APPENDIX F

WATER CONSERVATION PROGRAMS COSTS AND SAVINGS WORKSHEETS

Table 1. Water Conservation Activity

			Conservation Activity in Units (Fiscal Year Starting)												
	Program	**Unit**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
1a	SF Residential Water Surveys	Home	57	148	500	500	500	500	500	500	500	500	500	500	500
1b	MF Residential Water Surveys	Dwelling	0	0	100	100	100	100	100	100	100	100	100	100	100
2a	SF Plumbing Retrofit	Home	0	525	500	500	500	500	500	0	0	0	0	0	0
2b	MF Plumbing Retrofit	Dwelling	0	0	100	200	300	300	300	0	0	0	0	0	0
3	Water System Audits	System	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Water Metering	System	1	1	1	1	1	1	1	1	1	1	1	1	1
5a	Landscape Water Budget	Site	300	300	300	300	242.8	207.0	131.9	131.9	131.9	131.9	131.9	131.9	131.9
5b	Landscape Field Inspection	Site	14	10	25	25	20.2	17.3	11.0	11.0	11.0	11.0	11.0	11.0	11.0
5c	Landscape Field Followup	Site	0	0	25	25	20.2	17.3	11.0	11.0	11.0	11.0	11.0	11.0	11.0
6a	SF Clothes Washer Rebates	Washer	553	472	500	500	0	0	0	0	0	0	0	0	0
6b	MF Clothes Washer Rebates	Washer	33	15	50	50	0	0	0	0	0	0	0	0	0
7	Public Information Programs	System	1	1	1	1	1	1	1	1	1	1	1	1	1
8	School Education Programs	System	1	1	1	1	1	1	1	1	1	1	1	1	1
9a	CII ULFT Toilets	Toilet	0	0	0	250	400	100	0	0	0	0	0	0	0
9b	CII Water Use Surveys	Site	0	0	0	50	50	50	0	0	0	0	0	0	0
9c	CII Urinals	Urnial	0	0	0	50	150	50	0	0	0	0	0	0	0
10	Wholesale Agency Assistance	System	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Conservation Pricing	System	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Conservation Coordinator	System	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Water Waste Prohibition	System	1	1	1	1	1	1	1	1	1	1	1	1	1
14a	SF ULFT Replacement	Toilet	0	1,308	4,000	2,000	0	0	0	0	0	0	0	0	0
14b	MF ULFT Replacement	Toilet	0	0	2,000	3,000	0	0	0	0	0	0	0	0	0
15	Water Allocation Program	Utility	1	1	1	1	1	1	1	1	1	1	1	1	1
16	Pre Rinse Spray Nozzles	Nozzel	77	139	150	0	0	0	0	0	0	0	0	0	0
17	Artifical Turf Replacement	Project	0	0	1	0	0	0	0	0	0	0	0	0	0
18	Hot Water Recirculation Pumps	Pump	0	0	0	50	100	100	100	0	0	0	0	0	0
19	ET Controller Incentive Program	Controller	0	0	5	25	0	0	0	0	0	0	0	0	0

Table 2. Water Conservation Costs

			Conservation Activity Costs (Fiscal Year Starting)												
	Program	**Unit Cost**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
1a	SF Residential Water Surveys	$126	$7,182	$18,648	$63,000	$63,000	$63,000	$63,000	$63,000	$63,000	$63,000	$63,000	$63,000	$63,000	$63,000
1b	MF Residential Water Surveys	$33	$0	$0	$3,300	$3,300	$3,300	$3,300	$3,300	$3,300	$3,300	$3,300	$3,300	$3,300	$3,300
2a	SF Plumbing Retrofit	$15	$0	$7,875	$7,500	$7,500	$7,500	$7,500	$7,500	$0	$0	$0	$0	$0	$0
2b	MF Plumbing Retrofit	$15	$0	$0	$1,500	$3,000	$4,500	$4,500	$4,500	$0	$0	$0	$0	$0	$0
3	Water System Audits	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Water Metering	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5a	Landscape Water Budget	$64	$54,047	$12,600	$13,500	$13,500	$10,926	$9,316	$5,933	$5,933	$5,933	$5,933	$5,933	$5,933	$5,933
5b	Landscape Field Inspection	$1,200	$16,800	$12,000	$30,000	$30,000	$24,280	$20,703	$13,185	$13,185	$13,185	$13,185	$13,185	$13,185	$13,185
5c	Landscape Field Followup	$450	$0	$0	$11,250	$11,250	$9,105	$7,764	$4,945	$4,945	$4,945	$4,945	$4,945	$4,945	$4,945
6a	SF Clothes Washer Rebates	$166	$91,798	$78,352	$83,000	$83,000	$0	$0	$0	$0	$0	$0	$0	$0	$0
6b	MF Clothes Washer Rebates	$300	$9,900	$4,500	$15,000	$15,000	$0	$0	$0	$0	$0	$0	$0	$0	$0
7	Public Information Programs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	School Education Programs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9a	CII ULFT Toilets	$300	$0	$0	$0	$75,000	$120,000	$30,000	$0	$0	$0	$0	$0	$0	$0
9b	CII Water Use Surveys	$1,500	$0	$0	$0	$75,000	$75,000	$75,000	$0	$0	$0	$0	$0	$0	$0
9c	CII Urinals	$100	$0	$0	$0	$5,000	$15,000	$5,000	$0	$0	$0	$0	$0	$0	$0
10	Wholesale Agency Assistance	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Conservation Pricing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Conservation Coordinator	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Water Waste Prohibition	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14a	SF ULFT Replacement	$230	$0	$300,840	$920,000	$460,000	$0	$0	$0	$0	$0	$0	$0	$0	$0
14b	MF ULFT Replacement	$200	$0	$0	$400,000	$600,000	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Water Allocation Program	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Pre Rinse Spray Nozzles	$50	$3,850	$6,950	$7,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
17	Artifical Turf Replacement	$5,000,000	$0	$0	$0	$5,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	Hot Water Recirculation Pumps	$150	$0	$0	$0	$7,500	$15,000	$15,000	$15,000	$0	$0	$0	$0	$0	$0
19	ET Controller Incentive Program	$1,000	$0	$0	$5,000	$25,000	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total			**$183,577**	**$441,765**	**$1,560,550**	**$6,477,050**	**$347,611**	**$241,083**	**$117,364**	**$90,364**	**$90,364**	**$90,364**	**$90,364**	**$90,364**	**$90,364**

Table 3. Water Conservation Water Savings

			Conservation Program Net Water Savings in AF/Year (Fiscal Year Starting)												
	Program	**Unit Water Savings GPD**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
1a	SF Residential Water Surveys	24.1	0	2	6	19	33	44	54	54	54	54	54	54	54
1b	MF Residential Water Surveys	4.5	0	0	0	0	1	1	2	2	2	2	2	2	2
2a	SF Plumbing Retrofit	4.1	0	0	2	5	7	9	12	14	14	14	14	14	14
2b	MF Plumbing Retrofit	4.5	0	0	0	0	1	3	4	5	4	3	1	0	0
3	Water System Audits	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Water Metering	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5a	Landscape Water Budget	443	149	149	149	149	120	103	65	65	65	65	65	65	65
5b	Landscape Field Inspection	443	7	12	24	30	35	31	24	19	16	16	16	16	16
5c	Landscape Field Followup	443	0	0	12	25	35	31	24	19	16	16	16	16	16
6a	SF Clothes Washer Rebates	15	0	9	15	19	18	17	15	14	13	12	11	10	9
6b	MF Clothes Washer Rebates	82	0	3	3	6	6	5	5	5	4	4	4	3	3
7	Public Information Programs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	School Education Programs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9a	CII ULFT Toilets	25	0	0	0	7	18	21	21	21	21	21	21	21	21
9b	CII Water Use Surveys	105	0	0	0	6	12	18	18	18	12	6	0	0	0
9c	CII Urinals	14.200	0	0	0	1	3	4	4	4	4	4	4	4	4
10	Wholesale Agency Assistance	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Conservation Pricing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Conservation Coordinator	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Water Waste Prohibition	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14a	SF ULFT Replacement	22.6	0	0	27	116	150	143	136	129	122	116	110	105	100
14b	MF ULFT Replacement	33.2	0	0	0	72	177	168	160	152	144	137	130	124	117
15	Water Allocation Program	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Pre Rinse Spray Nozzles	156.0	0	13	38	64	64	64	51	26	0	0	0	0	0
17	Artifical Turf Replacement	0.102	0	0	15	48	48	65	65	65	65	65	65	65	65
18	Hot Water Recirculation Pumps	16.4	0	0	0	1	3	5	6	6	6	4	2	0	0
19	ET Controller Incentive Program	443	0	0	2	15	15	15	15	12	0	0	0	0	0
Total			**156**	**187**	**294**	**583**	**746**	**747**	**681**	**632**	**563**	**540**	**517**	**500**	**488**