City of Calistoga		RYDRAFI			20	009	Water R	ate Study
.ble B								
Water Sources and Uses Summary								
	Adopted	Project	ed	Projected	Project	ted	Projected	Projected
	FY 09-10	FY 10-		FY 11-12	FY 12-	13	FY 13-14	FY 14-15
	The state of the s	1		2	3		4	5
Changes in Rates								0.400
Monthly Service Charge - Residential Meter [1]	\$ 17.56	\$ 18	3.53 6%	\$ 19.93 8%		0.40 2%		ENTERNATION INCOME.
Percent Change Base Volume Charge per 748 Gallons (hcf) [2]	\$ 4.61	\$ 4	1.87			5.38		
Percent Change	Ψ.σ.	H	6%	8%		3%		
Connection Fee in acre feet (af) [3]	\$ 26,350	\$ 31,	271	\$ 32,834	\$ 34,	476	\$ 36,200	\$ 38,010
Percent Change		1	19%	5%		5%	5%	5%
Average Residential Combined Service and Volume								
Percent Change [3]			8%	8%		2%	2%	2%
Average Transient Facility Combined Service and Volume Percent Change [3]			6%	8%		2%	2%	2%
			0%	0.70		2 70	470	2/0
Average Commercial Combined Service and Volume Percent Change [3]			6%	8%		2%	2%	2%
Annual User Generated Total Revenue Percent						-01	H 00/	4.000
Change - Shows impact of growth/conservation		3	.3%	7.8%	a Tio Tel	.5%	5.0%	4.9%
v enues								
Charges for Services	2,148,309	2,160,		2,325,229	2,382		2,439,817	2,492,688
Connection Fees	151,038		290	136,419	2,576		795,618	1,106,174 20,000
Interest Earnings	20,000 1,238,537	20, 1,910,	307	20,000 359,094		,000 ,106	20,000 657,075	326,000
Grants From Other Agencies Debt & Lease Proceeds	3,750,000	1,250,		-	040	-	-	-
Other Revenues	168,000	147,		147,000	147	,000	147,000	147,000
Total Revenues	7,475,884	5,542,		2,987,741	5,474	,202	4,059,510	4,091,862
Expenses								
Operations	49E 3E0	498,	725	506,636	515	,495	525,323	536,163
Water Distribution Water Treatment	485,350 1,434,950	1,471,		1,507,022	1,579		1,631,992	1,692,711
Depreciation	349,200	349,		349,200		,200	349,200	349,200
Total Operating Expenses	2,269,500	2,318,		2,362,858	2,443	,896	2,506,516	2,578,073
Special Projects	51,250	101,	565	112,588	134	,005	146,073	148,568
Equipment	42,000		000	50,000		,000	50,000	50,000
Capital Improvements								
Distribution Projects	2,031,000	4,787,		540,000	725	,000	250,000	125,000
Treatment Projects	25,000	NYSES MANAGEMENT AND ASSESSMENT OF THE PARTY	000	20,000	705	-	320,000	105.000
Total Capital Improvements	2,056,000	4,801,	971	560,000	725	,000	570,000	125,000
Debt Payments			I national and a second					2.12.3 %
Principal	185,326	176,		270,471		,574	278,788	340,649
Interest	335,300	450,		464,688		,599	451,090	481,190
Other Debt Related Costs	51,500 572,126	31, 657,	572	1,500 736,659		,500 ,673	41,500 771,378	1,500 823,339
Total Debt Payments	372,120	657,	JIZ	730,039			771,070	
Total Expenses	4,990,876	7,930,	047	3,822,105	4,084	,573	4,043,967	3,724,980

City of Calistoga

2009 Water Rate Study

Γable Β

Nater Sources and Uses Summary

	Name and Address of the Owner, when the Owner, which the O	Physical Color of the Color of	The second secon		THE RESERVE TO SHARE THE PARTY OF THE PARTY	THE RESERVE OF THE PARTY OF THE
	Adopted FY 09-10	Projected FY 10-11	Projected FY 11-12	Projected FY 12-13	Projected FY 13-14	Projected FY 14-15
Vet Surplus/Deficit	2,485,009	(2,387,238)	(834,363)	1,389,629	15,543	366,882
Net Other Adjustments/Transfers	349,200	349,200	349,200	349,200	349,200	349,200
3eginning Working Capital	(114,009)	2,720,199	682,161	196,997	1,935,826	2,300,570
Ending Working Capital	2,720,199	682,161	196,997	1,935,826	2,300,570	3,016,651
Norking Capital Allocation						
Operating Reserve - 20% Goal	384,060	393,948	402,732	418,939	431,463	445,775
Required Debt Service Reserve	40,212	57,550	86,269	114,965	143,632	172,266
Future Debt Service	14,520	(56,839)	(134,655)	764,655	951,627	1,243,511
Operating & Capital Contingency	2,281,407	287,502	(157,348)	637,268	773,848	1,155,100
Norking Capital Allocation	2,720,199	692 464	196,997	1,935,826	2,300,570	3,016,651
Norking Capital Anocation	2,120,133	682,161	130,331	1,300,020	2,300,370	3,010,031
	2,720,199	002,101	150,557	1,303,020	2,300,370	3,010,031
Debt Coverage Formula						
Debt Coverage Formula	7,475,884	5,542,808	2,987,741	5,474,202	4,059,510 (795,618)	4,091,862
Debt Coverage Formula All Revenues Less Connection Fees	7,475,884 (151,038)	5,542,808 (55,290)			4,059,510	
Debt Coverage Formula All Revenues Less Connection Fees Less Proceeds & Grants	7,475,884 (151,038) (4,988,537)	5,542,808	2,987,741 (136,419)	5,474,202 (2,576,614)	4,059,510 (795,618)	4,091,862 (1,106,174)
Debt Coverage Formula All Revenues Less Connection Fees	7,475,884 (151,038)	5,542,808 (55,290) (3,160,307)	2,987,741 (136,419) (359,094)	5,474,202 (2,576,614) (348,106)	4,059,510 (795,618) (657,075)	4,091,862 (1,106,174) (326,000)
Debt Coverage Formula All Revenues Less Connection Fees Less Proceeds & Grants Add back Meas A Grant for USDA Debt Service Add back Portion of Connection Fees for Debt	7,475,884 (151,038) (4,988,537) 379,850	5,542,808 (55,290) (3,160,307) 368,994	2,987,741 (136,419) (359,094) 359,094	5,474,202 (2,576,614) (348,106) 348,106	4,059,510 (795,618) (657,075) 337,075	4,091,862 (1,106,174) (326,000) 326,000
Debt Coverage Formula All Revenues Less Connection Fees Less Proceeds & Grants Add back Meas A Grant for USDA Debt Service	7,475,884 (151,038) (4,988,537) 379,850 62,223	5,542,808 (55,290) (3,160,307) 368,994 22,778	2,987,741 (136,419) (359,094) 359,094 56,200	5,474,202 (2,576,614) (348,106) 348,106 1,061,480	4,059,510 (795,618) (657,075) 337,075 327,768	4,091,862 (1,106,174) (326,000) 326,000 455,707
Debt Coverage Formula All Revenues Less Connection Fees Less Proceeds & Grants Add back Meas A Grant for USDA Debt Service Add back Portion of Connection Fees for Debt Less Oper & Maint (No Equip/Deprec/Sp Projects)	7,475,884 (151,038) (4,988,537) 379,850 62,223 (1,920,300)	5,542,808 (55,290) (3,160,307) 368,994 22,778 (1,969,738)	2,987,741 (136,419) (359,094) 359,094 56,200 (2,013,658)	5,474,202 (2,576,614) (348,106) 348,106 1,061,480 (2,094,696)	4,059,510 (795,618) (657,075) 337,075 327,768 (2,157,316)	4,091,862 (1,106,174) (326,000) 326,000 455,707 (2,228,873)
Debt Coverage Formula All Revenues Less Connection Fees Less Proceeds & Grants Add back Meas A Grant for USDA Debt Service Add back Portion of Connection Fees for Debt Less Oper & Maint (No Equip/Deprec/Sp Projects) Net Revenues Annual Debt Service	7,475,884 (151,038) (4,988,537) 379,850 62,223 (1,920,300) 858,082	5,542,808 (55,290) (3,160,307) 368,994 22,778 (1,969,738) 749,244	2,987,741 (136,419) (359,094) 359,094 56,200 (2,013,658) 893,865	5,474,202 (2,576,614) (348,106) 348,106 1,061,480 (2,094,696) 1,864,372	4,059,510 (795,618) (657,075) 337,075 327,768 (2,157,316) 1,114,345	4,091,862 (1,106,174) (326,000) 326,000 455,707 (2,228,873) 1,212,522
Debt Coverage Formula All Revenues Less Connection Fees Less Proceeds & Grants Add back Meas A Grant for USDA Debt Service Add back Portion of Connection Fees for Debt Less Oper & Maint (No Equip/Deprec/Sp Projects) Net Revenues	7,475,884 (151,038) (4,988,537) 379,850 62,223 (1,920,300) 858,082	5,542,808 (55,290) (3,160,307) 368,994 22,778 (1,969,738) 749,244 626,072	2,987,741 (136,419) (359,094) 359,094 56,200 (2,013,658) 893,865 735,159	5,474,202 (2,576,614) (348,106) 348,106 1,061,480 (2,094,696) 1,864,372 730,173	4,059,510 (795,618) (657,075) 337,075 327,768 (2,157,316) 1,114,345 729,878	4,091,862 (1,106,174) (326,000) 326,000 455,707 (2,228,873) 1,212,522 821,839

Table A er Rates

Current Rates

Fixed Monthly Meter Service Charge

Monthly Service Charge = Base Demand Charge times Demand Factor

Meter Size	Capacity Ratios	All have a constraint of the constraint of the tensor account to the design of the second of the sec
5/8" or 3/4"	4	\$17.56
1"	2.5	\$43.90
1 1/2"	5	\$87.80
2"	8	\$140.48
3"	15	\$263.40
4"	25	\$439.00
6"	50	\$878.00
8"	80	

Demand Factor of Potential Water Demand by type of	Current Factor
Single family	1.00
Multi-family residential facilities	1.58
Mobile home parks	2.36
Commercial general	1.16
Restaurants	2.39
Laundry	
Transient Occupancy facilities	2.57
Spa Resorts with Groundwater Disch	narge
Industrial	5.35

Proposed Rates											
Initial Changes	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15						
When Adopted	January 1										

6%	0%	8%		2%		2%	2%		
\$ 18.53	\$ 18.53	\$	19.93	\$ 20.40	\$	20.87	\$	21.30	
\$ 46.33	\$ 46.33	\$	49.82	\$ 51.00	\$	52.19	\$	53.26	
\$ 92.67	\$ 92.67	\$	99.64	\$ 102.01	\$	104.37	\$	106.52	
\$ 148.27	\$ 148.27	\$	159.42	\$ 163.21	\$	167.00	\$	170.43	
\$ 278.01	\$ 278.01	\$	298.91	\$ 306.02	\$	313.12	\$	319.56	
\$ 463.35	\$ 463.35	\$	498.18	\$ 510.03	\$	521.86	\$	532.60	
\$ 926.70	\$ 926.70	\$	996.37	\$ 1,020.06	\$	1,043.73	\$	1,065.20	
\$ 1,482.72	\$ 1,482.72	\$	1,594.19	\$ 1,632.09	\$	1,669.97	\$	1,704.33	

lated ctor	
1.00	0%
1.42	-10%
2.11	-11%
1.10	-5%
2.39	0%
2.74	137%
1.25	-51%
2.39	-7%
3.19	-40%

2.4%

5.51

2.2%

5.63

15%

able A Vater Rates



Proposed Rates										
Initial Changes	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15					
When Adopted	January 1									

2.5%

5.38

7.7%

5.25

/olume	Charge	for	amount	of	water
ised					

ingle Family Conservation Rates Amount of Bi-monthly Water Use (every 2 months)

0 - 8 hcf

Charge is per hundred cubic feet (hcf) equal to 748 gallons of water)

3ase charge For all Users

\$4.61				4.87	4.87
		Revised Con	servation T		
	+/- % of Base Rate	hcf Range	+/- % of Base Rate		
\$3.46	-25%	0 to 6	-25%	\$ 3.65	\$ 3.65

5.7%

0.0%

2	9 - 14 hcf	\$4.15	-10%
3	15 - 22 hcf	\$4.61	0%
4	23 - 30 hcf	\$4.61	0%
5	31 - 50 hcf	\$4.61	0%
6	51 + hcf	\$6.12	33%

-25%	\$	3.65	\$	3.65	\$	3.93	\$	4.03	\$	4.13	\$	4.22
-10%	\$	4.38	\$	4.38	\$	4.72	\$	4.84	\$	4.96	\$	5.07
0%	\$	4.87	\$	4.87	\$	5.25	\$	5.38	\$	5.51	\$	5.63
25%	\$	6.09	\$	6.09	\$	6.56	\$	6.72	\$	6.89	\$	7.04
75%	\$	8.52	\$	8.52	\$	9.18	\$	9.41	\$	9.64	\$	9.85
	-10% 0% 25%	-10% \$ 0% \$	-10% \$ 4.38 0% \$ 4.87 25% \$ 6.09	-10% \$ 4.38 \$ 0% \$ 4.87 \$ 25% \$ 6.09 \$	-10% \$ 4.38 \$ 4.38 0% \$ 4.87 \$ 4.87 25% \$ 6.09 \$ 6.09	-10% \$ 4.38 \$ 4.38 \$ 0% \$ 4.87 \$ 4.87 \$ 25% \$ 6.09 \$ 6.09 \$	-10% \$ 4.38 \$ 4.38 \$ 4.72 0% \$ 4.87 \$ 4.87 \$ 5.25 25% \$ 6.09 \$ 6.09 \$ 6.56	-10% \$ 4.38 \$ 4.38 \$ 4.72 \$ 0% \$ 4.87 \$ 4.87 \$ 5.25 \$ 25% \$ 6.09 \$ 6.09 \$ 6.56 \$	-10% \$ 4.38 \$ 4.38 \$ 4.72 \$ 4.84 0% \$ 4.87 \$ 4.87 \$ 5.25 \$ 5.38 25% \$ 6.09 \$ 6.09 \$ 6.56 \$ 6.72	-10% \$ 4.38 \$ 4.38 \$ 4.72 \$ 4.84 \$ 0% \$ 4.87 \$ 4.87 \$ 5.25 \$ 5.38 \$ 25% \$ 6.09 \$ 6.09 \$ 6.56 \$ 6.72 \$	-10% \$ 4.38 \$ 4.38 \$ 4.72 \$ 4.84 \$ 4.96 0% \$ 4.87 \$ 4.87 \$ 5.25 \$ 5.38 \$ 5.51 25% \$ 6.09 \$ 6.09 \$ 6.56 \$ 6.72 \$ 6.89	-10% \$ 4.38 \$ 4.38 \$ 4.72 \$ 4.84 \$ 4.96 \$ 0% \$ 4.87 \$ 5.25 \$ 5.38 \$ 5.51 \$ 25% \$ 6.09 \$ 6.09 \$ 6.56 \$ 6.72 \$ 6.89 \$

'eak Surchar	ge Rate
eak Surcharge	Rate per h

\$5.68 23%

\$ 6.57	\$ 6.57	\$ 7.01	\$ 7.20	\$ 7.39	\$ 7.58
35%	35%	34%	34%	34%	35%

eak Surcharge rate applied to water use in excess of nonthly use by size of meter

Meter Size	Water Use per Month (in hcf)
5/8" or 3/4"	35
1"	88
1 1/2"	175
2"	280
3"	525
4"	875
6"	1,750
8"	n/a
outside City Rate	15% of Volume charge rates listed

Updated Water Use per month				
21	-40%			
53				
105				
168				
315				
525				
1,050				
1,680	n/a			
15%	15%	15%	15%	15%

ifeline Rate For Qualified. Residents (PG&E CARE Program)

20% reduction up to 35 units of bi-monthly water

20% reduction up to 35 units of bi-monthly water use.

Table ter Rate Changes and Comparision to er Agencies **Proposed Charges** Meter and Water Use Initial Current FY 10-11 FY 11-12 FY 12-13 FY 13-14 FY 14-15 Changes Rates Monthly Use When Meter Demand Jan 1st Jan 1st Jan 1st Jan 1st Jan 1st Adopted Size Factor (in hcf) Single Family Residential Low Annual Use \$ 18.53 \$ 18.53 \$ 19.93 \$ 20.40 \$ 20.87 17.56 Monthly Service Charg 5/8 1.00 3.7 7.3 Water Use Bi-Mthly hcf Bi-Mthly hcf \$ 11.80 \$ 12.10 S 12.40 \$ 12.67 0 to 6 \$ 10.96 \$ 10.96 \$3.46 \$12.69 0 - 8 hcf 3.07 \$ 3.07 \$ 3.30 \$ 3.39 \$ 3.47 \$ 6 to 12 9 - 14 hcf \$4.15 \$ \$4.61 12 to 30 15 - 22 hcf 23 - 30 hcf \$4.61 \$4.61 30 to 51 31 - 50 hcf 51 + hcf \$6.12 51 and over \$14.03 \$14.03 \$15.11 \$15.49 \$15.87 \$16.22 Total Volume Charge \$12.69 \$32.56 \$32.56 \$35.04 \$35.89 \$36.74 \$37.52 **Total Monthly Charge** \$30.25 8% 0% 8% 2% 2% 2% Average Annual Use 18.53 \$ 19.93 \$ 20.40 \$ 20.87 \$ 21.30 17.56 \$ 18.53 \$ Monthly Service Charg 5/8 1.00 9.4 Water Use 18.8 Bi-Mthly hcf Bi-Mthly hcf 11.80 \$ 12.10 \$ 12.40 \$ 12.67 \$ 10.96 \$ 10.96 \$ \$13.84 \$3.46 0 to 6 0 - 8 hcf 14.87 14.16 14.52 \$ S 15.20 9 - 14 hcf \$4.15 \$12.45 6 to 12 \$ 13.15 \$ 13.15 S \$ \$ 17.84 \$ 18.28 \$ 18.73 \$ 19.15 16.56 \$ 16.56 \$4.61 \$11.06 12 to 30 15 - 22 hcf 23 - 30 hcf \$4.61 \$4.61 30 to 51 31 - 50 hcf \$6.12 51 and over 51 + hcf \$40.67 \$40.67 \$43.80 \$44.90 \$46.00 \$47.02 Total Volume Charge \$37.35 \$63.73 \$65.30 \$66.87 \$68.33 \$59.21 \$59.21 \$54.91 **Total Monthly Charge** 2% 2% 0% 8% 2% 8% High Annual Use \$ 18.53 \$ 18.53 \$ 19.93 \$ 20.40 \$ 20.87 \$ 21.30 17.56 Monthly Service Charg 5/8 1.00 \$ 18.3 Water Use 36.7 Bi-Mthly hcf Bi-Mthly hcf 10.96 \$ 11.80 \$ 12.10 \$ 12.40 \$ 12.67 \$ 10.96 \$ \$3.46 \$13.84 0 to 6 0 - 8 hcf \$4.15 \$12.45 6 to 12 \$ 13.15 \$ 13.15 \$ 14.16 \$ 14.52 \$ 14.87 \$ 15.20 9 - 14 hcf \$ 47.21 \$ 48.40 \$ 49.58 \$ 50.68 43.84 S 43.84 \$ \$4.61 \$52.09 12 to 30 15 - 22 hcf \$4.61 23 - 30 hcf \$ 22.18 22.72 \$ 23.23 20.09 \$ 21.64 S \$ 20.09 \$ \$4.61 30 to 51 31 - 50 hcf \$6.12 51 and over 51 + hcf \$88.04 \$94.82 \$97.19 \$99.57 \$101.79 \$88.04 Total Volume Charge \$78.38 \$117.60 \$120.45 \$123.09 \$106.57 \$114.75 \$106.57 **Total Monthly Charge** \$95.94 0% 8% 2% 2% 2% 11% **Transient General** Average Use \$ 199.27 \$ 204.01 \$ 208.75 \$ 213.04 \$ 185.34 \$ 185.34 Monthly Service Charg 2" 1 25 8 \$ 175.60 \$ 515.55 \$ 480.26 \$ 492.29 \$ 504.35 \$422.05 \$ 445.93 \$ 445.93 Water Use 696.30 713.09 728.59 597.65 631.27 631.27 679.53 Total Monthly Charge 0% 8% 2% 2% 2% 6% Commercial General Average Use \$ 20.39 20.39 \$ 21.92 \$ 22.44 \$ 22.96 \$ S Monthly Service Charg 5/8" 1.10 1 \$ 19.32 8.9 \$40.91 43.23 \$ 43.23 \$ 46.56 S 47.72 S 48.89 \$ 49.98 Vater Use 63.62 63.62 68.48 70.16 71.85 73.41 60.23 **Total Monthly Charge** 8% 2% 2% 2% 6% 0%

City of Calistoga

Table _____
Connection Fee Revenue Projections
From Development Projections

From Development Projections						
	Revised Projected FY 09-10	Projected Projected FY 10-11	Projected Projected FY 11-12	Projected Projected FY 12-13	Projected Projected FY 13-14	Projected Projected FY 14-15
Connection Fee per Acre Foot of Water Capacity	26,350	31,271	32,834	34,476	36,200	38,010
Annual Increase in fee based on Annual percent change of ENR construction costs	20,350	31,271	5%	5%	5%	5%
Projected Development and Acre Foot Cap	pacity Needs					
Executed Memorandums of Understanding (MOU)	Linuxukar • Cinaria Arkak Cons	-	# Linguistania mandarana a saana	2.40	5.35	-
Development Agreements (DA) / MOU to be						
requested/required	121		-	40.17	8.08	21.90
DA Implementation	-	 3	#.(100 Part	22.91	8	-
Growth Management Applications (GMA) Granted	1.80	-	0.43	-		-
Residential	(E)	0.43	0.91	8.25	7.55	6.20
Commercial	1.40	0.34	1.82	-	<u> </u>	-
Deferred Agreements	1.53	-	-	4.00	1.00	1.00
Miscellaneous	1.00	1.00	1.00	1.00	1.00 21.98	1.00 29.10
Total Estimated Acre Foot Development	5.73	1.77	4.15	74.73	21.50	25.10
B : 4 d C eti- Fee Beveryee						
Projected Connection Fee Revenues				82,743	193,597	
Executed Memorandums of Understanding (MOU)	-	_	-	02,743	100,007	
Develoment Agreements (DA) / MOU to be	161		_	1,384,972	292,341	832,407
requested/required	_	_	-	789,933		-
DA Implementation Growth Management Applications (GMA) Granted	47,456	_	14,053	-	_	_
Residential	-7,400	13,384	29,929	284,341	273,436	235,699
Commercial	36,890	10,632	59,594	-	-	-
Deferred Agreements	40,342	.0,00=	,	40	-	-
Miscellaneous	26,350	31,271	32,834	34,476	36,200	38,010
Total Estimated Connection Fees	151,038	55,290	136,419	2,576,614	795,618	1,106,174
		F-7864-15-14-20-2-14-2-2	n rower trees as a second trainer to			COSTANTANTO TERMINA
Connection Fees Used for						
% of Connection Fee related to Debt [1]	65%	41%				
Portion of Debt for Expansion and Buy-in Costs	98,175	22,778		1,061,480	327,768	455,707
Balance for Equity and Replacement	52,863	32,513	80,219	1,515,134	467,850	650,467
[1] Allocation of Connection fee revenues to current a service and portion of project allocated between Exist Service payments that should be funded from Connectiee revneues will be reserved for future years debt pa	ing and New/Exp ction Fees is esti	anded Develomated at 21%	opment. Port . The balanc	tion of Annua e of annual c	ıl debt	
	D-14	626.072	725 150	720 172	729,878	821,839
	Debt	626,072	735,159	730,173		338,570
	% paid	257,921	302,861 432,298	300,807 429,366	300,686 429,193	483,268
9	Net (Chart) (Evanos	368,151			27.082	117 137

(Short)/Excess

Cummulative Net

(235,143)

(246,661)

(481,804)

760,673

278,869

117,137

423,088

27,082

305,951

Table _ ection Fee Calculation

Past and Future Project Costs to	Added		Allocatio	on Percent	Allocation	n Amount	Added Capacity (in gpd)		
be Allocated to Existing or Expanded Capacity	Capacity (in gpd) [1]	Totals	Existing Upgrade	Expanded Capacity	Existing Upgrade	Expanded Capacity	Existing Upgrade	Expanded Capacity	
Water Allocation Acquisition & NBA Line Kern County - 925 af American Canyon - 500 af Annual Agreement Standby/Fixed Charges	825,786 446,371	\$ 1,010,000 614,000	70% 0%	30% 100%	\$ 707,000	614,000	578,050 -	247,736 446,371	
(2009 Annual charge projected 20 years)		4,260,000	70%	30%	2,982,000	1,278,000			
Distribution Projects Pipeline-Myrtledale/Grant/Kimball Main		2,162,774	80%	20%	1,730,219	432,555			
Pipeline Debt Financing Interest Costs		2,808,000	80%	20%	2,246,400	561,600 2,153,173	1,125,000	375,000	
Mt. Washington Water Tank Water Tank Debt Financing Interest Costs	1,500,000	8,612,692 3,995,700	75% 75%	25% 25%	6,459,519 2,996,775	998,925	1,125,000	373,000	
NBA Pump Station (Dwyer Road) Option A NBA & Fiege Tank Improvement		651,422	80%	20%	521,138	130,284			
Debt Financing Interest Costs		336,000	80%	20%	268,800	67,200			
Replacement Mains Various Loc Option B Main Improvement Debt Financing		1,016,430	100%	0%	1,016,430	-			
Interest Costs		696,000	100%	0%	696,000	-			
Polybutylene Service Replacement Repair Fiege Tank Option A NBA & Fiege Tank Improvement		341,020 360,000	100% 75%	0% 25%	341,020 270,000	90,000			
(50%) Debt Financing Interest Costs		336,000	75%	25%	252,000	84,000			
Silverado Trail Valves / Shut Off Valves		90,000	100%	0%	90,000 464,190	-			
Automatic Meter Read Program		464,190	100%	0% 20%	156.000	39,000			
Cathodic Protection Survey Master Plan (assume total system 800		195,000 300,000	80% 100%	0%	300,000	-			
Treatment Projects									
Dredge Kimball Reservoir		328,055	80%	20%	262,444	65,611			
Kimball Spillway Safety Impv & WTP Upgrades		1,775,459	80%	20%	1,420,367	355,092			
Storage Building - Kimball		10,000	100%	0%	10,000	150 100			
Pump Protection - Kimball		20,000	100%	0%	20,000 12,192	-			
Chemical Tank Cover		12,192	100%	0% 0%	125,653				
Treatment System Security Improvements		125,653 34,200	100% 100%	0%	34,200	-			
SCADA Conversion to Radio Telemetry Pope St Pump Station Telemetry Update		14,000	100%	0%	14,000				
Kimball Inflow Measurement		25,000	100%	0%	25,000	·			
Total	2,772,157	\$ 30,593,787		4	\$ 23,421,347		1,703,050	1,069,107	
		100%			77%	23%	61%	39%	

hle

ater Expansion Related Costs							1/202
pansion Related Projects	% of Total	Exp	pansion Relat		Connection	В	rotion Est
	Cost Related to Expansion	Amount	Gallons per Day (gpd) [1]	Acre Feet (af)	Fee per Acre Foot		lelated to Debt
ater Allocation Acquisition & NBA Line ern County - 925 af merican Canyon - 500 af nnual Agreement Standby/Fixed Charges	30% 100%	\$ 303,000 614,000	247,736 446,371	0.76 1.37	-		
)09 Annual charge projected 20 years) ater Acquisition Projects	30% -	1,278,000 2,195,000	694,107	2.13	\$ 2,653	\$	*
. Washington Water Tank	25%	2,153,173	375,000	1.15			
Vater Tank Debt Financing Interest Costs	25%	998,925					
pair Fiege Tank	25%	90,000					
Option A NBA & Fiege Tank Improvement Obtion A NBA & Fiege Tank Improvement	25%	84,000					
ipeline Debt Financing Interest Costs	20%	432,555	-				
edge Kimball Reservoir	20%	561,600	-				
nball Spillway Safety Impv & WTP Upgrades	20%	65,611					20
	20%	355,092					
st NBA and Water Improvements Financing A Pump Station (Dwyer Road)	20% 20%	420.204					
otion A NBA & Fiege Tank Improvement	20%	130,284					
ot Financing Interest Costs	20%	67,200					
A Cathodic Protection Survey	20%	39,000		***************************************	; 		
oply, Storage and Distribution Projects	(-	4,977,440	375,000	1.15	11,136	\$	6,529 59%
tals	6 <u>-</u>	\$ 7,172,440	1,069,107	3.28	\$ 13,789	\$	6,529
stimated Expansion Related Cost	s per Ann	ual Acre Fe	et [3]		\$ 13,789	\$	6,529
	1.10.	X-11-11-12-13-13-13-13-13-13-13-13-13-13-13-13-13-					47%
ater System Facilities Equity (Bu			<u> </u>				
t Water Enterprise fixed assets less construct ojects costs related to existing system upgrad ss project costs in Fixed Assets)					\$ 8,090,880		
50 TO 100	fit- [4]				22,714,347		
s actual and estimated future grant funding o	or projects [4]				(7,181,700)		n Far oco
al facilities buy-in cost al System Capacity with all new projects (in ç	jpd) [5]				\$ 23,623,527 2,100,000	\$	8,585,260 36%
/-In Costs per gpd					\$ 11.25		
timated Buy-In Related Costs pe	r Annual A	Acre Feet [3	3]		\$ 17,481	\$	6,353
-							36%
tal Water Connection Fee per ac	re foot of a	annual add	ed water d	emand	\$ 31,271	\$	12,883
Taren Commodicin i do por do				T	т - 1,1111 г	*	
					00.050		41%
rrent Connection Fee per acre foot					26,350		

The measure for capacity is in gallons per day (gpd). An acre foot of annual water volume is the equivalent of 325,836 gallons per ar or 893 gallons per day

Increased Connection fee

19%

From Resources Management System Standardized Use Table (Resolution 99-65) - Single Family Dwellings of up to 3 bedrooms is 28 af per year or 382 gpd

Table

ection Fee Calculation

اح. بplication of Fee Per Acre Foot for other uses is from the Resources Management System Standardized Use Table (Resoultion 99-65) An af per year of water is the equivilent of 893 gpd

[4] Estimated Grant Funding of Capital Projects

2,300,000 Water Tank Measure A USDA Debt retirement 3,161,700 Other Wtr Improvements 400,000

200,000 Dredging Kimball 6,061,700

1,000,000 **USDA** Grant Kimball 120,000 Other Grants Security 7,181,700

[5] Projected water sources and Treatment capacity by Erler & Kalinowsk[6] Water Facitiies Master Plan, Table 3-16

2009 Water Rate Study

itv	of	Calistoga
T C Y	O A	CONTROCO

onthly Service Charge alculation

	2009		Meter Capacity Equivalent [3]										
	Demand Factor	5/8" [2]	1"	1.5"	2"	3"	4"	6"	8"			X Demand	
er Type	Ratio	1	2.5	5	8	15	25	50	80	Total	%	Factors	
sidential		laminova anticonte											
Single family	1.00	1,070	160	65	8	0	0	0	0	1,303	53%	1,303	
Multi-family	1.42	79	68	50	72	30	0	0	0	299	12%	424	
Mobile home parks	2.11	0	0	. 0	8	0	0	150	0	158	6%	333	
sidential Subtotal		1,149	228	115	88	30	0	150	0	1,760	72%	2,060	
ansient													
Transient general	1.25	8	10	10	80	0	50	0	16	174	7%	218	
: Spas with Grndwtr Discharge	2.57	2	13	20	24	0	0	0	0	59	2%	150	
Campgrounds	1.25	0	0	0	0	0	25	0	0	25	1%	31	
Bed & Breakfast	1.25	19	10	0	0	0	0	0	0	29	1%	36	
ansient Subtotal	1.25	29	33	30	104	0	75	0	16	287	12%	436	
ommercial													
Commercial general	1.10	65	33	20	32	0	0	0	0	150	6%	164	
: Restaurants	2.39	23	8	5	8	0	0	0	0	44	2%	104	
Laundries	2.74	0	0	0	8	0	0	0	0	8	0%	22	
Public Buildings	1.10	10	33	0	40	0	0	0	0	83	3%	91	
' Commercial social	1.10	16	8	10	0	0	0	0	0	34	1%	37	
Medical care	1.10	10	5	5	0	15	0	0	0	35	1%	38	
) Industrial general	1.10	0	3	0	0	0	0	0	0	3	0%	3	
ommercial/Industrial Subtotal	1.10	124	88	40	88	15	0	0	0	355	14%	458	
ottling Works - Industrial													
! Bottling works	3.19	2	0	0	0	45	0	0	0	47	2%	150	
otal		1,304	348	185	280	90	75	150	16	2,448	100%	3,104	