FY	Customer Class	Date	Count	Consumption	Revenue
		7/1/2007	133	2,035,500	10,244.64
		8/1/2007	135	2,199,600	11,074.58
		9/1/2007	137	3,610,200	19,640.72
	Customer Class Total		*1,502*	*29,314,000*	*$154,328.39*
	Customer Class Average		*125*	*2,442,833*	*$12,860.70*
	Outside City Commercial				
		10/1/2006	81	11,896,100	47,350.62
		11/1/2006	82	7,944,500	31,221.81
		12/1/2006	84	8,965,800	35,135.80
		1/1/2007	83	7,351,300	28,969.59
		2/1/2007	83	3,187,100	13,045.89
		3/1/2007	83	4,793,900	19,183.87
		4/1/2007	85	5,615,900	22,338.61
		5/1/2007	86	4,525,500	18,186.77
		6/1/2007	87	6,099,300	24,209.51
		7/1/2007	86	4,674,000	20,618.42
		8/1/2007	88	4,771,900	21,049.38
		9/1/2007	90	8,666,700	37,490.69
	Customer Class Total		*1,018*	*78,492,000*	*$318,800.96*
	Customer Class Average		*85*	*6,541,000*	*$26,566 75*
	Outside City MultiFamily				
		10/1/2006	11	4,105,200	13,128.45
		11/1/2006	11	3,207,300	9,667.28
		12/1/2006	11	2,321,500	7,063.04
		1/1/2007	11	6,210,100	18,495.52
		2/1/2007	11	1,738,200	5,348.14
		3/1/2007	11	1,817,200	5,586.52
		4/1/2007	12	1,865,500	5,729.75
		5/1/2007	12	2,074,600	6,344.51
		6/1/2007	12	2,287,100	6,969.25
		7/1/2007	12	3,565,300	11,761.10
		8/1/2007	11	4,518,000	14,791.07
		9/1/2007	11	6,378,700	20,801.13
	Customer Class Total		*136*	*40,088,700*	*$125,685.76*
	Customer Class Average		*11*	*3,340,725*	*$10,473.81*
	Outside City Residential				
		10/1/2006	3	100,400	512.96

FY	Customer Class	Date	Count	Consumption	Revenue
		11/1/2006	4	136,300	751.50
		12/1/2006	4	144,200	795.05
		1/1/2007	4	56,100	255.24
		2/1/2007	4	5,800	35.22
		3/1/2007	4	55,300	239.70
		4/1/2007	4	47,200	206.30
		5/1/2007	4	179,800	1,101.85
		6/1/2007	4	159,700	978.59
		7/1/2007	4	74,600	420.77
		8/1/2007	4	57,200	242.12
		9/1/2007	4	380,000	2,439.60
	Customer Class Total		*47*	*1,396,600*	*$7,978.90*
	Customer Class Average		*4*	*116,383*	*$664.91*
	Fiscal Year Total for All Classes		*34,686*	*3,397,651,680*	*$12,228,221.45*
	Fiscal Year Average for All Classes		*361*	*35,392,205*	*$127,377.31*
2005-06					
	Inside City Commercial				
		10/1/2005	2,140	364,320,080	1,280,991.91
		11/1/2005	2,141	299,044,700	1,029,562.77
		12/1/2005	2,171	240,611,400	832,412.69
		1/1/2006	2,184	181,548,400	632,722.71
		2/1/2006	2,191	164,437,100	574,892.99
		3/1/2006	2,199	155,863,300	545,969.54
		4/1/2006	2,206	179,856,000	627,074.29
		5/1/2006	2,217	205,207,800	712,802.44
		6/1/2006	2,221	283,812,100	978,486.31
		7/1/2006	2,231	359,226,800	1,319,575.82
		8/1/2006	2,260	408,785,370	1,500,130.66
		9/1/2006	2,292	466,130,000	1,707,159.98
	Customer Class Total		*26,453*	*3,308,843,050*	*$11,741,782 11*
	Customer Class Average		*2,204*	*275,736,921*	*$978,481.84*
	Inside City Golf				
		10/1/2005	10	4,019,500	14,059.41
		11/1/2005	10	3,917,000	13,366.20
		12/1/2005	10	3,219,600	11,008.99
		1/1/2006	10	2,160,700	7,429.91

FY	Customer Class	Date	Count	Consumption	Revenue
		2/1/2006	10	772,500	2,737.80
		3/1/2006	10	977,800	3,436.79
		4/1/2006	9	1,168,900	4,072.55
		5/1/2006	9	1,696,200	5,854.82
		6/1/2006	9	3,416,000	11,667.74
		7/1/2006	9	2,888,200	10,576.95
		8/1/2006	8	6,436,800	23,398.23
		9/1/2006	9	13,796,700	50,090.36
	Customer Class Total		*113*	*44,469,900*	*$157,699.75*
	Customer Class Average		*9*	*3,705,825*	*$13,141.65*
	Inside City Industrial				
		10/1/2005	1	16,443,000	50,545.26
		11/1/2005	1	8,146,000	25,002.16
		12/1/2005	1	9,720,000	29,818.60
		1/1/2006	1	5,547,000	17,049.22
		2/1/2006	1	9,629,000	29,540.14
		3/1/2006	2	6,615,000	20,326.29
		4/1/2006	1	9,787,000	30,023.62
		5/1/2006	1	10,832,000	33,221.32
		6/1/2006	1	11,518,000	35,320.48
		7/1/2006	1	16,144,000	53,189.16
		8/1/2006	1	15,625,000	51,481.65
		9/1/2006	2	14,916,000	49,160.93
	Customer Class Total		*14*	*134,922,000*	*$424,678.83*
	Customer Class Average		*1*	*11,243,500*	*$35,389.90*
	Inside City MultiFamily				
		10/1/2005	224	105,720,200	300,719.12
		11/1/2005	227	70,542,400	198,362.49
		12/1/2005	228	50,712,400	143,441.13
		1/1/2006	230	36,364,400	103,757.86
		2/1/2006	233	33,824,400	96,721.14
		3/1/2006	235	38,777,500	110,431.06
		4/1/2006	240	45,785,200	129,895.72
		5/1/2006	242	60,887,200	171,802.61
		6/1/2006	243	88,989,700	249,578.10
		7/1/2006	245	119,811,700	362,555.95
		8/1/2006	250	120,265,200	363,942.03

FY	Customer Class	Date	Count	Consumption	Revenue
		9/1/2006	261	148,974,600	450,306.88
	Customer Class Total		*2,858*	*920,654,900*	*$2,681,514.09*
	Customer Class Average		*238*	*76,721,242*	*$223,459.51*
	Inside City Residential				
		10/1/2005	35	1,651,800	9,027.27
		11/1/2005	35	1,428,100	7,678.95
		12/1/2005	35	1,430,700	7,776.21
		1/1/2006	37	1,174,200	6,247.38
		2/1/2006	37	810,000	3,995.92
		3/1/2006	38	882,200	4,466.33
		4/1/2006	42	1,283,800	6,538.99
		5/1/2006	42	1,154,900	5,816.40
		6/1/2006	44	1,973,300	10,766.54
		7/1/2006	68	3,007,200	16,324.75
		8/1/2006	112	5,434,400	29,851.42
		9/1/2006	117	5,949,800	32,892.89
	Customer Class Total		*642*	*26,180,400*	*$141,383.05*
	Customer Class Average		*54*	*2,181,700*	*$11,781.92*
	Outside City Commercial				
		10/1/2005	74	12,341,900	43,420.45
		11/1/2005	75	9,862,900	36,876.37
		12/1/2005	75	9,981,500	37,311.60
		1/1/2006	75	10,974,300	40,955.20
		2/1/2006	75	7,292,500	27,443.01
		3/1/2006	76	6,750,900	25,459.70
		4/1/2006	79	5,972,700	22,628.18
		5/1/2006	78	7,690,400	28,920.54
		6/1/2006	78	11,978,800	44,671.18
		7/1/2006	78	12,518,800	49,771.15
		8/1/2006	79	13,603,100	54,029.90
		9/1/2006	81	16,404,200	65,033.96
	Customer Class Total		*923*	*125,372,000*	*$476,521.24*
	Customer Class Average		*77*	*10,447,667*	*$39,710.10*
	Outside City MultiFamily				
		10/1/2005	9	4,308,500	13,173.38
		11/1/2005	9	4,064,800	11,962.70
		12/1/2005	9	2,618,800	7,754.85

FY	Customer Class	Date	Count	Consumption	Revenue
		1/1/2006	9	2,130,100	6,332.73
		2/1/2006	9	1,680,800	5,025.26
		3/1/2006	9	2,908,700	8,598.45
		4/1/2006	9	2,960,700	8,749.78
		5/1/2006	9	4,018,300	11,827.38
		6/1/2006	8	4,835,700	14,182.24
		7/1/2006	10	6,369,600	20,245.95
		8/1/2006	9	7,119,500	22,560.57
		9/1/2006	11	6,376,000	20,281.47
	Customer Class Total		*110*	*49,391,500*	*$150,694.76*
	Customer Class Average		*9*	*4,115,958*	*$12,557.90*
	Outside City Residential				
		10/1/2005	2	80,600	425.81
		11/1/2005	2	71,200	359.00
		12/1/2005	2	46,200	212.55
		1/1/2006	2	53,400	262.49
		2/1/2006	3	7,500	26.95
		3/1/2006	3	8,800	30.93
		4/1/2006	3	60,500	304.99
		5/1/2006	3	6,900	26.15
		6/1/2006	3	114,100	631.37
		7/1/2006	4	94,400	473.75
		8/1/2006	3	227,000	1,322.42
		9/1/2006	3	137,000	725.01
	Customer Class Total		*33*	*907,600*	*$4,801.42*
	Customer Class Average		*3*	*75,633*	*$400.12*
	Fiscal Year Total for All Classes		*31,146*	*4,610,741,350*	*$15,779,075.25*
	Fiscal Year Average for All Classes		*324*	*48,028,556*	*$164,365.37*
2004-05					
	Inside City Commercial				
		10/1/2004	2,086	302,780,200	965,351.00
		11/1/2004	2,087	222,624,300	738,025.32
		12/1/2004	2,022	115,908,600	391,381.00
		1/1/2005	2,029	101,292,700	344,034.58
		2/1/2005	2,053	87,446,700	299,367.25
		3/1/2005	2,062	87,495,300	299,792.94

FY	Customer Class	Date	Count	Consumption	Revenue
		4/1/2005	2,077	116,802,000	394,723.88
		5/1/2005	2,079	177,659,700	591,940.61
		6/1/2005	2,102	247,489,700	818,396.46
		7/1/2005	2,108	354,869,500	1,247,880.23
		8/1/2005	2,105	357,940,400	1,258,527.42
		9/1/2005	2,118	378,186,720	1,328,900.52
	Customer Class Total		*24,928*	*2,550,495,820*	*$8,678,321.21*
	Customer Class Average		*2,077*	*212,541,318*	*$723,193.43*
	Inside City Golf				
		10/1/2004	10	971,600	3,147.04
		11/1/2004	10	684,900	2,330.83
		12/1/2004	10	444,700	1,552.59
		1/1/2005	10	512,800	1,773.22
		2/1/2005	10	299,300	1,081.49
		3/1/2005	10	276,200	1,006.65
		4/1/2005	10	776,600	2,627.94
		5/1/2005	10	2,120,200	6,981.20
		6/1/2005	10	3,407,400	11,151.74
		7/1/2005	10	3,938,200	13,777.31
		8/1/2005	10	1,454,800	5,159.92
		9/1/2005	10	1,895,900	6,690.53
	Customer Class Total		*120*	*16,782,600*	*$57,280.46*
	Customer Class Average		*10*	*1,398,550*	*$4,773.37*
	Inside City Industrial				
		10/1/2004	1	17,417,000	49,345.88
		11/1/2004	1	14,714,000	41,558.73
		12/1/2004	1	7,792,000	22,038.69
		1/1/2005	1	6,654,000	18,829.53
		2/1/2005	1	9,051,000	25,589.07
		3/1/2005	1	8,836,000	24,982.77
		4/1/2005	1	8,211,000	23,220.27
		5/1/2005	1	8,733,900	24,694.85
		6/1/2005	1	13,727,100	38,775.67
		7/1/2005	1	16,549,000	50,870.68
		8/1/2005	1	14,193,000	43,637.76
		9/1/2005	1	16,601,000	51,030.32

FY	Customer Class	Date	Count	Consumption	Revenue
	Customer Class Total		*12*	*142,479,000*	*$414,574.22*
	Customer Class Average		*1*	*11,873,250*	*$34,547.85*
	Inside City MultiFamily				
		10/1/2004	99	32,363,300	85,105.11
		11/1/2004	136	27,530,600	73,161.10
		12/1/2004	215	23,946,900	64,862.36
		1/1/2005	214	17,706,500	48,649.95
		2/1/2005	216	16,296,400	44,943.32
		3/1/2005	216	16,925,400	46,717.72
		4/1/2005	216	29,340,200	78,802.45
		5/1/2005	218	53,688,300	142,162.14
		6/1/2005	223	76,040,000	200,288.56
		7/1/2005	221	115,850,300	329,276.88
		8/1/2005	219	121,432,800	344,981.50
		9/1/2005	221	122,173,800	347,092.44
	Customer Class Total		*2,414*	*653,294,500*	*$1,806,043.53*
	Customer Class Average		*201*	*54,441,208*	*$150,503.63*
	Inside City Residential				
		10/1/2004	25	747,500	3,664.01
		11/1/2004	26	636,600	3,231.21
		12/1/2004	29	313,500	1,522.90
		1/1/2005	29	345,300	1,690.50
		2/1/2005	29	294,900	1,449.08
		3/1/2005	27	281,800	1,368.21
		4/1/2005	28	510,100	2,618.73
		5/1/2005	30	969,200	5,191.95
		6/1/2005	30	1,055,000	5,604.17
		7/1/2005	31	1,628,800	9,160.81
		8/1/2005	33	1,258,900	6,779.38
		9/1/2005	34	1,812,700	10,127.30
	Customer Class Total		*351*	*9,854,300*	*$52,408.25*
	Customer Class Average		*29*	*821,192*	*$4,367.35*
	Outside City Commercial				
		10/1/2004	80	15,531,100	49,363.78
		11/1/2004	77	9,649,800	31,905.63
		12/1/2004	73	4,762,800	16,023.99
		1/1/2005	74	4,941,000	16,606.85

FY	Customer Class	Date	Count	Consumption	Revenue
		2/1/2005	70	2,664,800	9,186.48
		3/1/2005	70	1,505,300	5,437.69
		4/1/2005	70	3,880,300	13,124.72
		5/1/2005	70	7,053,800	23,406.87
		6/1/2005	71	8,050,700	26,640.84
		7/1/2005	74	12,193,100	42,893.10
		8/1/2005	72	10,846,000	38,197.67
		9/1/2005	73	12,827,500	45,094.97
	Customer Class Total		*874*	*93,906,200*	*$317,882.59*
	Customer Class Average		*73*	*7,825,517*	*$26,490.22*
	Outside City MultiFamily				
		10/1/2004	3	324,000	915.42
		11/1/2004	6	1,629,300	4,676.63
		12/1/2004	10	1,666,700	4,823.35
		1/1/2005	10	1,358,500	3,954.23
		2/1/2005	10	1,563,300	4,535.15
		3/1/2005	9	927,900	2,735.31
		4/1/2005	9	1,704,100	4,924.20
		5/1/2005	9	2,629,700	7,534.39
		6/1/2005	9	4,081,200	11,627.62
		7/1/2005	9	6,100,700	18,603.75
		8/1/2005	9	6,128,700	18,688.59
		9/1/2005	9	6,209,200	18,932.51
	Customer Class Total		*102*	*34,323,300*	*$101,951 15*
	Customer Class Average		*9*	*2,860,275*	*$8,495.93*
	Outside City Residential				
		10/1/2004	3	165,400	890.63
		11/1/2004	3	143,900	850.38
		12/1/2004	3	152,400	933.47
		1/1/2005	3	135,800	821.67
		2/1/2005	2	6,100	19.74
		3/1/2005	2	10,000	30.23
		4/1/2005	2	23,200	68.44
		5/1/2005	2	28,600	100.77
		6/1/2005	2	57,000	269.34
		7/1/2005	2	104,100	595.51
		8/1/2005	2	30,200	116.58

FY	Customer Class	Date	Count	Consumption	Revenue
		9/1/2005	2	110,700	633.44
	Customer Class Total		28	967,400	$5,330.20
	Customer Class Average		2	80,617	$444.18
	Fiscal Year Total for All Classes		28,829	3,502,103,120	$11,433,791.61
	Fiscal Year Average for All Classes		300	36,480,241	$119,102.00
2003-04					
	Inside City Commercial				
		10/1/2003	1,964	280,163,660	854,089.97
		11/1/2003	1,980	251,428,900	748,166.51
		12/1/2003	1,986	203,938,200	609,528.18
		1/1/2004	2,000	194,885,600	583,168.49
		2/1/2004	2,011	125,480,600	380,637.78
		3/1/2004	2,009	99,335,800	304,200.67
		4/1/2004	2,041	131,596,800	398,760.99
		5/1/2004	2,046	152,736,700	460,462.19
		6/1/2004	2,062	222,271,200	663,611.44
		7/1/2004	2,069	260,891,600	834,074.56
		8/1/2004	2,079	334,128,200	1,063,801.32
		9/1/2004	2,088	373,125,200	1,186,306.52
	Customer Class Total		24,335	2,629,982,460	$8,086,808.62
	Customer Class Average		2,028	219,165,205	$673,900.72
	Inside City Golf				
		10/1/2003	8	737,400	2,283.76
		11/1/2003	9	994,300	2,994.78
		12/1/2003	9	2,111,600	6,257.30
		1/1/2004	9	669,800	2,047.24
		2/1/2004	10	307,800	994.99
		3/1/2004	10	333,500	1,076.93
		4/1/2004	9	748,400	2,274.63
		5/1/2004	10	685,600	2,098.16
		6/1/2004	10	782,700	2,381.69
		7/1/2004	10	709,600	2,324.34
		8/1/2004	10	1,148,400	3,702.20
		9/1/2004	10	1,160,600	3,740.49
	Customer Class Total		114	10,389,700	$32,176.51
	Customer Class Average		10	865,808	$2,681.38

FY	Customer Class	Date	Count	Consumption	Revenue
	Inside City Industrial				
		10/1/2003	2	16,478,900	44,136.52
		11/1/2003	2	12,722,100	33,215.68
		12/1/2003	2	12,017,000	31,382.42
		1/1/2004	2	11,018,400	28,786.06
		2/1/2004	2	10,360,600	27,075.78
		3/1/2004	2	9,680,800	25,308.30
		4/1/2004	1	11,518,000	30,002.57
		5/1/2004	1	8,188,000	21,344.57
		6/1/2004	1	13,363,000	34,799.57
		7/1/2004	1	20,316,000	57,550.05
		8/1/2004	1	15,084,000	42,743.49
		9/1/2004	1	18,725,000	53,047.52
	Customer Class Total		*18*	*159,471,800*	*$429,392.53*
	Customer Class Average		*2*	*13,289,317*	*$35,782.71*
	Inside City MultiFamily				
		10/1/2003	76	24,107,300	60,278.96
		11/1/2003	76	19,249,300	46,371.68
		12/1/2003	76	15,890,800	38,411.98
		1/1/2004	76	13,188,500	32,012.39
		2/1/2004	76	7,912,100	19,504.62
		3/1/2004	78	7,745,000	19,118.17
		4/1/2004	81	12,067,400	29,380.03
		5/1/2004	91	15,238,500	36,991.13
		6/1/2004	91	23,666,600	56,979.52
		7/1/2004	94	28,296,700	74,477.57
		8/1/2004	95	38,360,300	100,646.96
		9/1/2004	96	39,770,500	104,331.58
	Customer Class Total		*1,006*	*245,493,000*	*$618,504.59*
	Customer Class Average		*84*	*20,457,750*	*$51,542.05*
	Inside City Residential				
		10/1/2003	16	471,800	2,310.35
		11/1/2003	19	533,200	2,660.53
		12/1/2003	20	411,100	1,989.45
		1/1/2004	20	460,400	2,256.18
		2/1/2004	19	88,600	265.97
		3/1/2004	21	153,600	675.41

FY	Customer Class	Date	Count	Consumption	Revenue
		4/1/2004	25	310,400	1,355.60
		5/1/2004	25	295,100	1,297.65
		6/1/2004	26	508,400	2,389.07
		7/1/2004	25	584,200	2,740.50
		8/1/2004	25	945,900	4,875.59
		9/1/2004	25	1,029,600	5,368.44
	Customer Class Total		*266*	*5,792,300*	*$28,184.74*
	Customer Class Average		*22*	*482,692*	*$2,348.73*
	Outside City Commercial				
		10/1/2003	83	14,703,000	41,328.45
		11/1/2003	83	10,488,000	31,232.53
		12/1/2003	82	8,338,700	24,951.76
		1/1/2004	82	9,571,100	28,550.40
		2/1/2004	76	6,794,700	20,401.77
		3/1/2004	77	6,636,800	19,980.91
		4/1/2004	76	7,949,500	23,787.84
		5/1/2004	76	7,474,500	22,400.83
		6/1/2004	76	12,856,900	38,117.45
		7/1/2004	79	13,552,000	43,145.17
		8/1/2004	80	19,499,900	61,830.09
		9/1/2004	80	19,801,800	62,779.33
	Customer Class Total		*950*	*137,666,900*	*$418,506.53*
	Customer Class Average		*79*	*11,472,242*	*$34,875.54*
	Outside City Golf				
		10/1/2003	1	35,400	102.66
		11/1/2003	1	17,900	57.05
		12/1/2003	1	33,200	101.72
		1/1/2004	1	15,300	49.46
	Customer Class Total		*4*	*101,800*	*$310.89*
	Customer Class Average		*1*	*25,450*	*$77.72*
	Outside City MultiFamily				
		10/1/2003	10	927,100	2,256.30
		11/1/2003	10	655,800	1,728.37
		12/1/2003	10	644,000	1,698.87
		1/1/2004	10	643,900	1,698.62
		2/1/2004	8	238,900	661.11
		3/1/2004	9	731,900	1,984.11

FY	Customer Class	Date	Count	Consumption	Revenue
		4/1/2004	9	375,500	1,020.71
		5/1/2004	3	122,500	333.91
		6/1/2004	3	262,400	683.66
		7/1/2004	3	274,100	778.70
		8/1/2004	4	533,300	1,492.93
		9/1/2004	4	444,800	1,250.45
	Customer Class Total		*83*	*5,854,200*	*$15,587.74*
	Customer Class Average		*7*	*487,850*	*$1,298.98*
	Outside City Residential				
		10/1/2003	2	45,400	193.43
		11/1/2003	2	35,300	139.17
		12/1/2003	3	53,000	199.08
		1/1/2004	3	53,200	200.32
		2/1/2004	3	23,900	84.83
		3/1/2004	3	202,900	1,139.94
		4/1/2004	3	191,300	1,112.61
		5/1/2004	3	193,100	1,128.95
		6/1/2004	3	215,400	1,199.18
		7/1/2004	3	200,400	1,102.02
		8/1/2004	3	245,900	1,373.72
		9/1/2004	3	187,400	1,019.34
	Customer Class Total		*34*	*1,647,200*	*$8,892.59*
	Customer Class Average		*3*	*137,267*	*$741.05*
	Fiscal Year Total for All Classes		*26,810*	*3,196,399,360*	*$9,638,364.74*
	Fiscal Year Average for All Classes		*268*	*31,963,994*	*$96,383.65*
2002-03					
	Inside City Commercial				
		10/1/2002	1,855	316,564,500	962,666.87
		11/1/2002	1,858	183,732,000	525,627.24
		12/1/2002	1,869	142,853,800	411,652.05
		1/1/2003	1,887	105,940,700	308,880.88
		2/1/2003	1,902	82,172,400	242,542.26
		3/1/2003	1,904	78,441,700	232,202.27
		4/1/2003	1,923	126,286,700	365,772.02
		5/1/2003	1,942	247,325,500	703,560.43
		6/1/2003	1,949	315,282,800	893,254.92

FY	Customer Class	Date	Count	Consumption	Revenue
		7/1/2003	1,953	336,253,700	1,022,350.02
		8/1/2003	1,954	369,757,600	1,122,889.14
		9/1/2003	1,965	416,904,200	1,264,492.45
	Customer Class Total		22,961	2,721,515,600	$8,055,890.55
	Customer Class Average		1,913	226,792,967	$671,324.21
	Inside City Golf				
		10/1/2002	7	7,611,400	22,931.68
		11/1/2002	7	1,433,100	4,077.58
		12/1/2002	7	1,687,000	4,785.96
		1/1/2003	7	1,715,500	4,865.48
		2/1/2003	7	1,085,200	3,106.94
		3/1/2003	7	145,200	484.34
		4/1/2003	7	1,169,400	3,341.85
		5/1/2003	7	1,149,000	3,284.94
		6/1/2003	9	1,097,600	3,152.11
		7/1/2003	9	1,347,600	4,132.61
		8/1/2003	9	2,085,200	6,345.41
		9/1/2003	9	1,272,700	3,907.91
	Customer Class Total		92	21,798,900	$64,416 81
	Customer Class Average		8	1,816,575	$5,368.07
	Inside City Industrial				
		10/1/2002	2	13,548,600	36,312.62
		11/1/2002	2	13,084,400	32,063.80
		12/1/2002	2	10,336,500	25,358.92
		1/1/2003	2	10,652,700	26,130.45
		2/1/2003	2	10,006,700	24,554.21
		3/1/2003	2	10,401,300	25,517.03
		4/1/2003	2	10,202,000	25,030.74
		5/1/2003	2	12,354,600	30,283.08
		6/1/2003	2	14,058,200	34,439.87
		7/1/2003	2	16,118,500	43,256.52
		8/1/2003	2	15,979,600	42,803.39
		9/1/2003	2	15,207,600	40,742.15
	Customer Class Total		24	151,950,700	$386,492 78
	Customer Class Average		2	12,662,558	$32,207.73
	Inside City MultiFamily				
		10/1/2002	46	14,380,200	35,996.72

FY	Customer Class	Date	Count	Consumption	Revenue
		11/1/2002	46	6,754,200	15,778.79
		12/1/2002	57	5,719,300	13,501.84
		1/1/2003	57	4,609,700	10,983.06
		2/1/2003	56	4,145,100	9,923.80
		3/1/2003	59	4,019,700	9,671.87
		4/1/2003	61	9,912,000	23,084.65
		5/1/2003	59	22,709,400	52,100.54
		6/1/2003	68	24,447,500	56,126.22
		7/1/2003	71	27,455,600	68,492.69
		8/1/2003	73	36,100,000	89,879.83
		9/1/2003	74	44,196,700	109,896.43
	Customer Class Total		*727*	*204,449,400*	*$495,436.44*
	Customer Class Average		*61*	*17,037,450*	*$41,286.37*
	Inside City Residential				
		12/1/2002	4	153,500	847.87
		1/1/2003	6	111,800	618.92
		2/1/2003	7	84,000	495.25
		3/1/2003	10	120,100	594.94
		4/1/2003	12	321,600	1,632.31
		5/1/2003	12	454,000	2,309.57
		6/1/2003	12	365,000	1,814.63
		7/1/2003	14	564,800	2,868.87
		8/1/2003	14	676,500	3,545.92
		9/1/2003	14	520,600	2,619.80
	Customer Class Total		*105*	*3,371,900*	*$17,348.08*
	Customer Class Average		*11*	*337,190*	*$1,734.81*
	Outside City Commercial				
		10/1/2002	84	22,692,700	63,490.64
		11/1/2002	83	11,116,000	28,644.79
		12/1/2002	81	7,791,800	20,263.34
		1/1/2003	82	5,018,800	13,282.11
		2/1/2003	82	4,544,700	12,077.68
		3/1/2003	82	4,322,200	11,521.56
		4/1/2003	84	7,701,300	20,043.64
		5/1/2003	83	18,518,400	47,293.82
		6/1/2003	82	19,235,200	49,091.28
		7/1/2003	84	21,588,700	60,437.04

FY	Customer Class	Date	Count	Consumption	Revenue
		8/1/2003	83	23,517,800	65,762.37
		9/1/2003	83	21,828,900	61,059.11
	Customer Class Total		*993*	*167,876,500*	*$452,967 38*
	Customer Class Average		*83*	*13,989,708*	*$37,747.28*
	Outside City Golf				
		10/1/2002	1	2,200	10.69
		11/1/2002	1	1,200	7.62
		12/1/2002	1	1,300	7.88
		1/1/2003	1	1,100	7.37
		2/1/2003	1	1,300	7.88
		3/1/2003	1	4,100	14.93
		4/1/2003	1	1,600	8.63
		5/1/2003	1	2,500	10.90
		6/1/2003	1	2,600	11.15
		7/1/2003	1	3,100	13.19
		8/1/2003	1	8,200	27.31
		9/1/2003	1	13,400	41.72
	Customer Class Total		*12*	*42,600*	*$169.27*
	Customer Class Average		*1*	*3,550*	*$14.11*
	Outside City MultiFamily				
		10/1/2002	9	1,174,600	2,817.71
		11/1/2002	9	828,400	1,833.65
		12/1/2002	9	870,100	1,922.46
		1/1/2003	9	492,300	1,117.75
		2/1/2003	10	183,600	477.96
		3/1/2003	10	327,900	785.32
		4/1/2003	10	894,400	1,991.96
		5/1/2003	10	1,807,300	3,936.44
		6/1/2003	10	1,588,100	3,469.55
		7/1/2003	10	1,750,400	4,182.82
		8/1/2003	10	1,883,900	4,495.22
		9/1/2003	10	1,411,100	3,388.87
	Customer Class Total		*116*	*13,212,100*	*$30,419.71*
	Customer Class Average		*10*	*1,101,008*	*$2,534.98*
	Outside City Residential				
		7/1/2003	1	7,300	15.32
		8/1/2003	2	86,500	429.68

FY	Customer Class	Date	Count	Consumption	Revenue
		9/1/2003	2	62,100	286.82
	Customer Class Total		5	155,900	$731.82
	Customer Class Average		2	51,967	$243.94
	Fiscal Year Total for All Classes		25,035	3,284,373,600	$9,503,872.84
	Fiscal Year Average for All Classes		258	33,859,522	$97,978.07
2001-02					
	Inside City Commercial				
		10/1/2001	1,696	300,322,940	841,316.46
		11/1/2001	1,701	234,645,030	666,790.28
		12/1/2001	1,718	145,371,400	417,738.01
		1/1/2002	1,724	81,513,800	239,670.36
		2/1/2002	1,730	95,882,760	279,782.08
		3/1/2002	1,743	107,283,800	311,643.97
		4/1/2002	1,756	199,088,140	567,846.72
		5/1/2002	1,761	214,159,700	609,993.79
		6/1/2002	1,779	344,356,050	973,307.45
		7/1/2002	1,790	320,059,400	971,133.86
		8/1/2002	1,802	291,819,600	888,152.60
		9/1/2002	1,824	378,441,700	1,148,193.80
	Customer Class Total		21,024	2,712,944,320	$7,915,569.38
	Customer Class Average		1,752	226,078,693	$659,630.78
	Inside City Golf				
		10/1/2001	7	1,864,300	5,236.52
		11/1/2001	6	867,800	2,482.15
		12/1/2001	6	301,100	901.05
		1/1/2002	6	419,700	1,231.94
		2/1/2002	6	488,500	1,423.90
		3/1/2002	6	192,500	598.06
		4/1/2002	7	1,607,700	4,593.62
		5/1/2002	7	6,147,400	17,230.46
		6/1/2002	7	4,133,500	11,611.69
		7/1/2002	7	338,600	1,378.97
		8/1/2002	6	1,553,900	4,722.68
		9/1/2002	6	14,717,700	44,232.33
	Customer Class Total		77	32,632,700	$95,643.37
	Customer Class Average		6	2,719,392	$7,970.28

FY	Customer Class	Date	Count	Consumption	Revenue
	Inside City Industrial				
		10/1/2001	2	659,600	1,752.02
		11/1/2001	2	718,700	1,891.49
		12/1/2001	2	754,800	1,979.57
		1/1/2002	2	1,063,900	2,733.78
		2/1/2002	2	4,306,500	10,645.72
		3/1/2002	2	13,883,900	34,014.58
		4/1/2002	2	13,967,200	34,217.83
		5/1/2002	2	16,588,700	40,614.29
		6/1/2002	2	12,182,100	29,862.18
		7/1/2002	2	13,247,700	35,500.38
		8/1/2002	2	13,841,200	37,093.86
		9/1/2002	2	13,354,500	35,794.38
	Customer Class Total		*24*	*104,568,800*	*$266,100.08*
	Customer Class Average		*2*	*8,714,067*	*$22,175.01*
	Inside City MultiFamily				
		10/1/2001	28	10,429,100	24,699.23
		11/1/2001	27	6,746,900	15,562.19
		12/1/2001	32	3,388,400	8,009.99
		1/1/2002	33	2,195,100	5,289.87
		2/1/2002	33	3,799,200	8,931.17
		3/1/2002	35	4,113,900	9,653.46
		4/1/2002	36	6,008,100	13,966.76
		5/1/2002	36	13,132,900	30,135.48
		6/1/2002	37	13,003,400	29,850.37
		7/1/2002	39	13,288,000	33,141.49
		8/1/2002	41	13,086,900	32,750.37
		9/1/2002	41	16,600,400	41,406.17
	Customer Class Total		*418*	*105,792,300*	*$253,396.55*
	Customer Class Average		*35*	*8,816,025*	*$21,116.38*
	Outside City Commercial				
		10/1/2001	71	12,961,600	35,464.21
		11/1/2001	69	10,818,500	27,835.60
		12/1/2001	71	7,074,500	18,408.57
		1/1/2002	70	4,170,000	11,056.88
		2/1/2002	79	7,696,800	19,999.15
		3/1/2002	78	7,366,800	19,160.11

FY	Customer Class	Date	Count	Consumption	Revenue
		4/1/2002	78	10,074,600	25,988.36
		5/1/2002	80	16,682,200	42,646.82
		6/1/2002	80	27,878,200	70,866.31
		7/1/2002	79	24,709,500	68,992.64
		8/1/2002	81	26,151,900	73,070.49
		9/1/2002	82	30,094,400	83,985.69
	Customer Class Total		*918*	*185,679,000*	*$497,474.83*
	Customer Class Average		*77*	*15,473,250*	*$41,456.24*
	Outside City Golf				
		10/1/2001	1	2,000	8.72
		11/1/2001	1	2,300	10.40
		12/1/2001	1	1,100	7.37
		1/1/2002	1	900	6.87
		2/1/2002	1	1,100	7.37
		3/1/2002	1	1,900	9.39
		4/1/2002	1	1,200	7.62
		5/1/2002	1	1,900	9.39
		6/1/2002	1	1,900	9.39
		7/1/2002	1	2,100	9.14
		8/1/2002	1	1,600	9.03
		9/1/2002	1	1,600	9.03
	Customer Class Total		*12*	*19,600*	*$103.72*
	Customer Class Average		*1*	*1,633*	*$8.64*
	Outside City MultiFamily				
		10/1/2001	2	436,000	1,009.44
		11/1/2001	2	237,000	514.01
		12/1/2001	2	50,500	116.76
		1/1/2002	3	57,400	138.19
		2/1/2002	3	62,900	149.91
		3/1/2002	3	203,800	450.03
		4/1/2002	3	176,400	391.66
		5/1/2002	3	262,700	575.48
		6/1/2002	9	906,300	1,999.56
		7/1/2002	9	901,800	2,166.31
		8/1/2002	9	1,056,200	2,540.66
		9/1/2002	9	1,371,700	3,278.93

FY	Customer Class	Date	Count	Consumption	Revenue
	Customer Class Total		57	5,722,700	$13,330.94
	Customer Class Average		5	476,892	$1,110.91
	Fiscal Year Total for All Classes		22,530	3,147,359,420	$9,041,618.87
	Fiscal Year Average for All Classes		268	37,468,565	$107,638.32
2000-01					
	Inside City Commercial				
		10/1/2000	1,533	211,029,200	512,524.96
		11/1/2000	1,548	160,920,400	427,362.92
		12/1/2000	1,550	96,613,200	259,825.50
		1/1/2001	1,565	69,112,300	188,359.48
		2/1/2001	1,533	73,790,300	200,243.31
		3/1/2001	1,577	58,976,700	162,028.53
		4/1/2001	1,602	78,022,380	211,654.60
		5/1/2001	1,621	129,869,600	346,629.99
		6/1/2001	1,632	232,023,600	612,193.09
		7/1/2001	1,638	313,117,300	876,265.47
		8/1/2001	1,660	423,719,300	1,182,872.79
		9/1/2001	1,664	370,184,670	1,034,497.27
	Customer Class Total		19,123	2,217,378,950	$6,014,457.91
	Customer Class Average		1,594	184,781,579	$501,204.83
	Inside City Golf				
		12/1/2000	3	266,600	734.38
		1/1/2001	7	353,100	990.47
		2/1/2001	7	338,300	951.99
		3/1/2001	7	155,200	475.93
		4/1/2001	6	135,600	400.93
		5/1/2001	7	1,285,200	3,437.97
		6/1/2001	7	1,474,800	3,906.89
		7/1/2001	7	9,405,600	26,125.91
		8/1/2001	6	2,646,300	7,387.71
		9/1/2001	7	19,154,300	53,144.78
	Customer Class Total		64	35,215,000	$97,556.96
	Customer Class Average		6	3,521,500	$9,755.70
	Inside City Industrial				
		10/1/2000	2	17,854,700	38,833.14
		11/1/2000	2	15,870,300	36,617.90

FY	Customer Class	Date	Count	Consumption	Revenue
		12/1/2000	2	15,836,400	36,639.93
		1/1/2001	2	5,030,000	11,685.21
		2/1/2001	2	10,609,200	24,517.37
		3/1/2001	2	10,769,600	24,886.29
		4/1/2001	2	10,369,000	23,964.91
		5/1/2001	2	14,847,900	34,266.38
		6/1/2001	2	17,486,800	40,335.85
		7/1/2001	2	17,178,000	42,717.65
		8/1/2001	2	17,857,500	44,402.81
		9/1/2001	2	2,371,100	5,996.54
	Customer Class Total		*24*	*156,080,500*	*$364,763.98*
	Customer Class Average		*2*	*13,006,708*	*$30,397.00*
	Inside City MultiFamily				
		10/1/2000	6	1,749,300	4,204.07
		11/1/2000	6	1,401,000	3,100.86
		12/1/2000	11	804,200	1,831.98
		1/1/2001	13	770,600	1,766.86
		2/1/2001	13	1,307,000	2,943.39
		3/1/2001	14	1,480,000	3,332.55
		4/1/2001	15	1,216,500	2,753.66
		5/1/2001	16	2,508,100	5,584.50
		6/1/2001	18	4,231,000	9,367.93
		7/1/2001	20	4,815,100	11,427.17
		8/1/2001	23	7,452,300	17,631.23
		9/1/2001	25	5,221,800	12,398.88
	Customer Class Total		*180*	*32,956,900*	*$76,343.08*
	Customer Class Average		*15*	*2,746,408*	*$6,361.92*
	Outside City Commercial				
		10/1/2000	63	15,607,600	35,570.31
		11/1/2000	63	6,756,600	17,286.56
		12/1/2000	70	4,507,300	11,697.15
		1/1/2001	69	4,863,400	12,684.08
		2/1/2001	67	3,053,600	8,032.83
		3/1/2001	70	2,625,700	7,024.25
		4/1/2001	68	4,018,300	10,446.81
		5/1/2001	72	9,013,200	23,000.02
		6/1/2001	72	16,028,000	40,527.77

FY	Customer Class	Date	Count	Consumption	Revenue
		7/1/2001	72	17,963,500	48,957.65
		8/1/2001	73	26,601,000	72,287.52
		9/1/2001	74	20,397,100	55,548.87
	Customer Class Total		*833*	*131,435,300*	*$342,963.82*
	Customer Class Average		*69*	*10,952,942*	*$28,580.32*
	Outside City Golf				
		1/1/2001	1	1,000	5.82
		2/1/2001	1	900	5.57
		3/1/2001	1	8,600	24.82
		4/1/2001	1	2,300	9.07
		5/1/2001	1	5,300	16.57
		6/1/2001	1	2,700	10.07
		7/1/2001	1	1,900	8.45
		8/1/2001	1	3,000	11.42
		9/1/2001	1	1,000	6.02
	Customer Class Total		*9*	*26,700*	*$97.81*
	Customer Class Average		*1*	*2,967*	*$10.87*
	Fiscal Year Total for All Classes		*20,233*	*2,573,093,350*	*$6,896,183.56*
	Fiscal Year Average for All Classes		*302*	*38,404,378*	*$102,928.11*
1999-00					
	Inside City Commercial				
		10/1/1999	1,360	446,062,800	1,070,770.22
		11/1/1999	1,376	324,014,100	780,495.62
		12/1/1999	1,380	236,435,660	572,086.59
		1/1/2000	1,360	160,481,900	391,144.02
		2/1/2000	1,396	135,119,000	331,169.32
		3/1/2000	1,429	132,458,000	325,049.36
		4/1/2000	1,447	136,721,700	335,149.99
		5/1/2000	1,463	161,749,600	394,835.73
		6/1/2000	1,466	240,830,300	583,212.00
		7/1/2000	1,492	270,566,100	654,163.20
		8/1/2000	1,499	262,521,500	634,927.87
		9/1/2000	1,517	293,980,620	709,959.39
	Customer Class Total		*17,185*	*2,800,941,280*	*$6,782,963.31*
	Customer Class Average		*1,432*	*233,411,773*	*$565,246.94*
	Inside City Industrial				

FY	Customer Class	Date	Count	Consumption	Revenue
		10/1/1999	2	17,791,300	38,695.56
		11/1/1999	2	14,129,400	30,749.24
		12/1/1999	2	13,105,100	28,526.51
		1/1/2000	2	11,620,000	25,303.84
		2/1/2000	2	10,965,900	23,884.44
		3/1/2000	2	10,911,700	23,766.83
		4/1/2000	2	12,832,400	27,934.75
		5/1/2000	2	13,205,600	28,744.59
		6/1/2000	2	18,016,100	39,183.38
		7/1/2000	2	19,388,800	42,162.14
		8/1/2000	2	19,744,500	42,934.01
		9/1/2000	2	20,745,100	45,105.31
	Customer Class Total		*24*	*182,455,900*	*$396,990.60*
	Customer Class Average		*2*	*15,204,658*	*$33,082.55*
	Inside City MultiFamily				
		11/1/1999	2	394,800	954.35
		12/1/1999	3	698,000	1,684.28
		1/1/2000	3	750,600	1,809.47
		2/1/2000	3	352,500	861.99
		3/1/2000	3	316,600	776.56
		4/1/2000	4	433,900	1,062.14
		5/1/2000	5	820,500	1,987.10
		6/1/2000	5	1,244,000	2,995.03
		7/1/2000	5	1,212,800	2,920.77
		8/1/2000	5	1,468,200	3,528.62
		9/1/2000	6	1,992,300	4,782.40
	Customer Class Total		*44*	*9,684,200*	*$23,362.71*
	Customer Class Average		*4*	*880,382*	*$2,123.88*
	Outside City Commercial				
		10/1/1999	51	19,422,200	44,041.76
		11/1/1999	50	16,933,200	38,437.60
		12/1/1999	51	18,748,500	42,555.25
		1/1/2000	50	8,603,100	19,699.08
		2/1/2000	53	6,079,000	14,094.66
		3/1/2000	55	5,843,400	13,550.46
		4/1/2000	55	8,061,900	18,542.09
		5/1/2000	60	10,869,700	24,904.18

FY	Customer Class	Date	Count	Consumption	Revenue
		6/1/2000	59	13,389,600	30,523.21
		7/1/2000	62	20,218,700	46,009.11
		8/1/2000	60	14,607,100	33,304.02
		9/1/2000	60	15,505,900	35,326.32
	Customer Class Total		*666*	*158,282,300*	*$360,987.74*
	Customer Class Average		*56*	*13,190,192*	*$30,082.31*
	Fiscal Year Total for All Classes		*17,919*	*3,151,363,680*	*$7,564,304.36*
	Fiscal Year Average for All Classes		*381*	*67,050,291*	*$160,942.65*
	Grand Total		***207,188***	***26,863,085,560***	***$82,085,432.68***

City of Austin
Issue Paper #6: Rates for Irrigation Customers

SECTION

C

Example of Bill Calculations for Irrigation Rates

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

Typical Monthly Bills at Various Consumption Levels
5/8" Meter

	Consumption (Kgal)						
Description	15	40	60	100	500	1,000	5,000
Single-family Residential	$49.30	$240.05	$392.65	$697.85	$3,749.85	$7,564.85	$38,084.85
Multifamily	57.40	144.15	213.55	352.35	1,740.35	3,475.35	17,355.35
Commercial	68.05	172.55	256.15	423.35	2,095.35	4,185.35	20,905.35
Industrial	63.10	159.35	236.35	390.35	1,930.35	3,855.35	19,255.35
Proposed Irrigation	119.80	310.55	463.15	768.35	3,820.35	7,635.35	38,155.35

Typical Monthly Bills at Various Consumption Levels
3/4" Meter

Description	Consumption (Kgal)						
	15	40	60	100	500	1,000	5,000
Single-family Residential	$50.20	$240.95	$393.55	$698.75	$3,750.75	$7,565.75	$38,085.75
Multifamily	58.30	145.05	214.45	353.25	1,741.25	3,476.25	17,356.25
Commercial	68.95	173.45	257.05	424.25	2,096.25	4,186.25	20,906.25
Industrial	64.00	160.25	237.25	391.25	1,931.25	3,856.25	19,256.25
Proposed Irrigation	120.70	311.45	464.05	769.25	3,821.25	7,636.25	38,156.25

Typical Monthly Bills at Various Consumption Levels
1" Meter

Description	Consumption (Kgal)						
	15	40	60	100	500	1,000	5,000
Single-family Residential	$51.46	$242.21	$394.81	$700.01	$3,752.01	$7,567.01	$38,087.01
Multifamily	59.56	146.31	215.71	354.51	1,742.51	3,477.51	17,357.51
Commercial	70.21	174.71	258.31	425.51	2,097.51	4,187.51	20,907.51
Industrial	65.26	161.51	238.51	392.51	1,932.51	3,857.51	19,257.51
Proposed Irrigation	121.96	312.71	465.31	770.51	3,822.51	7,637.51	38,157.51

Typical Monthly Bills at Various Consumption Levels
1 1/4" Meter

Description	Consumption (Kgal)						
	15	40	60	100	500	1,000	5,000
Single-family Residential	$53.26	$244.01	$396.61	$701.81	$3,753.81	$7,568.81	$38,088.81
Multifamily	61.36	148.11	217.51	356.31	1,744.31	3,479.31	17,359.31
Commercial	72.01	176.51	260.11	427.31	2,099.31	4,189.31	20,909.31
Industrial	67.06	163.31	240.31	394.31	1,934.31	3,859.31	19,259.31
Proposed Irrigation	123.76	314.51	467.11	772.31	3,824.31	7,639.31	38,159.31

Typical Monthly Bills at Various Consumption Levels
1 1/2" Meter

Description	Consumption (Kgal)						
	15	40	60	100	500	1,000	5,000
Single-family Residential	$55.06	$245.81	$398.41	$703.61	$3,755.61	$7,570.61	$38,090.61
Multifamily	63.16	149.91	219.31	358.11	1,746.11	3,481.11	17,361.11
Commercial	73.81	178.31	261.91	429.11	2,101.11	4,191.11	20,911.11
Industrial	68.86	165.11	242.11	396.11	1,936.11	3,861.11	19,261.11
Proposed Irrigation	125.56	316.31	468.91	774.11	3,826.11	7,641.11	38,161.11

Typical Monthly Bills at Various Consumption Levels
2" Meter

	Consumption (Kgal)						
Description	15	40	60	100	500	1,000	5,000
Single-family Residential	$58.66	$249.41	$402.01	$707.21	$3,759.21	$7,574.21	$38,094.21
Multifamily	66.76	153.51	222.91	361.71	1,749.71	3,484.71	17,364.71
Commercial	77.41	181.91	265.51	432.71	2,104.71	4,194.71	20,914.71
Industrial	72.46	168.71	245.71	399.71	1,939.71	3,864.71	19,264.71
Proposed Irrigation	129.16	319.91	472.51	777.71	3,829.71	7,644.71	38,164.71

Typical Monthly Bills at Various Consumption Levels
3" Meter

	Consumption (Kgal)						
Description	15	40	60	100	500	1,000	5,000
Single-family Residential	$74.50	$265.25	$417.85	$723.05	$3,775.05	$7,590.05	$38,110.05
Multifamily	82.60	169.35	238.75	377.55	1,765.55	3,500.55	17,380.55
Commercial	93.25	197.75	281.35	448.55	2,120.55	4,210.55	20,930.55
Industrial	88.30	184.55	261.55	415.55	1,955.55	3,880.55	19,280.55
Proposed Irrigation	145.00	335.75	488.35	793.55	3,845.55	7,660.55	38,180.55

Typical Monthly Bills at Various Consumption Levels
4" Meter

Description	Consumption (Kgal)						
	15	40	60	100	500	1,000	5,000
Single-family Residential	$92.50	$283.25	$435.85	$741.05	$3,793.05	$7,608.05	$38,128.05
Multifamily	100.60	187.35	256.75	395.55	1,783.55	3,518.55	17,398.55
Commercial	111.25	215.75	299.35	466.55	2,138.55	4,228.55	20,948.55
Industrial	106.30	202.55	279.55	433.55	1,973.55	3,898.55	19,298.55
Proposed Irrigation	163.00	353.75	506.35	811.55	3,863.55	7,678.55	38,198.55

City of Austin
Issue Paper #6: Rates for Irrigation Customers

SECTION

D

Executive Team Revised Evaluation Criteria Memorandum

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

2908-083 / POR

D. Executive Team Revised Evaluation Criteria Memorandum

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

MEMORANDUM

To: Austin Water Utility Executive Team **Date:** December 28, 2007

From: Red Oak Consulting

Re: Revised Evaluation Criteria

Introduction

The Austin Water Utility (AWU) retained Red Oak Consulting (Red Oak) to conduct a water and wastewater cost-of-service rate study. An important tool for analyzing and recommending appropriate alternatives or policies is to have an objective set of evaluation criteria that meets AWU's needs.

During our recent meeting with AWU, Red Oak presented a list of preliminary evaluation criteria. During the presentation, AWU revised the criteria to better meet the needs of the citizens of Austin. This memorandum presents an overview of the selected evaluation criteria.

Description of Evaluation Criteria

The evaluation criteria are organized into five categories. These categories include:

- Implementation,
- Equity,
- Customer impact,
- Conservation, and
- Financial.

The following table presents these categories and the revised criteria within those categories.

• 12670 NW Barnes Road • Suite 104 • Portland, OR 97229 • T 503-352-0900 • F 503-644-2414 • www.redoakconsulting.com

Implementation	Equity	Customer	Conservation	Financial
Administrative Burden	Interclass	Affordability	Average-Day Savings	Revenue Sufficiency
Public Understanding	Intraclass	Economic Development	Peak-Season Savings	Revenue Stability
Public and Political Acceptance	Inter-generational	Rate Shock/ Volatility	Peak-Day Savings	Rate Stability
Risk of Implementation	Inside/ Outside City	Understand Bill	Sustainability	Rate Predictability
Legal Defensibility	Industry Standards			Financial Risk
Policy Durability				

Following is a brief description of each criterion by category.

Implementation

Criteria included in the implementation category are designed to compare the issues of implementing alternatives. Due to the nature of the criteria within this category, and the lack of an appropriate quantitative measure tool for many of them, these criteria are evaluated qualitatively.

Administrative Burden

The amount of administrative burden required can vary greatly among alternatives. Additional data collection needs, changes to the accounting and budgeting system, or additional staff needs and training are a few examples of how administrative burden among alternatives can differ.

Public Understanding

The public's ability to understand alternatives, the process by which they were developed, and the resulting cost consequences are imperative for successful implementation.

Public and Political Acceptance

The selected alternative should be one the public and the City's elected officials will accept. Acceptance of a new alternative is typically tied to community values and goals. This criterion typically requires gathering information on likely customer responses and the involvement of elected officials.

Risk of Implementation

The success of implementing any new alternative involves a degree of risk. The selected alternative should minimize risk that it may not be able to be implemented or can only be implemented outside an acceptable timeframe.

Legal Defensibility

The proposed alternative must be legally defensible if challenged.

Policy Durability

The proposed alternative should remain viable as the utility's situation changes over time. Policies that are more likely to fair well considering an uncertain future are considered relatively more durable and receive a higher rating for *Policy Durability*.

Equity

Interclass Equity

This type of equity assures that the alternative distributes the costs of services across customer classes in proportion to the cost of serving each class. Each customer class pays its fair share and no class provides or receives a subsidy from another class.

Intraclass Equity

This type of equity recognizes that alternatives will vary in their ability to assign costs to customers equitably within the same customer class.

Intergenerational Equity

This type of equity recognizes that alternatives will vary in the degree which they compensate existing customers for investments already made in the system that will benefit new customers. Usually, intergenerational equity is managed by implementing appropriate system development charge methodologies.

Inside/Outside City

This type of equity measures the proportionality of costs to revenue for inside- and outside-city customers.

Industry Standards

Industry standards have evolved to ensure the integrity of the cost-of-service process. The standards focus largely on ensuring proportionality of costs and revenue. These industry standards may guide the selection of alternatives.

Customer Impact

The customer impacts focus on the affects of an alternative on customers. Some criteria are very subjective and often require the direct participation of policymakers. Others, (e.g., rate shock), can be measured quantitatively.

Affordability

In addition to promoting the health, general welfare, and fire protection needs of its customers, many utilities were formed by local governments to ensure that a minimum level of service is available to users who might not otherwise be able to afford them. This criterion focuses on the ability of residential customers to afford services.

Economic Development

Water and sewer services are vital to local economic development. Also, local businesses are often affected by the cost of utility services. This criterion measures the relative impacts on economic development of the alternatives.

Rate Shock/Volatility

Rate shock measures the significance of changes in customer bills because of a proposed alternative. Large, sudden increases in bills can impose economic difficulties that are harmful to local governments, businesses, and residents.

Understandability of Bill

Public understanding of the service bill is an important criterion to consider when examining the likely customer impact of alternatives. Specifically, this criterion is tied to the complexity of the bill. Simpler rate designs will likely generate bills that are easier to read and understand by customers.

Conservation

Water savings is often a primary objective of modern rate designs. However, water savings can accumulate differently based on the type of rate structure selected. Therefore, the conservation criteria are selected to measure the types of water savings most important to AWU.

Often conservation criteria are considered to apply exclusively to water, and generally the criteria are more relevant to water. In some circumstances, however, conservation of water will reduce the cost of wastewater treatment.

Average-Day Savings

Some policies provide conservation incentives regardless of the time of year. These policies are best suited to reducing a utility's average-day water savings. These policies generally have greater impacts on wastewater flows than the criteria that include a focus on peaking. This criterion measures the reduction in average-day demands.

Peak-Season Savings

A commonly used criterion is the reduction in peak usage because reducing peak demands often results in a reduction in long-term capital costs. One factor driving the sizing of certain parts of a water system is peak-season demands. Policies that affect the amount of outdoor water use can impact peak-season savings.

Peak-Day Savings

Like peak-season savings, reduction in peak-day demands can also result in reductions of long-term capital costs.

Sustainability

The proposed alternative should promote the sustainability of the region's resources. Again, this may relate to promoting efficiency by the selected alternative, or in by the extent which growth is required to pay for itself.

Financial

Revenue Sufficiency

The proposed alternative needs to provide sufficient revenues to meet AWU's capital-related revenue requirements (i.e., fund the capital projects needs of AWU.) All alternatives proposed in this study will generate sufficient revenues for the utilities in the long run. However, the amount of system development fees generated as a source of revenues will vary between alternatives. Some alternatives may require additional revenues from rates to meet AWU's capital plan. Also this criterion measures the impact of assumptions on AWU's service expansion policies.

Revenue Stability

The proposed alternative should minimize fluctuations in revenues due to changes in growth or other factors outside the control of AWU. This criterion measures the degree of volatility in resulting revenues from a propose alternative.

Rate Stability

Rate stability measures the volatility in the rates from year to year. A more stable rate increases at a steady pace and avoids large, one-time adjustments. Customers have a difficult time adjusting their budgets when rates are unstable.

Rate Predictability

The proposed alternative should minimize the unpredictability in the total bill and fee. A customer will have a hard time predicting his/her bill and fees in the future if changes in use cause significant changes in the total bill. In contrast to the revenue sufficiency criterion, where the criterion is evaluated from the point of view of the utility, this criterion is evaluated from a customer's perspective.

Financial Risk

Notably for growth-related improvements, AWU takes on financial risk when anticipating growth and the expectation that new customers will connect to its systems, thereby helping to fund the improvements. The proposed alternative should minimize the risk AWU incurs when adding new infrastructure to its systems.

City of Austin
Issue Paper #6: Rates for Irrigation Customers

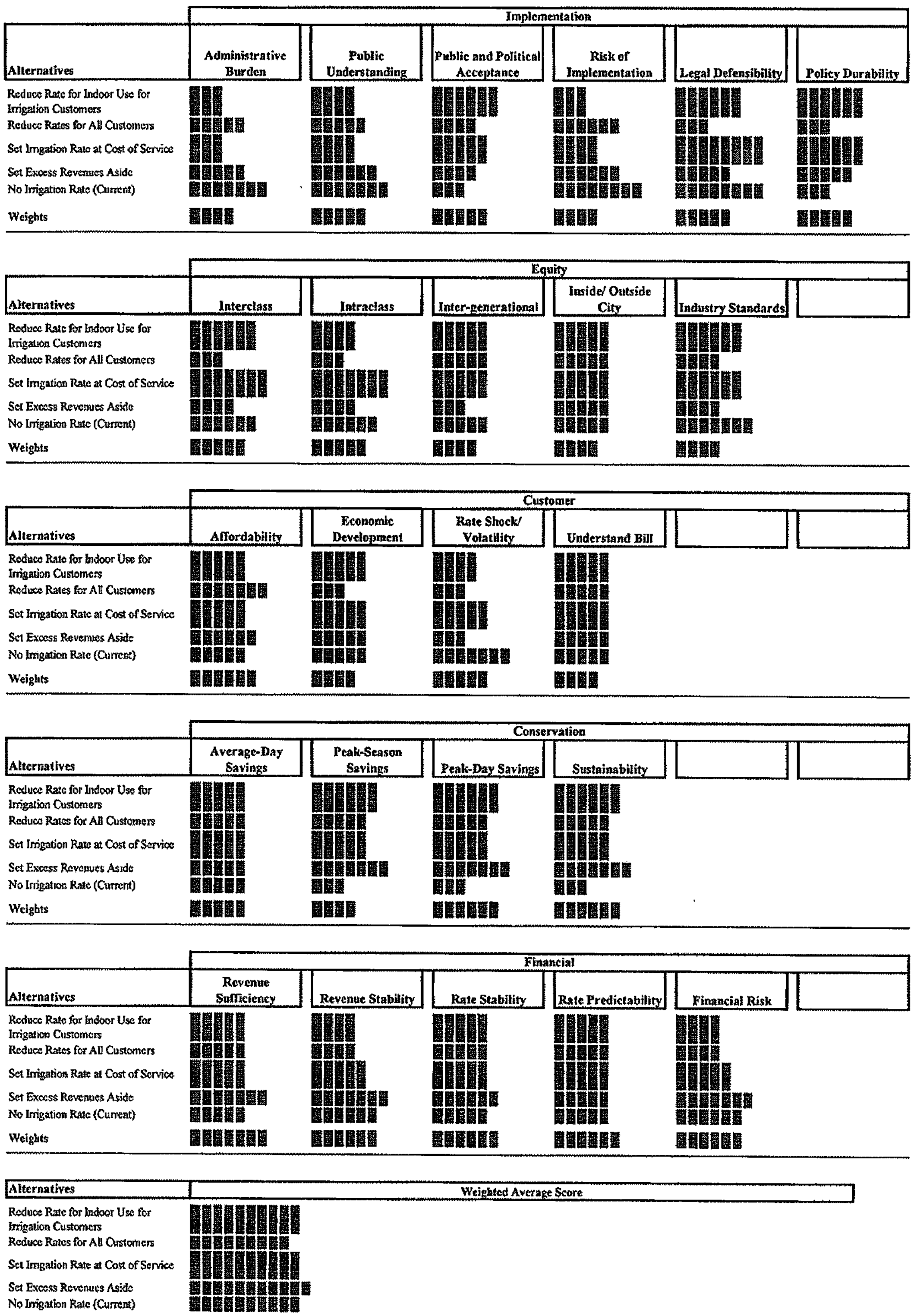
SECTION

E

Evaluation of Alternatives

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

Evaluations Based on Average Ratings
Use of Excess Revenues from Irrigation Rates



Average Ratings
Use of Excess Revenues from Irrigation Rates

	Implementation					
Alternatives	Administrative Burden	Public Understanding	Public and Political Acceptance	Risk of Implementation	Legal Defensibility	Policy Durability
Reduce Rate for Indoor Use for Irrigation Customers	3.0	4.0	5.9	3.0	5.9	5.9
Reduce Rates for All Customers	4.9	4.9	4.0	5.9	3.0	3.0
Set Irrigation Rate at Cost of Service	3.0	4.0	4.9	4.0	7.9	5.9
Set Excess Revenues Aside	4.9	5.9	4.0	5.9	4.9	4.9
No Irrigation Rate (Current)	6.9	6.9	3.0	7.9	7.9	3.0
Weights Rated from 0 to 10 (10 most important)	4.0	5.2	5.2	4.0	4.8	4.8

	Equity					
Alternatives	Interclass	Intraclass	Inter-generational	Inside/ Outside City	Industry Standards	
Reduce Rate for Indoor Use for Irrigation Customers	5.9	4.0	4.9	4.9	5.9	
Reduce Rates for All Customers	3.0	3.0	4.9	4.9	4.0	
Set Irrigation Rate at Cost of Service	6.9	6.9	4.9	4.9	5.9	
Set Excess Revenues Aside	4.0	4.0	3.0	4.9	4.0	
No Irrigation Rate (Current)	5.9	5.9	4.9	4.9	6.9	
Weights Rated from 0 to 10 (10 most important)	5.3	4.9	4.1	3.6	4.0	

	Customer					
Alternatives	Affordability	Economic Development	Rate Shock/ Volatility	Understand Bill		
Reduce Rate for Indoor Use for Irrigation Customers	4.9	4.9	4.0	4.9		
Reduce Rates for All Customers	6.9	3.0	3.0	4.9		
Set Irrigation Rate at Cost of Service	4.9	4.9	4.9	4.9		
Set Excess Revenues Aside	5.9	4.9	3.0	4.9		
No Irrigation Rate (Current)	4.9	4.9	6.9	4.9		
Weights Rated from 0 to 10 (10 most important)	5.8	4.1	4.6	3.9		

	Conservation					
Alternatives	Average-Day Savings	Peak-Season Savings	Peak-Day Savings	Sustainability		
Reduce Rate for Indoor Use for Irrigation Customers	4.9	5.9	5.9	5.9		
Reduce Rates for All Customers	4.9	4.9	4.9	4.9		
Set Irrigation Rate at Cost of Service	4.9	4.9	4.9	4.9		
Set Excess Revenues Aside	4.9	6.9	6.9	6.9		
No Irrigation Rate (Current)	4.9	3.0	3.0	3.0		
Weights Rated from 0 to 10 (10 most important)	4.8	4.5	5.9	5.6		

	Financial					
Alternatives	Revenue Sufficiency	Revenue Stability	Rate Stability	Rate Predictability	Financial Risk	
Reduce Rate for Indoor Use for Irrigation Customers	4.9	4.0	4.9	4.9	4.0	
Reduce Rates for All Customers	4.9	4.0	4.9	4.9	4.0	
Set Irrigation Rate at Cost of Service	4.9	4.9	4.9	4.9	4.9	
Set Excess Revenues Aside	6.9	6.9	5.9	4.9	6.9	
No Irrigation Rate (Current)	4.9	5.9	4.9	4.9	5.9	
Weights Rated from 0 to 10 (10 most important)	6.7	6.3	5.9	5.9	6.1	

Alternatives	Weighted Average Score
Reduce Rate for Indoor Use for Irrigation Customers	590
Reduce Rates for All Customers	531
Set Irrigation Rate at Cost of Service	619
Set Excess Revenues Aside	647
No Irrigation Rate (Current)	625

Evaluations Based on Average Ratings
Appropriate Level for Irrigation Rates

	Implementation					
Alternatives	Administrative Burden	Public Understanding	Public and Political Acceptance	Risk of Implementation	Legal Defensibility	Policy Durability
Highest Residential Block Rate	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Cost of Service	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
No Irrigation Rate	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Weights	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

	Equity					
Alternatives	Interclass	Intraclass	Inter-generational	Inside/ Outside City	Industry Standards	
Highest Residential Block Rate	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
Cost of Service	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
No Irrigation Rate	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
Weights	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

	Customer					
Alternatives	Affordability	Economic Development	Rate Shock/ Volatility	Understand Bill		
Highest Residential Block Rate	[redacted]	[redacted]	[redacted]	[redacted]		
Cost of Service	[redacted]	[redacted]	[redacted]	[redacted]		
No Irrigation Rate	[redacted]	[redacted]	[redacted]	[redacted]		
Weights	[redacted]	[redacted]	[redacted]	[redacted]		

	Conservation					
Alternatives	Average-Day Savings	Peak-Season Savings	Peak-Day Savings	Sustainability		
Highest Residential Block Rate	[redacted]	[redacted]	[redacted]	[redacted]		
Cost of Service	[redacted]	[redacted]	[redacted]	[redacted]		
No Irrigation Rate	[redacted]	[redacted]	[redacted]	[redacted]		
Weights	[redacted]	[redacted]	[redacted]	[redacted]		

	Financial					
Alternatives	Revenue Sufficiency	Revenue Stability	Rate Stability	Rate Predictability	Financial Risk	
Highest Residential Block Rate	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
Cost of Service	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
No Irrigation Rate	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
Weights	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

Alternatives	Weighted Average Score
Highest Residential Block Rate	[redacted]
Cost of Service	[redacted]
No Irrigation Rate	[redacted]

Average Ratings
Appropriate Level for Irrigation Rates

	Implementation					
Alternatives	**Administrative Burden**	**Public Understanding**	**Public and Political Acceptance**	**Risk of Implementation**	**Legal Defensibility**	**Policy Durability**
Highest Residential Block Rate	5.9	4.9	6.9	4.9	3.9	4.9
Cost of Service	3.9	3.9	4.9	3.9	6.9	5.9
No Irrigation Rate	6.9	4.9	2.9	6.9	5.9	2.9
Weights Rated from 0 to 10 (10 most important)	4.0	5.2	5.2	4.0	4.8	4.8

	Equity					
Alternatives	**Interclass**	**Intraclass**	**Inter-generational**	**Inside/ Outside City**	**Industry Standards**	
Highest Residential Block Rate	2.9	2.9	4.9	4.9	2.9	
Cost of Service	6.9	6.9	4.9	4.9	6.9	
No Irrigation Rate	4.9	4.9	4.9	4.9	4.9	
Weights Rated from 0 to 10 (10 most important)	5.3	4.9	4.1	3.6	4.0	

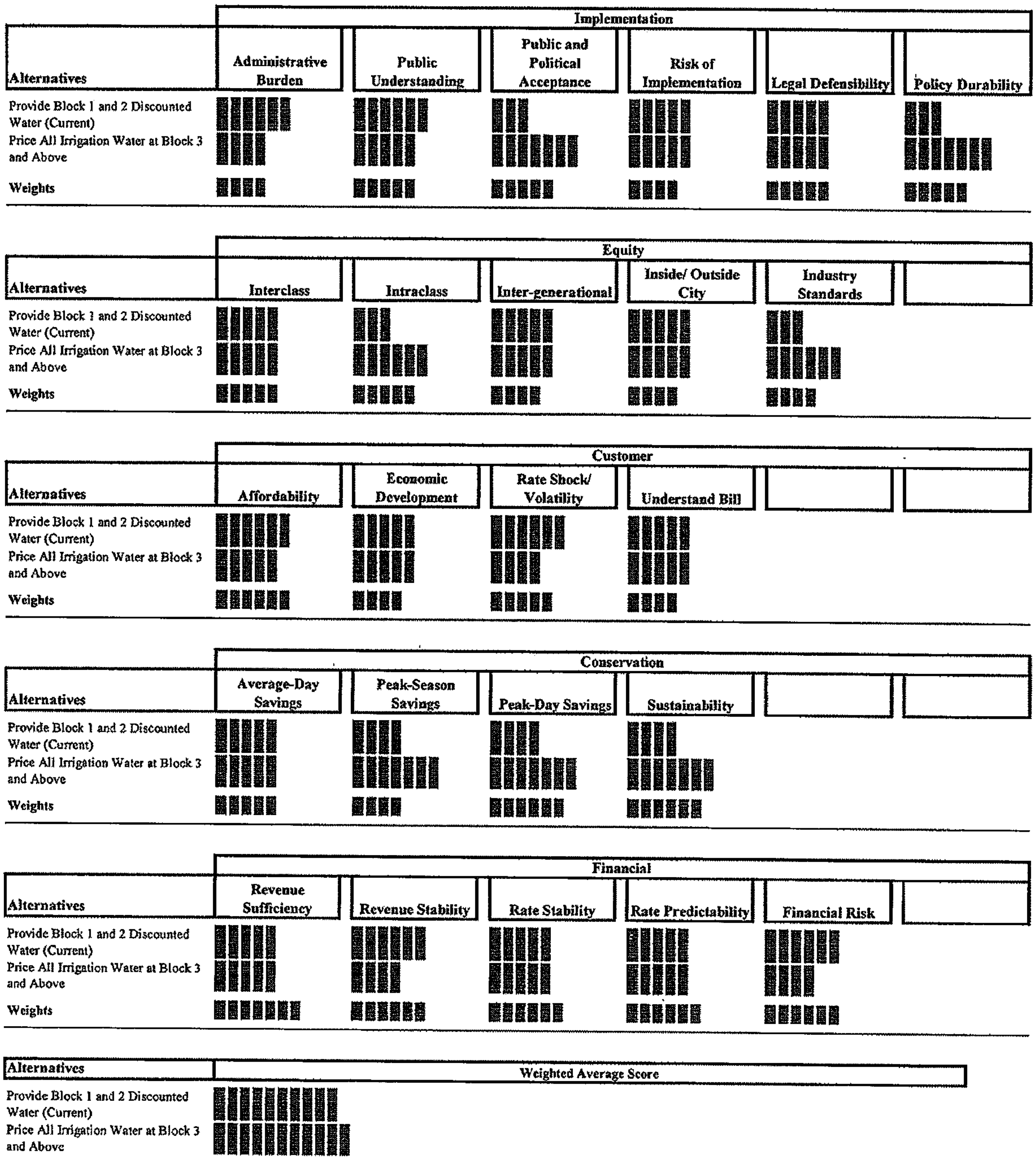
	Customer					
Alternatives	**Affordability**	**Economic Development**	**Rate Shock/ Volatility**	**Understand Bill**		
Highest Residential Block Rate	5.9	3.9	2.9	4.9		
Cost of Service	4.9	4.9	3.9	4.9		
No Irrigation Rate	3.9	5.9	5.9	4.9		
Weights Rated from 0 to 10 (10 most important)	5.8	4.1	4.6	3.9		

	Conservation					
Alternatives	**Average-Day Savings**	**Peak-Season Savings**	**Peak-Day Savings**	**Sustainability**		
Highest Residential Block Rate	4.9	6.9	6.9	6.9		
Cost of Service	4.9	5.9	5.9	5.9		
No Irrigation Rate	4.9	3.9	3.9	3.9		
Weights Rated from 0 to 10 (10 most important)	4.8	4.5	5.9	5.6		

	Financial					
Alternatives	**Revenue Sufficiency**	**Revenue Stability**	**Rate Stability**	**Rate Predictability**	**Financial Risk**	
Highest Residential Block Rate	4.9	3.9	3.9	4.9	3.9	
Cost of Service	4.9	4.9	4.9	4.9	4.9	
No Irrigation Rate	4.9	5.9	5.9	4.9	5.9	
Weights Rated from 0 to 10 (10 most important)	6.7	6.3	5.9	5.9	6.1	

Alternatives	**Weighted Average Score**
Highest Residential Block Rate	577
Cost of Service	629
No Irrigation Rate	594

Evaluations Based on Average Ratings
Single-family Residential Irrigation Blocks



Average Ratings
Single-family Residential Irrigation Blocks

Alternatives	Implementation					
	Administrative Burden	Public Understanding	Public and Political Acceptance	Risk of Implementation	Legal Defensibility	Policy Durability
Provide Block 1 and 2 Discounted Water (Current)	5.9	5.9	3.0	4.9	4.9	3.0
Price All Irrigation Water at Block 3 and Above	4.0	4.9	6.9	4.9	4.9	6.9
Weights Rated from 0 to 10 (10 most important)	4.0	5.2	5.2	4.0	4.8	4.8

Alternatives	Equity					
	Interclass	Intraclass	Inter-generational	Inside/ Outside City	Industry Standards	
Provide Block 1 and 2 Discounted Water (Current)	4.9	3.0	4.9	4.9	3.0	
Price All Irrigation Water at Block 3 and Above	4.9	5.9	4.9	4.9	5.9	
Weights Rated from 0 to 10 (10 most important)	5.3	4.9	4.1	3.6	4.0	

Alternatives	Customer					
	Affordability	Economic Development	Rate Shock/ Volatility	Understand Bill		
Provide Block 1 and 2 Discounted Water (Current)	5.9	4.9	5.9	4.9		
Price All Irrigation Water at Block 3 and Above	4.9	4.9	4.0	4.9		
Weights Rated from 0 to 10 (10 most important)	5.8	4.1	4.6	3.9		

Alternatives	Conservation					
	Average-Day Savings	Peak-Season Savings	Peak-Day Savings	Sustainability		
Provide Block 1 and 2 Discounted Water (Current)	4.9	4.0	4.0	4.0		
Price All Irrigation Water at Block 3 and Above	4.9	6.9	6.9	6.9		
Weights Rated from 0 to 10 (10 most important)	4.8	4.5	5.9	5.6		

Alternatives	Financial					
	Revenue Sufficiency	Revenue Stability	Rate Stability	Rate Predictability	Financial Risk	
Provide Block 1 and 2 Discounted Water (Current)	4.9	5.9	4.9	4.9	5.9	
Price All Irrigation Water at Block 3 and Above	4.9	4.0	4.9	4.9	4.0	
Weights Rated from 0 to 10 (10 most important)	6.7	6.3	5.9	5.9	6.1	

Alternatives	Weighted Average Score
Provide Block 1 and 2 Discounted Water (Current)	571
Price All Irrigation Water at Block 3 and Above	632

APPENDIX

A

Executive Team Briefing Minutes

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

MEETING MINUTES

CITY OF AUSTIN
2007 COST OF SERVICE AND RATE STUDY
Executive Team Briefing PIC Meeting #1

Meeting Location: City of Austin Waller Creek Center

Date & Time: November 27, 2007; 2:15 p.m.

Attendees: David Anders, Mike Castillo, Rusty Cobern, Darrel Culberson, Rick Giardina, Jennifer Ivey, Jimmy Jackson, Robena Jackson, Paul Matthews, Denise McDonald, Greg Meszaros, Charles Schoening,

The following is a summary of the meeting notes from the Executive Team Briefing PIC Meeting #1 which was held on November 21, 2007. The notes below constitute Red Oak's understanding of the items discussed, key decisions made, and action items assigned at the meeting.

- Ground rules need to provide process for public participation.
- City would like sign n sheet for public comment period. Public will be allowed to ask questions.
- PIC members should designate alternatives in advance of workshop if unable to attend.
- PIC member should provide comments from workshop to Mike Castillo within five days of workshop.
- Red Oak will poll attendees' experience with cost-of-services studies.
- Red Oak will provide references to M1 and WEF manuals as appropriate for PIC members' education.
- Red Oak will provide a memo to PIC members to explain the evaluation criteria selected by the Executive Team.
- Red Oak will ask PIC members' preference for PIC workshop on Mondays or Tuesdays. Executive Team briefings will be held on Tuesday morning.
- The City will provide the website link to the PIC members. Red Oak will inform PIC member that all comments will be posted on the website for public information.