CITY OF COLTON

Water & Wastewater Business Plan

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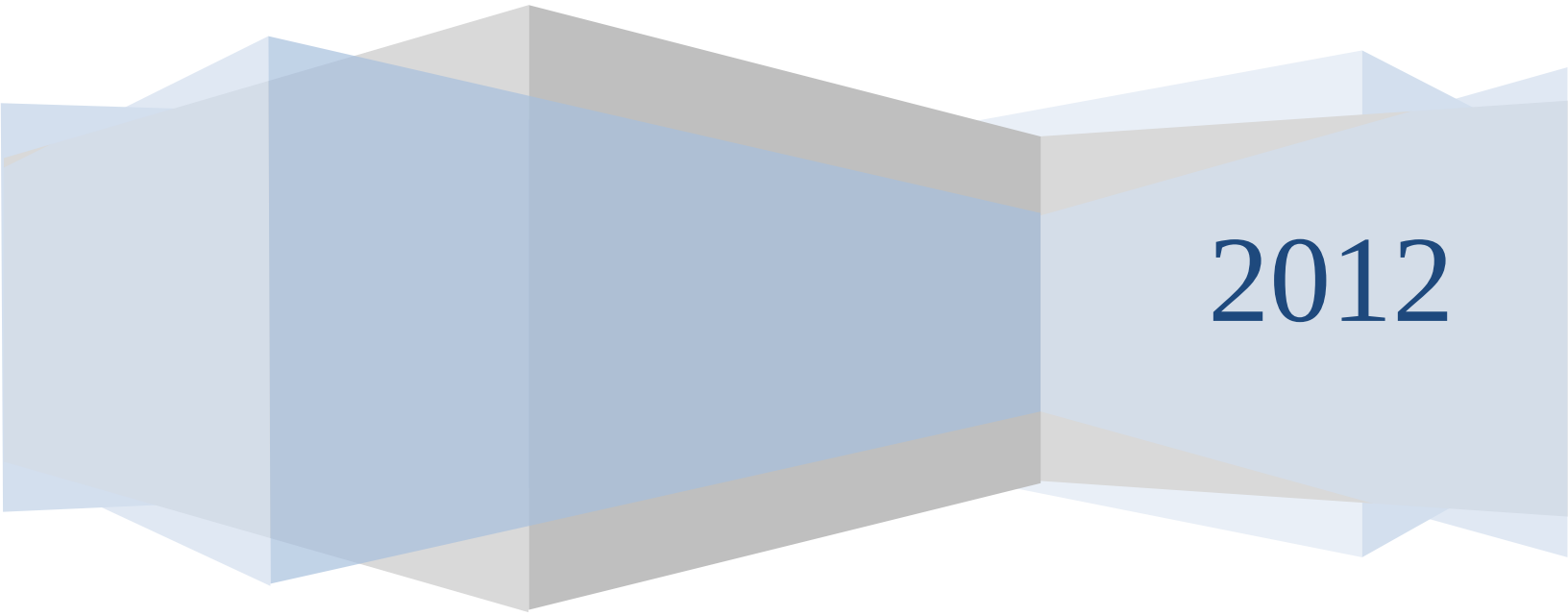

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1. Executive Summary

The Water and Wastewater Utility, Divisions of the Public Works Department of the City of Colton is a customer service organization responsible for providing distribution of safe drinking water, water for fire protection; and, proper treatment and disposal of wastewater. We provide maintenance of water distribution and sewer collection lines and facilities throughout our service area.

This Strategic Business Plan identifies goal and objectives developed by the City of Colton (City) Water and Wastewater Utilities with the intention of delivering excellent service to the City's residents. In this regard, it is understood that utilities-related services (drinking water, wastewater, recycled water, stormwater) are essential to the ongoing health and welfare of the public and the environment. Accordingly, it is vital that meaningful plans be in place and companion actions pursued to both satisfy near-term requirements and sustain high performance for future generations.

The nature of utilities-related services includes ever-advancing technology and heavily regulated oversight of operations by federal and state agencies. Further, the inherent capital-intensive infrastructure (underground conveyance systems, complex treatment facilities, etc.) requires significant lead-time to appropriately manage such critical life-cycle decisions as replacement, upgrade and expansion. Decisions to pursue funding and construction of capital projects must be guided by informed projections such that system capacity and performance fully anticipate future City requirements. A basic tenet of the Plan is that the City's ratepayers will be best served by orderly decisions (operating, infrastructure improvement, financing, workforce development, etc.) that are rationally developed to meet validated future needs, as opposed to reactive actions driven by episodic triggers. Such triggers include preventable system failures or unexpected regulatory mandates imposed by a higher authority to address performance shortfalls.

In this light, the Plan sets forth the Water and Wastewater Utilities business framework (vision, mission, goals/objectives), forecasts the future through an informed analysis of the Projected Operating Environment, and articulates specific strategies to most effectively address current and forecasted challenges and opportunities.

This Plan is conceived as a "living" document, created using the best information available, and anticipates an ongoing cyclical process of planning, execution, review, assessment of results, and adjustment of the Plan. This "Plan-Do-Check-Act/Adjust" approach is adopted to achieve continual improvement in departmental performance over time.

2. Utility Overview

The City of Colton, incorporated in 1887, is approximately 50 miles east of Los Angeles, bounded by the City of San Bernardino on the north and northeast, the City of Grand Terrace and unincorporated areas of Riverside County on the south, the City of Loma Linda on the east, and the City of Rialto on the west. Strategically located in the heart of Southern California, Colton is at the crossroads of the Inland Empire. It boasts affordable housing, low business taxes, a wide range of community programs for all ages and a very responsive City government. Colton is a full service City with its own Police and Fire Protection, Water and Wastewater Facilities, and Electric Utility.

Colton currently serves a population of approximately 52,000 and covers approximately 90% of the City of Colton. Its service area includes 14 square miles in the City of Colton and approximately 0.8 square miles of unincorporated area in San Bernardino County. Colton's service area is within the boundaries of the San Bernardino Valley Municipal Water District.

An abundant local water supply is one of Colton's greatest assets. The City sits on one of the largest potable aquifers in the State of California; therefore, 100% of the City's water comes from deep water wells. Colton's existing potable water system facilities consist of fifteen wells, five main booster pumping plants, nine water storage reservoirs, two pressure reducing facilities, and over 120 miles of water transmission and distribution pipelines.

The City owns, operates and maintains a wastewater collection, pumping and treatment system. The wastewater treatment plant also serves the City of Grand Terrace and some unincorporated County areas. The plant utilizes a conventional and extended aeration secondary treatment process to produce treated effluent in compliance with Regional Water Quality Control Board regulations. In addition, a regional tertiary treatment plant serving both the cities of Colton and San Bernardino treats the effluent from the wastewater treatment plant and returns the water to the Santa Ana River.

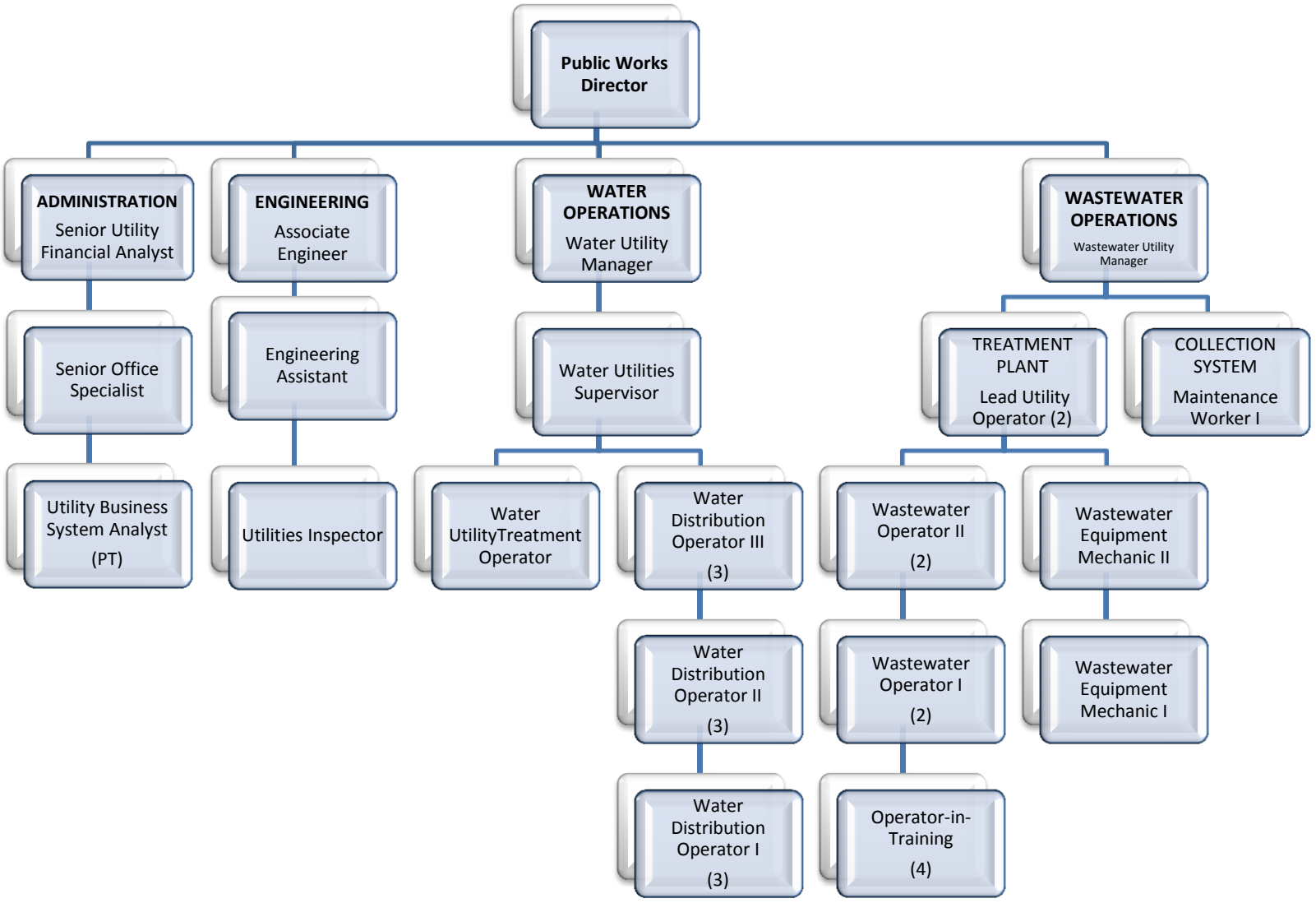
2.1 Mission Statement

The City of Colton Water and Wastewater Utilities are committed to providing present and future generations a sufficient supply of high quality drinking water. The Water and Wastewater Utilities staff strive to provide customers with the highest quality water and wastewater services possible while maintaining a competitive rate structure. Each decision made by staff in dealing with customers will be determined by doing what is right for both the customers and the utility.

Every staff member strives to effectively communicate with each other, and with other city departments, council members, utilities commissioners, and customers.

The Water and Wastewater Utilities strive to provide a quality product to the areas served at a reasonable cost while upholding the standards and regulations imposed by State and Federal agencies for water quality and safe disposal of wastewater. Staff is committed to providing the highest level of customer service to our customers.

2.2 Organizational Chart



2.3 Products and Services

The Water and Wastewater Utilities provide services to City of Colton residents, businesses and others within the geographical boundaries of its service area as shown in Appendix A.

Water Distribution/Water Plant Operation – Licensed, certified operators maintain and operate the water plant continually monitoring the water pressure and performing chemical analysis of the water that is being sent out to the customers for consumption.

Wastewater Collection/ Wastewater Plant Operation – Licensed, certified operators maintain and operate the wastewater treatment plant.

Water Distribution Line Maintenance – Licensed operators perform maintenance and repair of water distribution lines, as well as customer's service lines throughout the service area. They are also responsible for meter installation and maintenance of valves and services as shown in Appendix B.

Lift Station Operation and Maintenance –Licensed operators monitor the lift stations, perform daily preventative maintenance of the pumps, general appearance of the stations, and perform repairs and rehabilitation of the stations. The City currently owns and maintains numerous stations throughout our service area.

Wastewater Collection and Transmission Line Maintenance – Licensed operators perform maintenance and repair of wastewater mains and services throughout the City's service area. City contracts with Houston Harris to provide yearly sewer cleaning services. In the last fiscal year,the sewer lines were cleaned by the contractor as shown in Appendix C.

Field Customer Service – Field personnel are responsible for the daily interaction with customers in the field which could involve explaining how to read a water meter,

showing a customer how their meter registers a leak on their property and informing the customer of the Department's policies. They connect new services, disconnect services for non-payment, assess problems with the water meters and perform usage audits when consumption shows to be abnormal. They are also responsible for installing and changing water meters and performing minor repairs to water service lines.

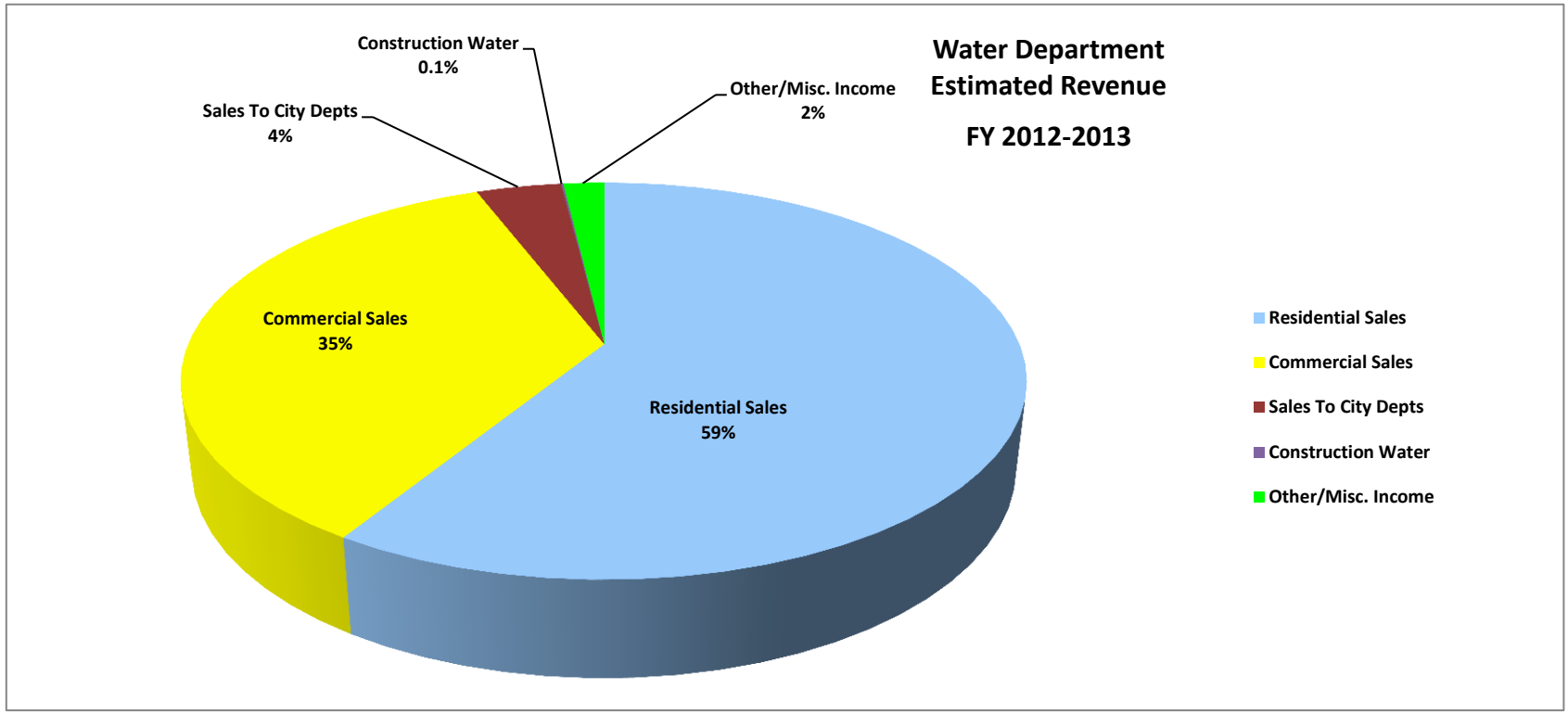
2.4 Present Status

Water Utilities

The Water Utility is estimating its revenue for FY 2012-2013 at $10,788,325 and appropriations at $10,767,597 of which $965,000 is for Capital Outlay and $535,000 for Capital Improvement Projects. The Water Utility has a projected cash flow deficit of approximately $5.5 million at 06-30-12. The deficit is mainly due to the ongoing costs related to the regional battle to remove perchlorate from underground water sources. In Fiscal Year 2012-2013, the Water Utility is proposing to fund a water rate study/structure for the following key components (1) conformity with current laws, (2) establish a methodology to retire debt in a reasonable time frame (3) establish a capital reserve, rate stabilization, and capital replacement fund and (4) meet revenue requirements for the existing bond issue. Sources of revenues for Water Utility are shown in figure 2.4.1.

The water commodity charge per HCF is $1.61 for residential and commercial users and the average facilities charge is $16.70 per month. The average monthly residential bill based on 30/hcf of water usage is $65.00 per month. The Water Department receives 59% of its revenue from residential water sales, 35% from commercial sales, 4% from City Departments, 0.1% from construction sales and 2% is from other/miscellaneous income.

Figure 2.4.1 **WATER UTILITIES**



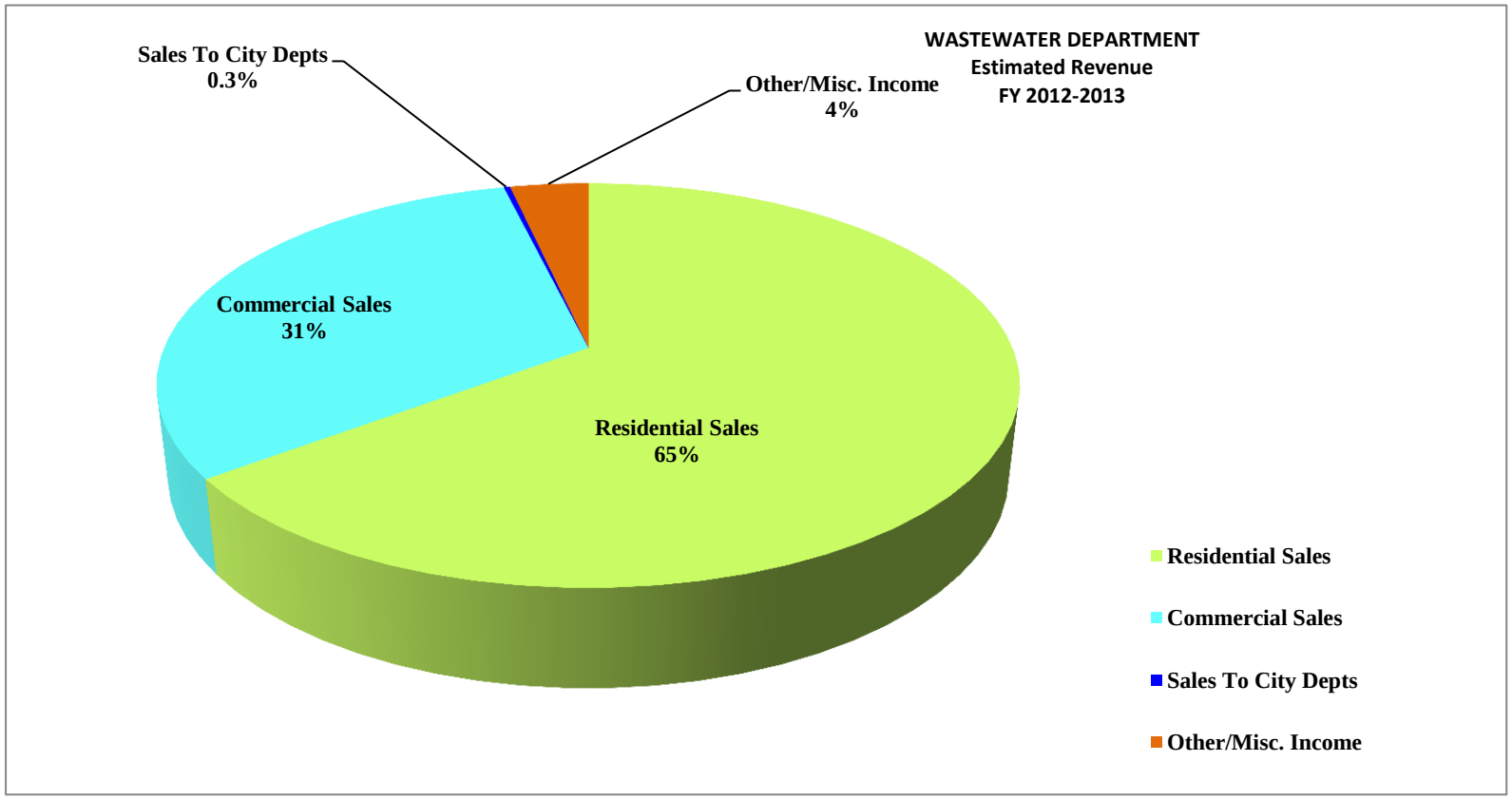
Residential Sales	**$**	**6,348,737**	59%
Commercial Sales	**$**	**3,807,831**	35%
Sales To City Depts	**$**	**419,955**	4%
Construction Water	**$**	**10,587**	0.1%
Other/Misc. Income	**$**	**201,125**	2%
	$	**10,788,235**	100%

Wastewater Utilities

The Wastewater Utility is estimating its revenue for FY 2012-2013 at $8,876,996 and appropriations at $9,432,638 of which $117,408 is for Capital Outlay and $529,279 is for capital improvements. In Fiscal Year 2012-2013, the Wastewater Utility is proposing to fund a sewer rate study/structure. Sources of revenues for the Wastewater Utility are shown in figure 2.4.2.

The sewer charge for residential customers is $32.78 per month. The Wastewater Utility receives 65% of its revenue from residential sewer sales, 31% from commercial sales, 0.3% from City Departments and 4% from other/miscellaneous income.

Figure 2.4.2 **WASTEWATER UTILITIES**



Residential Sales	$	5,752,455	65%
Commercial Sales	$	2,788,266	31%
Sales To City Depts	$	24,858	0.3%
Other/Misc. Income	$	311,417	4%
	$	8,876,996	100%

2.5 Financial Projections

In Section 2.6, the Wastewater Utility is estimating it's expenditures to be $9,432,637 at Fiscal Year End 2012-2013. The percentage breakdown of the expenditures is as follows: Salary & Benefits 12% (Wastewater 11%, General Fund 1%), Maintenance & Operations 62%, General Fund Lease Payment 6%, Allocations-General Fund 8%, Admin/Tech Allocation-from water to wastewater 5%, Capital Outlay 1%, Capital Improvements 6%. The estimated revenue for Fiscal Year End 2012-2013 is $8,876,996. The majority of revenue is from sewer sales. The percentage breakdown is as follows: residential 65%, commercial/industrial 31%, sales to City Departments 0.3%, and other/miscellaneous 4%.

In Section 2.7, the Water Utility is estimating its expenditures to be $10,767,598 at Fiscal Year End 2012-2013. The percentage breakdown of the expenditures is as follows: Salary & Benefits 17% (Water 16%, General Fund 1%), Maintenance & Operations 54%, General Fund Lease Payment 8%, Allocations-General Fund 12%, Admin/Tech Allocation Adjustment-from wastewater to water -5%, Capital Outlay 9%, Capital Improvements 5%. The Water Division has approximately $3 Million in Bond Funds, which will roll-over into FY 2012-2013 for Capital Improvement projects. The estimated revenue for Fiscal Year End 2012-2013 is $10,788,235. The majority of revenue is from water sales. The percentage breakdown is as follows: residential 59%, commercial/industrial 35%, sales to City Departments 4%, construction/hydrant 0.1%, and other/miscellaneous 2%.

2.6 Wastewater Fiscal Year 2011-2012 Budget

2.6.1 Fiscal Year 2011-2012 Budget – EXPENDITURES

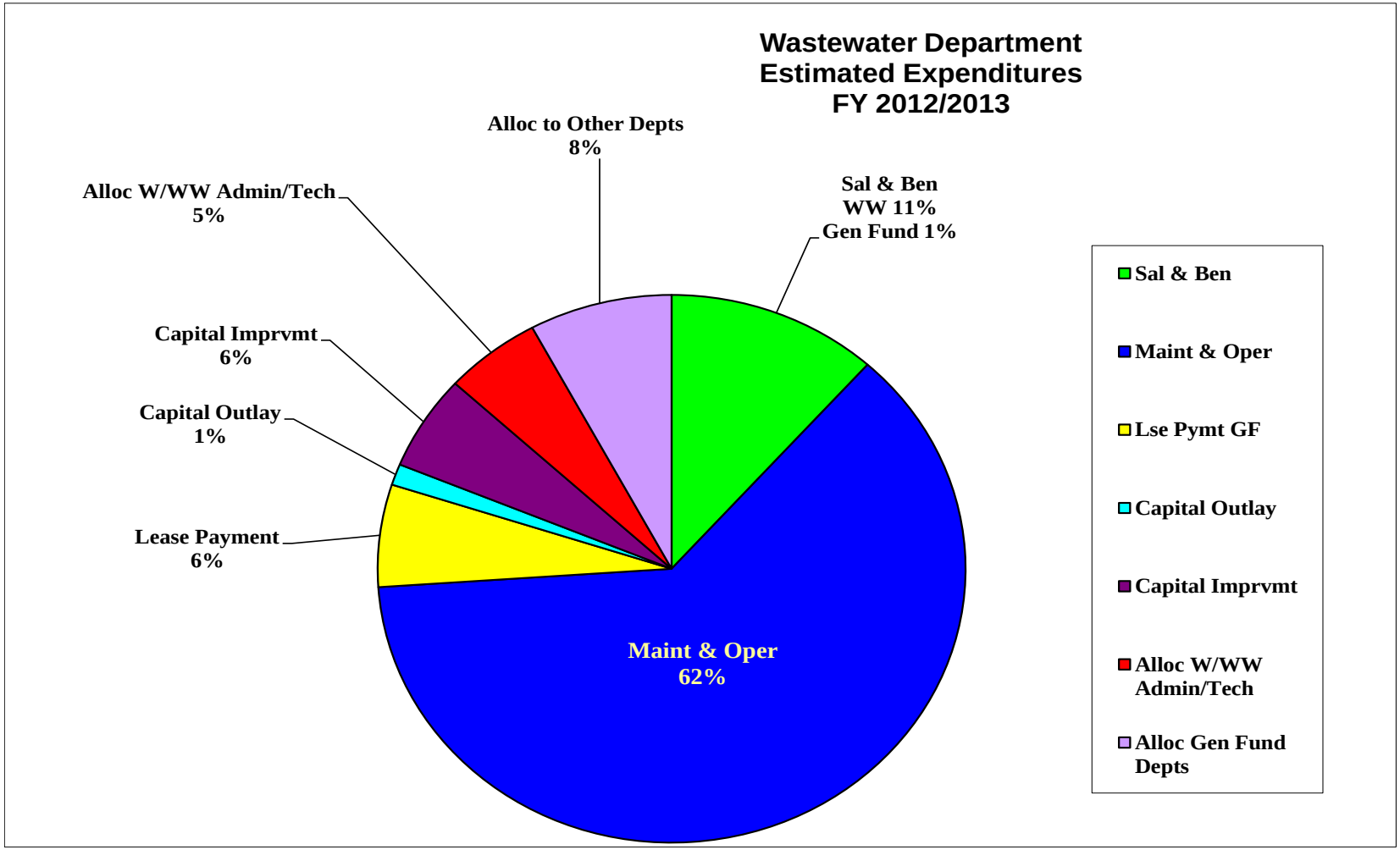
		EXPENSES				
		Actuals FY 09/10	Actuals FY 10/11	Adopted Budget FY 11/12	*Estimated* Actuals FY 11/12	ESTIMATED BUDGET FY 12/13
522	**Wastewater Utility**					
8200	**Wastewater Operations**					
1000	**TOTAL SALARIES & BENEFITS**					
1010	Salaries - Miscellaneous	530,896	553,098	608,521	600,385	641,256
1040	Salaries- Part Time	76,056	82,543	108,432	108,432	150,960
1050	Salaries - Overtime	17,633	30,683	30,748	30,748	30,482
1100	Salary Related Benefits	80,516	86,479	99,403	98,098	108,493
1101	Non-Persable Benefits	134,395	108,462	132,766	131,640	154,894
1105	Persable Benefits	41	0	0	0	0
1150	Retiree Health Insurance	4,721	2,659	0	0	-
1160	Education & Training	445	411	875	875	1,000
1170	Uniforms	5,838	5,764	5,715	5,715	5,672
1180	Safety Equipment	4,081	3,218	3,264	3,264	2,864
	TOTAL SALARIES & BENEFITS:	854,622	873,318	989,724	979,157	**1,095,621**
2000	**TOTAL MAINT. & OPERATIONS**					
2210	Vehicle Operating Expense	36,301	59,591	80,643	60,643	60,756
2230	Vehicle Allowance	750	1,078	1,300	1,125	1,500
2240	Misc. Equipment Maint.	3,647	4,439	4,864	4,864	4,317
2241	Permits	24,306	20,746	29,468	29,468	24,940
2250	Buildings & Grounds Maint.	10,098	9,851	10,867	10,867	10,272
2255	WWT Plant Operations & Maint.	77,615	67,703	87,745	87,745	91,785
2256	Lift Station Operations & Maintenance	30,202	32,790	45,142	45,142	36,591
2257	Collection Systems Oper & Maint.	3,737	2,223	3,032	3,032	2,873
2301	Operating Supp./Equip.	33,534	25,827	40,221	36,906	37,664
2303	Unsch. Immed. Line Repair	193	469	10,000	10,000	10,000
2310	Telecommunication Expense	7,642	5,902	7,588	7,588	7,403
2320	Utilities Expense	851,628	837,595	950,374	950,374	942,234
2342	Recruitment Expense	376	0	0	0	0
2350	Professional Services	891,197	634,916	1,010,968	1,010,968	1,159,856
2380	Administrative Charges	4,202	3,973	5,960	5,960	5,960
2381	Lease Payment To Gen Fund	570,000	570,000	570,000	570,000	570,000
2420	Equipment Lease	6,625	2,224	10,000	10,000	10,000
2500	Principal	533,096	545,941	1,270,659	1,270,659	1,298,846
2510	Interest Expense	428,414	343,415	374,547	374,547	346,910
2550	Depreciation Expense	1,033,229	1,005,711	1,100,000	1,100,000	1,100,000
2555	Amortization Expense	132,727	132,727	132,727	132,727	132,727
2560	Bad Debt Expense	85,294	72,359	96,573	96,573	84,745
2600	Cost Of Issuance	13,412	13,412	13,412	13,412	13,412
2650	Operations & Maint. RIX	457,169	532,859	441,517	441,517	495,014
	TOTAL MAINT. & OPERATIONS:	5,235,395	4,925,750	6,297,607	6,274,117	**6,447,804**

Wastewater Expenditures (Cont'd)

		EXPENSES				
		Actuals FY 09/10	Actuals FY 10/11	Adopted Budget FY 11/12	*Estimated* Actuals FY 11/12	ESTIMATED BUDGET FY 12/13
4000	**TOTAL CAPITAL OUTLAY**					
4900	Office Equipment	0	0	0	0	0
4910	Automobile	0	0	0	0	80,000
4920	Radio Equipment	0	0	0	0	0
4930	Miscellaneous Equipment	3,888	0	10,000	30,000	10,000
4955	Operations Equipment	38,689	16,127	20,271	20,271	27,408
	TOTAL CAPITAL OUTLAY:	42,577	16,127	30,271	50,271	**117,408**
5000	**TOTAL COST ALLOCATIONS**					
5990	Alloc. To General Fund Depts.	900,428	640,218	694,314	638,577	687,795
5991	Transfer Out-PERS	47,407	48,828	61,429	50,231	53,637
5995	Allocations Fm Water To Wwtr	464,105	464,554	436,964	441,626	501,093
		1,411,940	1,153,600	1,192,707	1,130,434	**1,242,525**
TOTAL WASTEWATER OPERATIONS:		**7,544,534**	**6,968,795**	**8,510,309**	**8,433,979**	**8,903,358**
8203	**RIX Facility**					
3000	**Total Capital Improvements**					
3890	Capital Improvement	37,059	21,499	41,784	41,784	29,279
8204	**Water Treat. Plant**					
3000	**Total Capital Improvements**					
3890	Capital Improvement	54,050	32,822	1,267,000	1,267,000	265,000
8206	**Sewer Line Replacement**					
3000	**Total Capital Improvements**					
3890	Capital Improvement	21,933	115,302	325,000	325,000	200,000
8209	**Lift Stations**					
3000	**Total Capital Improvements**					
3890	Capital Improvements	24,694	38,970	35,000	35,000	35,000
	TOTAL CAPITAL IMPROVEMENTS:	137,737	208,592	1,668,784	1,668,784	**529,279**
Total Wastewater Utility Expenses:		**7,682,271**	**7,177,387**	**10,179,093**	**10,102,763**	**9,432,637**

2.6.2 Fiscal Year 2011-2012 Budget - EXPENDITURES

WASTEWATER DIVISION

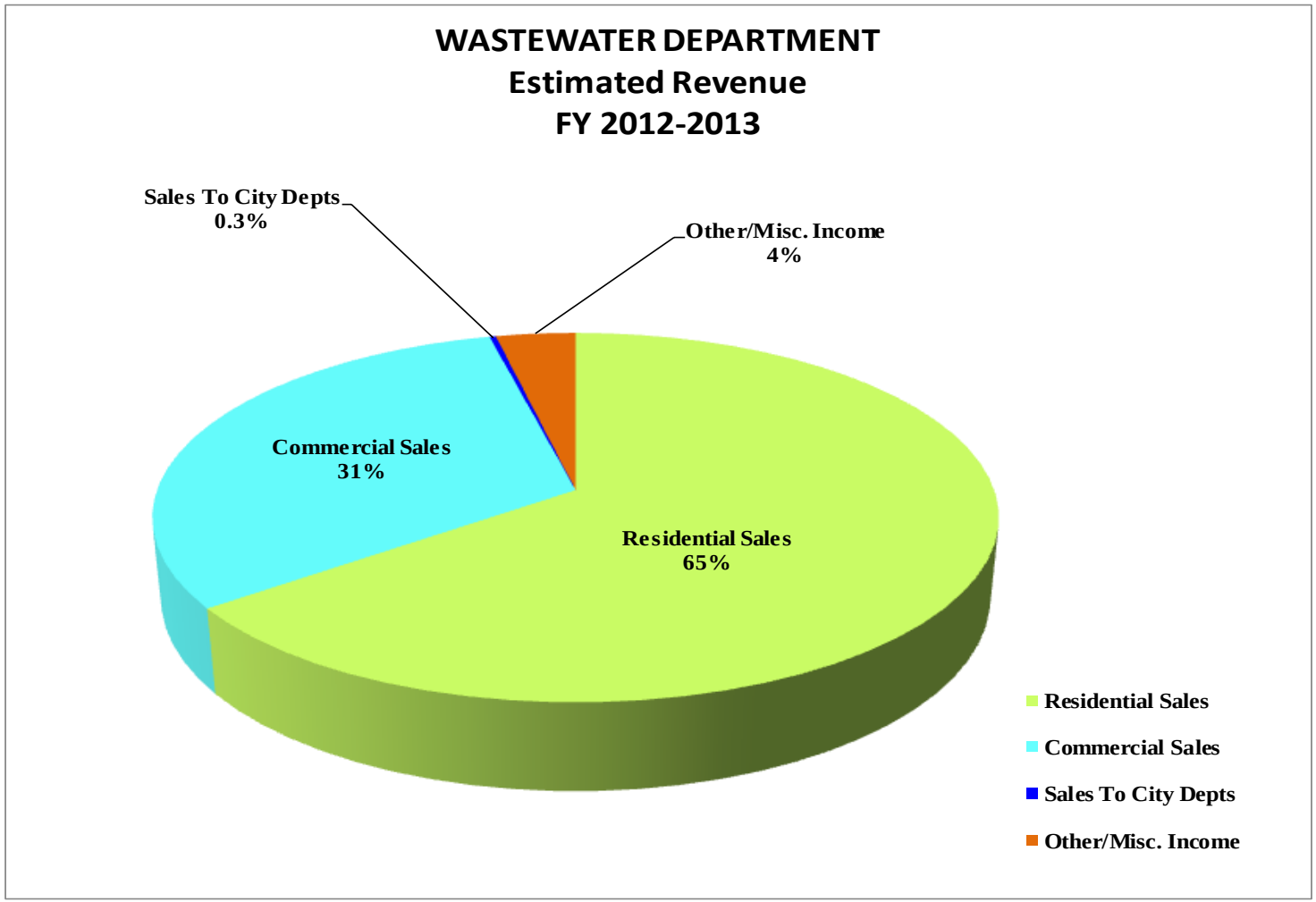


2.6.3 Fiscal Year 2012-2013 Budget - REVENUE

City of Colton						
Wastewater Department						
Estimated Revenue						
Fiscal Year 2012-2013						
		REVENUE				
		ACTUALS FY 09-10	ACTUALS FY 10-11	BUDGET FY 11-12	*ESTIMATED* ACTUALS FY11-12	**BUDGET FY 12-13**
522	**Wastewater Utility**					
5600	**Use of Money and Property**					
5601	Pooled Interest	22,490	44,010	16,012	16,012	**19,251**
5604	Trustee Interest Income	25,318	25,311	25,315	25,315	**25,315**
		47,808	69,321	41,327	41,327	**44,566**
6700	**Charges For Current Services**					
6711	Industrial Discharge Permit	2,100	3,702	2,087	2,087	**3,086**
6729	Plan Check Fees	0	150	500	500	**150**
6743	Connection Fee (Grand Terrace)	0	640,200	209,300	209,300	**100,240**
6758	Inspection Fees	1,056	826	400	400	**941**
		3,156	644,878	212,287	212,287	**104,417**
6800	**Charges For Current Services**					
6812	Sewer Chgs - Residential	5,664,074	5,718,130	5,743,437	5,743,437	**5,752,455**
6813	Sewer Chgs - Commercial	1,149,562	1,205,696	1,317,656	1,317,657	**1,538,743**
6814	Sewer Chgs - City Dept	22,606	24,784	24,636	24,636	**24,858**
6821	Sewer Chgs - GT Res	1,148,984	1,148,984	1,148,984	1,148,984	**1,199,995**
6822	Sewer Chgs - GT Comm	42,034	46,288	49,148	49,148	**49,528**
		8,027,261	8,143,883	8,283,861	8,283,862	**8,565,579**
7800	**Miscellaneous Revenue**					
7822	Damage To City Property-Recovery	231	15,203	500	500	**500**
7830	Miscellaneous Revenue	10,923	42,738	10,965	10,965	**10,944**
		11,153	57,941	11,465	11,465	**11,444**
7900	**Miscellaneous Revenue**					
7908	Connection Fee-Colton B	191,462	209,611	48,000	48,000	**68,000**
7910	5% Late Charge	69,032	71,857	73,069	73,069	**82,990**
		260,494	281,468	121,069	121,069	**150,990**
TOTAL WASTEWATER REVENUE:		**8,349,872**	**9,197,491**	**8,670,009**	**8,670,010**	**8,876,996**

2.6.4 Fiscal Year 2012-2013 - REVENUE

WASTEWATER DIVISION



2.7 Water Fiscal Year 2011-2012 Budget

2.7.1 Fiscal Year 2012-2013 Budget – EXPENDITURES

		EXPENSES				
		Actuals FY 09-10	Actuals FY 10-11	Adopted Budget FY 11-12	*Estimated* Actuals FYE 11-12	ESTIMATED BUDGET FY 2012-2013
521	**Water Utility**					
8100	**Water Operations**					
1000	**TOTAL SALARIES & BENEFITS**					
1010	Salaries - Miscellaneous	734,892	721,697	860,856	860,856	820,553
1040	Salaries - Part Time	20,269	20,156	20,452	20,452	20,160
1050	Salaries - Overtime	70,377	85,625	74,969	74,969	82,447
1100	Salary Related Benefits	103,691	70,712	138,722	138,722	134,688
1101	Non-Persable Benefits	169,751	205,700	184,009	184,009	200,842
1150	Retiree Health Insurance	14,793	22,606	27,954	27,954	29,874
1161	Certification & Training	494	-	1,480	1,480	1,500
1170	Uniforms	4,472	5,857	5,395	5,395	5,244
1180	Safety Equipment	2,878	2,601	9,744	9,744	10,000
	TOTAL SALARY & BENEFITS:	1,121,617	1,134,953.91	1,323,581	1,323,581	**1,305,308**
2000	**TOTAL MAINT. & OPERATIONS**					
2210	Vehicle Operating Expense	51,523	63,577	129,986	129,986	88,689
2240	Misc. Equipment Maint.	1,859	410	988	988	898
2241	Permits	11,602	19,140	26,816	26,816	24,316
2250	Buildings & Grounds Maint.	9,523	5,712	13,000	13,000	10,523
2301	Operating Supp./Equip.	108,803	103,003	150,256	150,256	135,705
2303	Unsch. Immed. Line Repair	17,585	20,116	22,859	22,859	20,186
2308	Hypochlorite Solution Purchases	158,724	119,161	191,042	191,042	142,550
2309	Perchlorate Resin (Non-Capitalizable)	315,434	319,434	367,349	367,349	314,184
2310	Telecommunication Expense	4,182	4,391	5,085	5,085	5,000
2320	Utilities Expense	2,017,266	2,028,825	2,424,927	2,424,927	2,324,757
2331	Purchased Water	5,298	5,189	63,845	63,845	50,000
2350	Professional Services	231,324	135,676	198,334	198,334	293,950
2352	Professional Svc - Perchlorate	729,993	741,575	1,000,000	1,000,000	500,000
2380	Administrative Charges	5,015	4,423	10,000	10,000	6,000
2381	Lease Payment To Gen Fund	870,000	870,000	870,000	870,000	870,000
2411	Production Maintenance	71,914	31,933	127,634	127,634	120,319
2420	Equipment Lease	403	1,948	8,500	8,500	5,500
2500	Principal	260,000	275,000	615,541	615,541	691,926
2510	Interest Expense	431,348	421,260	421,521	421,521	407,043
2550	Depreciation Expense	624,691	521,808	700,000	700,000	525,000
2560	Bad Debt Expense	27,602	28,971	30,000	30,000	40,105
2600	Cost Of Issuance	10,229	10,229	10,300	10,300	10,300
	TOTAL MAINT. & OPERATIONS:	5,964,318	5,731,782.44	7,387,983	7,387,983	**6,586,951**
3888	**STORES WRITE-OFF**	18,289	6,945.31			**7,000**
3000	**TOTAL CAPITAL IMPROVEMENT**					
3890	**Capital Improvement**	209,457	70,586	148,112	148,112	**135,000**
4000	**TOTAL CAPITAL OUTLAY**					
4900	Office Equipment	-		-	-	-
4910	Automobile	-		-	-	95,000
4920	Radio Equipment	-		-	-	-
4930	Miscellaneous Equipment	-	23,567	416	416	-
4940	Water Meters	75,742	71,938	150,000	150,000	850,000
4955	Operations Equipment	-	14,555	20,000	20,000	20,000
	TOTAL CAPITAL OUTLAY:	75,742	110,060	170,416	170,416	**965,000**

Water Expenditures (Cont'd)

		EXPENSES				
		Actuals FY 09-10	Actuals FY 10-11	Adopted Budget FY 11-12	*Estimated* Actuals FY 11-12	ESTIMATED BUDGET FY 2012-2013
5000	**COST ALLOCATIONS**					
5990	Allocations From Gen Fund Depts	1,059,045	912,006	911,978	911,978	994,007
5991	Transfer Out - PERS	50,810	65,400	68,595	68,595	68,585
	TOTAL COST ALLOCATIONS:	1,109,855	977,406	980,573	980,573	**1,062,592**
	TOTAL WATER OPERATIONS	**8,499,277**	**8,031,733**	**10,010,665**	**10,010,665**	**10,061,851**
8103	**BOOSTER STATIONS**					
3890	Capital Improvement	-		-	-	-
8104	**RESERVOIRS**					
3890	Capital Improvement			2,071,388	1,071,388	-
8105	**WELLS**					
3890	Capital Improvements			225,000	1,007,326	**225,000**
8106	**MAINLINE REPLACEMENT**					
3890	Capital Improvements	-	70,707	75,000	1,075,000	**175,000**
8107	**WATER BASIN RECHARGE-CIP**					
3890	Capital Improvement		-	-	174,398	
	TOTAL CAPITAL IMPROVEMENTS:	-	**70,707**	**2,371,388**	**3,328,112**	**400,000**
8300	**WATER/WASTEWATER ADMIN/TECH**					
1000	**TOTAL SALARIES & BENEFITS**					
1010	Salaries - Miscellaneous	405,009	225,882	289,514	270,386	294,280
1010-0920	Salaries - Miscellaneous	80,342	91,209	46,768	55,906	47,506
1040	Salaries - Part Time					55,739
1050	Salaries - Overtime	100	1,573	2,027	2,027	1,300
1100	Salary Related Benefits	54,593	39,409	51,324	49,704	56,610
1101	Salary Related Benefits	132,195	54,370	72,397	70,789	71,434
1105	Persable Benefits	4,486	-	-	-	-
1150	Retiree Health Insurance	20,415	24,855	11,322	11,322	12,244
1160	Education & Training	-	-	-	-	1,500
1161	Certification - Training/Renew	-	2,613	2,500	2,500	2,000
1170	Uniforms	416	242	450	450	450
1180	Safety equipment	120	-	500	500	500
	TOTAL SALARIES & BENEFITS:	697,675	440,153	476,802	463,584	**543,562**
2000	**TOTAL MAINT. & OPERATIONS**					
2210	Vehicle Operating Expense	2,476	2,726	5,150	5,150	7,200
2230	Vehicle Allowance-City Manager	750	1,078	1,300	1,128	1,500
2240	Misc. Equipment Maint.	1,215	1,207	1,810	1,810	1,625
2250	Bldg & Grnds Maintenance	-	156	2,000	2,000	1,000
2270	Dues & Publications	813	2,550	3,007	3,007	3,000
2280	Travel & Meetings	-	53	600	600	600
2300	Office Supplies/Postage	2,667	4,312	8,716	5,400	6,185
2350	Professional Services	28,716	32,325	29,420	29,420	10,795
2420	Equipment Lease	3,748	4,404	5,665	5,665	5,665
	TOTAL MAINT. & OPERATIONS:	40,384	48,812	57,668	54,180	**37,570**

Water Expenditures (Cont'd)

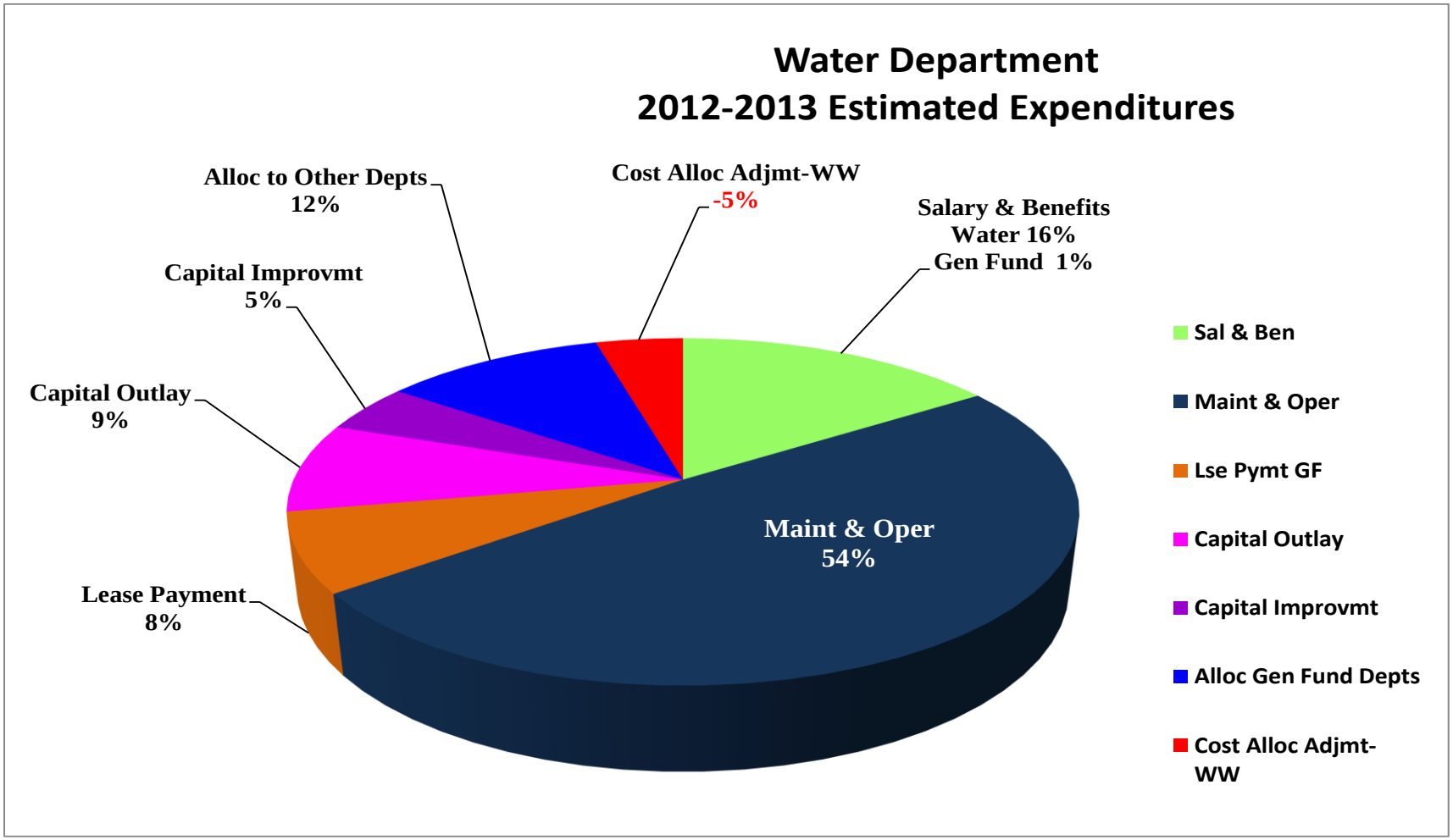
		EXPENSES				
		Actuals FY 09-10	Actuals FY 10-11	Adopted Budget FY 11-12	*Estimated* Actuals FY 11-12	ESTIMATED BUDGET FY 2012-2013
5000	**COST ALLOCATIONS**					
5990	Allocations From Gen Fund Depts	1,059,045	912,006	911,978	911,978	994,007
5991	Transfer Out - PERS	50,810	65,400	68,595	68,595	68,585
	TOTAL COST ALLOCATIONS:	1,109,855	977,406	980,573	980,573	**1,062,592**
	TOTAL WATER OPERATIONS	**8,499,277**	**8,031,733**	**10,010,665**	**10,010,665**	**10,061,851**
8103	**BOOSTER STATIONS**					
3890	Capital Improvement	-		-	-	-
8104	**RESERVOIRS**					
3890	Capital Improvement			2,071,388	1,071,388	-
8105	**WELLS**					
3890	Capital Improvements			225,000	1,007,326	**225,000**
8106	**MAINLINE REPLACEMENT**					
3890	Capital Improvements	-	70,707	75,000	1,075,000	**175,000**
8107	**WATER BASIN RECHARGE-CIP**					
3890	Capital Improvement		-	-	174,398	
	TOTAL CAPITAL IMPROVEMENTS:	-	**70,707**	**2,371,388**	**3,328,112**	**400,000**
4000	**TOTAL CAPITAL OUTLAY**					
4900	Office Equipment	-	12,090.27	14,585	14,585	-
4910	Automobile	-	-	-	-	15,000
4920	Radio Equipment	-	-	-	-	-
4930	Miscellaneous Equipment	-	-	-	-	-
	TOTAL CAPITAL OUTLAY:	-	12,090.27	14,585	14,585	**15,000**
5000	**COST ALLOCATIONS**					
5990	Allocs Fm Gen Fund Depts	144,398	182,460.00	256,784	182,130	182,130
5991	Transfer Out PERS	25,484	27,120.00	36,895	25,697	28,577
	TOTAL COST ALLOCATIONS:	169,882	209,580.00	293,679	207,827	**210,707**
	TOTAL ADMIN/TECH EXPENDITURES	907,941	710,635.68	842,734	740,176	**806,839**
5000	**COST ALLOCATION ADJUSTMENTS**					
5995	Allocs Admin/Tech **to Wastewater**	**(464,105)**	**(464,554)**	**(436,964)**	**(436,964)**	**(501,093)**
TOTAL WATER OPERATIONS:		**8,943,114**	**8,348,522**	**12,787,823**	**13,641,989**	**$ 10,767,598**

Water Expenditures (Cont'd)

		EXPENSES				
		Actuals FY 09-10	Actuals FY 10-11	Adopted Budget FY 11-12	*Estimated* Actuals FY 11-12	ESTIMATED BUDGET FY 2012-2013
521 - CAPITAL IMPROVEMENTS (BONDS)						
8104	**RESERVOIRS**					
3000	**TOTAL CAPITAL IMPROVEMENT**					
3890	Capital Improvements - **(BOND FUNDS)**			1,071,388	-	**971,388**
8105	**WELLS**					
3000	**TOTAL CAPITAL IMPROVEMENT**					
3890	Capital Improvements Wells 30 & 31- **(BOND FUNDS)**	30,812	17,759	782,326	-	**782,326**
8106	**MAIN LINE REPLACEMENT**					
3000	**TOTAL CAPITAL IMPROVEMENT**					
3890	Cap Improv -Mainline Replacement	-		1,000,000		**1,100,000**
8107	**WATER RECHARGE BASIN**					
3000	**TOTAL CAPITAL IMPROVEMENT**					
3890	Cap Improv-Water Recharge Basin **(BOND FUNDS)**	8,907		174,398	-	**174,398**
TOTAL CAPITAL IMPROVEMENTS		39,719	17,759	3,028,112	-	**$ 3,028,112**
		$ 8,982,833	**$ 8,366,282**	**15,815,935**	**13,641,989**	
TOTAL FY 2012-2013 BUDGET - EXPENDITURES & CAPITAL IMPROVEMENTS:						**$ 13,795,709**

2.7.2 Fiscal Year 2012-2013 - EXPENDITURES

WATER DIVISION



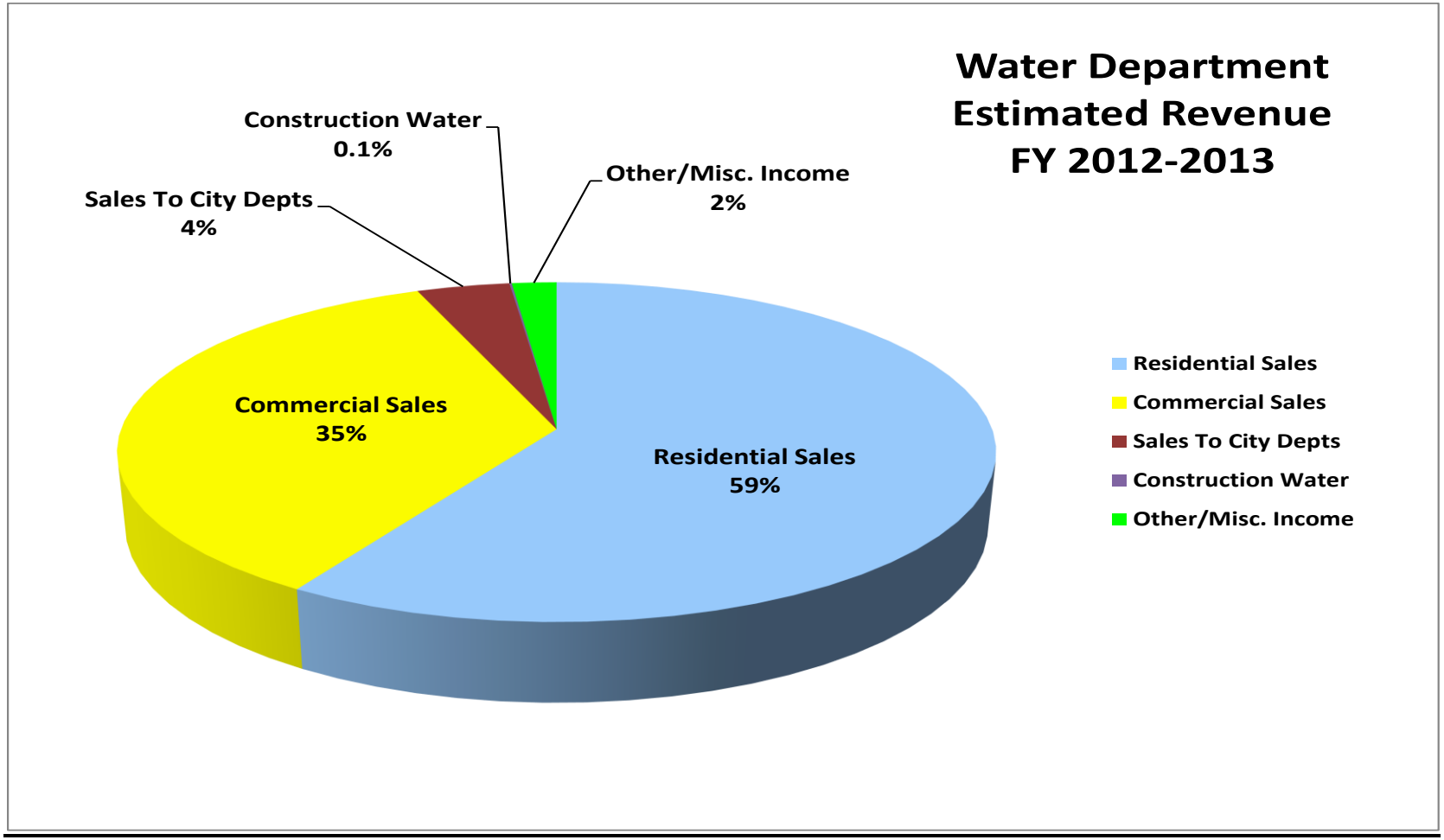
2.7.3 Fiscal Year 2012-2013 – REVENUE

WATER DIVISION

		REVENUE				
		Actuals FY 09/10	Actuals FY10/11	Adopted Budget FY 11/12	*Jul11-Jan12* 7 Mo Actuals FY11/12	ESTIMATED REVENUE FY 12/13
521	**Water Utility**					
5600	**Use of Money and Property**					
5602	Interest on Investment	13,495	10,572	0	0	0
5604	Trustee Interest Income	19,931	37,646	47,746	19,202	38,404
	Total Use of Money and Property	**33,426**	**48,218**		**19,202**	**38,404**
6700	**Charges For Current Services**					
6702	Sale of Maps and Pubs	0	1,920	0	0	0
6729	Plan Check Fees	5,567	3,431	1,487	700	1,639
6758	Inspection Fees	6,624	1,478	3,410	1,993	2,294
6788	Temp Meter Sales	345	308	682	462	572
6792	Customer Service Charge	20,279	16,164	13,921	9,130	16,788
6794	Main Connection Chg (Frontage Fee)	82,063	0	5,000	0	1,000
6796	Water Meter Installation Fee	1,553	1,115	2,000	0	1,334
	Charges For Current Services	**116,430**	**24,416**	**26,500**	**12,284**	**23,627**
6800	**Charges For Current Services**					
6800	Residential Sales	4,479,611	5,032,007	5,998,271	3,093,848	6,348,737
6803	Commercial Sale	2,658,066	3,152,371	3,624,712	1,891,346	3,807,831
6806	Sales To City Depts	260,461	299,990	427,073	225,066	419,955
6888	Construction Water	7,390	8,761	10,046	6,840	10,587
	Charges For Current Services	**7,405,528**	**8,493,128**	**10,060,102**	**5,217,100**	**10,587,110**
7800	**Miscellaneous Revenue**					
7820	Refunds, Rebates & Reimbursements	0	61		0	0
7822	Damage to City Property-Recovery	502	300	300	150	350
7830	Miscellaneous Revenue	166,290	21,393	22,645	10,765	21,530
	Total Misc. Revenue-General	166,792	21,693	22,945	**10,915**	21,880
7900	**Miscellaneous Revenue**					
7908	Connection Fees-B$	178,294	45,800	40,000	16,200	32,400
7910	5% Late Charge	57,957	69,452	80,562	49,475	84,814
	Total Misc. Revenue-Enterprise	236,251	115,252	120,562	**65,675**	117,214
	Total Miscellaneous Revenue	**403,044**	**136,945**	**143,507**	**76,590**	**139,094**
	TOTAL WATER REVENUE:	**7,958,428**	**8,702,768**	**10,277,855**	**5,325,176**	**$ 10,788,235**

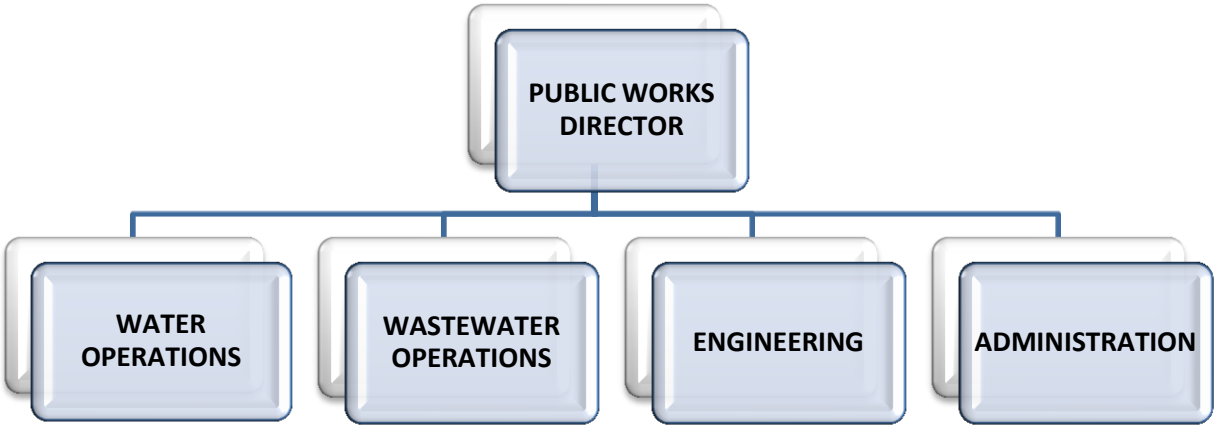
2.7.4 Fiscal Year 2012-2013 - REVENUE

WATER DIVISION



3. Core Business Units

The operation of the Water and Wastewater Utilities is divided into four divisions: management, engineering, water operations and distribution, wastewater operations and distribution. A brief overview of the four divisions is discussed below:



3.1 ADMINISTRATION

The Administration Division is responsible for the oversight of the utility, development of water and wastewater resources, and provides financial support to each division. This division is also responsible for various financial and regulatory reporting. This division has positions that include the Senior Utility Financial Analyst, Senior Office Specialist, and Utility Business System Analyst.

The Administration Division duties provide oversight of the following crucial services:

3.1.1 Customer Service

The Customer Service section provides a full line of customer services for the City's Utility Customer Service Division. This service is provided by the City's Management Services Department.

The Customer Service section is responsible for any customer contact necessary to establish, maintain, and terminate water and wastewater contracts. This section responds to residential and commercial service request and bill inquiries and processes cash receipts, while maintaining security of customer records. Customer Service is the focus for customer contact in the utility. Furthermore, this section receives read data collected by the meter readers and process, records, and renders billing statements to clearly inform the customer of their energy consumption. Responsibilities in this section also include, negotiating payment schedules and coordinating all customer refunds, reviews and preparation of accounts.

3.1.2 Administrative

The Administrative Section is a part of Administration division and is responsible for a variety of tasks including Administrative support, payroll, and finance and accounting responsibilities.

The Administrative section provides daily administrative tasks such as generation of section files, records and provides budgetary tasks. Primary tasks include budget tracking and coordination with the finance division on expenditures. Capital and expense budget costs are controlled by personnel in this section. The Administrative Section also ensures that all regulatory compliance reporting is completed and met. Furthermore, the Section ensures that proper procurement and contract compliance is met through purchasing of services and material. The administrative staff is responsible for the Water and Wastewater Departments payroll function. Staff is responsible for collection and

submission of employee time sheets for accurate payroll processing to meet bi-weekly payroll requirements.

The Administrative Section provides financial management, analysis of reports and budget to the City Council, staff and the corresponding regulatory agencies. The accounting section is also responsible for developing and maintaining the utility property records and providing accounts payable and receivable services.

The following objectives and tasks are provided by the Administration Section:

- Provide accurate and timely financial and accounting information on a monthly basis.
- Prepare reports necessary to meet internal and external reporting requirements.
- Assist and respond to the annual external audit and other internal audits.
- Review data used to prepare the audited financial statements.
- Provide Regulatory Affairs with financial data to develop Revenue Requirement, Cost of Service and other regulatory filings.
- Produce the business plans, operating budgets and capital budgets.
- Develop and implement long-range financial forecasts and reports.
- Review capital work order set-up information for accuracy and completeness.
- Provide budget analyses throughout the year for Management and City Council.
- Provide historic and prospective budget data for requesting entities.
- Provide state and federal agencies with detailed budget and accounting information as necessary.
- Advise management on financial issues facing the Utility.

3.2 ENGINEERING DIVISION

The Engineering Division provides support services to the Water and Wastewater operations and maintenance, provides inspection services to developers for all

construction needs, works with customers for planning, and designing, budgeting, coordination and provides service connections to the system, and maintains the Water and Wastewater Department GIS system information. This division has positions that include Associate Engineer, Utilities Inspector, and Engineering Assistant.

Engineering Division duties include the following crucial services:

3.2.1 System Engineering

Major projects to construct new infrastructure or replace existing infrastructure are included in the Capital Improvement Program (CIP). Engineering staff coordinate the annual update to the CIP, reviewing proposed projects for appropriateness and accuracy, and presenting the draft document to the Utility Commission, and City Council for approval. This ensures that capital projects are completed as scheduled, taking responsibility for all phases of the project: design, specification, construction, project management, fund management and community outreach.

3.2.2 Plan Review and Inspection of New Construction

As a condition of new development, contractors are required to install public infrastructure (water and wastewater) that the City will eventually own, operate, and maintain. Staff reviews the plans for the new infrastructure and monitors the construction process. The finished products are inspected and, after any needed corrections have been made, the work is placed under a one-year warranty. During this period, staff continues to monitor the site, notifying the developer of any warranty work required.

3.2.3 Land Use Planning Support

New development is required to extend streets and utilities in a manner that not only supports that specific development, but ensures that adjacent parcels can be adequately served. Engineering staff performs a detailed review of land use proposals, and Comprehensive Plan and Land Development Code revisions to ensure compatibility with City master plans, codes, and policies.

3.2.4 Citizen Request for Infrastructure

On occasion, members of the public request an extension of City infrastructure. Typically, these requests are for sewer main extensions to serve areas declared a health hazard due to failing septic systems. Staff reviews the feasibility of the infrastructure extension and estimates the cost of the project, as well as potential property owner participation in the financing. This information is shared with the affected property owners, who are then surveyed to determine an overall interest level. Projects with a high level of support are typically added to the CIP project list for construction by the City.

The following objectives and tasks are provided by the Engineering Division:

- Responsive design of new customer services
- Design, construct, contract for, and manage water and wastewater operations and distribution system protection
- Maintain continuing property records and system maps
- Investigation of system safety concerns
- Research and integration of technological advances into the existing system
- Analysis of system operation
- Development of required capital improvement plans and projects/ budgets, as well as the engineering design and management of projects
- Coordination with other governmental entities and utilities for use of right-of-way and location or relocation of utilities
- Provide technical support necessary to comply with all applicable environmental laws and regulations while integrating environmental risks, costs, and impacts in the decision making process

3.3 WATER OPERATION

Colton's water supply is comprised entirely of groundwater extracted from the San Bernardino Basin Area (Bunker Hill Basin portion), the Rialto-Colton Basin, and the Riverside Basin (Riverside North Basin portion). Colton currently does not import water in order to meet the demands of its service area.

Colton categorizes customers as residential, commercial, industrial, and "other" uses. On average, 60 % of water deliveries are for residential use and 35 % are for commercial use, while the remaining 5 % is split between industrial (3 %) and other uses (2 %).

Listed below are some of the key information and infrastructure that the City of Colton's Water Utility maintains:

- 9,900 acre-feet of water produced each year
- 52,000 residents served
- 4 pressures zones
- 120 Miles of pipeline ranging from 2" to 30"
- 13 production wells
- 9 reservoirs with a 21.78 million gallon combined capacity
- 5 booster stations with 11 boosters
- 2 perchlorate treatment systems
- 3 groundwater basins
- 1,809 system valves ranging from 2" to 30"
- 1,594 fire hydrants

The Water Operation and Distribution Division is responsible for providing high-quality drinking water, maintaining the piping system to ensure reliable service, providing storage in water reservoirs to meet periods of high demand and fire fighting, and monitoring consumption through meters located on each service line. This division has positions that include the Water Utility Manager, Water Quality Cross Connection Control, Water Utilities Supervisor, Water Quality Specialist, Water Utility Operator, (3) Water Distribution Operator III, (3) Water Distribution Operator II, and (3) Water Distribution Operator I. The Water Operation and Distribution Division's duties include oversight of the following crucial services:

3.3.1 Water Quality Monitoring

Water quality monitoring stations are in continuous operation to track and record the water quality throughout the distribution system. Staff use this data to report to regulatory agencies and to make adjustments as needed based on the results.

3.3.2 Pipe Line Connections (Taps)

Water lines are tapped to add a new service connection. City crews are the only ones authorized to tap or connect to a main line to ensure drinking water quality because

during this process there is the potential of contaminating the already treated (potable) water in the line.

3.3.3 Pipe Line Repairs

Pipe line breaks are a very high priority and are responded to as soon as possible. Most often, breaks are identified by citizens reporting water in the street. Sometimes, the water treatment plant will notice a change in water pressure in the system that could indicate a break. Crews respond to breaks 24 hours a day, 7 days a week.

3.3.4 Pipe Line Replacements

A pipe replacement is defined as replacing a valve to valve section of pipe; smaller segments would be considered a repair. Lines are replaced because the pipe has reached the end of its useful life, because it is undersized for the service demand, or because more capacity is needed for fire-fighting response. Replacement projects are scheduled in advance and completed through the Capital Improvement Program (CIP).

3.3.5 Service Repairs

A service line is defined as the pipe from the main line in the street to the water meter. This section is the City's responsibility to maintain. The pipe from the water meter to the structure is the property owner's responsibility. Breaks are the primary problem in service lines and are usually identified by the property owner due to reduced water pressure or water ponding on the ground service repairs have a high priority.

3.3.6 Valve Exercising and Flushing Program

Flushing main lines remove sediment or rust from the water pipes. This activity helps maintain drinking water quality, reduces taste and odors, and maintains flow capacity in the pipeline. The valve is exercised and any problems with the valve mechanism can be identified. The same is true for fire hydrants, which are opened during the flushing process. Any hydrant maintenance needs discovered during flushing are scheduled and completed by staff. Dead-end lines are flushed more often to circulate the water and

maintain effective chlorine levels in the distribution system. The flushing program also aides in mitigating brown water issues that are discussed in detail in section 5.9.

3.3.7 Water Meter Installation

The City's Engineering Division identifies the work to be done and communicates the need to the Water and Wastewater Department. Typically, 3/4 and 1 inch (pipe diameter) meters are installed for a residence; businesses usually require a larger meter. This program systematically replaces all meters in the system with Automatic Meter Reading (AMR) meters. The Department is proposing to replace all meters with radio read meters in the next three years.

3.3.8 Facility Automation

Staff implements and maintains the hardware and software that allow the water treatment plant and pump stations to be operated and monitored remotely. It also provides more accurate data collection, more immediate notice of alarms, and quick recovery from a disaster that compromises the treatment process. Staff is expected to respond after-hours to resolve any problems that may arise at these facilities or with the automation hardware and software.

3.3.9 Meter Repair/Replacement

The typical reasons for a repair are if the meter stops registering, if the register is fogged and can't be read, or if the meter or valve is leaking. Problems are usually identified by the City's meter readers.

3.3.10 Hydrant Maintenance

Hydrants are not used very often, and hence parts can deteriorate, making them difficult to operate. The City Fire Department exercises all the hydrants in the system at least once a year. During this process, maintenance needs are identified and forwarded to Water Utilities Department.

3.3.11 Air Relief Valves

Water lines below the surface typically match the contours of the land. Matching the topography changes through the community creating high points in the water piping system. Air relief valves are used to release the air that gets trapped in these high points. Air in the line is not desirable because it reduces flow capacity and it can cause knocking or water hammer in a property owner's pipes.

3.3.12 Flow or Pressure Checks

Customers who call with concerns about their water pressure can have the pressure level checked at the meter and the house by City staff. About 95% of the time that a problem is found, it is caused by deteriorated galvanized piping on the customer's side of the meter. In these cases, the property owner is responsible for fixing the problem.

3.3.13 Water Line Backflow Prevention Program

The City is required to ensure that water from commercial and customer service line does not flow back into the City's main line, which could cause contamination of the water. Connections to the City's water system where there is the potential for this to happen, such as irrigation systems and industrial uses, require a backflow prevention device. The City is required to ensure that annual testing is performed on these devices and to discontinue water service if the test is not completed or if a problem found during testing is not corrected. In addition to managing the program, staff reviews development plans for proper backflow devices and annually tests.

3.3.14 Hydrant Painting

Fire hydrants are painted to allow for easier identification in emergency situations and to make them aesthetically pleasing to the neighborhood. This work should be performed every three to five years.

3.3.15 Hydrant Meter Installation

When a contractor is performing work in a new development or on a project, they often request that the City install a meter on the nearest fire hydrant. This is a convenient way

for them to get water for their construction activities. The contractor is charged for the amount of water used and a flat fee for installation. If the meter is damaged during use, the contractor is charged for the repair or replacement costs. The demand for this service has increased in recent years and more meters have been purchased. Backflow prevention devices are installed on these meters to protect the potable water supply from contamination.

3.3.16 Utility Line Location

Before any excavation can take place in the public rights-of-way, the law requires that underground utility lines be located. Representatives from both public and private utilities go to the site and mark the surface with a unique color of paint, indicating where their respective infrastructure is below the surface. Water and Wastewater staff typically have 48 hours after notification to locate water and sewer utilities, but some are emergency requests, which require prompt attention. Utility line locations are a very high priority. Currently, the water and wastewater inspector is responsible for locating the water and wastewater line.

3.3.17 Water Turn-ons/Turn-offs

Requests for water service to be turned on or off at the water meter come from Customer Service (Utility Billing) staff or directly from customers. During normal business hours, the meter readers perform these duties. Occasionally, a customer will call asking for the water to be turned off because they have a break on their side of the water meter or because they are installing an irrigation system.

3.3.18 Customer Requests

Customers occasionally call with water quality concerns. Water Department staff will respond to these requests by visiting the property, taking water samples, and troubleshooting the situation.

3.3.19 Development Plan Review

Staff review plans for new development for impacts to the water distribution system. During the review meetings, detailed construction plans are analyzed and problems identified.

3.3.20 Association Contacts

Staff maintains contacts with professional associations such as the American Water Works Association, San Bernardino Valley Municipal Water District, East Valley Water District, City of Loma Linda, City of Redlands, City of San Bernardino Municipal Water Department, West Valley Water District, Yucaipa Valley Water District, and with State departments such as the California Department of Health. Contacts with these associations are vital to ensuring that the City is in a good position to meet emerging regulations and to contest regulations where appropriate.

3.3.21 Testing and Analysis

The testing and analysis (required by the Safe Drinking Water Act) is done in a State-certified drinking water laboratory. Water Utility currently contracts with Clinical Laboratory of San Bernardino to provide monthly and annual separate tests to ensure high-quality drinking water. City staff is responsible for keeping appropriate records on all tests and reporting to regulatory agencies.

3.3.22 Pump Stations

There are five pumping stations in the City that are used to move drinking water to higher elevations. These stations operate through an automated system that provides remote monitoring and control. It is essential that the pump stations operate as needed to ensure customers receive an uninterrupted water supply and staff will respond after-hours to take care of problems. Nine reservoirs located around the community store water that customers draw from when the pumping plants are not in operation. The reservoirs are a key component of the system, especially during high-demand periods, such as the summer irrigation season and when fighting fires. Additional reservoir capacity is needed to meet the current and future forecasted water demands. These issues are discussed in

more detail in section 5.2. Detailed records are kept on all these operations and periodic reports are made to regulatory agencies.

The following objectives and tasks are provided by the Water Division:

- Improve reliability and reduce service interruptions through ongoing inspection and preventative maintenance programs
- Annually inspect and maintain the water system
- Maintain right-of-way clearing and maintenance program
- Provide SCADA support services
- Annual inspection of distribution system and scheduling of routing maintenance
- Preventative maintenance of treatment plant
- Continue system inspections programs using various technologies
- Provide reliable fleet service and vehicle maintenance by performing annual vehicle safety inspections
- Provide efficient system construction
- Refine comprehensive construction and scheduling program
- Identify and initiate the replacement of pipes and equipment
- Evaluate new technologies and alternatives for sewer pipe maintenance
- Conduct investigations of customer premise access issues

3.4 WASTEWATER OPERATION

In 1910, Colton began construction of the wastewater treatment plant. The City of Colton has 125 miles of collection system pipe ranging from 6 inch to 36 inch. Currently, the Wastewater Plant flow is 5.2 million gallons per day and runs 24 hours a day, 365 days a year and serves 52,000 residents. The plant also serves residents in the City of Grand Terrace. The collection systems have eight lift stations. The Plant produces about 2,000 tons of dry bio solids each year.

The Wastewater Treatment Plant performs ongoing extraction of bio-solids from wastewater during treatment. These solids must be disposed of in an environmentally safe and acceptable manner, consistent with EPA regulations.

The Wastewater Treatment Plant removes approximately 7,000 tons of sludge per year. Once dry, the sludge is hauled to an acceptable and environmentally safe disposal site.

The Plant has seven sewage lift stations are maintained by the Department. The purpose of the sewage lift stations is to raise the wastewater up to a level that will allow it to gravity feed into sewer lines. Pump stations are a vital part of the collection system. Pump stations run 24/7 and many times replacement parts are no longer available. Replacement pumps and equipment have long lead times; to aggressively keep our corrective maintenance program on-going it is necessary to have spare pumps for the vital lift stations. Much of this equipment is for the plant lift stations where spills could develop if such equipment fails. By having spare pump equipment ready to go such disasters can be mitigated or avoided.

The Wastewater Operation Division is responsible for providing the removal and treatment of wastewater from homes and businesses within the service area, collecting the wastewater from properties, maintaining the pipes to minimize service interruptions and treating the wastewater to state and federal water quality standards. Each of these steps includes a variety of operation and maintenance activities. Services in support of these core activities include testing wastewater samples to ensure a high-quality effluent, operating the combined sewer overflow and bio-solids treatment facilities, educating the public on pollution prevention activities and, developing facility master plans to set the stage for the future. This Division has positions that include the Wastewater Utility Manager, Lead Wastewater Utility Operator, Collection System Maintenance Worker I, (2) Wastewater Operator II, (2) Wastewater Operator I, Wastewater Equipment Mechanic II, Wastewater Equipment Mechanic I, and (4) Operator-in-training. The Wastewater Operation and Distribution Division's duties include the following crucial services:

3.4.1 Collection System

The City provides for removal and treatment of wastewater from homes and businesses within the City limits. To accomplish this, the City collects the wastewater from properties, maintains the pipes to minimize service interruptions, moves the wastewater through the piped collection system by operating large pumps to lift the wastewater at key locations, and treats the wastewater to state and federal water quality standards, and finally discharges the treated wastewater to the Rapid Infiltration and Extraction

(RIX) facility. Each of these steps includes a variety of operation and maintenance activities. Services in support of these core activities include testing wastewater samples to ensure a high-quality effluent, operating the combined sewer overflow, educating the public on pollution prevention activities and developing facility master plans to set the stage for the future. The majority of the activities performed are strictly regulated on the federal level through the Clean Water Act and on the State level.

3.4.2 Maintenance

Major maintenance at the treatment plant includes pump replacements; valve repairs; and electrical, instrumentation and electronic equipment maintenance. Predictive and preventative maintenance programs are in place and an automated maintenance management system is used to ensure that necessary maintenance is scheduled and completed. Most of the maintenance work is done by City crews; the remainder, through contracts with the private sector.

3.4.3 Pump Stations

There are seven pump stations around the community that move the wastewater through the collection system to the treatment plant. These stations are tied to the main plant through a computerized remote monitoring and control system. It is essential that these pump stations operate continuously to ensure that untreated wastewater does not backup in the system or overflow to creeks or the river. Staff responds after-hours to take care of problems that may arise.

3.4.4 Facility Automation

Staff implements and maintains the hardware and software that allow the wastewater treatment plant and pump stations to be operated and monitored remotely. Automated systems also provide more accurate data collection and reporting, more immediate notice of alarms and quick recovery from a disaster that compromises the treatment processes.

3.4.5 Video Inspection of Pipe Lines

A specialized video camera is passed through the pipes to record the condition and identify problems (cracks, roots, inflow/infiltration, etc.). This data is used to develop proactive maintenance schedules or to select pipes for replacement. A program has been developed to systematically video all the pipe lines in the system. Lines are also inspected ahead of street reconstruction projects, in response to reports of plugged lines or to assist property owners in identifying and solving problems. Video inspections of lines in new development are done during final project inspection to ensure the construction meets City standards. The video inspection is performed annually by the City's Contractor (Houston Harris).

3.4.6 Flushing

Pipe lines are flushed to remove obstructions and maintain flow capacity. The work requires specialized equipment to flush the lines and then vacuum out the debris. If lines are not flushed, system capacity issues, odors, and blockages are likely to occur, and animals could be drawn to the area. For known problem areas, lines are routinely flushed depending on the severity of the problem.

3.4.7 Dye Testing

This is a technique used to identify problems in the piping system. If a problem is suspected, dye is introduced to a pipeline and traced to see if there is an obstruction or a collapsed line. Dye testing is also done in response to citizen requests for assistance with issues in the pipe connecting their house to the wastewater system.

3.4.8 Pipe Line Replacements

A replacement of a manhole-to-manhole section of pipe is accomplished through the CIP program. Candidates for replacement are identified from video inspection. Part of the priority-setting process includes consideration of planned street reconstruction projects. This ensures that lines are replaced before, or as a part of, the street reconstruction project, and not after. Emergency replacements are performed by maintenance staff.

3.4.9 Manhole Maintenance

Manholes are installed in the piping system to provide access points for maintenance. The need for maintenance of manholes is identified through visual inspection, and video reports. The number of defective manholes increases as the system ages. Minor deficiencies are repaired by maintenance staff. Major problems are corrected through the CIP program.

3.4.10 Root Control

Tree roots growing into lines and impeding the wastewater flow are periodically removed by mechanical and chemical means. Problem areas are identified through video inspection reports. The majority of root problems are in easement (backyard) lines where property owners have planted trees on or near pipeline routes.

3.4.11 Infiltration and Inflow (I/I)

Infiltration occurs when manholes or lines are cracked or not properly aligned and ground water enters the piping system. Inflow occurs when storm lines or roof drains are inappropriately connected to the sanitary pipe system. Both add unnecessary flow to the wastewater system, impacting pipeline-carrying capacity and plant treatment capacity. Repair work on the public infrastructure is contracted out through the CIP program and includes grouting and sealing pipe lines and manholes, or replacing lines and manholes. Over time, the reduction of infiltration and inflow into the sanitary system will preserve pipeline capacity to accommodate growth and reduce the amount of ground or rain water that receives unnecessary treatment, saving costs on chemicals and electricity.

3.4.12 Pipe Line Repairs

The majority of pipe line repairs are identified through video inspection reports. Because of the potential health implications caused by sewer service interruptions, these repairs are done immediately by City staff or performed by the City's Contractor.

The following objectives and tasks are provided by the Wastewater Division:

- Improve reliability and reduce service interruptions through ongoing inspection and preventative maintenance programs
- Annually inspect and maintain the wastewater system
- Maintain right-of-way clearing and maintenance program
- Annual inspection of sewer distribution system and scheduling of routing maintenance
- Preventative maintenance of wastewater treatment plant
- Continue system inspections programs using various technologies
- Provide reliable fleet service and vehicle maintenance by performing annual vehicle safety inspections
- Provide efficient system construction
- Refine comprehensive construction and scheduling program
- Identify and initiate the replacement of pipes and equipment
- Evaluate new technologies and alternatives for sewer pipe maintenance
- Conduct investigations of customer premise access issues

4 Projects

Colton Crossing Infrastructure Upgrade

Colton Crossing Project will separate the at-grade crossing of Union Pacific Rail Road Company (UPRR) and Burlington Northern Santa Fe (BNSF) railroad track by constructing a railroad bridge over the BNSF railroad track. The project limit is approximately Mt. Vernon Ave. on the east and Rancho Ave. on the west. This project will affect a number of existing utilities that cross the UPRR tracks including Colton Water and Wastewater infrastructure. The scope of the project is as follows:

a. 3rd Street - Protection and encasement of existing 18" Vitrified Sewer Clay Pipe (VCP) and 12" Asbestos Water Cement Pipe (ACP) with 20" steel casing
b. 5th Street - Protection and encasement of 14" VCP with 6" thick concrete blanket.
c. 7th Street – Protection and encasement of 10" Cast Iron Sewer Pipe (CIP) sewer with 18" steel casing and 12" ACP with 18" casing.

The City of Colton and UPRR entered into a cooperative agreement to address the funding and construction mechanism of this project.

Hunts Lane Grade Separation

The Hunts Lane Grade Separation Project will separate the existing Union Pacific Rail Road Company (UPRR) railroad track by constructing a bridge over the existing railroad. Water and Wastewater is required to relocate and/or upgrade some of its existing lines within the project area. SANBAG is the lead agency for the project and a Cooperative Agreement is in place that addresses all the funding, right of way, utility relocation, and construction aspects of this project.

Laurel Street Grade Separation

The Laurel Street Grade Separation Project will separate the existing Burlington Northern Santa Fe (BNSF) railroad track by constructing a railroad bridge over depressed lowered Laurel Street profile. Colton Water and Wastewater will be required to relocate and/or upgrade some of its existing lines within the project area. SANBAG is the lead agency for the project and a Cooperative Agreement will be in place to address all the funding, right of way, utility relocation, and construction aspects of this project.

North Colton Water Line Replacement Project

The North Colton Water Line Replacement Project is currently under construction and will replace the old steel pipe with Polyvinyl Chloride (PVC) throughout the North Colton section except for two locations on Fogg Street and Rancho Avenue, which will be replaced with Ductile Iron Pipe (DIP). This project will mitigate brown water issues in the water system caused primarily by old rusting steel pipes. In total, the City will replace 6,000 L.F. of water mains, new water services, hydrants and valves.

Wells 30 and 31 Project

The City's Water Facilities Master Plan includes recommendations for the construction of new wells to effectively meet the City's required water production capacity as well as replace existing wells that have exceeded their useful life. Wells 30 and 31 will be new sources of supply and an essential element of the water system master plan. The plans for this project have been completed and construction will begin FY 2012/13.

Waste Water Treatment Plant Centrifuge Project

The Wastewater Centrifuge Project will improve operations and reduce the plant footprint. The centrifuge is proposed to thicken digested sludge that will significantly reduce the area of onsite sludge storage and drying facilities. The proposed facility improvements will be integrated into the existing hydraulic, electrical, and control systems. This project is in design stage and construction is expected to begin in FY 2012/13.

Riverside Avenue Sewer Main Project

The Riverside Avenue Sewer Main Project will help improve the City's lack of infrastructure along the Agua Mansa corridor. This project will help channel all the sewer from the Agua Mansa corridor south to a proposed lift station along Center Street and tie to the existing sewer system along La Cadena Drive. This project is currently in planning stage.

5 Challenges and Strategies

Like any other business, Colton's Water and Wastewater Divisions are facing challenges due to a down turn in the economy. In addition, there are other factors that may impact the utility in the near future. Management is developing plans to build on the utility's strengths, resolve weaknesses, seize opportunities, and avoid, as much as possible, any negative fallout from the major issues.

5.1 Wastewater Infrastructure

Challenge

One challenge includes certain assets which will need repair and/or replacement to preserve reliable treatment ability. Failure to complete this work in a timely, planned manner may result in higher repair costs when failures occur unexpectedly and/or possible NPDES permit violations, if the treatment process is impacted.

Collection system overflow is an area that poses a challenge to the Wastewater Utility. The laterals maintained by the property owners that are in public right-of-way also pose a threat due to potential for overflows. Water and Wastewater needs to manage maintenance to minimize overflows within its control. In addition, the lack of adequate fats-oils-grease (FOG) and root control programs have contributed to sewer system clogging, resulting in an increased need for maintenance.

Strategy

Installation of system upgrades, plant modifications, replacement of aging infrastructure, and introduction of more sophisticated equipment, instrumentation and technology will provide a high level of service and more productive facility. These modifications shall continue to preserve the City's investment in the equipment; produce effluent of high quality; and, comply with the regulations in the Clean Water Act. Staff is also exploring the possibility of extending the maintenance by the Utility Department to include the sewer lateral up to the property line. Sewer laterals are currently maintained by the property owner from the main line to the property. A master plan update proposed for FY

2012/13 will identify deficiencies in the wastewater system. Staff will use the master plan to create a capital improvement program to address the deficiencies and funding mechanisms.

5.2 Water Infrastructure and Capacity

Challenge

The City is obligated by State law to provide water to residents within the City limits. To meet this obligation, there must be treatment facilities sufficient to meet State and Federal regulations for water quality, and distribution facilities sufficient to store and deliver drinking water to customers. An issue of importance for the Water Utility Division is the Utility's ability to deliver a sufficient quantity of water to meet demand as the costumer base grows. The Utility needs additional storage for water and additional capacity for water production to meet the current and future water demands. Maintaining and repairing the collection systems will need attention to keep the aging system in good condition.

Strategy

Installation system upgrades, plant improvements, replacement of aging infrastructure, and the future addition of more sophisticated equipment, instrumentation and technology will provide a high level of service and more productive facility. In addition, to continue to preserve the City's investment in the equipment, producing drinking water of high quality, and compliance with the regulations in the Safe Drinking Water Act, installation of new reservoirs, water wells, pump stations, water meters, etc. will be needed to provide a better service to the residents of the City. A master plan update proposed for FY 2012/13 will identify deficiencies in the water system. Staff will use the master plan to create a capital improvement program to address the deficiencies and funding mechanisms.

5.3 Efficient Meter Program

Challenge

The City lacks the ability to provide the service for the reduction of meter reading cost, and does not allow us to provide immediate and accurate billing data for the Advanced Utility Customer Information System (CIS) billing system.

Strategy

Implementing a citywide automated meter reading (AMR) program will provide the convenience for both the City and the customer. With AMR, the meter readers can collect meter readings much quicker by simply driving by meter locations. The new meters will assist customers in detecting leaks and will assist utility staff in detecting malfunctioning or tampered meters. Additionally, this timely information coupled with analysis, can help both utility staff and customers better manage the City's potable water usage.

5.4 Workforce Development

Challenge

A shortage of qualified staff for Water and Wastewater Division is common as many workers in the field are starting to retire. In the near future, many Colton employees will be eligible to retire, and replacing the retirees will be challenging.

Upon completion of the Water and Wastewater Master Plan, various Capital Improvement Projects will be implemented to improve the City's existing infrastructure. With the increase in workload, and projects, additional staff will be needed to deliver the services.

Strategy

Staff is finalizing a plan to be considered at the mid-year budget of FY 2012/13 and/or FY 2013/14, outlining divisional needs for additional staffing or reclassification.

5.5 Water and Sewer Master Plans

Challenge

Inadequate funding for Capital Improvement Projects and Infrastructure maintenance was a barrier for the Master Plans, and low rates that result in insufficient revenue are the primary cause of this deficiency. To address this, the City needs to complete the update of the master plans for each of its utilities to describe the necessary work and resulting costs for each utility.

Strategy

The Master Plan updates will provide information that will be used as a basis for rate studies that would indicate the rate structures required for funding of each utility. The master plans and rate studies would be used to support the necessary rate increases. The Master Plans will also be used to identify the infrastructures needed for Water and Wastewater (reservoir, pump stations, water wells, centrifuge, pipeline mains, etc.). Staff is requesting funding for the master plans for the FY 2012/13 budget.

5.6 Perchlorate

Challenge

The City of Colton draws its water supply from the Rialto-Colton groundwater basin in San Bernardino County, California. In 2005, Colton filed suits against numerous entities that had engaged in industrial activities in the Basin over the years, alleging that they caused the release of perchlorate into the groundwater. Colton has spent resources to investigate the contamination and to implement the wellhead treatment program.

Strategy

A resolution and settlement is currently being formulated.

5.7 Water Conservation Program

Challenge

The City does not have a Water Conservation Program that can provide water audits for customers to help them conserve through upgrading water fixtures or change how they

use water. In the past, the program focused on providing rebates to customers who purchased water-efficient washers and toilets.

The Water Conservation Bill of 2009 (SBX7-7) provides the regulatory framework to support the statewide reduction in urban per capita water use described in the Water Conservation Plan. The Bill requires the City to achieve a 10% reduction of water use by 2015 and 20% by 2020. In addition, the City will need to assess every five years the reliability of its water sources over a 20-year planning horizon through the City's Urban Water Management Plan.

Strategy

The City has adopted the 2011 Urban Water Management Plan that requires conservation and efficient use of urban water supply. The Water Utility is proposing to conduct a classification study for a water Conservation Specialist. This position will identify efficiencies in outdoor water use, provide public education on water conservation, school presentations, and provide information pieces to the community. Staff is proposing to bring this to the City Council at the mid-year budget for FY 2012/13.

5.8 Inter-Agency Issues

Challenge

Staff is continuously working with various adjacent Government and Utility agencies to provide and/or receive services. Certain areas of water and sewer service within the City requires out of service area agreement from other agencies.

Currently, the utilities also provide service to adjacent utilities and agencies through various agreements. A number of issues have been pending that need to be resolved in the near future.

Strategy

Staff is working with the City of Rialto to finalize a new extraterritorial agreement to expand the City of Colton's sewer services. Staff will explore other alternatives with East

Valley Water to provide emergency tie-ins. Staff is working with the City of Riverside to provide utility service to the Pellisier Ranch. In addition, staff is currently working with the City of Grand Terrace on an update on their rate structure for their customers.

5.9 Brown Water

Challenge

Brown water is caused by rust that settles in the water lines and is occasionally disturbed by release of a sudden increase in flow of water. Brown water can be perceived as health risk and is an indication that rust is forming in the system or is being pumped from the wells. Having brown water running through the home for a prolonged period can also cause damage to a home's hot water heater, taps, faucets, shower heads and anything else that uses water.

The City of Colton has unlined steel water mains that are over 50 years old in several streets throughout the City. These unlined steel water mains are corroded and rusty causing leaks and are a source of discolored water to the customers.

Strategy

To correct the problem of the discolored water and leaks in the old steel water mains, a Mainline Replacement Program was implemented to replace the water mains. The Department has already replaced over 35,000 linear feet of old steel mains with Polyvinyl Chloride (PVC) pipe. Currently, the Department is implementing a project to replace approximately 7,000 linear feet of water mains throughout north Colton. In addition, a wellhead treatment program will be implemented to provide treatment to existing wells to help improve service. Once all the old steel lines have been replaced and well treatment installed, staff will continue to flush the system and vacuum the reservoirs to rid the water lines of remaining rust. The Department expects the brown water incidents to be significantly reduced over the next year and beyond.

6 Conclusion

Business planning is a continual process, with the business plan being reviewed and updated annually, such that the utility always has a future business plan as a reference. In this regard, staff has set a goal each year to update the business plan.

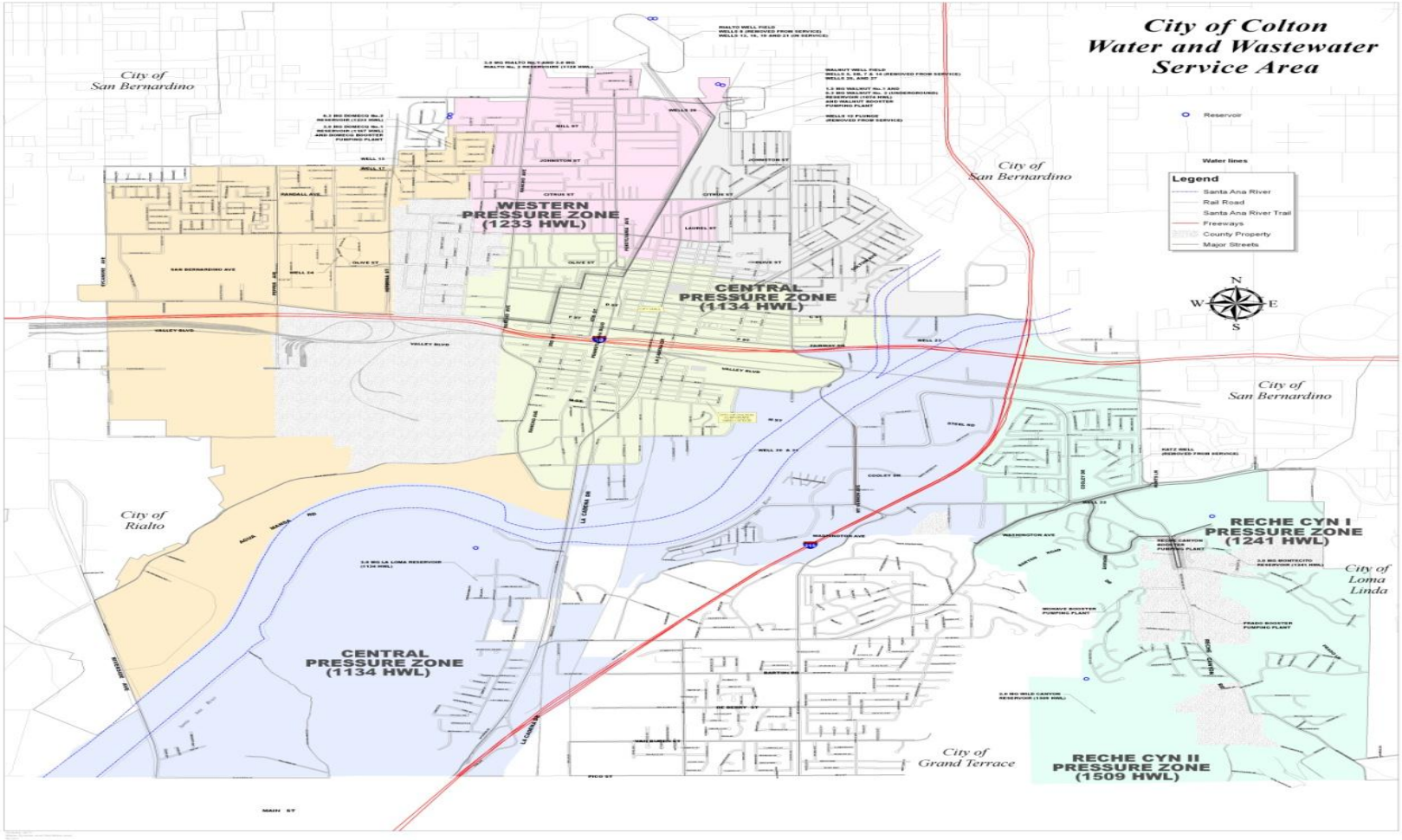
The updating process allows the staff to seriously and objectively review its accomplishments over the course of the year, relative to the strategic goals and measurable targets in the business plan, and assess how effective the Action Plans were in achieving the targeted goal for that year.

This Business Plan considers national trends impacting all water utilities, as well as local concerns identified by elected officials, utility commissioners, employees, and community leaders. The plan adopts a set of service level metrics to form a basis for monitoring progress in the execution of this multi-year plan. This approach is consistent with national trends and local demands for the Utility to be more accountable and transparent in producing tangible and sustainable results for customers. Recommendations contained within this Strategic Plan include direction to:

- Establish appropriate policies to address financial challenges./ capital improvements
- Develop program for the renewal of existing aged infrastructure.
- Improve customer understanding and relations.
- Proactively address long term needs to ensure a sustainable utility.

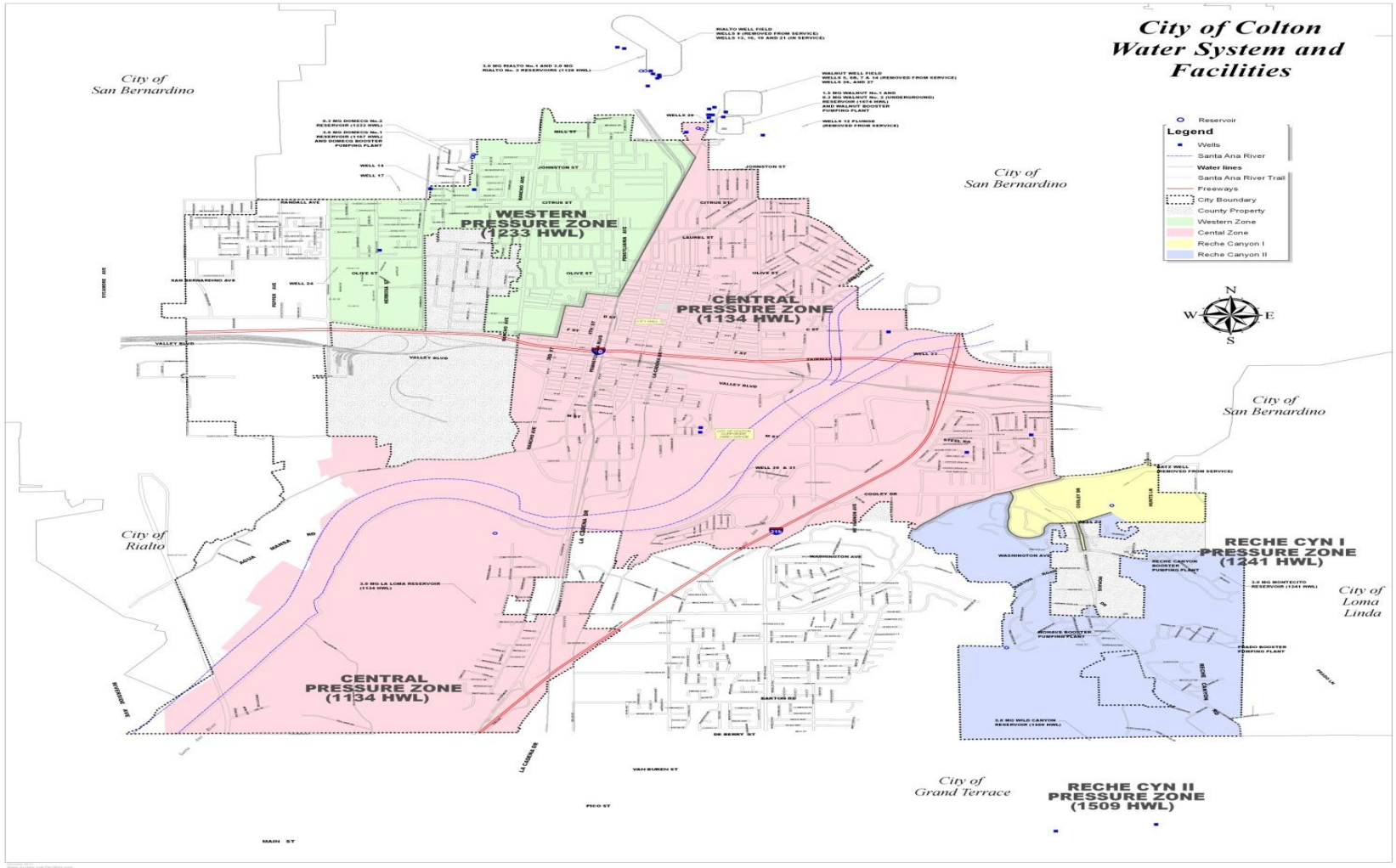
APPENDIX A

WATER AND WASTEWATER UTILITY SERVICE AREA



APPENDIX B

EXISTING WATER UTILITIES



APPENDIX C

EXISTING SEWER UTILITIES