TO: BOARD OF DIRECTORS

FROM: MICHAEL S. LEBRUN MAL GENERAL MANAGER



DATE: MARCH 23, 2012

### **GENERAL MANAGER'S REPORT**

#### ITEM

Standing report to your Honorable Board -- Period covered by this report is March 9, 2012 through March 23, 2012

#### DISTRICT BUSINESS

#### Administrative

- Operations recruitment;
  - Mr. Ryan Zimmerman will begin work as Operations Administrative Assistant (part-time contract position) on Monday March 26.
  - Mr. Francisco Maldonado has passed pre-employment screening and accepted the District's offer of employment as a Customer Service Maintenance Worker. Mr. Maldonado is scheduled to start work at the District on April 9, 2012.
  - o A second Maintenance Worker offer is pending.
- Maintenance of the office parking area (seal and overlay) is being scheduled for an upcoming weekend.
- AWWA 2011 Water Rate Study (Attached)
- AB 1234 Training Announcement
- News: Looking beyond Regional DeSal
- News: Eucalyptus: Freshwater Species of the Week

#### Meetings

Meetings attended:

- March 13, Supplemental Water project partners
- March 13, Supplemental Water Assessment Engineer, Bond Counsel and General Counsel
- March 13, Supplemental Water Project Ad Hoc
- March 14, Regular Board Meeting
- March 15, Finance and Audit Committee 2012-2013 Budget Kick-Off
- March 15, Supplemental Water Project Ad-Hoc and SLO County Public Works Director
- March 16, NMMA Technical Group
- March 16, Coordination with General Counsel
- March 19, Coordination with Board Officers
- March 20, KUHL Radio Interview
- March 20, Coordination with District Engineer
- March 20, Southland Financing
- March 21, Community Park DEIR Ad-Hoc
- March 21, Supplemental Water Project Ad-Hoc and SLO County Public Works Director
- March 22, Supplemental Water Project City of Santa Maria Utilities Director
- March 23, Supplemental Water Project, County Public Works Director

March 23, Annual IT review

Meetings Scheduled:

- March 26, Operations Crew Briefing
- March 26, Supplemental Water Project Ad Hoc
- March 27, Supplemental Water Project County Board of Supervisors
- March 28, County Chapter CSDA

#### Safety Program

Water overflow from tank site on March 14, 2012.

#### RECOMMENDATION

Staff seeks direction and input from your Honorable Board

#### ATTACHMENTS

- AWWA Rate Survey
- AB 1234 Training Flyer
- March 8, 2012 Desal News
- March 9, 2012 Euc News

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# CALIFORNIA-NEVADA WATER RATE SURVEY





RAFTELIS FINANCIAL CONSULTANTS, INC. / CALIFORNIA-NEVADA SECTION, AMERICAN WATER WORKS ASSOCIATION

#### FOREWORD

The 2011 California-Nevada Water Rate Survey is a joint effort between the California-Nevada Section of the American Water Works Association (CA-NV AWWA) and Raftelis Financial Consultants, Inc. (RFC). CA-NV AWWA is a nonprofit professional association dedicated to providing high-quality technical information to its water utility members and general public. RFC is a nationally recognized water and wastewater finance and pricing consulting firm.

This survey was first conducted by RFC in 2005 to provide in-depth analysis of water rates and charges in the state of California. In 2007, CA-NV AWWA and RFC formed a partnership to produce the next edition rate survey including California and Nevada.

The 2011 survey provides valuable insights to pricing practices embraced by utilities across California and Nevada. Specifically included in this year's survey:

- Participation by water systems with diverse ownership and operating characteristics serving a total of 216 California agencies and 7 Nevada agencies.
- Rate calculations and other pertinent data grouped by county and sorted by city.

The report is also a powerful tool for comparative benchmarking. Drawing conclusions from rate comparisons, however, should be done only after evaluating several community characteristics (such as geography, climate, and service area, as well as the use of taxes, subsidies and grants). The determinants of utility rates are varied and complex and do not necessarily reflect the true cost of service. A low rate or a high rate does not necessarily mean that a utility is more or less efficient, respectively. As a result, the survey findings alone should not be used to judge the performance of any individual utility or to generalize about all water-sector utilities. Also, our rate survey uses a sample that is not statistically random. Even with these constraints, the information contained in the survey should be beneficial to utilities throughout California. At a minimum, it can be used to identify utilities that have similar characteristics to include in a more in-depth benchmarking effort.

We recognize the valuable contribution made by the numerous water utility professionals who donated their time and energy to this effort. Their participation in this survey is greatly appreciated.

Withdaly

Timothy Worley, Ph.D. Executive Director California Nevada Section of AWWA

Sudhir Pardiwala Vice-President Raftelis Financial Consultants, Inc.

#### **Factors Affecting Rates**

Because water rates are of immense public interest, legislative bodies entrusted with reviewing and approving rates are very sensitive to adjusting rates. From our work with many water utilities, we have identified seven factors that can affect water rates and charges. Four of these factors are driving water rates higher, while the other three have a lowering effect on rates. Because the factors that are increasing rates have had a much greater impact in recent years, water rates have increased faster than the overall rate of inflation. The following describes each factor, how it influences rates, and its expected impact over the next five to ten years. It should be noted that they are not the *only* factors affecting rates, but those that we believe are particularly relevant to water utilities.

#### **Growing Infrastructure Needs**

Much of the original water infrastructure in the Western United States is going to need replacement in the near future. In many cases, this will be the first time that utilities will face significant capital needs that is not funded by growth in the customer base. In addition, this existing infrastructure repair and replacement will likely be more costly than placing comparable new infrastructure in service in undeveloped areas. This factor is going to significantly impact utilities in coming years and will likely be a major driver of rate increases.

#### Water Shortage

Parts of California and Nevada experience a continuing threat of water shortages. Highly populous areas which are dependent on the Colorado River (such as southern Nevada and Southern California) have been particularly impacted by water shortages and use restrictions. Many cities in California face some kind of water use restriction, brought about by regulatory restrictions on accessing water or moving water supplies through an aqueduct system. There is also a mounting concern that climate change will reduce the snow pack in the local mountains, which serves as a natural storage system. Water shortages, whatever the source, typically have an adverse effect on the financial health of a utility, leading to increased pressure to raise rates.

#### Increasing Regulatory Stringency

While it is unclear how water regulation will be promulgated in the future, it is our expectation that standards will continue to become more stringent. As the ability to measure water quality improves and technology for producing "cleaner" potable water and effluent advances, regulations will inevitably follow and utilities will need to spend resources to acquire the new technology and/or reconfigure existing treatment processes. We believe that increasing regulatory stringency driven by these advances in technology will drive rates higher.

#### **Decreasing per Capita Consumption**

We have noticed that more and more of the utilities that we serve are facing declining per capita consumption. We believe there are two primary reasons for this trend. The first reason is that each generation of new home appliances is more and more water efficient. During the 1960s and 1970s, growth in consumption was fueled by the addition of water using devices to homes. With the replacement of each device, water efficiency is gained. The second reason is that the conservation message has been internalized by much of the population. Many of us don't let the water run while brushing our teeth or shaving our face like we once did. We believe this has been accomplished through public service efforts and often reinforced by the pricing structure. In addition, many utilities have faced droughts or capacity issues due to growth, which has forced additional efforts to reduce per capita consumption. We believe that this factor will continue to impact rates in the

future. The impact will diminish over time, however, as there is a level below which per capita consumption will not drop.

#### **Technological Improvements**

As mentioned earlier, water treatment technology is constantly improving. Certain technological improvements have a lowering impact on rates. Supervisory control and data acquisition (SCADA) systems allow for operations with fewer employees and help to minimize power loads. As a result, the cost of producing potable water is decreasing with all other variables remaining the same. We believe technology will continue to improve any benefit customers.

#### **Effective Utility Management**

Municipal utilities no longer see themselves as governmental monopolies. Elected officials and governing boards increasingly require utilities to operate as efficiently as possible. The growth of contractor operations has also caused utilities to become more efficient. In fact, many utilities have gone through some sort of formal optimization process. We believe that these efforts will continue to have lowering effect on water rates.

#### **Political Actions**

The strongest force in limiting rate increases has been the political process. Whereas optimization efforts are beneficial to the utility, politically limited rate increases may not be. It would be unfair to say that the political influence does not have some positive effects, as it does often force utilities to be as efficient as possible. However, when a rate increase is obviously needed and that increase is not allowed due to political issues, there can be severe future ramifications. We believe this will continue to have a significant impact on limiting rate increases.

#### **Overview of the Survey**

The survey provides data on 223 water service providers (216 in California and 7 in Nevada). Because water usage varies widely by cities and regions, a benchmark water usage amount is needed to provide a basis to compare water rates. This survey relies on 15 ccf (hundred cubic feet) or 11,220 gallons of consumption per month as that benchmark.

The California survey results are sorted first alphabetically by county and then by city. Additionally, several analyses are done on the four regions of California: Northern, San Joaquin Valley, Central Coast, and Southern. The regions are comprised of the following counties.

Northern: Alameda, Butte, Calaveras, Colusa, El Dorado, Humboldt, Lake, Lassen, Marin, Mariposa, Mendocino, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Shasta, Solano, Sonoma, Stanislaus, Sutter, Tehama, Tuolumne, and Yolo.

San Joaquin Valley: Fresno, Kern, Kings, Madera, Merced, Mono, San Joaquin, and Tulare

Central Coast: Monterey, San Luis Obispo, and Santa Barbara

Southern: Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura

This year's Nevada survey includes data from the following counties: Clark, Douglas, and Washoe.

This is our fourth survey in California/Nevada (Previous surveys include 2005, 2007, and 2009, though as the inaugural survey, 2005 data was limited to California). In the survey, we have made

some comparisons regarding the bill frequency, rate structure and user charges between 2009 and 2011. The comparisons are made when applicable, and include only the 175 agencies that participated in both the 2009 and 2011 surveys. Characteristics of billing frequency, rate structures, and water charges are also included.

# CALIFORNIA

#### **BILLING FREQUENCY**

monthly rate structure.

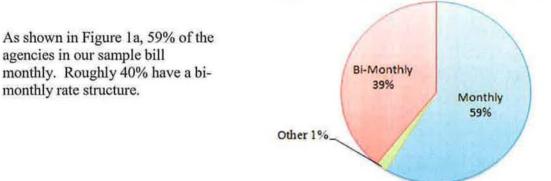


Figure 1a: 2011 Billing Frequency

We have also examined the billing frequency trend, shown in Figure 1b. Over the last two years, our analysis shows that the bi-monthly billing has increased from 34% in 2009 to 39% in 2011. This increase corresponds with a decrease in monthly billing, which was 64% in 2009 and is currently 60% in 2011. This behavior is contrary to the overall industry trend, and that seen in the 2009 survey. Monthly billing is predominantly becoming more popular, as monthly billing helps convey information on consumption and pricing to an agency's customer base faster. Also, as rates increase and bills get larger, customers may find it easier to pay smaller monthly bills than larger bimonthly bills.

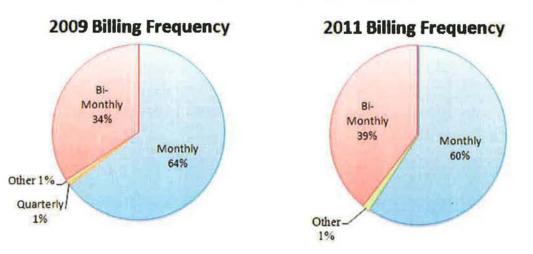


Figure 1b. –2009 v. 2011 Billing Frequency

Figure 1b compares the billing frequency between 2009 and 2011. Only agencies participating in both years (175 agencies) will be counted; therefore, the percentage shown in 2011 will be different from the percentage shown in Figure 1a since there are 216 agencies counted in the 2011 survey.

#### **RATE STRUCTURES**

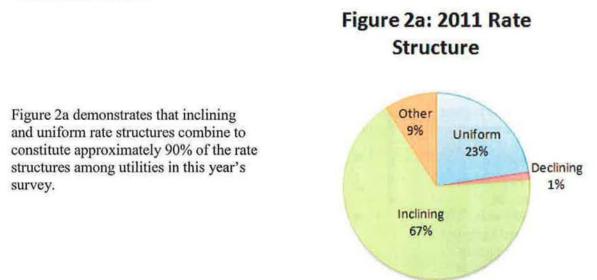


Figure 2b shows the trend of rate structures from 2009 through 2011, with an increase in inclining blocks, from 55% of survey respondents to 70%. The 2009 survey has captured instances of water budget rates, an increasingly popular rate structure designed to ensure efficient use of water; however the 2011 survey failed to capture this trend. This is inconsistent with RFC's experience, and is likely due to the fact that survey respondents are not entirely consistent year-to-year, as opposed to a decline in agencies using this structure.

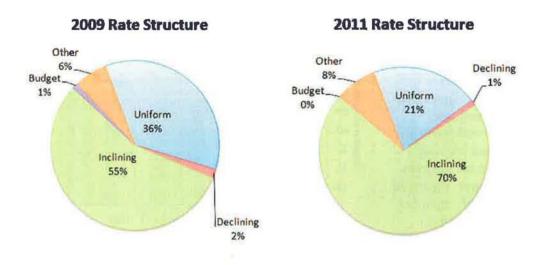


Figure 2b. –2009 v. 2011 Rate Structures

Similarly, figure 2b compares the billing frequency between 2009 and 2011, with only agencies participating in both years (175 agencies) included.

Figure 2c. – Rate Structures by Region

The regional variation of rate structures in Figure 2c shows that Central California has the highest percentage of agencies with inclining tiered rate structures (92%) that would tend to promote conservation. In Southern California, 72% of the surveyed agencies reported inclining rate structures compared to 62% in Northern California. Southern and Northern California have 69 and 53 agencies reporting inclining rates, respectively.

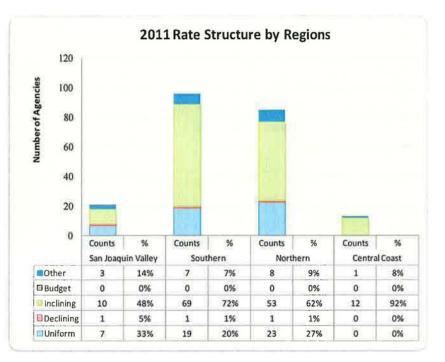
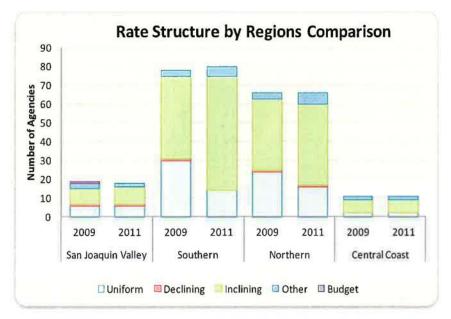




Figure 2d compares the changes by regions and shows the Southern California agencies getting more aggressive with inclining rate structures and Southern agencies are moving away from the uniform rate structures. Figure 2d compares only agencies participating in both 2009 and 2011 surveys (175 agencies).



#### CHARGES

As mentioned previously, all charges in this survey are based on the assumption that the utility customer uses 15 ccf (11,220 gal) per month. For utilities that do not bill monthly, the charge was calculated on the assumption of 15 ccf per month usage. It should be noted that the average usage can vary significantly from agency to agency. For example the average usage in San Francisco is 6 ccf per month and the rate structure is designed for that level of usage so the charge at 15 ccf per month will be high with a tiered rate structure.

Figure 3a shows the average fixed charge and variable charge in the four regions in 2011. The Central Coast Region has the highest average rate in our survey, which is almost \$75 per month. San Joaquin Region has the lowest average monthly bill, which is about \$32 per month.

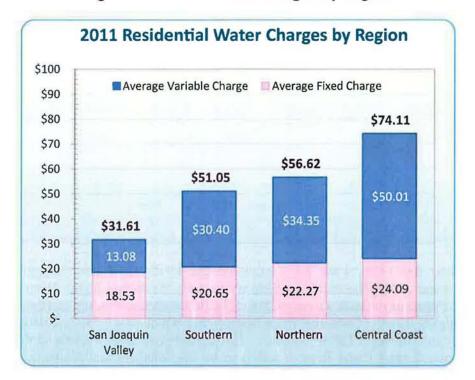
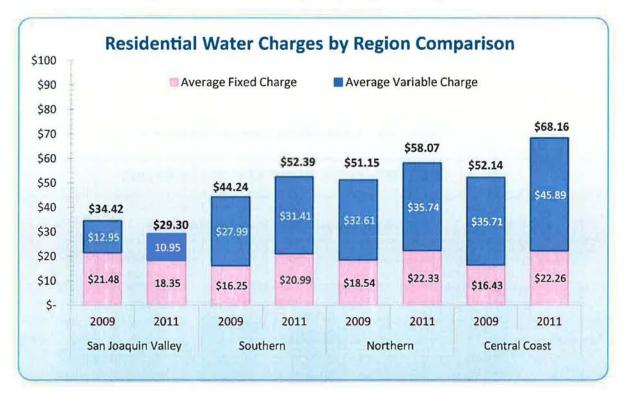


Figure 3a - 2011 Water Charges by Region

Figure 3b shows the average water charges (separated by fixed and variable) by region for the 2009 and 2011 California surveys. On average, agencies in the San Joaquin Valley have the lowest water charges while Central Coast water is the most expensive. Figure 3b compares only agencies participating in both 2009 and 2011 surveys (175 agencies).



#### Figure 3b – Water Charges by Region Comparison

Over the past few years, water rates increased due to the California drought situation and the increasing water costs. The following table summarizes the data in Figure 3b and shows the annual percentage increases for each survey period. The data indicates that the increases in water charges are much higher than the Consumer Price Index (CPI), which rose 1.5% in 2010 and 3% in 2011, as provided by the Bureau of Labor Statistics. The highest percentage increase in the average monthly rates is in the Central Coast Region, followed by the Southern and Northern regions. The San Joaquin Valley actually showed a decrease in water rates from 2009. This is likely due to a significant number of utilizes in that region installing meters over the last couple of years. Traditionally these areas have had flat charges that assumed a lot of usage. By switching to a variable rate, it's likely that customers using 15 hcf per month would receive a reduced bill.

	San Joa	iquin Valley	So	uthern	No	rthern	Cent	ral Coast
2009	\$	34.42	\$	44.24	\$	51.15	\$	52.14
2011	\$	29.30	\$	52.39	\$	58.07	\$	68.16
% increase 2009-2011		-15%		18%		14%	1	31%

Figure 3c shows the high and low monthly residential fixed water charge comparisons in four regions for the 2009 and 2011 California surveys. Although water rates on whole are trending higher, the fixed charges often do not increase as much, except for those at the Central Coast. A lower fixed charge means a higher variable charge for water consumption, which sends a stronger pricing signal for conservation.

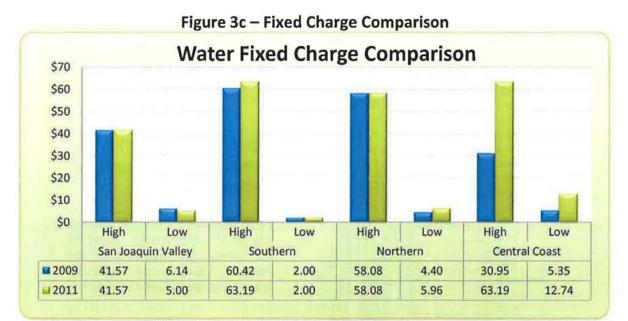
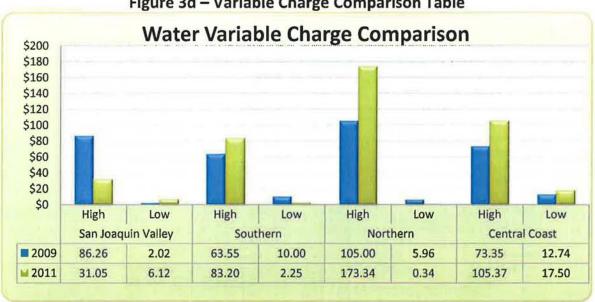
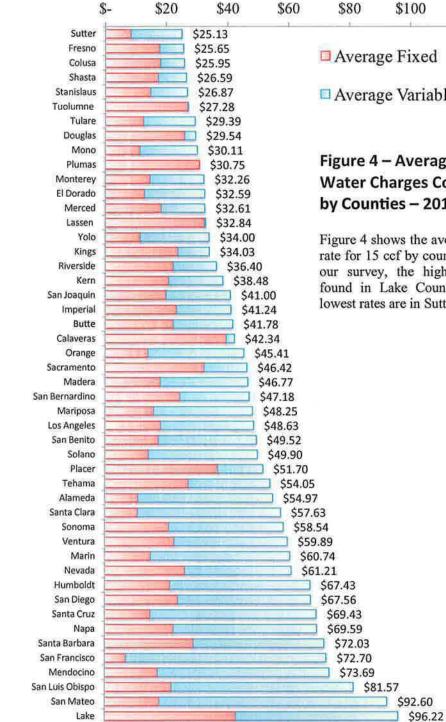


Figure 3d shows the high and low monthly residential variable water charge for 15 ccf, which is compared by the four regions for the 2009 and 2011 California surveys. Some of the highest and lowest variable rates are reported in the Northern and Southern Regions. Figure 3c and 3d compares only agencies participating in both 2009 and 2011 surveys.



### Figure 3d – Variable Charge Comparison Table

# **Average Monthly Water Charges Comparison by Counties - 2011**



Average Variable

#### Figure 4 – Average Monthly Water Charges Comparison by Counties - 2011

\$120

Figure 4 shows the average monthly rate for 15 ccf by county. Based on our survey, the highest rates are found in Lake County, while the lowest rates are in Sutter County.

Figure 5 displays the year in which the survey's utilities have most recently updated their rates. A clear majority of respondents (64%) have updated their rates within the past two years (2010 & 2011).

The 2009 survey reported that 70% of utilities had updated their rates within the previous (2008 & 2009) two years.

Figure 5 - Rate Frequency Update

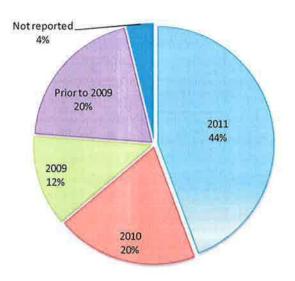


Figure 6 summarizes the comparison of connection charge (system development fee) data for 2009 and 2011 surveys where data is available. This comparison indicates that the average connection charge has increased by 46 percent in two years.

Figure 6 -	Connection	Fee	Charge	Comparison
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Connection Fee		2009		2011	
Highest	\$	19,600	\$	34,732	
Lowest	\$	450	\$	650	
Average	\$	2,279	\$	3,330	
	%	Change	46%		

	City	Water Service Provider	Elfective Date	Heatness	xed Charge	Charge	er an air an an air an air air an	Rate Format	Population	Res Ustre	Res. Connect
lameda	Alameda	East Bay Municipal Utilities District	07/01/2011	Bi-monthly	13.70	38.60	52.30	Inclining	1,400,000	11.00	13,5
_	Fremont	Alameda County Water District	3/1/2011	BI-monthly	12.55	43,74	56,29	Uniform	337,500	11.50	6,3
	Hayward	City of Hayward	10/1/2010	8I-Monthly	9.00	47.00	56.00	Inclining	145,000		11,4
0.00	Dublin	Dublin/San Ramon Services District	07/01/2009	Bi-monthly	8.33	46.95	55.28	Inclining	130,855	11.83	34,
utte	Gridley	City of Gridley	7/1/2010	Monthly	24.99	10.67	35.66	Uniform	6,438	250.00	2,3
	Paradise	Paradise Irrigation District	01/01/2008	Monthly	27.25	37,81	65,07	Inclining	26,000	21.00	4,6
	Butte	South Feather Water and Power Authority	3/1/1993	Monthly	15.00	9,60	24.60	Declining	20,000	13,42	3,8
alaveras	Angels (Angels Camp)	City of Angels	2/5/2010	Monthly	39.75	5.42	45.17	Other	3,500	11,81	8,3
	San Andreas	Calaveras County Water District	7/1/2011	BI-Monthly	39.50		39.50	Other	31,750	15.10	9,5
olusa	Colusa	City of Colusa	5/1/2011	Monthly	18.14	7.81	25.95	Inclining	5,892		
	Brentwood	City of Brentwood	11/26/2002	Monthly	27.79	32.45	60.24	Inclining	51,500	9.87	
	Martinez	City of Martinez	Not Reported	Bi-monthly	23.80	49.80	73.60	Uniform	37,000		
	Pittsburg	City of Pittsburg	11/1/2010	Monthly	19.58	42.81	62.39	Inclining	64,148		
	Pittsburg	Golden State Water Company	11/25/2008	Monthly	13.75	53.31	67,06	Inclining	450,000	13.00	
ouglas	Gardnerville	Gardnerville Water Company	4/19/2009	Bi-Monthly	26.00	3.54	29,54	Inclining	5,000	21,39	6,
Dorado	Placerville	El Dorado Irrigation District	4/1/2009	Bi-monthly	12.95	19.64	32.59	Inclining	182,019		17,
esno	Fowler	City of Fowler	05/01/2009	Monthly	16.24	17.86	34.10	Other	5,764	40.10	2,
	Kerman	City of Kerman	7/1/2011	Monthly	13.14	8.58	21.72	Uniform	12,737	-	
	Kingsburg	City of Kingsburg	4/1/2010	Monthly	19.50	11.1.4.2	19.50	Other	11,064		
	Reedley	City of Reedley	7/1/2007	Monthly	28.55	6.12	34.67	Uniform	23,500		
	Sanger	City of Sanger	7/1/2007	Monthly	11.79	6.48	18.27	Inclining	25,447		
mboldt	Arcata	City of Arcata	07/01/2011	Monthly	6,77	47.24	54.01	Inclining	17,044		
	Eureka	City of Eureka	07/01/2011	and the second se	29.11	1.56	30.67	Uniform			
		Approximate and a second	and the state of t	Monthly					28,000	2.74	
	Winnemucca McKinleyville	City of Winnemucca	1/1/2010	Monthly	2.10	13.75 29.25	15.85	Uniform	12,000	3.74	2
	PARTY AND DESCRIPTION OF TAXABLE	Humboldt Community Services District	7/1/2011	Monthly	13.85	Protection Calif	43.10	Uniform	19,000	7,00	2
	Trinidad	Westhaven Community Services District	07/01/2011	Monthly	43.57	140.67	184.24	Inclining	500	4,00	8
1000	Willow Creek	Willow Creek Community Services District	11/20/2008	Monthly	33.00	43.73	76.73	Inclining	1,753		
erial	Calexico	City of Calexico	8/1/2008	Monthly	43,89		43.89	Other	39,337	30.00	_
	El Centro	City of El Centro	7/1/2009	Monthly	3.01	35.57	38.58	Uniform	42,000	114,40	
13	Bear Valley Springs	Bear Valley Community Services Dist	7/1/1995	Monthly	25.33	31.05	56.38	Inclining	5,200	12.00	-
	Bakersfield	Greenfield County water District	6/1/2011	Monthly	20,09		20.09	Inclining	8,500		
	Ridgecrest	Indian Welis Valley Water District	02/01/2011	Monthly	26.24	14,30	40,54	Inclining	30,000	18,00	
	Pine Mountain Club	Mil Potrero Mutual Water Co	7/1/2011	Other	14.25	10.00	24.25	Inclining	3,000	4.16	
	Oildale	North of the River Municipal Water District	7/1/2010	Monthly	18,37	15.15	33.52	Inclining	7,000	30.00	1
s	Corcoran	City of Corcoran	09/07/2005	Monthly	41.57	9.99	51.56	Other	25,692		
	Hanford	City of Hanford	9/1/2007	Monthly	6,14	10.35	16.49	Uniform	54,367	24.00	
6 112	Clearlake Oaks	Clearlake Oaks County Water District	12/25/2008	Monthly	27.36	36,79	64.15	Uniform	2,458	7.00	
	Kelseyville	Buckingham Park Water District	2/1/2010	Monthly	46.44	62.80	109.24	Uniform	450	1.40	
	Middletown	Callayomi County Water District	10/1/2010	Monthly	35.00	23.49	58.49	Other	1,126		
	Clearlake Park	Golden State Water Company	10/2/2010	Monthly	49.80	70.68	120.58	Uniform	2,129	6.00	
-	Lower Lake	Lower Lake County Waterworks District 1	8/25/2010	Monthly	56.03	72.53	128.56	Indining	2,125	5.00	
				and the second s	32.50	0.34		Col and a state of the			
en	Westwood	Westwood Community Services District	05/01/2011	Monthly		0,54	32.84	Inclining	2,000	37,60	-
Angeles	Bellflower	Beilflower Home Garden Water Company	01/01/2011	Other	24.00		24,00	Other	1,200		
	Montebello	California Water Service Company	4/1/2001	Monthly	14.04	44.97	59,01	Inclining	27,000	_	_
	Beverty Hills	City of Beverly Hills	7/1/2011	Bi-monthly	35.17	52,30	87.47	Inclining	34,445		
	Brentwood	City of Brentwood	7/1/2011	Monthly	18.53	33.21	51.74	Inclining	49,480		
	Burbank	City of Burbank	7/1/2011	Monthly	10.32	37.53	47.85	Inclining	103,340	16.90	
	Covina	City of Covina Municipal Water District	7/1/2010	Monthly	28.48	2.25	30.73	Inclining	46,000	28.00	
	Downey	City of Downey	7/1/1995	BI-monthly	3.90	13.54	17.44	Inclining	111,000	25.38	
	La Verne	City of La Verne	10/1/2009	Bi-monthly	13.00	29.59	42.59	Uniform	32,500	23.00	4
	Lakewood	City of Lakewood	9/1/2010	Bi-Monthly	6,75	24.95	31,70	Inclining	59,660	12.50	
	Merced	City of Merced	7/1/2006	Monthly	35.14	35.14	70.28	Inclining	81,500		
	Pomona	City of Pomona	1/1/2011	BI-monthly	22.38	18,75	41.13	Inclining	149,058	18.00	
	Santa Monica	City of Santa Monica	07/01/2011	Bi-monthly		34.24	34.24	Inclining	84,084	17.00	
	Sierra Madre	City of Sierra Madre	07/01/2011	Bi-monthly	21.51	28.80	50,31	Inclining	10,800	24.00	
	Torrance	City of Torrance	3/1/2011	Bi-Monthly	10.50	83,20	93.70	Inclining	140,820	14.00	
	Whittier	City of Whittier	8/1/2010	Bi-monthly	2.00	32.25	34.25	Inclining	82,000	1400	
-	Covina	Covina Municipal Water District	7/1/2010	Bi-monthly	28.48	33.75	62.23	Inclining	35,000	24.00	
			and a second second								
	La Crescenta Giandala	Crescenta Valley Water District	01/01/2012	Bi-monthly Monthly	15,70	43,90	59,60	Inclining	32,000	16.08	
	Giendale	Glendale Water and Power	Not Reported	Monthly	15.66	40.53	55,19	Inclining	207,157	22.00	
_	Pasadena	Kinneloa Irrigation District	1/1/2011	Monthly	49.00	2.95	51.95	Uniform	1,500	38.00	
	La Habra	La Habra Heights County Water District	07/01/2011	Monthly	35,81	20.70	56,51	Uniform	6,000	46.00	
	Los Angeles	Los Angeles Department of Water and Power	7/1/1993	BI-Monthly		46.60	46.60	Other	3,840,700	12,00	
	Calabasas	Las Virgenes Municipal Water District	01/01/2012	Bi-monthly	26.35	29.29	55.64	Inclining	65,000	27,00	
	Long Beach	Long Beach Water Department	10/1/2010	Monthly	12.72	30,49	43.21	Inclining	463,789	and the second	1.00
	Maywood	Maywood Mutual Water Company #1	1/1/2009	Bi-Monthly	22.00	34.50	56.50	Uniform	7,500	25.00	
	Newhall	Newhall County Water District	1/1/2005	Bl-monthly	17.04	12.56	29.60	Indining	31,000	X	
	Downey	Park Water Company	1/1/2011	Bi-monthly	16.47	51.10	67.57	Inclining	128,190	13.00	
	Santa Clartia	Santa Clarita Water Division	01/01/2010	Monthly	20.53	22.13	42.66	Inclining	124,200	29.00	
	Covina	Suburban Water Systems	1/1/2011	Monthly	14.45	24.00	38.45	Inclining	293,500	20.00	
	Valencia	Valencia Water Company	02/01/2011	Monthly	13.72	18.47	32.19	Other	113,000	20.00	
	Walnut	Walnut Valley Water District	4/1/2010	Monthly	16,03	27.57	43.60	Inclining	99,716		
lera	Madera	City of Madera	07/01/2011	Monthly	9.18	11.91	21.09	Uniform	61,000	15,00	
97075	Oakhurst	Hillview Water Company	10/25/2010	Monthly	27.11	45.33	72.44	Uniform	3,300	12.49	
n	Corte Madera	Marin Municipal Water District	6/1/2011	BEmonthly	20.13	52,95	73.08	Inclining	190,000	23.00	The last
		North Marin Water District					48.39	and the second s	the second se		
lease	Novato		06/01/2011	Bi-monthly	10.00	38,39		Inclining	61,000	12.67	21
iposa	Mariposa	Mariposa Public Utility District	02/22/2002	Monthly	16.00	32.25	48 25	Inclining	1,800		
ndocino	Fort Bragg	City of Fort Bragg	7/1/2011	Monthly	22.02	94.05	115.07	Uniform	6,604	_	_
	Ukiah	City of Ukiah	7/1/2007	Monthly	14.94	18.00	32.94	Uniform	14.956		
	Fort Bragg	Fort Bragg Water Works	7/1/2011	Monthly	22,64	62.10	84,74	Uniform	7,273	732.55	3
	Redwood Valley	Redwood Valley County Water District	01/01/2010	Monthly	10.00	51,00	61.00	Inclining	4,000	17.00	5
ced	Hilmar	Hilmar County Water District	7/1/2011	Monthly	23.25		23,25	Inclining	4,800	21.00	3
	Los Banos	City of Los Banos	2/21/2011	Bi-monthly	16.24	1.5	16.24	Inclining	34,000	14.00	
	Merced	Meadowbrook Water Company of Merced	08/01/2011	Monthly	15.58	14.25	29.83	Inclining	5,500	20.00	
	Mammoth Lakes	Mammoth Community Water District	04/01/2009	Monthly	11.46	18.65	30,11	Inclining	8,000	8,00	
00		the state and the state and the state of the	01/01/2003		44.40	ad.03	-0,44	-menning	0,000	0,00	
no nterey	Castroville	Castroville Water District	6/15/2003	Monthly	14.76	17.50	32.26	Inclining	7,000	27.00	

County	. GIV	Water Service Provider	Effective Date	Billing Frequency	Fixed Charge	Commodity	Total Charge	Rate Formal	Service: Population:	Current Avg, R Res Usage	les. Connection Fee
	Napa	Circle Oaks County Water District	6/12/2008	Monthly	52.15	73.00	125,15	Inclining	500	10.00	
	Napa	City of Napa	10/1/2011	Bl-monthly	6.63	42.15	48.78	Uniform	87,000	11.20	4,10
Directory of	St. Helena	City of St. Helena	1/1/2010	BI-Monthly	31.40	26.25	57.65	Inclining	5,817	-	_
levada	Grass Valley	City of Grass Valley Nevada Irrigation District	1/1/2011 1/1/2011	Monthly	35.25 17.32	45.44 24.40	80.69 41.72	Uniform	12,200		7,04
Irange	Placer Anahelm	City of Anshelm	7/1/2010	Bi-monthly Bi-monthly	5.00	28.05	33.05	Uniform	364,921	14.00	7,04
range	Brea	City of Brea	5/1/2009	Monthly	6.17	39.27	45.44	Inclining	12,000	16.00	2,43
	Buena Park	City of Buena Park	7/12/2011	Bi-monthly	30.36	22.20	52.56	Indining	79,379		
	Garden Grove'	City of Garden Grove Water Services	7/1/2011	Bi-monthly	13.33	39.60	52.93	Inclining	180,000		
	Huntington Beach	City of Huntington Beach	10/1/2010	Monthly	10.90	26.22	37.12	Uniform	203,000	11.00	2,40
	La Palma	City of La Palma	6/1/2010	Bi-monthly	39.00	18.70	57.70	Inclining	15,603		
	Orange	City of Orange	6/30/2006	Bi-monthly	10.07	15,14	25.21	Inclining	143,000	20,00	
	San Clemente	City of San Clemente	9/1/2010	Monthly	10.92	34.07	44,99	Inclining	65,000	16.00	
	Santa Ana	City of Santa Ana	7/1/2010	8I-monthly	7.00	38.18	45,18	Indining	339,130		
	Westminster	City of Westminster	9/17/2010	Bi-monthly	7.32	33.75	41.07	Inclining	88,407	_	
	Orange	East Orange County Water District	6/15/2011	Bi-monthly	16.64	33,45	50.09	Uniform	5,000	40.00	2,50
	trvine	Irvine Ranch Water District	7/26/2011	BI-monthly	8,75	24.06	32.81	Inclining	320,000		_
	South Coast	South Coast Water District	7/1/2011	Monthly	21.47	46,64	68.11	Indining	302,000	25.00	
	Yorba Linda Alpine Meadows	Yorba Linda Water District Alpine Springs County Water District	8/1/2010 7/1/2008	Monthly Other	11,73 58.08	37.80	49.53 87.44	Uniform	75,000	25.00	2,27
lacer	Roseville	City of Roseville	8/1/2011	Monthly	18.05	7.02	25.07	Inclining	112,000	19.00	6,12
	Granite Bay	San Juan Water District	1/1/2001	Bi-monthly	34.50	8.10	42.60	Other	30,600	43.00	13,68
lumas	Blairsden	Plumas Eureka Community Services District	07/01/2011	Other	30.75	-	30.75	Uniform	500-1500)	-	
iverside	Coachella	Coachella Valley Water District	8/1/2010	Monthly	7.00	15.70	22.70	Other	372,598	25.50	3,75
Martine (	Riverside	Eastern Municipal Water District	Not Reported	Bi-monthly	10.52	23.22	33,74	Other	687,000		
	Hemet	Lake Hemet Municipal Water District	03/01/2009	Monthly	13.02	32.78	45.80	Declining	14,464	30.00	3,11
	Banning	Morongo Band of Mission Indians	10/28/2003	Monthly	45,00		45,00	Uniform	2,000	150.00	9
	Idyllwild	Pine Cove Water District	2/1/2011	<b>Bi-monthly</b>	47.00		47.00	Indining	1,093	54,42	
	Temecula	Rancho California Water District	7/1/2010	Monthly	16,63	12.05	28.68	Other	141,500	35,00	1,39
	Rubidoux	Rubidoux Community Services District	Not Reported	Monthly	17.25	14.60	31.85	Indining	26,000		
acramento	Carmichael	Carmichael Water District	7/1/2011	Bi-monthly	45,16	16.35	61.51	Uniform	12,000	30.00	1,04
	Citrus Heights	Citrus Heights Water District	01/01/2011	8i-monthly	25.02	10.12	35.14	Inclining	62,000	52.00	5,89
_	Galt	City of Galt	3/1/2011	Bi-monthly	26.30		26.30	Uniform	24,264		2,78
	Elk Grove	Elk Grove Water Service	6/24/2009	Monthly	56.53	21.90	78,43	Indining	40,000	27.00	3,85
	Fair Oaks	Fair Oaks water District	Not Reported	Bi-monthly	32,55	6.75	39,30	Uniform	40,000	25.00	4,40
	Rancho Murieta	Rancho Murieta Community Services District	7/1/2011	Monthly	31.92	19.35	51.27	Indialog	6,000		
	Rio Linda	Rio Linda County Water District	5/1/2011	<b>Bi-monthly</b>	29.00	4.86	33.86	Inclining	14,500	3.00	3,50
	Sacramento	Sacramento Suburban Water District	01/01/2009	Monthly	33.95	13.00	46.95	Inclining	171,229	21.00	4,91
	Sacramento	Sacramento County Water Agency	07/01/2009	Bl-monthly	12.02	19.05	31.07	Other	150,000	20.00	
an Benito	Hollister	Sunnyslope County Water District	12/21/2010	Monthly	17.57	31,95	49.52	Indining	18,500		
San Bernardino	Apple Valley	Mariana Ranchos County Water District	7/1/2010	Monthly	43.00	11,00	54.00	Inclining	1,350		2,20
	Beaumont	Beaumont Cherry Valley Water District	1/1/2011	Bi-monthly	8.52	13.65	22.17	Inclining	40,000		10,12
	Big Bear City	Big Bear City Community Services District	7/1/2007	BI-monthly	20.02	22.20	42.22	Inclining	7,000	16.00	
	Bighorn-Desert View	Bighorn-Desert View Water Agency	01/01/2008	Bl-monthly	27.50	45.00	72.50	Uniform	3,300	4.01	4,05
	Big Bear Lake	City of Big Bear Lake Dept of Water	Not Reported	Bi-monthly	81.32	14.70	96.02	Inclining	15,000	-	6,05
	Chino Hills	City of Chino Hills	7/1/2011	Monthly	20.44	18.45	38.89	Uniform	68,356	21.00	2.64
	Needles	City of Needles	10/1/2010	Monthly	33.77	7,40	41.17 25.40	Uniform	4,870	15,60	2,50
	Upland Crestline	City of Upland Crestline Village Water District	1/1/2004 7/1/2004	Bi-monthly Monthly	8.00	17.40 67.20	89.20	Inclining	7,940	1.30	3,01
	Rancho Cucamonga	Cucamonga County Water District	Not Reported	Bl-monthly	24.51	22.60	47.11	Inclining	172,000	52.00	5,96
	Fontana	Fontana Water Company	7/1/2011	Monthly	19.16	34.35	53.51	Inclining	154,000	23.00	5,00
	Hesperia	Hesperia Water District	9/1/2011	Bi-monthly	39.27	16.75	56.02	Indining	93,000	45.00	6,17
	Joshua Tree	Joshua Basin Water District	1/1/2011	Monthly	23.82	46.55	70.37	Inclining	9,000	10.00	3,46
	Upland	San Antonio Water Company	5/19/2009	<b>Bi-Monthly</b>	20.00	6.30	26.30	Indining	3,371	94.00	10,72
	Twentynine Palms	Twentynine Palms Water District	Not Reported	Bi-monthly	11.00	•	11.00	Uniform	18,000	5.10	65
	Victorville	Victorville Water District	11/01/2009	Monthly	16.50	22.05	38.55	Uniform	110,000	26.00	4,90
	Rialto	West Valley Water District	1/1/2011	Monthly	13.27	20,10	33,37	Inclining	60,000		
	Yucalpa	Yucaipa Valley Water District	1/1/2009	Monthly	10.00	21.44	31,44	Indining	43,818	14.00	14,50
an Diego	Carisbad	Carlsbad Municipal Water District	1/1/200	Monthly	18.00	42.84	60.84	Inclining	15,000	10.20	3,54
	Escondido	City of Escondido	3/1/2011	Monthly	24.05	57.00	81.05	Inclining	142,000	20.70	4,65
_	Oceanside	City of Oceanside	5/1/1996	Monthly	14,13	32,40	46.53	Inclining	183,000	12,00	4,59
	San Diego	City of San Diego	03/01/2011	Bi-monthly	19.33	46.27	65,60	Indining	1,300,000	13,00	3,04
	San Diego	Helix Water District	1/1/2011	BI-monthly	40.10	28.76	68.86	Inclining	260,000		
	Julian	Julian Community Services District	7/1/2010	BI-monthly	30.00	6.50	36.50	Inclining	578	4.50	6,60
	Encinitas	Olivenhain Municipal Water District	4/1/2011	Monthly	25.85	39,87	65.72	Inclining	67,353	13,00	
	Spring Valley	Otay Water District	02/01/2011	Monthly	25,40	66.84	93.24 69.91	Indining	208,000	14.30 50.00	8,63
	Pine Valley Fallbrook	Pine Valley Mutual Water Company Rainbow Municipal Water District	1/1/2007 07/01/2011	Bi-monthly Monthly	28.00 41.78	41.91 38,70	80.48	Uniform	1,500 19,000	36,00	1.11
	Ramona	Rainbow Municipal Water District Ramona Municipal Water District	11/1/2011	Bi-monthly	24.34	57,90	80.48	Inclining	40,000	30,00	
	San Diego	San Diego County Water Authority	1/1/2011	Monthly	5,63	29.95	35.58	Uniform	3,100,000	15.40	4,49
	Chula Vista	Sweetwater Authority	09/01/2010	Bi-monthly	7,35	69.52	75.87	Indining	186,907	11.00	2,30
	San Marcos	Vallecitos Water District	01/01/2011	Monthly	23.12	39.60	62.72	Inclining	94,911	15.00	5,21
	Valley Center	Valley Center Municipal Water District	2/1/2011	Monthly	26.99	50.57	77.56	Uniform	25,378		11,72
	Vista	Vista Irrigation District	9/1/2009	BI-monthly	29.30	47.95	77.25	Indining	125,962	19.00	4,00
an Francisco	San Francisco	San Francisco Public Utilities Commission	7/1/2011	Monthly	7.00	65.70	72.70	inclining	800,000		
n Joaquin	Stockton	City of Stockton Municipal Utilities Department	07/07/2009	Monthly	20.00	21.00	41.00	Unlform	169,963	16.50	6,48
in Luis Oblspo	Arroyo Grande	City of Arroyo Grande	07/01/2011	Bi-monthly	32.13	70.60	102.73	Inclining	16,901	15.50	3,82
	Atascadero	Atascadero Mutual Water Co.	1/16/2011	Monthly	18.00	18,00	36,00	Inclining	29,077	24.00	19,64
	San Luis Obispo	City of San Luis Obispo	06/01/1992	Monthly		105,37	105.37	Inclining	45,000	8,00	15,91
	Cayucos	County Service Area 10A	02/08/2005	BI-monthly	40.24	85.20	125.44	Inclining	755	5.00	8,10
	Santa Margarita	County Service Area 23	07/22/2008	81-monthly	28.09	60.14	88.23	Inclining	507	18,00	1,50
	Heritage Ranch	Heritage Ranch Community Services District	07/01/2010	Bi-monthly	19,44	53.76	73,20	Indining	3,500	8.00	5,44
	Nipomo	Nipomo Community Services District	1/1/2009	<b>Bi-monthly</b>	15,42	24.60	40.02	Inclining	10,867	40,00	17,35
an Mateo	Belmont	Mid-Peninsula Water District	7/1/2011	Monthly	14.23	52,50	66.73	Indining	28,050	12.00	

County	City	Water Service Provider	Effective Date	Rilling	Fixed Charge	Commodity Charge	Total Charge	Hate Format	Population	Current Avg. Res. Usace	Res Connection
	Half Moon Bay	Coastside Water District	7/1/2011	Bi-monthly	15.36	39.44	54.80	Inclining	17,000	In the second second	- Juli Stan
	Foster City	Estero Municipal Improvement District	07/01/2011	Bi-monthly	35.10	33.30	68.40	Inclining	30,000	11.00	1.873
anta Barbara	Carpinteria	Carpinteria Valley Water District	7/1/2008	Monthly	63.19	50.10	113.29	Other	15,050	12.00	9,131
	Santa Barbara	City of Santa Barbara	7/1/2011	Monthly	12.74	67.89	80.63	Inclining	93,000	100	5,691
	Santa Barbara	Mission Hills Community Services District	Not Reported	Monthly	16.60	19.75	36.35	Inclining	5.000		
	Santa Barbara	Montecito Water District	10/1/2008	Monthly	30.95	58.50	89.45	Inclining	13,500	42.72	14,150
	Vandenberg Vittage	Vandenberg Village Community Services District	7/1/2009	Monthly	21.66	18.75	40.41	Inclining	6,500	16.77	3,407
anta Clara	Milpitas	City of Milpitas	07/01/2011	<b>Bi-monthly</b>	12.88	54.14	67.02	Inclining	67,000	11.50	1,910
the state of the s	Morgan Hill	City of Morgan Hill	1/1/2008	Monthly	5.96	23.20	29.16	Inclining	40,000	13.00	3,150
	Palo Alto	City of Palo Alto	10/1/2011	Monthly	10.00	87.66	97.66	Inclining	62,000		
	San Jose	City of San Jose	6/29/2011	Bi-monthly	19.06	32.89	51.95	Inclining	948,279		
	Santa Clara	City of Santa Clara	7/1/2011	Monthly		44.85	44.85	Uniform	118,830	3.00	
	San Jose	San Jose Water Company	7/1/2011	Bi-monthly	16.93	38.23	55.16	Inclining	1,000,000		-
anta Cruz	Santa Cruz	City of Santa Cruz Water Dept.	07/01/2004	Monthly	17.41	59.03	76.44	Inclining	92,000	7.00	6,530
	Watsonville	City of Watsonville	7/1/2010	Monthly	9.13	23.77	32.90	Inclining	60,785	17.00	
	Soquel	Soquel Creek Water District	1/1/2011	81-monthly	18.41	80.53	98.94	Inclining	38,000	8.00	11,200
hasta	Burney	Burney Water District	11/1/2009	Monthly	11.80	9.75	21.55	Other	3,200	14.61	3,488
	Redding	Bella Vista Water District	3/1/2011	8i-monthly	17.17	6.76	23.93	Inclining	16,000	26.19	7,310
	Redding	City of Redding	07/01/2009	Monthly	10.99	15.15	26.14	Uniform	91,561	18.00	6,890
	Redding	Mountain Gate Community Services District	6/1/2011	Monthly	29.72	5.00	34.72	Inclining	2,500	10.00	6,000
olano	Vallejo	City of Vallejo-Water Division	7/1/2010	Bl-monthly	14.35	35.55	49.90	Inclining	118,300	11.00	7,810
onoma	Santa Rosa	City of Santa Rosa	7/1/2011	Monthly	8.35	48.51	56.86	Other	160,000	11.63	8,403
	Forestville	Russian River County Water Authority	06/22/2010	Monthly	18.50	39.00	57.50	Inclining	2,500	5.00	
	Guerneville	Sweetwater Spring Water District	7/1/2011	Si-monthly	50.00	25.30	75.30	Inclining	10,000		3,763
1	Glen Ellen	Valley of the Moon Water District	7/1/2011	Monthly	7.02	37.47	44.49	Inclining	23,000		
tanislaus	Ceres	City of Ceres	01/01/2011	Monthly	19.67	7.59	27.26	Uniform	45,000	20.45	2,300
Carrier and a	Modesto	City of Modesto	7/1/2011	Monthly	14.25	19.95	34.20	Inclining	270,000	5 1 1 K 1	
	Newman	City of Newman	01/01/2008	Monthly	10.90	8.25	19.15	Uniform	10,000	19.32	1.061
utter	Sutter	Sutter Community Services District	6/1/2005	Monthly	8.48	16.65	25.13	Uniform	2,904	19.00	7,500
ehama	Tehama	City of Tehama	07/01/2011	Monthly	27.36	26.69	54.05	Inclining	435	8.50	
ulare	Dinuba	City of Dinuba	07/01/2011	Monthly	20.20	22.78	42.98	Declining	21,950	20.00	
	Porterville	City of Porterville	1/1/1995	Monthly	5.00	10.80	15.80	Uniform	54,165	29.00	1.824
uolumne	Sonora	Tuolumne Utilities District	7/1/2009	Bi-monthly	27.06	0.22	27.28	Other	54,000		985
entura	Camarillo	City of Camarillo	1/1/2011	Monthly	14.38	27.45	41.83	Inclining	65,201	12.00	
allosite"	Camrosa	Camrosa Water District	1/1/2011	Monthly	40.00	35.01	75.01	Inclining	31,000		
	Oak View	Casitas Municipal Water District	9/1/2008	Monthly	22.02	14.65	36.67	Inclining	65,000	20.25	18,686
- A	Oxnard	City of Oxnard	7/14/2011	Monthly	15.18	66.18	81.36	Indining	189,000	Contraction of the second	and the second
	Port Hugneme	City of Port Hueneme	07/01/2011	Bi-monthly	42.16	82.80	124.96	Uniform	22,000	11.00	2,235
	San Buenaventura	City of San Buenaventura	7/1/2009	Bi-monthly	15.03	30.30	45.33	Inclining	109,000	140.88	2,505
	Thousand Oaks	City of Thousand Oaks	7/1/2010	Bl-monthly	31.06	40.50	71.56	Inclining	420,000	31.00	4,100
	Ventura	City of Ventura	07/01/2009	81-monthly	7.51	34.78	42.29	Indining	103,000	10.50	
	Camarillo	Crestview Mutual Water Company	12/1/2009	Monthly	17.25	2.75	20.00	Inclining	2,300	188.80	4,000
olo	Davis	City of Davis	7/1/2010	8i-monthly	11.50	22.50	34.00	Inclining	68,000	15.00	8,970

# NEVADA

#### BILLING FREQUENCY

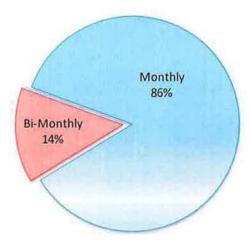
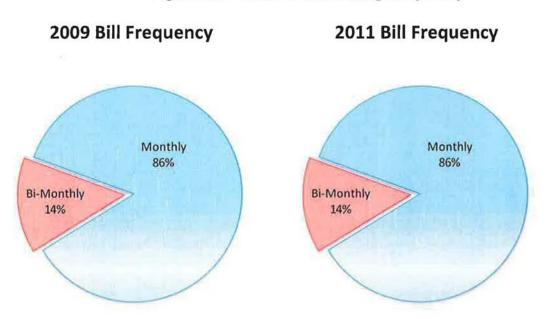


Figure 1a - Billing Frequency

As shown in Figure 1a, a large majority (86%) of the utility survey's respondents has a monthly billing structure.

Comparison of the utilities participating in both the 2009 and 2011 survey shows no change in the billing frequency.



#### Figure 1b. - 2009 v. 2011 Billing Frequency

#### **RATE STRUCTURES**



#### Figure 2a - Water Rate Structures

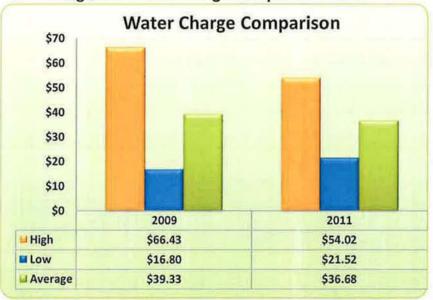
Figure 2a demonstrates that, based on a small sample size of utilities, the inclining rate structure makes up 100% of the rate structures among the utilities surveyed in Nevada.

The types of rate structures have remained consistent from 2009 to 2011 for the sample utilities.

#### CHARGES

As in the California section, all charges below are based on the assumption that the utility customer uses  $15 \operatorname{ccf}(11,220 \text{ gal})$  per month. For utilities that do not bill monthly, the charge was calculated on the assumption of  $15 \operatorname{ccf}$  per month usage.

Figure 3 displays high, low and average monthly residential water charges comparisons throughout the entire state. The average rate has decreased slightly from about \$39 in 2009 to \$36 in 2011.



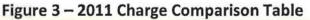
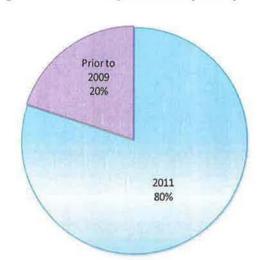


Figure 4 displays the year in which most utilities have most recently updated their rates. A majority of them, 80% have done so within the last year (in 2011).



#### Figure 4 – Rate Update Frequency

											Connection
County.	City		Efforther Date								
Clark	Las Vegas	Las Vegas Valley Water District	1/1/2011	Monthly	10.06	19.97	30.03	Inclining			
	Laughlin	Big Bend Water District	7/1/2006	Monthly	7.10	30.29	37.39	Inclining			
	Logandale	Moapa Valley Water District	1/1/2011	Monthly	29.79	24.23	54.02	inclining	9,000	22.70	3,963
	North Las Vegas	City of North Las Vegas	11/1/2011	Monthly	9.00	20.91	29.91	Inclining			
Douglas	Gardnerville	Gardnerville Town Water Company		<b>Bi-Monthly</b>	13.00	8.52	21.52	Uniform			
	Zephyr Cove	Douglas County Water and Sewer Authority		Monthly	22.00	19.84	41.84	Other			
Washoe	Reno	Washoe County Department of Water Resources	03/01/2011	Monthly	13.43	28.64	42.07	Inclining	42,947	16.89	4,200

Copy of document found at <a href="http://www.NoNewWipTax.com">www.NoNewWipTax.com</a>

#### **BACKGROUND ON CA-NV AWWA and RFC**

The California-Nevada Section is the largest regional section of the American Water Works Association, "the authoritative resource on safe water," with about one-tenth of the AWWA membership. Since 1881, AWWA has led the development and dissemination of water industry guidelines, standards, procedures, training and other information.

To fulfill its mission of leading, educating, and serving the drinking water community to ensure public health and to provide safe and sufficient water for all, CA-NV AWWA offers a number of educational opportunities such as conferences, workshops, an educational symposium and expositions, and the Water College. CA-NV also manages six professional certification programs serving over 20,000 individuals, helping to ensure drinking water safety for over 35 million people. The Section publishes a quarterly journal, *Source*, and helps disseminate technical input on drinking water issues to state regulators and legislators.

#### ADDITIONAL COPIES OF THE SURVEY CAN BE OBTAINED BY CONTACTING CA-NV AWWA AT (909) 481-7200

CA-NV Section AWWA 10574 Acacia St. Suite D6 Rancho Cucamonga, CA 91730

Raftelis Financial Consultants, Inc. (RFC) is a full service water and wastewater financial consulting firm with offices located across the country in Pasadena, CA; Kansas City, MO; Orlando, FL; Raleigh, NC; and Charlotte, NC. RFC specializes in a variety of different services for water, wastewater, and stormwater utilities including:

- Cost of service rate studies;
- Revenue bond feasibility studies;
- Conservation pricing studies;
- Strategic financial planning studies;
- Valuation studies; and
- Utility Management studies.

In addition, RFC provides litigation support, procurement assistance, and management consulting for municipal utilities. RFC personnel have been conducting a comprehensive national water and wastewater rate survey biennially since 1986 and have gained extensive data on utilities across the county. We teamed with AWWA to produce a national 2010 Water and Wastewater Rate Survey that can be obtained from AWWA.

We welcome any suggestions for enhancing the survey as a benchmarking tool for the utilities we serve. You may contact Sudhir Pardiwala or Steve Vuoso or Anthony Lo.

Sudhir Pardiwala	Steve Vuoso	Anthony Lo
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# TEMPLETON COMMUNITY SERVICES DISTRICT

# PRESENTS: ETHICS TRAINING FOR DIRECTORS & DESIGNATED EMPLOYEES

THIS IS A MANDATORY TRAINING UNDER ASSEMBLY BILL 1234



A CERTIFICATE OF COMPLIANCE WILL BE ISSUED

# Wednesday, June 6, 2012 9:45 a.m. to Noon Templeton Community Center/women's Club 601 S. Main Street, Templeton

We are pleased to welcome representatives from the Law Firm of Best, Best and Krieger. Their presentation will include the following:

- Personal Financial Gain by Public Servants
- Conflict of Interest, Bribery & Nepotism
- ✓ Gift, Travel & Mass-Mailing Restrictions
- Honoraria, Financial Interest Disclosure, & Competitive Bidding
- Prohibitions on the Use of Public Resources for Personal or Political Purposes. Etc.

Fee: \$55 per person

Please make checks payable to: Templeton CSD Mail to: TCSD, P.O. Box 780, Templeton, CA 93465

PRE-REGISTRATION IS MANDATORY TO INSURE THAT THERE ARE ENOUGH SPACES AVAILABLE FOR ALL ATTENDEES.

*Please <u>R.S.V.P.</u> by Thursday, May 31, 2012.* Please call or email Laurie Ion, Assistant to the General Manager, at Templeton CSD at (805) 434-4900 or <u>ion@templetoncsd.org</u>

~ Refreshments will be served ~

## Looking beyond regional desal plan

By ROGER DOLAN Guest commentary Posted: 03/08/2012 09:46:56 PM PST Updated: 03/08/2012 09:46:56 PM PST

The end of the Regional Desalination Project came with a bang, not a whimper.

The project was falling apart of its own accord, but the fusillade that finally brought it down was rejection of the environmental report followed by the withdrawal of Cal Am and the county from the sponsoring partnership.

Having the RDP gone clears the way for a Peninsula-based water supply. There is general consensus that a three-component solution will be best—desalination, groundwater recharge (GWR) using highly treated recycled water and aquifer storage and recovery (ASR), where treated winter flows from the Carmel River are stored for summer use.

But before getting to the question of what to build, a decision needs to be made about who should plan, finance, build and own the components. The choice is obvious with the recharge project. The Monterey Regional Water Pollution Control Agency (PCA) has excess winter flows that receive secondary and tertiary treatment. This water can be further treated in full conformance with all state and federal standards and be injected into the Seaside aquifer for storage.

The PCA and Monterey Peninsula Water Management District can work out details of a pipeline to the Peninsula and injection into the groundwater basin.

Designing and building the aquifer storage project is also relatively straightforward. In the past few years, the initial phase has been built. The existing facilities are partly owned by CalAm and the water management district. This arrangement provides a model for future design, construction and ownership.

Who should be in charge of the desal project is a more complex question. Desal will probably be the largest and most expensive supply component. Normally, one would think that the elected water managed district board would make the decisions and proceed with the project. However, there are more chefs in this kitchen than you can imagine.

It is arguable that many of the problems that we have witnessed during the past couple of decades can be attributed to the fact that, unlike most California communities, we have two organizations, the waer management district and Cal Am, each with responsibility and some level of authority for developing the water supply.

The 1995 decision that took away most of the Carmel River water, SWRCB Order 95-10, placed the burden of finding a new supply on Cal Am's shoulders, either alone or with WMD.

By 1997, Cal Am was putting lipstick on the big dam proposal that voters had turned down and getting ready to trot it down the runway a second time. The Legislature stepped in and assumed responsibility for the new water supply. That makes three "responsible" agencies. In 1998, the legislature passed AB1182, by Assemblyman Fred Keeley, assigning the California Public Utility Commission to develop the Peninsula's water resources plan as an alternative to the dam CalAm had proposed. That is the fourth responsible agency.

The PUC had never managed a project like this before. It rejected a lot of very constructive advice and then approved the now defunct Regional Desalination Plan, which actually would have farmed out the responsibility to the Marina Coast Water District and the county. They would have been agencies five and six if the RP was still viable.

So, when the new mayors' joint powers agency arrived on scene with all the powers of a fullfledged water district, it reminded one of the Pacific Grove council members of an old saw. If the government ran a horse race and one of the horses was too slow, they'd put a couple of extra jockeys on it. However, now that the mayors' agency is organized, they have made it clear that they intend their role to be a positive one. They can be a positive influence by advising, encouraging and supporting constructive progress, and knowing when to step out of the way.

Considering the governmental pecking order, the Legislature is on top and AB1182 is still the law. It requires the PUC to produce a viable plan, which it has failed to do. The law states that the water management district is to implement the PUC's plan, if there is one. Rather incredibly, the PUC arrogantly took away the water district's ability to recover the cost of state-mandated riparian mitigation work the district performs on the Carmel River.

Recently the PUC accepted a Cal Am proposal to produce its own plan, presumably to take the place of the failed PUC plan. Subsequently, the PUC dismissed points raised by water district officials, telling them that the PUC was calling the shots. So far, the PUC is not looking good.

The two most important questions are how should the future costs associated with the new supply be funded and who should perform the work.

It seems to this humble observer that the next step is to ask our state Senate and Assembly representatives to change the current law (AB1182) to clearly and unequivocally give back responsibility to the water management district to manage the water supply program while ordering the PUC to provide the funding for the essential work via the Cal Am water bills.

A public meeting on this topic will be held 5 to 7 p.m. on Wednesday, March 14, at the Oldemeyer Center in Seaside.

If you can make it, please attend, form your own independent opinions and don't hesitate to express them.

Dolan is an engineer experienced in management of water and wastewater utilities. He is a member of the Carmel Valley Association Water Committee. He has written several commentaries on this subject.

# **Eucalyptus: Freshwater Species of the Week**

Posted by <u>Brian Clark Howard</u> of <u>National Geographic News</u> in <u>Water Currents</u> on March 9, 2012Eucalyptus trees were imported to South Africa for timber, but they are now considered invasive because they suck up too much water. David Siu, Flickr Creative Commons

Although trees perform many valuable ecological services, not every tree is a "good tree." Some can be downright problematic, especially when they are invasive, crowding out native species and hogging resources like water and growing space.

This is especially true in South Africa, where invasive plants like imported eucalyptus trees cover about 10% (19-million hectares) of the country, and the invaders are spreading — like weeds — at an exponential rate. But forest managers are fighting back.

A <u>recent report</u> points out the multiple benefits of a longstanding invasive species eradication program, established in 1995 to address "what was then perceived to be the single biggest threat to the country's biological biodiversity and water security, which intensify the effect of fires and floods and increase soil erosion, while also diverting water from more productive uses, and impeding industries, such as agriculture, fisheries, transport, recreation and water supply, causing billions of rands of damage to South Africa's economy every year."

The country's eradication program has cleared more than two million hectares of invasive plants, while providing jobs for more than 25,000 people a year, many of them hailing from marginalized parts of society, and 54% of them women.

The South African government now spends well over a billion dollars a year dealing with invasive plants, but the recent report suggests that's not nearly enough.

Christo Marais, natural resource management programs head of operations for the Department of Water Affairs' Working for Water program, told *Engineering News*, "The estimated costs of controlling invasive plants, restoring degraded land, implementing an integrated veld and forest fire management program and restoring and maintaining degraded wetlands and riparian zones are orders of magnitude (about R57-billion) more than what government is currently investing, and this is a challenge that might hamper growth in industry."

Scientists estimate that 9,000 plants have been introduced into South Africa, with about 198 currently classified as being invasive. Among the most notorious are several species of eucalyptus trees, especially *E. camaldulensis*, *E. cladocalyx*, *E. diversicolor*, *E. grandis*, and *E. lehmannii*.

Eucalyptus trees are mostly native to Australia and neighboring islands, though they have been imported to many parts of the world for use as timber and as ornamental plants. In many places they have become invasive, since they grow rapidly and often suck up large amounts of water, harming freshwater ecosystems.

A 2011 paper in *Biological Invasions* by Willem de Lange and Brian van Wilgen suggested that the water lost to invasive plants every year was worth R6.5billion in South Africa. Without government control efforts, that could have been R41.7-billion, said Marais.

South African officials are now investigating ways to turn invasive eucalyptus trees into biofuels. One pilot program at Farleigh is already turning eucalyptus wood into "eco-furniture," including school desks.

When people plant trees they typically have the best intentions, but sometimes nonnative species can cause more harm to freshwater ecosystems than good. This can lead resource managers to seek creative solutions.

Brian Clark Howard is a writer and editor with <u>NationalGeographic.com</u>. He was formerly an editor at The Daily Green and E/The Environmental Magazine and has contributed to many publications, including <u>TheAtlantic.com</u>, <u>FastCompany.com</u>, <u>MailOnline.com</u>, <u>PopularMechanics.com</u>, Yahoo!, MSN and elsewhere. His latest book, with Kevin Shea, is <u>Build Your Own Small Wind Power</u> <u>System</u>.