

City of Castroville, Texas

2016 Electric, Gas, Water and Wastewater

Rate Study and Financial Forecast

City Council Briefing



Presentation Format



- Introduction
- Electric Rate Study
- Natural Gas Rate Study
- Water/WW Rate Study
- Presentation Summary









Facts about Utility Rates in Texas and USA



- Average electric, water and wastewater utility has been increasing rates 3-6% per year; trend expected to continue
- Natural Gas costs have decreased yet remain highly volatile
- Many reasons for increases are beyond a utility's ability to influence
- 30-40% of utilities charge rates that do not cover their costs



Utility Rate Plans Overall Goals



- Fund all operating expenses
- Provide means to finance Capital Improvement Plan
- Ensure that each utility is fully selfsustaining



 Minimize impact of any rate adjustments on ratepayers



City of Castroville Initial Observations



- Previous annual rate
 adjustments have contributed
 to the financial health and
 stability of the utility
- However, due to increasing costs, rate adjustments are necessary to ensure all operating costs are covered and identified capital requirements are funded





Electric Utility Analysis and Recommendations



Current Electric Rates Effective October 1, 2015



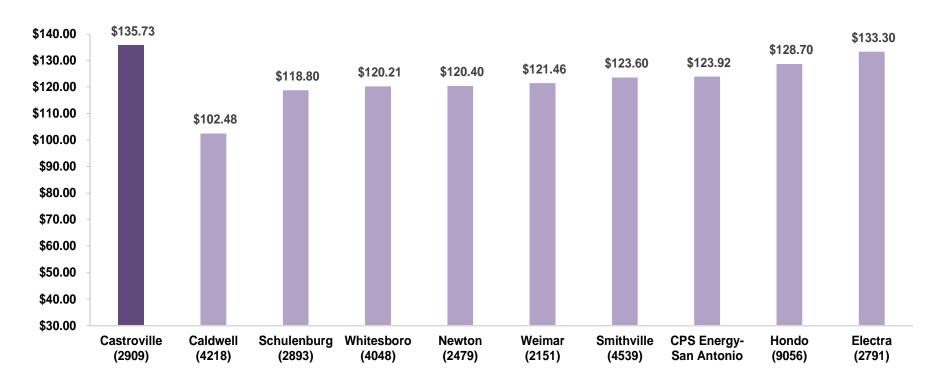
	sdential nside	•	Residential Outside	F	Residential Senior	С	ommercial Inside	Commercial Outside			
Minimum Bill	\$ 9.13	\$	9.13	\$	8.67	\$	23.97	\$	23.97		
Metered Usage \$ per kWh	0.1266		0.1266		0.1203		0.1266		0.1266		

Residential - Sr. Account get a 5% discount off rates



Electric Monthly Residential Charges for 1,000 kWh Usage





Population of each City indicated in parentheses



Electric Test Year Customers and Usage

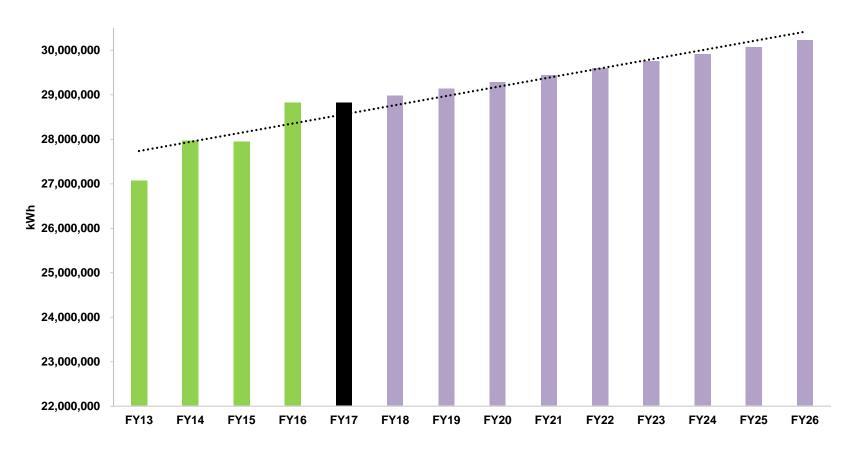


	July 2016	Usage kWh August 2015 - July 2016	Percent of Total Usage
Residential - In	913	11,866,741	41.17%
Residential - Out	8	91,068	0.32%
Residential- Senior	271	3,219,217	11.17%
Commercial - In	248	11,423,279	39.63%
Commercial - Out	3	66,300	0.23%
City Accounts	51	2,158,694	<u>7.49%</u>
Total	1,494	28,825,299	100.00%



Electric Historical and Forecast Sales



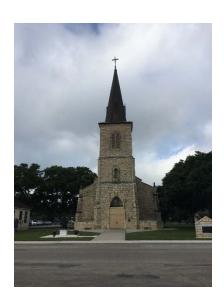




Electric Utility 5 Year Financial Forecast Primary Assumptions



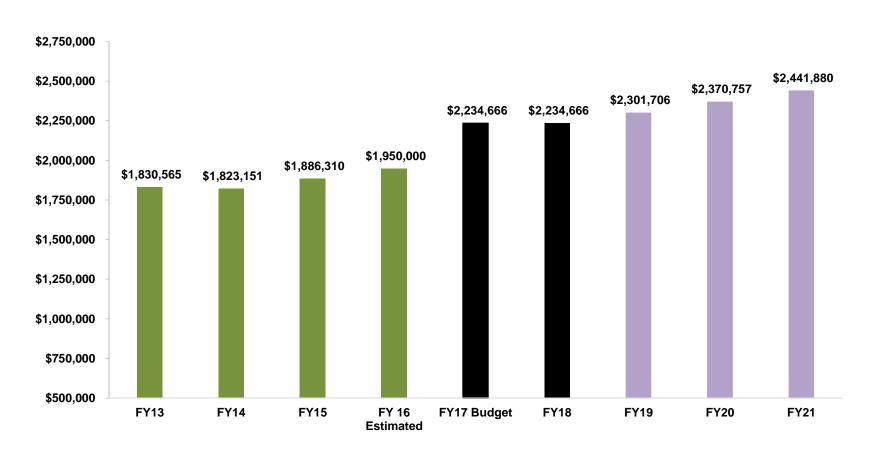
- Account growth is expected to increase by 5 Residential and 2 Commercial accounts per year
- Outside Residential and Commercial Rates 25% higher than Inside City Rates Beginning in FY17
- Most personnel/operating costs increase 3.0 8.0% per year
- CPS Contract has Pricing Term changes effective October 2016 -- Electric Supply Costs expected to increase 13% in FY17 and remain flat in FY18
- City issues \$2.6 million bond in FY 2020 to fund capital improvements





CPS Contracted Electric Supply Costs

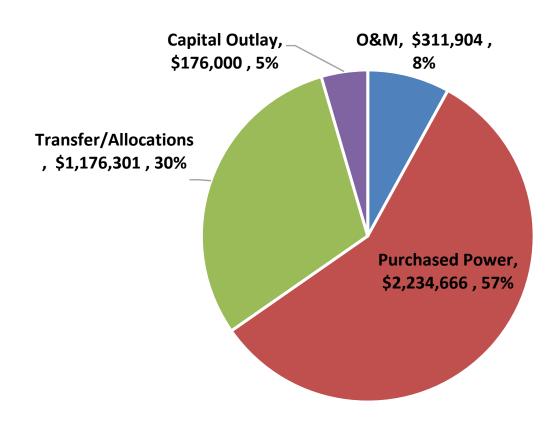






FY 2017 Electric Cost of Service





Total = \$3,898,871

Electric Utility CIP and Forecast Schedule for New Bond Issues



- FY 2020 Country Village District: \$1.1 Million
- FY 2021 River Bluff District: \$2.5 Million
- ◆ Total Electric Debt Issued in FY 2020 = \$2.6 Million



Electric Utility Forecast Net Revenue Requirement



	2017	2018	2019	2020	2021
Operating Expense	\$ 311,904	\$ 323,781	\$ 336,206	\$ 349,211	\$ 362,830
Purchased Power	2,234,666	2,234,666	2,301,706	2,370,757	2,441,880
Transfers/Allocations	1,176,301	1,211,590	1,247,938	1,285,376	1,323,937
Debt Service	-	-	-	-	250,237
Capital Outlays	176,000	178,880	181,846	184,902	158,049
Total Cost of Service	\$ 3,898,871	\$ 3,948,917	\$ 4,067,696	\$ 4,190,246	\$ 4,536,932
Less Non-Rate Revs	(62,923)	(62,923)	(62,923)	(62,923)	(62,923)
Net Revenue Rqmt	\$ 3,835,948	\$ 3,885,994	\$ 4,004,774	\$ 4,127,323	\$ 4,474,010



Proposed Electric Rate Plan



	Oct-15	Effective Oct-16	Effective Oct-17	Effective Oct-18	Effective Oct-19	Effective Oct-20
Residential - In						
Minimum Bill	\$ 9.13	\$ 9.40	\$ 9.69	\$ 9.98	\$ 10.28	\$ 10.69
Energy per kWh	0.1266	0.1304	0.1343	0.1383	0.1425	0.1482
Residential - Out						
Minimum Bill	9.13	11.75	12.11	12.47	12.84	13.36
Energy per kWh	0.1266	0.1630	0.1679	0.1729	0.1781	0.1852
Residential- Senior						
Minimum Bill	8.67	8.93	9.20	9.48	9.76	10.15
Energy per kWh	0.1203	0.1239	0.1276	0.1314	0.1354	0.1408
Commercial - In						
Minimum Bill	23.97	24.69	25.43	26.19	26.98	28.06
Energy per kWh	0.1266	0.1304	0.1343	0.1383	0.1425	0.1482
Commercial - Out						
Minimum Bill	23.97	30.86	31.79	32.74	33.72	35.07
Energy per kWh	0.1266	0.1630	0.1679	0.1729	0.1781	0.1852



Electric Rate Proposal -- Impact on Monthly Residential - Inside and Outside Bills



Residential INSIDE Monthly Charges

KWh			Oct-15	Effective Oct-16		Effective Oct-17		Effective Oct-18		Effective Oct-19			ffective Oct-20
500													
	Total	\$	72.43	\$	74.60	\$	76.84	\$	79.15	\$	81.52	\$	84.78
	Increase				2.17		2.24		2.31		2.37		3.26
1,000													
	Total		135.73		139.80		144.00		148.32		152.77		158.88
	Increase				4.07		4.19		4.32		4.45		6.11
2,000													
	Total		262.33		270.20		278.31		286.66		295.25		307.06
	Increase				7.87		8.11		8.35		8.60		11.81
Residential	OUTSIDE Month	ılv Ch	arnes										
Residential	OOTOIDE MONE	ily Olli	ai geo										
500		_		_		_		_		_		_	
	Total	\$	72.43	\$		\$	96.05	\$	98.93	\$	101.90	\$	105.98
	Increase				20.82		2.80		2.88		2.97		4.08
1,000													
	Total	\$	135.73	\$	174.75	\$	179.99	\$	185.39	\$	190.96	\$	198.59
	Increase				39.02		5.24		5.40		5.56		7.64
2,000													
	Total	\$	262.33	\$	337.75	\$	347.88	\$	358.32	\$	369.07	\$	383.83
	Increase				75.42		10.13		10.44		10.75		14.76

Average Residential Electric Usage = 1,000 kWh per month



Gas Utility Analysis and Recommendations



Current Gas Rates



	F	Residential Inside	Residential Outside	C	Commercial Inside	Commercial Outside			
Service Fee	\$	10.73	\$ 10.73	\$	13.11	\$	13.11		
Usage Charge (per 1,000 CF)		8.22	8.22		8.22		8.22		

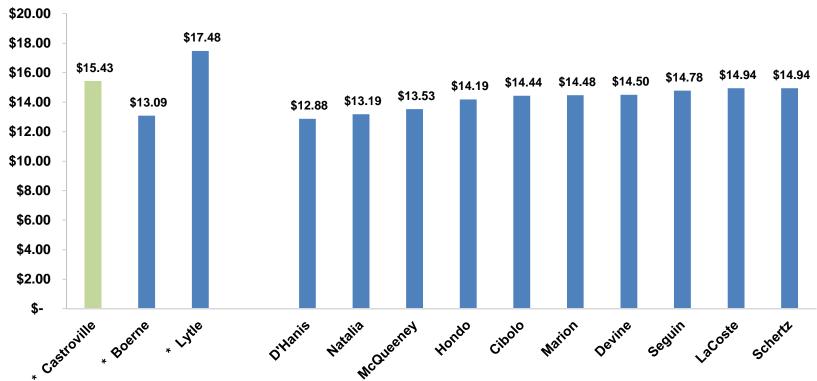
Cost of Gas to City

VARIES MONTHLY



Comparison of Average Price Per MCF – CY 2014





* Municipally Owned Distribution Systems

Source: : Railroad Commission of Texas – CY 2014 Average Price of Gas for Municipally and Investor Owned Systems



Gas Test Year Customers and Usage

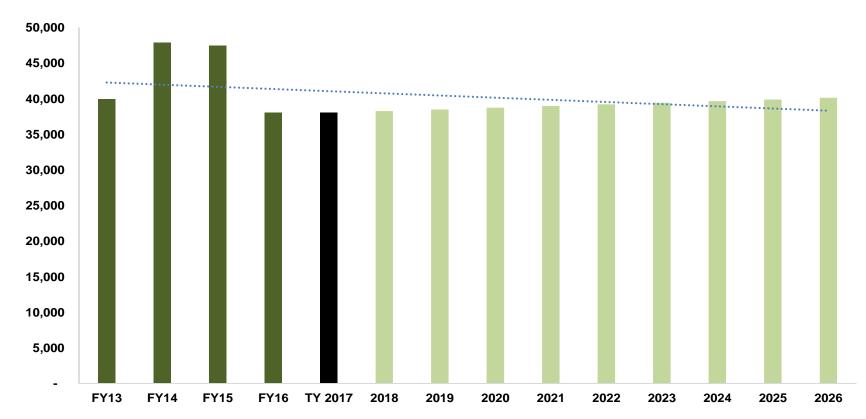


_	July 2016	Usage - MCF August 2015 - July 2016	Percent of Total Usage
Residential - In	747	17,902	47.97%
Residential - Out	9	267	0.71%
Commercial - In	85	15,972	42.80%
Commercial - Out	12	3,125	8.37%
City Accounts	4	53	0.14%
Total	857	37,319	100.00%



Gas Historical and Forecast Sales





Total Gas Sales Decreased 20% in FY 2016



Gas Department Primary Assumptions



- Account growth is expected to increase by 4 Residential and 2 Commercial accounts per year
- Most personnel/operating costs increase 3.0 8.0% per year
- Cost of Gas to City is based on FY2017 Budget
- Utilities System Maintenance and Line Testing/Repair are funded from Rate Revenue



City Purchased Gas Supply



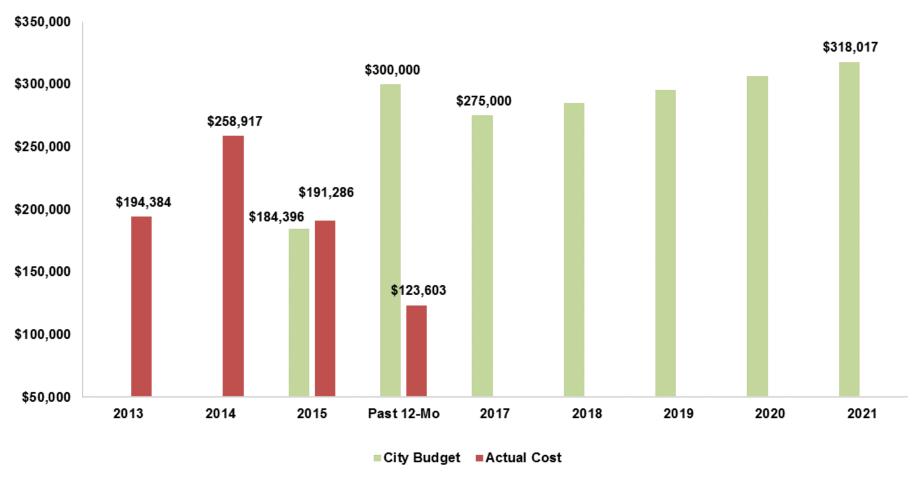
- Current Supply Contract is with West Texas Gas Marketing, Inc. and is effective December 1, 2015 – November 30, 2016
- Contract Price is based on the First of the month East Texas – Houston Ship Channel index price as published in "Inside FERC's – Gas Market Report, under the table entitled, Market Center Spot Gas Prices, plus \$.65 per MMBtu
- Spot Gas Prices are highly volatile and currently at historic lows. Futures settlement prices between September 2016 and September 2018 vary up to 20%





West Texas Contracted Gas Supply Costs and Budget

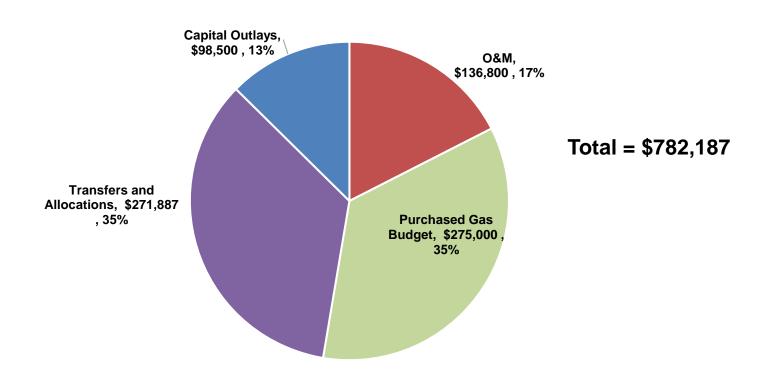






Gas Cost of Service FY 2017





Gas Department Forecast Net Revenue Requirement



	2017	2018	2019			2020	2021
Operating Expense	\$ 136,800	\$ 140,932	\$	145,189	\$	149,574	\$ 154,092
Purchased Gas	275,000	285,175		295,713		306,626	317,928
Transfers/Allocations	27,128	27,942		28,780		29,643	30,533
Capital Outlays	98,500	100,000		53,045		54,636	56,275
Debt Service	 <u>-</u>	<u></u> ,		<u>-</u>			
Total Cost of Service	\$ 782,187	\$ 806,151	\$	782,392	\$	807,935	\$ 834,306
Less Non-Rate Revenues	(14,886)	(14,886)		(14,886)		(14,886)	(14,886)
Net Revenue Rqmt	\$ 767,301	\$ 791,265	\$	767,506	\$	793,049	\$ 819,420



2 Rate Plan Alternatives Based on Funding Approach



- Alternative 1: Rate Pay Full Gas Utility Cost of Service
- Alternative 2: Drawdown Fund Balance by \$100,000 to reduce magnitude of rate adjustment
- Both alternatives Outside
 Residential and Commercial
 Rates 25% higher than Inside City
 Rates Beginning in FY17





Gas Alt 1 - Cost of Service Recommended Rate Plan



				ĺ										
						Effective	l	Effective		Effective		Effective		Effective
				Oct-15		Oct-16		Oct-17		Oct-18		Oct-19		Oct-20
	Gas to City MONTHLY		\$	3.19	\$	7.09	\$	7.30	\$	7.52	\$	7.75	\$	7.98
Residential - In														
Service I	Fee		\$	10.73	\$	13.09	\$	13.48	\$	13.89	\$	14.30	\$	14.73
Usage C	harge	(Per 1,000 CF)		8.22		10.03		10.33		10.64		10.96		11.29
Residential - Out														
Service I	Fee		\$	10.73	\$	16.36	\$	16.85	\$	17.36	\$	17.88	\$	18.42
Usage C	harge	(Per 1,000 CF)		8.22		12.54		12.91		13.30		13.70		14.11
Commercial - In														
Service I	Fee		\$	13.11	\$	15.99	\$	16.47	\$	16.97	\$	17.48	\$	18.00
Usage C	harge	(Per 1,000 CF)		8.22	·	10.03		10.33		10.64		10.96		11.29
Commercial - Out														
Service I	Fee	•	\$	13.11	\$	19.99	\$	20.59	\$	21.21	\$	21.85	\$	22.50
Usage C	harge	(Per 1,000 CF)	*	8.22	Ť	12.54	Ť	12.91	•	13.30	Ť	13.70	·	14.11
City Accounts														
Service I	Fee	_	\$	13.11	\$	15.99	\$	16.47	\$	16.97	\$	17.48	\$	18.00
Usage C		(Per 1,000 CF)	•	8.22	*	10.03	*	10.33	T	10.64	*	10.96	•	11.29



Gas Alt 1 - Cost of Service Impact on Residential Rates



			В	ffective	ı	Effective	E	Effective		Effective		ffective
		 ct-15	(Oct-16		Oct-17		Oct-18	Oct-19			Oct-20
Residential I	NSIDE Monthly Charges											
c	Cost of Gas to City Per CF VARIES MONTHLY	\$ 3.19	\$	7.09	\$	7.30	\$	7.52	\$	7.75	\$	7.98
2	2,000 CF	\$ 27.17	\$	33.15	\$	34.14	\$	35.17	\$	36.22	\$	37.31
	Increase			5.98		0.99		1.02		1.05		1.09
4	,000 CF	\$ 43.61	\$	53.20	\$	54.80	\$	56.44	\$	58.14	\$	59.88
	Increase		,	9.59	Ť	1.60		1.64	Ť	1.69	Ť	1.74
Residential (OUTSIDE Monthly Charges											
C	Cost of Gas to City Per CF VARIES MONTHLY	\$ 3.19	\$	7.09	\$	7.30	\$	7.52	\$	7.75	\$	7.98
2	2,000 CF	\$ 27.17	\$	41.43	\$	42.68	\$	43.96	\$	45.28	\$	46.63
	Increase			14.26		1.24		1.28		1.32		1.36
4	,000 CF	\$ 43.61	\$	66.51	\$	68.50	\$	70.56	\$	72.67	\$	74.85
	Increase			22.90		2.00		2.06		2.12		2.18
				_								

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Page: 30 Average Residential Gas Usage = 2,000 CF per month

Gas Alt 2 - Fund Balance Drawdown Recommended Rate Plan



			Oct-15		Effective Oct-16	Effective Oct-17		Effective Oct-18		Effective Oct-19			Effective Oct-20
Cost of Gas to City VARIES MONTHLY		\$	3.19	\$	7.09	\$	7.30	\$	7.52	\$	7.75	\$	7.98
- In													
Service Fee Usage Charge	(Per 1,000 CF)	\$	10.73 8.22	\$	11.53 8.84	\$	12.11 9.28	\$	12.47 9.56	\$	12.85 9.84	\$	13.23 10.14
- Out													
Service Fee		\$	10.73	\$	14.42	\$	_	\$	15.59	\$		\$	16.54
Usage Charge	(Per 1,000 CF)		8.22		11.05		11.60		11.95		12.30		12.67
ıl - In													
Service Fee		\$	13.11	\$	14.09	\$	14.80	\$	15.24	\$	15.70	\$	16.17
Usage Charge	(Per 1,000 CF)		8.22		8.84		9.28		9.56		9.84		10.14
ıl - Out													
Service Fee		\$	13.11	\$	17.62	\$	18.50	\$	19.05	\$	19.62	\$	20.21
Usage Charge	(Per 1,000 CF)		8.22		11.05		11.60		11.95		12.30		12.67
ıts													
Service Fee		\$	13.11	\$	14.09	\$	14.80	\$	15.24	\$	15.70	\$	16.17
Usage Charge	(Per 1,000 CF)		8.22		8.84		9.28		9.56		9.84		10.14
	VARIES MONTHLY - In Service Fee Usage Charge - Out Service Fee Usage Charge I - In Service Fee Usage Charge I - Out Service Fee Usage Charge I - Out Service Fee Usage Charge	VARIES MONTHLY - In Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) I - In Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF)	VARIES MONTHLY - In Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) I - In Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) Service Fee Usage Charge (Per 1,000 CF) **The Count of the County of	Cost of Gas to City VARIES MONTHLY - In Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) I - In Service Fee Usage Charge (Per 1,000 CF) I - In Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF)	Cost of Gas to City VARIES MONTHLY - In Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - In Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF) - Out Service Fee Usage Charge (Per 1,000 CF)	Oct-15 Oct-16 Cost of Gas to City VARIES MONTHLY \$ 3.19 \$ 7.09 Service Fee Usage Charge (Per 1,000 CF) \$ 10.73 \$ 11.53 Usage Charge (Per 1,000 CF) \$ 10.73 \$ 14.42 Usage Charge (Per 1,000 CF) \$ 22 \$ 11.05 I - In Service Fee Usage Charge (Per 1,000 CF) \$ 13.11 \$ 14.09 Usage Charge (Per 1,000 CF) \$ 22 \$ 13.11 \$ 17.62 Usage Charge (Per 1,000 CF) \$ 22 \$ 11.05 Usage Charge (Per 1,000 CF) \$ 13.11 \$ 17.62 Usage Charge (Per 1,000 CF) \$ 13.11 \$ 17.62 Usage Charge (Per 1,000 CF) \$ 13.11 \$ 14.09	Cost of Gas to City VARIES MONTHLY - In Service Fee Usage Charge (Per 1,000 CF) Service Fee Usage Charge (Per 1,000 CF) I - In Service Fee Usage Charge (Per 1,000 CF) I - In Service Fee Usage Charge (Per 1,000 CF) I - In Service Fee Usage Charge (Per 1,000 CF) I - In Service Fee Usage Charge (Per 1,000 CF) I - In Service Fee Usage Charge (Per 1,000 CF) I - Out Service Fee Usage Charge (Per 1,000 CF)	Cost of Gas to City (ARIES MONTHLY) - In Service Fee (Per 1,000 CF) - Out Service Fee (Per 1,000 CF) - Ou	Cost of Gas to City (ARIES MONTHLY) - In Service Fee Jaage Charge (Per 1,000 CF) Service Fee Jaage Charge (Per 1,000 CF)	Cost of Gas to City VARIES MONTHLY - In Service Fee Sarvice Fee S	Cost of Gas to City \$ 3.19 \$ 7.09 \$ 7.30 \$ 7.52 \$	Cost of Gas to City VARIES MONTHLY \$ 3.19 \$ 7.09 \$ 7.30 \$ 7.52 \$ 7.75 Service Fee Usage Charge (Per 1,000 CF) \$ 10.73 \$ 11.53 \$ 12.11 \$ 12.47 \$ 12.85 Usage Charge (Per 1,000 CF) \$ 22 \$ 8.84 9.28 9.56 9.84 Out \$ 22 \$ 14.42 \$ 15.14 \$ 15.59 \$ 16.06 Usage Charge (Per 1,000 CF) \$ 22 \$ 11.05 \$ 11.60 \$ 15.24 \$ 15.70 Usage Charge (Per 1,000 CF) \$ 22 \$ 14.09 \$ 14.80 \$ 15.24 \$ 15.70 Usage Charge (Per 1,000 CF) \$ 22 \$ 17.62 \$ 18.50 \$ 19.05 \$ 19.62 Usage Charge (Per 1,000 CF) \$ 22 \$ 17.62 \$ 18.50 \$ 19.05 \$ 19.62 Usage Charge (Per 1,000 CF) \$ 22 \$ 11.05 \$ 11.60 \$ 19.05 \$ 19.62 Usage Charge (Per 1,000 CF) \$ 22 \$ 11.05 \$ 11.60 \$ 19.05 \$ 19.05 Usage Charge (Per 1,000 CF) \$ 22 \$ 17.62 \$ 18.50 \$ 19.05 \$ 19.05	Cost of Gas to City VARIES MONTHLY \$ 3.19 \$ 7.09 \$ 7.30 \$ 7.52 \$ 7.75 \$ 7



Gas Alt 2 - Fund Balance Drawdown Impact on Residential Rates



		0	Oct-15		Effective Oct-16		Effective Oct-17		Effective Oct-18		Effective Oct-19		ffective Oct-20
Residentia	I INSIDE Monthly Charges												
	Cost of Gas to City Per CF VARIES MONTHLY	\$	3.19	\$	7.09	\$	7.30	\$	7.52	\$	7.75	\$	7.98
	2,000 CF	\$	27.17	\$	29.21	\$	30.67	\$	31.59	\$	32.54	\$	33.51
	Increase				2.04		1.46		0.92		0.95		0.98
	4,000 CF	\$	43.61	\$	46.88	\$	49.22	\$	50.70	\$	52.22	\$	53.79
	Increase				3.27		2.34		1.48		1.52		1.57
Residentia	I OUTSIDE Monthly Charges												
	Cost of Gas to City Per CF VARIES MONTHLY	\$	3.19	\$	7.09	\$	7.30	\$	7.52	\$	7.75	\$	7.98
	2,000 CF	\$	27.17	\$	36.51	\$	38.34	\$	39.49	\$	40.67	\$	41.89
	Increase				9.34		1.83		1.15		1.18		1.22
	4,000 CF	\$	43.61	\$	58.60	\$	61.53	\$		\$	65.28	\$	67.24
	Increase				14.99		2.93		1.85		1.90		1.96



Gas Alt 1 and Alt 2 – Comparison of Impact on Residential Rates



	Oct-15		Effective Oct-16		Effective Oct-17		Effective Oct-18		Effective Oct-19		Effective Oct-20	
Residential Monthly Charges												
Cost of Gas to City Per CF VARIES MONTHLY	\$	3.19	\$	7.09	\$	7.30	\$	7.52	\$	7.75	\$	7.98
2,000 CF Alt 1 - Cost of Service Alt 2 - Fund Bal Drawdown	\$	27.17 27.17	\$	33.15 29.21 3.94	\$	34.14 30.67 3.47	\$	35.17 31.59 3.58	\$	36.22 32.54 3.68	\$	37.31 33.51 3.80
4,000 CF Alt 1 - Cost of Service Alt 2 - Fund Bal Drawdown	\$	43.61 43.61	\$	53.20 46.88 6.32	\$	54.80 49.22 5.58	\$	56.44 50.70 5.74	\$	58.14 52.22 5.92	\$	59.88 53.79 6.09
6,000 CF Alt 1 - Cost of Service Alt 2 - Fund Bal Drawdown	\$	60.05 60.05	\$	73.26 64.55 8.71	\$	75.46 67.78 7.68	\$	77.72 69.81 7.91	\$	80.05 71.91 8.14	\$	82.46 74.07 8.39

Average Residential Gas Usage = 2,000 CF per month



Water and Wastewater Utility Analysis and Recommendations



City of Castroville Current Water/WW Rate Structure

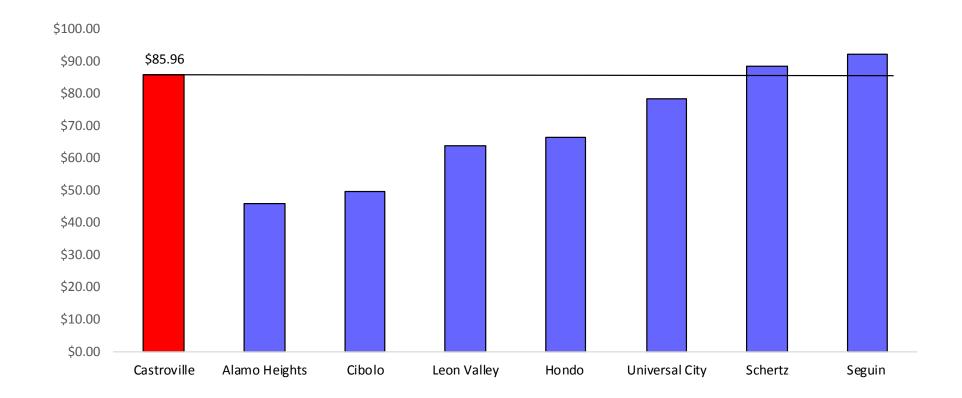


Water Base Rates - II	nside and Out	side	Wastewater Base Rate - Inside & Outside							
Minimum Charge			Minimum Charge - includes first 2,000 Gallons							
Residential	\$	15.51	Residential \$	14.31						
Commercial		19.38	Commercial	20.27						
Water Volume Rates	- Inside & Out	side	Wastewater Volume Rates - Inside & Outside							
Volume Rate (per 1,000 Gallons))									
0 - 5000	\$	3.65	Volume Rate per 1,000 Gallons over 2,000 \$	6.13						
5001 - 10000		3.90								
10001 - 20000		4.31	Residential volume charges are based on average of r	monthly.						
20001 - 30000		4.56	water usage during November through February with	exception						
30001 - 40000		4.81	of highest month							
40001 - 50000		5.06								
50001 - Above		5.82								



Monthly Residential Charge Comparison 10,000 Gallons Water & 5,000 Gallons WW







Current Water and Wastewater Accounts



WATER Accoun	nts	WASTEWATER Acco	ccounts		
Residential Inside	1,019	Residential Inside	970		
Residential Outside	59	Residential Outside	2		
Commercial Inside	164	City Average Res Insi	2		
Comm Inside No Sew	-	Explicit Avg Resid	34		
Commercial Outside	13	Commercial Inside	154		
All City Accounts	37	Commercial Outside	2		
·		Explicit Commercial	2		
Total	1,292	Total	1,166		



Key Assumptions Driving W/WW Forecast Revenue Requirement & Rate Plan

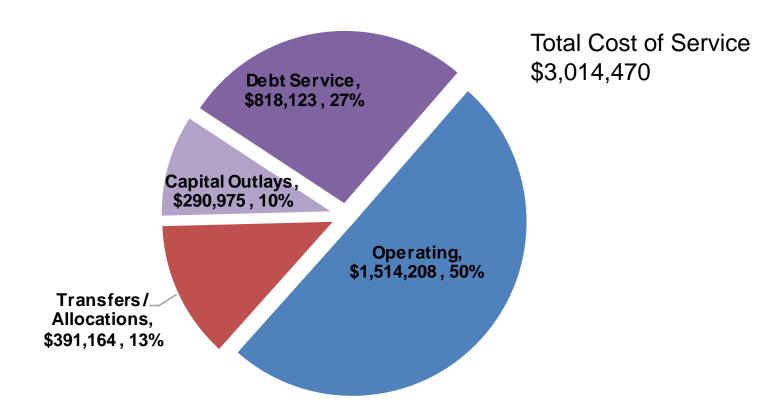


- Account and consumption growth expected to be nominal
- Most personnel & operating expenses increase 3-5% per year
- One additional WW employee to be added in conjunction with the WWTP expansion
- CIP funded through debt issued in FY 2015, impact fees and \$7.1 million in new debt over next five years for Water related projects
- Although CIP calls for water projects funded through debt to be implemented in FY 2018 – FY 2020, model defers debt 2 years in order for rate revenues to meet debt coverage



Water and Wastewater Test Year Cost of Service





5 Year Water and Wastewater Capital Improvement Plan

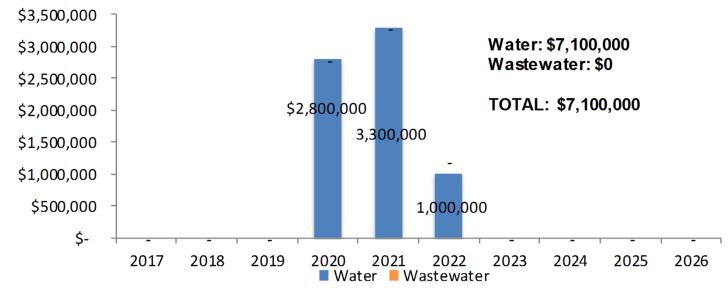


Project	FY17	FY18	FY19	FY20	Total By Project
Water Projects					
Water Line Replacement	\$2,000,003	already issued- 2015			\$2,000,003
Hwy. 90 Looping	\$150,000				\$150,000
Airport Plant/Distribution			\$3,300,000	\$0	\$3,300,000
Cross Hill Distribution		\$0	\$0	\$1,000,000	\$1,000,000
Eastside Elev Storage Tank		\$2,800,000	\$0	\$0	\$2,800,000
Wastewater Projects					
East Side Lift Station	\$3,050,000	already issued- 2015A			\$3,050,000
WWTP Improvement	\$7,330,745	already issued- 2015B			\$7,330,745
Total By Year	\$12,530,748	\$2,800,000	\$3,300,000	\$1,000,000	
Total by Impact Fees	\$150,000				\$150,000
Total By Utility Debt		\$2,800,000	\$3,300,000	\$1,000,000	\$7,100,000
Total By TWDB Loan	\$10,380,745				\$10,380,745



Forecast Schedule for New Bond Issues

- FY 2018 (moved to FY 2020) Elevated Water Storage Tank:
 \$2.80 Million
- FY 2019 (FY 2021) Airport Plant/Distribution: \$3.30 Million
- FY 2020 (FY 2022) Cross Hill Distribution: \$1.00 Million
- Total over next four years + \$7.10 Million in new Water Debt

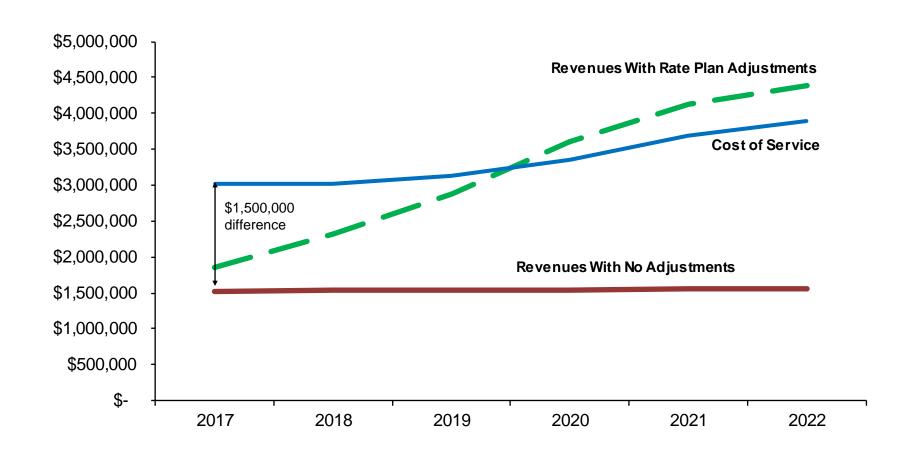


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Water/Wastewater Cost of Service and Revenues With & Without Rate Adjustments





Adjustments Need To Be Aggressive, Draw On Fund Balance & Defer CIP



- If lender reviews W/WW separately from other utilities, W/WW debt revenues would need to improve to attain acceptable debt coverage ratio to issue new debt
- Suggest all major CIP projects and debt plans be deferred by 2 years and new debt deferred until FY 2020 if possible
- Alternative 1 assumes deferral of new debt until FY 2020, positive cash flow for water and wastewater by FY 2020



Water and Wastewater Forecast Cost of Service



	2017	2018		2019			2020	2021
Operating	\$ 1,199,737	\$	1,275,213	\$	1,369,981	\$	1,363,460	\$ 1,441,570
Transfers/Allocations	705,635		718,051		730,839		744,011	757,578
Capital Outlays	290,975		200,000		200,000		200,000	200,000
Debt Service	 818,123		823,039		822,782		1,039,464	1,295,316
Total Cost of Services	\$ 3,014,470	\$	3,016,302	\$	3,123,602	\$	3,346,935	\$ 3,694,464

Alternative 1 –Fund Balance Drawdown Proposed Water Rate Plan



		Eff							
Alt 1 - CIP 2 Yr de	eferral/FB draw	Current	Oct-16	Oct-17		Oct-18	Oct-19	Oct-20	Oct-21
				WATER	Ra	tes			
Minimum Charge	e Residential li	nside							
All Meters		\$ 15.51	\$ 19.39	\$ 24.23	\$	30.29	\$ 37.87	\$ 39.76	\$ 41.75
Minimum Charge	e Commercial	Inside							
All Meters		19.38	24.23	30.28		37.85	47.31	49.68	52.16
Volume/1,000 Ga	ıl All Rate Clas	ses - Inside							
0	5,000	3.65	4.56	5.70		7.13	8.91	9.36	9.82
5,001	10,000	3.90	4.88	6.09		7.62	9.52	10.00	10.50
10,001	20,000	4.31	5.39	6.73		8.42	10.52	11.05	11.60
20,001	30,000	4.56	5.70	7.13		8.91	11.13	11.69	12.27
30,001	40,000	4.81	6.01	7.52		9.39	11.74	12.33	12.95
40,001	50,000	5.06	6.33	7.91		9.88	12.35	12.97	13.62
50,001	Above	5.82	7.28	9.09		11.37	14.21	14.92	15.67

For Outside Accounts, Add 25% Surcharge to all rate components beginning October 2016



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Alternative 1 – Fund Balance Drawdown Proposed Wastewater Rate Plan



	Eff	ective Date of	Rate	Adjustme	nt							
Alt 1 - CIP 2 Yr deferral/FB draw	Current	Oct-16		Oct-17		Oct-18		Oct-19		Oct-20		Oct-21
			1	WASTEW A	TER	Rates						
Residential Inside Min. & Volun	ne Charges											
Minimum Chg	\$ 14.31	\$ 17.89	\$	22.36	\$	27.95	\$	34.94	\$	43.67	\$	45.85
Volume/1,000 Gal	6.13	7.66	6	9.58		11.97		14.97		18.71		19.64
(Based on Winter Avg)												
Commercial Inside Min. & Volume	me Charges											
Minimum Charge	\$ 20.27	\$ 25.34	\$	31.67	\$	39.59	\$	49.49	\$	61.86	\$	64.95
Volume/1,000 Gal	6.13	7.66	6	9.58		11.97		14.97		18.71		19.64

For Outside Accounts, Add 25% Surcharge to all rate components beginning October 2016



Alt 1 Proposed Water/WW Rate Plan Impact on Monthly Residential Charges



Effective Date of Rate Adjustment												
Alt 1 - CIP 2 Yr deferral/FB draw	Current			Oct-16		Oct-17		Oct-18		Oct-19		Oct-20
Residential Monthly Bills												
5,000 Water, 5,000 WW	\$	66.46	\$	83.08	\$	103.84	\$	129.80	\$	162.26	\$	186.34
				16.62		20.77		25.96		32.45		24.08
10,000 Water, 5,000 WW	r, 5,000 WW 85.96			107.45		134.31		167.89		209.86		236.32
-,,-,-,				21.49		26.86		33.58		41.97		26.46
Summary of Results Rate Calculator				2017		2018		2019		2020		2021
Net Revenues Available for Contingency	and C	`overage										
Water	and C	overage	-	(260,523)		91,381		367,492		594,662		428,081
Wastew ater				(896,877)		(784,883)		(607,509)		(328,811)		5,129
Total				(1,157,400)		(693,503)		(240,017)		265,850		433,210
Debt Coverage W WW Only				(0.06)		0.40		0.95		1.45		1.49
Days of Fund Balance W/WW only				361		277		239		252		271
Debt Coverage All Utilities				5.08		5.18		5.41		4.37		3.05
Days of Fund Balance All Utilities				250		181		156		179		198
WILLDAN Economists.com				Page	: 4	7						

Impact on Average Residential Ratepayer on Consolidated Bill for all Four Utilities



	Effective I	justment								
		C	Current	Oct-16	Oct-17	Oct-18	Oct-19		Oct-20	
Residential Mont	hly Bill 5,000 Gallons Water & WW									
5,000 Gal Wtr & WW	Total	\$	66.46	\$ 83.08	\$ 103.84	\$ 129.80	\$	162.26	\$	186.34
Electric Rates - Resid	dential									
Average Usage 1000 kWh	Total for Minimum and kWh	\$	135.73	\$ 139.80	\$ 144.00	\$ 148.32	\$	152.77	\$	158.88
Gas Rates Residen	tial									
2,000 CF	Total for Base and Usage	\$	27.17	\$ 29.21	\$ 30.67	\$ 31.59	\$	32.54	\$	33.51
Consolidated Billing	for 5,000 gallons water; 5,000 gallon	tewater; 1	<mark>,,000 kWh</mark>	Electric; 2	,000 CF Ga	ıs				
	Total for all utilities Increase \$	\$	229.36	\$ 252.08 22.72	\$ 278.51 26.42	\$ 309.71 31.20	\$	347.56 37.85	\$	378.72 31.17

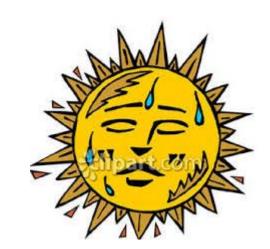
Regular Revenue and Expense Reviews are recommended in order to adjust rate plan for changes in CIP, Expenses, Growth, Usage, etc.



Presentation Summary How Will Rate Plan Benefit City and Citizens?



- Rate plan is necessary to enable the City to recover all of its costs
- Without rate plan, the City will be selling its service at below cost and will be unable to contribute to General Fund
- Adoption of rate plan will ensure that the City is able to continue to maintain a financially healthy utility





Next Steps



- Refine assumptions and scenarios based on City input
- Schedule Public Hearing if needed and adopt rate plan
- Complete and submit Rate Study Report



