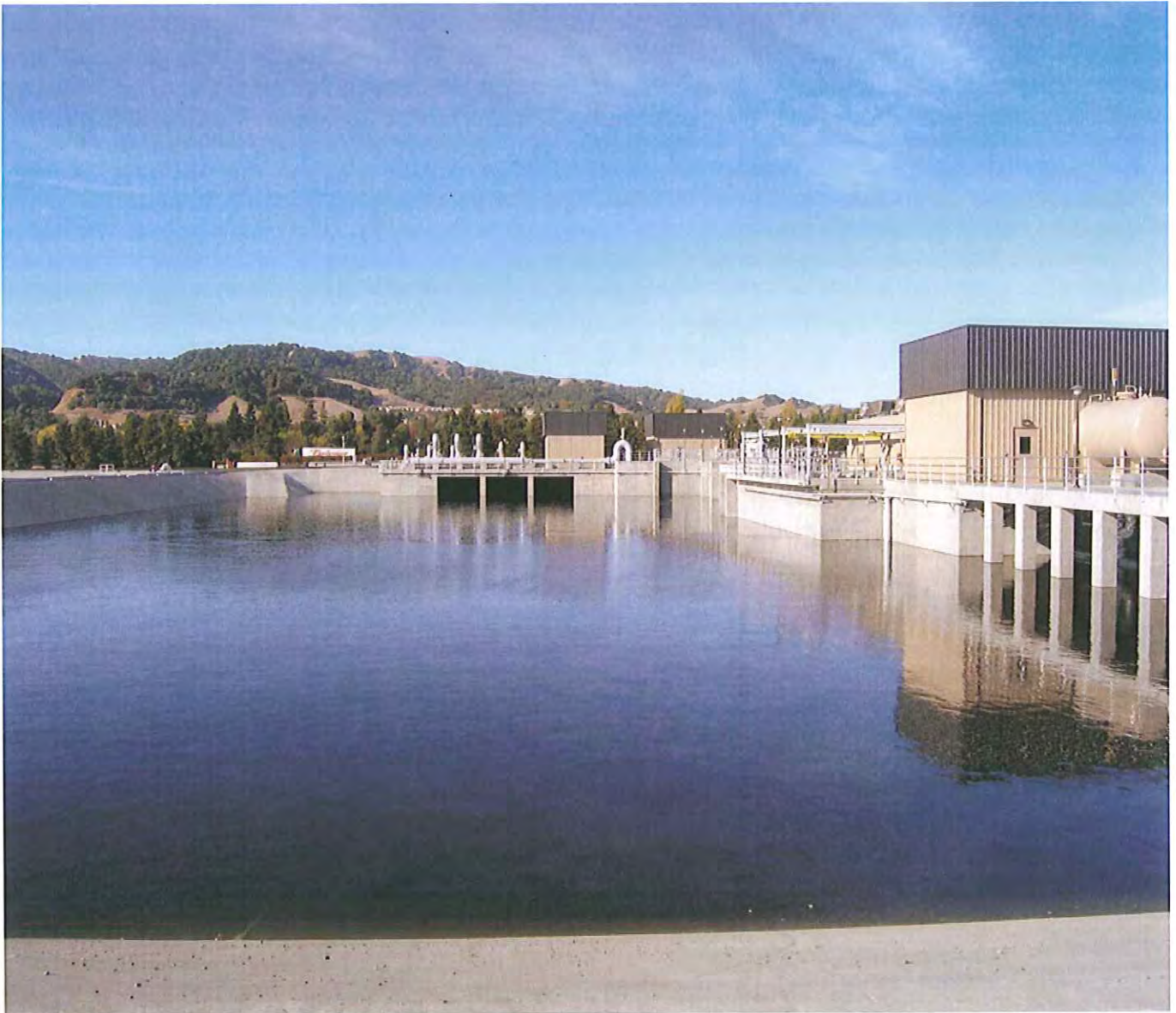


DERWA

REPORT OF OPERATIONS

JANUARY – DECEMBER 2010

Final



Prepared by Dublin San Ramon Services District

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**REPORT OF OPERATIONS
DERWA RECYCLED WATER SYSTEM
December 2010**

1. OVERVIEW

1.1 Summary

The following report covers the operation of the recycled water facilities from January 1 through December 31, 2010, for the San Ramon Valley Recycled Water Program (SRVRWP). Operations of the DERWA joint use facilities began in 2006.

During the period a total of 2,174 acre-feet (708 million gallons) of recycled water were produced and distributed to DSRSD's and EBMUD's customers. Customer demands as measured for each pressure zone totaled 2,127 acre-feet (693 million gallons). Of this amount, DSRSD's customers used 1,714 acre-feet (558 million gallons), and EBMUD's customers used 413 acre-feet (135 million gallons). The difference between the quantity of recycled water produced and the customer demand is due to a combination of factors, including:

- The annual flushing and draining procedure as a means of eliminating seasonal nitrified water, during which the contents of the recycled water reservoirs are drained back to DSRSD's WWTP for reprocessing or discharge
- Spills of recycled water, and all significant spills are reported to the RWQCB on DSRSD's self monitoring reports
- System losses and meter errors

On June 28, 2010 the demand for recycled water set a new record with a maximum daily delivery of 5.53 MGD. This demand topped the previous record of 5.34 MGD, which was set on June 29, 2009. The total cost to operate the system during CY 2010 was \$1,114,330, averaging \$513 per acre-foot delivered. The budget for FYE 2011 anticipated recycled water deliveries totaling 2,830 acre-feet (922 million gallons) and a unit cost of \$544 per acre-foot. The budget for FYE 2010 anticipated recycled water deliveries totaling 3,100 acre-feet (1,010 million gallons) and a unit cost of \$493 per acre-foot. The CY 2010 actual cost of \$513 per acre-foot falls between the budgeted costs for the two fiscal years. Recycled water demands were significantly less than what was budgeted, which is due in part to the sluggish economy and the slump in the housing and construction market. While fixed costs have tracked close to the budget, variable costs for production and distribution have been less than budgeted.

Recycled water deliveries during 2010 were even less than in 2009. Additional reasons that recycled water deliveries were lower than expected in 2010 include:

- Spring rains in April and May resulted in a late ramp-up of recycled water demands
- The summer of 2010 was unseasonably cool, rather than the more usual hot and windy Tri-Valley weather
- The contractor hired by DERWA and the Army Corps of Engineers to build the final segment of the Bollinger Canyon Road pipeline and PS R200A failed to complete both projects in 2009, which prevented Chevron, Bishop Ranch, Canyon Lakes, and a number of other significant EBMUD customers from being converted to recycled water during the 2010 irrigation season as originally anticipated. Although Chevron began using recycled water late in August 2010, their usage did not reflect the hottest part of the season.

During the calendar year full Regional Water Quality Control Board permit compliance was maintained. Recycled water production and demand is summarized in Table 1.

TABLE 1
DERWA System: Actual 2010 Season Demand Totals

Month	Production		Actual Recycled Water Demand			
	SF-UV MG	MF-UV MG	Total MGD	Peak MGD	MG	AF
Jan-10	0.00	6.12	0.17	0.28	5.38	16.51
Feb-10	0.00	3.33	0.13	0.25	3.66	11.24
Mar-10	0.00	13.94	0.38	1.27	11.82	36.27
Apr-10	0.87	16.87	0.55	1.13	16.41	50.37
May-10	70.74	0.24	2.25	3.08	69.62	213.68
Jun-10	116.29	3.24	3.84	5.53	115.24	353.69
Jul-10	136.26	4.98	4.54	5.15	140.70	431.82
Aug-10	138.88	1.00	4.34	5.46	134.67	413.32
Sep-10	102.34	5.88	3.69	4.83	110.67	339.67
Oct-10	59.20	0.78	1.98	3.55	61.37	188.34
Nov-10	0.00	21.08	0.55	1.28	16.40	50.35
Dec-10	0.00	6.14	0.23	0.63	6.99	21.44
AVG	52.05	6.97	1.89			
TOTAL	624.58	83.60			692.9	2,126.7
MIN	0.00	0.24	0.13	0.25	3.7	11.2
MAX	138.88	21.08	4.54	5.53	140.7	431.8

1.2 Regulatory Approval and Permitting

The treatment and distribution system was operated under a General Water Reuse Permit (Board Order No. 96-011) issued by the San Francisco Bay Regional Water Quality Control Board. In 2005 a Title 22 Conformed Engineering Report and Notice of Intent (NOI) was approved by the California Department of Public Health (CDPH). The Conformed Engineering Report describes the treatment to be provided, as well as details concerning permitting, distribution, and reuse. In 2007 CDPH granted approval for the sand filter ultraviolet disinfection (SF-UV) system to operate up to the design capacity of 9.7 MGD.

The micro-filter ultraviolet disinfection (MF-UV) system was used during the winter months when the demand for recycled water ceased requiring daily production, or when the daily demand dropped below about 2.0 MGD, which is the lower design parameter for operating the SF-UV system. The MF-UV system was also used on occasion during the summer months to supplement SF-UV production during times when secondary process upsets and/or maintenance needs interrupted or reduced SF-UV production.

1.3 2010 Season Highlights

January 2010: During the month staff negotiated with Wedeco, the manufacturer of the SF-UV system, to resolve reliability issues related to the lamps themselves. After operating through four irrigation seasons the Wedeco UV system needed a substantial replacement of bulbs and wiper assemblies to maintain performance. During 2009, frequent lamp failures significantly impacted operational flexibility. To compensate for these problems, the operating staff resorted to leaving the SF-UV lamps on continuously, which increased O&M costs for electricity. Wedeco discovered a flaw in the design of the UV lamps that was causing the premature failure of the original UV lamps. Wedeco agreed to replace all 600 lamps in Channel No. 1 at no cost to DERWA. WEDECO also agreed to provide replacement lamps for Channel No. 2 at a discounted price.

March 2010: The Recycled Water Program Annual Report for the 2009 Irrigation Season was submitted to the Regional Water Quality Control Board (RWQCB) and the California Department of Public Health. The submission of the report was done in compliance with the reporting requirements of the RWQCB General Water Reuse Order 96-011 and applicable provisions of the California Code of Regulations Title 22.

On March 25 staff from DSRSD and EBMUD participated in an all-day communications roundtable exercise designed to improve overall responses to various problems and issues that might arise. The exercise also provided participants with an update on recycled water system construction and growth projections.

The annual draining and refilling of the recycled water reservoirs was postponed until April after the Bridges Golf Course staff announced that they were planning turf grass maintenance during March that would require higher than normal levels of irrigation.

April 2010: On April 7 staff completed the annual draining and refilling of reservoirs R100 and R200. The reservoirs were drained to remove recycled water that had nitrified during the winter months, and then the reservoirs were refilled with fresh recycled water containing a higher than normal chlorine residual. Some portions of the DERWA backbone piping were inadvertently dewatered during this procedure, which staff normally tries to avoid if possible. A total of 1.39 million gallons of recycled water were drained back to the Wastewater Treatment Plant. The timing for the procedure was selected so that the draining and refilling occurred with minimal inconvenience or interruption of service to customers.

Staff completed the replacement of all of the lamps in Channel No. 1 on the Wedeco UV system, as previously noted. The work included the replacement of 600 UV lamps in Channel No. 1, and the replacement of lamps in 3 of the 5 banks in Channel No. 2. Wedeco service technicians provided service support during the work. Staff also repaired or replaced a number of the lamp wiper assemblies.

May 2010: On May 1 the SF-UV system was placed in operation due to warmer weather and increasing seasonal demands. The MF-UV system was turned off and placed in standby.

Bridges Golf Course advised staff that a lab analysis they had performed on the recycled water they were receiving showed a pH of 8.2, and they expressed concern that the pH level could be causing them to use more nitrogen on the golf course.

June 2010: Recycled water demand peaked on June 28 when a daily flow of 5.53 MGD was delivered to customers, setting a record which topped the previous record of 5.34 MGD set on June 29 the previous year.

July 2010: The new Bollinger Canyon pipeline was finally completed, and DSRSD staff arranged to have the pipeline flushed with recycled water to remove accumulations of gravel and dirt left over from construction. The pipeline was flushed several times into a series of Baker tanks, which were then drained into a nearby CCCSD sewer. DSRSD staff also worked with EBMUD staff to flush EBMUD's distribution pipeline to the Chevron campus.

August 2010: On August 8 the Chevron corporate campus at Bishop Ranch began using recycled water for irrigation. Chevron estimated their annual usage would be about 33 MG of recycled water. Staff traded correspondence with Chevron concerning their questions about ammonia in recycled water related to possibly using recycled water for cooling tower makeup.

September 2010: Chevron began experiencing problems with a pressure regulating valve (PRV) downstream of their metered connection, which allowed the recycled water pressure inside their facility to slowly increase over time until it matched the upstream pressure, and the spike in pressure resulted in damage to some of their piping. At the request of EBMUD, DSRSD staff provided assistance to Chevron by working with the manufacturer of the PRV. DSRSD staff provided advice to Chevron for determining a resolution to their problem.

October 2010: On October 29 recycled water demands decreased to the point where the SF-UV system was removed from service and placed in standby. The MF-UV system was placed in service for the winter, and was only operated on an as-needed basis to provide enough recycled water to meet customer demands.

JDH Corrosion Consultants completed the annual survey of the DERWA Iron Horse Trail stray voltage mitigation system, and determined that the system was operating properly. JDH noted some concern regarding damage to test stations from grass mowing operations that needed to be addressed.

The sodium hypochlorite addition system was placed in operation at PSR 200B to begin boosting chlorine residuals in R200.

November 2010: DERWA accepted ownership of Pump Station R200A from the US Army Corps of Engineers. DSRSD staff began alternating between using PSR 200A and PSR 200B to maintain appropriate levels in R200.

1.4 2011 Goals

During 2011 the goals for DSRSD as the operator of the DERWA system will include:

- Determine how best to repair mower damage to air relief valves and stray voltage mitigation test stations along the Iron Horse Trail, and work with DERWA to fund and implement the repairs. EBMUD engineering is currently working on a design for this.
- Complete the testing of PACL dosage rates to determine the optimum dosage to be matched to secondary turbidity, as a means of minimizing chemical costs.
- Minimize or prevent the occurrence of secondary treatment process upsets that limit the ability of the treatment system to produce sufficient quantities of recycled water to meet demands, particularly during the peak summer months, without adversely impacting struvite control strategies.
- Perform the annual recycled reservoir drain and flush procedure as a means of mitigating nitrification that occurs in the reservoirs during the winter months, without adversely affecting recycled water customers. Staff will also attempt to measure and monitor the accumulation of silt and solids in the reservoirs.
- Continue work on optimizing the SF-UV lamp control system to more closely match lamp intensity and electrical usage to the desired production flow rate and UVT.

1.5 Key Performance Measures

Performance measures serve as a mechanism to check and evaluate the DERWA system's efficiency and output.

The measured delivery during the 2010 season was 2,127 acre feet, or 693 million gallons, compared to the projected 2,830 acre-feet that was estimated for the FY 2010/2011 budget. In contrast, deliveries during the CY 2009 season of operation were 2,294 acre-feet, or 747 million gallons. The cost to produce and deliver recycled water during CY 2010 averaged \$513 per acre-foot, compared to the FY 2009/2010 budget rate of \$493 per acre-foot and the FY 2010/2011 budget rate of \$544 per acre-foot.

The percentage of backwash waste averaged about 11.3% during the season, which more than met the target goal of 15.2% for FY 2010/2011. The SF-UV system utilizes a continuous backwash system that essentially discharges a fixed quantity of backwash waste regardless of the amount of recycled water produced, so the percentage of backwash will remain high until recycled water production increases. During the peak

production months of June through August, the percentage of backwash waste averaged 9.6%.

Key performance measures for the DERWA system are summarized in Table 2.

TABLE 2
DERWA System: Performance Measures

Table 2: Key Performance Measures

Work Element	Performance Measure	FY 09/10 Actual	FY 10/11 YTD Actual	2011 Target
Permit Compliance	Number of DHS permit violations associated with DERWA Facilities	0	0	0
Customer Satisfaction	Numbers of Verified Water Quality Complaints	0	0	0
	Number of Verified Water Pressure Complaints	0	0	0
	Maximum Response Time to Verified Complaints			Same Day
Treatment and Delivery	Total Combined Cost per acre-foot of Recycled Water Treated and Delivered	\$554	\$421	\$615
Cost-Effectiveness	Operations Cost per acre-foot of Recycled Water Treated and Delivered	\$394	\$275	\$423
	Distribution Cost per acre-foot of Recycled Water Treated and Delivered	\$165	\$128	\$194
	Chemical Cost per acre-foot of Recycled Water Treated (excluding delivery)	\$45	\$40	\$45
	Power Cost per acre-foot of Recycled Water Treated (excluding delivery)	\$163	\$156	\$175
Maintenance Practices	Percent of Scheduled Preventive Maintenance Tasks Completed	100%	96%	98%
Return Streams Handling Efficiency	Average Filter Backwash Percent of Total Volume of Water Treated	10.2%	11.2%	12.0%
System Reliability	Number of Unplanned Recycled Water Supply Outages	0	0	0
	Total Duration of Unplanned Recycled Water Supply Outages	0	0	0
	Number of Reportable Recycled Water Spills	4	4	0

1.6 Secondary Effluent Supply versus Recycled Water Demand During 2010

DERWA has a legal right to utilize all of the wastewater that originates from Dublin and South San Ramon for recycling and reuse. By an amendment to the Regional Agreement under which DSRSD serves the City of Pleasanton, the City agreed to allow DSRSD to also use up to 2.5 MGD of the wastewater that originates from Pleasanton for recycling. During 2010 this agreement was extended through December 31, 2011. On a number of summer days during 2010 the demand for recycled water exceeded the quantity of sewage generated by Dublin and South San Ramon, so on these days a small portion of

the wastewater that originated from the residents of the City of Pleasanton was utilized to meet recycled water demands.

Table 3 shows the flow of sewage that originated from Dublin and portions of South San Ramon (DSR flow), the flow that originated from the City of Pleasanton, and the combined total volume of DSRSD's secondary effluent. Table 3 also shows the volume of DSRSD's secondary effluent that is currently available for recycling, which is shown as the Dublin-San Ramon flow plus 2.5 MGD of Pleasanton's flow. Table 3 further shows the measured monthly average and peak daily recycled water demands during 2010, and the percentage of the available supply that was utilized. The peak daily demand for recycled water utilized more than the DSR supply on a number of individual days during 2010. However, the *highest daily peak demand* for recycled water utilized 99% of the *monthly average* DSR supply.

Figure 1 shows plots comparing the 2010 *monthly average* demand for recycled water, the Dublin-San Ramon (DSR) flow, and the total secondary effluent flow (Dublin-San Ramon plus all of Pleasanton's flow).

Figure 2 shows plots comparing the 2010 *peak daily* demand for recycled water, the Dublin-San Ramon (DSR) flow, and the total secondary effluent flow (Dublin-San Ramon plus all of Pleasanton's flow).

TABLE 3

DERWA System: 2010 Secondary Effluent Supply versus Recycled Water Demand during 2010

Month	Total Secondary Effluent MGD	City of Pleasanton Flow MGD	Dublin San Ramon Flow MGD	Secondary Effluent Currently available for Recycling MGD	DERWA Recycled Water Demand AVG MGD	DERWA Recycled Water Demand Peak MGD	Average Recycled Demand % of DSR Supply	Daily Peak Recycled Demand % of DSR Supply
Jan-10	12.31	6.08	6.23	8.73	0.17	0.28	3%	4%
Feb-10	11.96	5.87	6.09	8.59	0.13	0.25	2%	4%
Mar-10	12.04	5.70	6.35	8.85	0.38	1.27	6%	20%
Apr-10	12.01	6.39	5.62	8.12	0.55	1.13	10%	20%
May-10	12.35	6.01	6.34	8.84	2.25	3.08	35%	49%
Jun-10	11.15	5.53	5.62	8.12	3.84	5.53	68%	98%
Jul-10	10.49	5.25	5.24	7.74	4.54	5.15	87%	98%
Aug-10	10.28	4.76	5.52	8.02	4.34	5.46	79%	99%
Sep-10	10.62	4.91	5.71	8.21	3.69	4.83	65%	85%
Oct-10	10.62	5.07	5.55	8.05	1.98	3.55	36%	64%
Nov-10	9.97	4.95	5.02	7.52	0.55	1.28	11%	26%
Dec-10	10.93	5.50	5.43	7.93	0.23	0.63	4%	12%
AVG	11.23	5.50	5.73	8.23	1.89		34%	48%
TOTAL	4,097.56	2,007.24	2,090.32		692.94			
MIN	9.97	4.76	5.02	7.52	0.13	0.25	2%	4%
MAX	12.35	6.39	6.35	8.85	4.54	5.53	87%	99%

Figure 1: 2010 Season Recycled Water Supply vs Average Monthly Demand

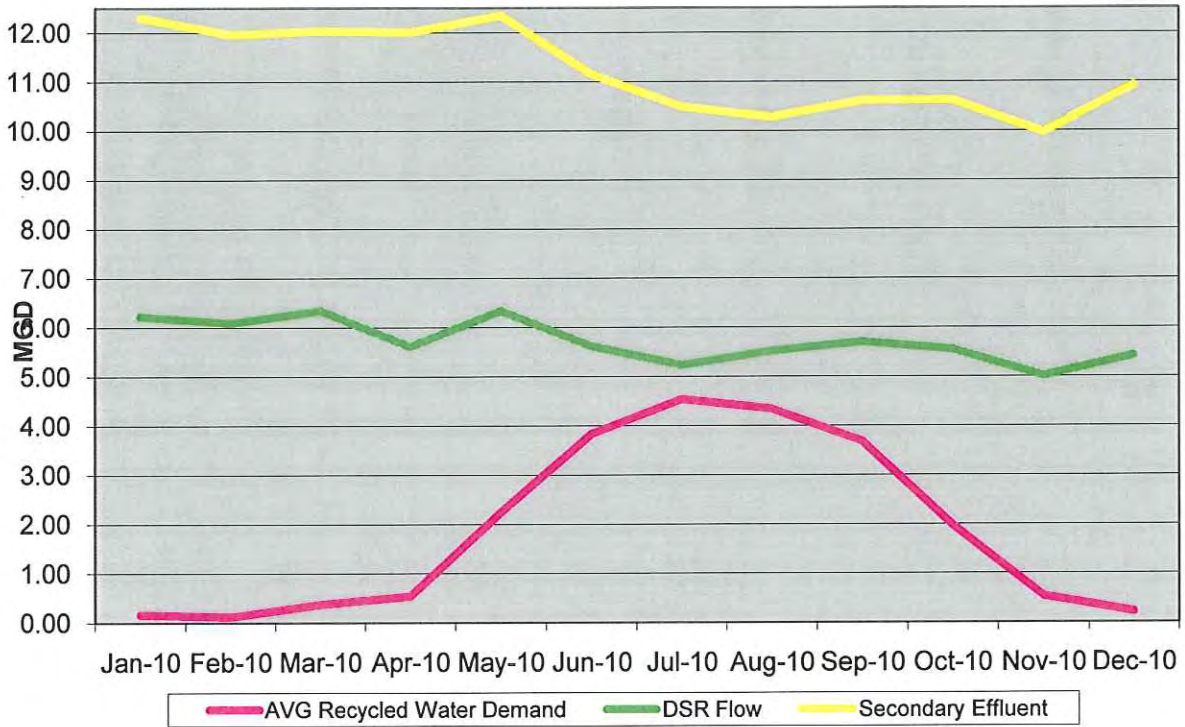
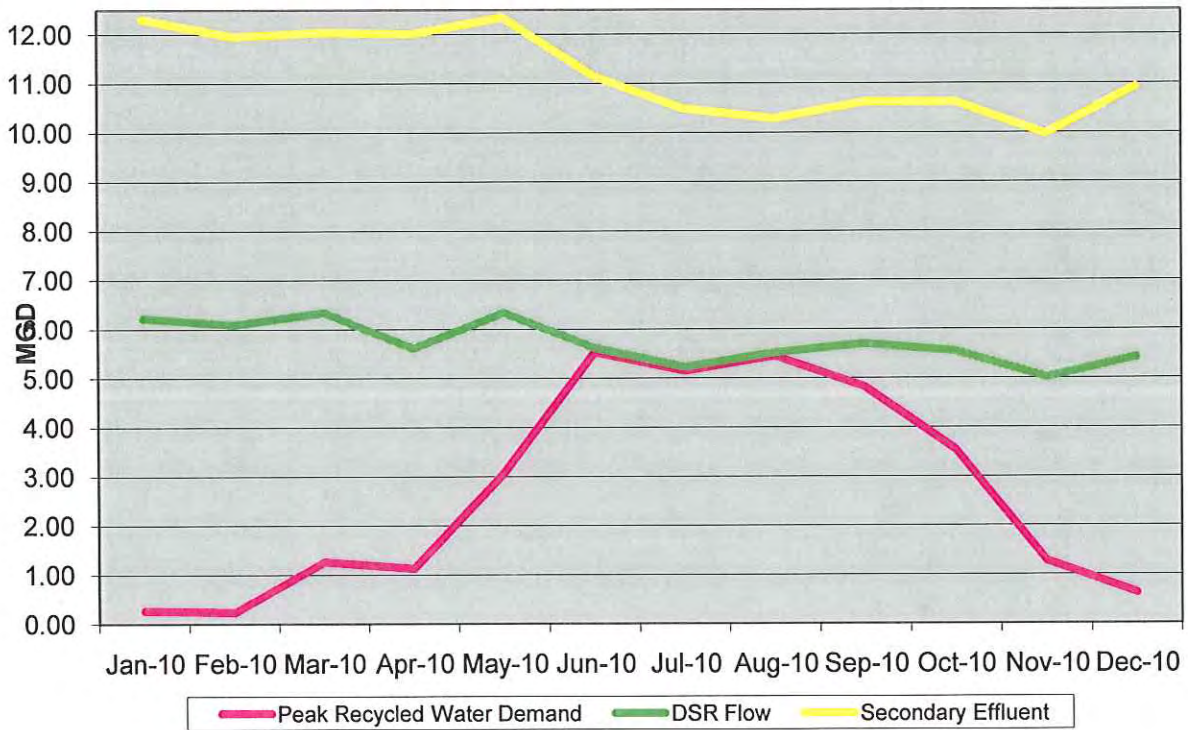


Figure 2: 2010 Season Recycled Water Supply vs Peak Daily Demand



1.7 2011 Projections of Supply and Demand

Table 4 shows the estimated or projected CY 2011 flows for the Dublin-San Ramon (DSR) flow, including anticipated growth. The 2011 projections are estimates prepared by the DSRSD Engineering Department based on projected new recycled water customers during 2010, including projected new EBMUD customer connections. Recycled water demands in 2011 are expected to increase by about 14% compared to 2010. Table 4 also shows the monthly average and peak daily recycled water demands that are expected during 2011, and the percentage of the supply that will be utilized. The *highest daily peak demand* for recycled water is expected to utilize about 102% of the *projected monthly average* DSR supply. On peak demand days during 2011 the recycled water demand is again expected to utilize a portion of Pleasanton's flow.

TABLE 4
DERWA System: 2011 Projected Secondary Effluent Supply and Recycled Water Demand

Month	Total Secondary Effluent MGD	City of Pleasanton Flow MGD	Dublin San Ramon Flow MGD	Secondary Effluent Currently available for Recycling MGD	Projected		Average Recycled Demand % of DSR Supply	Daily Peak Recycled Demand % of DSR Supply
					DERWA Recycled Water Demand MGD	DERWA Recycled Water Demand Peak MGD		
Jan-11	11.23	5.50	5.73	8.23	0.29	0.39	5%	7%
Feb-11	11.23	5.50	5.73	8.23	0.38	0.72	7%	13%
Mar-11	11.23	5.50	5.73	8.23	0.43	1.41	7%	25%
Apr-11	11.23	5.50	5.73	8.23	1.26	2.60	22%	45%
May-11	11.23	5.50	5.73	8.23	2.55	3.49	45%	61%
Jun-11	11.23	5.50	5.73	8.23	3.71	5.84	65%	102%
Jul-11	11.23	5.50	5.73	8.23	4.22	5.29	74%	92%
Aug-11	11.23	5.50	5.73	8.23	4.22	5.81	74%	101%
Sep-11	11.23	5.50	5.73	8.23	3.73	4.89	65%	85%
Oct-11	11.23	5.50	5.73	8.23	2.52	4.51	44%	79%
Nov-11	11.23	5.50	5.73	8.23	1.68	3.95	29%	69%
Dec-11	11.23	5.50	5.73	8.23	0.87	2.43	15%	42%
AVG	11.23	5.50	5.73	8.23	2.15	3.44	38%	60%
TOTAL	4,097.56	2,007.24	2,090.32		790.09			
MIN	11.23	5.50	5.73	8.23	0.29	0.39	5%	7%
MAX	11.23	5.50	5.73	8.23	4.22	5.84	74%	102%

Figure 3 shows plots comparing the 2011 estimated *monthly average* demand for recycled water, the Dublin-San Ramon (DSR) flow, and the total secondary effluent flow (Dublin-San Ramon plus all of Pleasanton's flow).

Figure 4 shows plots comparing the 2011 estimated *peak daily* demand for recycled water, the Dublin-San Ramon (DSR) flow, and the total secondary effluent flow (Dublin-San Ramon plus all of Pleasanton's flow).

During 2011 the demand for recycled water will continue to occasionally exceed the wastewater generated by the cities of Dublin and South San Ramon, although the agreement with Pleasanton to use 2.5 MGD of their wastewater should continue to meet recycled water demands during 2011.

Figure 3: 2011 Projections of Recycled Water Supply vs Average Monthly Demand

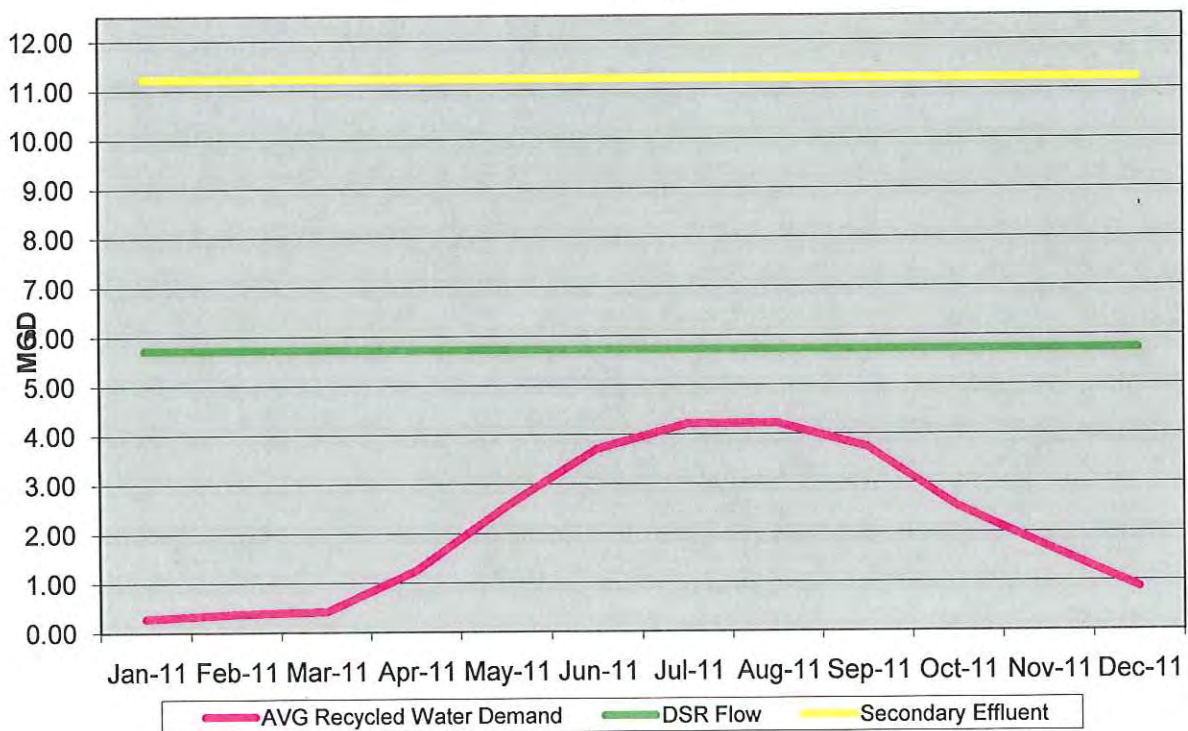


Figure 4: 2011 Projections of Recycled Water Supply vs Peak Daily Demand

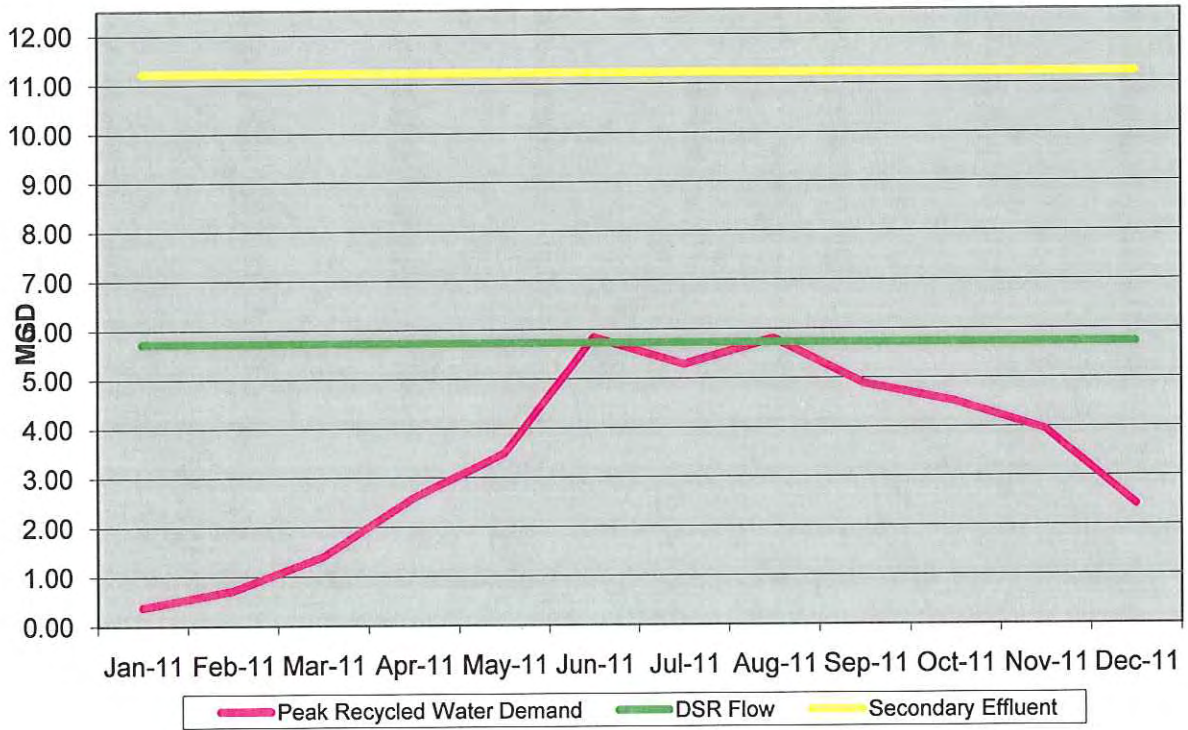


Table 5 summarized the 2011 projections for recycled water demands based on average daily demand, peak daily demand, total millions of gallons, and total acre-feet.

TABLE 5
DERWA System: Projected 2011 Season Demand Totals

Month	Projected Recycled Water Demand		Projected Recycled Water Production	
	MGD	Peak MGD	MG	AF
Jan-11	0.29	0.39	8.9	27.4
Feb-11	0.38	0.72	10.6	32.6
Mar-11	0.43	1.41	13.2	40.4
Apr-11	1.26	2.60	37.7	115.6
May-11	2.55	3.49	79.1	242.7
Jun-11	3.71	5.84	111.2	341.3
Jul-11	4.22	5.29	130.8	401.5
Aug-11	4.22	5.81	130.9	401.8
Sep-11	3.73	4.89	112.0	343.9
Oct-11	2.52	4.51	78.1	239.7
Nov-11	1.68	3.95	50.5	155.0
Dec-11	0.87	2.43	27.1	83.0
AVG	2.15	3.44		
TOTAL			790.1	2,424.9
MIN	0.29	0.39	8.9	27.4
MAX	4.22	5.84	130.9	401.8
Expected increase over 2010 Season:			14%	

1.8 Volume of Recycled Water in Reservoir/Storage

The DERWA distribution system includes two 4.36 million gallon recycled water reservoirs, with a total combined capacity of 8.72 million gallons. DSRSD separately operates two additional recycled water reservoirs connected to the system with the following design maximum usable storage capacities:

- R300 0.41 MG Dougherty Valley
- R20 1.38 MG Eastern Dublin

Tables 6, 7, and 8 provide estimations of the amount of the available storage capacity that is being utilized by the current recycled water demand. The data reflects the level contained in each reservoir at 9 PM each evening, which is the time of day most often when the level of water is the highest prior to the night's irrigation cycle.

Table 6 shows the average volume stored during each month, the maximum storage capacity, the monthly percent of storage utilized, the monthly average turnover, and the monthly average demand for DERWA Reservoir R100. The average turnover in R100 was 10.4 days during 2010.

TABLE 6
DERWA System: Utilization of Storage Capacity

Reservoir R100					
Month	Average Volume Stored * MG	Maximum Storage Capacity MG	Storage Capacity Utilized %	Average Turnover DAYS	Average Demand MGD
Jan-10	1.13	4.36	26%	16.2	0.07
Feb-10	1.60	4.36	37%	33.5	0.05
Mar-10	1.37	4.36	32%	10.3	0.13
Apr-10	1.37	4.36	31%	5.6	0.25
May-10	3.10	4.36	71%	4.6	0.68
Jun-10	3.00	4.36	69%	2.8	1.07
Jul-10	3.44	4.36	79%	3.6	0.96
Aug-10	3.78	4.36	87%	3.2	1.19
Sep-10	3.27	4.36	75%	3.6	0.92
Oct-10	2.85	4.36	65%	4.9	0.58
Nov-10	1.82	4.36	42%	9.0	0.20
Dec-10	2.12	4.36	49%	27.6	0.08
AVG	2.41		55%	10.4	0.51
MIN	1.13		26%	2.8	0.05
MAX	3.78		87%	33.5	1.19

*Average volume in storage as of 9:00 PM each evening

Figure 5 shows a plot comparing the average volume of recycled water stored each month, average turnover in days, and the average monthly demand for Reservoir R100.

Figure 5: 2010 Season Reservoir R100 Storage Utilization

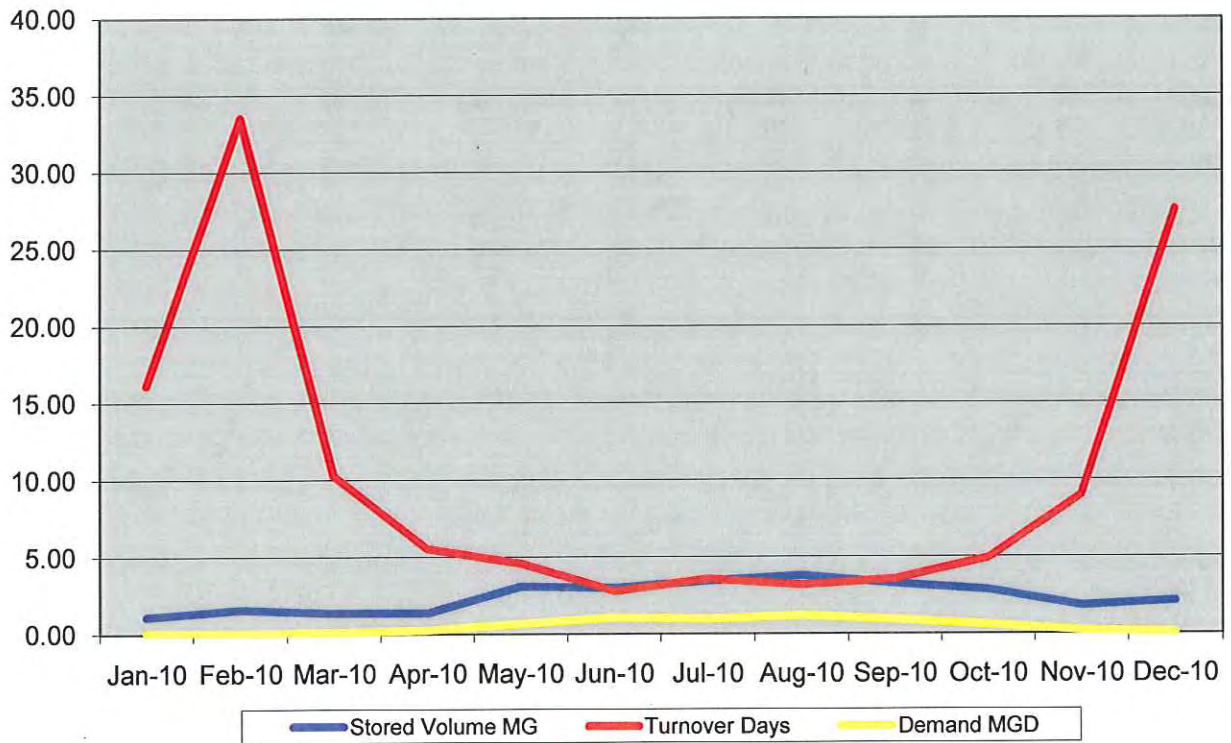


Table 7 shows the average volume stored per month, maximum storage capacity, monthly percent of storage utilized, monthly average turnover, and the monthly average demand for DERWA Reservoir R200. The average turnover in R200 was 5.8 days in 2010.

TABLE 7
DERWA System: Utilization of Storage Capacity

Reservoir R200					
Month	Average Volume Stored * MG	Maximum Storage Capacity MG	Storage Capacity Utilized %	Average Turnover DAYS	Average Demand MGD
Jan-10	0.60	4.36	14%	16.4	0.04
Feb-10	0.59	4.36	13%	16.4	0.04
Mar-10	0.63	4.36	14%	5.9	0.11
Apr-10	0.67	4.36	15%	4.9	0.14
May-10	1.28	4.36	29%	1.4	0.89
Jun-10	1.82	4.36	42%	1.2	1.47
Jul-10	2.27	4.36	52%	1.3	1.77
Aug-10	2.69	4.36	62%	1.4	1.87
Sep-10	2.41	4.36	55%	1.4	1.69
Oct-10	1.80	4.36	41%	2.1	0.84
Nov-10	1.07	4.36	25%	5.6	0.19
Dec-10	0.97	4.36	22%	11.5	0.08
AVG	1.40		32%	5.8	0.76
MIN	0.59		13%	1.2	0.04
MAX	2.69		62%	16.4	1.87

* Average volume in storage as of 9:00 PM each evening

Figure 6 shows a plot comparing the average volume of recycled water stored each month, average turnover in days, and the average monthly demand for Reservoir R200.

Figure 6: 2010 Season Reservoir R200 Storage Utilization

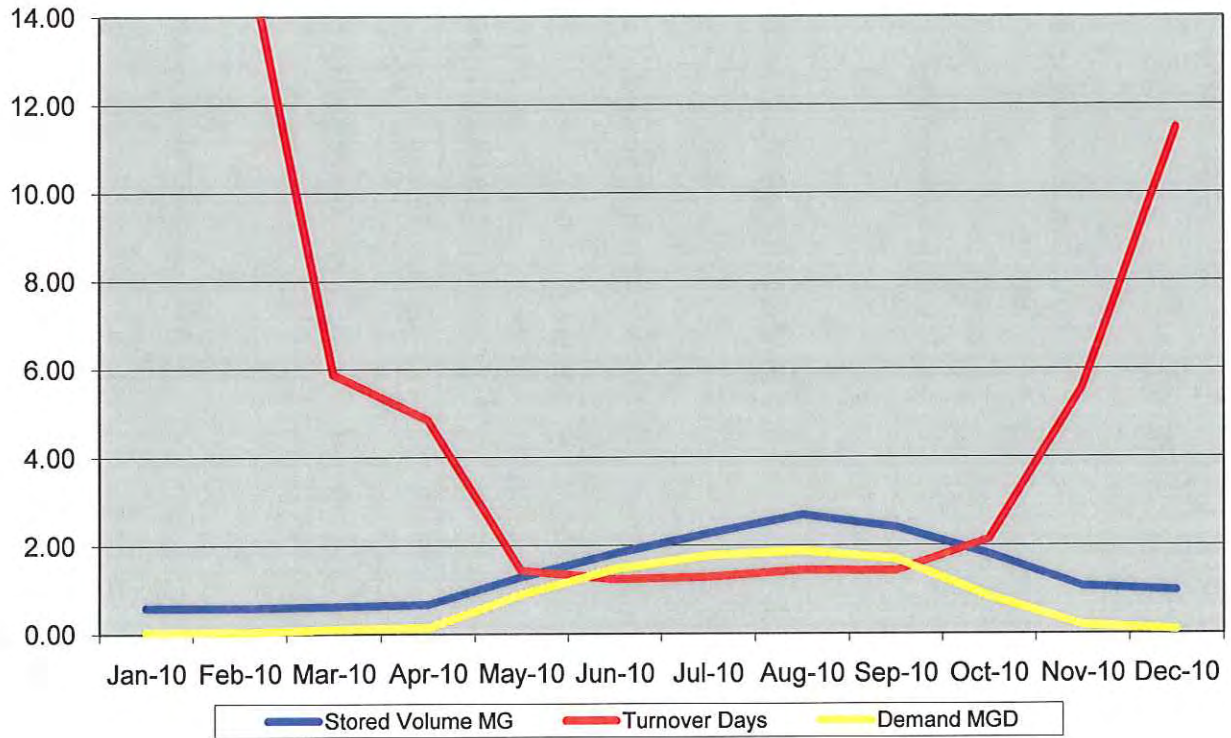


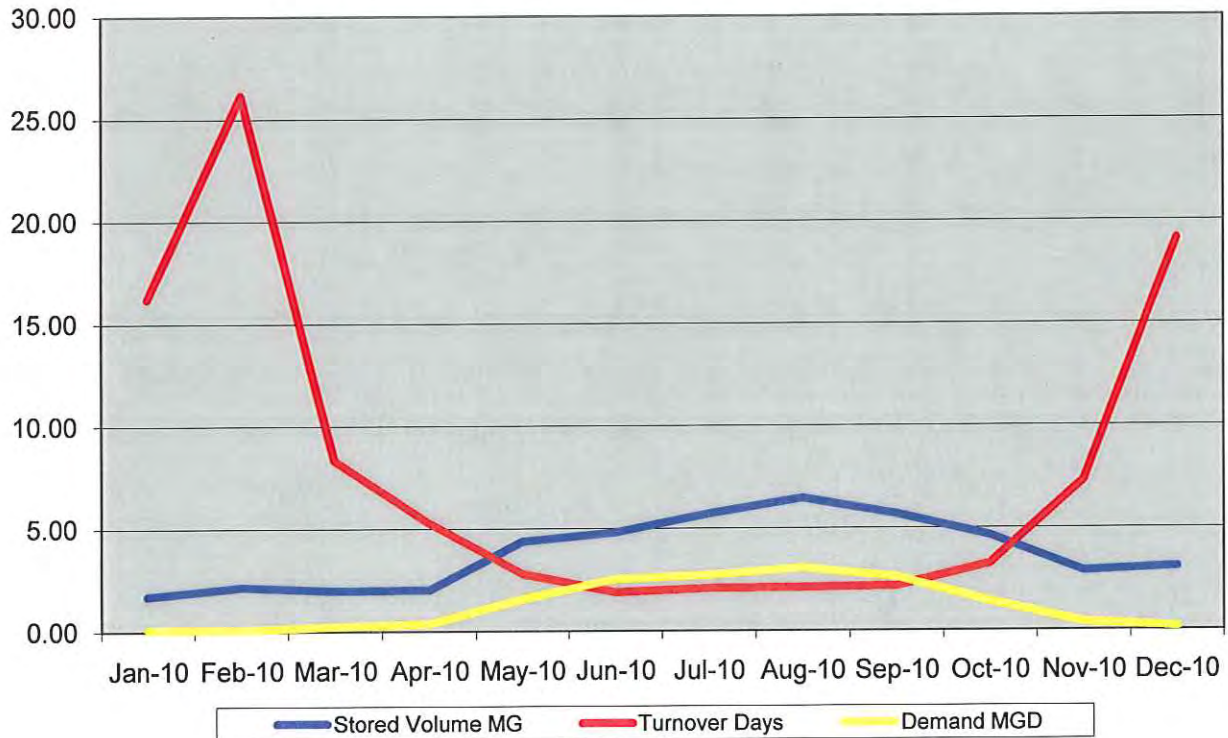
Table 8 shows the average volume stored per month, maximum storage capacity, monthly percent of storage utilized, monthly average turnover, and the monthly average demand for the two DERWA reservoirs combined. The average turnover in the combined reservoirs was 8.1 days during 2010.

TABLE 8
DERWA System: Utilization of Storage Capacity

Month	Combined Reservoirs R100 & R200				
	Average Volume Stored MG	Maximum Storage Capacity MG	Storage Capacity Utilized %	Average Turnover DAYS	Average Demand MGD
Jan-10	1.73	8.72	20%	16.2	0.11
Feb-10	2.18	8.72	25%	26.2	0.08
Mar-10	2.00	8.72	23%	8.3	0.24
Apr-10	2.04	8.72	23%	5.3	0.38
May-10	4.39	8.72	50%	2.8	1.57
Jun-10	4.82	8.72	55%	1.9	2.54
Jul-10	5.72	8.72	66%	2.1	2.73
Aug-10	6.47	8.72	74%	2.1	3.06
Sep-10	5.68	8.72	65%	2.2	2.61
Oct-10	4.65	8.72	53%	3.3	1.42
Nov-10	2.89	8.72	33%	7.3	0.39
Dec-10	3.09	8.72	35%	19.1	0.16
AVG	3.81		44%	8.1	1.28
MIN	1.73		20%	1.9	0.08
MAX	6.47		74%	26.2	3.06

Figure 7 shows a plot comparing the average volume of recycled water stored each month, average turnover in days, and the average monthly demand for the combined reservoirs. The tabular data and figures demonstrate that storage facilities are being effectively managed and are sufficient to meet peak demand requirements at current delivery rates and schedules.

Figure 7: 2010 Season Combined Reservoir Storage Utilization



1.9 Potential Budgetary Impacts

During 2011 staff expects to incur operations and maintenance costs that are reasonably consistent with the actual expenses logged during 2011.

2. OPERATIONS

2.1 Operational Strategies

Strategies that will be tested and/or used in 2011 include:

- Holding Basin No. 4 will continue to be used to store water to meet peak recycled water demands and to reduce electrical costs for pumping. During past years staff determined that algae will grow in the basin during summer days, but the growth of the algae does not appear to significantly impact recycled water production.
- Testing of the SF-UV system will be conducted to determine what minimum dosage of PACL is necessary to provide consistent recycled water quality as secondary turbidity levels fluctuate. Operating experience has indicated that the dosage of

PACL may need to be adjusted during the day as the turbidity of the secondary effluent varies with the typical diurnal flow. Without clear data to guide the Operator in setting the PACL dosage, the PACL usage is not being optimized, and as a result chemical costs may be higher than necessary. This testing will seek to develop a firm correlation between secondary effluent quality and the corresponding correct PACL dosage. In addition, the testing will attempt to determine the maximum secondary effluent turbidity at which the SF-UV system can achieve adequate recycled water quality. Past experience has found that compliance with the 2 NTU standard becomes increasingly difficult if the secondary effluent exceeds a turbidity of about 6-8 NTU's. Recent efforts to reduce the formation of struvite have resulted in a more variable SVI and corresponding higher secondary turbidities.

- Staff plans to evaluate hydraulic modeling of the DERWA distribution system to determine if, and how, time-of-use pumping could be utilized in the near term to reduce electrical costs.

2.2 Filter Backwash

The percentage of backwash waste averaged about 11.3% during the 2010 season. The SF-UV system utilizes a continuous backwash system that essentially discharges a fixed quantity of backwash waste regardless of the amount of recycled water produced, so the percentage of backwash will not decrease significantly until recycled water production increases.

Table 9 shows the average monthly volume of recycled water produced, the average monthly volume of backwash waste, and the percent of backwash to recycled water production for each month. The average percentage of the backwash waste to recycled water produced was 11.3% during 2010, which more than met the target goal of 15.2% (also referenced in Table 2, Performance Measures).

TABLE 9
DERWA System: Backwash Waste Efficiency

Month	Recycled Produced SF-UV MG	Backwash SF-UV MG	Backwash % of Recycled
Jan-10			
Feb-10			
Mar-10			
Apr-10	0.87	0.10	11.5%
May-10	70.74	8.80	12.4%
Jun-10	116.29	11.80	10.1%
Jul-10	136.26	13.30	9.8%
Aug-10	138.88	12.42	8.9%
Sep-10	102.34	12.30	12.0%
Oct-10	59.20	8.40	14.2%
Nov-10			
Dec-10			
TOTAL	624.58	67.12	
AVG	89.23	9.59	11.3%
2011 TARGET GOAL:			12.0%
2010 TARGET GOAL:			15.2%

Figure 8 shows a plot comparing the quantity of recycled water produced versus the quantity of the backwash waste flow in million gallons per day.

Figure 8: 2010 Season Backwash Waste Flow vs Recycled Water Produced

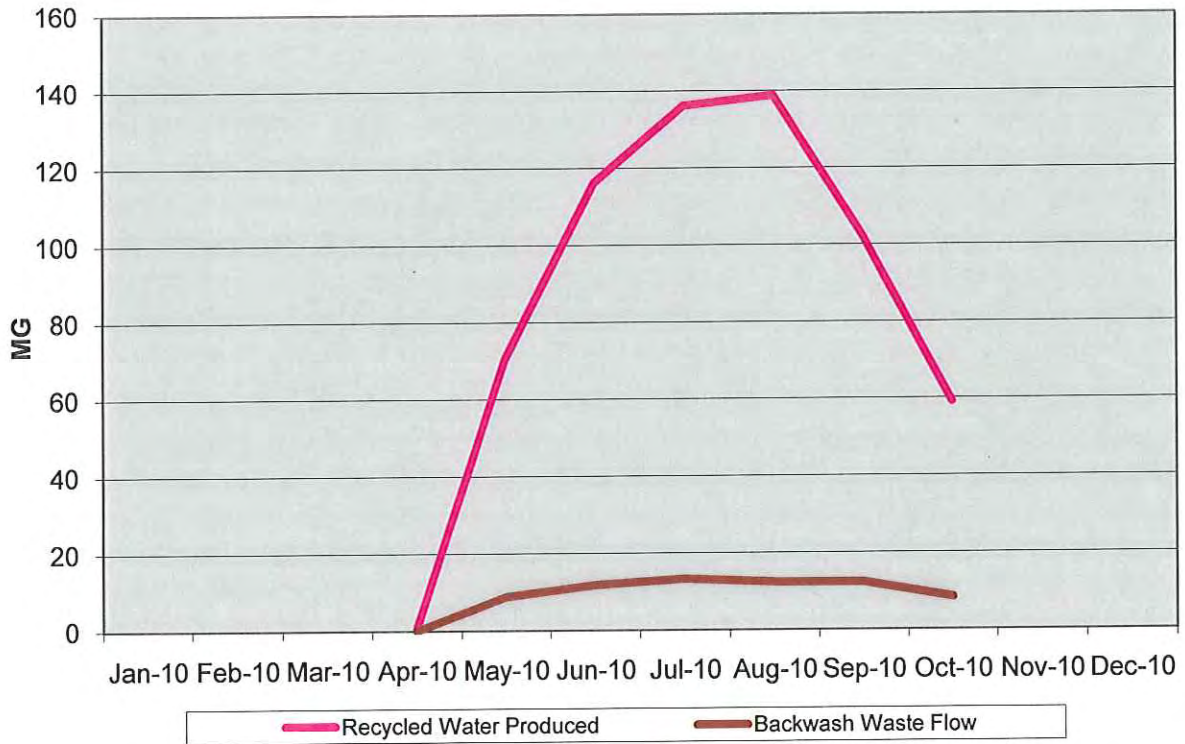
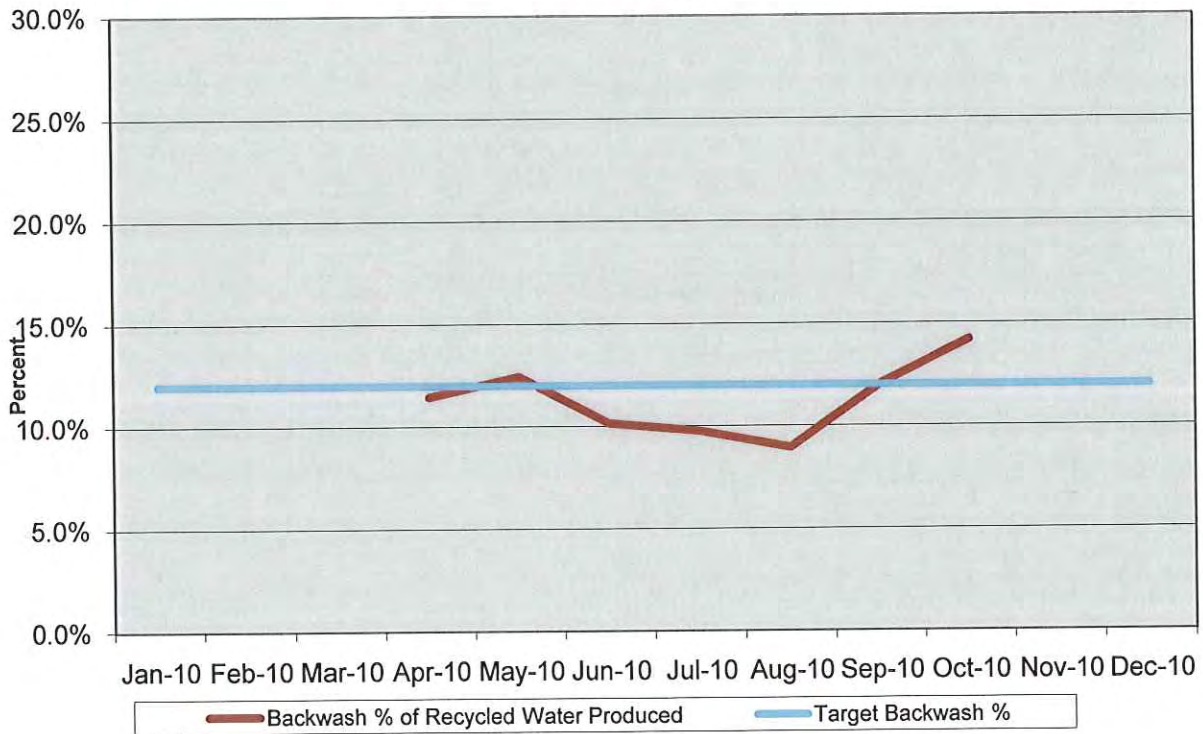


Figure 9: 2010 Season Backwash Waste as a Percentage of Recycled Water Produced



2.3 Consumables

Power usage for DERWA includes the operation of the treatment system as well as pumping for distribution. The chemicals used in the production of recycled water for DERWA include PACL (a coagulant) and sodium hypochlorite for disinfection.

2.4 Power

Table 10 shows the electrical usage for the DERWA treatment system. Usage is separately monitored by the SCADA system using kilowatt transmitters installed on key motor control centers and recorded for:

- MF-UV: Micro Filter treatment including UV disinfection.
- SF-UV: Sand Filter treatment including coagulation, flocculation, filtration, UV disinfection, and the tertiary influent pumps (TIPS).
- Total: Combined usage including MF-UV and SF-UV.

TABLE 10
DERWA System: Treatment Electric Usage and Costs

Month	TREATMENT SYSTEM							
	SFUUV kWh	MF-UV kWh	Total kWh	kWh \$	Demand \$	Total \$	Total kWh/AF	Total \$/AF
Jan-10	14,405	28,495	42,900	\$3,561	\$86	\$3,647	2,599	\$221
Feb-10	12,195	18,188	30,384	\$2,533	\$950	\$3,482	2,703	\$310
Mar-10	14,719	33,720	48,439	\$4,098	\$0	\$4,098	1,335	\$113
Apr-10	40,380	43,812	84,192	\$7,189	\$2,552	\$9,741	1,672	\$193
May-10	139,236	10,006	149,241	\$13,966	\$5,784	\$19,750	698	\$92
Jun-10	173,612	13,028	186,639	\$18,666	\$5,032	\$23,698	528	\$67
Jul-10	226,364	14,704	241,068	\$23,488	\$0	\$23,488	558	\$54
Aug-10	222,408	10,353	232,761	\$22,674	\$1,320	\$23,994	563	\$58
Sep-10	174,563	18,037	192,600	\$18,982	\$9,684	\$28,666	567	\$84
Oct-10	139,200	12,754	151,954	\$14,663	\$3,997	\$18,660	807	\$99
Nov-10	3,874	16,516	20,389	\$3,059	\$10,788	\$13,847	405	\$275
Dec-10	5,238	8,743	13,981	\$1,055	\$0	\$1,055	652	\$49
Average	97,183	19,030	116,212	\$11,161	\$3,349	\$14,511	1,091	\$82
Total	1,166,193	228,355	1,394,548	\$133,935	\$40,192	\$174,128		
Minimum	3,874	8,743	13,981	\$1,055	\$0	\$1,055	405	\$49
Maximum	226,364	43,812	241,068	\$23,488	\$10,788	\$28,666	2,703	\$310

Table 11 shows the electrical usage for the DERWA distribution system. Usage for the distribution system is measured by PG&E and recorded for:

- PSR 1: Recycled water pumping from the treatment systems into the distribution system (R100).
- Recycled Water Pump Station PS R200B (100 Old Dougherty Road)
- Recycled Water Pump Station PS R200A (Bollinger Canyon Road at Iron Horse Trail)
- Reservoir R100 (off Alcosta Blvd, north of Pine Valley Road)
- Reservoir R200 (off Gale Ridge Road)

TABLE 11
DERWA System: Distribution Electric Usage and Costs

Month	Pump Stations			Reservoirs		DISTRIBUTION SYSTEM			
	PSR 1 kWh	PSR 200B kWh	PSR 200A kWh	R100 kWh	R200 kWh	Total kWh	Total \$	Total kWh/AF	Total \$/AF
Jan-10	12,083	4,480		106	38	16,707	\$2,655	1,012	\$161
Feb-10	7,121	4,160		84	32	11,397	\$1,249	1,014	\$111
Mar-10	24,320	6,560		81	30	30,991	\$4,339	854	\$120
Apr-10	32,645	12,640		76	30	45,391	\$4,706	901	\$93
May-10	3,747	33,120		60	30	36,957	\$5,326	173	\$25
Jun-10	162,512	52,640		44	30	215,226	\$29,358	609	\$83
Jul-10	201,079	60,320		46	31	261,476	\$39,963	606	\$93
Aug-10	193,162	45,440		43	30	238,675	\$34,760	577	\$84
Sep-10	157,424	37,280		44	30	194,778	\$23,122	573	\$68
Oct-10	94,241	18,080		47	31	112,399	\$17,186	597	\$91
Nov-10	9,861	6,720	2,280	77	29	18,967	\$2,152	377	\$43
Dec-10	4,741	3,840	3,480	76	34	12,171	\$3,042	568	\$142
Average	75,245	23,773	2,880	65	31	99,594	\$13,988	655	\$79
Total	902,935	285,280	5,760	784	375	1,195,134	\$167,859		
Minimum	3,747	3,840	2,280	43	29	11,397	\$1,249	173	\$25
Maximum	201,079	60,320	3,480	106	38	261,476	\$39,963	1,014	\$161

2.5 Chemicals

Sodium hypochlorite is purchased in bulk under a bid that the District awarded in July 2010, following a very successful joint bidding effort as a participant in the Bay Area Chemical Consortium (BACC). Sodium hypochlorite is added to the finished recycled water prior to distribution, in order to maintain a concentration of chlorine as the

recycled water is pumped into the distribution system. During most of the irrigation season the desired chlorine residual is established at 5 mg/l. In addition, sodium hypochlorite is added to the recycled water leaving PS R200B using a temporary system that was added in 2008. Also, staff can add sodium hypochlorite directly to the reservoirs if needed to maintain sufficient chlorine residuals, although this practice is relatively labor intensive so it is not usually employed during the winter months. Chlorine dosages via sodium hypochlorite addition, prevents any re-growth of pathogens, including coliform, and it also serves to prevent nitrification and the growth of algae and slime in pumps, piping, and reservoirs.

During 2010, a total of 34,338 gallons of 12% bulk sodium hypochlorite solution were purchased for recycled water treatment and delivery. Sodium hypochlorite deliveries were accepted on the following schedule:

- April 23, 2010 4,281 gallons
- June 2, 2010 4,599 gallons
- July 9, 2010 5,030 gallons
- August 12, 2010 5,012 gallons
- September 10, 2010 4,922 gallons
- September 28, 2010 5,004 gallons
- November 8, 2010 500 gallons
- November 19, 2010 4,990 gallons

Coagulant for the SF-UV system was advertised for competitive bidding in July 2009 and a two year bid was subsequently awarded to CalChem Enterprises.

During 2010 a total of 20,600 gallons of PACL was purchased for use with the SF-UV treatment. PACL deliveries were accepted on the following schedule:

- April 14, 2010 4,255 gallons
- June 11, 2010 4,167 gallons
- July 13, 2010 4,140 gallons
- August 25, 2010 3,951 gallons
- September 30, 2010 4,086 gallons

3. MAINTENANCE

3.1 Overhauls and Replacements

During the months of March and April, staff performed rehabilitation of the Wedeco UV system in order to maintain optimum performance and operational flexibility. Rehabilitation included the installation of 600 UV lamps in Channel No. 1 and replacement of lamps in 3 banks of the 5 banks in Channel No. 2. Wedeco service technicians provided service support in the rehabilitation of the UV system in replacing the lamps and wiper assemblies.

3.2 Preventative Maintenance

During 2010 a total of 504 Preventative Maintenance (PM) work orders were generated, of which a total of 468 were completed. The remaining PM's were either cancelled (i.e. deemed no longer necessary due to related work recently completed), deferred to a later date, or rewritten into a new work order. Table 12 itemizes the PM's by classification related to job skills.

Table 12: Routine Maintenance Work Completed									
Class	PREVENTATIVE MAINTENANCE WORK ORDERS								
	Generated	Completed	Deferred		New W.O.		Cancelled		
DERWA System									
ELECTRICIAN	62	38	79%	17	27%	5	8%	2	3%
INSTRUMENT TECHNICIAN	353	345	99%	0	0%	2	1%	6	2%
MECHANIC	84	81	98%	0	0%	0	0%	1	1%
OPS	3	2	50%	0	0%	1	33%	0	0%
SCD	2	2	100%	0	0%	0	0%	0	0%
TOTAL	504	468	96%	17	3%	8	2%	9	2%

3.3 Reactive Maintenance

The reactive or corrective maintenance that occurred was limited primarily to:

- Cleaning and inspecting distribution system air relief valves
- Instrumentation failures and/or calibration drift
- Replacing failed UV lamps and wipers
- Debugging and/or fixing the control logic system
- Removing silt accumulations from the reservoirs

4. CUSTOMER SATISFACTION

4.1 Complaints and Responses

During 2010 Bridges Golf Course advised staff that a lab analysis they had performed on the recycled water they were receiving showed a pH of 8.2, and they expressed concern that the pH level could be causing them to use more nitrogen on the golf course. DSRSD staff began working on a formal response to this issue.

4.2 Spills and Responses: DSRSD Service Area

On January 4 DSRSD staff discovered a leak of fully treated tertiary recycled water coming from the irrigation system that serves the Johnson Drive Streetscape in Pleasanton. The leaking water saturated the "French drain" system that collects storm run-off from the landscaped area, and then ran across the driveway and flowed into Zone 7's drainage canal between DSRSD's facultative sludge lagoons and the adjacent Home Depot. DSRSD staff estimated the volume of the leak to be 10,000 to 20,000 gallons. The leak was traced to an irrigation zone valve that had stuck open. The spill was reported in writing to the Regional Water Quality Control Board.

On April 7 DSRSD staff responded to a leak of fully treated tertiary recycled water coming from a 3-inch air relief valve (ARV) on the DERWA main distribution pipeline that conveys recycled water to the Dougherty Valley. DSRSD staff estimated the volume of the spill to be approximately 5,525 gallons. The source of the leak was traced to the ARV that had apparently stuck open when the DERWA pipeline was being refilled following the annual draining and flushing. All of the water from the spill entered a City storm drain that discharges to the Chabot Canal on the south side of I-580. There was no evidence of any adverse impact to the Chabot Canal. The spill was reported in writing to the Regional Water Quality Control Board.

On September 26, 2010, DSRSD staff responded to a report of excessive irrigation at the Dublin Ranch Golf Club at the intersection of Fallon Road and Turnberry Drive in Dublin. DSRSD staff estimated the volume of the spilled water to be approximately 300,000 gallons. The cause of the excessive irrigation was due to a golf course irrigation control valve that stuck open. The excessive irrigation was reported in writing to the Regional Water Quality Control Board.

On October 6 DSRSD staff responded to a report of excessive irrigation of a City of Dublin greenway area located at the intersection of Fallon Road and Cydonia Court in

Dublin. DSRSD staff estimated the volume to be approximately 118,000 gallons. The cause of the excessive irrigation was due to a malfunctioning irrigation control valve. The excessive irrigation was reported in writing to the Regional Water Quality Control Board.

On November 28 DSRSD staff responded to a spill of fully treated tertiary recycled water from a DERWA pipeline leak along the Iron Horse Trail in San Ramon. The spill occurred when a 2-inch copper elbow failed on the connection between the 16-inch diameter main and an air relief valve (ARV). DSRSD staff estimated the volume of the spill to be approximately 39,660 gallons. The spill was reported in writing to the Regional Water Quality Control Board.

On December 1 DSRSD staff responded to a spill of fully treated tertiary recycled water from a pipeline leak south of I-580 and next to Fallon Road in Pleasanton. The spill occurred when a farm implement working a field struck a buried air relief valve (ARV) close to the end of DSRSD's buried recycled water main. The water that leaked from the damaged ARV soaked into the soil in the plowed field, and none of the spilled recycled water escaped from the site. DSRSD staff estimated the volume of the spill to be approximately 6,000 gallons. The spill was reported in writing to the Regional Water Quality Control Board.

5. EMERGENCY READINESS AND RESPONSE

5.1 Emergency Responses in 2010

There were no emergencies declared during the past year.

5.2 Emergency Contact List

The current contact list, including general information, technical issues, and emergency response, is listed below.

General Information Contact Numbers

The general contact information for each agency is as follows:

AGENCY	CONTACT	OFFICE
DSRSD	Sue Stephenson, Community Affairs Supervisor	(925) 875-2295
DSRSD	Mary Gordon, Public Information Office	(925) 875-2290
EBMUD	Charles Hardy, Senior Public Affairs Representative	(510) 287-0141
EBMUD	Jeff Beccera, Senior Public Information Representative	(510) 287-0143
DERWA	Jim Bewley, Authority Manager	(925) 875-2234
DERWA	Dave Requa, Acting Authority Manager	(925) 875-224

Technical Questions and Complaints

The general contact information for each agency is as follows:

AGENCY	CONTACT	OFFICE
DSRSD	Jim Dryden, Field Operations Supervisor (Storage and Distribution System)	(925) 570-8916
DSRSD	Levi Fuller, Operations Supervisor (Treatment Facilities)	(925) 570-8775
DSRSD	Dan Gallagher, Operations Manager	(925) 570-8759
DSRSD	Stefanie Olson, Clean Water Program Coordinator	(925) 570-9756
EBMUD	Debra Skeaton, Water Distribution Supervisor	(510) 287-1071

Emergency Contact Numbers

The emergency contact information for each agency is as follows:

AGENCY	CONTACT	Office	WEEKEND/AFTER HOURS
DSRSD	24-Hour On-Call Operator		(925) 872-5890
DSRSD	Plant Operations	(925) 846-4565	(925) 519-0557
DSRSD	Jim Dryden, Field Operations Supervisor (Storage/Distribution)	(925) 875-2367	(925) 570-8916
DSRSD	Levi Fuller, Operations Supervisor (Treatment Facilities)	(925) 570-8775	(707) 552-4094
DSRSD	Dan Gallagher, Operations Manager	(925) 875-2345	(925) 570-8759
EBMUD	24-Hour On-Call Operator		(866) 403-2683
DERWA	Jim Bewley, Authority Manager	(925) 875-2234	(650) 465-0042
DERWA	Dave Requa, Acting Authority Manager	(925) 875-2244	(925) 570-9085

6. INVOICED COSTS

6.1 Operations and Maintenance Costs during 2010

During 2010, the total cost invoiced to DERWA for the operation and maintenance of the treatment and distribution system was \$1,112,097 or \$523 per acre-foot delivered. Table 13 shows the 2010 overall expenditures for operating and maintaining the DERWA system.

TABLE 13
DERWA System: Overall Operations & Maintenance Expenditures

Month	Labor	Electric Costs	Materials Supplies Lab & Misc Expenses	Total O&M Cost	Cost \$/MG	Cost \$/AF
Jan-10	\$30,378	\$6,302	\$2,424	\$39,103	\$7,270	\$2,369
Feb-10	\$26,112	\$4,732	\$1,312	\$32,156	\$8,780	\$2,861
Mar-10	\$36,292	\$8,438	\$46,461	\$91,190	\$7,716	\$2,514
Apr-10	\$43,871	\$14,448	\$44,872	\$103,191	\$6,288	\$2,049
May-10	\$64,714	\$25,076	\$25,226	\$115,017	\$1,652	\$538
Jun-10	\$53,500	\$53,056	\$35,166	\$141,722	\$1,230	\$401
Jul-10	\$41,571	\$63,452	\$8,076	\$113,098	\$804	\$262
Aug-10	\$38,303	\$58,753	\$26,394	\$123,450	\$917	\$299
Sep-10	\$44,480	\$51,788	\$27,601	\$123,869	\$1,119	\$365
Oct-10	\$70,267	\$35,847	\$30,865	\$136,979	\$2,232	\$727
Nov-10	\$30,200	\$15,999	\$10,864	\$57,063	\$3,478	\$1,133
Dec-10	\$22,642	\$4,097	\$9,385	\$36,124	\$5,172	\$1,685
Total	\$502,328	\$341,986	\$268,647	\$1,112,962		
Average	\$41,861	\$28,499	\$22,387	\$92,747	\$1,606	\$523
Minimum	\$22,642	\$4,097	\$1,312	\$32,156	\$804	\$262
Maximum	\$70,267	\$63,452	\$46,461	\$141,722	\$8,780	\$2,861

6.2 Treatment versus Distribution Costs During 2010

Of the total O&M cost, \$799,406 or \$376 per acre-foot represents the cost related to treatment, and \$315,465 or \$148 per acre-foot represents the cost related to pumping and distribution. Table 14 shows the 2010 expenditures for operating and maintaining the treatment system, and Table 15 shows the 2010 expenditures for operating and maintaining the distribution system.

TABLE 14
DERWA System: Treatment Expenditures, O&M

Month	Labor Expenses	Electric Costs	Materials Supplies & Lab Expenses	Total O&M Expenses	Cost \$/MG	Cost \$/AF	SF-UV Cost \$/AF	MF-UV Cost \$/AF
Jan-10	\$22,009	\$3,647	\$4,295	\$29,951	\$5,568	\$1,814		\$1,814
Feb-10	\$17,598	\$3,482	\$1,307	\$22,388	\$6,113	\$1,992		\$1,992
Mar-10	\$22,160	\$4,098	\$46,461	\$72,719	\$6,153	\$2,005		\$2,005
Apr-10	\$26,495	\$9,741	\$44,491	\$80,727	\$4,919	\$1,603	\$79	\$1,524
May-10	\$47,277	\$19,750	\$25,226	\$92,254	\$1,325	\$432	\$430	
Jun-10	\$40,851	\$23,698	\$34,935	\$99,484	\$863	\$281	\$274	
Jul-10	\$36,291	\$23,488	\$8,076	\$67,855	\$482	\$157	\$152	
Aug-10	\$34,142	\$23,994	\$26,394	\$84,530	\$628	\$205	\$203	
Sep-10	\$34,841	\$28,666	\$27,298	\$90,806	\$820	\$267	\$253	
Oct-10	\$52,230	\$18,660	\$23,365	\$94,256	\$1,536	\$500	\$494	
Nov-10	\$20,997	\$13,847	\$8,980	\$43,824	\$2,671	\$870		\$870
Dec-10	\$13,590	\$1,055	\$5,968	\$20,614	\$2,951	\$962		\$962
Total	\$368,482	\$174,128	\$256,796	\$799,406				
Average	\$30,707	\$14,511	\$21,400	\$66,617	\$1,154	\$376	\$269	\$1,528
Minimum	\$13,590	\$1,055	\$1,307	\$20,614	\$482	\$157	\$79	\$870
Maximum	\$52,230	\$28,666	\$46,461	\$99,484	\$6,153	\$2,005	\$494	\$2,005

Note: Treatment expenditures include all labor costs coded to treatment; electric costs for treatment; all lab costs; backwash waste treatment; and all misc expenses coded to treatment.

TABLE 15
DERWA System: Distribution Expenditures, O&M

Month	Labor Expenses	Electric Costs	Materials & Supplies Expenses	Total O&M Expenses	Cost \$/MG	Cost \$/AF
Jan-10	\$8,369	\$2,655	\$38	\$11,062	\$2,057	\$670
Feb-10	\$8,514	\$1,249	\$5	\$9,768	\$2,667	\$869
Mar-10	\$14,132	\$4,339	\$0	\$18,471	\$1,563	\$509
Apr-10	\$17,376	\$4,706	\$381	\$22,464	\$1,369	\$446
May-10	\$17,437	\$5,326	\$0	\$22,763	\$327	\$107
Jun-10	\$12,649	\$29,358	\$232	\$42,239	\$367	\$119
Jul-10	\$5,280	\$39,963	\$0	\$45,243	\$322	\$105
Aug-10	\$4,161	\$34,760	\$0	\$38,920	\$289	\$94
Sep-10	\$9,638	\$23,122	\$303	\$33,063	\$299	\$97
Oct-10	\$18,037	\$17,186	\$7,500	\$42,723	\$696	\$227
Nov-10	\$9,202	\$2,152	\$1,884	\$13,239	\$807	\$263
Dec-10	\$9,052	\$3,042	\$3,417	\$15,510	\$2,220	\$723
Total	\$133,846	\$167,859	\$13,760	\$315,465		
Average	\$11,154	\$13,988	\$1,147	\$26,289	\$455	\$148
Minimum	\$4,161	\$1,249	\$0	\$9,768	\$289	\$94
Maximum	\$18,037	\$39,963	\$7,500	\$45,243	\$2,667	\$869

Note: Distribution expenditures include all labor costs coded to distribution; electric costs for distribution; no lab costs; hypochlorite added at the reservoirs; and all misc expenses coded to distribution.

6.3 Fixed versus Variable Costs During 2010

Of the total O&M cost, \$547,443 or 49% represents fixed costs, and \$565,519 or 51% represents variable costs. For the purpose of this analysis, fixed costs include all labor costs and laboratory expenses, and variable costs include electricity, chemicals, materials, supplies, contractual services, and backwash treatment. Table 16 shows the total 2010 expenditures itemized by fixed costs and variable costs.

TABLE 16
DERWA System: Fixed versus Variable Costs, O&M

Month	Fixed Costs			Variable Costs			Ratio Fixed vs Variable	
	Labor Expenses	Lab Costs	Subtotal	Electric Costs	Materials & Supplies	Backwash Treatment		Subtotal
Jan-10	\$30,378	\$1,450	\$31,828	\$6,302	\$920	\$54	\$7,276	81%
Feb-10	\$26,112	\$1,278	\$27,390	\$4,732	\$5	\$29	\$4,766	85%
Mar-10	\$36,292	\$2,261	\$38,552	\$8,438	\$37,484	\$6,716	\$52,638	42%
Apr-10	\$43,871	\$3,498	\$47,369	\$14,448	\$40,858	\$516	\$55,822	46%
May-10	\$64,714	\$5,482	\$70,197	\$25,076	\$17,473	\$2,270	\$44,820	61%
Jun-10	\$53,500	\$5,343	\$58,843	\$53,056	\$27,547	\$2,277	\$82,880	42%
Jul-10	\$41,571	\$5,609	\$47,180	\$63,452	\$0	\$2,467	\$65,919	42%
Aug-10	\$38,303	\$5,634	\$43,936	\$58,753	\$18,192	\$2,568	\$79,514	36%
Sep-10	\$44,480	\$5,478	\$49,958	\$51,788	\$19,645	\$2,478	\$73,911	40%
Oct-10	\$70,267	\$4,340	\$74,607	\$35,847	\$25,287	\$1,239	\$62,372	54%
Nov-10	\$30,200	\$3,264	\$33,463	\$15,999	\$6,846	\$755	\$23,600	59%
Dec-10	\$22,642	\$1,479	\$24,121	\$4,097	\$7,671	\$235	\$12,003	67%
Total	\$502,328	\$45,115	\$547,443	\$341,986	\$201,928	\$21,604	\$565,519	
Average	\$41,861	\$3,760	\$45,620	\$28,499	\$16,827	\$1,800	\$47,127	49%
Minimum	\$22,642	\$1,278	\$24,121	\$4,097	\$0	\$29	\$4,766	36%
Maximum	\$70,267	\$5,634	\$74,607	\$63,452	\$40,858	\$6,716	\$82,880	85%

6.4 O&M Costs Itemized by Functional Category During 2010

Of the total O&M cost, \$455,533 represents operations costs, \$221,932 represents maintenance costs, \$93,511 represents chemical costs, and the remaining \$341,986 represents electrical costs. For the purpose of this analysis, operations costs include all labor for Treatment Plant Operations (Division 52) and Field Operations (Division 51); maintenance costs include all labor for Mechanical Maintenance (Division 53), and Electrical and Instrumentation (Division 54), and any other labor costs such as the Safety Officer and Engineering. Table 17 shows the 2010 expenditures itemized by these functional categories as described. The analysis shown in Table 17 is necessary for the computation of the metrics shown in Table 2.

TABLE 17

DERWA System: O&M Cost Breakdown by Category

Month	Operations Costs			Maintenance Costs			Power			Chemical Costs	
	Labor Expenses	Lab	Backwash	Labor Expenses & Supplies	Materials	Subtotal	Electric	PACL	Hypo	Subtotal	
		Costs	Treatment								Costs
Jan-10	\$23,028	\$1,450	\$54	\$24,532	\$7,350	\$920	\$8,270	\$6,302	\$0	\$0	\$0
Feb-10	\$16,806	\$1,278	\$29	\$18,113	\$9,306	\$5	\$9,310	\$4,732	\$0	\$0	\$0
Mar-10	\$23,021	\$2,261	\$6,716	\$31,998	\$13,270	\$37,484	\$50,754	\$8,438	\$0	\$0	\$0
Apr-10	\$31,967	\$3,498	\$516	\$35,981	\$11,904	\$36,550	\$48,454	\$14,448	\$0	\$4,308	\$4,308
May-10	\$54,749	\$5,482	\$2,270	\$62,501	\$9,966	\$995	\$10,961	\$25,076	\$13,030	\$3,448	\$16,478
Jun-10	\$45,322	\$5,343	\$2,277	\$52,942	\$8,178	\$11,083	\$19,260	\$53,056	\$12,760	\$3,704	\$16,464
Jul-10	\$35,932	\$5,609	\$2,467	\$44,008	\$5,639	\$0	\$5,639	\$63,452	\$0	\$0	\$0
Aug-10	\$29,933	\$5,634	\$2,568	\$38,135	\$8,369	\$1,588	\$9,958	\$58,753	\$13,178	\$3,426	\$16,604
Sep-10	\$32,987	\$5,478	\$2,478	\$40,943	\$11,492	\$303	\$11,795	\$51,788	\$12,576	\$6,767	\$19,342
Oct-10	\$58,543	\$4,340	\$1,239	\$64,122	\$11,724	\$8,872	\$20,596	\$35,847	\$13,006	\$3,409	\$16,414
Nov-10	\$20,939	\$3,264	\$755	\$24,957	\$9,261	\$2,946	\$12,207	\$15,999	\$0	\$3,900	\$3,900
Dec-10	\$15,587	\$1,479	\$235	\$17,300	\$7,055	\$7,671	\$14,727	\$4,097	\$0	\$0	\$0
Total	\$388,814	\$45,115	\$21,604	\$455,533	\$113,514	\$108,417	\$221,932	\$341,986	\$64,549	\$28,962	\$93,511
Average	\$32,401	\$3,760	\$1,800	\$37,961	\$9,460	\$9,035	\$18,494	\$28,499	\$5,379	\$2,413	\$7,793
Minimum	\$15,587	\$1,278	\$29	\$17,300	\$5,639	\$0	\$5,639	\$4,097	\$0	\$0	\$0
Maximum	\$58,543	\$5,634	\$6,716	\$64,122	\$13,270	\$37,484	\$50,754	\$63,452	\$13,178	\$6,767	\$19,342

Note: Labor expenses included in Operations Costs are for Divisions 51 and 52 only. Labor expenses included in Maintenance Costs are for Divisions 53 and 54 and any other labor coded to DERWA (i.e. safety officer, engineering, etc).

APPENDIX A

**Recycled Water Customer Demands, Production, and Weather Data
Calendar Year 2010**

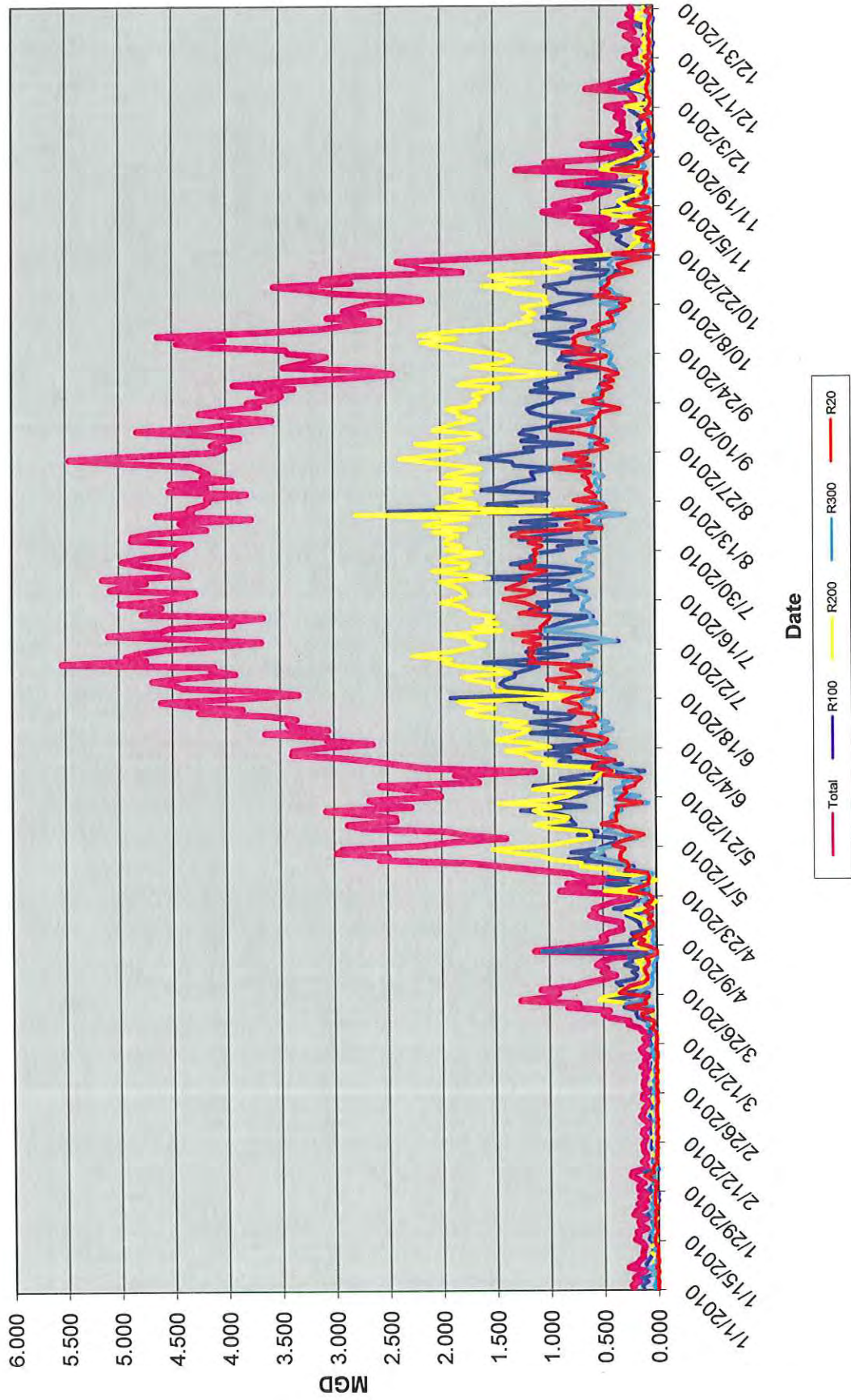
DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 2010 Monthly Average Summary

Month	Recycled Water Demand (MGD)										Weather Conditions													
	Total	R100			R200			R300			R20			Load Out Station	Mean Temp °F	Max Temp °F	Avg Humidity	Total Rainfall inches	Avg Wind mph	Eto inches	Production Potable			Total AF
		R100	R200	R300	R20	R300	R20	R300	R20	R300	SF-UV MG	MF-UV MG	Total MG											
JAN	0.174	0.070	0.037	0.047	0.020	0.0001	48.5	57.7	84	0.19	3.1	0.03	0.00	6.12	0.00	6.12	0.00	0.00	0.00	0.00	6.12	18.77		
FEB	0.131	0.048	0.036	0.028	0.019	0.0002	52.3	63.7	84	0.12	2.8	0.06	0.00	3.33	0.00	3.33	0.00	0.00	0.00	0.00	3.33	10.22		
MAR	0.381	0.134	0.106	0.066	0.075	0.0001	51.5	66.4	69	0.09	3.7	0.12	0.00	13.94	0.00	13.94	0.00	0.00	0.00	0.00	13.94	42.79		
APR	0.547	0.247	0.138	0.068	0.094	0.0000	51.3	64.5	68	0.12	4.3	0.15	0.00	16.87	0.00	16.87	0.00	0.00	0.00	0.00	16.87	54.45		
MAY	2.246	0.675	0.891	0.354	0.326	0.0000	55.8	69.7	65	0.02	5.0	0.19	0.00	70.74	0.00	70.74	0.00	0.00	0.00	0.00	70.98	217.84		
JUN	3.841	1.073	1.470	0.563	0.735	0.0001	61.8	76.5	60	0.00	5.8	0.24	0.00	116.29	0.00	116.29	0.00	0.00	0.00	0.00	119.53	366.86		
JUL	4.539	0.964	1.769	0.656	1.149	0.0001	66.5	83.3	60	0.00	6.4	0.24	0.00	136.26	0.00	136.26	0.00	0.00	0.00	0.00	141.24	433.48		
AUG	4.344	1.188	1.874	0.582	0.701	0.0000	61.3	76.0	64	0.00	5.4	0.21	0.00	138.88	0.00	138.88	0.00	0.00	0.00	0.00	139.88	429.31		
SEP	3.689	0.920	1.694	0.507	0.568	0.0022	64.2	82.5	60	0.00	3.3	0.17	0.00	102.34	0.00	102.34	0.00	0.00	0.00	0.00	108.22	332.13		
OCT	1.980	0.579	0.841	0.283	0.277	0.0018	61.4	75.8	59.2	0.0	2.6	0.1	0.00	59.20	0.00	59.20	0.00	0.00	0.00	0.00	59.98	184.09		
NOV	0.547	0.202	0.192	0.069	0.083	0.0001	51.2	65.0	71.5	0.1	1.6	0.1	0.00	21.08	0.00	21.08	0.00	0.00	0.00	0.00	21.08	64.70		
DEC	0.225	0.077	0.085	0.035	0.040	0.0000	49.8	58.9	88.9	0.2	1.8	0.0	0.00	6.14	0.00	6.14	0.00	0.00	0.00	0.00	6.14	18.84		
TOTAL	693.451	188.885	279.514	99.760	125.150	0.1413	56.3	70.0	70	0.84	3.8	0.13	0.00	624.58	0.00	624.58	0.00	0.00	0.00	0.00	708.18	2,173.47		
AVG	1.887	0.515	0.761	0.272	0.341	0.0004	56.3	70.0	70	0.07	3.8	0.13	0.00	52.05	0.00	52.05	0.00	0.00	0.00	0.00	59.01	181.12		
MIN	0.131	0.048	0.036	0.028	0.019	0.0000	48.5	57.7	59	0.00	1.6	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33	10.22		
MAX	4.539	1.188	1.874	0.656	1.149	0.0022	66.5	83.3	89	0.19	6.4	0.24	0.00	138.88	0.00	138.88	0.00	0.00	0.00	0.00	141.24	433.48		

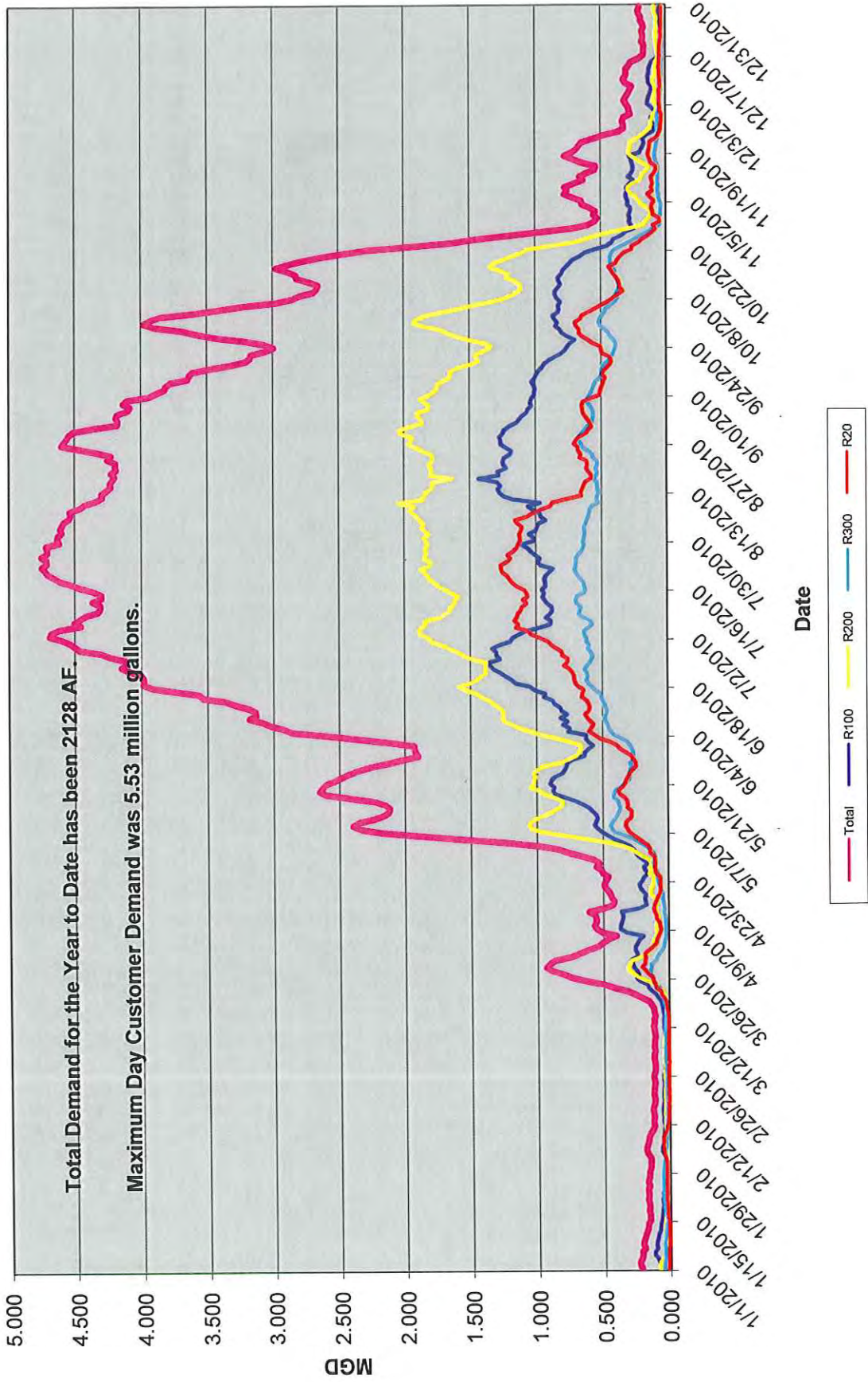
Sources of weather data used:
 Temperatures, rainfall, and wind speed reported at the DSRSD WWTP
 Humidity (average relative) reported at Pleasanton by CIMIS, www.ipm.ucdavis.edu
 Evapotranspiration (Eto) reported at Pleasanton by CIMIS, www.ipm.ucdavis.edu

Total Demand for the Year to Date has been 2128 AF.

2010 DERWA Recycled Water Demand



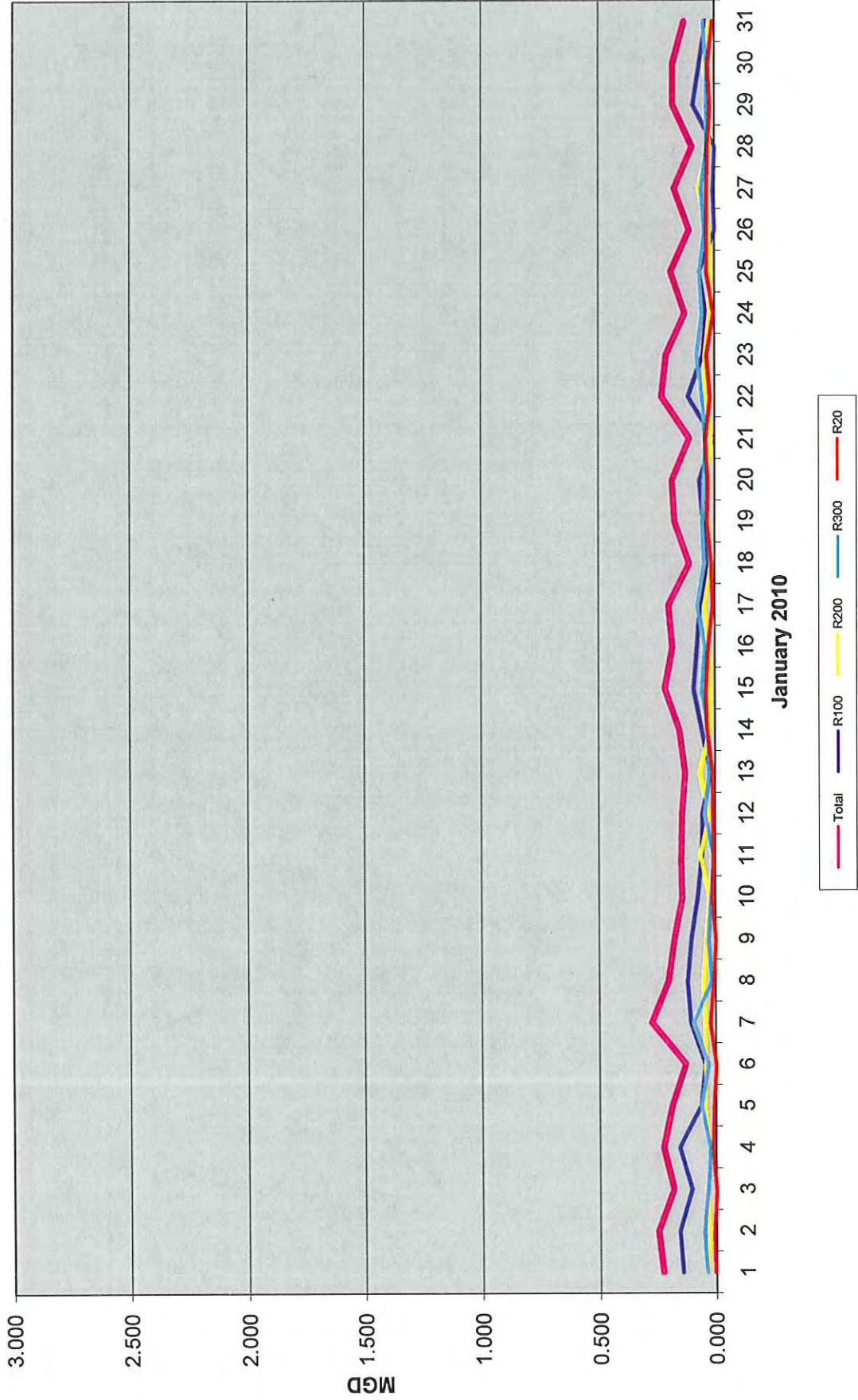
2010 DERWA 7-Day Running Average Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 January 2010

Date:	Day:	Recycled Water Customer Demand (MG)										Weather Conditions							Production (MG)			
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Wind mph	Avg Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total	Production (MG)		Total		
																		Eto inches	Potable			
1	Fri	0.231	0.144	0.040	0.042	0.005	0.0000	54.1	64.1	85	0.00	1.0	0.03	0.00	0.14	0.00	0.00	0.14	0.00	0.14		
2	Sat	0.251	0.158	0.028	0.055	0.010	0.0000	52.3	56.8	90	0.00	1.6	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
3	Sun	0.184	0.106	0.040	0.039	0.000	0.0000	48.8	57.8	89	0.01	2.8	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
4	Mon	0.228	0.158	0.026	0.028	0.015	0.0000	47.4	57.3	86	0.00	1.8	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
5	Tue	0.191	0.066	0.050	0.065	0.010	0.0000	46.1	60.4	87	0.01	1.6	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
6	Wed	0.130	0.048	0.046	0.036	0.000	0.0000	46.5	58.9	88	0.01	2.0	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.53		
7	Thu	0.277	0.108	0.046	0.098	0.025	0.0000	45.3	59.6	90	0.01	1.4	0.03	0.00	0.16	0.00	0.00	0.16	0.00	0.16		
8	Fri	0.204	0.122	0.053	0.020	0.010	0.0000	44.8	50.9	91	0.01	2.5	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
9	Sat	0.179	0.106	0.040	0.034	0.000	0.0000	45.0	53.6	88	0.01	1.8	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10	Sun	0.143	0.079	0.026	0.022	0.015	0.0000	43.5	55.2	89	0.01	1.3	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
11	Mon	0.148	0.060	0.066	0.011	0.010	0.0000	44.7	50.0	86	0.00	1.7	0.02	0.00	0.47	0.00	0.00	0.47	0.00	0.47		
12	Tue	0.143	0.057	0.028	0.048	0.010	0.0000	55.9	65.8	79	0.21	8.0	0.05	0.00	0.08	0.00	0.00	0.08	0.00	0.08		
13	Wed	0.129	0.023	0.066	0.028	0.012	0.0000	53.8	62.4	78	0.07	5.5	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
14	Thu	0.153	0.058	0.026	0.034	0.035	0.0000	49.3	62.2	80	0.01	1.7	0.05	0.00	0.13	0.00	0.00	0.13	0.00	0.13		
15	Fri	0.216	0.092	0.023	0.061	0.040	0.0000	46.5	56.7	84	0.00	1.5	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
16	Sat	0.183	0.079	0.026	0.048	0.030	0.0000	49.5	58.9	84	0.00	1.2	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
17	Sun	0.199	0.066	0.047	0.076	0.010	0.0000	52.7	57.2	76	0.09	5.3	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
18	Mon	0.109	0.028	0.019	0.048	0.015	0.0000	52.1	54.7	73	0.49	8.6	0.04	0.00	0.67	0.00	0.00	0.67	0.00	0.67		
19	Tue	0.172	0.051	0.031	0.055	0.035	0.0000	49.2	55.4	75	1.43	8.5	0.05	0.00	0.10	0.00	0.00	0.10	0.00	0.10		
20	Wed	0.183	0.066	0.040	0.048	0.030	0.0000	48.8	53.2	75	1.64	10.2	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
21	Thu	0.108	0.009	0.015	0.043	0.040	0.0000	44.6	49.3	86	0.81	3.5	0.00	0.00	0.75	0.00	0.00	0.75	0.00	0.75		
22	Fri	0.228	0.114	0.040	0.056	0.019	0.0000	42.6	53.2	83	0.36	2.3	0.03	0.00	0.20	0.00	0.00	0.20	0.00	0.20		
23	Sat	0.209	0.052	0.044	0.078	0.035	0.0000	46.4	61.0	81	0.13	1.8	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
24	Sun	0.127	0.040	0.026	0.056	0.005	0.0000	45.6	53.7	86	0.01	1.0	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
25	Mon	0.188	0.067	0.020	0.066	0.035	0.0000	51.3	56.0	80	0.19	4.9	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
26	Tue	0.107	0.001	0.026	0.045	0.035	0.0000	48.8	54.5	90	0.26	2.7	0.00	0.00	0.40	0.00	0.00	0.40	0.00	0.40		
27	Wed	0.173	0.009	0.069	0.059	0.035	0.0000	48.3	62.4	90	0.00	1.5	0.04	0.00	1.49	0.00	0.00	1.49	0.00	1.49		
28	Thu	0.095	0.002	0.026	0.036	0.031	0.0000	47.9	58.7	88	0.01	1.5	0.05	0.00	0.15	0.00	0.00	0.15	0.00	0.15		
29	Fri	0.179	0.093	0.026	0.039	0.020	0.0000	50.1	62.0	85	0.20	2.0	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
30	Sat	0.180	0.067	0.046	0.038	0.030	0.0000	51.2	65.7	81	0.01	2.0	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
31	Sun	0.131	0.040	0.029	0.052	0.010	0.0000	49.2	61.2	85	0.01	1.4	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TOTAL		5.379	2.169	1.133	1.464	0.612	0.0025	48.5	57.7	84	6.00	3.1	0.03	0.00	6.12	0.00	0.00	6.12	0.00	6.12		
AVG		0.174	0.070	0.037	0.047	0.020	0.0001	48.5	57.7	84	0.19	3.1	0.03	0.00	0.20	0.00	0.00	0.20	0.00	0.20		
MIN		0.095	0.001	0.015	0.011	0.000	0.0000	42.6	49.3	73	0.00	1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
MAX		0.277	0.158	0.069	0.098	0.040	0.0025	55.9	65.8	91	1.64	10.2	0.06	0.00	1.49	0.00	0.00	1.49	0.00	1.49		

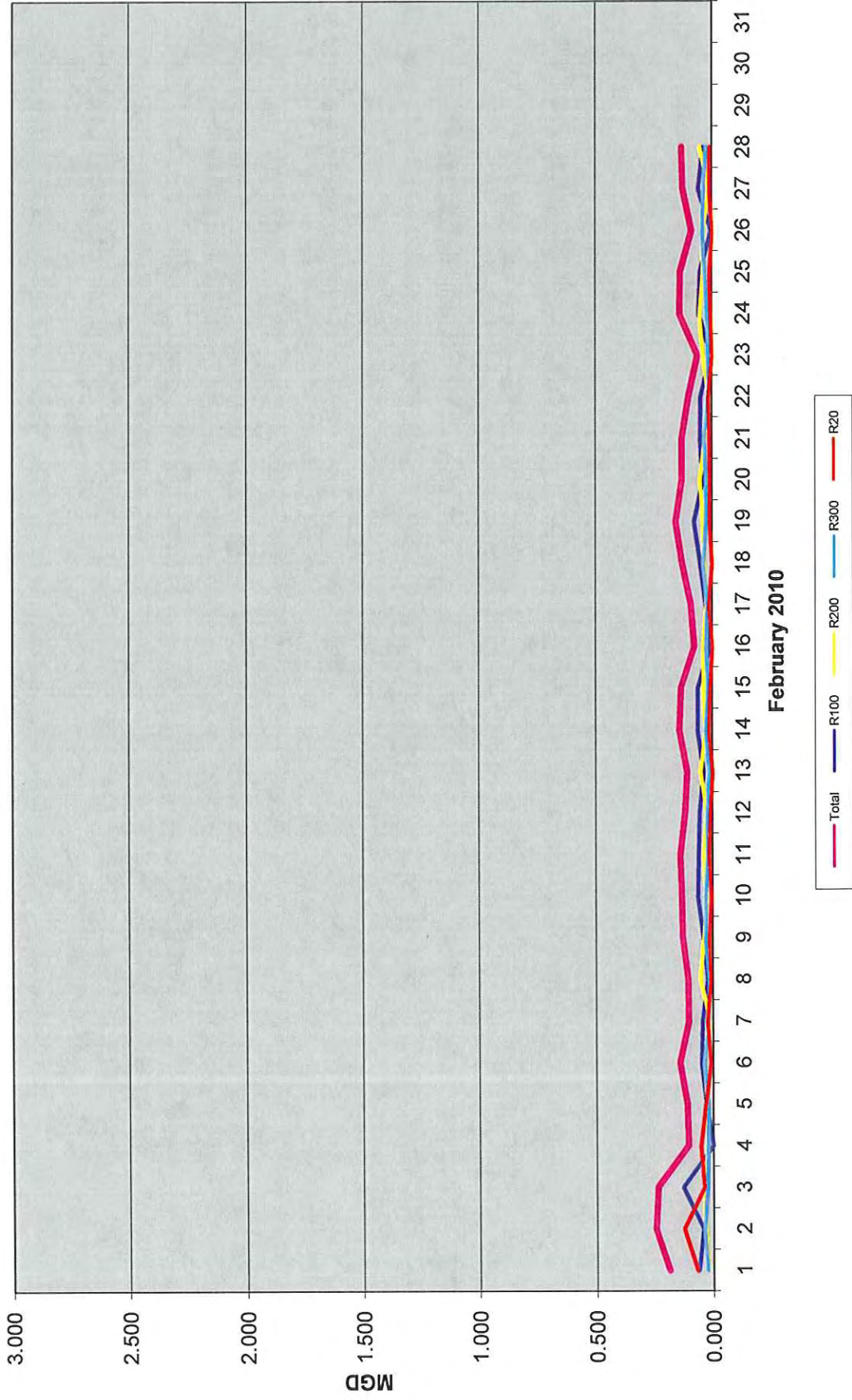
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 February 2010

Date:	Day:	Recycled Water Customer Demand (MG)										Weather Conditions							Production (MG)		
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total				
1	Mon	0.190	0.066	0.026	0.028	0.070	0.0008	51.4	63.8	80	0.00	1.7	0.05	0.00	0.00	0.00	0.00				
2	Tue	0.250	0.045	0.035	0.041	0.128	0.0000	51.4	62.0	85	0.02	1.9	0.03	0.00	0.00	0.00	0.00				
3	Wed	0.240	0.132	0.040	0.028	0.040	0.0000	50.5	65.8	81	0.01	1.6	0.07	0.00	0.00	0.00	0.00				
4	Thu	0.108	0.001	0.026	0.025	0.055	0.0000	52.0	59.7	76	0.44	6.0	0.03	0.00	0.95	0.00	0.95				
5	Fri	0.113	0.030	0.026	0.022	0.034	0.0000	55.4	64.7	79	0.02	2.8	0.07	0.00	0.24	0.00	0.24				
6	Sat	0.144	0.052	0.041	0.041	0.010	0.0000	51.1	56.7	79	0.31	5.3	0.04	0.00	0.00	0.00	0.00				
7	Sun	0.105	0.048	0.013	0.020	0.025	0.0000	51.0	59.3	75	0.00	3.6	0.00	0.00	0.00	0.00	0.00				
8	Mon	0.107	0.024	0.057	0.017	0.010	0.0022	47.9	55.7	86	0.04	2.2	0.03	0.00	0.00	0.00	0.00				
9	Tue	0.130	0.042	0.040	0.034	0.015	0.0000	49.1	56.8	74	0.20	3.3	0.08	0.00	0.00	0.00	0.00				
10	Wed	0.133	0.066	0.028	0.034	0.005	0.0000	47.5	60.2	83	0.01	2.4	0.05	0.00	0.00	0.00	0.00				
11	Thu	0.140	0.063	0.040	0.022	0.015	0.0000	52.1	68.5	69	0.00	1.8	0.07	0.00	0.00	0.00	0.00				
12	Fri	0.120	0.058	0.026	0.025	0.010	0.0000	56.7	68.4	73	0.00	2.3	0.06	0.00	0.00	0.00	0.00				
13	Sat	0.109	0.040	0.053	0.017	0.000	0.0000	54.5	66.5	85	0.00	1.3	0.06	0.00	0.00	0.00	0.00				
14	Sun	0.143	0.066	0.030	0.032	0.015	0.0000	53.3	72.8	87	0.01	1.3	0.08	0.00	0.00	0.00	0.00				
15	Mon	0.135	0.065	0.041	0.020	0.010	0.0000	56.1	73.8	79	0.01	1.5	0.09	0.00	0.00	0.00	0.00				
16	Tue	0.077	0.010	0.040	0.028	0.000	0.0000	57.3	73.9	85	0.01	0.9	0.08	0.00	0.52	0.00	0.52				
17	Wed	0.092	0.029	0.026	0.022	0.014	0.0000	57.2	73.0	92	0.00	1.4	0.10	0.00	0.57	0.00	0.57				
18	Thu	0.129	0.053	0.035	0.041	0.000	0.0000	53.9	69.3	100	0.01	2.9	0.07	0.00	0.00	0.00	0.00				
19	Fri	0.157	0.079	0.040	0.028	0.010	0.0000	51.9	59.8	91	0.00	3.7	0.02	0.00	0.00	0.00	0.00				
20	Sat	0.130	0.040	0.053	0.028	0.010	0.0000	50.8	57.2	83	0.00	4.9	0.04	0.00	0.00	0.00	0.00				
21	Sun	0.130	0.053	0.032	0.035	0.010	0.0000	49.7	55.3	98	0.46	2.1	0.02	0.00	0.00	0.00	0.00				
22	Mon	0.101	0.051	0.015	0.020	0.015	0.0000	50.7	62.7	72	0.01	1.9	0.07	0.00	0.00	0.00	0.00				
23	Tue	0.062	0.006	0.040	0.017	0.000	0.0000	47.3	52.3	95	0.77	2.9	0.01	0.00	0.46	0.00	0.46				
24	Wed	0.140	0.058	0.054	0.023	0.005	0.0000	55.0	63.3	83	0.04	6.2	0.07	0.00	0.12	0.00	0.12				
25	Thu	0.136	0.053	0.040	0.034	0.010	0.0000	55.4	68.1	90	0.00	1.4	0.09	0.00	0.00	0.00	0.00				
26	Fri	0.087	0.005	0.040	0.042	0.000	0.0000	53.5	64.0	88	0.72	5.8	0.05	0.00	0.44	0.00	0.44				
27	Sat	0.124	0.060	0.014	0.040	0.010	0.0000	51.0	60.1	96	0.17	3.5	0.05	0.00	0.04	0.00	0.04				
28	Sun	0.130	0.040	0.053	0.028	0.010	0.0016	51.9	70.0	94	0.01	1.9	0.10	0.00	0.00	0.00	0.00				
TOTAL		3.662	1.332	1.004	0.791	0.536	0.0046	52.3	63.7	84	3.27	2.8	0.06	0.00	3.33	0.00	3.33				
AVG		0.131	0.048	0.036	0.028	0.019	0.0002	52.3	63.7	84	0.12	2.8	0.06	0.00	0.12	0.00	0.12				
MIN		0.052	0.001	0.013	0.017	0.000	0.0000	47.3	52.3	69	0.00	0.9	0.01	0.00	0.00	0.00	0.00				
MAX		0.250	0.132	0.057	0.042	0.128	0.0022	57.3	73.9	100	0.77	6.2	0.10	0.00	0.95	0.00	0.95				

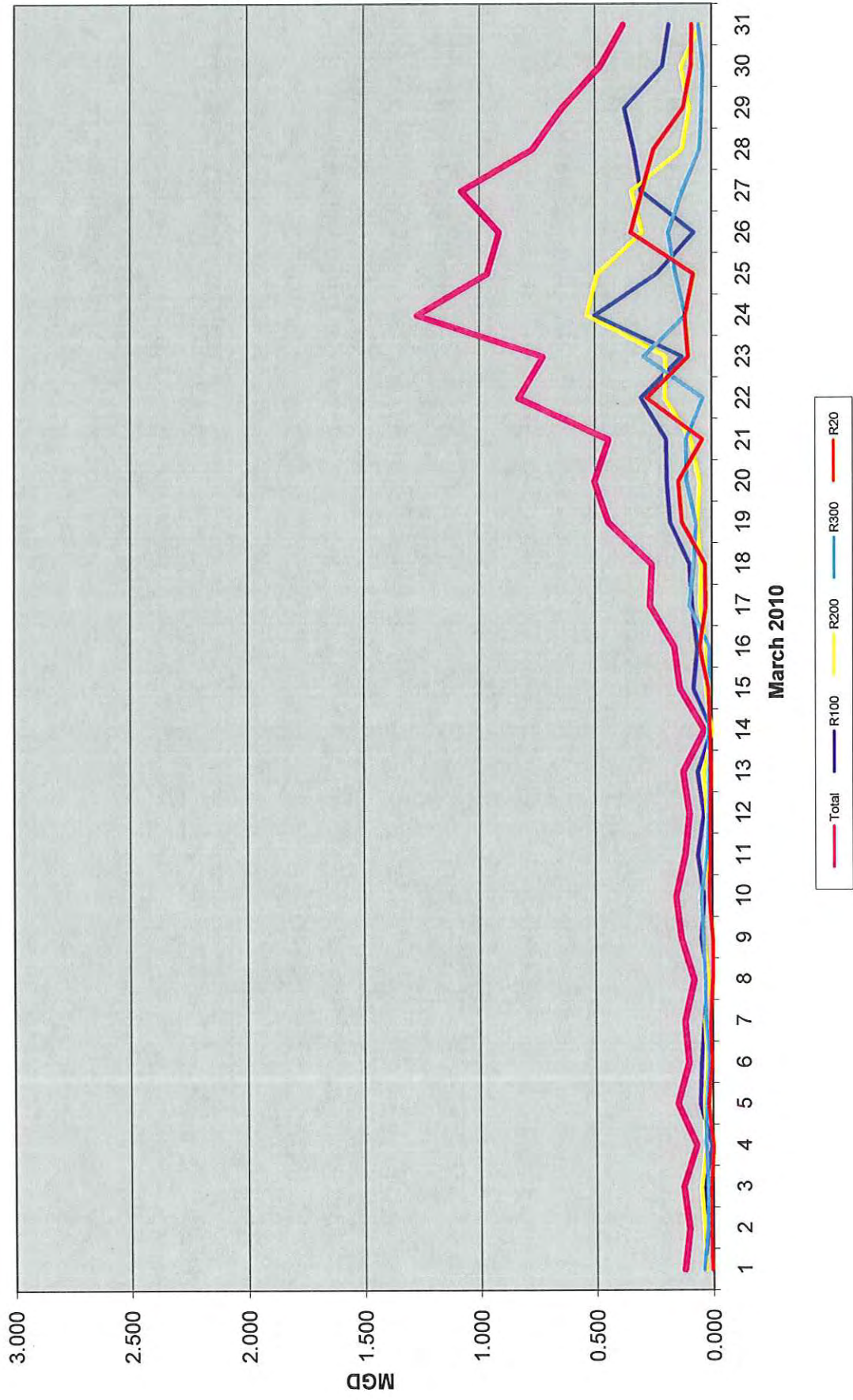
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 March 2010

Date:	Day:	Recycled Water Customer Demand (MG)										Weather Conditions						Production (MG)		
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total			
1	Mon	0.125	0.043	0.033	0.044	0.005	0.0000	54.5	68.7	91	0.01	3.6	0.09	0.00	0.00	0.00	0.00			
2	Tue	0.104	0.026	0.040	0.028	0.010	0.0000	53.1	62.8	75	0.35	4.5	0.05	0.00	0.00	0.00	0.00			
3	Wed	0.128	0.040	0.053	0.025	0.010	0.0000	46.6	57.7	85	0.75	5.0	0.06	0.00	0.00	0.00	0.00			
4	Thu	0.073	0.008	0.032	0.032	0.000	0.0000	44.5	58.1	87	0.01	2.6	0.08	0.00	0.51	0.00	0.51			
5	Fri	0.151	0.058	0.040	0.034	0.020	0.0000	45.2	57.1	85	0.00	1.5	0.08	0.00	0.13	0.00	0.13			
6	Sat	0.104	0.053	0.026	0.020	0.005	0.0000	51.8	66.7	67	0.00	2.1	0.09	0.00	0.00	0.00	0.00			
7	Sun	0.120	0.040	0.038	0.032	0.010	0.0000	49.1	60.6	86	0.00	5.3	0.11	0.00	0.00	0.00	0.00			
8	Mon	0.081	0.026	0.020	0.035	0.001	0.0000	45.2	52.9	66	0.12	8.2	0.11	0.00	0.00	0.00	0.00			
9	Tue	0.134	0.052	0.040	0.042	0.000	0.0000	43.4	55.0	70	0.05	5.2	0.11	0.00	0.00	0.00	0.00			
10	Wed	0.157	0.040	0.052	0.050	0.015	0.0000	44.9	58.2	62	0.13	5.2	0.12	0.00	0.00	0.00	0.00			
11	Thu	0.117	0.066	0.013	0.028	0.010	0.0000	47.6	65.6	69	0.00	2.5	0.12	0.00	0.00	0.00	0.00			
12	Fri	0.098	0.040	0.026	0.022	0.010	0.0000	45.1	54.7	85	0.56	4.6	0.04	0.00	0.00	0.00	0.00			
13	Sat	0.125	0.066	0.040	0.014	0.005	0.0000	46.9	58.2	70	0.00	3.9	0.13	0.00	0.00	0.00	0.00			
14	Sun	0.035	0.006	0.001	0.019	0.010	0.0000	51.0	71.1	63	0.00	2.1	0.13	0.00	0.91	0.00	0.91			
15	Mon	0.138	0.083	0.026	0.014	0.015	0.0011	55.3	73.0	74	0.00	1.0	0.13	0.00	0.11	0.00	0.11			
16	Tue	0.161	0.066	0.026	0.014	0.055	0.0000	58.3	78.5	77	0.00	1.3	0.13	0.00	0.00	0.00	0.00			
17	Wed	0.267	0.088	0.053	0.099	0.027	0.0000	62.8	81.6	71	0.00	1.4	0.15	0.00	0.00	0.00	0.00			
18	Thu	0.258	0.097	0.049	0.082	0.030	0.0000	62.2	77.7	29	0.00	3.5	0.18	0.00	1.02	0.00	1.02			
19	Fri	0.443	0.180	0.064	0.072	0.128	0.0000	67.6	89.1	35	0.00	2.7	0.18	0.00	0.16	0.00	0.16			
20	Sat	0.502	0.194	0.055	0.110	0.143	0.0000	58.4	78.4	55	0.00	2.2	0.14	0.00	0.00	0.00	0.00			
21	Sun	0.443	0.197	0.091	0.113	0.041	0.0000	57.7	73.8	75	0.00	3.4	0.14	0.00	0.00	0.00	0.00			
22	Mon	0.830	0.306	0.203	0.042	0.280	0.0006	55.6	67.7	66	0.00	2.8	0.15	0.00	1.17	0.00	1.17			
23	Tue	0.725	0.130	0.199	0.295	0.100	0.0000	53.7	74.7	50	0.00	2.8	0.17	0.00	1.63	0.00	1.63			
24	Wed	1.268	0.503	0.536	0.115	0.114	0.0000	48.3	68.4	71	0.03	4.9	0.15	0.00	0.20	0.00	0.20			
25	Thu	0.966	0.238	0.490	0.158	0.080	0.0000	47.7	57.4	72	0.06	5.7	0.13	0.00	1.74	0.00	1.74			
26	Fri	0.914	0.079	0.299	0.190	0.347	0.0000	48.1	65.7	64	0.00	2.7	0.15	0.00	1.83	0.00	1.83			
27	Sat	1.077	0.305	0.344	0.128	0.300	0.0000	51.7	72.7	57	0.00	1.6	0.16	0.00	1.35	0.00	1.35			
28	Sun	0.771	0.336	0.129	0.056	0.250	0.0000	52.9	72.6	54	0.00	3.5	0.17	0.00	1.64	0.00	1.64			
29	Mon	0.644	0.377	0.098	0.047	0.122	0.0000	51.8	63.3	75	0.04	4.9	0.10	0.00	1.55	0.00	1.55			
30	Tue	0.479	0.215	0.132	0.042	0.090	0.0000	50.5	58.7	73	0.28	9.2	0.11	0.00	0.00	0.00	0.00			
31	Wed	0.382	0.186	0.050	0.059	0.086	0.0000	46.1	59.2	68	0.34	5.1	0.12	0.00	0.00	0.00	0.00			
TOTAL		11.819	4.141	3.298	2.061	2.319	0.0017				2.73				13.94	0.00	13.94			
AVG		0.381	0.134	0.106	0.066	0.075	0.0001	51.5	66.4	69	0.09	3.7	0.12	0.00	0.45	0.00	0.45			
MIN		0.035	0.006	0.001	0.014	0.000	0.0000	43.4	52.9	29	0.00	1.0	0.04	0.00	0.00	0.00	0.00			
MAX		1.268	0.503	0.536	0.295	0.347	0.0011	67.6	89.1	91	0.75	9.2	0.18	0.00	1.83	0.00	1.83			

DERWA Recycled Water Demand

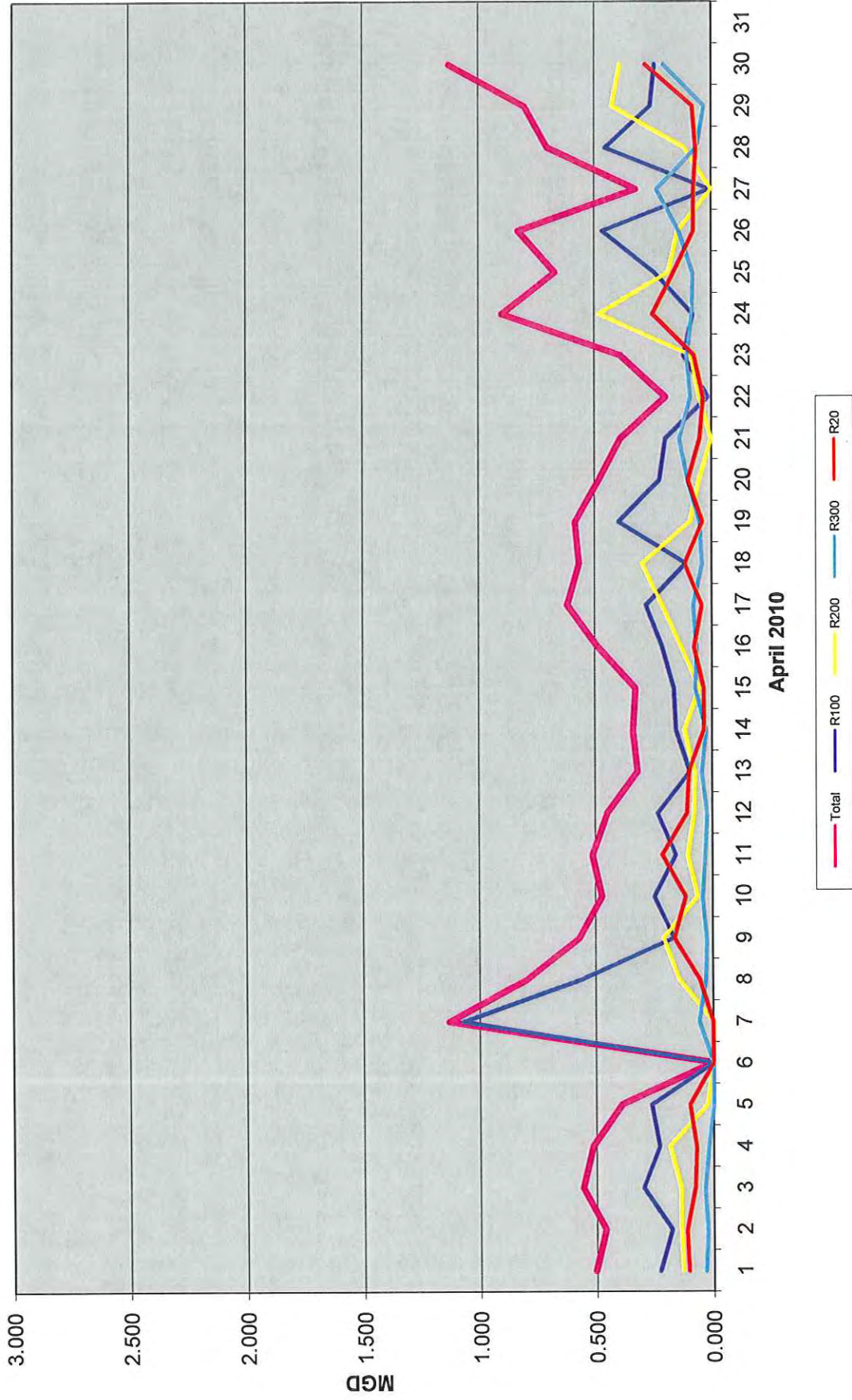


DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
April 2010

Date:	Day:	Recycled Water Customer Demand (MG)										Weather Conditions					Production (MG)		
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total		
1	Thu	0.506	0.230	0.132	0.036	0.107	0.0000	43.3	53.9	74	0.00	4.6	0.13	0.00	0.00	0.00	0.00		
2	Fri	0.462	0.180	0.140	0.028	0.115	0.0000	42.4	53.3	81	0.10	4.2	0.07	0.00	0.74	0.00	0.74		
3	Sat	0.558	0.300	0.140	0.038	0.080	0.0000	42.0	55.8	70	0.00	3.6	0.11	0.00	0.13	0.00	0.13		
4	Sun	0.515	0.232	0.187	0.022	0.074	0.0000	41.9	50.0	80	0.95	5.7	0.05	0.00	0.00	0.00	0.00		
5	Mon	0.390	0.264	0.026	0.000	0.100	0.0000	45.5	58.9	74	0.11	1.0	0.11	0.00	0.00	0.00	0.00		
6	Tue	0.000	0.000	0.000	0.000	0.000	0.0000	48.5	63.4	63	0.01	2.2	0.17	0.00	0.00	0.00	0.00		
7	Wed	1.133	1.071	0.000	0.062	0.000	0.0000	54.2	75.1	59	0.00	1.9	0.18	0.22	1.03	0.00	1.26		
8	Thu	0.800	0.566	0.144	0.034	0.056	0.0000	50.8	64.1	61	0.00	4.4	0.17	0.33	1.52	0.00	1.85		
9	Fri	0.571	0.167	0.211	0.028	0.165	0.0000	53.1	71.3	52	0.00	2.1	0.19	0.00	0.66	0.00	0.66		
10	Sat	0.473	0.250	0.063	0.045	0.115	0.0000	50.0	56.4	68	0.00	5.1	0.09	0.00	0.00	0.00	0.00		
11	Sun	0.513	0.158	0.106	0.034	0.215	0.0000	46.4	53.6	73	0.97	7.3	0.04	0.00	0.00	0.00	0.00		
12	Mon	0.449	0.235	0.079	0.025	0.109	0.0000	47.1	55.2	82	0.50	5.9	0.08	0.00	0.50	0.00	1.16		
13	Tue	0.318	0.097	0.075	0.046	0.100	0.0000	50.0	59.3	74	0.00	3.6	0.08	0.00	1.16	0.00	1.16		
14	Wed	0.337	0.155	0.119	0.028	0.035	0.0000	50.3	62.0	69	0.00	4.4	0.17	0.00	0.25	0.00	0.52		
15	Thu	0.327	0.164	0.054	0.074	0.035	0.0000	53.8	71.9	69	0.00	2.4	0.17	0.00	0.52	0.00	0.52		
16	Fri	0.488	0.214	0.132	0.067	0.075	0.0000	57.2	71.0	64	0.00	3.9	0.19	0.00	0.62	0.00	0.62		
17	Sat	0.618	0.281	0.213	0.082	0.043	0.0000	56.1	71.3	71	0.00	3.3	0.17	0.00	0.46	0.00	0.46		
18	Sun	0.567	0.112	0.297	0.043	0.115	0.0000	55.8	78.1	58	0.01	2.3	0.20	0.00	1.17	0.00	1.17		
19	Mon	0.584	0.399	0.092	0.053	0.039	0.0000	54.4	69.7	65	0.00	4.4	0.18	0.00	0.63	0.00	0.63		
20	Tue	0.483	0.225	0.054	0.104	0.100	0.0000	48.3	55.9	72	0.49	7.8	0.15	0.00	0.05	0.00	0.05		
21	Wed	0.389	0.198	0.001	0.140	0.050	0.0000	45.7	54.0	77	0.05	4.4	0.05	0.00	0.00	0.00	0.00		
22	Thu	0.195	0.016	0.052	0.092	0.035	0.0000	55.2	67.3	70	0.00	2.9	0.18	0.00	1.13	0.00	1.13		
23	Fri	0.387	0.119	0.088	0.107	0.073	0.0000	56.4	73.7	73	0.00	3.4	0.20	0.00	1.47	0.00	1.47		
24	Sat	0.898	0.080	0.482	0.086	0.250	0.0000	57.5	75.1	69	0.00	3.2	0.20	0.00	0.37	0.00	0.37		
25	Sun	0.669	0.243	0.183	0.082	0.161	0.0000	63.3	85.2	52	0.00	2.4	0.23	0.00	0.46	0.00	0.46		
26	Mon	0.828	0.468	0.144	0.141	0.075	0.0000	59.0	75.8	52	0.00	4.3	0.21	0.00	0.04	0.00	0.04		
27	Tue	0.322	0.010	0.001	0.236	0.075	0.0000	54.9	64.4	76	0.08	9.1	0.14	0.00	1.23	0.00	1.23		
28	Wed	0.702	0.456	0.116	0.064	0.065	0.0000	49.8	58.9	72	0.18	7.1	0.13	0.00	0.84	0.00	0.84		
29	Thu	0.801	0.262	0.426	0.033	0.080	0.0000	51.8	63.8	64	0.00	5.5	0.19	0.00	0.89	0.00	0.89		
30	Fri	1.127	0.245	0.392	0.209	0.282	0.0000	54.7	67.9	59	0.00	5.1	0.21	0.32	1.51	0.00	1.83		
TOTAL		16.411	7.401	4.148	2.039	2.824	0.0000	51.3	64.5	68	3.45	4.3	0.15	0.87	16.87	0.00	17.74		
AVG		0.547	0.247	0.138	0.068	0.094	0.0000	51.3	64.5	68	0.12	4.3	0.15	0.03	0.56	0.00	0.59		
MIN		0.000	0.000	0.000	0.000	0.000	0.0000	41.9	50.0	52	0.00	1.0	0.04	0.00	0.00	0.00	0.00		
MAX		1.133	1.071	0.482	0.236	0.282	0.0000	63.3	85.2	82	0.97	9.1	0.23	0.33	1.52	0.00	1.85		

Note: During the reservoir cleaning in April 1,447,800 gallons of recycled water were drained back to the WWTP:
R100: 119,000 gallons
R200: 30,000 gallons
R300: 58,500 gallons
Pipeline Backbone: 1.24 MG

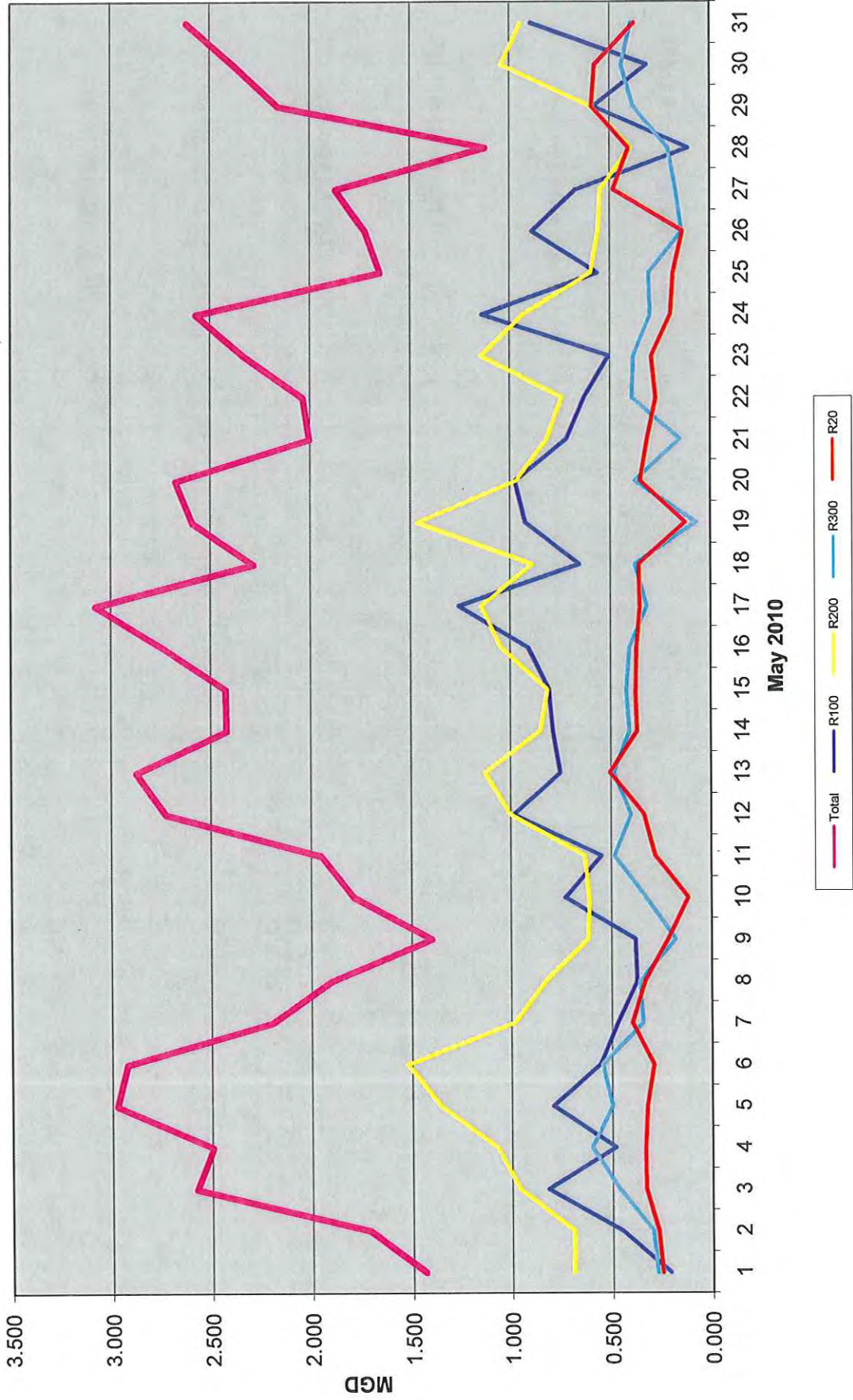
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 May 2010

Date:	Day:	Recycled Water Customer Demand (MG)										Weather Conditions					Production (MG)		
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Wind mph	Avg inches	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total	
			0.213	0.696	0.277	0.251													
1	Sat	1.436	0.213	0.696	0.277	0.251	57.8	72.0	70	0.00	3.8	0.20	1.73	0.24	0.00	1.98			
2	Sun	1.716	0.454	0.692	0.300	0.270	63.5	81.1	50	0.00	4.7	0.24	1.22	0.00	0.00	1.22			
3	Mon	2.579	0.821	0.960	0.467	0.331	64.6	84.9	59	0.00	3.7	0.23	0.88	0.00	0.00	0.88			
4	Tue	2.496	0.484	1.074	0.603	0.334	61.1	79.0	56	0.00	3.3	0.22	2.87	0.00	0.00	2.87			
5	Wed	2.977	0.794	1.357	0.501	0.325	57.7	71.2	59	0.00	4.1	0.20	2.83	0.00	0.00	2.83			
6	Thu	2.924	0.559	1.523	0.551	0.291	59.3	75.7	33	0.00	3.7	0.22	3.39	0.00	0.00	3.39			
7	Fri	2.198	0.472	0.983	0.345	0.339	57.7	72.2	54	0.00	4.2	0.22	3.82	0.00	0.00	3.82			
8	Sat	1.901	0.375	0.829	0.363	0.334	56.6	67.4	70	0.00	6.6	0.20	2.92	0.00	0.00	2.92			
9	Sun	1.398	0.382	0.617	0.181	0.218	55.3	63.2	73	0.00	7.5	0.14	1.87	0.00	0.00	1.87			
10	Mon	1.786	0.731	0.610	0.329	0.116	51.1	59.8	76	0.16	7.6	0.10	1.29	0.00	0.00	1.29			
11	Tue	1.949	0.550	0.632	0.487	0.280	53.6	67.7	65	0.01	3.9	0.20	1.74	0.00	0.00	1.74			
12	Wed	2.727	0.987	1.002	0.404	0.335	56.6	73.8	65	0.00	4.0	0.21	1.84	0.00	0.00	1.84			
13	Thu	2.874	0.753	1.129	0.488	0.505	56.3	75.0	69	0.00	4.1	0.21	2.93	0.00	0.00	2.93			
14	Fri	2.421	0.790	0.852	0.410	0.369	54.0	66.9	74	0.00	6.3	0.20	3.11	0.00	0.00	3.11			
15	Sat	2.425	0.809	0.815	0.425	0.376	56.1	74.5	70	0.00	5.7	0.20	2.79	0.00	0.00	2.79			
16	Sun	2.738	0.911	1.046	0.410	0.371	52.2	65.9	74	0.00	6.9	0.18	2.27	0.00	0.00	2.27			
17	Mon	3.078	1.261	1.145	0.320	0.353	53.9	65.0	76	0.06	4.1	0.08	2.65	0.00	0.00	2.65			
18	Tue	2.283	0.656	0.889	0.380	0.358	56.2	68.5	76	0.01	3.8	0.13	2.88	0.00	0.00	2.88			
19	Wed	2.588	0.924	1.467	0.072	0.125	55.7	68.0	71	0.01	4.2	0.13	3.10	0.00	0.00	3.10			
20	Thu	2.673	0.975	0.969	0.380	0.350	55.6	69.9	63	0.00	4.8	0.21	1.85	0.00	0.00	1.85			
21	Fri	2.003	0.720	0.817	0.153	0.314	49.5	59.2	67	0.00	7.5	0.18	1.77	0.00	0.00	1.77			
22	Sat	2.034	0.630	0.740	0.394	0.269	47.0	59.2	60	0.00	8.5	0.21	2.78	0.00	0.00	2.78			
23	Sun	2.329	0.507	1.145	0.386	0.291	49.7	62.7	61	0.00	7.2	0.22	1.96	0.00	0.00	1.96			
24	Mon	2.570	1.142	0.933	0.299	0.196	51.9	66.2	66	0.00	5.4	0.12	2.41	0.00	0.00	2.41			
25	Tue	1.650	0.563	0.597	0.307	0.183	49.7	61.0	82	0.40	3.0	0.21	2.70	0.00	0.00	2.70			
26	Wed	1.723	0.890	0.557	0.141	0.135	52.7	62.7	69	0.05	5.3	0.21	1.63	0.00	0.00	1.63			
27	Thu	1.871	0.670	0.547	0.172	0.482	51.3	62.6	73	0.00	5.1	0.15	1.81	0.00	0.00	1.81			
28	Fri	1.122	0.109	0.398	0.210	0.405	54.9	68.3	68	0.00	4.3	0.18	1.72	0.00	0.00	1.72			
29	Sat	2.156	0.584	0.598	0.385	0.589	62.0	78.8	54	0.00	3.5	0.25	1.32	0.00	0.00	1.32			
30	Sun	2.379	0.315	1.043	0.446	0.574	64.5	84.2	49	0.00	3.7	0.26	2.19	0.00	0.00	2.19			
31	Mon	2.617	0.896	0.946	0.397	0.378	61.7	75.2	70	0.00	5.1	0.20	2.49	0.00	0.00	2.49			
TOTAL		69.622	20.927	27.606	10.982	10.107	55.8	69.7	65	0.70	5.0	0.19	70.74	0.24	0.00	70.98			
AVG		2.246	0.675	0.891	0.354	0.326				0.02			2.28	0.01	0.00	2.29			
MIN		1.122	0.109	0.398	0.072	0.116	47.0	59.2	33	0.00	3.0	0.08	0.88	0.00	0.00	0.88			
MAX		3.078	1.261	1.523	0.603	0.589	64.6	84.9	82	0.40	8.5	0.26	3.82	0.24	0.00	3.82			

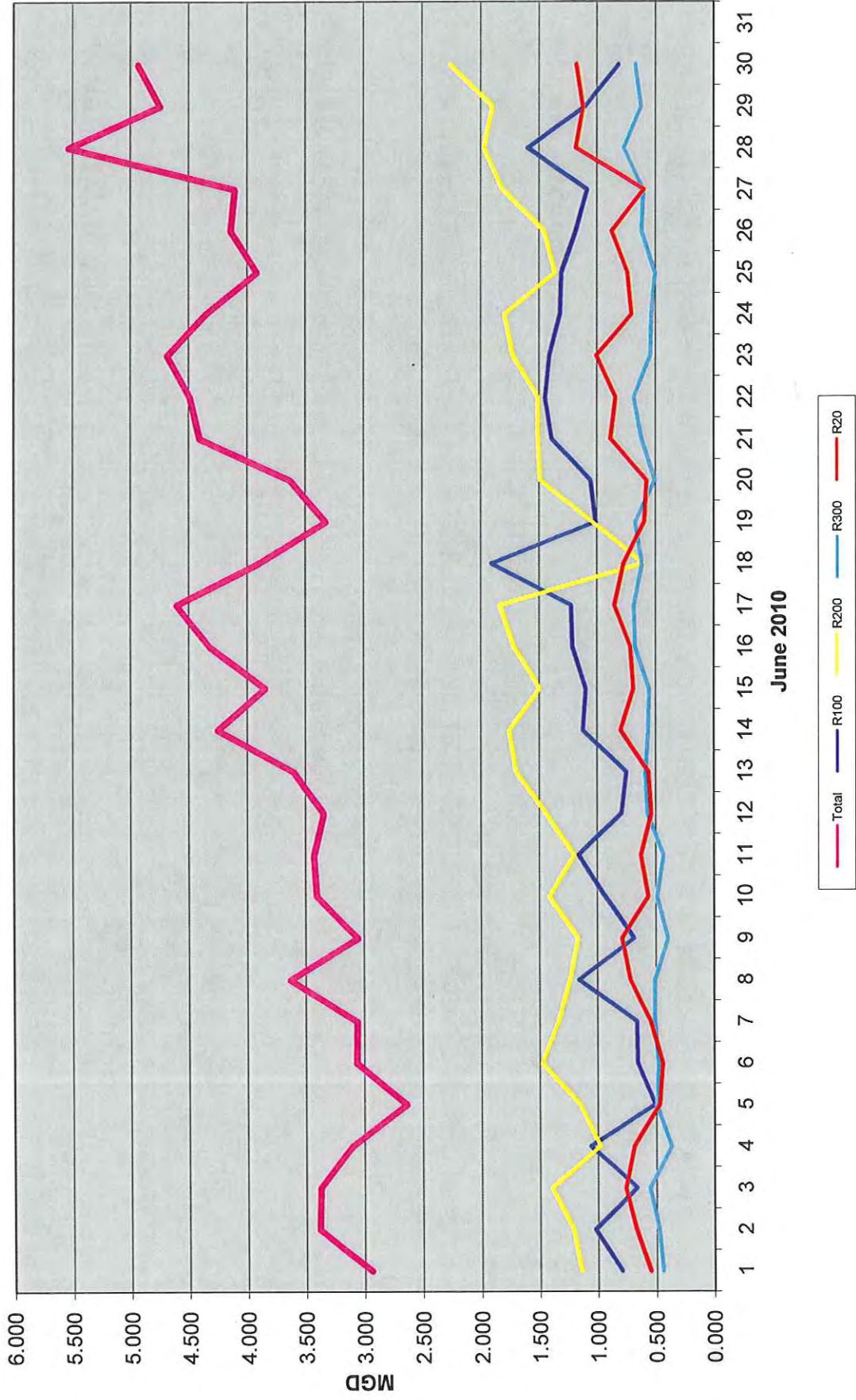
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 June 2010

Date:	Day:	Recycled Water Customer Demand (MG)										Weather Conditions					Production (MG)		
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total		
1	Tue	2,940	0.798	1.145	0.447	0.550	0.0000	56.8	69.5	76	0.00	5.8	0.17	1.97	0.00	0.00	1.97		
2	Wed	3,389	1.025	1.214	0.480	0.670	0.0000	60.6	74.8	70	0.00	5.0	0.23	1.88	0.00	0.00	1.88		
3	Thu	3,380	0.666	1.393	0.558	0.763	0.0000	62.4	74.0	69	0.00	5.5	0.22	2.96	0.22	0.00	3.18		
4	Fri	3,104	1.064	0.980	0.371	0.688	0.0000	65.7	79.0	69	0.00	4.9	0.24	1.74	0.95	0.00	2.69		
5	Sat	2,639	0.510	1.154	0.502	0.474	0.0000	66.2	80.9	62	0.00	4.5	0.26	3.59	2.07	0.00	5.66		
6	Sun	3,066	0.657	1.479	0.485	0.446	0.0000	62.3	75.7	74	0.00	5.4	0.24	3.46	0.00	0.00	3.46		
7	Mon	3,060	0.664	1.336	0.513	0.547	0.0000	56.8	70.4	71	0.00	6.8	0.22	2.89	0.00	0.00	2.89		
8	Tue	3,636	1.163	1.241	0.515	0.717	0.0000	53.9	65.5	73	0.00	6.7	0.22	3.14	0.00	0.00	3.14		
9	Wed	3,051	0.688	1.170	0.401	0.792	0.0000	54.9	64.1	73	0.00	6.0	0.21	3.56	0.00	0.00	3.56		
10	Thu	3,405	0.935	1.410	0.496	0.563	0.0000	58.8	68.5	65	0.00	7.1	0.22	2.87	0.00	0.00	2.87		
11	Fri	3,429	1.165	1.199	0.440	0.625	0.0000	64.6	80.6	34	0.00	6.2	0.28	3.27	0.00	0.00	3.27		
12	Sat	3,346	0.798	1.438	0.573	0.537	0.0000	73.2	88.1	34	0.00	7.1	0.31	4.16	0.00	0.00	4.16		
13	Sun	3,605	0.755	1.698	0.591	0.560	0.0000	73.0	90.6	39	0.00	4.1	0.29	3.66	0.00	0.00	3.66		
14	Mon	4,252	1.126	1.755	0.569	0.803	0.0000	64.3	81.4	57	0.00	5.9	0.25	3.89	0.00	0.00	3.89		
15	Tue	3,845	1.099	1.496	0.562	0.688	0.0000	56.2	68.6	64	0.00	8.6	0.23	4.28	0.00	0.00	4.28		
16	Wed	4,323	1.214	1.716	0.678	0.715	0.0000	59.9	76.4	46	0.00	4.7	0.26	4.28	0.00	0.00	4.28		
17	Thu	4,606	1.226	1.837	0.689	0.855	0.0000	59.3	78.5	46	0.00	4.1	0.22	4.41	0.00	0.00	4.41		
18	Fri	3,905	1.911	0.604	0.616	0.773	0.0000	51.9	65.8	74	0.00	8.2	0.20	4.42	0.00	0.00	4.42		
19	Sat	3,324	1.013	1.043	0.676	0.592	0.0000	50.7	59.8	73	0.00	8.1	0.20	3.34	0.00	0.00	3.34		
20	Sun	3,630	1.054	1.491	0.510	0.574	0.0000	57.5	72.2	63	0.00	4.4	0.24	3.01	0.00	0.00	3.01		
21	Mon	4,406	1.390	1.509	0.621	0.887	0.0016	62.4	80.4	49	0.00	3.9	0.26	3.85	0.00	0.00	3.85		
22	Tue	4,488	1.448	1.509	0.688	0.843	0.0000	68.8	86.4	53	0.00	4.7	0.25	7.99	0.00	0.00	7.99		
23	Wed	4,687	1.411	1.724	0.549	1.003	0.0000	62.5	77.6	61	0.00	5.4	0.25	4.20	0.00	0.00	4.20		
24	Thu	4,355	1.319	1.796	0.539	0.701	0.0000	55.1	67.3	75	0.00	6.6	0.21	5.38	0.00	0.00	5.38		
25	Fri	3,915	1.308	1.359	0.510	0.737	0.0000	57.3	73.1	73	0.00	6.9	0.20	4.90	0.00	0.00	4.90		
26	Sat	4,140	1.187	1.457	0.621	0.875	0.0000	64.6	81.1	61	0.00	5.0	0.25	4.37	0.00	0.00	4.37		
27	Sun	4,107	1.088	1.815	0.609	0.595	0.0000	75.4	96.0	44	0.00	3.1	0.29	4.19	0.00	0.00	4.19		
28	Mon	5,532	1.598	1.975	0.777	1.182	0.0000	73.5	91.3	49	0.00	5.3	0.29	4.67	0.00	0.00	4.67		
29	Tue	4,745	1.102	1.899	0.625	1.120	0.0000	66.2	83.6	51	0.00	5.9	0.27	5.08	0.00	0.00	5.08		
30	Wed	4,934	0.820	2.264	0.675	1.175	0.0000	59.1	73.5	49	0.00	6.6	0.24	4.88	0.00	0.00	4.88		
TOTAL		115,242	32,202	44,105	16,884	22,051	0.0016	61.8	76.5	60	0.00	5.8	0.24	116,29	3.24	0.00	119,53		
AVG		3,841	1,073	1,470	0,563	0,735	0,0001	61.8	76.5	60	0.00	5.8	0.24	3,88	0.11	0.00	3,98		
MIN		2,639	0,510	0,604	0,371	0,446	0,0000	50,7	59,8	34	0,00	3,1	0,17	1,74	0,00	0,00	1,88		
MAX		5,532	1,911	2,264	0,777	1,182	0,0016	75,4	96,0	76	0,00	8,6	0,31	7,99	2,07	0,00	7,99		

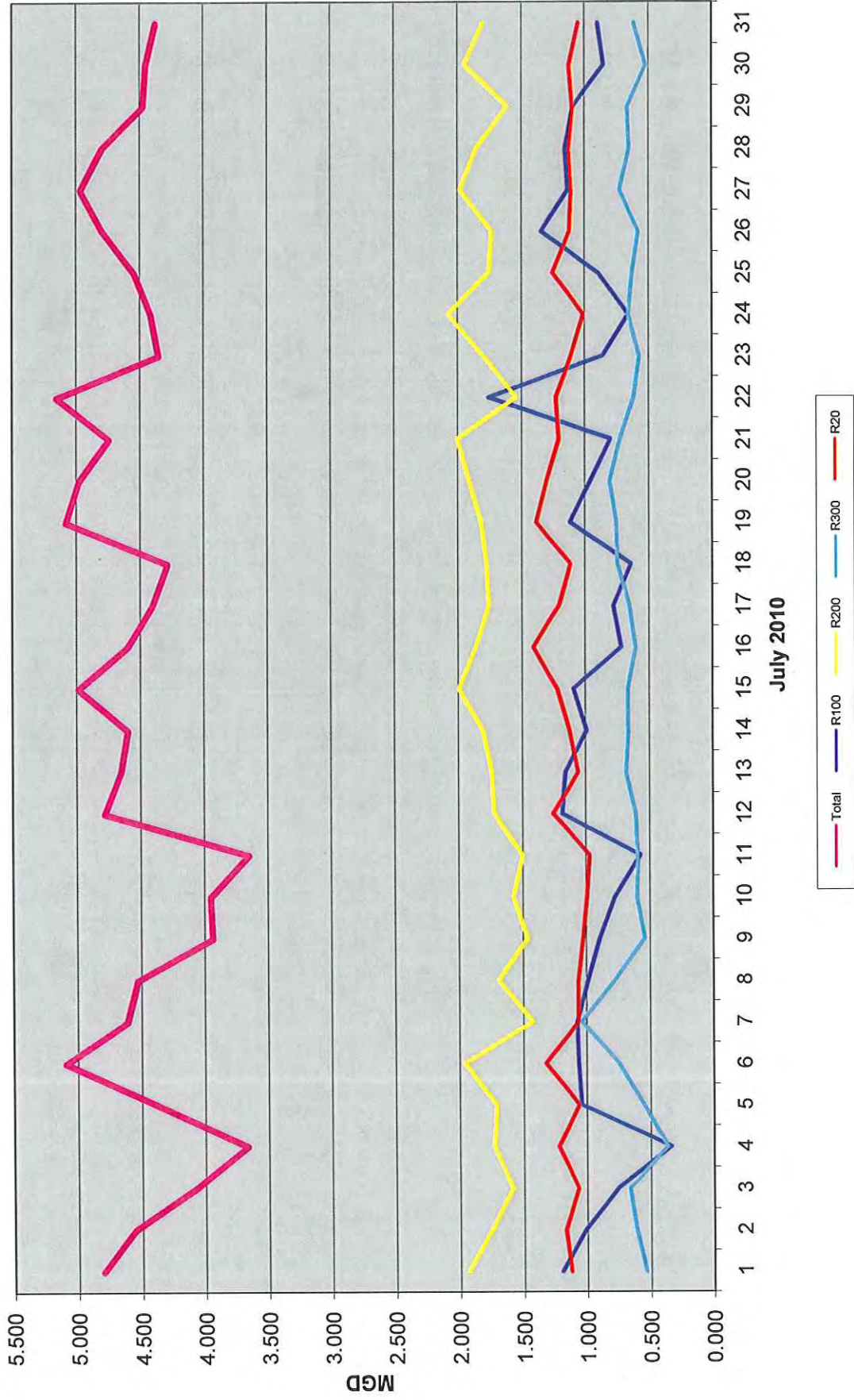
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 July 2010

Date:	Day:	Recycled Water Customer Demand (MG)										Weather Conditions					Production (MG)		
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total		
1	Thu	4.807	1.202	1.936	0.541	1.128	0.0000	58.2	73.5	63	0.00	6.2	0.24	4.86	0.00	0.00	4.86		
2	Fri	4.560	1.014	1.756	0.617	1.172	0.0000	60.7	73.2	58	0.00	5.5	0.25	4.93	0.00	0.00	4.93		
3	Sat	4.078	0.758	1.585	0.666	1.069	0.0000	74.4	93.7	41	0.00	3.4	0.28	4.17	0.00	0.00	4.17		
4	Sun	3.667	0.341	1.733	0.368	1.225	0.0000	75.0	95.9	42	0.00	4.6	0.28	3.15	0.00	0.00	3.15		
5	Mon	4.379	1.045	1.715	0.557	1.062	0.0027	70.0	88.2	59	0.00	5.6	0.26	4.29	0.00	0.00	4.29		
6	Tue	5.096	1.066	1.958	0.751	1.322	0.0000	64.6	78.1	72	0.00	8.4	0.24	4.67	0.00	0.00	4.67		
7	Wed	4.613	1.077	1.428	1.043	1.065	0.0000	66.1	81.1	67	0.00	7.7	0.24	5.16	0.00	0.00	5.16		
8	Thu	4.532	0.990	1.693	0.782	1.067	0.0000	63.6	78.8	69	0.00	9.1	0.23	4.18	0.00	0.00	4.18		
9	Fri	3.936	0.899	1.465	0.546	1.026	0.0000	65.1	82.8	68	0.00	7.2	0.22	4.74	0.00	0.00	4.74		
10	Sat	3.953	0.778	1.572	0.607	0.996	0.0000	70.0	88.5	63	0.00	5.4	0.25	3.84	0.00	0.00	3.84		
11	Sun	3.650	0.578	1.500	0.599	0.972	0.0000	69.2	85.6	62	0.00	6.5	0.24	3.83	0.00	0.00	3.83		
12	Mon	4.784	1.192	1.722	0.612	1.258	0.0000	66.8	81.8	70	0.00	9.1	0.24	4.15	0.00	0.00	4.15		
13	Tue	4.653	1.166	1.740	0.688	1.059	0.0000	68.4	81.4	67	0.00	7.8	0.24	4.02	0.00	0.00	4.02		
14	Wed	4.598	0.992	1.808	0.669	1.129	0.0000	71.8	88.7	35	0.00	4.4	0.27	5.72	0.00	0.00	5.72		
15	Thu	4.987	1.097	1.994	0.673	1.222	0.0000	76.1	93.8	41	0.00	3.9	0.29	4.64	0.00	0.00	4.64		
16	Fri	4.602	0.720	1.861	0.611	1.410	0.0000	70.0	87.4	47	0.00	5.4	0.25	5.20	0.00	0.00	5.20		
17	Sat	4.404	0.781	1.760	0.657	1.205	0.0000	74.0	90.6	54	0.00	5.2	0.27	3.99	0.00	0.00	3.99		
18	Sun	4.284	0.642	1.775	0.749	1.118	0.0000	73.5	93.9	50	0.00	5.1	0.26	4.02	0.00	0.00	4.02		
19	Mon	5.081	1.123	1.817	0.757	1.383	0.0000	67.6	83.2	61	0.00	6.4	0.25	4.21	0.00	0.00	4.21		
20	Tue	4.978	0.957	1.909	0.812	1.300	0.0000	62.9	81.0	71	0.00	8.4	0.22	4.55	0.00	0.00	4.55		
21	Wed	4.742	0.804	2.004	0.730	1.205	0.0000	61.2	78.1	73	0.00	8.1	0.22	4.72	0.00	0.00	4.72		
22	Thu	5.153	1.760	1.543	0.623	1.226	0.0000	67.9	89.2	62	0.00	6.0	0.23	2.90	1.48	0.00	4.38		
23	Fri	4.352	0.861	1.802	0.580	1.109	0.0000	68.2	88.2	59	0.00	5.0	0.24	3.95	2.03	0.00	5.97		
24	Sat	4.413	0.661	2.077	0.664	1.011	0.0000	68.4	89.5	58	0.00	6.0	0.24	5.57	1.47	0.00	7.04		
25	Sun	4.543	0.897	1.759	0.635	1.252	0.0000	68.0	82.0	58	0.00	8.3	0.23	4.56	0.00	0.00	4.56		
26	Mon	4.790	1.344	1.736	0.587	1.123	0.0000	56.3	70.0	72	0.00	8.7	0.22	4.67	0.00	0.00	4.67		
27	Tue	4.964	1.138	1.984	0.732	1.110	0.0000	57.3	70.9	69	0.00	7.3	0.22	5.28	0.00	0.00	5.28		
28	Wed	4.797	1.158	1.854	0.657	1.128	0.0000	59.3	73.4	70	0.00	7.0	0.21	3.07	0.00	0.00	3.07		
29	Thu	4.477	1.096	1.614	0.670	1.097	0.0000	63.7	81.8	61	0.00	6.0	0.23	4.20	0.00	0.00	4.20		
30	Fri	4.454	0.855	1.947	0.528	1.124	0.0000	60.4	77.3	67	0.00	6.1	0.22	4.55	0.00	0.00	4.55		
31	Sat	4.376	0.900	1.803	0.622	1.051	0.0000	62.6	81.3	59	0.00	4.2	0.23	4.48	0.00	0.00	4.48		
TOTAL		140.700	29.893	54.851	20.332	35.624	0.0027				0.00			136.26	4.98	0.00	141.24		
AVG		4.539	0.964	1.769	0.656	1.149	0.0001	66.5	83.3	60	0.00	6.4	0.24	4.40	0.16	0.00	4.56		
MIN		3.650	0.341	1.428	0.368	0.972	0.0000	56.3	70.0	35	0.00	3.4	0.21	2.90	0.00	0.00	3.07		
MAX		5.153	1.760	2.077	1.043	1.410	0.0027	76.1	95.9	73	0.00	9.1	0.29	5.72	2.03	0.00	7.04		

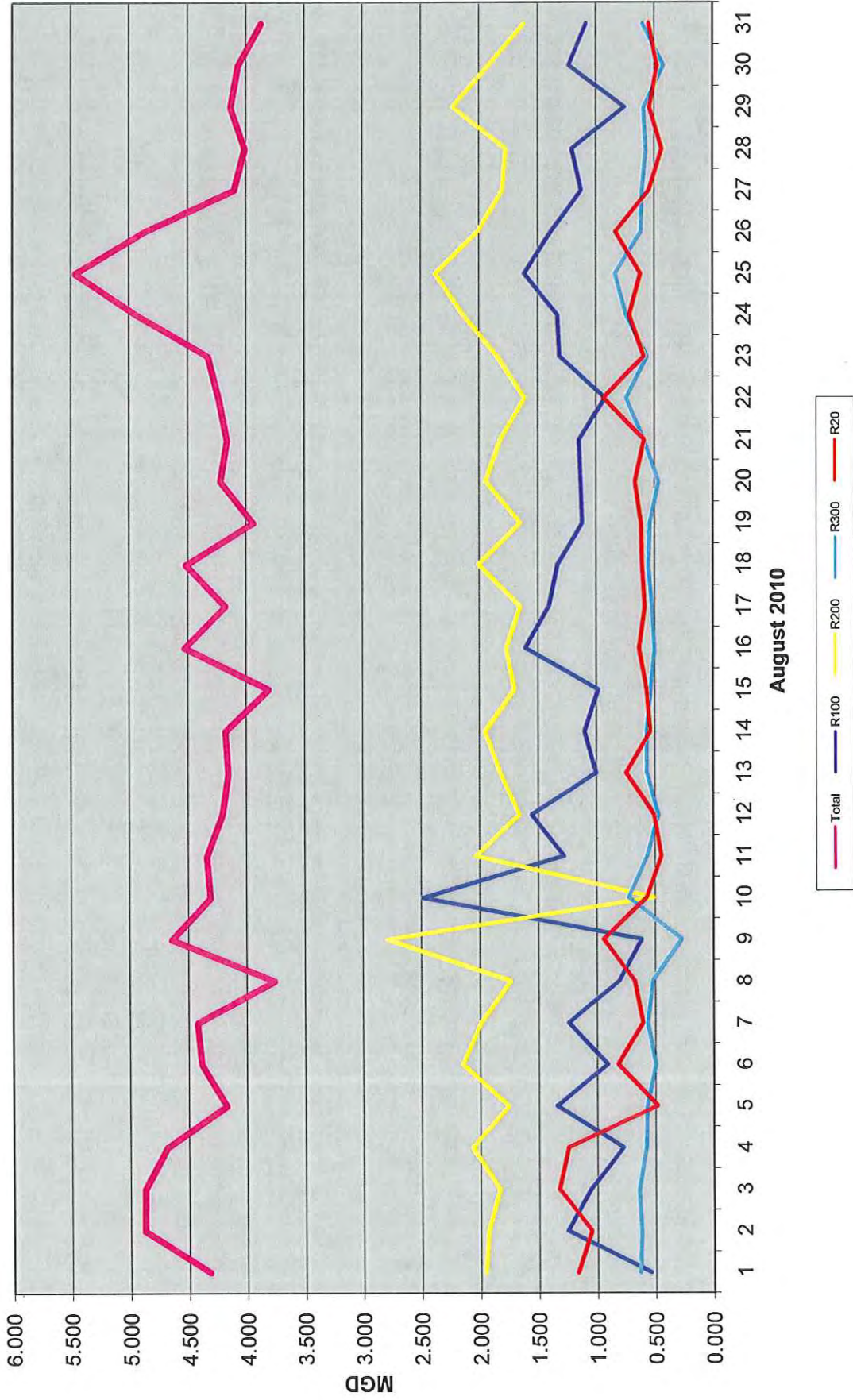
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 August 2010

Date:	Day:	Recycled Water Customer Demand (MG)										Weather Conditions						Production (MG)		
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total			
1	Sun	4.321	0.548	1.959	0.642	1.172	0.0000	68.8	87.1	57	0.00	3.6	0.24	4.49	0.00	0.00	4.49			
2	Mon	4.880	1.262	1.936	0.629	1.053	0.0000	61.5	77.0	61	0.00	5.5	0.23	4.51	0.00	0.00	4.51			
3	Tue	4.877	1.060	1.835	0.650	1.331	0.0000	60.5	81.0	62	0.00	4.5	0.22	4.91	0.00	0.00	4.91			
4	Wed	4.692	0.781	2.068	0.589	1.254	0.0000	55.3	72.1	71	0.00	7.7	0.21	5.23	0.00	0.00	5.23			
5	Thu	4.175	1.350	1.758	0.581	0.486	0.0000	53.2	66.4	64	0.00	7.9	0.20	4.27	0.00	0.00	4.27			
6	Fri	4.389	0.915	2.148	0.502	0.824	0.0000	56.9	74.7	66	0.00	5.8	0.22	4.16	0.00	0.00	4.16			
7	Sat	4.427	1.250	1.993	0.574	0.610	0.0000	59.4	79.6	69	0.00	5.7	0.21	8.14	1.00	0.00	9.14			
8	Sun	3.760	0.815	1.736	0.529	0.680	0.0000	60.5	75.0	73	0.00	6.6	0.21	4.22	0.00	0.00	4.22			
9	Mon	4.643	0.625	2.791	0.280	0.948	0.0000	62.8	77.8	70	0.00	6.7	0.21	4.12	0.00	0.00	4.12			
10	Tue	4.309	2.487	0.514	0.733	0.576	0.0000	59.0	78.1	67	0.00	6.2	0.21	4.13	0.00	0.00	4.13			
11	Wed	4.340	1.286	2.033	0.575	0.446	0.0000	55.3	64.2	79	0.00	6.8	0.17	4.58	0.00	0.00	4.58			
12	Thu	4.206	1.560	1.661	0.477	0.509	0.0000	62.3	80.8	66	0.00	4.7	0.20	4.72	0.00	0.00	4.72			
13	Fri	4.154	1.007	1.823	0.576	0.748	0.0000	60.3	7.8	70	0.00	5.9	0.21	4.75	0.00	0.00	4.75			
14	Sat	4.178	1.106	1.953	0.577	0.542	0.0000	56.4	68.5	73	0.00	7.7	0.19	3.31	0.00	0.00	3.31			
15	Sun	3.807	0.990	1.702	0.543	0.571	0.0000	56.2	74.4	72	0.00	6.6	0.19	4.18	0.00	0.00	4.18			
16	Mon	4.528	1.612	1.772	0.507	0.637	0.0000	63.3	81.8	67	0.00	4.6	0.21	3.76	0.00	0.00	3.76			
17	Tue	4.176	1.410	1.652	0.528	0.586	0.0000	59.6	75.5	73	0.00	7.2	0.20	4.52	0.00	0.00	4.52			
18	Wed	4.513	1.336	2.009	0.560	0.608	0.0000	62.0	76.0	69	0.00	6.7	0.21	4.54	0.00	0.00	4.54			
19	Thu	3.936	1.121	1.649	0.549	0.618	0.0000	66.6	89.0	57	0.00	3.2	0.21	4.45	0.00	0.00	4.45			
20	Fri	4.219	1.135	1.945	0.471	0.668	0.0000	62.6	80.7	67	0.00	5.6	0.21	3.69	0.00	0.00	3.69			
21	Sat	4.161	1.150	1.822	0.597	0.592	0.0000	56.2	64.5	74	0.00	6.1	0.18	3.83	0.00	0.00	3.83			
22	Sun	4.232	0.928	1.614	0.749	0.940	0.0000	63.7	83.4	55	0.00	4.1	0.21	4.43	0.00	0.00	4.43			
23	Mon	4.322	1.315	1.846	0.569	0.592	0.0000	73.5	101.8	40	0.00	1.4	0.24	4.96	0.00	0.00	4.96			
24	Tue	4.930	1.333	2.133	0.748	0.717	0.0000	81.0	104.4	37	0.00	1.0	0.25	4.29	0.00	0.00	4.29			
25	Wed	5.459	1.618	2.376	0.844	0.621	0.0000	77.6	101.1	40	0.00	3.9	0.24	5.05	0.00	0.00	5.05			
26	Thu	4.865	1.392	2.014	0.624	0.835	0.0000	62.9	82.1	60	0.00	5.1	0.21	5.25	0.00	0.00	5.25			
27	Fri	4.100	1.131	1.805	0.616	0.549	0.0000	56.6	70.4	68	0.00	5.6	0.20	3.90	0.00	0.00	3.90			
28	Sat	4.006	1.213	1.776	0.581	0.436	0.0000	52.5	60.5	72	0.00	9.3	0.17	3.64	0.00	0.00	3.64			
29	Sun	4.130	0.761	2.227	0.599	0.543	0.0000	56.8	72.8	66	0.00	4.7	0.18	4.29	0.00	0.00	4.29			
30	Mon	4.066	1.241	1.921	0.428	0.477	0.0013	55.1	67.3	74	0.00	4.6	0.17	4.30	0.00	0.00	4.30			
31	Tue	3.869	1.089	1.621	0.610	0.550	0.0000	62.2	80.3	58	0.00	3.3	0.20	4.27	0.00	0.00	4.27			
TOTAL		134.671	36.826	58.093	18.034	21.718	0.0013			64	0.00	5.4	0.21	138.88	1.00	0.00	139.88			
AVG		4.344	1.188	1.874	0.582	0.701	0.0000	61.3	76.0	64	0.00	5.4	0.21	4.48	0.03	0.00	4.51			
MIN		3.760	0.548	0.514	0.280	0.436	0.0000	52.5	7.8	37	0.00	1.0	0.17	3.31	0.00	0.00	3.31			
MAX		5.459	2.487	2.791	0.844	1.331	0.0013	81.0	104.4	79	0.00	9.3	0.25	8.14	1.00	0.00	9.14			

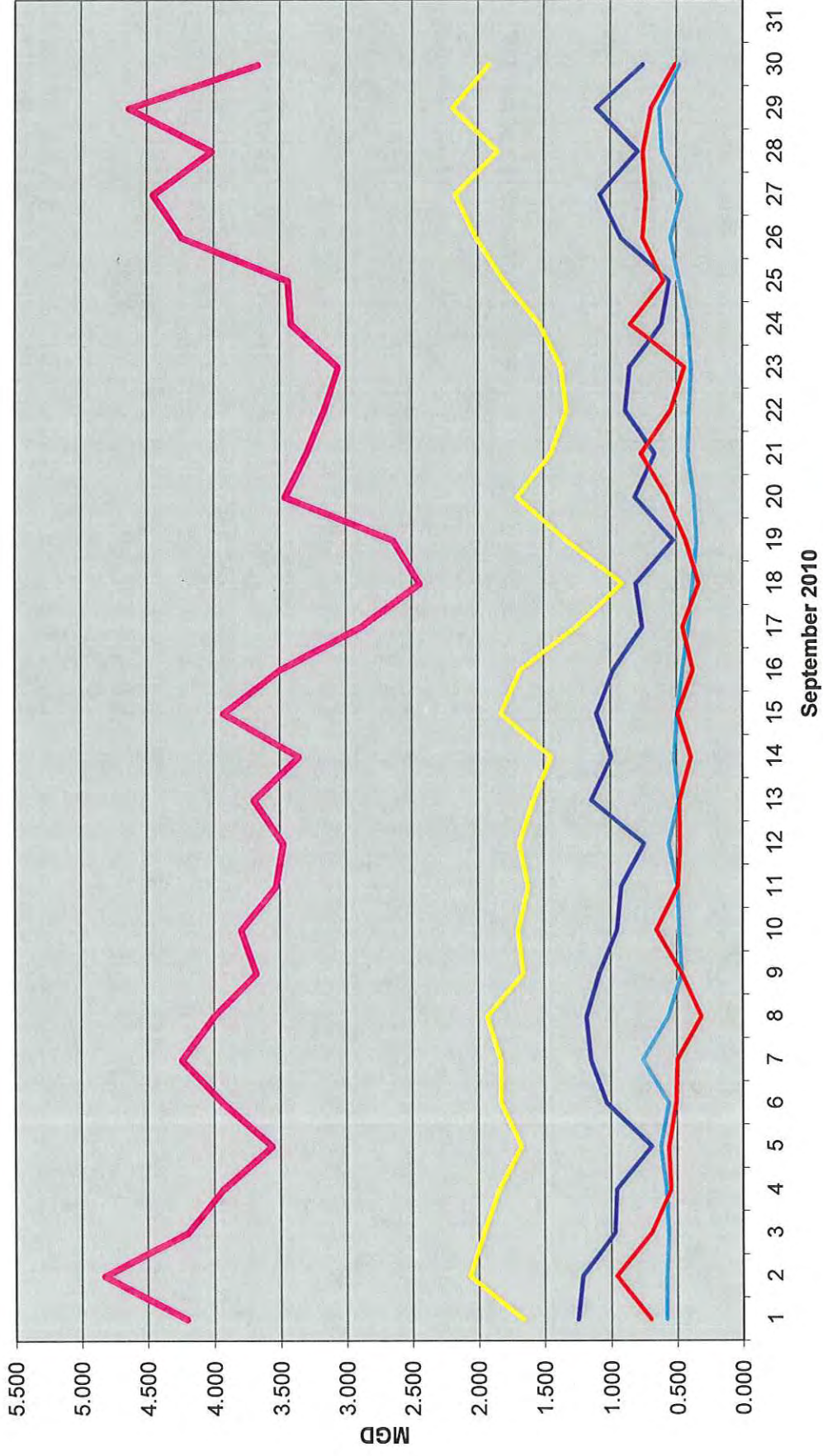
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 September 2010

Date:	Day:	Recycled Water Customer Demand (MG)										Weather Conditions					Production (MG)			Total
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable				
1	Wed	4.209	1.254	1.666	0.588	0.702	0.0000	69.6	92.7	43	0.00	1.6	0.23	3.76	0.00	0.00	0.00	3.76		
2	Thu	4.827	1.218	2.067	0.583	0.959	0.0000	71.8	94.8	40	0.00	2.5	0.23	4.33	0.00	0.00	0.00	4.33		
3	Fri	4.202	0.974	1.962	0.569	0.696	0.0000	67.3	85.9	50	0.00	3.9	0.22	4.21	0.00	0.00	0.00	4.21		
4	Sat	3.936	0.961	1.844	0.583	0.548	0.0000	62.1	83.5	59	0.00	3.9	0.20	4.23	0.00	0.00	0.00	4.23		
5	Sun	3.564	0.697	1.675	0.629	0.563	0.0000	66.9	87.9	52	0.00	2.7	0.21	4.10	0.00	0.00	0.00	4.10		
6	Mon	3.935	1.034	1.825	0.568	0.508	0.0000	72.4	95.1	33	0.00	2.0	0.23	3.80	0.00	0.00	0.00	3.80		
7	Tue	4.243	1.154	1.828	0.763	0.499	0.0000	59.5	71.0	68	0.00	6.7	0.18	3.49	0.00	0.00	0.00	3.49		
8	Wed	4.004	1.186	1.931	0.570	0.317	0.0000	55.6	63.3	79	0.00	7.2	0.08	3.92	0.00	0.00	0.00	3.92		
9	Thu	3.680	1.091	1.657	0.468	0.464	0.0000	59.3	76.0	68	0.00	3.6	0.16	4.18	0.00	0.00	0.00	4.18		
10	Fri	3.795	0.956	1.697	0.485	0.658	0.0000	62.6	83.0	55	0.00	2.2	0.19	3.82	0.00	0.00	0.00	3.82		
11	Sat	3.531	0.923	1.620	0.496	0.492	0.0000	66.3	87.4	48	0.00	2.1	0.20	3.69	0.00	0.00	0.00	3.69		
12	Sun	3.476	0.750	1.688	0.565	0.474	0.0000	60.3	74.5	60	0.00	4.8	0.18	3.77	0.00	0.00	0.00	3.77		
13	Mon	3.697	1.150	1.580	0.488	0.479	0.0000	55.3	71.2	73	0.00	6.0	0.13	3.76	0.00	0.00	0.00	3.76		
14	Tue	3.357	0.998	1.446	0.522	0.391	0.0000	58.4	76.0	63	0.00	3.3	0.17	3.50	0.00	0.00	0.00	3.50		
15	Wed	3.926	1.110	1.825	0.500	0.491	0.0000	55.7	73.3	72	0.00	4.4	0.16	3.64	0.00	0.00	0.00	3.64		
16	Thu	3.500	0.983	1.679	0.462	0.377	0.0000	59.9	75.3	74	0.01	3.5	0.17	3.62	0.00	0.00	0.00	3.62		
17	Fri	2.883	0.761	1.255	0.415	0.452	0.0000	59.3	70.6	86	0.00	3.7	0.11	3.32	0.00	0.00	0.00	3.32		
18	Sat	2.437	0.809	0.913	0.385	0.330	0.0000	59.4	69.3	82	0.00	4.0	0.11	2.31	0.00	0.00	0.00	2.31		
19	Sun	2.639	0.525	1.333	0.351	0.430	0.0000	61.0	74.1	81	0.00	2.9	0.09	2.78	0.00	0.00	0.00	2.78		
20	Mon	3.460	0.817	1.701	0.370	0.571	0.0245	62.9	77.1	72	0.00	2.9	0.16	2.63	0.00	0.00	0.00	2.63		
21	Tue	3.297	0.667	1.445	0.418	0.767	0.0000	54.4	64.7	77	0.00	6.1	0.12	3.01	0.00	0.00	0.00	3.01		
22	Wed	3.166	0.887	1.329	0.409	0.541	0.0000	55.3	66.2	70	0.00	6.0	0.15	2.14	0.00	0.00	0.00	2.14		
23	Thu	3.059	0.857	1.370	0.393	0.439	0.0000	62.0	84.5	62	0.00	2.3	0.16	2.90	0.00	0.00	0.00	2.90		
24	Fri	3.412	0.615	1.533	0.416	0.848	0.0000	67.8	90.0	52	0.00	1.0	0.18	3.37	0.00	0.00	0.00	3.37		
25	Sat	3.436	0.558	1.799	0.483	0.595	0.0000	71.6	99.8	46	0.00	1.1	0.18	3.84	0.00	0.00	0.00	3.84		
26	Sun	4.237	0.922	2.012	0.548	0.755	0.0000	72.3	97.3	47	0.00	1.1	0.18	2.07	0.00	0.00	0.00	2.07		
27	Mon	4.452	1.084	2.174	0.465	0.729	0.0428	75.1	103.1	43	0.00	0.4	0.18	2.44	0.00	0.00	0.00	3.38		
28	Tue	4.012	0.795	1.850	0.614	0.753	0.0000	78.3	103.3	38	0.00	1.1	0.18	4.28	0.00	0.00	0.00	6.00		
29	Wed	4.633	1.112	2.195	0.634	0.692	0.0000	77.2	99.7	37	0.00	2.5	0.18	2.17	0.00	0.00	0.00	4.03		
30	Thu	3.666	0.757	1.917	0.483	0.510	0.0000	66.1	83.8	56	0.00	3.4	0.16	3.28	0.00	0.00	0.00	4.62		
TOTAL AVG		110.673 3.689	27.606 0.920	50.816 1.694	15.220 0.507	17.031 0.568	0.0672 0.0022	64.2	82.5	60	0.01 0.00	3.3	0.17	102.34 3.41	5.88 0.20	0.00 0.00	0.00 0.00	108.22 3.61		
MIN		2.437	0.525	0.913	0.351	0.317	0.0000	54.4	63.3	33	0.00	0.4	0.08	2.07	0.00	0.00	0.00	2.07		
MAX		4.827	1.254	2.195	0.763	0.959	0.0428	78.3	103.3	86	0.01	7.2	0.23	4.33	1.86	0.00	0.00	6.00		

DERWA Recycled Water Demand

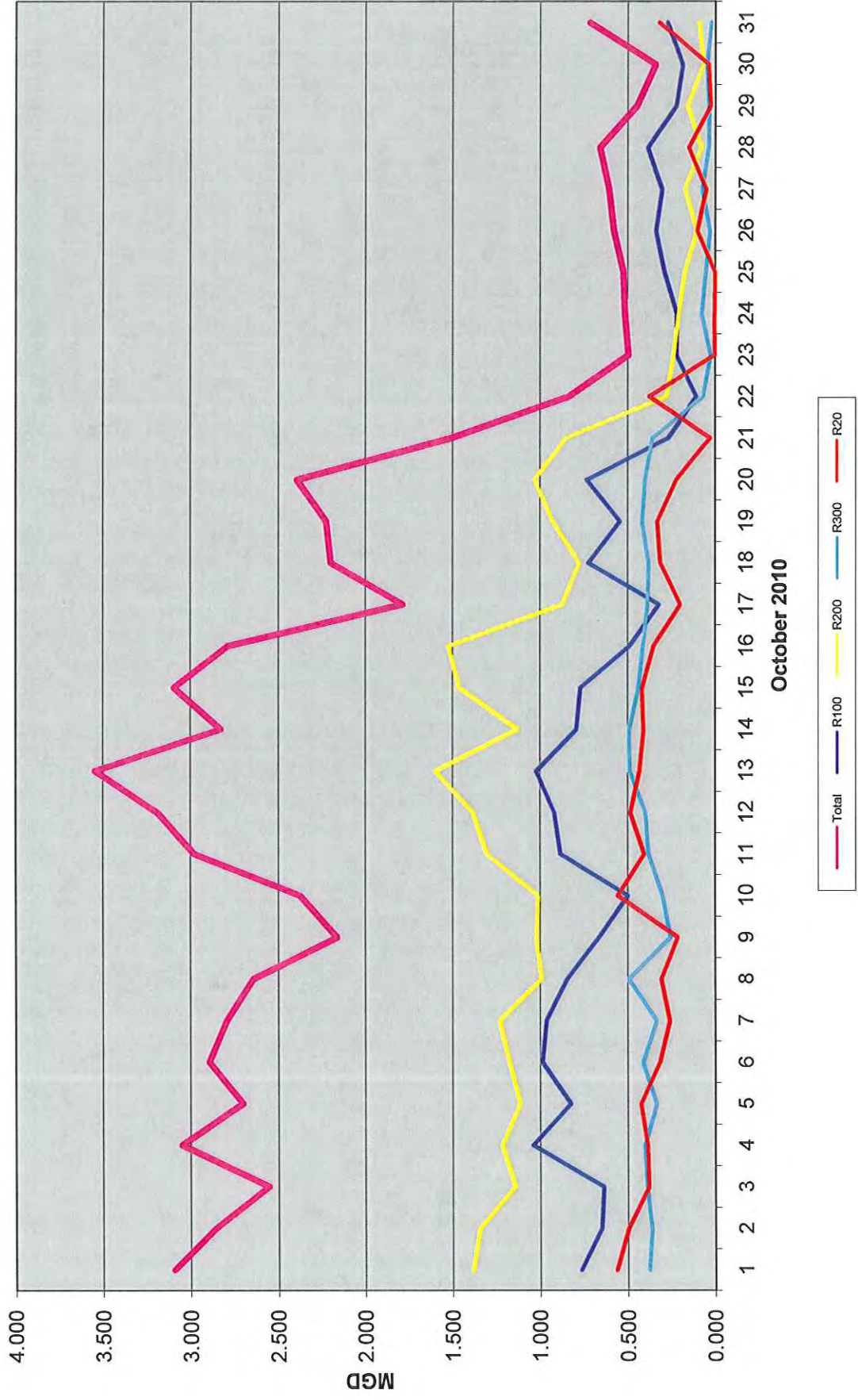


Legend:
Total (pink line)
R100 (blue line)
R200 (yellow line)
R300 (light blue line)
R20 (red line)

DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 October 2010

Date:	Day:	Recycled Water Customer Demand (MG)					Weather Conditions					Production (MG)			Total		
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled		MF-UV Recycled	Potable
1	Fri	3.095	0.767	1.383	0.381	0.564	0.0000	59.6	73.8	74	0.00	5.2	0.14	3.14	0.00	0.00	3.14
2	Sat	2.857	0.651	1.344	0.365	0.497	0.0000	65.6	83.0	60	0.00	3.5	0.15	4.61	0.00	0.00	4.61
3	Sun	2.555	0.641	1.142	0.391	0.381	0.0000	62.5	74.9	77	0.00	6.6	0.13	2.35	0.00	0.00	2.35
4	Mon	3.049	1.041	1.215	0.405	0.389	0.0346	59.7	69.3	77	0.00	4.7	0.07	3.10	0.00	0.00	3.10
5	Tue	2.702	0.826	1.113	0.337	0.426	0.0000	61.4	78.2	65	0.00	1.9	0.11	3.09	0.00	0.00	3.09
6	Wed	2.895	0.988	1.173	0.416	0.318	0.0000	58.4	74.2	68	0.00	2.6	0.13	2.69	0.00	0.00	2.69
7	Thu	2.794	0.965	1.230	0.337	0.262	0.0000	57.0	71.5	73	0.00	2.9	0.13	2.78	0.00	0.00	2.78
8	Fri	2.644	0.847	0.990	0.498	0.309	0.0000	57.9	76.4	64	0.00	2.2	0.13	2.16	0.00	0.00	2.16
9	Sat	2.163	0.666	1.021	0.259	0.217	0.0000	60.6	79.9	62	0.00	1.7	0.14	2.31	0.00	0.00	2.31
10	Sun	2.375	0.502	1.012	0.304	0.558	0.0000	65.4	85.7	62	0.00	1.6	0.14	1.95	0.00	0.00	1.95
11	Mon	2.978	0.884	1.303	0.383	0.407	0.0156	68.8	89.0	44	0.00	1.4	0.17	2.62	0.00	0.00	2.62
12	Tue	3.190	0.919	1.383	0.402	0.486	0.0000	75.7	93.3	35	0.00	3.4	0.18	2.77	0.00	0.00	2.77
13	Wed	3.546	1.022	1.600	0.490	0.434	0.0000	75.1	94.4	40	0.00	2.1	0.15	3.08	0.00	0.00	3.08
14	Thu	2.827	0.794	1.127	0.495	0.410	0.0000	75.3	94.6	47	0.00	2.6	0.16	2.60	0.00	0.00	2.60
15	Fri	3.094	0.771	1.462	0.443	0.419	0.0000	70.8	89.7	51	0.00	2.7	0.15	2.45	0.00	0.00	2.45
16	Sat	2.786	0.493	1.524	0.417	0.353	0.0000	62.8	76.2	64	0.00	3.3	0.12	3.58	0.00	0.00	3.58
17	Sun	1.785	0.322	0.874	0.390	0.199	0.0000	55.0	56.9	85	0.05	2.9	0.01	3.45	0.00	0.00	3.45
18	Mon	2.197	0.725	0.776	0.383	0.313	0.0000	60.4	74.2	70	0.00	1.4	0.10	1.87	0.00	0.00	1.87
19	Tue	2.223	0.546	0.928	0.420	0.330	0.0000	63.3	84.9	69	0.00	1.0	0.11	1.55	0.00	0.00	1.55
20	Wed	2.392	0.734	1.031	0.404	0.223	0.0000	56.6	70.9	78	0.00	2.9	0.10	0.91	0.00	0.00	0.91
21	Thu	1.509	0.271	0.850	0.361	0.028	0.0000	54.4	65.1	73	0.00	2.2	0.09	3.98	0.00	0.00	3.98
22	Fri	0.835	0.108	0.279	0.072	0.376	0.0000	56.0	67.4	73	0.03	1.0	0.03	1.99	0.00	0.00	1.99
23	Sat	0.493	0.225	0.240	0.028	0.000	0.0000	56.9	64.9	52	0.10	3.1	0.04	0.00	0.00	0.00	0.67
24	Sun	0.515	0.221	0.211	0.079	0.003	0.0000	61.6	64.8	76	0.65	9.8	0.04	0.00	0.00	0.00	0.00
25	Mon	0.523	0.290	0.176	0.057	0.000	0.0000	57.3	67.5	50	0.01	2.6	0.10	0.00	0.00	0.00	0.00
26	Tue	0.577	0.340	0.104	0.033	0.100	0.0000	55.4	70.6	34	0.01	0.7	0.10	0.00	0.00	0.00	0.00
27	Wed	0.605	0.305	0.174	0.076	0.050	0.0000	54.2	68.3	34	0.00	0.2	0.07	0.00	0.00	0.00	0.00
28	Thu	0.657	0.386	0.079	0.042	0.150	0.0000	59.6	80.1	20	0.00	1.7	0.11	0.17	0.11	0.00	0.28
29	Fri	0.448	0.226	0.158	0.039	0.024	0.0000	59.3	68.5	51	0.04	0.5	0.05	0.00	0.00	0.00	0.00
30	Sat	0.341	0.188	0.066	0.050	0.037	0.0000	57.5	67.7	62	0.06	1.1	0.04	0.00	0.00	0.00	0.00
31	Sun	0.714	0.274	0.092	0.028	0.320	0.0065	58.8	75.4	46	0.01	0.9	0.09	0.00	0.00	0.00	0.00
TOTAL		61.366	17.937	26.061	8.787	8.581	0.0566	61.4	75.8	59	0.96	2.6	0.11	59.20	0.78	0.00	59.98
AVG		1.980	0.579	0.841	0.283	0.277	0.0018	61.4	75.8	59	0.03	2.6	0.11	1.91	0.03	0.00	1.93
MIN		0.341	0.108	0.066	0.028	0.000	0.0000	54.2	56.9	20	0.00	0.2	0.01	0.00	0.00	0.00	0.00
MAX		3.546	1.041	1.600	0.498	0.564	0.0346	75.7	94.6	85	0.65	9.8	0.18	4.61	0.67	0.00	4.61

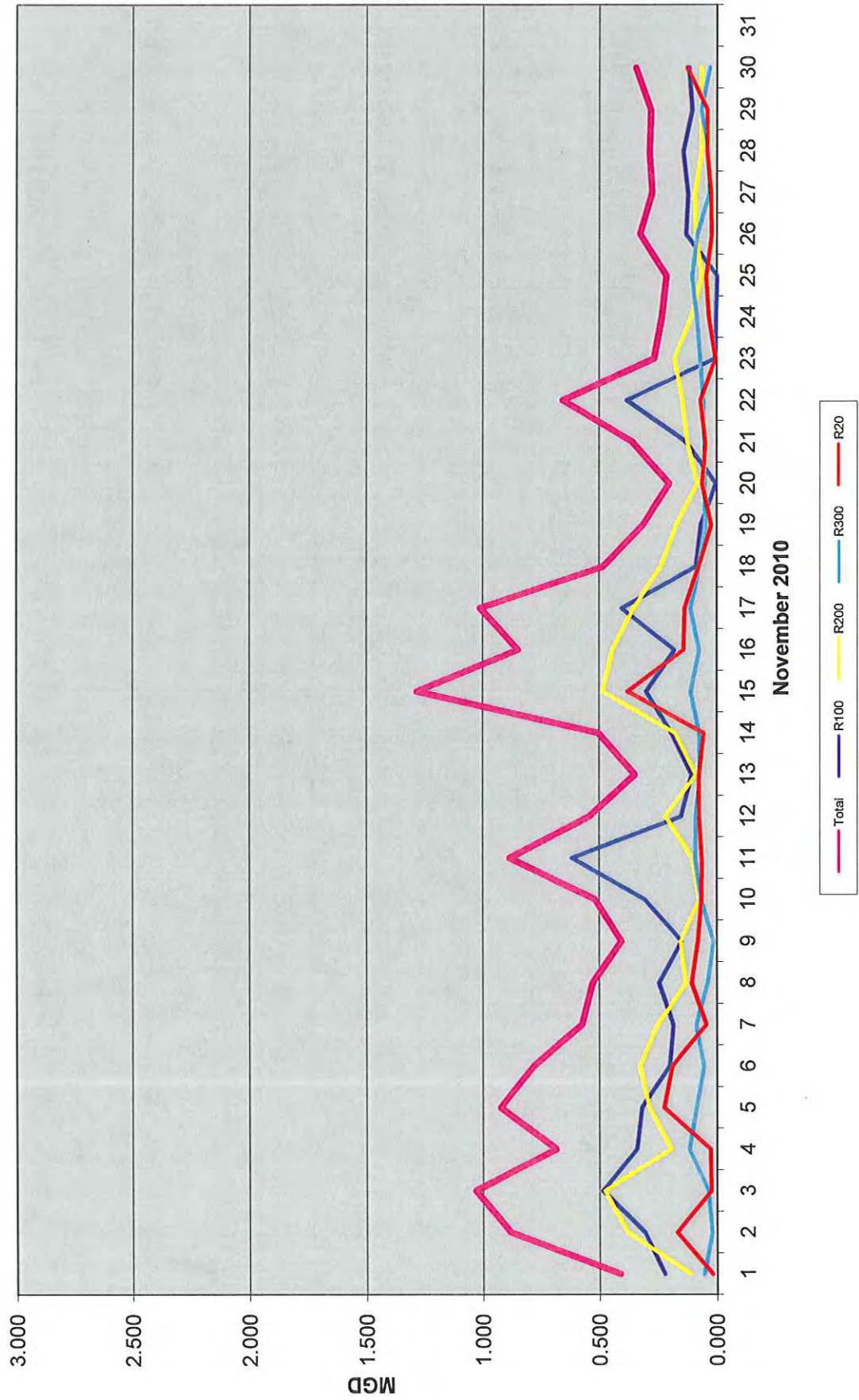
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 November 2010

Date:	Day:	Recycled Water Customer Demand (MG)										Weather Conditions					Production (MG)			
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Wind mph	Avg Wind	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total		
1	Mon	0.414	0.224	0.113	0.057	0.020	0.0000	60.6	80.9	76	0.00	0.3	0.10	0.00	0.93	0.00	0.93			
2	Tue	0.882	0.309	0.381	0.023	0.170	0.0000	62.9	83.0	69	0.00	0.4	0.11	0.00	0.53	0.00	0.53			
3	Wed	1.031	0.488	0.479	0.039	0.025	0.0000	64.3	82.1	76	0.00	0.6	0.10	0.00	0.00	0.00	0.00			
4	Thu	0.685	0.343	0.195	0.119	0.028	0.0000	67.1	85.2	75	0.00	0.3	0.10	0.00	1.68	0.00	1.68			
5	Fri	0.925	0.321	0.288	0.090	0.226	0.0000	58.5	68.5	71	0.00	1.8	0.07	0.00	1.01	0.00	1.01			
6	Sat	0.781	0.204	0.328	0.057	0.192	0.0000	53.5	65.8	82	0.00	2.3	0.08	0.00	1.21	0.00	1.21			
7	Sun	0.576	0.188	0.252	0.091	0.045	0.0000	50.5	54.3	85	0.00	4.5	0.02	0.00	0.00	0.00	0.00			
8	Mon	0.530	0.248	0.132	0.042	0.108	0.0000	47.3	60.8	77	0.01	1.8	0.08	0.00	1.00	0.00	1.00			
9	Tue	0.407	0.152	0.155	0.017	0.082	0.0000	46.0	58.7	75	0.01	0.8	0.08	0.00	0.00	0.00	0.00			
10	Wed	0.519	0.309	0.074	0.069	0.067	0.0000	49.2	59.8	75	0.05	2.2	0.08	0.00	1.26	0.00	1.26			
11	Thu	0.885	0.620	0.104	0.095	0.065	0.0000	50.0	67.5	58	0.00	1.1	0.09	0.00	1.42	0.00	1.42			
12	Fri	0.543	0.154	0.220	0.093	0.075	0.0000	50.9	72.5	70	0.00	0.3	0.08	0.00	1.11	0.00	1.11			
13	Sat	0.349	0.108	0.090	0.075	0.077	0.0000	58.2	74.9	43	0.00	1.9	0.12	0.00	0.00	0.00	0.00			
14	Sun	0.505	0.195	0.178	0.076	0.056	0.0000	66.2	82.0	51	0.00	2.3	0.11	0.00	0.00	0.00	0.00			
15	Mon	1.283	0.302	0.487	0.114	0.380	0.0001	68.4	80.0	52	0.00	2.6	0.12	0.00	1.03	0.00	1.03			
16	Tue	0.848	0.182	0.446	0.078	0.141	0.0000	60.1	76.3	59	0.00	1.1	0.10	0.00	2.04	0.00	2.04			
17	Wed	1.010	0.405	0.355	0.114	0.136	0.0000	55.0	78.8	60	0.00	0.2	0.05	0.00	1.53	0.00	1.53			
18	Thu	0.483	0.089	0.239	0.078	0.077	0.0000	47.8	62.7	83	0.00	0.9	0.06	0.00	1.79	0.00	1.79			
19	Fri	0.313	0.069	0.172	0.050	0.022	0.0000	48.3	53.6	83	0.20	1.3	0.02	0.00	1.48	0.00	1.48			
20	Sat	0.202	0.004	0.082	0.054	0.062	0.0000	44.0	51.9	87	1.07	3.7	0.03	0.00	0.00	0.00	0.00			
21	Sun	0.359	0.132	0.125	0.054	0.048	0.0000	45.6	53.3	76	0.26	4.6	0.06	0.00	0.00	0.00	0.00			
22	Mon	0.655	0.383	0.145	0.059	0.068	0.0030	49.3	59.1	76	0.04	1.8	0.04	0.00	0.22	0.00	0.22			
23	Tue	0.266	0.009	0.180	0.072	0.005	0.0000	46.1	51.5	75	0.40	4.8	0.05	0.00	1.11	0.00	1.11			
24	Wed	0.233	0.005	0.109	0.087	0.032	0.0000	37.2	51.6	64	0.00	1.0	0.06	0.00	1.74	0.00	1.74			
25	Thu	0.214	0.000	0.063	0.107	0.044	0.0000	39.2	55.0	62	0.00	0.6	0.06	0.00	0.00	0.00	0.00			
26	Fri	0.325	0.132	0.088	0.085	0.020	0.0000	40.9	56.6	76	0.00	0.2	0.05	0.00	0.00	0.00	0.00			
27	Sat	0.273	0.123	0.092	0.034	0.024	0.0000	44.8	54.6	83	0.31	3.4	0.03	0.00	0.00	0.00	0.00			
28	Sun	0.286	0.143	0.066	0.036	0.040	0.0000	40.8	55.1	77	0.01	0.3	0.05	0.00	0.00	0.00	0.00			
29	Mon	0.280	0.106	0.065	0.069	0.040	0.0000	40.2	57.0	69	0.01	0.5	0.06	0.00	0.00	0.00	0.00			
30	Tue	0.343	0.119	0.066	0.034	0.125	0.0000	41.6	55.8	80	0.00	0.3	0.04	0.00	0.00	0.00	0.00			
TOTAL		16.405	6.067	5.770	2.068	2.501	0.0031	51.2	65.0	72	2.74	1.6	0.07	0.00	21.08	0.00	21.08			
AVG		0.547	0.202	0.192	0.069	0.083	0.0001	51.2	65.0	72	0.09	1.6	0.07	0.00	0.70	0.00	0.70			
MIN		0.202	0.000	0.063	0.017	0.005	0.0000	37.2	51.5	43	0.00	0.2	0.02	0.00	0.00	0.00	0.00			
MAX		1.283	0.620	0.487	0.119	0.380	0.0030	68.4	85.2	87	1.07	4.8	0.12	0.00	2.04	0.00	2.04			

DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
 DERWA Recycled Water Daily Demand
 December 2010

Date:	Day:	Recycled Water Customer Demand (MG)										Weather Conditions					Production (MG)		Total
		Total	R100	R200	R300	R20	Load Out Station	Mean Temp °F	Max Temp °F	Avg Hum	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable			
1	Wed	0.271	0.172	0.092	0.042	0.015	0.0000	44.0	60.9	68	0.01	0.3	0.05	0.00	0.00	0.00	0.00		
2	Thu	0.338	0.215	0.075	0.077	0.070	0.0000	47.9	58.0	80	0.00	0.4	0.03	0.00	0.00	0.00	0.00		
3	Fri	0.433	0.106	0.251	0.042	0.035	0.0000	50.3	57.5	88	0.00	1.4	0.03	0.00	0.00	0.00	0.00		
4	Sat	0.171	0.089	0.029	0.028	0.025	0.0000	53.6	62.0	79	0.00	1.2	0.03	0.00	0.00	0.00	0.00		
5	Sun	0.169	0.066	0.053	0.025	0.020	0.0000	54.3	63.0	85	0.30	2.9	0.03	0.00	0.00	0.00	0.00		
6	Mon	0.197	0.051	0.040	0.048	0.059	0.0000	55.0	65.3	80	0.19	3.0	0.07	0.00	1.64	0.00	1.64		
7	Tue	0.228	0.094	0.066	0.022	0.046	0.0000	51.3	69.4	88	0.01	0.6	0.05	0.00	0.99	0.00	0.99		
8	Wed	0.628	0.313	0.191	0.063	0.061	0.0000	51.1	56.1	100	0.59	0.2	0.00	0.00	0.00	0.00	0.00		
9	Thu	0.444	0.229	0.119	0.039	0.056	0.0000	56.6	63.1	100	0.01	0.0	0.02	0.00	0.00	0.00	0.00		
10	Fri	0.306	0.152	0.072	0.042	0.040	0.0000	59.8	66.3	100	0.01	0.9	0.02	0.00	0.00	0.00	0.00		
11	Sat	0.138	0.023	0.053	0.017	0.045	0.0000	59.9	71.8	100	0.00	0.3	0.04	0.00	0.00	0.00	0.00		
12	Sun	0.184	0.066	0.028	0.050	0.040	0.0000	54.9	65.3	100	0.00	1.0	0.02	0.00	0.00	0.00	0.00		
13	Mon	0.042	0.000	0.066	0.042	0.065	0.0000	53.1	55.7	97	0.00	0.9	0.01	0.00	1.33	0.00	1.33		
14	Tue	0.126	0.013	0.053	0.020	0.040	0.0000	53.9	60.0	94	0.29	0.7	0.01	0.00	0.00	0.00	0.00		
15	Wed	0.209	0.044	0.079	0.031	0.055	0.0000	45.6	57.0	95	0.01	0.1	0.04	0.00	0.00	0.00	0.00		
16	Thu	0.205	0.089	0.066	0.034	0.017	0.0000	41.6	53.4	97	0.06	0.4	0.04	0.00	0.00	0.00	0.00		
17	Fri	0.261	0.027	0.110	0.049	0.025	0.0000	46.3	52.1	100	0.57	2.9	0.01	0.00	0.00	0.00	0.00		
18	Sat	0.156	0.040	0.066	0.025	0.025	0.0000	55.0	60.4	85	0.22	7.7	0.04	0.00	0.00	0.00	0.00		
19	Sun	0.161	0.041	0.066	0.017	0.037	0.0000	50.1	54.9	93	1.48	5.8	0.02	0.00	0.00	0.00	0.00		
20	Mon	0.174	0.012	0.092	0.034	0.036	0.0000	48.2	53.4	74	0.00	3.1	0.04	0.00	0.87	0.00	0.87		
21	Tue	0.061	0.000	0.066	0.022	0.025	0.0000	48.4	57.5	89	0.10	0.9	0.03	0.00	0.00	0.00	0.00		
22	Wed	0.202	0.044	0.092	0.031	0.035	0.0000	51.2	59.8	100	0.12	1.1	0.03	0.00	0.00	0.00	0.00		
23	Thu	0.257	0.084	0.065	0.058	0.050	0.0000	46.9	59.9	87	0.00	0.4	0.05	0.00	0.00	0.00	0.00		
24	Fri	0.172	0.049	0.064	0.028	0.031	0.0000	45.5	60.4	95	0.01	0.3	0.04	0.00	0.00	0.00	0.00		
25	Sat	0.193	0.066	0.079	0.022	0.025	0.0000	45.6	55.4	100	0.68	1.6	0.00	0.00	0.00	0.00	0.00		
26	Sun	0.304	0.161	0.079	0.020	0.044	0.0000	46.6	58.4	86	0.01	0.7	0.05	0.00	0.00	0.00	0.00		
27	Mon	0.143	0.007	0.066	0.028	0.043	0.0000	48.7	58.4	86	0.00	0.9	0.05	0.00	1.31	0.00	1.31		
28	Tue	0.182	0.000	0.152	0.049	0.020	0.0000	48.0	52.4	89	0.75	4.0	0.02	0.00	0.00	0.00	0.00		
29	Wed	0.231	0.037	0.141	0.031	0.021	0.0000	46.4	51.9	69	0.26	9.3	0.07	0.00	0.00	0.00	0.00		
30	Thu	0.188	0.029	0.066	0.028	0.065	0.0000	42.2	55.5	70	0.00	1.1	0.06	0.00	0.00	0.00	0.00		
31	Fri	0.212	0.066	0.092	0.034	0.020	0.0000	41.0	51.2	83	0.01	0.4	0.03	0.00	0.00	0.00	0.00		
TOTAL		6.985	2.385	2.629	1.097	1.247	0.0000	49.8	58.9	89	5.69	1.8	0.03	0.00	6.14	0.00	6.14		
AVG		0.225	0.077	0.085	0.035	0.040	0.0000				0.18			0.00	0.20	0.00	0.20		
MIN		0.042	0.000	0.028	0.017	0.015	0.0000	41.0	51.2	68	0.00	0.0	0.00	0.00	0.00	0.00	0.00		
MAX		0.628	0.313	0.251	0.077	0.075	0.0000	59.9	71.8	100	1.48	9.3	0.07	0.00	1.64	0.00	1.64		

DERWA Recycled Water Demand

