

# City of Calistoga Rate Study 2017



## Wastewater Final Draft Tables 11/2/2017



BARTLE WELLS ASSOCIATES  
Independent Public Finance Advisors

**Table 1**  
**City of Calistoga**  
**Wastewater Rates**

*rates effective January 1, 2017*

<b>User Category</b>	<b>Basis</b>	<b>Charge</b>
<b>Residential Rates</b>		
Single Family Residential	Flat Monthly	\$65.25
Multi-Family Residential	Flat Monthly per meter	\$54.90
Mobile Home	Flat Monthly per meter	\$35.46
<b>Transient Rates</b>		
Transient General	Per hcf water use	\$13.35
Spa	Per hcf water use	\$13.35
Campground	Per hcf water use	\$13.35
Bed & Breakfast	Per hcf water use	\$13.35
<b>Other Non-Residential Rates</b>		
Commercial General	Per hcf water use	\$5.17
Restaurant/Bakery	Per hcf water use	\$22.92
Laundry	Per hcf water use	\$5.17
Public Building	Per hcf water use	\$5.17
Medical Care	Per hcf water use	\$5.17
Brewery/Winery	Per hcf water use	\$1.48
School	Per hcf water use	\$5.17
Service Station	Per hcf water use	\$5.17
<b>Industrial &amp; Bottling Works Rates</b>		
Measure Flow Rate	Per mg of Measured Flow	\$10,330.19
Calculated BOD Rate	Per Pound	\$1.69
Calculated SS Rate	Per Pound	\$1.31
<b>Groundwater Discharge Rates</b>		
Spa	Per hcf of Water Use	\$4.15
Residential Spa/Commercial	Per hcf of Groundwater Measured Flow Only	\$8.61
<b>Other Rates</b>		
Wastewater Capacity Allocation	Flat Monthly	\$41.19
Minimum Rate for All Non-Residential User Categories	Flat Monthly	\$35.46

**Table 2**  
**City of Calistoga**  
**10-year Wastewater CIP Plan, Updated January 2017**

Project	FY16/17	FY17/18	FY18/19	FY19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	Total Cost	Known Grant Funding
<b>Critical Priority</b>												
Sewer Trunk Line	\$2,986,970										\$2,986,970	\$2,548,075
Pine Street Lift Station Replacement	1,163,883	275,000									1,438,883	947,778
Riverside Pond & Headworks Project	100,000	250,000	2,000,000	1,645,852							3,995,852	2,996,889
Geothermal Meters Project	50,000	180,000	270,000								500,000	
THM Compliance Improvements		250,000									250,000	
Inflow and Infiltration (Testing and Repairs)	75,000	100,000	100,000								275,000	
Remove Grit from Aeration Basins		500,000									500,000	
<b>Total Critical Priority</b>	<b>\$4,375,853</b>	<b>\$1,555,000</b>	<b>\$2,370,000</b>	<b>\$1,645,852</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$9,946,705</b>	<b>\$6,492,742</b>
<b>High Priority</b>												
Loop Recycle Water System - Pipe Improvements		\$150,000	\$500,000	\$700,000							\$1,350,000	
Recycle Booster Pump Station				150,000	700,000	750,000					1,600,000	
Palisades Lift Station Re-lining			250,000								250,000	
Lift Station Mobile SCADA			150,000								150,000	
Utility Survey/Mobile GIS		75,000									75,000	
Calibrate Sewer Model/Develop Master Plan		150,000									150,000	
Replacement Sewer Mains/MH's		275,000	280,000	290,000	300,000	305,000	315,000	320,000	325,000	335,000	2,745,000	
Grit Removal System at Headworks			750,000								750,000	
Sludge Dewatering				850,000							850,000	
Filter Improvements						1,200,000					1,200,000	
<b>Total High Priority</b>	<b>\$0</b>	<b>\$650,000</b>	<b>\$1,930,000</b>	<b>\$1,990,000</b>	<b>\$1,000,000</b>	<b>\$2,255,000</b>	<b>\$315,000</b>	<b>\$320,000</b>	<b>\$325,000</b>	<b>\$335,000</b>	<b>\$9,120,000</b>	<b>\$0</b>
<b>Normal Priority</b>												
Advanced Treatment-Boron Removal					\$200,000		\$3,000,000	\$500,000			\$3,700,000	
Expand Recycle Water Distribution							500,000	500,000			1,000,000	
PLC Upgrade									1,000,000		1,000,000	
SCADA Upgrade						250,000	50,000				300,000	
Controls Upgrades								100,000	100,000	100,000	300,000	
<b>Total Normal Priority</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$200,000</b>	<b>\$250,000</b>	<b>\$3,550,000</b>	<b>\$1,100,000</b>	<b>\$1,100,000</b>	<b>\$100,000</b>	<b>\$6,300,000</b>	<b>\$0</b>
<b>Total Critical Priority CIP</b>	<b>\$4,375,853</b>	<b>\$1,163,883</b>	<b>\$2,370,000</b>	<b>\$1,645,852</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$9,946,705</b>	<b>\$6,492,742</b>
<b>Total Critical and High Priority CIP</b>	<b>\$4,375,853</b>	<b>\$2,205,000</b>	<b>\$4,300,000</b>	<b>\$3,635,852</b>	<b>\$1,000,000</b>	<b>\$2,255,000</b>	<b>\$315,000</b>	<b>\$320,000</b>	<b>\$325,000</b>	<b>\$335,000</b>	<b>\$19,066,705</b>	<b>\$6,492,742</b>
<b>Total All CIP</b>	<b>\$4,375,853</b>	<b>\$2,205,000</b>	<b>\$4,300,000</b>	<b>\$3,635,852</b>	<b>\$1,200,000</b>	<b>\$2,505,000</b>	<b>\$3,865,000</b>	<b>\$1,420,000</b>	<b>\$1,425,000</b>	<b>\$435,000</b>	<b>\$25,366,705</b>	<b>\$6,492,742</b>

**Table 3**  
**City of Calistoga**  
**Wastewater Expenses**

Title	Actual FY14-15	Final Budget FY15-16	Actual FY15-16	Revised Budget FY16-17	Adopted Budget FY17-18	Escalation <sup>1</sup>	Projected			
							FY18-19	FY19-20	FY20-21	FY21-22
<b>WASTEWATER COLLECTION</b>										
Personnel Services										
Full-Time Salaries	\$212,373	\$222,084	\$218,986	\$235,811	\$307,749	4.0%	\$320,059	\$332,861	\$346,176	\$360,023
Overtime	12,304	19,291	9,701	12,172	13,649	4.0%	14,195	14,763	15,353	15,967
FICA/Medicare	17,880	22,799	18,276	22,414	26,398	4.0%	27,454	28,552	29,694	30,882
Part-Time Salaries	3,026	3,812	3,602	4,591	4,966	4.0%	5,165	5,371	5,586	5,810
Special Pay	12,278	17,198	12,917	18,333	18,710	4.0%	19,458	20,237	21,046	21,888
PERS	45,313	58,339	58,160	69,475	75,379	4.0%	78,394	81,530	84,791	88,183
Medical/Dental	43,911	45,011	39,146	39,653	75,357	4.0%	78,371	81,506	84,766	88,157
Workers Comp	15,405	17,077	17,022	18,286	19,773	4.0%	20,564	21,386	22,242	23,132
Other Benefits	919	888	3,525	1,165	1,279	4.0%	1,330	1,383	1,439	1,496
Housing Allowance	0	1,225	1,225	1,575	0	4.0%	0	0	0	0
<b>Total Personnel Services</b>	<b>\$363,409</b>	<b>\$407,724</b>	<b>\$382,560</b>	<b>\$423,475</b>	<b>\$543,260</b>		<b>\$564,990</b>	<b>\$587,590</b>	<b>\$611,094</b>	<b>\$635,537</b>
<b>Services &amp; Supplies</b>										
Materials & Supplies	\$4,906	\$1,000	\$1,034	\$8,108	\$6,900	4.0%	\$7,176	\$7,463	\$7,762	\$8,072
Contract Services	9,319	13,681	10,009	37,705	56,150	4.0%	58,396	60,732	63,161	65,688
Utilities	4,888	5,170	5,917	7,050	7,800	4.0%	8,112	8,436	8,774	9,125
Repairs & Maintenance	4,384	1,803	1,802	7,000	7,280	4.0%	7,571	7,874	8,189	8,517
Training & Seminars - Staff	742	475	936	777	800	4.0%	832	865	900	936
Uniform Allowance	1,275	2,427	2,427	2,000	3,450	4.0%	3,588	3,732	3,881	4,036
Postage	0	50	13	0	50	4.0%	52	54	56	58
Fuel & Oil	5,123	2,500	2,038	2,743	2,850	4.0%	2,964	3,083	3,206	3,334
Pension Expense	-99,741	0	72,580	40,000	40,000	4.0%	41,600	43,264	44,995	46,794
Health & Safety	139	300	252	300	1,040	4.0%	1,082	1,125	1,170	1,217
Dues & Subscriptions	0	0	0	0	120	4.0%	125	130	135	140
Fees	2,088	3,215	3,575	2,088	3,750	4.0%	3,900	4,056	4,218	4,387
Repairs & Maintenance	3,507	3,600	10,003	4,420	0	4.0%	0	0	0	0
Training & Seminars - Management	0	0	0	0	520	4.0%	541	562	585	608
Equipment Fund Rental	23,769	25,723	26,526	29,030	32,634	4.0%	33,939	35,297	36,709	38,177
<b>Total Services &amp; Supplies</b>	<b>-\$39,601</b>	<b>\$59,944</b>	<b>\$137,112</b>	<b>\$141,221</b>	<b>\$163,344</b>		<b>\$169,878</b>	<b>\$176,673</b>	<b>\$183,740</b>	<b>\$191,089</b>
<b>Other</b>										
Vehicles	0	0	0	0	\$30,000	4.0%	\$31,200	\$32,448	\$33,746	\$35,096
Misc Field Equipment	11,284	56,000	33,888	51,063	23,335	4.0%	24,268	25,239	26,249	27,299
Computer Equipment	0	0	0	4,968	0	4.0%	0	0	0	0
<b>Total Other</b>	<b>\$11,284</b>	<b>\$56,000</b>	<b>\$33,888</b>	<b>\$56,031</b>	<b>\$53,335</b>		<b>\$55,468</b>	<b>\$57,687</b>	<b>\$59,995</b>	<b>\$62,394</b>
<b>TOTAL WASTEWATER COLLECTION</b>	<b>\$335,092</b>	<b>\$523,668</b>	<b>\$553,560</b>	<b>\$620,727</b>	<b>\$759,939</b>		<b>\$790,337</b>	<b>\$821,950</b>	<b>\$854,828</b>	<b>\$889,021</b>
<b>WASTEWATER TREATMENT</b>										
<b>Personnel Services</b>										
Full-Time Salaries	\$283,751	\$303,949	\$295,426	\$360,591	\$449,584	4.0%	\$467,567	\$486,270	\$505,721	\$525,950
Overtime	18,450	36,426	26,387	38,588	49,888	4.0%	51,884	53,959	56,117	58,362
FICA/Medicare	24,249	36,114	26,283	34,013	41,222	4.0%	42,871	44,586	46,369	48,224
Part-Time Salaries	3,026	13,812	11,138	14,591	4,966	4.0%	5,165	5,371	5,586	5,810
Special Pay	20,814	34,314	24,231	24,920	34,415	4.0%	35,792	37,223	38,712	40,261
PERS	57,513	79,688	79,118	88,930	81,290	4.0%	84,542	87,923	91,440	95,098
Medical/Dental	69,034	68,927	67,967	67,382	112,535	4.0%	117,036	121,718	126,587	131,650

Workers Comp	22,877	27,050	24,452	27,349	30,876	4.0%	32,111	33,395	34,731	36,121
Other Benefits	1,242	1,466	5,475	1,669	1,924	4.0%	2,001	2,081	2,164	2,251
Housing Allowance	0	1,400	1,400	1,800	0	4.0%	0	0	0	0
<b>Total Personnel Services</b>	<b>\$500,956</b>	<b>\$603,146</b>	<b>\$561,877</b>	<b>\$659,833</b>	<b>\$806,700</b>		<b>\$838,968</b>	<b>\$872,527</b>	<b>\$907,428</b>	<b>\$943,725</b>
<b>Services &amp; Supplies</b>										
Materials & Supplies	\$135,447	\$157,642	\$136,404	\$173,000	\$134,300	4.0%	\$139,672	\$145,259	\$151,069	\$157,112
Contract Services	418,074	186,672	223,413	280,000	327,640	4.0%	340,746	354,375	368,550	383,292
Electricity	139,886	134,878	162,783	147,875	150,000	4.0%	156,000	162,240	168,730	175,479
Repairs & Maintenance	50,722	51,706	53,815	37,131	50,000	4.0%	52,000	54,080	56,243	58,493
Training & Seminars - Staff	3,077	1,199	1,541	2,800	3,550	4.0%	3,692	3,840	3,993	4,153
Uniform Allowance	3,263	2,627	3,552	3,105	4,800	4.0%	4,992	5,192	5,399	5,615
Advertising	86	0	0	0	150	4.0%	156	162	169	175
Postage	3,579	3,907	4,516	3,595	4,500	4.0%	4,680	4,867	5,062	5,264
Fuel & Oil	8,768	3,849	4,810	9,921	10,325	4.0%	10,738	11,168	11,614	12,079
Pension Expense	(126,595)	0	98,735	40,000	40,000	4.0%	41,600	43,264	44,995	46,794
Health & Safety	1,353	800	1,908	950	2,000	4.0%	2,080	2,163	2,250	2,340
Weeds / Pest Control	2,434	0	0	0	0	4.0%	0	0	0	0
Dues & Subscriptions	232	257	207	570	295	4.0%	307	319	332	345
Fees	20,414	21,498	22,024	28,767	26,050	4.0%	27,092	28,176	29,303	30,475
Repairs & Maintenance	5,284	29,155	28,181	14,353	14,925	4.0%	15,522	16,143	16,789	17,460
Central Serv. Overhead	82,500	82,500	82,500	82,500	82,500	4.0%	85,800	89,232	92,801	96,513
Lab Testing	54,396	64,640	50,004	59,075	50,000	4.0%	52,000	54,080	56,243	58,493
Water/Sewer Expense	431	370	444	500	700	4.0%	728	757	787	819
Training & Seminars - Management	127	0	13	0	1,000	4.0%	1,040	1,082	1,125	1,170
Equipment Fund Rental	73,603	75,260	79,645	80,540	82,771	4.0%	86,082	89,525	93,106	96,830
<b>Total Services &amp; Supplies</b>	<b>\$877,081</b>	<b>\$816,960</b>	<b>\$954,495</b>	<b>\$964,682</b>	<b>\$985,506</b>		<b>\$1,024,926</b>	<b>\$1,065,923</b>	<b>\$1,108,560</b>	<b>\$1,152,903</b>
<b>Other</b>										
Misc Field Equipment	\$48,436	\$31,071	\$37,035	\$12,000	\$142,300		\$35,000	\$35,000	\$35,000	\$35,000
Misc Office Equipment	0	0	0	0	0	4.0%	0	0	0	0
Computer Equipment	0	0	0	0	0	4.0%	0	0	0	0
<b>Total Other</b>	<b>\$48,436</b>	<b>\$31,071</b>	<b>\$37,035</b>	<b>\$12,000</b>	<b>\$142,300</b>		<b>\$35,000</b>	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$35,000</b>
<b>TOTAL WASTEWATER TREATMENT</b>	<b>\$1,426,473</b>	<b>\$1,451,177</b>	<b>\$1,553,407</b>	<b>\$1,636,515</b>	<b>\$1,934,506</b>		<b>\$1,898,894</b>	<b>\$1,973,450</b>	<b>\$2,050,988</b>	<b>\$2,131,628</b>
<b>TOTAL WASTEWATER EXPENSES</b>	<b>\$1,761,565</b>	<b>\$1,974,845</b>	<b>\$2,106,967</b>	<b>\$2,257,242</b>	<b>\$2,694,445</b>		<b>\$2,689,231</b>	<b>\$2,795,400</b>	<b>\$2,905,816</b>	<b>\$3,020,649</b>

1 - Escalation based on average yearly percent change in actual operating expenses FY2011-2016 (3.6%)  
Expenses do not include Depreciation

**Table 4**  
**City of Calistoga**  
**Wastewater Debt Service**

		total payment (principal + interest and fees)										
	Fund	FY15/16	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26
Installment Agreement	Wastewater Operations	\$225,068	\$225,198	\$224,983	\$224,341	\$223,319	\$222,041	\$220,506	\$223,588	\$221,375	\$219,000	\$221,250
2005 Certificates of Participation	Wastewater Operations	\$106,224	\$106,332	\$106,381	\$106,370	\$106,199	\$106,374	\$106,376	\$106,410	\$106,171	\$106,369	\$106,382
State Revolving Fund Loan	Wastewater Operations	\$363,591	\$363,591	\$363,591	\$363,591	\$363,591	\$363,591	\$363,591	\$363,591	\$0	\$0	\$0
<b>Total Debt Service</b>		<b>\$694,883</b>	<b>\$695,121</b>	<b>\$694,954</b>	<b>\$694,301</b>	<b>\$693,109</b>	<b>\$692,005</b>	<b>\$690,473</b>	<b>\$693,588</b>	<b>\$327,546</b>	<b>\$325,369</b>	<b>\$327,632</b>

**Table 5**  
**City of Calistoga**  
**Wastewater Cash Flow Projection**

	Actual 2015/16	Budget 2016/17	projected					
			2017/18	2018/19	2019/20	2020/21	2021/22	
<b>Beginning Fund Balance</b>								
Unrestricted Operating Fund	\$1,369,195	\$1,077,313	\$570,997	(\$188,860)	(\$200,470)	(\$144,872)	(\$17,437)	
Unrestricted Capital Fund	(\$95,139)	(\$101,713)	\$2,420,795	\$9,430,474	\$5,444,084	\$1,792,005	\$4,160,272	
<b>Total Unrestricted Funds</b>	<b>\$1,274,056</b>	<b>\$975,600</b>	<b>\$2,991,792</b>	<b>\$9,241,614</b>	<b>\$5,243,614</b>	<b>\$1,647,134</b>	<b>\$4,142,835</b>	
<b>% Rate Revenue Increase January 1</b>			<b>15.0%</b>	<b>13.0%</b>	<b>10.0%</b>	<b>10.0%</b>	<b>3.0%</b>	
<b>% Capacity Fee Revenue Increase January 1</b>			<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>% Growth</b>			<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	
<i>Typical Single Family Bimonthly Bill, Current Rate Structure</i>		\$130.50	\$150.08	\$169.58	\$186.54	\$205.20	\$211.35	
<b>REVENUE</b>								
<b>Operations Fund Revenue</b>								
Charges for Services								
Residential Sales	\$1,380,441	\$1,415,418	\$1,524,617	\$1,626,965	\$1,711,730	\$1,800,911	\$1,831,581	
Transient Sales	600,930	609,661	656,696	700,780	737,291	775,704	788,914	
Commercial Sales	308,671	311,238	335,250	357,755	376,394	396,005	402,749	
Industrial Sales	53,004	40,304	43,413	46,328	48,741	51,281	52,154	
Silver Rose Estimated Sales				251,605	264,714	278,506	283,249	
Calistoga Hills Estimated Sales				318,784	335,393	352,867	358,876	
Other Revenues	96,366	69,426	69,565	69,704	69,843	69,983	70,123	
<b>Total Operating Revenues</b>	<b>\$2,439,412</b>	<b>\$2,446,047</b>	<b>\$2,629,542</b>	<b>\$3,371,922</b>	<b>\$3,544,107</b>	<b>\$3,725,256</b>	<b>\$3,787,645</b>	
<b>Capital Fund Revenue</b>								
Connection/Impact Fees	\$79,724	\$3,026,708	\$282,864	\$642,645	\$642,645	\$642,645	\$642,645	
Interest Earnings	474	800	802	803	805	806	808	
General Fund Subsidy	105,946	0						
Recycled Water Grant	750,000	0						
Hazmat Grant	0	375,000						
Other Grants/Loans <sup>1</sup>		3,495,853						
Proposed Loan Proceeds <sup>2</sup>			10,140,852			3,705,000		
<b>Total Water Capital Fund Revenue</b>	<b>\$936,144</b>	<b>\$6,898,361</b>	<b>\$10,424,518</b>	<b>\$643,448</b>	<b>\$643,450</b>	<b>\$4,348,452</b>	<b>\$643,453</b>	
<b>TOTAL REVENUES</b>	<b>\$3,375,556</b>	<b>\$9,344,408</b>	<b>\$13,054,060</b>	<b>\$4,015,370</b>	<b>\$4,187,557</b>	<b>\$8,073,708</b>	<b>\$4,431,098</b>	
<b>Operations Fund Expenses</b>								
Operating Expenses								
Wastewater Treatment	\$1,516,372	\$1,636,515	\$1,934,506	\$1,898,894	\$1,973,450	\$2,050,988	\$2,131,628	
Wastewater Collection	519,672	620,727	759,939	790,337	821,950	854,828	889,021	
Debt Service	695,250	695,121	694,954	694,301	693,109	692,005	690,473	
<b>Total Operations Fund Expenses</b>	<b>\$2,731,294</b>	<b>\$2,952,363</b>	<b>\$3,389,399</b>	<b>\$3,383,532</b>	<b>\$3,488,509</b>	<b>\$3,597,821</b>	<b>\$3,711,121</b>	
<b>Capital Fund Expenses</b>								
Capital Improvement Project <sup>3</sup>	\$942,718	\$4,375,853	\$2,205,000	\$4,300,000	\$3,635,852	\$1,200,000	\$2,505,000	
Proposed Loan Debt Service <sup>4</sup>			329,838	329,838	659,677	780,185	900,693	
Transfer Out - Rate Stabilization Fund			880,000					
<b>Total Capital Expenses</b>	<b>\$942,718</b>	<b>\$4,375,853</b>	<b>\$3,414,838</b>	<b>\$4,629,838</b>	<b>\$4,295,529</b>	<b>\$1,980,185</b>	<b>\$3,405,693</b>	
<b>TOTAL EXPENSES</b>	<b>\$3,674,012</b>	<b>\$7,328,216</b>	<b>\$6,804,238</b>	<b>\$8,013,371</b>	<b>\$7,784,038</b>	<b>\$5,578,006</b>	<b>\$7,116,814</b>	
Net Revenues - Operating Fund	(\$291,882)	(\$506,316)	(\$759,857)	(\$11,610)	\$55,598	\$127,435	\$76,524	
Net Revenues - Capital Fund	(\$6,574)	\$2,522,508	\$7,009,679	(\$3,986,390)	(\$3,652,079)	\$2,368,267	(\$2,762,239)	
<b>NET REVENUES</b>	<b>(\$298,456)</b>	<b>\$2,016,192</b>	<b>\$6,249,822</b>	<b>(\$3,998,000)</b>	<b>(\$3,596,481)</b>	<b>\$2,495,702</b>	<b>(\$2,685,715)</b>	
<b>Ending Fund Balance</b>								
Unrestricted Operating Fund	\$1,077,313	\$570,997	(\$188,860)	(\$200,470)	(\$144,872)	(\$17,437)	\$59,087	
Unrestricted Capital Fund	(\$101,713)	\$2,420,795	\$9,430,474	\$5,444,084	\$1,792,005	\$4,160,272	\$1,398,033	
<b>Total Unrestricted Funds</b>	<b>\$975,600</b>	<b>\$2,991,792</b>	<b>\$9,241,614</b>	<b>\$5,243,614</b>	<b>\$1,647,134</b>	<b>\$4,142,835</b>	<b>\$1,457,120</b>	
Total Unrestricted Fund Target (90 days O&M)	\$673,470	\$727,980	\$835,742	\$834,296	\$860,180	\$887,134	\$915,071	
# Days O&M Covered	130	370	995	566	172	420	143	
Debt Service Coverage (Min. 1.25x)	1.93	10.20	10.11	1.29	1.03	3.51	0.89	
Target Met	yes	yes	yes	yes	no	yes	no	
<b>Rate Stabilization Fund Draw</b>					\$300,000		\$580,000	
Debt Service Coverage					1.25		1.25	
Target Met								

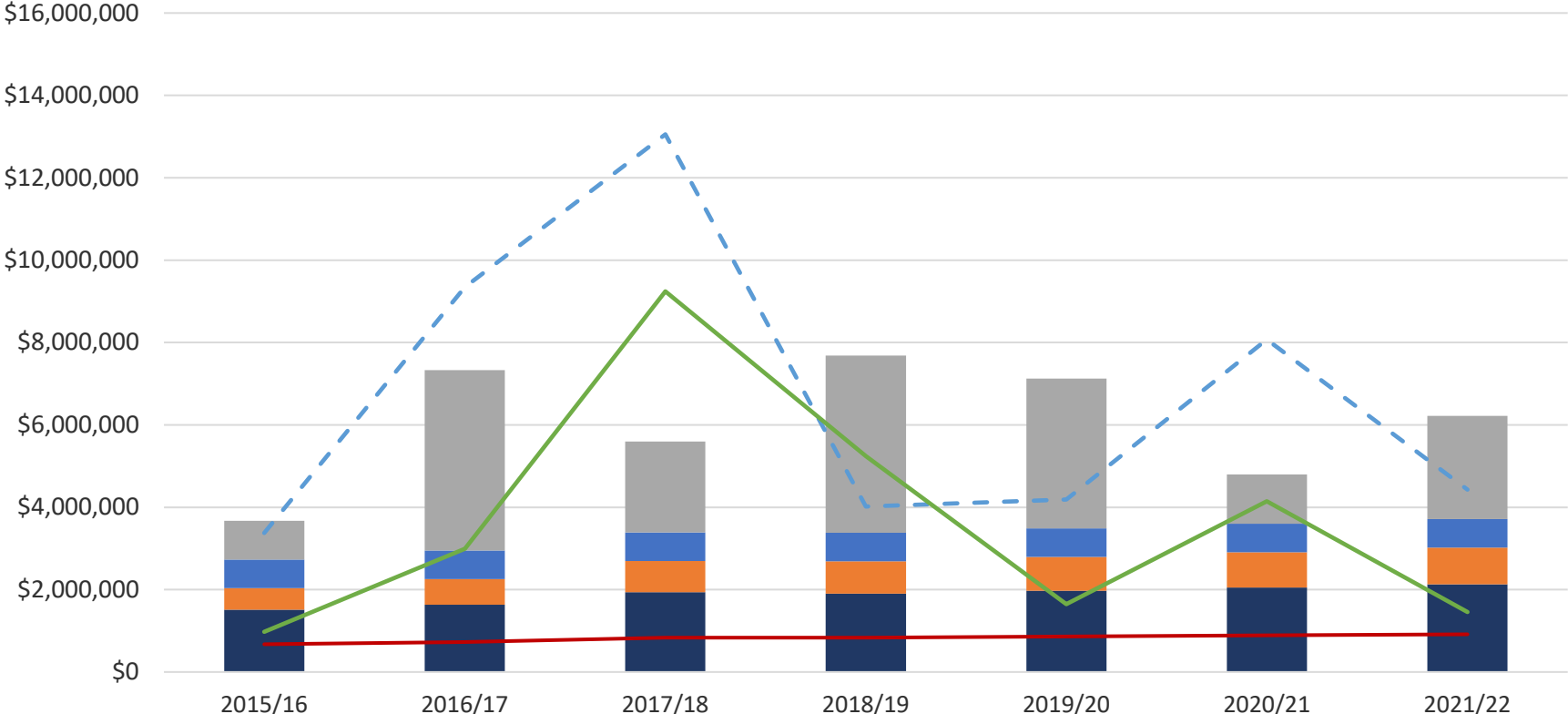
1 - Known grant funding from CIP Table 2

2 - FY17/18 loan covers capital projects FY17/18 - FY18/19. FY19/20 loan covers capital projects FY19/20 - FY21/22

3 - Updated December 2016

4 - assumes 5% loan over 30 years, 1/2 payments first two years

Chart 1: Wastewater Projected Revenue, Expenses & Reserves



Wastewater Treatment
  Wastewater Collection
  Total Debt Service

Capital Improvement Project
  Total Revenue
  Fund Balance

Target Fund Balance



**Table 6**  
**City of Calistoga**  
**Wastewater Cash Flow Projection Option 2 - All Prospective Grant Funding**

	Actual 2015/16	Budget 2016/17	projected					
			2017/18	2018/19	2019/20	2020/21	2021/22	
<b>Beginning Fund Balance</b>								
Unrestricted Operating Fund	\$1,369,195	\$1,077,313	\$570,997	(\$188,860)	(\$264,597)	(\$357,582)	(\$503,102)	
Unrestricted Capital Fund	(\$95,139)	(\$101,713)	\$2,520,795	\$3,986,064	\$2,191,115	\$5,994,201	\$4,892,288	
<b>Total Unrestricted Funds</b>	<b>\$1,274,056</b>	<b>\$975,600</b>	<b>\$3,091,792</b>	<b>\$3,797,204</b>	<b>\$1,926,518</b>	<b>\$5,636,619</b>	<b>\$4,389,186</b>	
<b>% Rate Revenue Increase January 1</b>			<b>15.0%</b>	<b>8.0%</b>	<b>5.0%</b>	<b>3.0%</b>	<b>3.0%</b>	
<b>% Capacity Fee Revenue Increase January 1</b>			<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>% Growth per Fiscal Year</b>			<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	
<i>Typical Single Family Bimonthly Bill, Current Rate Structure</i>		\$130.50	\$150.08	\$162.08	\$170.19	\$175.29	\$180.55	
<b>REVENUE</b>								
<b>Operations Fund Revenue</b>								
Charges for Services								
Residential Sales	\$1,380,441	\$1,415,418	\$1,524,617	\$1,588,773	\$1,631,750	\$1,659,538	\$1,687,800	
Transient Sales	600,930	609,661	656,696	684,330	702,841	714,811	726,984	
Commercial Sales	308,671	311,238	335,250	349,357	358,807	364,918	371,132	
Industrial Sales	53,004	40,304	43,413	45,240	46,464	47,255	48,060	
Silver Rose Estimated Sales				251,605	258,411	262,812	267,288	
Calistoga Hills Estimated Sales				318,784	327,407	332,983	338,654	
Other Revenues	96,366	69,426	69,565	69,704	69,843	69,983	70,123	
<b>Total Operating Revenues</b>	<b>\$2,439,412</b>	<b>\$2,446,047</b>	<b>\$2,629,542</b>	<b>\$3,307,795</b>	<b>\$3,395,524</b>	<b>\$3,452,300</b>	<b>\$3,510,041</b>	
<b>Capital Fund Revenue</b>								
Connection/Impact Fees	\$79,724	\$3,026,708	\$282,864	\$642,645	\$642,645	\$642,645	\$642,645	
Interest Earnings	474	800	802	803	805	806	808	
General Fund Subsidy	105,946	0						
Recycled Water Grant	750,000	0						
Hazmat Grant	0	375,000						
Other Grants/Loans <sup>1</sup>		3,595,853	250,000	2,000,000	646,889			
Proposed Loan Proceeds <sup>2</sup>			4,255,000		6,693,963			
<b>Total Water Capital Fund Revenue</b>	<b>\$936,144</b>	<b>\$6,998,361</b>	<b>\$4,788,666</b>	<b>\$2,643,448</b>	<b>\$7,984,302</b>	<b>\$643,452</b>	<b>\$643,453</b>	
<b>TOTAL REVENUES</b>	<b>\$3,375,556</b>	<b>\$9,444,408</b>	<b>\$7,418,208</b>	<b>\$5,951,243</b>	<b>\$11,379,826</b>	<b>\$4,095,752</b>	<b>\$4,153,495</b>	
<b>Operations Fund Expenses</b>								
Operating Expenses								
Wastewater Treatment	\$1,516,372	\$1,636,515	\$1,934,506	\$1,898,894	\$1,973,450	\$2,050,988	\$2,131,628	
Wastewater Collection	519,672	620,727	759,939	790,337	821,950	854,828	889,021	
Debt Service	695,250	695,121	694,954	694,301	693,109	692,005	690,473	
<b>Total Operations Fund Expenses</b>	<b>\$2,731,294</b>	<b>\$2,952,363</b>	<b>\$3,389,399</b>	<b>\$3,383,532</b>	<b>\$3,488,509</b>	<b>\$3,597,821</b>	<b>\$3,711,121</b>	
<b>Capital Fund Expenses</b>								
Capital Improvement Project <sup>3</sup>	\$942,718	\$4,375,853	\$2,205,000	\$4,300,000	\$3,635,852	\$1,200,000	\$2,505,000	
Proposed Loan Debt Service <sup>4</sup>			138,397	138,397	545,364	545,364	712,246	
Transfer Out - Rate Stabilization Fund			980,000					
<b>Total Capital Expenses</b>	<b>\$942,718</b>	<b>\$4,375,853</b>	<b>\$3,323,397</b>	<b>\$4,438,397</b>	<b>\$4,181,216</b>	<b>\$1,745,364</b>	<b>\$3,217,246</b>	
<b>TOTAL EXPENSES</b>	<b>\$3,674,012</b>	<b>\$7,328,216</b>	<b>\$6,712,796</b>	<b>\$7,821,929</b>	<b>\$7,669,725</b>	<b>\$5,343,185</b>	<b>\$6,928,367</b>	
Net Revenues - Operating Fund	(\$291,882)	(\$506,316)	(\$759,857)	(\$75,737)	(\$92,985)	(\$145,521)	(\$201,080)	
Net Revenues - Capital Fund	(\$6,574)	\$2,622,508	\$1,465,269	(\$1,794,948)	\$3,803,086	(\$1,101,913)	(\$2,573,792)	
<b>NET REVENUES</b>	<b>(\$298,456)</b>	<b>\$2,116,192</b>	<b>\$705,412</b>	<b>(\$1,870,686)</b>	<b>\$3,710,101</b>	<b>(\$1,247,433)</b>	<b>(\$2,774,873)</b>	
<b>Ending Fund Balance</b>								
Unrestricted Operating Fund	\$1,077,313	\$570,997	(\$188,860)	(\$264,597)	(\$357,582)	(\$503,102)	(\$704,182)	
Unrestricted Capital Fund	(\$101,713)	\$2,520,795	\$3,986,064	\$2,191,115	\$5,994,201	\$4,892,288	\$2,318,496	
<b>Total Unrestricted Funds</b>	<b>\$975,600</b>	<b>\$3,091,792</b>	<b>\$3,797,204</b>	<b>\$1,926,518</b>	<b>\$5,636,619</b>	<b>\$4,389,186</b>	<b>\$1,614,313</b>	
Total Unrestricted Fund Target (90 days O&M)	\$673,470	\$727,980	\$835,742	\$834,296	\$860,180	\$887,134	\$915,071	
# Days O&M Covered	130	382	409	208	590	445	159	
Debt Service Coverage (Min. 1.25x)	1.93	10.34	5.67	3.92	6.93	0.96	0.81	
Target Met	yes	yes	yes	yes	yes	no	no	
<b>Rate Stabilization Fund Draw</b>						<b>\$360,000</b>	<b>\$620,000</b>	
Debt Service Coverage						1.25	1.25	

1 - Known grant funding from CIP Table 2

2 - FY17/18 loan covers capital projects FY17/18 - FY18/19 minus existing grant funding. FY19/20 loan covers capital projects FY19/20 - FY21/22 minus existing grant funding

3 - Updated December 2016

4 - assumes 5% loan over 30 years, 1/2 payments first two years

**Table 7**  
**City of Calistoga**  
**Wastewater Flows and Loadings**

	# of Sewer Meters	Est. Mo Flow (hcf) Per EDU	Annual Use	Projected Wastewater Flow			Strength (mg/l)		Loadings (lbs)	
				hcf	mg	gpd	BOD	SS	BOD	SS
<b>Residential</b>										
Single Family	1,130	5.00		67,800	50.72	138,953	300	300	127,000	127,000
Multi-Family	600	4.20		30,240	22.62	61,976	300	300	56,644	56,644
Mobile Home	<u>555</u>	2.70		<u>17,982</u>	<u>13.45</u>	<u>36,853</u>	300	300	<u>33,683</u>	<u>33,683</u>
<b>Total Residential</b>	<b><u>2,285</u></b>			<b><u>116,022</u></b>	<b><u>86.79</u></b>	<b><u>237,782</u></b>			<b><u>217,328</u></b>	<b><u>217,328</u></b>
<b>Transient</b>										
Transient General			25,443	25,443	19.03	52,144	400	200	63,545	31,773
Spa			11,822	11,822	8.84	24,229	400	200	29,526	14,763
Campground			3,613	3,613	2.70	7,405	400	200	9,024	4,512
Bed & Breakfast			<u>2,223</u>	<u>2,223</u>	<u>1.66</u>	<u>4,556</u>	400	200	<u>5,552</u>	<u>2,776</u>
<b>Total Transient</b>			<b><u>43,101</u></b>	<b><u>43,101</u></b>	<b><u>32</u></b>	<b><u>88,334</u></b>			<b><u>107,647</u></b>	<b><u>53,823</u></b>
<b>Commercial</b>										
Commercial General			7,484	7,484	5.60	15,338	80	80	3,738	3,738
Restaurant/Bakery			10,207	10,207	7.64	20,919	1000	600	63,731	38,239
Laundry			2,079	2,079	1.56	4,261	80	80	1,038	1,038
Public Building			1,673	1,673	1.25	3,429	80	80	836	836
Medical Care			584	584	0.44	1,197	80	80	292	292
Brewery/Winery (pre-treated)			405	405	0.30	830	80	80	202	202
School			2,696	2,696	2.02	5,525	80	80	1,347	1,347
Service Station			<u>392</u>	<u>392</u>	<u>0.29</u>	<u>803</u>	80	80	<u>196</u>	<u>196</u>
<b>Total Commercial</b>			<b><u>25,520</u></b>	<b><u>25,520</u></b>	<b><u>19</u></b>	<b><u>52,302</u></b>			<b><u>71,380</u></b>	<b><u>45,888</u></b>
<b>Industrial &amp; Bottling Works</b>										
Measured Flow			1,671	<u>1,671</u>	<u>1.25</u>	<u>3,425</u>	350	100	<u>3,652</u>	<u>1,044</u>
				<b><u>1,671</u></b>	<b><u>1.25</u></b>	<b><u>3,425</u></b>			<b><u>3,652</u></b>	<b><u>1,044</u></b>
<b>Groundwater Discharge</b>										
Spa Discharge [1]			11,822	<u>11,822</u>	<u>8.84</u>	<u>24,229</u>	1	1	<u>74</u>	<u>74</u>
<b>Total Groundwater Discharge</b>				<b><u>11,822</u></b>	<b><u>8.84</u></b>	<b><u>24,229</u></b>			<b><u>74</u></b>	<b><u>74</u></b>
<b>Total</b>						<b>198,136</b>	<b>148</b>	<b>406,072</b>	<b>400,081</b>	<b>318,156</b>

1 - Same users as spas in Transient Rates

Strength based on State Revenue Guidelines, 2016 Industrial customer bills, and 2010 Sewer Rate Study

**Table 8**  
**City of Calistoga**  
**Rate Revenue Requirements**

Costs Allocated to All Customers	2016/17 Budget	Allocation %			Allocation \$			Projected Loadings (lbs)		
		Flow	BOD	SS	Flow	BOD	SS	Flow (hcf) 198,136	BOD 400,081	SS 318,156
<b>Cost Component</b>										
Wastewater Treatment	\$1,636,515	52%	30%	18%	\$850,988	\$490,955	\$294,573			
Wastewater Collection	\$620,727	100%	0%	0%	620,727	0	0			
Debt Service	\$695,121	52%	30%	18%	361,463	208,536	125,122			
CIP	\$4,375,853	52%	30%	18%	2,275,444	1,312,756	787,654			
<b>Total Expenses</b>	<b>\$7,328,216</b>				<b>\$4,108,621</b>	<b>\$2,012,247</b>	<b>\$1,207,348</b>			
Composite Percentages					56%	27%	16%			
<b>Add: Net Revenue</b>	<b>\$2,016,192</b>									
<b>Less: Non-Rate Operating Revenue</b>	(\$69,426)									
<b>Less: Non-Operating Revenue</b>	(6,898,361)									
<b>Revenue Requirement</b>	<b>\$2,376,621</b>	<b>56%</b>	<b>27%</b>	<b>16%</b>	<b>\$1,332,471</b>	<b>\$652,594</b>	<b>\$391,556</b>	<b>\$6.73</b>	<b>\$1.63</b>	<b>\$1.23</b>

**Table 9**  
**City of Calistoga**  
**Flows and Loadings Summary**

	# of Sewer Meters	Projected Water Use	Projected Wastewater Flow			Loadings (lbs)		FY 2016/17 Unit Rate Per Class			FY 2016/17 Cost Recovery			Restructured
			hcf	mg	gpd	BOD	SS	\$/hcf	\$/lb BOD	\$/lb SS	\$/hcf	\$/lb BOD	\$/lb SS	FY 2016/17 Monthly Rates \$/billing unit
<b>Residential</b>														
Single Family	1,130	0	67,800	50.72	138,953	127,000	127,000	\$6.73	\$1.63	\$1.23	\$455,956	\$207,157	\$156,300	\$60.43
Multi Family	600	0	30,240	22.62	61,976	56,644	56,644	\$6.73	\$1.63	\$1.23	203,365	92,396	69,712	\$50.76
Mobile Home	555	0	17,982	13.45	36,853	33,683	33,683	\$6.73	\$1.63	\$1.23	120,929	54,942	41,454	\$32.63
<b>Transient</b>														
Transient General	N/A	25,443	25,443	19.03	52,144	63,545	31,773	\$6.73	\$1.63	\$1.23	171,105	103,652	39,103	\$/hcf \$12.34
Spa	N/A	11,822	11,822	8.84	24,229	29,526	14,763	\$6.73	\$1.63	\$1.23	79,503	48,161	18,169	\$12.34
Campground	N/A	3,613	3,613	2.70	7,405	9,024	4,512	\$6.73	\$1.63	\$1.23	24,298	14,719	5,553	\$12.34
Bed & Breakfast	N/A	2,223	2,223	1.66	4,556	5,552	2,776	\$6.73	\$1.63	\$1.23	14,950	9,056	3,416	\$12.34
<b>Commercial</b>														
Commerical General	N/A	7,484	7,484	5.60	15,338	3,738	3,738	\$6.73	\$1.63	\$1.23	50,330	6,098	4,601	\$/hcf \$8.15
Restaurant/Bakery	N/A	10,207	10,207	7.64	20,919	63,731	38,239	\$6.73	\$1.63	\$1.23	68,642	103,955	47,061	\$21.52
Laundry	N/A	2,079	2,079	1.56	4,261	1,038	1,038	\$6.73	\$1.63	\$1.23	13,981	1,694	1,278	\$8.15
Public Building	N/A	1,673	1,673	1.25	3,429	836	836	\$6.73	\$1.63	\$1.23	11,251	1,363	1,028	\$8.15
Medical Care	N/A	584	584	0.44	1,197	292	292	\$6.73	\$1.63	\$1.23	3,927	476	359	\$8.15
Brewery/Winery	N/A	405	405	0.30	830	202	202	\$6.73	\$1.63	\$1.23	2,724	330	249	\$8.15
School	N/A	2,696	2,696	2.02	5,525	1,347	1,347	\$6.73	\$1.63	\$1.23	18,131	2,197	1,657	\$8.15
Service Station	N/A	392	392	0.29	803	196	196	\$6.73	\$1.63	\$1.23	2,636	319	241	\$8.15
<b>Industrial &amp; Bottling Works</b>														
Industrial & Bottling Works	N/A	1,671	1,671	1.25	3,425	3,652	1,044	\$6.73	\$1.63	\$1.23	11,240	5,958	1,284	\$/mg \$8,990.05
														\$/BOD \$1.63
														\$/SS \$1.23
<b>Spa Discharge</b>														
Spa Discharge	N/A	11,822	11,822	8.84	24,229	74	74	\$6.73	\$1.63	\$1.23	79,503	120	91	\$/hcf \$6.74
<b>TOTAL</b>	<b>2,285</b>	<b>82,114</b>	<b>198,136</b>	<b>148.22</b>	<b>406,072</b>	<b>400,081</b>	<b>318,156</b>				<b>\$1,332,471</b>	<b>\$652,594</b>	<b>\$391,556</b>	
												<b>\$2,376,621</b>		

**Table 10**  
**City of Calistoga**  
**Wastewater Rate Comparison**

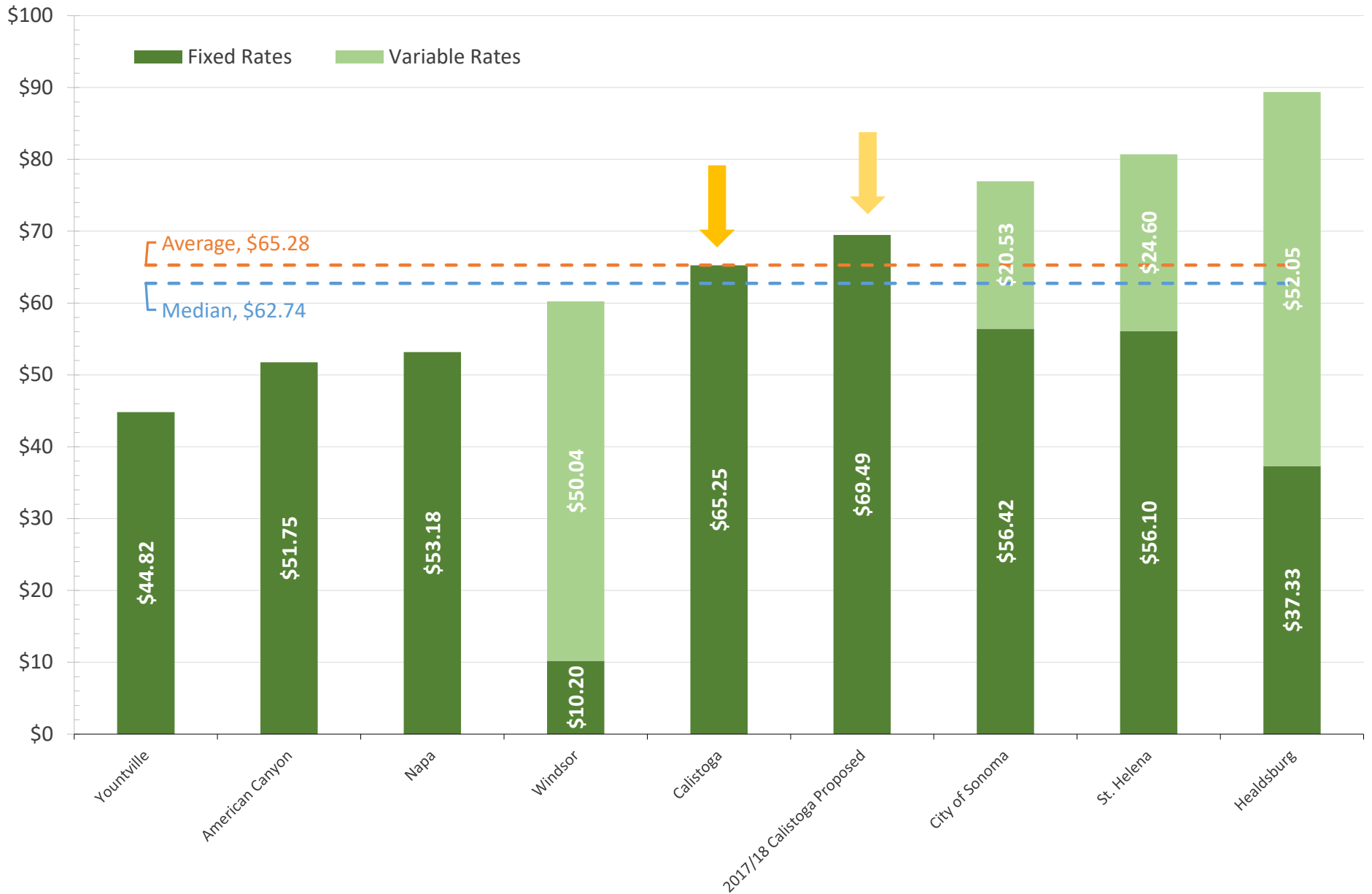
<b>User Category</b>	<b>Basis</b>	<b>Current Rate Structure</b>	<b>2017/18 Rate with First Year % Increase</b>
<b>Residential Rates</b>			
Single Family Residential	Flat Monthly	\$65.25	\$69.49
Multi-Family Residential	Flat Monthly per meter	\$54.90	\$58.37
Mobile Home	Flat Monthly per meter	\$35.46	\$37.53
<b>Transient Rates</b>			
Transient General	Per hcf water use	\$13.35	\$14.19
Spa	Per hcf water use	\$13.35	\$14.19
Campground	Per hcf water use	\$13.35	\$14.19
Bed & Breakfast	Per hcf water use	\$13.35	\$14.19
<b>Other Non-Residential Rates</b>			
Commerical General	Per hcf water use	\$5.17	\$9.38
Restaurant/Bakery	Per hcf water use	\$22.92	\$24.75
Laundry	Per hcf water use	\$5.17	\$9.38
Public Building	Per hcf water use	\$5.17	\$9.38
Medical Care	Per hcf water use	\$5.17	\$9.38
Brewery/Winery (with pre-treatment)	Per hcf water use	\$1.48	\$9.38
School	Per hcf water use	\$5.17	\$9.38
Service Station	Per hcf water use	\$5.17	\$9.38
<b>Industrial &amp; Bottling Works Rates</b>			
Measure Flow Rate	Per mg of Measured Flow	\$10,330.19	\$10,338.55
Calculated BOD Rate	Per Pound	\$1.69	\$1.88
Calculated SS Rate	Per Pound	\$1.31	\$1.42
<b>Groundwater Discharge Rates</b>			
Spa	Per hcf of Water Use	\$4.15	\$7.75
Residential Spa/Commercial [1]	Per hcf of Groundwater Measured Flow Only	\$8.61	\$9.90
<b>Other Rates</b>			
Wastewater Capacity Allocation [1]	Flat Monthly	\$41.19	\$47.37
Minimum Rate for All Non-Residential User Categories [1]	Flat Monthly	\$35.46	\$40.78

[1] no structure change

**Table 11**  
**City of Calistoga**  
**Proposed Wastewater Rates**

Current Rate Structure			Proposed Rate Structure									
			Rate Escalation Scenario 1 - All Capital					Rate Escalation Scenario 2 - All Capital w/ All Grant Funding				
User Category	Basis	Charge	15.0%	13.0%	10.0%	10.0%	3.0%	15.0%	8.0%	5.0%	3.0%	3.0%
			2017/18	2018/19	2019/20	2020/21	2021/22	2017/18	2018/19	2019/20	2020/21	2021/22
<b>Residential Rates</b>												
Single Family Residential	Flat Monthly	\$65.25	\$69.49	\$78.53	\$86.38	\$95.02	\$97.87	\$69.49	\$75.05	\$78.81	\$81.17	\$83.60
Multi-Family Residential	Flat Monthly per meter	\$54.90	\$58.37	\$65.96	\$72.56	\$79.81	\$82.21	\$58.37	\$63.04	\$66.20	\$68.18	\$70.23
Mobile Home	Flat Monthly per meter	\$35.46	\$37.53	\$42.40	\$46.65	\$51.31	\$52.85	\$37.53	\$40.53	\$42.55	\$43.83	\$45.15
<b>Transient Rates</b>												
Transient General	Per hcf water use	\$13.35	\$14.19	\$16.03	\$17.63	\$19.40	\$19.98	\$14.19	\$15.32	\$16.09	\$16.57	\$17.07
Spa	Per hcf water use	\$13.35	\$14.19	\$16.03	\$17.63	\$19.40	\$19.98	\$14.19	\$15.32	\$16.09	\$16.57	\$17.07
Campground	Per hcf water use	\$13.35	\$14.19	\$16.03	\$17.63	\$19.40	\$19.98	\$14.19	\$15.32	\$16.09	\$16.57	\$17.07
Bed & Breakfast	Per hcf water use	\$13.35	\$14.19	\$16.03	\$17.63	\$19.40	\$19.98	\$14.19	\$15.32	\$16.09	\$16.57	\$17.07
<b>Other Non-Residential Rates</b>												
Commerical General	Per hcf water use	\$5.17	\$9.38	\$10.60	\$11.66	\$12.82	\$13.21	\$9.38	\$10.13	\$10.63	\$10.95	\$11.28
Restaurant/Bakery	Per hcf water use	\$22.92	\$24.75	\$27.97	\$30.76	\$33.84	\$34.85	\$24.75	\$26.73	\$28.06	\$28.91	\$29.77
Laundry	Per hcf water use	\$5.17	\$9.38	\$10.60	\$11.66	\$12.82	\$13.21	\$9.38	\$10.13	\$10.63	\$10.95	\$11.28
Public Building	Per hcf water use	\$5.17	\$9.38	\$10.60	\$11.66	\$12.82	\$13.21	\$9.38	\$10.13	\$10.63	\$10.95	\$11.28
Medical Care	Per hcf water use	\$5.17	\$9.38	\$10.60	\$11.66	\$12.82	\$13.21	\$9.38	\$10.13	\$10.63	\$10.95	\$11.28
Brewery/Winery	Per hcf water use	\$1.48	\$9.38	\$10.60	\$11.66	\$12.82	\$13.21	\$9.38	\$10.13	\$10.63	\$10.95	\$11.28
School	Per hcf water use	\$5.17	\$9.38	\$10.60	\$11.66	\$12.82	\$13.21	\$9.38	\$10.13	\$10.63	\$10.95	\$11.28
Service Station	Per hcf water use	\$5.17	\$9.38	\$10.60	\$11.66	\$12.82	\$13.21	\$9.38	\$10.13	\$10.63	\$10.95	\$11.28
<b>Industrial &amp; Bottling Works</b>												
Measured Flow Rate	Per mg of Measured Flow	\$10,330.19	\$10,338.55	\$11,682.56	\$12,850.82	\$14,135.90	\$14,559.98	\$10,338.55	\$11,165.64	\$11,723.92	\$12,075.64	\$12,437.91
Calculated BOD Rate	Per pound	\$1.69	\$1.88	\$2.12	\$2.33	\$2.56	\$2.64	\$1.88	\$2.03	\$2.13	\$2.19	\$2.26
Calculated SS Rate	Per pound	\$1.31	\$1.42	\$1.60	\$1.76	\$1.94	\$1.99	\$1.42	\$1.53	\$1.60	\$1.65	\$1.70
<b>Groundwater Discharge Rates</b>												
Spa	Per hcf of Water Use Per hcf of Groundwater	\$4.15	\$7.75	\$8.76	\$9.64	\$10.60	\$10.92	\$7.75	\$8.37	\$8.79	\$9.06	\$9.33
Residential Spa/Commercial	Measured Flow Only	\$8.61	\$9.90	\$11.19	\$12.31	\$13.54	\$13.94	\$9.90	\$10.69	\$11.23	\$11.57	\$11.91
<b>Other Rates</b>												
Wastewater Capacity Allocat	Flat Monthly	\$41.19	\$47.37	\$53.53	\$58.88	\$64.77	\$66.71	\$47.37	\$51.16	\$53.72	\$55.33	\$56.99
Minimum Rate for All Non-Residential User Categories	Flat Monthly	\$35.46	\$40.78	\$46.08	\$50.69	\$55.76	\$57.43	\$40.78	\$44.04	\$46.24	\$47.63	\$49.06

Chart 2: Single Family Residential Monthly Wastewater Rates, FY17/18



\*assumes 1 EDU, 5 hcf (Calistoga median monthly SFR water usage, FY16)