DERWA
Report of Operations

DECEMBER 2008

Final Issue

Prepared by Dublin San Ramon Services District

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REPORT OF OPERATIONS
DERWA RECYCLED WATER SYSTEM
December 2008

1. OVERVIEW

1.1.1 Summary

The following report covers the operation of the facilities from November 1, 2007 through October 31, 2008, which represents the 12 month season of operation for the San Ramon Valley Recycled Water Program (SRVRWP). Operations of the DERWA joint use facilities began on February 1, 2006, and the sand filter treatment system was first placed in service on May 24, 2006.

During the period a total of 2,509 acre-feet (817 million gallons) of recycled water was produced and distributed to DSRSD's and EBMUD's customers. Of this amount, DSRSD's customers used 1,950 acre-feet (635 million gallons) and EBMUD's customers used 559 acre-feet (182 million gallons). Recycled water demands peaked on July 23 with a daily peak maximum flow of 5.14 MGD. The total cost to operate the system during this reporting period was $1,456,521, averaging $581 per acre-foot delivered. The budget for FYE 2009 anticipated a unit cost of $562 per acre-foot. The difference between this reporting period's actual cost of $581 per acre-foot and the budget of $562 per acre foot is due to:

- The actual cost for PACL was $104,502, which significantly exceeded the budget estimate of $41,393 per year, due to a higher than expected dosages that were required to meet turbidity standards. Staff is investigating possible ways to reduce the PACL required.
- Labor costs for chlorinating reservoirs during winter months.
- Labor and materials costs to replace a far greater number of UV bulbs than what was anticipated in the budget.

Only one complaint was received, on April 21 concerning delivery issues. Several customers in the Montevideo area in San Ramon did not receive water over the weekend of April 19th. EBMUD System Water Quality staff investigated the complaint and determined that a valve was found partially closed on the distribution line just off the Iron Horse Trail. The valve was reopened, and adequate flow and pressure were restored in the affected area.

During the period full RWQCB permit compliance was maintained. Recycled water production and demand is summarized as shown in Table 1.

TABLE 1
DERWA System: Actual 2008 Season Demand Totals

	Production		Actual Recycled Water Demand			
	SF-UV	MF-UV	Total			
Month	MG	MG	MGD	Peak MGD	MG	AF
Nov-07	0.00	33.50	1.04	2.06	31.2	95.6
Dec-07	0.00	9.56	0.34	1.13	10.5	32.1
Jan-08	0.00	5.29	0.16	0.29	4.8	14.8
Feb-08	0.00	6.37	0.21	0.50	5.8	17.9
Mar-08	12.38	19.90	1.09	2.84	33.8	103.9
Apr-08	78.65	0.00	2.51	3.43	75.2	230.7
May-08	104.87	0.62	3.37	4.48	104.5	320.7
Jun-08	120.51	0.58	4.01	4.80	120.2	368.9
Jul-08	129.30	0.19	4.19	5.14	129.9	398.6
Aug-08	123.82	4.64	4.14	5.02	128.3	393.7
Sep-08	89.66	13.05	3.51	4.30	105.2	322.8
Oct-08	69.61	0.00	2.19	2.81	68.0	208.8
AVG	60.73	7.81	2.23			
TOTAL	728.78	93.69			817.4	2,508.6
MIN	0.00	0.00	0.16	0.29	4.8	14.8
MAX	129.30	33.50	4.19	5.14	129.9	398.6

1.1.2 Regulatory Approval and Permitting

The treatment and distribution system is operated under a General Water Reuse Permit (Board Order No. 96-011) issued by the San Francisco Bay Regional Water Quality Control Board, and a Title 22 Conformed Engineering Report and Notice of Intent (NOI), dated April 2005, which was submitted to and approved by the California Department of Health Services (DHS). The April 2005 Conformed Engineer's Report responded to comments from DHS and updated a previous Engineer's Report and NOI that had been submitted in December 2003. The Conformed Engineer's Report describes the treatment to be provided, as well as details concerning permitting, distribution, and reuse. On March 30, 2007, DHS 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 typically used during the winter months when the demand for recycled water falls below 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 and/or replace SF-UV effluent due to secondary process upsets and/or maintenance requirements.

1.1.3 2008 Season Highlights

November 2007: Ted Fairfield Park in Dublin was connected to the DSRSD system with an estimated average demand of 15 acre-feet per year.
Design work continued on the Recycled Water Treatment Facility (RWTF) effluent quality improvements, to eliminate small pieces of plastic and other material from passing through the RWTF into the recycled water distribution system.

December 2007: Construction of the Pipeline Grounding System along the Iron Horse Trail was completed on time and with minimal changes. Training on the new safety requirements for the pipeline and location of the grounding system was provided for DSRSD Field Operations staff in December 2008.

Dougherty Valley High School in San Ramon was connected to the DSRSD system with an estimated average demand of 14 acre-feet per year, along with the Dublin Ranch Water Quality Basin at an estimated average demand of 10 acre-feet per year.

February 2008: Ramona Park in San Ramon was connected to the DSRSD system with an estimated average demand of 12 acre-feet per year.

March 2008: On March 24 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.

The Recycled Water Program Annual Report for the 2007 Irrigation Season was submitted to the Regional Water Quality Control Board and the California Department of Public Health. The submission of the report was in compliance with the reporting requirements of RWQCB General Water Reuse Order 96-011 and applicable provisions of the California Code of Regulations Title 22.

In the summer of 2007, it was determined that two of the tertiary influent pumps (TIPS) failed to start due to binding caused by plastics that packed into the pump bearing cavity due to the design of the water lubricated bearings. In January 2008 staff removed the No. 2 TIPS pump from service for inspection, overhaul and repair. The pump was modified to reduce the problem of binding due to plastics and was returned to service in mid-March.

Operators began experiencing problems with the ultraviolet intensity sensors on the Wedeco UV system (i.e. SF-UV). A hazing was occurring on the end of several sensor housings, causing a lower than anticipated UV intensity reading. The affected units were returned to Wedeco for evaluation and repair. Also, 5 of the 13,799 sensors started exhibiting high UV intensity readings. This was attributed to the use of incorrect sensors, which were returned to Wedeco and exchanged.

April 2008: Plans and specifications for the construction of PSR200A and the Bollinger Canyon Road pipeline extension were advertised for construction bids,

and the contract was awarded. The specifications required the contractor to use the DSRSD SCADA consultant for the programming of the PLC and telemetry.

Dublin Civic Center and Library was connected to the DSRSD system with an estimated average demand of 24 acre-feet per year. Piazza Park in Dublin was also connected to the DSRSD system with an estimated average demand of 44 acre-feet per year.

June 2008: Staff from DSRSD, DERWA and EBMUD participated in an all-day communications roundtable exercise designed to review and improve communication protocol, and continue to build relationships between partner agency staff. The communications roundtable included a tour of the recently completed East Bayshore Recycled Water Plant.

July 2008: Recycled water demands peaked on July 23 when the daily peak maximum flow of 5.14 MGD was delivered.

Bids were advertised seeking procurement for the manufacture and delivery of a fine band screen to be installed at the SF-UV Recycled Water Treatment Plant. The band screen will be installed in 2009 upon delivery from the manufacturer.

Construction began on the new Pump Station R200A and 6,500 feet of pipeline on Bollinger Canyon Road in San Ramon. The U.S. Army Corps of Engineers, San Francisco District, contracted for design of the facilities and will manage the construction process.

August 2008: During the months of July through August detailed downloads of hourly recycled water usage were performed on radio read devices that were originally installed on 21 EBMUD recycled water meters in 2006. The purpose of the detailed downloads was to confirm or modify the peaking factor that was used during the design of the DERWA system. The peaking factor will in turn be used to predict when the capacity of the Recycled Water Treatment Plant will need to be increased.

September 2008: DSRSD Staff participated in a workshop to provide input and suggestions for the Recycled Water System Operation Plan Update. The workshop included discussions on the overall system configuration, recycled water production constraints, water quality, seasonal RWTP and system operations, and seasonal demand.

October 2008: R100 is an above-ground tank with an intrusion alarm built into a ladder guard designed to prevent anyone from climbing the caged ladder to the top of the reservoir. The system was originally built with an intrusion sensor but without a way for the Operator to arm and disarm the security system. Approval was received from the DERWA Authority Manager to purchase and install a security access keypad at R100 which will allow the Operators to arm and disarm the intrusion alarm when making routine inspections. After procurement, programming modifications were performed and the keypad was installed along with a second Input/Output rack.

A prototype chlorination system was installed at Pump Station R200B to supply enough chlorine to maintain a residual set point of 5 mg/l in the recycled water delivered to the reservoirs. The system is currently being tested and will receive hypochlorite deliveries from DSRSD's chemical supplier.

On November 1, 2008 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 water to meet customer demands.

Coordination meetings were generally held every month to discuss the operations of the recycled water system and any issues of concern. DERWA Authority Manager, Jim Bewley, and representatives of DSRSD and EBMUD typically attended the meetings.

Charts and graphs summarizing the CY 2008 recycled water demand, recycled water production, and ambient weather conditions are attached in Appendix A.

1.2 2009 Goals

During 2009 the goals for DSRSD as the operator of the DERWA system will include:

- Complete construction of a mechanical screening system that will remove and eliminate plastics from the influent to the SF-UV treatment system.
- Minimize or prevent the occurrence of secondary treatment process upsets that limit the treatment system's ability to produce sufficient quantities of recycled water.
- Continue to study various means of dealing with the potential to have winter season nitrification occurring in the recycled water system, including an analysis of the operating costs for different control strategies.
- Complete the Recycled Water System Operation Plan Update.
- Continue work on optimizing the SF-UV control system to increase efficiency and reliability, and to reduce operating costs.
- Complete the installation of a pre-fabricated sunshade structure over the sand filtration area of the RWTP.
- Complete an investigation and testing of PACL dosage rates to minimize chemical costs.

1.3 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 2008 season was 2,509 acre feet, or 817 million gallons, compared to the 2,500 acre-feet previously estimated for use in preparing the budget for FY 2008/2009. Deliveries during the previous 12 month season of operation were 2,141 acre feet, or 697 million gallons. The cost to produce and deliver recycled water during the 2008 season averaged $581 per acre-foot, compared to the FY 2008/2009 budget rate of $562 per acre-foot.

A number of large institutional customers were added during late 2007 and early 2008, including Dougherty High School, the Dublin Civic Center and Library, Ted Fairfield Park, Dublin Ranch Water Quality Basin, Ramona Park, and Piazza Park, which will increase recycled water demands significantly.

The percentage of backwash waste averaged about 14.5% during the season, meeting the target goal. 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 11.3%.

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

Table 2: Key Performance Measures

Work Element	Performance Measure	FY 07/08 Actual	FY 08/09 YTD Actual	FY 09/10 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	1	0
	Maximum Response Time to Verified Complaints	Same Day	Same Day	Same Day
Treatment and Delivery Cost-Effectiveness	Total Combined Cost per acre-foot of Recycled Water Treated and Delivered	$626	$462	$493
	Operations Cost per acre-foot of Recycled Water Treated and Delivered	$441	$339	$338
	Distribution Cost per acre-foot of Recycled Water Treated and Delivered	$185	$124	$155
	Chemical Cost per acre-foot of Recycled Water Treated (excluding delivery)	$51	$59	$54
	Power Cost per acre-foot of Recycled Water Treated (excluding delivery)	$160	$174	$182
Maintenance Practices	Percent of Scheduled Preventive Maintenance Tasks Completed	86%	84%	95%
Return Streams Handling Efficiency	Average Filter Backwash Percent of Total Volume of Water Treated	14.5%	14.5%	13.8%
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	1	7	0

1.4.1 Secondary Effluent Supply versus Recycled Water Demand during 2008

An early task when DERWA formed was to firm up the recycled water supply. By an amendment to the Regional Agreement under which DSRSD serves the City of Pleasanton, the City agreed to allow DSRSD to use up to 2.5 MGD of the wastewater that originates from Pleasanton for recycling through the end of

2009. A portion of the 2.5 MGD Pleasanton supply was utilized to meet peak daily demand for the first time during 2008.

Table 3 shows the sewage flow that originates in Dublin and portions of South San Ramon (DSR flow), the City of Pleasanton's sewage flow, and the total volume of DSRSD 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 2008, and the percentage of the available supply that was utilized. The highest average monthly demand for recycled water utilized 89% of the DSR supply during 2008. The highest peak daily demand for recycled was utilized about 109% of the DSR supply during 2008.

Figure 1 shows plots comparing the 2008 ***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 2008 ***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: 2008 Secondary Effluent Supply versus Recycled Water Demand during 2008

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 MGD	DERWA Recycled Water Demand Peak MGD	Average Recycled Demand % of DSR Supply	Daily Peak Recycled Demand % of DSR Supply
Nov-07	10.27	5.54	4.72	7.22	1.04	2.06	22%	44%
Dec-07	11.55	6.23	5.31	7.81	0.34	1.13	6%	21%
Jan-08	11.54	6.23	5.31	7.81	0.16	0.29	3%	6%
Feb-08	11.56	6.24	5.32	7.82	0.21	0.50	4%	9%
Mar-08	10.49	5.66	4.83	7.33	1.09	2.84	23%	59%
Apr-08	10.46	5.64	4.81	7.31	2.51	3.43	52%	71%
May-08	9.86	5.32	4.54	7.04	3.37	4.48	74%	99%
Jun-08	10.36	5.59	4.77	7.27	4.01	4.80	84%	101%
Jul-08	10.25	5.53	4.71	7.21	4.19	5.14	89%	109%
Aug-08	10.33	5.58	4.75	7.25	4.14	5.02	87%	106%
Sep-08	10.80	5.83	4.97	7.47	3.51	4.30	71%	87%
Oct-08	10.42	5.62	4.79	7.29	2.19	2.81	46%	59%
AVG	10.66	5.75	4.90	7.40	2.23		47%	64%
MIN	9.86	5.32	4.54	7.04	0.16	0.29	3%	6%
MAX	11.56	6.24	5.32	7.82	4.19	5.14	89%	109%

Figure 1: 2008 Season Recycled Water Supply vs Average Monthly Demand

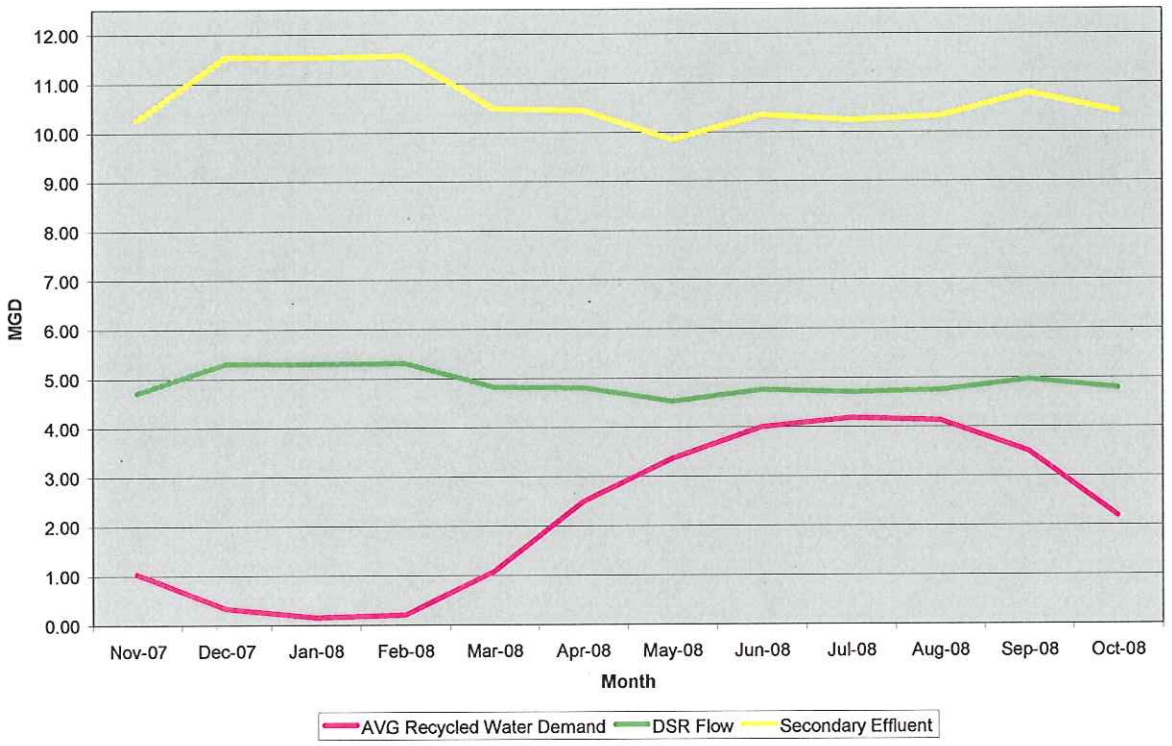
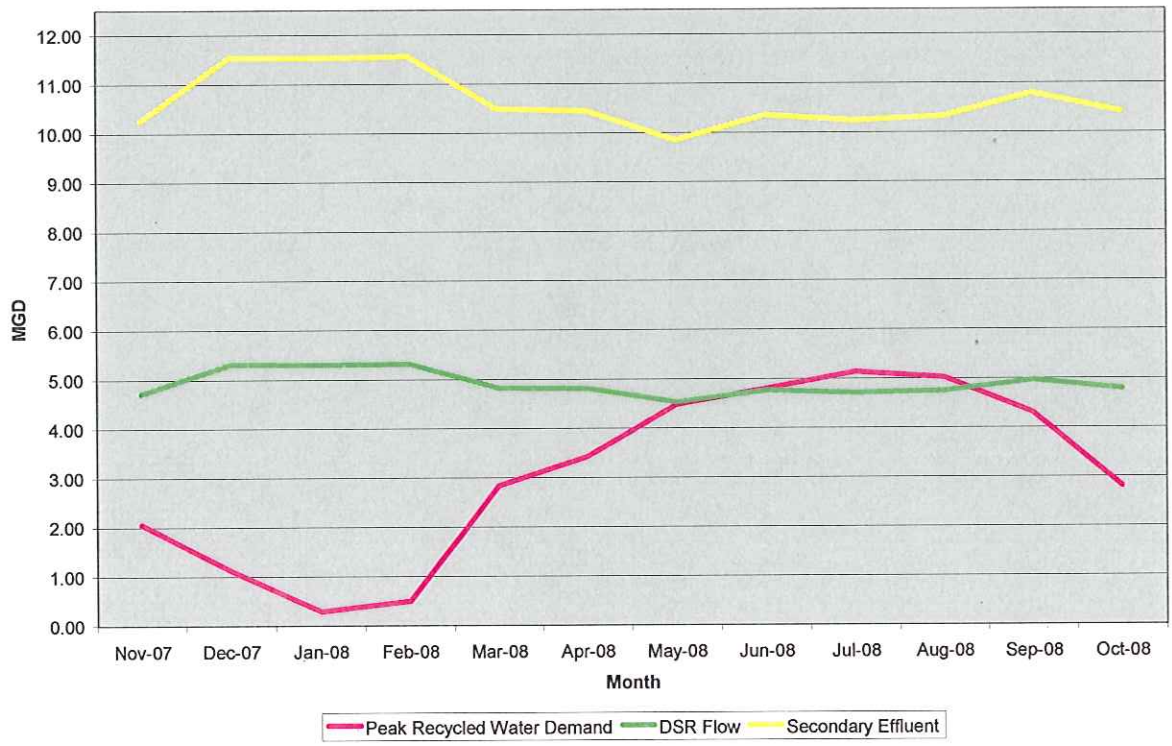


Figure 2: 2008 Season Recycled Water Supply vs Peak Daily Demand



1.4.2 2009 Projections of Supply and Demand

Table 4 shows the estimated or *projected 2009 flows* for the Dublin-San Ramon (DSR) flow, including anticipated growth. The *2009 projections* are estimates prepared by the DSRSD Operations Manager, based on actual recycled water deliveries measured during 2008, plus anticipated additional demands primarily from DSRSD customers connected during late 2008. (See information provided in Appendix A). Table 4 also shows the *monthly average* and *peak daily* recycled water demands that are expected during 2009, and the percentage of the supply that will be utilized. The highest average monthly demand for recycled water during 2008 is expected to utilize about 93% of the DSR supply. The highest peak daily demand for recycled water during 2009 is expected to utilize about 112% of the DSR supply. On peak demand days during 2009 the recycled water demand is expected to exceed the Dublin-San Ramon flow and will result in utilizing a portion of Pleasanton's flow.

TABLE 4
DERWA System: 2009 Projected Secondary Effluent Supply and Recycled Water Demand

					Projected			
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 MGD	DERWA Recycled Water Demand Peak MGD	Average Recycled Demand % of DSR Supply	Daily Peak Recycled Demand % of DSR Supply
Nov-08	10.66	5.75	4.90	7.40	0.65	1.29	13%	26%
Dec-08	10.66	5.75	4.90	7.40	0.33	1.09	7%	22%
Jan-09	10.66	5.75	4.90	7.40	0.31	0.59	6%	12%
Feb-09	10.66	5.75	4.90	7.40	0.28	0.67	6%	14%
Mar-09	10.66	5.75	4.90	7.40	1.16	3.02	24%	62%
Apr-09	10.66	5.75	4.90	7.40	3.10	4.25	63%	87%
May-09	10.66	5.75	4.90	7.40	3.99	5.31	81%	108%
Jun-09	10.66	5.75	4.90	7.40	4.33	5.19	88%	106%
Jul-09	10.66	5.75	4.90	7.40	4.38	5.37	89%	109%
Aug-09	10.66	5.75	4.90	7.40	4.54	5.50	93%	112%
Sep-09	10.66	5.75	4.90	7.40	4.09	5.02	83%	102%
Oct-09	10.66	5.75	4.90	7.40	2.94	3.76	60%	77%
AVG TOTAL	10.66	5.75	4.90	7.40	2.51		51%	70%
MIN	10.66	5.75	4.90	7.40	0.28	0.59	6%	12%
MAX	10.66	5.75	4.90	7.40	4.54	5.50	93%	112%

Figure 3 shows plots comparing the 2009 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 2009 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 2009 the demand for recycled water will begin to exceed the wastewater generated by the cities of Dublin and south San Ramon, although with the 2.5 MGD "commitment" of water from Pleasanton, the expected supply should continue to meet recycled water demands during 2009.

Figure 3: 2009 Projections of Recycled Water Supply vs Average Monthly Demand

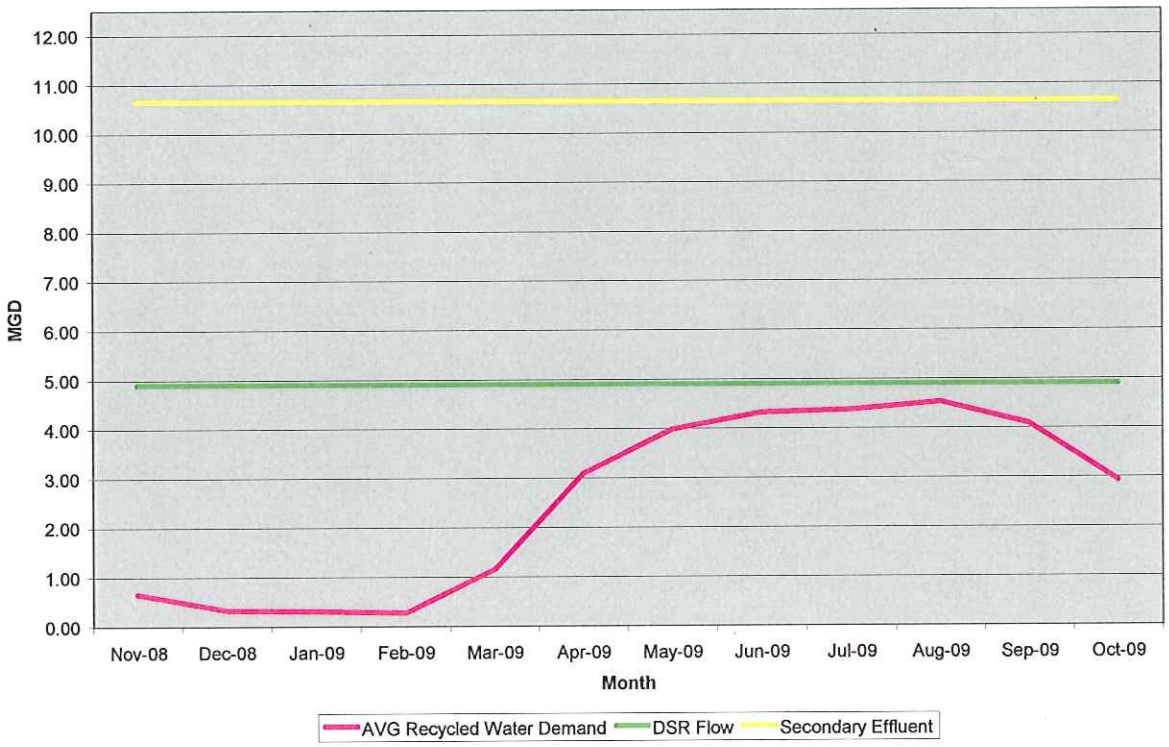


Figure 4: 2009 Projections of Recycled Water Supply vs Peak Daily Demand

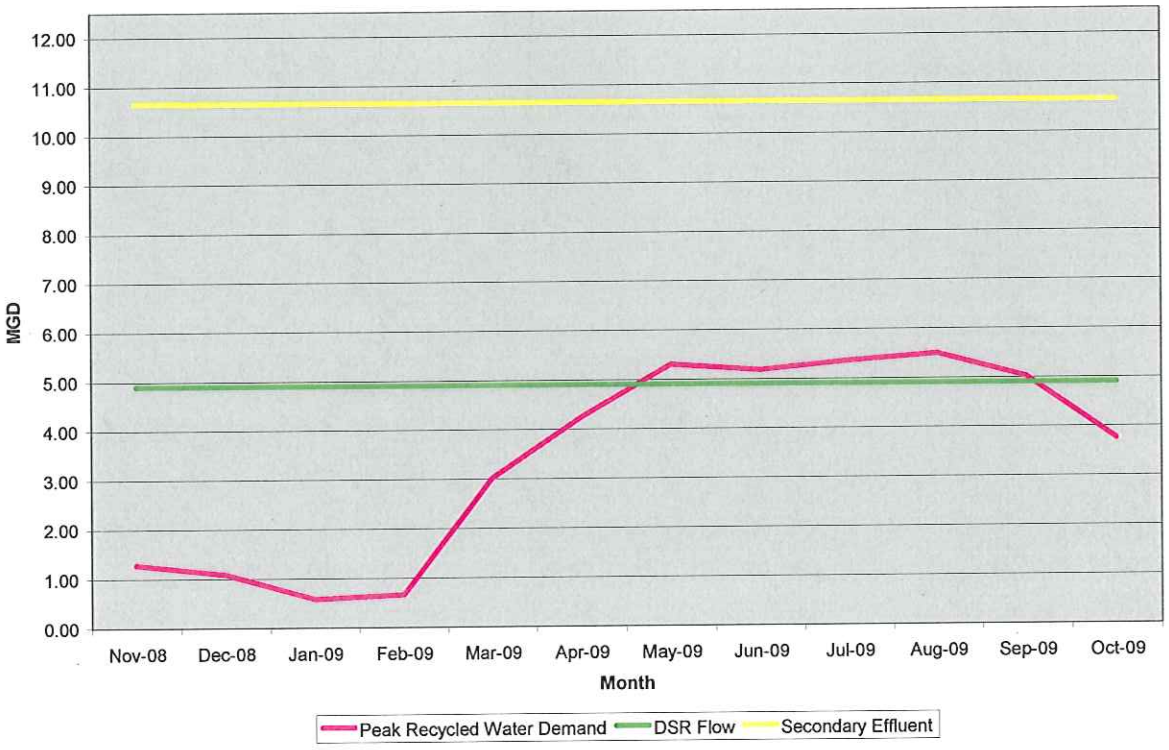


Table 5 summarizes the 2009 projections for recycled water demands based on average daily demand, peak daily demand, total millions of gallons, and total acre-feet.

TABLE 5

DERWA System: Projected 2009 Season Demand Totals

	Projected Recycled Water Demand			
Month	MGD	Peak MGD	MG	AF
Nov-08	0.65	1.29	19.5	59.9
Dec-08	0.33	1.09	10.1	31.1
Jan-09	0.31	0.59	9.6	29.6
Feb-09	0.28	0.67	8.1	24.8
Mar-09	1.16	3.02	36.0	110.5
Apr-09	3.10	4.25	93.0	285.4
May-09	3.99	5.31	123.7	379.6
Jun-09	4.33	5.19	129.9	398.5
Jul-09	4.38	5.37	135.6	416.3
Aug-09	4.54	5.50	140.6	431.6
Sep-09	4.09	5.02	122.8	376.8
Oct-09	2.94	3.76	91.0	279.2
AVG	2.51	3.42		
TOTAL			919.9	2,823.3
MIN	0.28	0.59	8.1	24.8
MAX	4.54	5.50	140.6	431.6

Expected increase over 2008 Season: 13%

1.4.3 Volume of Recycled Water in Reserve/Storage

The DERWA distribution system includes two (2) 4.36 million gallon recycled water reservoirs, with a total combined capacity of 8.72 million gallons (MG). DSRSD separately operates two (2) 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

Table 6 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 R100. The average turnover in R100 was 3.6 days during 2008.

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
Nov-07	1.31	4.36	30%	5.6	0.24
Dec-07	0.68	4.36	16%	4.8	0.14
Jan-08	0.62	4.36	14%	6.8	0.09
Feb-08	0.86	4.36	20%	8.5	0.10
Mar-08	1.03	4.36	24%	3.0	0.34
Apr-08	1.79	4.36	41%	2.7	0.67
May-08	1.91	4.36	44%	1.8	1.05
Jun-08	1.85	4.36	42%	1.6	1.16
Jul-08	2.55	4.36	59%	2.0	1.28
Aug-08	2.27	4.36	52%	1.9	1.21
Sep-08	2.11	4.36	48%	2.2	0.98
Oct-08	1.82	4.36	42%	2.8	0.66
AVG	1.57		36%	3.6	0.66
MIN	0.62		14%	1.6	0.09
MAX	2.55		59%	8.5	1.28

*Average Volume in storage as of 8:00 a.m. each morning

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: 2008 Season Reservoir R100 Storage Utilization

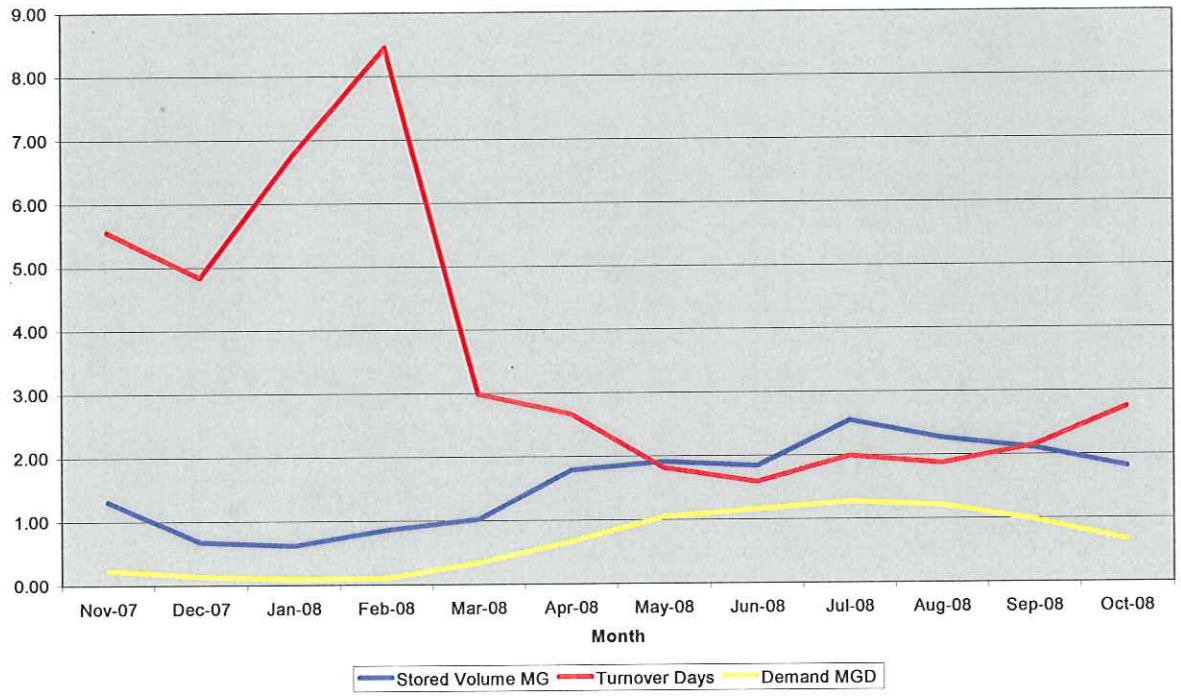


Table 7 shows the average volume stored per month, maximum storage capacity, monthly percent of storage utilized, monthly average turnover, and the monthly average demand for DERWA Reservoir R200. The average turnover in R200 was 2.9 days during 2008.

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
Nov-07	0.74	4.36	17%	1.5	0.51
Dec-07	0.61	4.36	14%	4.2	0.14
Jan-08	0.40	4.36	9%	11.1	0.04
Feb-08	0.38	4.36	9%	6.0	0.06
Mar-08	0.64	4.36	15%	1.5	0.42
Apr-08	1.00	4.36	23%	0.9	1.13
May-08	2.31	4.36	53%	1.5	1.49
Jun-08	2.68	4.36	61%	1.5	1.78
Jul-08	2.75	4.36	63%	1.5	1.85
Aug-08	3.05	4.36	70%	1.7	1.79
Sep-08	2.97	4.36	68%	1.9	1.58
Oct-08	1.93	4.36	44%	2.1	0.91
AVG	1.62		37%	2.9	0.98
MIN	0.38		9%	0.9	0.04
MAX	3.05		70%	11.1	1.85

*Average Volume in storage as of 8:00 a.m. each morning

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: 2008 Season Reservoir R200 Storage Utilization

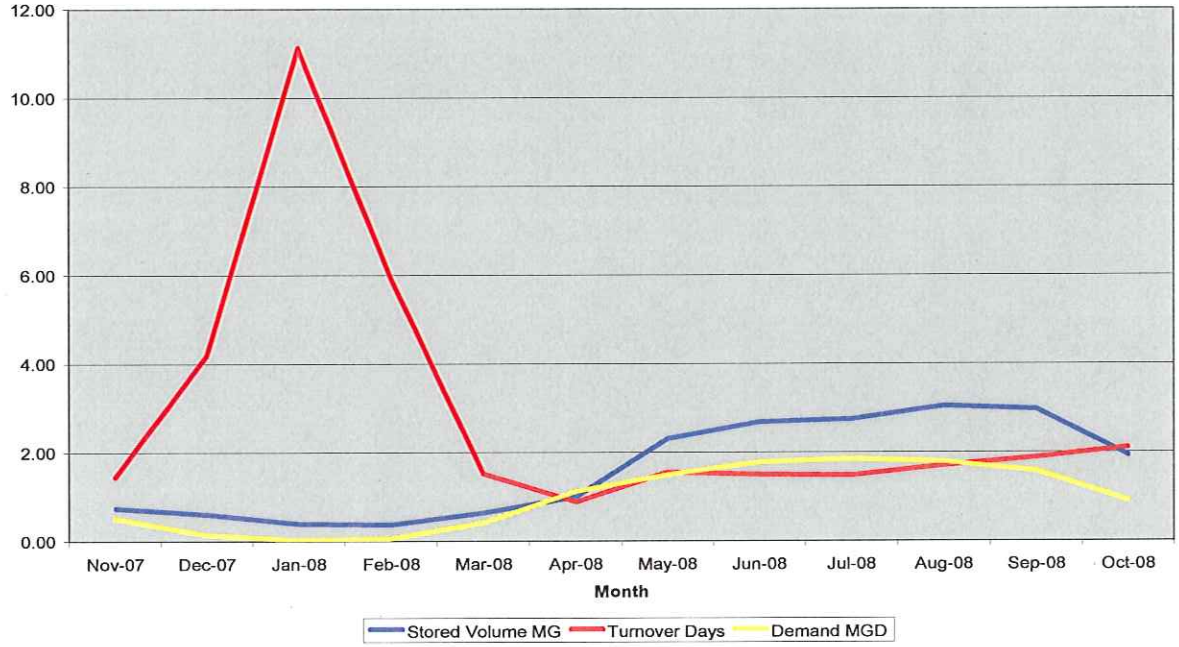


Table 8 shows the average volume stored per month, maximum storage capacity, monthly percent of storage utilized, monthly average turnover, and the monthly average demand for the two DERWA reservoirs combined. The average turnover in the combined reservoirs was 3.1 days during 2008.

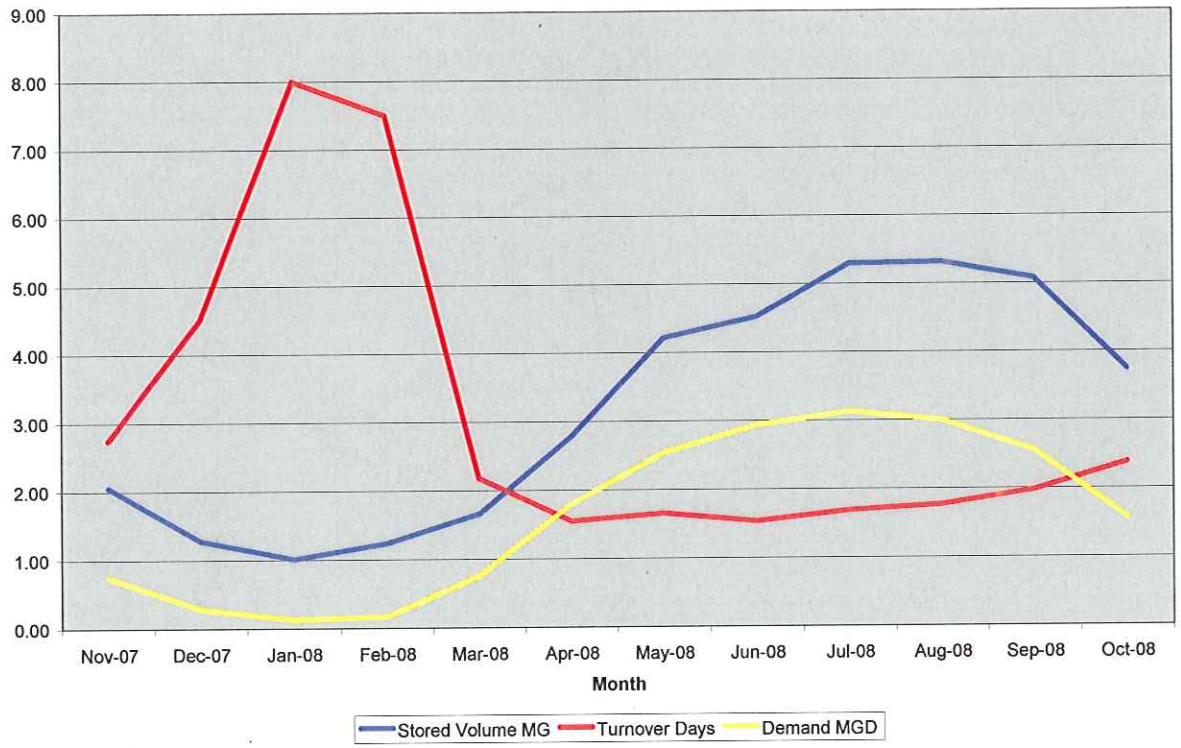
TABLE 8

DERWA System: Utilization of Storage Capacity

	Combined Reservoirs R100 & R200				
Month	Average Volume Stored MG	Maximum Storage Capacity MG	Storage Capacity Utilized %	Average Turnover DAYS	Average Demand MGD
Nov-07	2.06	8.72	24%	2.7	0.75
Dec-07	1.28	8.72	15%	4.5	0.28
Jan-08	1.02	8.72	12%	8.0	0.13
Feb-08	1.24	8.72	14%	7.5	0.16
Mar-08	1.67	8.72	19%	2.2	0.76
Apr-08	2.79	8.72	32%	1.6	1.80
May-08	4.22	8.72	48%	1.7	2.54
Jun-08	4.53	8.72	52%	1.5	2.94
Jul-08	5.30	8.72	61%	1.7	3.13
Aug-08	5.32	8.72	61%	1.8	3.00
Sep-08	5.08	8.72	58%	2.0	2.56
Oct-08	3.75	8.72	43%	2.4	1.57
AVG	3.19		37%	3.1	1.64
MIN	1.02		12%	1.5	0.13
MAX	5.32		61%	8.0	3.13

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: 2008 Season Combined Reservoir Storage Utilization



1.5 Potential Budgetary Impacts

During 2009 staff expects to incur fairly consistent maintenance costs. O&M costs during the winter months are expected to remain high due to labor and materials costs related to staff's efforts to inhibit nitrification by maintaining a minimum of 2 mg/l chlorine residual in the reservoirs.

The existing MF-UV system will be upgraded in early 2009 to use the latest version of Intellution iFix, the software that provides the human-machine interface (HMI) on the plant's process control computers. Currently, the MF-UV system uses an older DOS-based version of Intellution, which is not compatible with the newer Intellution software used for the SF-UV system. This incompatibility prevents staff from integrating and combining the controls for SF-UV and MF-UV on the same computer workstation, which would streamline process control and operation of the two treatment systems. The upgrade will also include replacing the PLC that is used to monitor and control the MF-UV via SCADA.

2. OPERATIONS

2.1 Operational Strategies

Strategies that will be tested and used in 2009 include:

- The new mechanical fine screen to remove plastics will be tested and placed in operation. Until the new mechanical screen is operational, staff will continue to periodically remove and clean the temporary fine screens that were fabricated to capture the plastics. The temporary screens have continued to remove significant quantities of small plastics, algae, and particles of grease from the secondary effluent. The temporary fine screens will be left in place as a redundant device to capture any plastics that get past the new mechanical fine screen.
- Improvements in routine process monitoring and control have allowed staff to better manage the loading from FSL cap water return. Staff plans to install new cap water return metering during 2009, as well as a modulating control valve that will be used to regulate and control the flow of cap water return to the secondary treatment system.
- Holding Basin No. 4 has been used successfully to store water to meet peak recycled water demands and to reduce electrical costs for pumping. Staff will continue to test measures to monitor the growth of algae in the holding basin, and test the effectiveness of various control methods, if necessary.
- Testing of the SF-UV system will be conducted to determine what minimum dosage of PACL is necessary to provide consistent recycled water quality. Operating experience during 2007 and 2008 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, it is likely that 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.
- 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 14.5% during the 2008 season, meeting the previously established goal of 14.5%. 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.

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 14.5% during 2008, which is 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
Nov-07	0.00	0.00	
Dec-07	0.00	0.00	
Jan-08	0.00	0.00	
Feb-08	0.00	0.00	
Mar-08	19.90	4.95	24.9%
Apr-08	78.65	12.12	15.4%
May-08	104.87	13.10	12.5%
Jun-08	120.51	13.11	10.9%
Jul-08	129.30	15.21	11.8%
Aug-08	123.82	13.94	11.3%
Sep-08	89.66	13.47	15.0%
Oct-08	69.61	10.05	14.4%
TOTAL	736.30		
AVG	61.36	8.00	14.5%
2009 TARGET GOAL:			13.8%

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: 2008 Season Backwash Waste Flow vs Recycled Water Produced

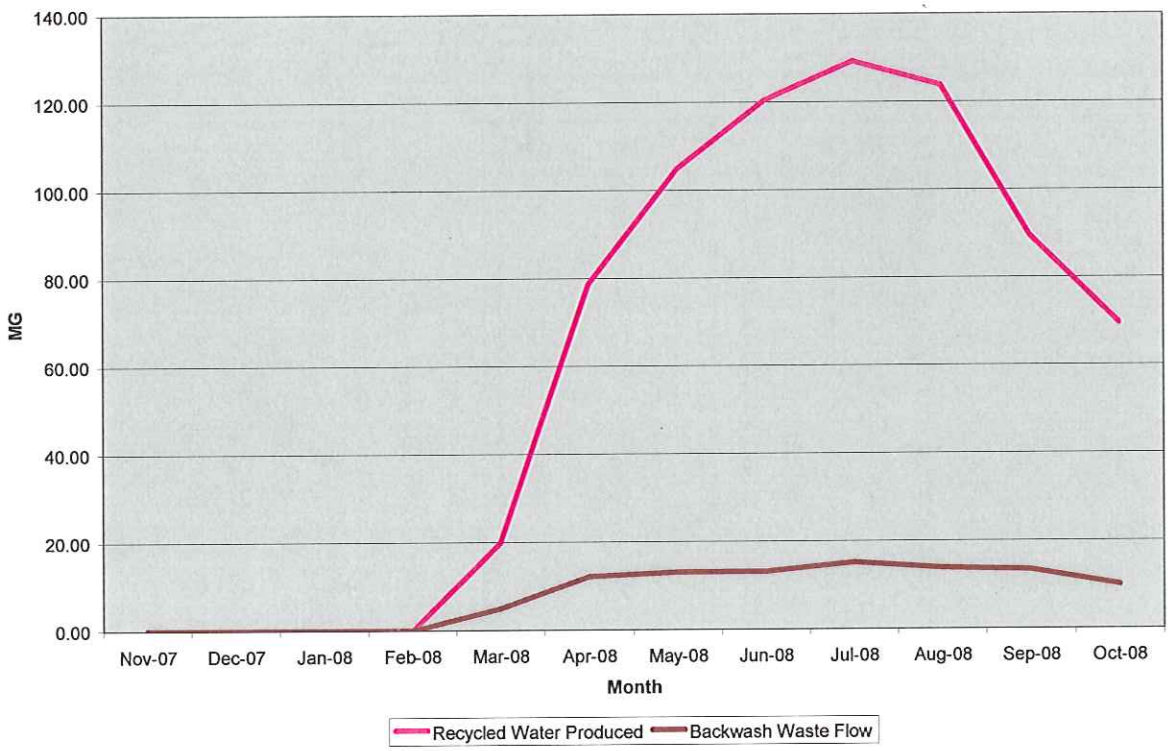
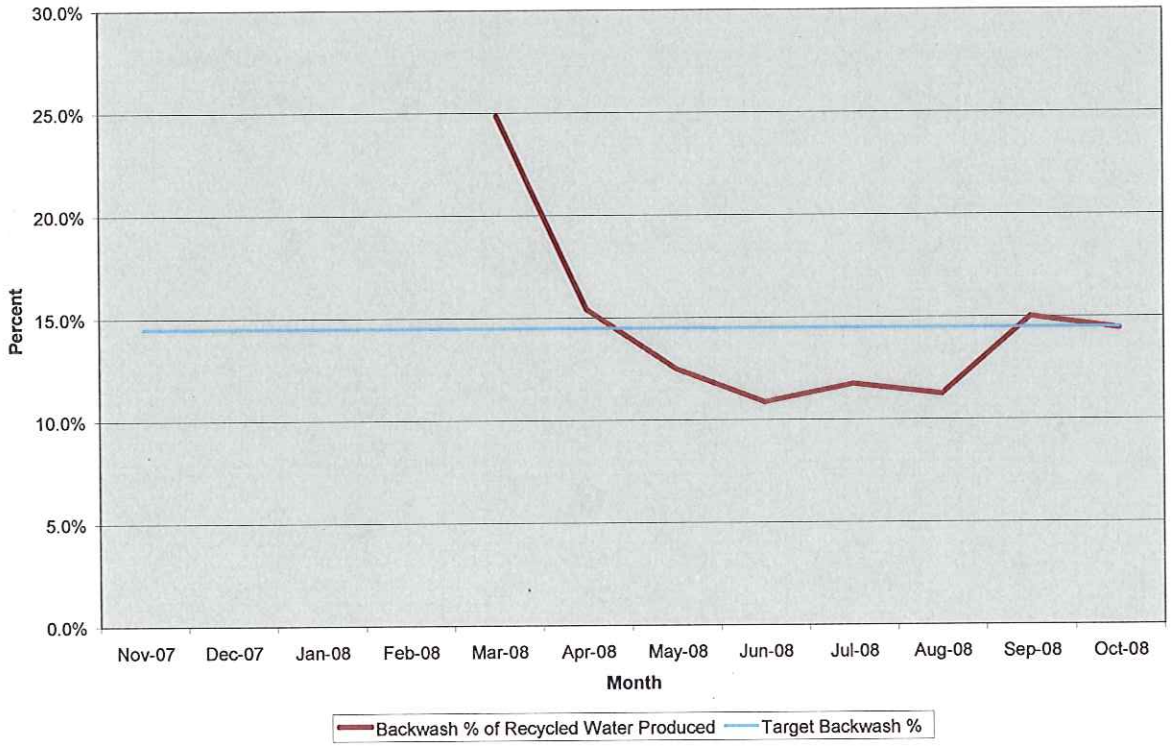


Figure 9: 2008 Season Backwash Waste as a Percentage of Recycled Water Produced



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.

2.4.1 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

	TREATMENT SYSTEM							
Month	SFUV kWh	MF-UV kWh	Total kWh	kWh $	Demand $	Total $	Total kWh/AF	Total $/AF
Nov-07	12,088	78,478	90,566	$5,171	$2,525	$7,696	947	$80
Dec-07	7,658	35,812	43,470	$70	$729	$799	1,353	$25
Jan-08	7,215	25,815	33,030	$2,584	$786	$3,370	2,235	$228
Feb-08	7,740	22,264	30,004	$3,373	$686	$4,058	1,674	$226
Mar-08	34,076	45,684	79,759	$6,750	$2,575	$9,325	768	$90
Apr-08	149,251	11,531	160,783	$11,536	$2,051	$13,586	697	$59
May-08	118,246	12,793	131,038	$20,137	$1,792	$21,930	409	$68
Jun-08	239,684	10,128	249,812	$23,304	$1,060	$24,364	677	$66
Jul-08	225,463	9,362	234,825	$24,997	$2,484	$27,481	589	$69
Aug-08	255,618	15,515	271,133	$28,565	$3,148	$31,713	689	$81
Sep-08	194,158	33,323	227,481	$23,743	$5,130	$28,873	705	$89
Oct-08	147,245	9,046	156,292	$19,180	$1,072	$20,253	748	$97
Average	116,537	25,813	142,349	$14,117	$2,003	$16,121	958	$77
Total	1,398,442	309,751	1,708,193	$169,409	$24,039	$193,448		
Minimum	7,215	9,046	30,004	$70	$686	$799	409	$25
Maximum	255,618	78,478	271,133	$28,565	$5,130	$31,713	2,235	$228

Note: SF-UV includes the TIPS pumps, coagulation, flocculation, filtration, and ultraviolet disinfection used with the sand filter system.

As mentioned in Section 2.1, during 2008 staff plans to continue testing the use of Holding Basin No. 4 as a means to decrease electrical costs by shifting more production to partial peak and off peak periods.

At the same time staff will observe whether increasing the volume of stored water in Holding Basin No. 4 would cause any significant amount of algae to grow in the holding basin, which could increase chemical and maintenance costs and negatively impact any costs saved from decreased electric costs.

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)
- 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

	Pump Stations		Reservoirs		Distribution System			
Month	PSR 1 kWh	PSR 200B kWh	R100 kWh	R200 kWh	Total kWh	Total $	Total kWh/AF	Total $/AF
Nov-07	63,292	23,200	79	46	86,617	$12,991	906	$136
Dec-07	18,434	25,760	101	40	44,335	$5,823	1,380	$181
Jan-08	10,334	27,360	103	42	37,839	$5,035	2,561	$341
Feb-08	11,078	25,600	89	45	36,812	$5,572	2,053	$311
Mar-08	55,337	16,960	79	38	72,414	$7,354	697	$71
Apr-08	111,401	31,840	69	40	143,350	$13,450	621	$58
May-08	145,914	55,520	68	44	201,546	$26,656	628	$83
Jun-08	170,579	53,760	44	39	224,422	$31,038	608	$84
Jul-08	182,571	64,000	43	40	246,654	$35,685	619	$90
Aug-08	184,345	63,040	47	40	247,472	$33,195	629	$84
Sep-08	149,701	48,960	38	42	198,741	$27,648	616	$86
Oct-08	107,013	23,680	48	41	130,782	$18,435	626	$88
Average	100,833	38,307	67	41	139,249	$18,574	995	$89
Total	1,209,998	459,680	808	497	1,670,983	$222,882		
Minimum	10,334	16,960	38	38	36,812	$5,035	608	$58
Maximum	184,345	64,000	103	46	247,472	$35,685	2,561	$341

Note: PSR1 is the pump station that conveys recycled water from SF-UV and MF-UV to the distribution system.

2.4.2 Chemicals

Sodium hypochlorite is purchased in bulk under a bid that the District awarded in July 2008. Sodium hypochlorite is added to the finished recycled water prior to distribution, in order to maintain a desired 5 mg/l concentration of chlorine as the recycled water is pumped into the distribution system. In addition, sodium hypochlorite is added to the recycled water reservoirs on an as-needed basis to maintain sufficient chlorine residuals in the reservoirs. Chlorine residual 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 2008 a total of 33,589 gallons of 12% bulk sodium hypochlorite solution were purchased for recycled water treatment and delivery. Sodium hypochlorite deliveries were accepted on the following schedule:

- January 14, 2008 3,872 gallons
- February 26, 2008 3,983 gallons
- April 28, 2008 3,948 gallons
- June 12, 2008 3,780 gallons
- July 11, 2008 4,755 gallons
- August 7, 2008 4,446 gallons
- September 5, 2008 4,341 gallons
- October 14, 2008 4,464 gallons

Coagulant for the SF-UV system was advertised for competitive bidding in July 2008 and subsequently awarded to Kemira Water Solutions.

During 2008 a total of 40,206 gallons of PACL was purchased for use with SF-UV treatment. PACL deliveries were accepted on the following schedule:

- April 1, 2008 3,895 gallons
- April 18, 2008 3,837 gallons
- May 7, 2008 3,846 gallons
- May 15, 2008 4,363 gallons
- May 27, 2008 4,051 gallons
- July 2, 2008 4,233 gallons
- July 23, 2008 3,846 gallons
- August 7, 2008 4,124 gallons
- August 29, 2008 3,944 gallons
- September 19, 2008 4,067 gallons

3. MAINTENANCE

3.1 Overhauls and Replacements

During 2008 the No. 2 TIPS pump was removed from service for inspection, overhaul and repair and installed back into service.

A number of improvements, overhauls, and replacements are planned for 2009 including:

- Installing a sunshade structure over the sand filters to better protect the sand filters from the elements, and to reduce the temperature of the inspection plates covering the sand filters, particularly on hot summer days.
- Removing an additional TIPS pump for inspection of the seals and bearings.
- UV lamp replacement as needed.

3.2 Preventative Maintenance

During the year at total of 611 Preventative Maintenance work orders were generated, of which a total of 457 were completed. The remaining PM's were either cancelled, 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	66	54	93%	0	0%	1	2%	9	14%
INSTRUMENT TECHNICIAN	395	262	79%	34	9%	1	0%	29	7%
MECHANIC	147	139	95%	7	5%	8	5%	1	1%
OPS	3	2	50%	0	0%	1	33%	0	0%
TOTAL	**611**	**457**	**84%**	**41**	**7%**	**11**	**2%**	**39**	**6%**

3.3 Reactive Maintenance

The reactive maintenance that occurred was limited primarily to:

- Instrumentation failures and/or calibration drift
- Debugging the control system logic
- Replacing failed UV lamps
- Cleaning the temporary screen
- Inspecting and repairing the TIPS pumps

4. CUSTOMER SATISFACTION

4.1 Complaints and Response

During 2008 a complaint was received from several customers in San Ramon related to a lack of water supply over the course of a weekend. An investigation revealed that a valve was found to be partially closed on the distribution line as it comes off the Iron Horse Trail. Staff reopened the valve to restore flow and pressure to the affected customers.

4.2 Spills and Response: DSRSD Service Area

On August 20 DSRSD staff responded to six spills of fully treated recycled water that occurred at the following locations: Dougherty Road at Wildwood Street; Gleason Road at the Tassajara Creek Bridge; Ulferts Center – 4228 Dublin Blvd.; Extended Stay America – 4500 Dublin Blvd.; Keegan Street between Central and Dublin Blvd.; and Dublin Sports Grounds – 100 Civic Plaza. The spills occurred when staff inadvertently closed valves that interrupted the flow of water from PSR1 at the recycled water treatment plant to Reservoir R100 and caused a spike in the pressure in the recycled water distribution system. DSRSD staff estimated the volume of the six spills to be no more than 23,800 gallons. The spills were reported in writing to the RWQCB. To prevent this from occurring

again, additional alarms and pump shutdowns have been programmed in SCADA to turn off the pumps at PSR 1 in the event that high pressure is detected in the recycled water pipeline.

On July 8 DSRSD staff responded to a spill of tertiary recycled water that occurred at 6300 Dublin Blvd. The spill occurred because of a curb stop that was damaged by road construction at this location. The spilled recycled water went into a catch basin which percolated into the ground with no runoff into receiving waters. DSRSD staff estimated the spill to be no more than 9,000 gallons. The spill was reported in writing to the RWQCB.

On June 18 DSRSD staff responded to a spill of fully treated recycled water that occurred at 7600 Johnson Drive in Pleasanton. Staff became aware that an irrigation sprinkler had stuck open and the estimated runoff amount of 1,800 gallons flowed into Alamo Canal. The spill was reported in writing to the RWQCB.

5. EMERGENCY READINESS AND RESPONSE

5.1 Emergency Responses in 2008

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 Officer	(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) 875-2244

Technical Questions and Complaints
The general contact information for each agency is as follows:

Agency	*Contact*	*Office*
DSRSD	Jim Dryden, Acting 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 Hrs*
DSRSD	24 Hour On Call Operator		(925) 872-5890
DSRSD	Plant Operations	(925) 846-4565	(925) 519-0557
DSRSD	Jim Dryden, Acting 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 Duty 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 2008

During the 2008 season (November 2007 to October 2008), the total cost invoiced to DERWA for the operation and maintenance of the treatment and distribution system was $1,456,521 or $581 per acre-foot delivered. Table 13 shows the 2008 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
Nov-07	$43,450	$20,687	$22,534	$86,671	$2,782	$906
Dec-07	$51,771	$6,622	$9,547	$67,940	$6,492	$2,115
Jan-08	$75,689	$8,405	$33,991	$118,085	$24,525	$7,991
Feb-08	$48,923	$9,631	$12,454	$71,008	$12,156	$3,961
Mar-08	$62,661	$16,679	$57,120	$136,460	$4,033	$1,314
Apr-08	$52,637	$27,036	$36,128	$115,801	$1,541	$502
May-08	$68,318	$48,585	$32,017	$148,920	$1,425	$464
Jun-08	$74,605	$55,402	$42,310	$172,317	$1,434	$467
Jul-08	$43,128	$63,166	$62,250	$168,544	$1,298	$423
Aug-08	$36,400	$64,909	$41,689	$142,998	$1,115	$363
Sep-08	$37,355	$56,521	$26,581	$120,457	$1,145	$373
Oct-08	$40,184	$38,687	$28,450	$107,321	$1,577	$514
Total	$635,121	$416,330	$405,071	$1,456,521		
Average	$52,927	$34,694	$33,756	$121,377	$1,782	$581
Minimum	$36,400	$6,622	$9,547	$67,940	$1,115	$363
Maximum	$75,689	$64,909	$62,250	$172,317	$24,525	$7,991

6.2 Treatment versus Distribution Costs during 2008

Of the total O&M cost, $1,047,706 or $418 per acre-foot represents the cost related to treatment, and $409,418 or $163 per acre-foot represents the cost related to pumping and distribution. Table 14 shows the 2008 expenditures for operating and maintaining the treatment system, and Table 15 shows the 2008 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
Nov-07	$22,314	$7,696	$22,534	$52,544	$1,686	$549
Dec-07	$28,799	$799	$9,547	$39,145	$3,740	$1,219
Jan-08	$58,461	$3,370	$33,991	$95,822	$19,901	$6,484
Feb-08	$20,823	$4,058	$12,454	$37,335	$6,392	$2,083
Mar-08	$38,701	$9,325	$53,318	$101,344	$2,995	$976
Apr-08	$38,092	$13,586	$33,258	$84,936	$1,130	$368
May-08	$54,392	$21,930	$31,597	$107,919	$1,033	$336
Jun-08	$65,655	$24,364	$42,904	$132,923	$1,106	$360
Jul-08	$38,608	$27,481	$62,250	$128,339	$988	$322
Aug-08	$26,850	$31,713	$41,542	$100,105	$780	$254
Sep-08	$31,089	$28,873	$26,581	$86,543	$823	$268
Oct-08	$32,048	$20,253	$28,450	$80,751	$1,187	$387
Total	$455,832	$193,448	$398,426	$1,047,706		
Average	$37,986	$16,121	$33,202	$87,309	$1,282	$418
Minimum	$20,823	$799	$9,547	$37,335	$780	$254
Maximum	$65,655	$31,713	$62,250	$132,923	$19,901	$6,484

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
Nov-07	$21,136	$12,991	$0	$34,127	$1,095	$357
Dec-07	$22,972	$5,823	$0	$28,795	$2,751	$896
Jan-08	$17,228	$5,035	$0	$22,263	$4,624	$1,507
Feb-08	$28,100	$5,572	$0	$33,672	$5,765	$1,878
Mar-08	$23,960	$7,354	$3,802	$35,116	$1,038	$338
Apr-08	$14,545	$13,450	$2,870	$30,865	$411	$134
May-08	$13,926	$26,656	$421	$41,003	$392	$128
Jun-08	$8,950	$31,038	$7	$39,995	$333	$108
Jul-08	$4,520	$35,685	$0	$40,205	$310	$101
Aug-08	$9,550	$33,195	$147	$42,892	$334	$109
Sep-08	$6,266	$27,648	$0	$33,914	$322	$105
Oct-08	$8,136	$18,435	$0	$26,570	$391	$127
Total	$179,289	$222,882	$7,247	$409,418		
Average	$14,941	$18,574	$604	$34,118	$501	$163
Minimum	$4,520	$5,035	$0	$22,263	$310	$101
Maximum	$28,100	$35,685	$3,802	$42,892	$5,765	$1,878

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 2008

Of the total O&M cost, $690,185 or 47% represents fixed costs, and $766,337 or 53% 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 2008 expenditures itemized by fixed costs and variable costs.

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

	Fixed Costs			Variable Costs				Ratio
Month	Labor Expenses	Lab Costs	Subtotal	Electric Costs	Materials & Supplies	Backwash Treatment	Subtotal	Fixed vs Variable
Nov-07	$43,450	$6,138	$49,588	$20,687	$16,263	$133	$37,083	57%
Dec-07	$51,771	$2,960	$54,731	$6,622	$6,565	$22	$13,209	81%
Jan-08	$75,689	$2,193	$77,882	$8,405	$31,770	$28	$40,203	66%
Feb-08	$48,923	$1,572	$50,495	$9,631	$10,851	$31	$20,513	71%
Mar-08	$62,661	$4,468	$67,129	$16,679	$52,295	$357	$69,331	49%
Apr-08	$52,637	$5,385	$58,022	$27,036	$30,216	$527	$57,779	50%
May-08	$68,318	$5,191	$73,509	$48,585	$26,254	$572	$75,411	49%
Jun-08	$74,605	$5,208	$79,813	$55,402	$36,813	$289	$92,504	46%
Jul-08	$43,128	$5,521	$48,649	$63,166	$56,137	$592	$119,895	29%
Aug-08	$36,400	$5,196	$41,596	$64,909	$35,720	$773	$101,402	29%
Sep-08	$37,355	$5,594	$42,949	$56,521	$20,439	$548	$77,508	36%
Oct-08	$40,184	$5,638	$45,822	$38,687	$22,611	$201	$61,499	43%
Total	$635,121	$55,064	$690,185	$416,330	$345,934	$4,073	$766,337	
Average	$52,927	$4,589	$57,515	$34,694	$28,828	$339	$63,861	47%
Minimum	$36,400	$1,572	$41,596	$6,622	$6,565	$22	$13,209	29%
Maximum	$75,689	$6,138	$79,813	$64,909	$56,137	$773	$119,895	81%

6.4 O&M Costs Itemized by Functional Category during 2008

Of the total O&M cost, $505,140 represents operations costs, $364,268 represents maintenance costs, $170,783 represents chemical costs, and the remaining $416,330 represents electrical costs. For the purpose of this analyses, 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 2008 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

	Operations Costs				Maintenance Costs			Power	Chemical Costs		
Month	Labor Expenses	Lab Costs	Backwash Treatment	Subtotal	Labor Expenses	Materials & Supplies	Subtotal	Electric Costs	PACL	Hypo	Subtotal
Nov-07	$40,451	$6,138	$133	$46,722	$2,999	$16,263	$19,262	$20,687	$0	$0	$0
Dec-07	$41,755	$2,960	$22	$44,737	$10,016	$6,184	$16,200	$6,622	$0	$381	$381
Jan-08	$32,003	$2,193	$28	$34,224	$43,686	$8,133	$51,819	$8,405	$0	$23,637	$23,637
Feb-08	$38,890	$1,572	$31	$40,493	$10,033	$3,669	$13,702	$9,631	$0	$7,182	$7,182
Mar-08	$45,588	$4,468	$357	$50,413	$17,073	$48,654	$65,727	$16,679	$0	$3,641	$3,641
Apr-08	$23,160	$5,385	$527	$29,072	$29,477	$20,542	$50,019	$27,036	$9,674	$0	$9,674
May-08	$44,882	$5,191	$572	$50,645	$23,436	$3,561	$26,997	$48,585	$19,083	$3,610	$22,693
Jun-08	$49,079	$5,208	$289	$54,576	$25,526	$7,582	$33,108	$55,402	$20,971	$8,260	$29,231
Jul-08	$28,843	$5,521	$592	$34,956	$14,285	$45,623	$59,908	$63,166	$10,514	$0	$10,514
Aug-08	$31,747	$5,196	$773	$37,716	$4,653	$4,996	$9,649	$64,909	$21,348	$9,376	$30,724
Sep-08	$31,377	$5,594	$548	$37,519	$5,978	$4,132	$10,110	$56,521	$11,281	$5,026	$16,307
Oct-08	$38,229	$5,638	$201	$44,067	$1,955	$5,812	$7,767	$38,687	$11,631	$5,168	$16,799
Total	$446,004	$55,064	$4,073	$505,140	$189,117	$175,151	$364,268	$416,330	$104,502	$66,281	$170,783
Average	$37,167	$4,589	$339	$42,095	$15,760	$14,596	$30,356	$34,694	$8,709	$5,523	$14,232
Minimum	$23,160	$1,572	$22	$29,072	$1,955	$3,561	$7,767	$6,622	$0	$0	$0
Maximum	$49,079	$6,138	$773	$54,576	$43,686	$48,654	$65,727	$64,909	$21,348	$23,637	$30,724

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

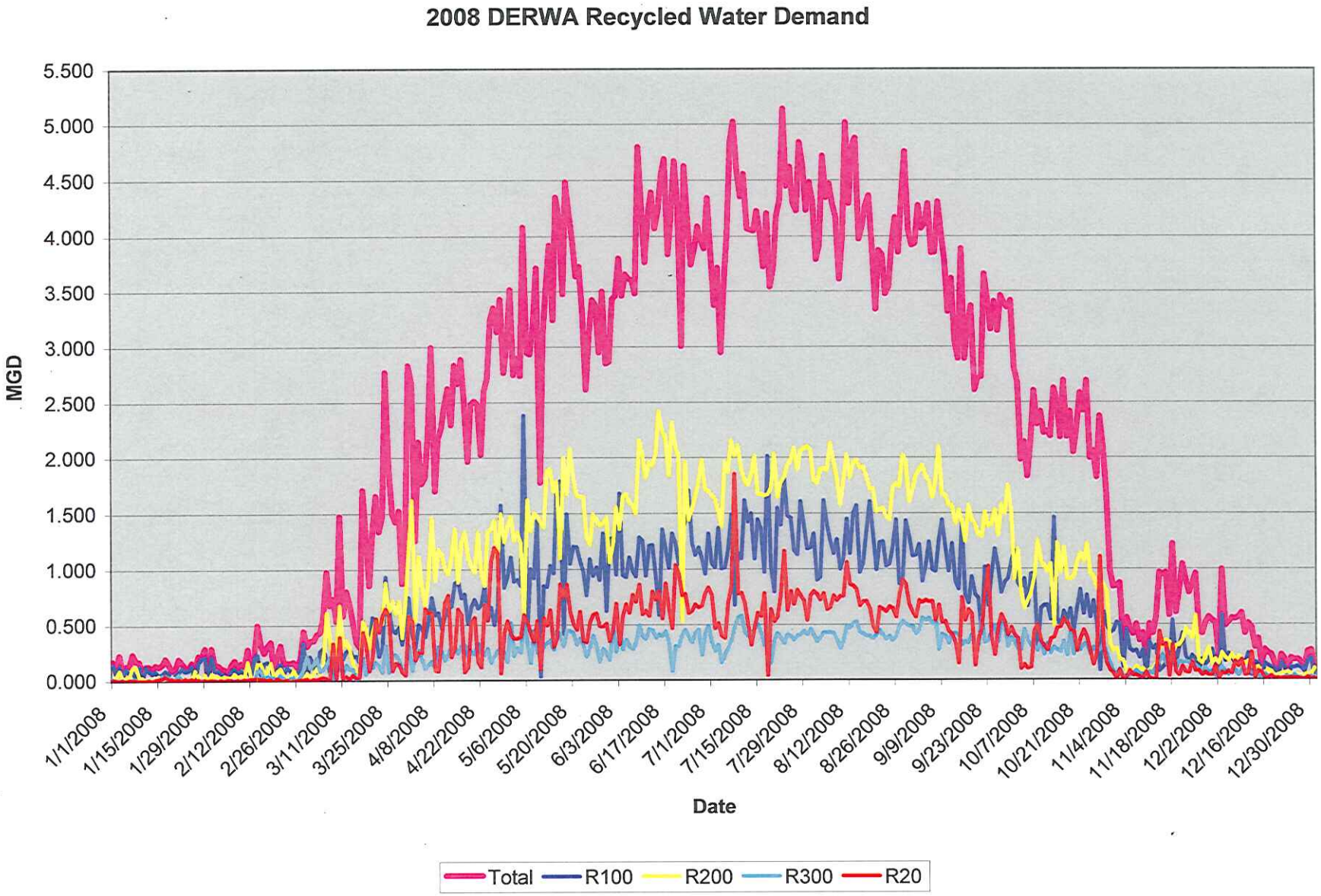
Recycled Water Customer Demands, Production, and Weather Data during Calendar Year 2008

DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
2008 Monthly Average Summary

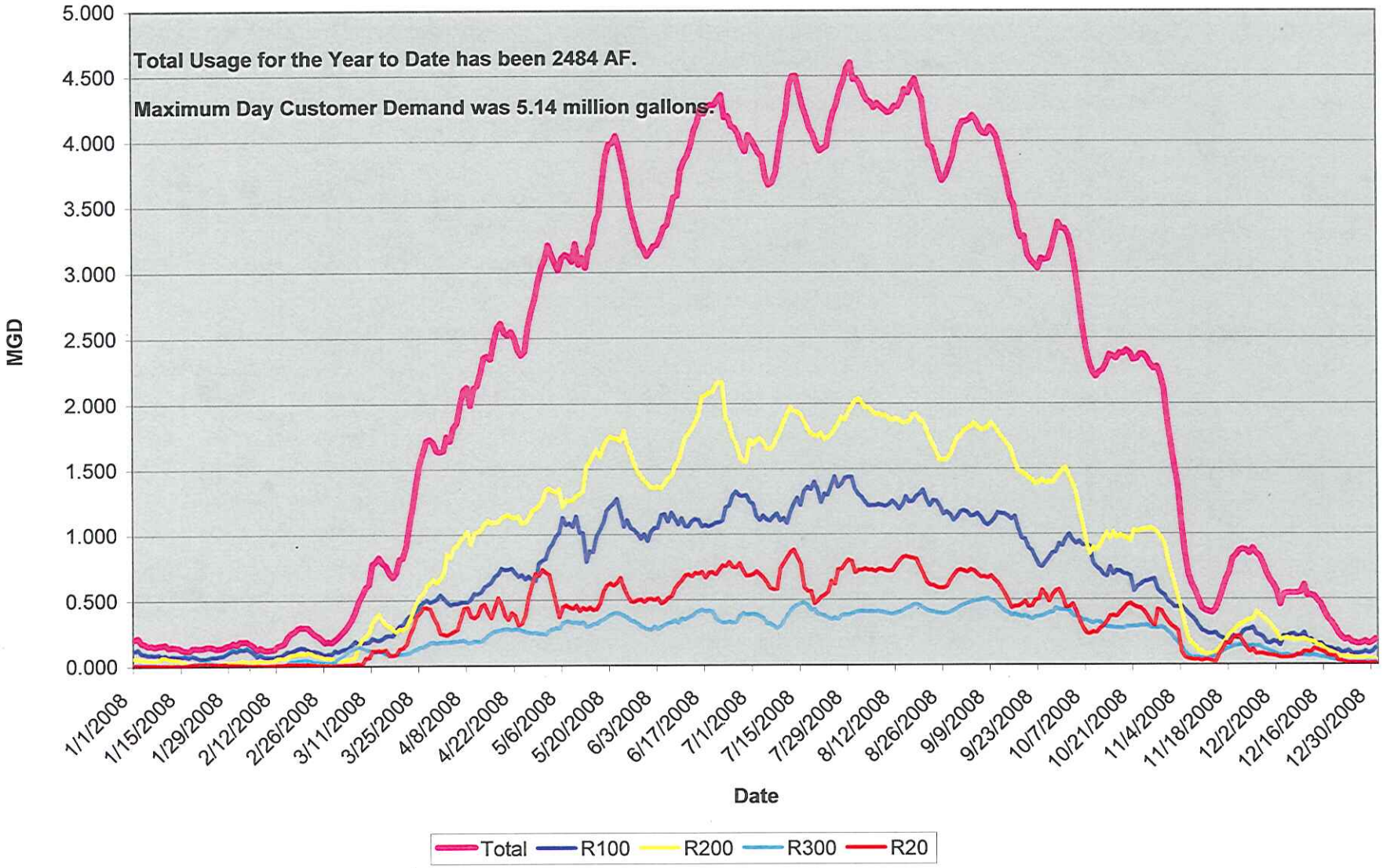
	Recycled Water Demand (MGD)					Weather Conditions						Production				
Month	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Total Rainfall inches	Avg Wind mph	Eto inches	SF-UV MG	MF-UV MG	Potable MG	Total MG	Total AF
JAN	0.155	0.091	0.036	0.016	0.012	47.5	56.5	76	0.24	3.9	0.06	0.00	5.29	0.00	5.29	16.22
FEB	0.209	0.102	0.063	0.033	0.011	51.2	65.3	70	0.09	3.7	0.08	0.00	6.37	0.00	6.37	19.54
MAR	1.092	0.343	0.420	0.135	0.194	54.5	68.8	62	0.00	4.0	0.13	12.38	19.90	1.19	33.47	102.72
APR	2.506	0.669	1.130	0.234	0.473	54.6	69.7	57	0.00	4.7	0.18	78.65	0.00	0.00	78.65	241.38
MAY	3.371	1.051	1.493	0.329	0.497	58.2	75.1	58	0.00	5.4	0.20	104.87	0.62	0.00	105.49	323.75
JUN	4.007	1.159	1.783	0.373	0.692	65.3	84.2	49	0.00	4.9	0.23	120.51	0.58	0.00	121.09	371.62
JUL	4.190	1.278	1.854	0.384	0.673	63.4	82.5	57	0.00	5.8	0.24	129.30	0.19	0.00	129.48	397.40
AUG	4.138	1.213	1.789	0.421	0.715	65.2	85.7	55	0.00	5.1	0.22	123.82	4.64	0.00	128.46	394.26
SEP	3.506	0.981	1.578	0.413	0.534	65.0	90.4	53	0.00	4.0	0.17	89.66	13.05	0.00	102.71	315.22
OCT	2.195	0.661	0.912	0.283	0.339	58.6	83.8	54	0.01	2.9	0.12	69.61	0.00	0.00	69.61	213.63
NOV	0.650	0.241	0.226	0.096	0.087	51.6	68.4	75	0.07	2.4	0.06	0.02	18.12	0.00	18.14	55.69
DEC	0.327	0.137	0.103	0.040	0.048	42.0	58.6	80	0.08	2.6	0.04	0.00	10.54	0.00	10.53	32.33
TOTAL									0.51			728.80	79.28	1.19	809.28	2,483.75
AVG	**2.195**	0.660	0.949	0.230	0.356	56.4	74.1	62	0.04	4.1	0.14	60.73	6.61	0.10	67.44	206.98
MIN	**0.155**	0.091	0.036	0.016	0.011	42.0	56.5	49	0.00	2.4	0.04	0.00	0.00	0.00	5.29	16.22
MAX	**4.190**	1.278	1.854	0.421	0.715	65.3	90.4	80	0.24	5.8	0.24	129.30	19.90	1.19	129.48	397.40

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 Usage for the Year to Date has been 2484 AF.


2008 DERWA Recycled Water Demand
MGD
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
1/1/2008
1/15/2008
1/29/2008
2/12/2008
2/26/2008
3/11/2008
3/25/2008
4/8/2008
4/22/2008
5/6/2008
5/20/2008
6/3/2008
6/17/2008
7/1/2008
7/15/2008
7/29/2008
8/12/2008
8/26/2008
9/9/2008
9/23/2008
10/7/2008
10/21/2008
11/4/2008
11/18/2008
12/2/2008
12/16/2008
12/30/2008
Date
Total
R100
R200
R300
R20

2008 DERWA 7-Day Running Average Recycled Water Demand

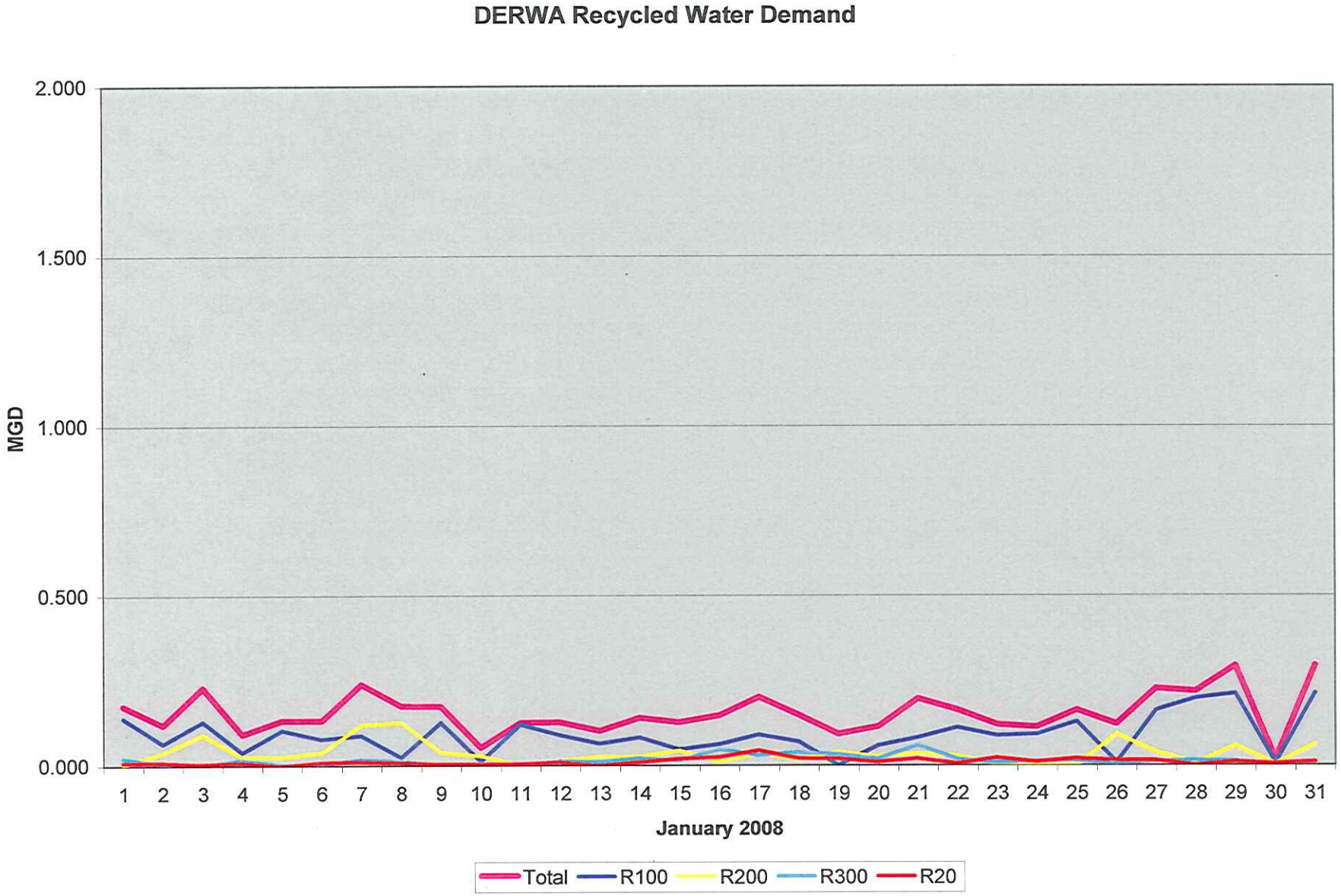


DUBLIN SAN RAMON SERVICES DISTRICT
Summary of New Recycled Water Use Licenses in 2008

			Estimated Water Requirements			
Month/ Year	License #	Pressure Zone	Site Area (Acres)	Average Demand (AF/YR)	Peak Demand (GPM)	Site Location
Jan-08	08-001	1	0.90	30.00	45	Ulfert Shopping Center, Dublin
	08-003		4.10	12.00	48	Ramona Park, San Ramon
	08-006		2.34	5.69	90	The Plaza at Gale Ranch, San Ramon
	08-007		0.11	0.38	29	RA 1170-Dalton Way, San Ramon
Apr-08	08-002		2.50	24.40	100	Dublin Civic Center and Library
	08-004		0.84	2.18	47	Venture Commerce Center, Dublin
	08-005		2.00	44.00	200	Area F-Park (Neighborhood Park aka Piazza Park), Dublin
	08-008		1.06	3.52	60	Tract 8777 - Village 36, San Ramon
May-08	08-012		1.90	6.20	30	Neighborhood 7 - Track 8682, San Ramon
	08-013		0.28	0.70	27	Grafton Station Offsite, Dublin
Jun-08	08-014		0.87	2.91	80	BART Parking Structure, Dublin
	08-015		2.14	5.49	30	Village 32 - Tract 8773, San Ramon
	08-016		0.25	0.92	22	Village 33 - Tract 8774, San Ramon
	08-019		0.23	0.50	26	Community ID Monument - PA 0017, San Ramon
Jul-08	08-011		0.55	2.06	41	Tract 8778 - Village 37, San Ramon
	08-017		0.35	1.18	45	Village 43 - Tract 8927, San Ramon
	08-018		0.44	1.10	32	Dublin Sonata-Gleason Median, Dublin
Sep-08	08-020		1.45	6.50	50	Dublin Neighborhood Square (Devaney Park), Dublin
	08-021		1.63	6.20	50	RA 1152 - Stoneleaf Road, San Ramon
	08-022		0.73	2.43	45	Tract 8926 - Village 42, San Ramon
	08-023		0.28	0.99	45	Tract 8928 - Village 44 (Verrado), San Ramon
	08-024		12.86	33.63	100	RA 1175 - Windemere Ph5 Backbone, San Ramon
	08-025		0.50	1.40	100	Dougherty Road - South of Dublin Blvd, Dublin
	08-026		0.50	1.40	100	Dublin Blvd Medians - Dougherty Rd to Scarlet Dr, Dublin
	08-027					Dougherty Rd Median Between Dublin Blvd & Sierra Lane
	08-028		2.25	4.80	43.75	Tract 7282 - Sonata, Dublin
Dec-08	08-009		12.00	167.00	500	Eleanor Murry Fallon Middle School, Dublin
	08-010		4.00	80.00	85	John Green Elementary School, Dublin
	08-029		1.20	0.25	2	Area B - Drainage Channel, Dublin
TOTAL			**58.26**	**447.83**	**2072.75**	

DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
January 2008

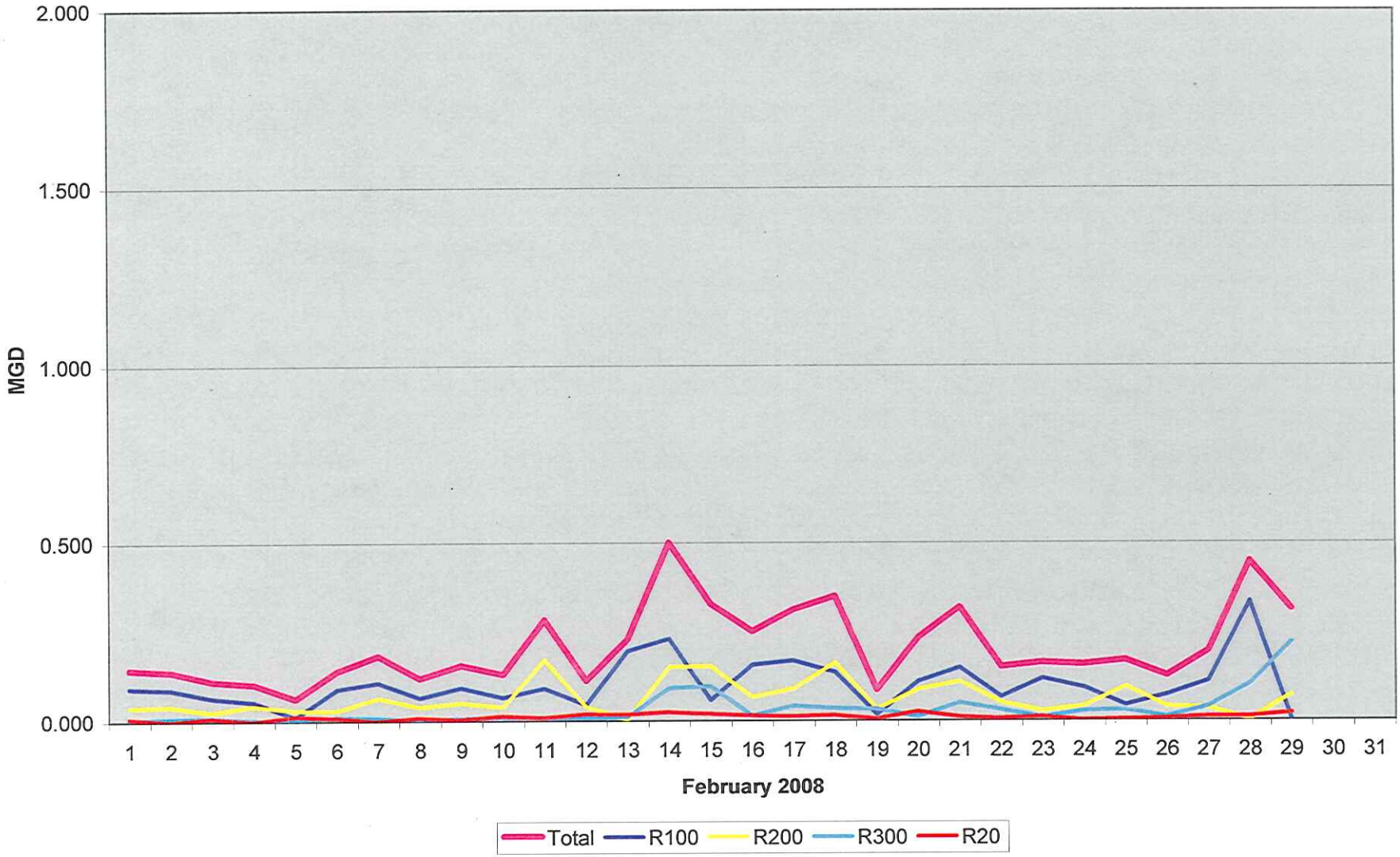
		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Tue	0.177	0.141	0.003	0.023	0.010	45.4	56.6	80	0.00	3.3	0.05	0.00	0.01	0.00	0.01
2	Wed	0.121	0.066	0.040	0.006	0.010	45.8	66.2	74	0.00	1.1	0.05	0.00	0.55	0.00	0.55
3	Thu	0.232	0.132	0.092	0.003	0.005	51.0	60.2	79	0.48	5.5	0.03	0.00	0.05	0.00	0.05
4	Fri	0.094	0.041	0.026	0.017	0.010	52.4	55.7	80	3.12	13.2	0.02	0.00	0.00	0.00	0.00
5	Sat	0.135	0.106	0.026	0.003	0.000	46.7	53.6	77	0.97	6.6	0.02	0.00	0.00	0.00	0.00
6	Sun	0.134	0.079	0.040	0.006	0.010	46.4	54.2	78	0.03	3.2	0.03	0.00	0.00	0.00	0.00
7	Mon	0.242	0.090	0.121	0.019	0.012	47.2	58.9	75	0.01	2.5	0.05	0.00	0.00	0.00	0.00
8	Tue	0.178	0.026	0.128	0.014	0.010	46.5	55.9	82	0.32	6.6	0.03	0.00	0.53	0.00	0.53
9	Wed	0.176	0.129	0.040	0.003	0.005	48.3	53.2	91	0.00	1.5	0.01	0.00	0.06	0.00	0.06
10	Thu	0.055	0.014	0.030	0.007	0.005	49.6	53.6	93	0.00	1.3	0.00	0.00	0.57	0.00	0.57
11	Fri	0.128	0.123	0.000	0.000	0.005	50.5	56.1	90	0.00	2.1	0.02	0.00	0.04	0.00	0.04
12	Sat	0.130	0.091	0.015	0.014	0.010	51.7	65.7	80	0.00	1.8	0.05	0.00	0.00	0.00	0.00
13	Sun	0.104	0.066	0.026	0.011	0.000	49.7	62.1	82	0.00	2.0	0.06	0.00	0.00	0.00	0.00
14	Mon	0.142	0.084	0.026	0.022	0.010	46.9	59.2	87	0.00	2.2	0.05	0.00	0.00	0.00	0.00
15	Tue	0.128	0.048	0.045	0.016	0.020	47.7	63.9	75	0.00	2.3	0.06	0.00	0.48	0.00	0.48
16	Wed	0.148	0.063	0.011	0.049	0.025	46.3	49.0	28	0.00	5.5	0.12	0.00	0.07	0.00	0.07
17	Thu	0.203	0.092	0.035	0.031	0.045	49.0	57.4	45	0.00	3.9	0.08	0.00	0.00	0.00	0.00
18	Fri	0.150	0.071	0.019	0.039	0.022	51.7	62.6	61	0.00	2.5	0.07	0.00	0.00	0.00	0.00
19	Sat	0.093	0.000	0.040	0.034	0.020	46.8	70.9	66	0.00	1.3	0.06	0.00	0.67	0.00	0.67
20	Sun	0.115	0.059	0.026	0.020	0.010	45.9	54.5	79	0.00	5.3	0.03	0.00	0.17	0.00	0.17
21	Mon	0.197	0.083	0.035	0.060	0.020	45.2	54.3	82	0.00	4.0	0.03	0.00	0.00	0.00	0.00
22	Tue	0.164	0.112	0.028	0.019	0.005	41.6	48.2	92	0.32	3.3	0.01	0.00	0.00	0.00	0.00
23	Wed	0.120	0.088	0.003	0.008	0.022	42.2	45.2	90	0.17	2.6	0.01	0.00	0.00	0.00	0.00
24	Thu	0.114	0.092	0.000	0.011	0.010	42.9	48.2	81	0.11	2.1	0.01	0.00	0.00	0.00	0.00
25	Fri	0.163	0.129	0.000	0.014	0.020	50.4	53.2	76	0.61	3.9	0.02	0.00	0.00	0.00	0.00
26	Sat	0.122	0.009	0.092	0.006	0.015	57.6	65.1	52	0.19	5.8	0.09	0.00	1.01	0.00	1.01
27	Sun	0.227	0.163	0.039	0.011	0.014	51.8	59.0	76	0.52	8.5	0.04	0.00	0.00	0.00	0.00
28	Mon	0.219	0.198	0.006	0.014	0.000	44.6	54.2	69	0.18	5.1	0.14	0.00	0.02	0.00	0.02
29	Tue	0.293	0.212	0.058	0.013	0.010	36.4	45.0	86	0.01	0.6	0.14	0.00	0.00	0.00	0.00
30	Wed	0.018	0.006	0.003	0.003	0.005	44.1	53.4	73	0.00	3.9	0.00	0.00	0.98	0.00	0.98
31	Thu	0.294	0.213	0.062	0.008	0.010	50.3	55.7	82	0.49	7.4	0.54	0.00	0.06	0.00	0.06
TOTAL		**4.815**	2.825	1.116	0.500	0.374				7.53			0.00	5.29	0.00	**5.29**
AVG		**0.155**	0.091	0.036	0.016	0.012	47.5	56.5	76	0.24	3.9	0.06	0.00	0.17	0.00	0.17
MIN		**0.018**	0.000	0.000	0.000	0.000	36.4	45.0	28	0.00	0.6	0.00	0.00	0.00	0.00	0.00
MAX		**0.294**	0.213	0.128	0.060	0.045	57.6	70.9	93	3.12	13.2	0.54	0.00	1.01	0.00	1.01


DERWA Recycled Water Demand
2.000
1.500
1.000
0.500
0.000
MGD
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
January 2008
Total
R100
R200
R300
R20

DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
February 2008

		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Fri	0.147	0.093	0.040	0.006	0.009	45.1	55.8	77	0.01	3.3	0.06	0.00	0.00	0.00	0.00
2	Sat	0.140	0.090	0.043	0.008	0.000	44.6	51.1	84	0.52	7.3	0.03	0.00	0.00	0.00	0.00
3	Sun	0.114	0.066	0.026	0.011	0.010	47.9	52.2	76	0.19	8.6	0.06	0.00	0.00	0.00	0.00
4	Mon	0.105	0.055	0.044	0.005	0.000	44.7	54.9	58	0.01	5.6	0.10	0.00	0.00	0.00	0.00
5	Tue	0.064	0.012	0.032	0.005	0.015	46.6	66.2	58	0.00	2.3	0.10	0.00	0.99	0.00	0.99
6	Wed	0.142	0.090	0.030	0.013	0.010	49.2	57.8	80	0.00	3.3	0.05	0.00	0.05	0.00	0.05
7	Thu	0.185	0.108	0.065	0.010	0.001	49.2	67.7	77	0.00	2.5	0.07	0.00	0.00	0.00	0.00
8	Fri	0.121	0.066	0.040	0.006	0.010	51.7	72.8	65	0.02	1.6	0.09	0.00	0.00	0.00	0.00
9	Sat	0.159	0.094	0.051	0.008	0.005	53.4	70.8	64	0.00	2.1	0.10	0.00	0.00	0.00	0.00
10	Sun	0.133	0.067	0.040	0.011	0.015	54.3	78.8	72	0.00	1.3	0.09	0.00	0.00	0.00	0.00
11	Mon	0.286	0.093	0.172	0.011	0.010	55.8	75.0	66	0.00	1.5	0.10	0.00	0.00	0.00	0.00
12	Tue	0.114	0.046	0.040	0.008	0.020	56.5	78.1	70	0.00	1.5	0.10	0.00	1.08	0.00	1.08
13	Wed	0.231	0.197	0.003	0.012	0.019	54.1	65.1	46	0.00	8.5	0.13	0.00	0.01	0.00	0.01
14	Thu	0.501	0.232	0.152	0.093	0.025	51.6	63.9	30	0.00	8.3	0.15	0.00	0.00	0.00	0.00
15	Fri	0.329	0.058	0.154	0.097	0.020	50.9	68.0	50	0.00	2.4	0.10	0.00	1.02	0.00	1.02
16	Sat	0.252	0.157	0.066	0.014	0.015	51.6	74.4	66	0.00	1.5	0.09	0.00	0.21	0.00	0.21
17	Sun	0.313	0.169	0.090	0.042	0.012	49.1	68.4	80	0.00	2.9	0.08	0.00	0.00	0.00	0.00
18	Mon	0.350	0.137	0.163	0.035	0.015	50.7	65.0	79	0.00	3.6	0.06	0.00	0.00	0.00	0.00
19	Tue	0.087	0.017	0.032	0.033	0.005	52.1	59.8	85	0.43	2.3	0.06	0.00	0.79	0.00	0.79
20	Wed	0.233	0.110	0.088	0.010	0.025	51.4	63.4	78	0.03	2.9	0.06	0.00	0.18	0.00	0.18
21	Thu	0.319	0.149	0.110	0.050	0.010	51.0	61.5	83	0.16	4.2	0.06	0.00	0.00	0.00	0.00
22	Fri	0.151	0.066	0.051	0.030	0.005	49.1	54.6	78	0.11	4.7	0.06	0.00	0.00	0.00	0.00
23	Sat	0.164	0.119	0.026	0.008	0.010	45.9	52.5	82	0.44	5.2	0.06	0.00	0.00	0.00	0.00
24	Sun	0.159	0.092	0.040	0.027	0.000	51.4	55.9	79	0.79	9.5	0.06	0.00	0.00	0.00	0.00
25	Mon	0.169	0.043	0.095	0.029	0.002	52.6	64.5	78	0.01	2.1	0.07	0.00	0.76	0.00	0.76
26	Tue	0.126	0.072	0.039	0.010	0.005	53.3	68.8	78	0.01	1.9	0.07	0.00	0.23	0.00	0.23
27	Wed	0.195	0.110	0.036	0.039	0.010	57.0	74.7	74	0.01	1.9	0.10	0.00	0.00	0.00	0.00
28	Thu	0.447	0.334	0.001	0.102	0.010	59.1	79.1	57	0.00	1.4	0.06	0.00	0.00	0.00	0.00
29	Fri	0.313	0.001	0.072	0.220	0.020	54.5	73.3	72	0.00	3.7	0.11	0.00	1.04	0.00	1.04
TOTAL		**6.050**	2.945	1.840	0.952	0.313				2.74			0.00	6.37	0.00	**6.37**
AVG		**0.209**	0.102	0.063	0.033	0.011	51.2	65.3	70	0.09	3.7	0.08	0.00	0.22	0.00	0.22
MIN		**0.064**	0.001	0.001	0.005	0.000	44.6	51.1	30	0.00	1.3	0.03	0.00	0.00	0.00	0.00
MAX		**0.501**	0.334	0.172	0.220	0.025	59.1	79.1	85	0.79	9.5	0.15	0.00	1.08	0.00	1.08

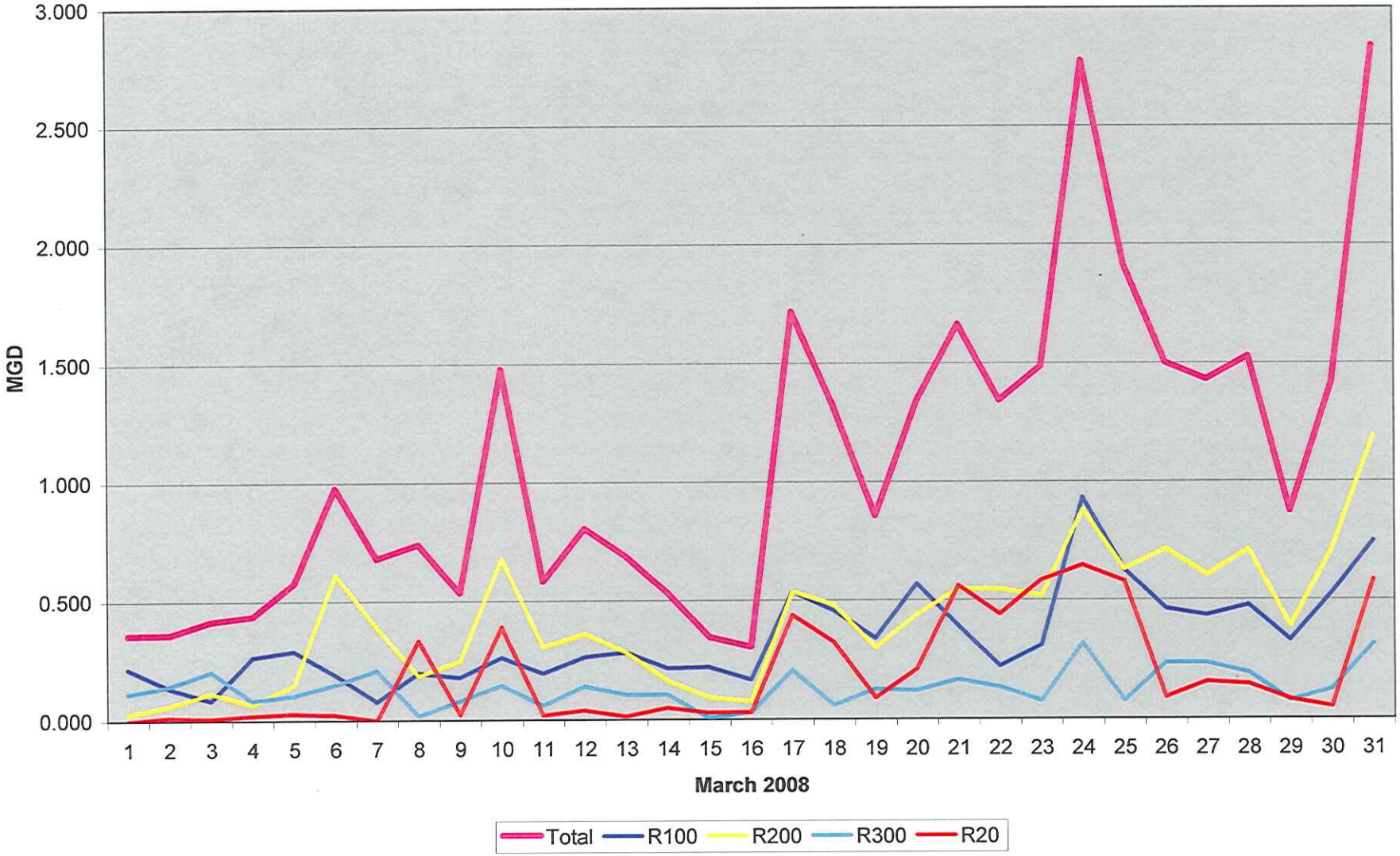
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
March 2008

		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Sat	0.359	0.217	0.028	0.114	0.000	53.6	62.9	64	0.00	5.8	0.11	0.00	0.33	0.00	0.33
2	Sun	0.361	0.137	0.063	0.146	0.015	55.6	67.8	42	0.00	7.3	0.17	0.00	0.00	0.00	0.00
3	Mon	0.417	0.085	0.116	0.206	0.010	56.4	79.4	50	0.00	1.8	0.12	0.00	1.09	0.00	1.09
4	Tue	0.438	0.266	0.067	0.084	0.021	54.5	75.1	64	0.00	2.4	0.12	0.00	0.22	0.00	0.22
5	Wed	0.577	0.291	0.150	0.105	0.030	55.4	72.7	44	0.00	2.4	0.15	0.00	0.00	0.00	0.00
6	Thu	0.980	0.191	0.613	0.151	0.025	51.9	68.3	62	0.00	2.2	0.08	0.00	1.10	0.00	1.10
7	Fri	0.681	0.080	0.389	0.211	0.001	55.9	74.2	58	0.00	2.6	0.11	0.00	1.87	0.00	1.87
8	Sat	0.740	0.199	0.187	0.020	0.335	56.4	70.3	65	0.00	3.3	0.13	0.00	0.84	0.00	0.84
9	Sun	0.536	0.182	0.248	0.082	0.025	58.6	80.9	54	0.00	1.5	0.13	0.00	0.73	0.00	0.73
10	Mon	1.481	0.263	0.679	0.147	0.391	58.9	76.5	65	0.00	3.7	0.13	0.00	0.21	0.00	0.21
11	Tue	0.584	0.197	0.305	0.062	0.020	55.9	72.6	76	0.00	3.3	0.09	0.00	1.92	0.00	1.92
12	Wed	0.806	0.264	0.360	0.142	0.040	55.1	65.4	59	0.00	4.4	0.09	0.00	0.62	0.00	0.62
13	Thu	0.688	0.283	0.284	0.106	0.015	55.1	62.8	78	0.04	6.0	0.11	0.00	0.65	0.00	0.65
14	Fri	0.533	0.216	0.162	0.105	0.050	51.5	58.3	71	0.01	6.5	0.10	0.00	0.74	0.00	0.74
15	Sat	0.347	0.221	0.092	0.006	0.029	48.9	59.5	67	0.04	5.5	0.11	0.00	0.74	0.00	0.74
16	Sun	0.306	0.169	0.077	0.031	0.030	53.1	63.4	43	0.00	8.3	0.17	0.00	0.73	0.00	0.73
17	Mon	1.718	0.537	0.536	0.207	0.438	55.5	70.4	53	0.00	3.0	0.14	0.00	0.32	0.17	0.49
18	Tue	1.321	0.458	0.480	0.059	0.324	56.9	73.1	69	0.00	3.1	0.14	0.00	2.04	1.02	3.06
19	Wed	0.856	0.339	0.300	0.127	0.090	53.3	60.4	80	0.00	5.4	0.10	0.00	1.88	0.00	1.88
20	Thu	1.338	0.569	0.439	0.120	0.210	51.3	61.2	65	0.00	5.2	0.14	0.00	0.54	0.00	0.54
21	Fri	1.664	0.390	0.547	0.166	0.560	54.3	74.1	61	0.00	2.6	0.14	0.00	0.86	0.00	0.86
22	Sat	1.342	0.221	0.546	0.135	0.440	57.4	80.3	52	0.00	2.5	0.16	0.00	1.75	0.00	1.75
23	Sun	1.486	0.309	0.518	0.076	0.584	57.3	76.2	58	0.00	2.6	0.16	0.00	0.68	0.00	0.68
24	Mon	2.776	0.932	0.881	0.317	0.647	57.4	73.2	67	0.00	3.9	0.15	0.83	0.00	0.00	0.83
25	Tue	1.915	0.629	0.630	0.076	0.580	55.8	67.2	73	0.00	4.0	0.13	2.58	0.00	0.00	2.58
26	Wed	1.502	0.463	0.715	0.234	0.090	52.4	61.3	67	0.00	5.4	0.15	1.66	0.00	0.00	1.66
27	Thu	1.430	0.435	0.606	0.234	0.155	50.9	65.1	58	0.00	3.8	0.13	1.70	0.00	0.00	1.70
28	Fri	1.528	0.477	0.713	0.193	0.145	53.8	65.0	67	0.00	3.5	0.12	1.28	0.00	0.00	1.28
29	Sat	0.874	0.330	0.388	0.076	0.081	52.8	60.7	73	0.01	5.0	0.08	1.59	0.06	0.00	1.65
30	Sun	1.416	0.528	0.715	0.123	0.050	50.1	64.5	65	0.00	4.8	0.15	1.19	0.00	0.00	1.19
31	Mon	2.838	0.748	1.192	0.314	0.583	52.2	68.7	55	0.00	2.5	0.15	1.55	0.00	0.00	1.55
TOTAL		**33.838**	10.625	13.024	4.174	6.015				0.10			12.38	19.90	1.19	**33.47**
AVG		**1.092**	0.343	0.420	0.135	0.194	54.5	68.8	62	0.00	4.0	0.13	0.40	0.64	0.04	1.08
MIN		**0.306**	0.080	0.028	0.006	0.000	48.9	58.3	42	0.00	1.5	0.08	0.00	0.00	0.00	0.00
MAX		**2.838**	0.932	1.192	0.317	0.647	58.9	80.9	80	0.04	8.3	0.17	2.58	2.04	1.02	3.06

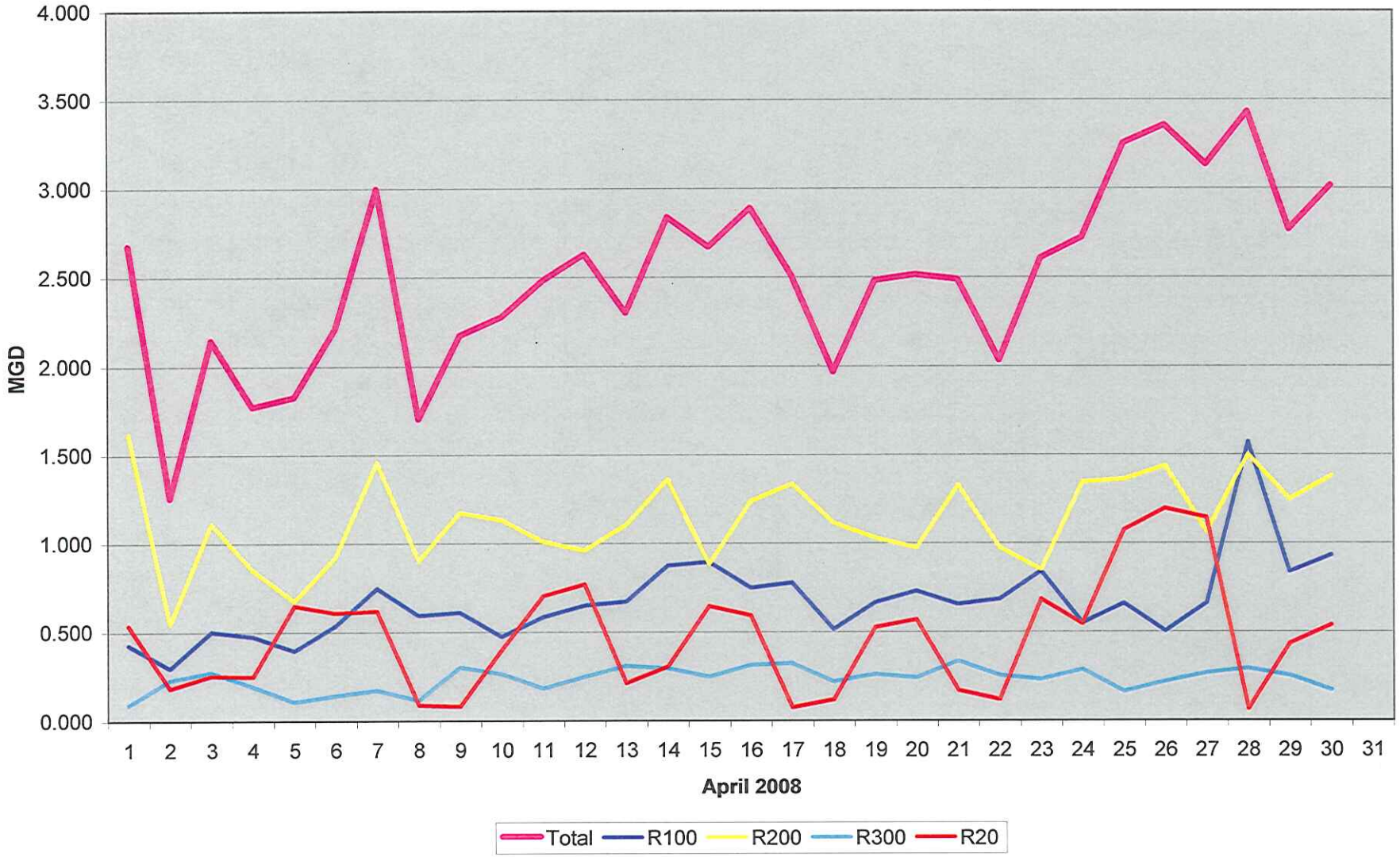
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
April 2008

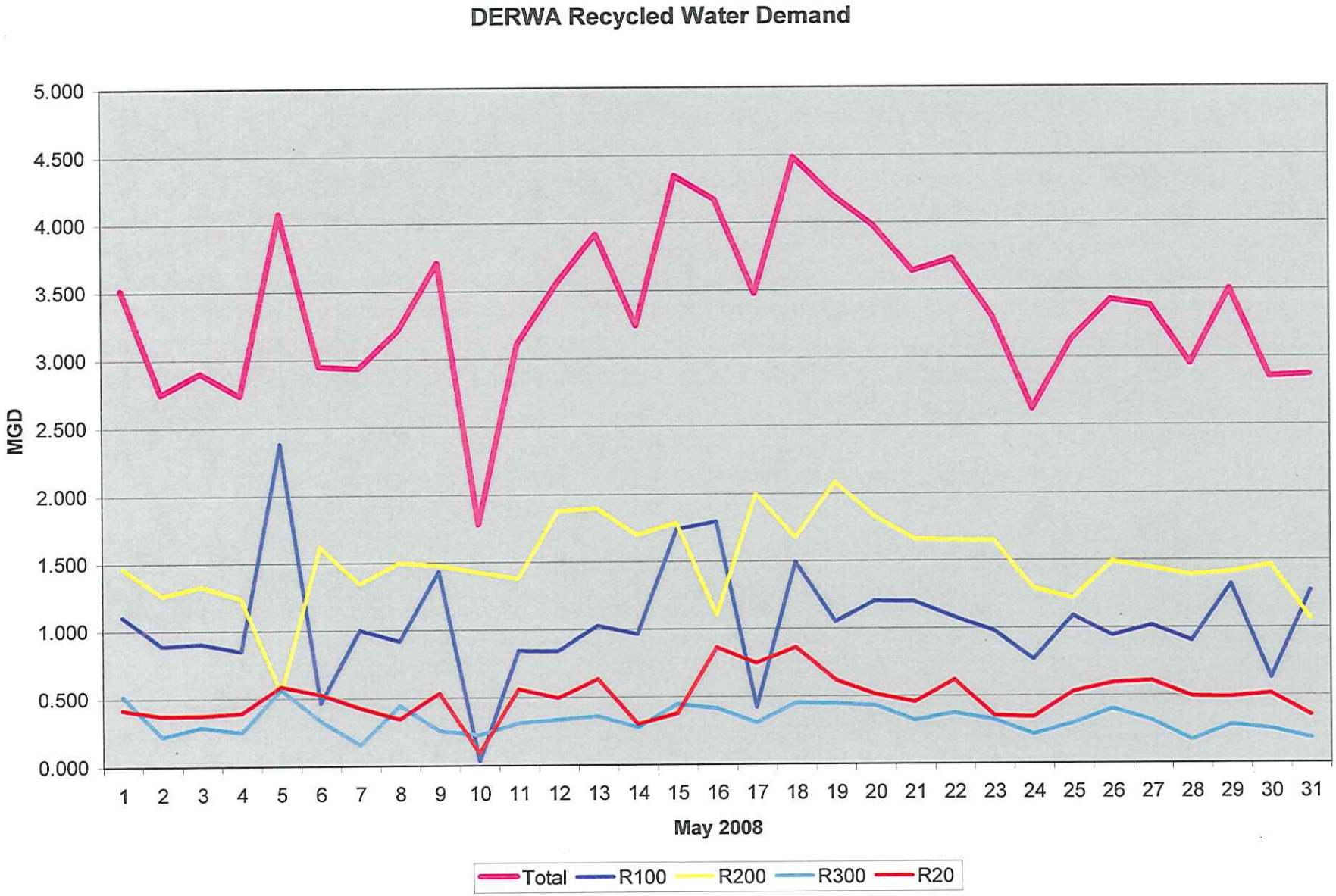
		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Tue	2.679	0.428	1.621	0.092	0.539	54.3	69.2	59	0.00	3.6	0.14	2.09	0.00	0.00	2.09
2	Wed	1.259	0.299	0.545	0.230	0.185	55.4	73.8	63	0.00	2.8	0.10	2.64	0.00	0.00	2.64
3	Thu	2.150	0.505	1.112	0.276	0.257	55.9	70.0	60	0.00	4.6	0.17	2.15	0.00	0.00	2.15
4	Fri	1.774	0.477	0.850	0.195	0.252	51.5	61.9	65	0.00	5.6	0.14	2.07	0.00	0.00	2.07
5	Sat	1.830	0.396	0.674	0.109	0.650	51.3	59.9	65	0.00	6.3	0.15	1.95	0.00	0.00	1.95
6	Sun	2.214	0.538	0.924	0.143	0.609	51.7	59.0	69	0.00	6.3	0.13	1.99	0.00	0.00	1.99
7	Mon	3.000	0.748	1.459	0.173	0.620	51.6	64.8	63	0.00	4.5	0.16	2.52	0.00	0.00	2.52
8	Tue	1.706	0.593	0.902	0.118	0.093	49.8	56.1	67	0.00	8.6	0.13	2.88	0.00	0.00	2.88
9	Wed	2.175	0.611	1.175	0.304	0.085	53.7	68.0	70	0.00	5.6	0.16	1.82	0.00	0.00	1.82
10	Thu	2.277	0.476	1.133	0.265	0.403	54.8	80.0	47	0.00	3.0	0.18	2.00	0.00	0.00	2.00
11	Fri	2.484	0.585	1.010	0.183	0.705	56.3	82.4	44	0.00	2.4	0.21	2.27	0.00	0.00	2.27
12	Sat	2.630	0.650	0.961	0.249	0.769	59.7	87.3	48	0.00	1.5	0.21	2.72	0.00	0.00	2.72
13	Sun	2.301	0.672	1.106	0.311	0.213	59.5	92.1	45	0.00	3.4	0.22	2.90	0.00	0.00	2.90
14	Mon	2.839	0.875	1.361	0.297	0.307	51.4	59.7	68	0.00	8.8	0.16	2.29	0.00	0.00	2.29
15	Tue	2.672	0.895	0.882	0.248	0.646	50.7	62.8	52	0.00	5.1	0.18	2.55	0.00	0.00	2.55
16	Wed	2.891	0.748	1.237	0.313	0.593	55.4	73.0	48	0.00	1.3	0.20	2.71	0.00	0.00	2.71
17	Thu	2.509	0.778	1.334	0.322	0.075	61.0	81.6	44	0.00	2.6	0.20	2.72	0.00	0.00	2.72
18	Fri	1.969	0.514	1.116	0.219	0.120	56.3	74.9	63	0.00	4.3	0.19	2.63	0.00	0.00	2.63
19	Sat	2.482	0.665	1.030	0.261	0.525	48.1	55.7	60	0.00	4.0	0.17	2.10	0.00	0.00	2.10
20	Sun	2.514	0.730	0.975	0.242	0.568	46.6	55.2	55	0.00	6.4	0.17	2.30	0.00	0.00	2.30
21	Mon	2.489	0.655	1.328	0.335	0.170	48.5	55.3	61	0.00	6.3	0.16	2.90	0.00	0.00	2.90
22	Tue	2.033	0.683	0.976	0.255	0.119	52.4	60.6	65	0.00	5.1	0.12	2.66	0.00	0.00	2.66
23	Wed	2.607	0.841	0.851	0.231	0.684	52.2	60.3	67	0.03	7.1	0.16	2.19	0.00	0.00	2.19
24	Thu	2.723	0.548	1.344	0.287	0.543	52.9	71.0	52	0.00	3.1	0.18	2.54	0.00	0.00	2.54
25	Fri	3.254	0.659	1.359	0.162	1.074	58.8	76.3	48	0.00	2.9	0.21	2.62	0.00	0.00	2.62
26	Sat	3.356	0.503	1.437	0.219	1.197	65.8	84.3	46	0.00	3.2	0.23	3.52	0.00	0.00	3.52
27	Sun	3.137	0.660	1.065	0.266	1.145	69.0	88.4	46	0.00	3.3	0.24	4.21	0.00	0.00	4.21
28	Mon	3.432	1.573	1.501	0.293	0.066	62.7	80.3	57	0.00	4.1	0.20	4.30	0.00	0.00	4.30
29	Tue	2.769	0.837	1.247	0.252	0.432	50.7	61.3	65	0.00	9.4	0.19	3.07	0.00	0.00	3.07
30	Wed	3.016	0.932	1.377	0.170	0.537	50.5	66.6	55	0.00	5.5	0.19	3.34	0.00	0.00	3.34
TOTAL		**75.169**	20.076	33.894	7.020	14.179				0.03			78.65	0.00	0.00	**78.65**
AVG		**2.506**	0.669	1.130	0.234	0.473	54.6	69.7	57	0.00	4.7	0.18	2.62	0.00	0.00	2.62
MIN		**1.259**	0.299	0.545	0.092	0.066	46.6	55.2	44	0.00	1.3	0.10	1.82	0.00	0.00	1.82
MAX		**3.432**	1.573	1.621	0.335	1.197	69.0	92.1	70	0.03	9.4	0.24	4.30	0.00	0.00	4.30

DERWA Recycled Water Demand



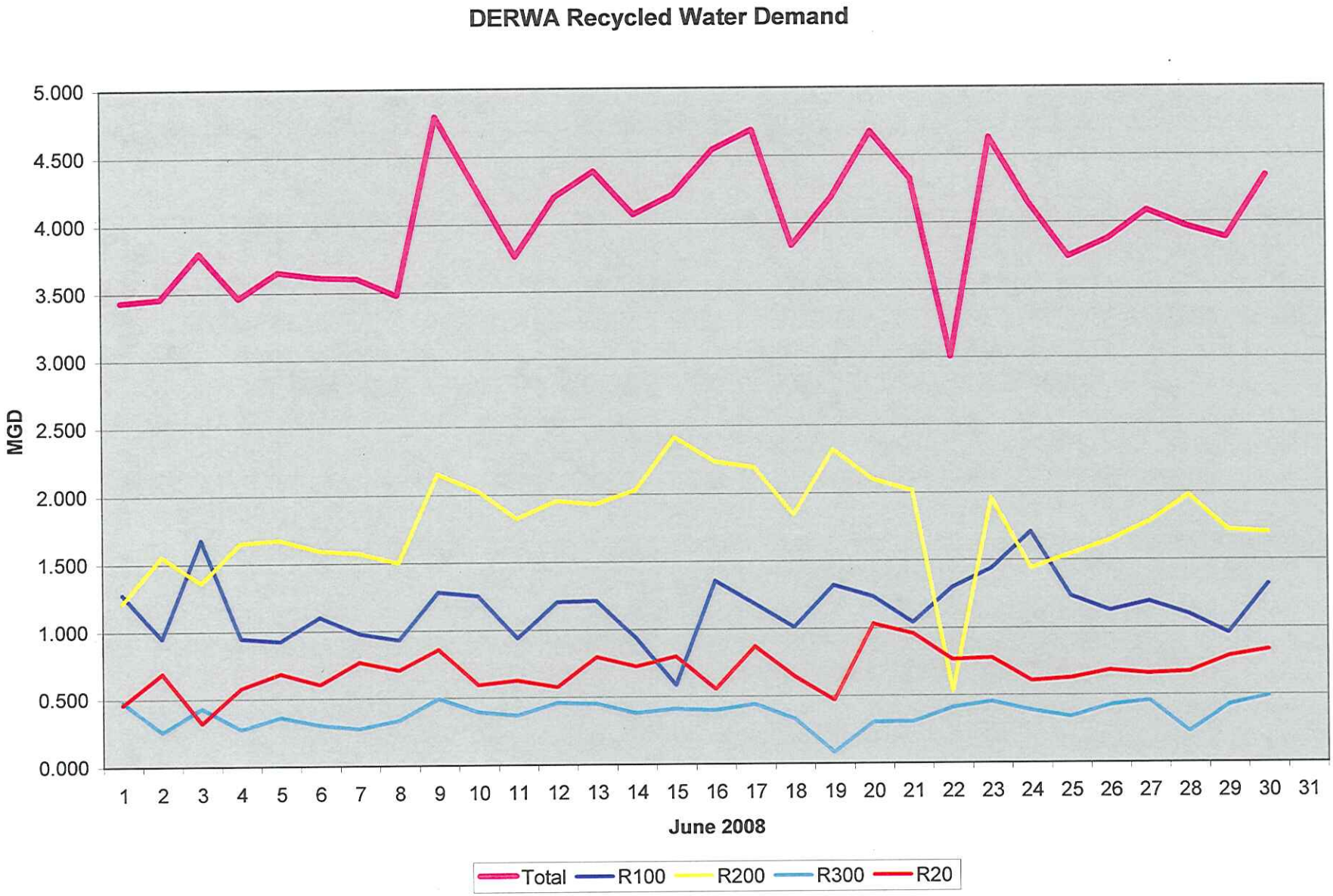
DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
May 2008

		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Thu	3.519	1.107	1.471	0.520	0.421	53.2	77.8	46	0.00	4.1	0.20	2.86	0.00	0.00	2.86
2	Fri	2.750	0.891	1.260	0.222	0.377	48.5	65.3	61	0.00	4.6	0.16	3.48	0.00	0.00	3.48
3	Sat	2.904	0.907	1.327	0.293	0.378	50.7	72.3	67	0.00	4.9	0.19	2.81	0.00	0.00	2.81
4	Sun	2.741	0.853	1.239	0.255	0.394	47.4	61.8	76	0.00	5.6	0.16	2.73	0.00	0.00	2.73
5	Mon	4.082	2.383	0.542	0.567	0.590	57.4	78.1	67	0.00	6.4	0.19	2.85	0.00	0.00	2.85
6	Tue	2.954	0.466	1.619	0.338	0.531	61.4	81.1	66	0.00	6.3	0.19	3.21	0.00	0.00	3.21
7	Wed	2.937	1.004	1.345	0.159	0.430	56.6	75.6	62	0.00	7.4	0.17	3.31	0.00	0.00	3.31
8	Thu	3.216	0.921	1.500	0.447	0.348	54.0	71.2	66	0.00	5.8	0.19	3.18	0.00	0.00	3.18
9	Fri	3.715	1.438	1.480	0.260	0.536	53.1	70.7	61	0.00	6.1	0.19	2.92	0.00	0.00	2.92
10	Sat	1.784	0.034	1.427	0.228	0.094	55.6	76.9	59	0.00	4.6	0.20	3.36	0.00	0.00	3.36
11	Sun	3.109	0.849	1.380	0.314	0.565	52.9	68.5	66	0.00	7.0	0.18	2.01	0.00	0.00	2.01
12	Mon	3.555	0.843	1.877	0.337	0.497	54.0	69.8	54	0.00	4.7	0.20	2.96	0.00	0.00	2.96
13	Tue	3.922	1.030	1.895	0.362	0.636	63.2	87.7	37	0.00	3.8	0.24	3.78	0.00	0.00	3.78
14	Wed	3.243	0.966	1.698	0.278	0.301	69.2	90.8	39	0.00	3.1	0.22	4.23	0.00	0.00	4.23
15	Thu	4.350	1.738	1.786	0.447	0.378	77.1	102.3	36	0.00	3.3	0.26	3.49	0.00	0.00	3.49
16	Fri	4.175	1.794	1.100	0.416	0.865	77.4	101.3	37	0.00	3.5	0.27	2.26	0.07	0.00	2.33
17	Sat	3.478	0.423	1.998	0.309	0.748	71.6	91.8	39	0.00	4.3	0.26	4.68	0.48	0.00	5.16
18	Sun	4.485	1.495	1.675	0.453	0.862	67.0	92.0	38	0.00	4.1	0.26	6.02	0.07	0.00	6.09
19	Mon	4.200	1.052	2.082	0.447	0.619	61.7	83.8	52	0.00	5.2	0.22	4.80	0.00	0.00	4.80
20	Tue	3.981	1.203	1.831	0.431	0.515	60.4	73.8	67	0.00	4.9	0.20	4.33	0.00	0.00	4.33
21	Wed	3.640	1.199	1.662	0.321	0.457	58.8	70.8	58	0.00	6.3	0.22	4.33	0.00	0.00	4.33
22	Thu	3.728	1.082	1.652	0.375	0.619	60.7	76.1	44	0.00	8.1	0.26	3.61	0.00	0.00	3.61
23	Fri	3.303	0.980	1.647	0.322	0.354	57.0	69.2	62	0.00	4.9	0.17	3.69	0.00	0.00	3.69
24	Sat	2.617	0.767	1.294	0.214	0.342	56.0	62.5	62	0.00	6.0	0.09	3.11	0.00	0.00	3.11
25	Sun	3.133	1.090	1.219	0.297	0.527	56.4	66.8	64	0.00	4.5	0.15	2.18	0.00	0.00	2.18
26	Mon	3.425	0.941	1.492	0.401	0.591	54.4	63.8	70	0.00	5.0	0.14	2.61	0.00	0.00	2.61
27	Tue	3.380	1.017	1.444	0.314	0.605	56.5	65.5	64	0.00	5.4	0.18	3.48	0.00	0.00	3.48
28	Wed	2.951	0.902	1.391	0.168	0.491	56.8	65.8	64	0.00	7.3	0.20	3.47	0.00	0.00	3.47
29	Thu	3.503	1.322	1.411	0.284	0.487	52.5	64.4	65	0.00	5.8	0.19	3.45	0.00	0.00	3.45
30	Fri	2.852	0.627	1.462	0.252	0.511	53.9	70.0	67	0.00	6.6	0.20	2.67	0.00	0.00	2.67
31	Sat	2.868	1.272	1.063	0.182	0.351	48.4	59.5	76	0.00	7.0	0.15	2.98	0.00	0.00	2.98
TOTAL		**104.499**	32.595	46.269	10.214	15.421				0.00			104.87	0.62	0.00	**105.49**
AVG		**3.371**	1.051	1.493	0.329	0.497	58.2	75.1	58	0.00	5.4	0.20	3.38	0.02	0.00	3.40
MIN		**1.784**	0.034	0.542	0.159	0.094	47.4	59.5	36	0.00	3.1	0.09	2.01	0.00	0.00	2.01
MAX		**4.485**	2.383	2.082	0.567	0.865	77.4	102.3	76	0.00	8.1	0.27	6.02	0.48	0.00	6.09


DERWA Recycled Water Demand
MGD
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
May 2008
Total
R100
R200
R300
R20

DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
June 2008

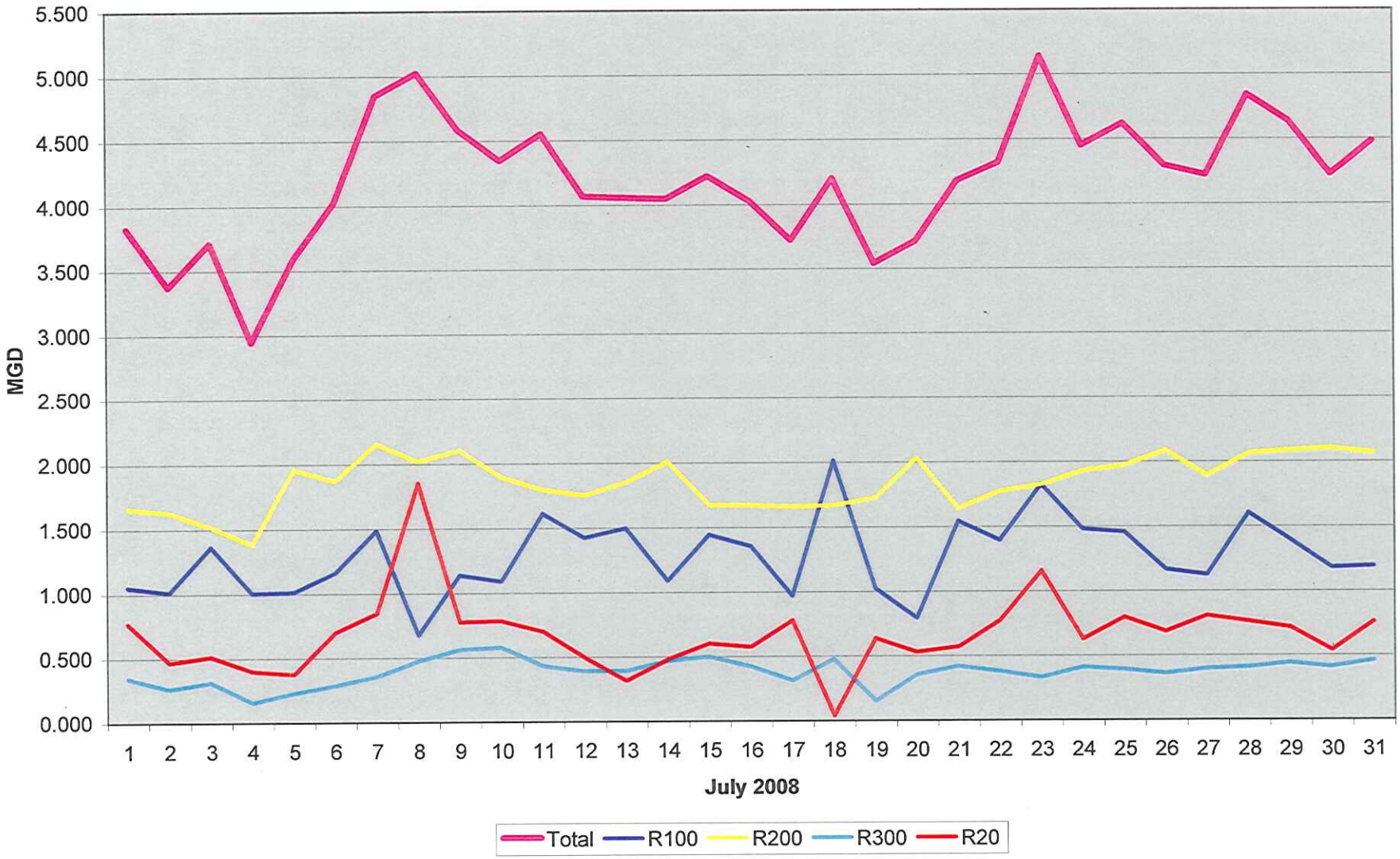
		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Sun	3.436	1.278	1.216	0.480	0.461	50.9	63.8	67	0.00	7.3	0.21	3.21	0.00	0.00	3.21
2	Mon	3.460	0.952	1.557	0.259	0.692	51.8	67.5	62	0.00	5.9	0.21	3.39	0.00	0.00	3.39
3	Tue	3.800	1.680	1.362	0.435	0.324	52.0	65.3	79	0.00	7.4	0.16	3.00	0.00	0.00	3.00
4	Wed	3.463	0.951	1.653	0.277	0.582	58.7	75.3	56	0.00	6.5	0.22	3.25	0.00	0.00	3.25
5	Thu	3.658	0.928	1.676	0.366	0.688	56.9	73.7	59	0.00	4.8	0.22	3.60	0.00	0.00	3.60
6	Fri	3.618	1.105	1.597	0.308	0.608	54.7	71.6	64	0.00	4.8	0.21	3.84	0.00	0.00	3.84
7	Sat	3.608	0.982	1.577	0.279	0.770	62.9	85.9	45	0.00	4.4	0.24	3.28	0.38	0.00	3.66
8	Sun	3.482	0.934	1.501	0.339	0.708	68.8	93.2	38	0.00	3.5	0.25	4.36	0.20	0.00	4.56
9	Mon	4.801	1.285	2.156	0.497	0.862	74.2	99.0	36	0.00	1.5	0.27	4.33	0.00	0.00	4.33
10	Tue	4.283	1.257	2.033	0.397	0.596	72.8	88.4	31	0.00	4.5	0.28	4.47	0.00	0.00	4.47
11	Wed	3.764	0.940	1.824	0.371	0.629	73.0	89.3	23	0.00	4.7	0.29	4.10	0.00	0.00	4.10
12	Thu	4.202	1.208	1.953	0.462	0.580	73.0	91.9	28	0.00	4.4	0.28	3.71	0.00	0.00	3.71
13	Fri	4.394	1.215	1.928	0.452	0.798	67.0	91.1	35	0.00	4.0	0.26	4.08	0.00	0.00	4.08
14	Sat	4.072	0.936	2.029	0.382	0.725	64.9	85.1	54	0.00	6.2	0.23	4.39	0.00	0.00	4.39
15	Sun	4.217	0.588	2.417	0.412	0.800	61.7	79.1	57	0.00	5.8	0.23	4.34	0.00	0.00	4.34
16	Mon	4.546	1.356	2.235	0.400	0.556	56.6	76.2	62	0.00	8.4	0.21	4.39	0.00	0.00	4.39
17	Tue	4.692	1.187	2.193	0.441	0.870	68.2	94.1	44	0.00	4.6	0.24	4.14	0.00	0.00	4.14
18	Wed	3.835	1.011	1.843	0.335	0.646	73.5	95.2	29	0.00	4.2	0.27	4.39	0.00	0.00	4.39
19	Thu	4.189	1.320	2.318	0.083	0.469	77.8	103.3	27	0.00	3.0	0.27	4.84	0.00	0.00	4.84
20	Fri	4.675	1.235	2.101	0.305	1.034	80.2	105.0	22	0.00	2.5	0.27	3.55	0.00	0.00	3.55
21	Sat	4.326	1.043	2.017	0.307	0.960	74.0	97.5	25	0.00	5.1	0.27	4.42	0.00	0.00	4.42
22	Sun	3.006	1.297	0.534	0.409	0.766	63.5	80.0	41	0.00	4.9	0.25	4.26	0.00	0.00	4.26
23	Mon	4.627	1.441	1.958	0.454	0.775	62.9	75.7	61	0.00	7.2	0.22	3.90	0.00	0.00	3.90
24	Tue	4.140	1.707	1.440	0.387	0.605	65.5	88.2	56	0.00	5.0	0.22	4.67	0.00	0.00	4.67
25	Wed	3.744	1.234	1.543	0.341	0.625	60.6	78.7	65	0.00	8.5	0.21	4.83	0.00	0.00	4.83
26	Thu	3.876	1.126	1.645	0.424	0.682	67.5	86.0	57	0.00	4.2	0.21	4.14	0.00	0.00	4.14
27	Fri	4.086	1.192	1.781	0.456	0.657	70.3	87.2	55	0.00	0.7	0.21	4.30	0.00	0.00	4.30
28	Sat	3.969	1.097	1.975	0.228	0.669	64.2	78.5	68	0.00	1.1	0.20	3.91	0.00	0.00	3.91
29	Sun	3.886	0.958	1.720	0.424	0.784	64.2	84.4	65	0.00	1.1	0.21	3.89	0.00	0.00	3.89
30	Mon	4.342	1.317	1.702	0.490	0.832	67.3	76.3	71	0.00	9.7	0.21	3.52	0.00	0.00	3.52
TOTAL		**120.198**	34.761	53.484	11.200	20.753				0.00			120.51	0.58	0.00	**121.09**
AVG		**4.007**	1.159	1.783	0.373	0.692	65.3	84.2	49	0.00	4.9	0.23	4.02	0.02	0.00	4.04
MIN		**3.006**	0.588	0.534	0.083	0.324	50.9	63.8	22	0.00	0.7	0.16	3.00	0.00	0.00	3.00
MAX		**4.801**	1.707	2.417	0.497	1.034	80.2	105.0	79	0.00	9.7	0.29	4.84	0.38	0.00	4.84


DERWA Recycled Water Demand
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
MGD
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
June 2008
Total
R100
R200
R300
R20

DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
July 2008

		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Tue	3.830	1.054	1.663	0.345	0.769	62.2	80.4	67	0.00	7.3	0.20	3.88	0.00	0.00	3.88
2	Wed	3.376	1.013	1.631	0.263	0.468	65.8	84.5	56	0.00	5.5	0.23	4.95	0.00	0.00	4.95
3	Thu	3.715	1.367	1.520	0.315	0.513	67.7	84.2	64	0.00	5.9	0.23	4.11	0.00	0.00	4.11
4	Fri	2.949	1.005	1.383	0.159	0.402	63.4	77.2	70	0.00	6.4	0.21	3.42	0.00	0.00	3.42
5	Sat	3.582	1.014	1.959	0.230	0.379	70.2	91.1	60	0.00	4.7	0.23	2.76	0.00	0.00	2.76
6	Sun	4.027	1.164	1.871	0.290	0.702	68.7	86.2	53	0.00	4.3	0.24	2.60	0.00	0.00	2.60
7	Mon	4.849	1.489	2.154	0.358	0.848	75.1	103.2	39	0.00	3.4	0.25	4.52	0.00	0.00	4.52
8	Tue	5.027	0.679	2.019	0.476	1.853	81.9	108.8	33	0.00	2.8	0.26	3.44	0.00	0.00	3.44
9	Wed	4.587	1.144	2.104	0.562	0.778	79.6	100.5	33	0.00	3.7	0.26	6.30	0.00	0.00	6.30
10	Thu	4.352	1.094	1.896	0.578	0.785	75.7	97.5	34	0.00	4.7	0.28	5.04	0.00	0.00	5.04
11	Fri	4.553	1.615	1.799	0.436	0.703	66.4	86.3	59	0.00	6.1	0.23	4.78	0.00	0.00	4.78
12	Sat	4.072	1.426	1.754	0.394	0.498	65.4	83.7	64	0.00	7.5	0.23	3.80	0.00	0.00	3.80
13	Sun	4.061	1.497	1.851	0.395	0.318	66.5	83.9	61	0.00	7.0	0.25	3.80	0.00	0.00	3.80
14	Mon	4.050	1.091	2.011	0.469	0.480	62.6	76.2	67	0.00	8.0	0.24	3.80	0.00	0.00	3.80
15	Tue	4.223	1.444	1.675	0.499	0.603	59.7	73.5	71	0.00	7.9	0.22	3.89	0.00	0.00	3.89
16	Wed	4.031	1.357	1.672	0.425	0.577	62.0	81.4	62	0.00	7.2	0.23	4.19	0.00	0.00	4.19
17	Thu	3.725	0.971	1.660	0.314	0.780	61.1	80.3	61	0.00	6.6	0.25	4.25	0.00	0.00	4.25
18	Fri	4.200	2.014	1.668	0.478	0.041	61.7	81.2	59	0.00	6.1	0.24	3.76	0.00	0.00	3.76
19	Sat	3.540	1.025	1.725	0.152	0.638	58.9	78.3	60	0.00	6.3	0.24	4.14	0.00	0.00	4.14
20	Sun	3.712	0.795	2.033	0.355	0.529	49.9	62.2	73	0.00	9.0	0.21	4.15	0.00	0.00	4.15
21	Mon	4.179	1.545	1.643	0.421	0.571	53.2	69.3	74	0.00	7.5	0.18	3.31	0.00	0.00	3.31
22	Tue	4.323	1.395	1.773	0.380	0.774	63.9	88.9	50	0.00	4.0	0.24	3.47	0.00	0.00	3.47
23	Wed	5.140	1.827	1.824	0.331	1.158	62.1	82.1	46	0.00	4.0	0.26	4.21	0.00	0.00	4.21
24	Thu	4.449	1.481	1.930	0.410	0.628	58.7	79.5	52	0.00	5.0	0.25	4.27	0.00	0.00	4.27
25	Fri	4.619	1.458	1.971	0.393	0.797	61.0	81.2	48	0.00	4.1	0.24	4.52	0.19	0.00	4.71
26	Sat	4.299	1.167	2.086	0.361	0.685	63.9	87.7	43	0.00	4.3	0.27	5.09	0.00	0.00	5.09
27	Sun	4.223	1.127	1.892	0.396	0.808	53.9	69.4	68	0.00	7.3	0.24	5.28	0.00	0.00	5.28
28	Mon	4.840	1.604	2.063	0.408	0.764	52.9	67.6	68	0.00	7.9	0.23	4.48	0.00	0.00	4.48
29	Tue	4.637	1.396	2.084	0.441	0.716	55.2	72.8	61	0.00	5.4	0.22	4.42	0.00	0.00	4.42
30	Wed	4.228	1.179	2.101	0.409	0.538	57.5	79.0	57	0.00	5.1	0.25	4.64	0.00	0.00	4.64
31	Thu	4.481	1.191	2.069	0.460	0.761	57.2	78.4	51	0.00	4.5	0.25	4.05	0.00	0.00	4.05
TOTAL		**129.878**	39.629	57.483	11.902	20.863				0.00			129.30	0.19	0.00	**129.48**
AVG		**4.190**	1.278	1.854	0.384	0.673	63.4	82.5	57	0.00	5.8	0.24	4.17	0.01	0.00	4.18
MIN		**2.949**	0.679	1.383	0.152	0.041	49.9	62.2	33	0.00	2.8	0.18	2.60	0.00	0.00	2.60
MAX		**5.140**	2.014	2.154	0.578	1.853	81.9	108.8	74	0.00	9.0	0.28	6.30	0.19	0.00	6.30

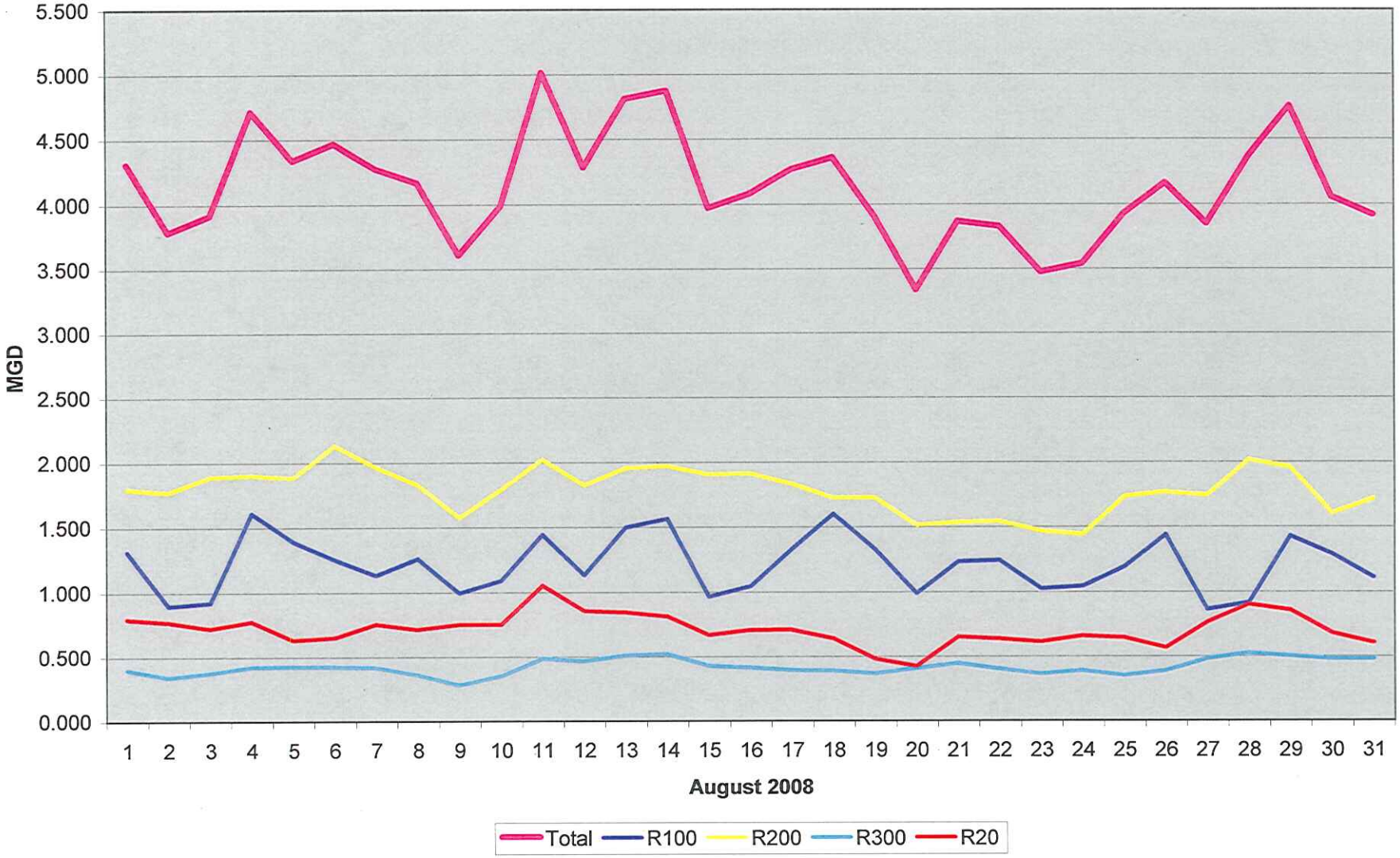
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
August 2008

		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Fri	4.316	1.316	1.798	0.404	0.798	61.4	87.3	55	0.00	5.0	0.24	4.71	0.00	0.00	4.71
2	Sat	3.787	0.899	1.771	0.344	0.773	66.6	89.0	53	0.00	4.3	0.25	3.82	0.00	0.00	3.82
3	Sun	3.917	0.924	1.891	0.379	0.724	59.6	76.0	62	0.00	6.4	0.23	3.80	0.00	0.00	3.80
4	Mon	4.718	1.612	1.902	0.426	0.778	60.8	80.5	59	0.00	5.6	0.23	4.06	0.00	0.00	4.06
5	Tue	4.344	1.397	1.884	0.427	0.636	58.8	77.5	55	0.00	6.5	0.21	3.89	0.00	0.00	3.89
6	Wed	4.470	1.257	2.130	0.427	0.655	63.0	80.4	56	0.00	7.1	0.22	4.27	0.00	0.00	4.27
7	Thu	4.282	1.136	1.966	0.421	0.759	58.5	77.1	66	0.00	7.9	0.22	4.62	0.00	0.00	4.62
8	Fri	4.173	1.264	1.828	0.364	0.717	56.3	71.6	69	0.00	8.6	0.21	4.59	0.00	0.00	4.59
9	Sat	3.611	0.998	1.576	0.284	0.753	60.2	77.3	64	0.00	5.8	0.22	4.57	0.00	0.00	4.57
10	Sun	3.989	1.093	1.790	0.353	0.753	67.8	93.3	47	0.00	3.3	0.24	3.15	0.00	0.00	3.15
11	Mon	5.018	1.447	2.023	0.490	1.058	71.8	94.3	40	0.00	4.0	0.26	4.69	0.00	0.00	4.69
12	Tue	4.289	1.137	1.823	0.469	0.860	75.1	96.3	49	0.00	4.3	0.23	4.96	0.00	0.00	4.96
13	Wed	4.813	1.499	1.955	0.511	0.848	75.7	102.8	43	0.00	2.7	0.25	4.62	0.00	0.00	4.62
14	Thu	4.875	1.566	1.973	0.522	0.815	68.5	92.9	46	0.00	4.2	0.23	4.18	0.00	0.00	4.18
15	Fri	3.974	0.966	1.907	0.431	0.669	69.0	93.4	43	0.00	4.5	0.24	5.10	0.00	0.00	5.10
16	Sat	4.084	1.047	1.913	0.417	0.707	61.3	82.8	59	0.00	7.6	0.22	3.64	0.00	0.00	3.64
17	Sun	4.271	1.335	1.831	0.396	0.709	56.9	81.0	70	0.00	7.5	0.20	3.79	0.00	0.00	3.79
18	Mon	4.361	1.602	1.723	0.393	0.643	54.6	68.1	73	0.00	7.0	0.18	3.98	0.00	0.00	3.98
19	Tue	3.907	1.331	1.725	0.369	0.483	55.4	70.7	74	0.00	5.7	0.15	4.21	0.00	0.00	4.21
20	Wed	3.338	0.991	1.514	0.407	0.426	60.1	78.2	74	0.00	5.0	0.19	3.75	0.00	0.00	3.75
21	Thu	3.869	1.234	1.535	0.446	0.653	62.6	77.0	71	0.00	5.0	0.21	4.32	0.00	0.00	4.32
22	Fri	3.830	1.244	1.544	0.405	0.638	62.5	83.6	61	0.00	5.8	0.21	4.02	0.00	0.00	4.02
23	Sat	3.475	1.025	1.470	0.365	0.616	63.4	85.5	60	0.00	4.2	0.20	3.63	0.00	0.00	3.63
24	Sun	3.539	1.044	1.444	0.391	0.660	65.3	90.2	59	0.00	4.6	0.21	3.18	0.00	0.00	3.18
25	Mon	3.925	1.194	1.733	0.352	0.647	63.1	82.8	53	0.00	4.4	0.22	3.74	0.00	0.00	3.74
26	Tue	4.164	1.439	1.767	0.389	0.568	71.0	90.6	44	0.00	3.0	0.22	3.22	0.00	0.00	3.22
27	Wed	3.850	0.864	1.742	0.481	0.763	77.3	100.5	32	0.00	2.7	0.24	1.95	1.57	0.00	3.52
28	Thu	4.364	0.916	2.018	0.526	0.904	81.9	104.4	29	0.00	3.4	0.26	3.87	1.33	0.00	5.19
29	Fri	4.755	1.430	1.961	0.505	0.858	80.1	101.9	33	0.00	3.4	0.25	3.19	1.59	0.00	4.78
30	Sat	4.058	1.292	1.604	0.481	0.681	69.2	90.2	54	0.00	3.4	0.21	4.10	0.15	0.00	4.25
31	Sun	3.918	1.113	1.716	0.480	0.608	64.1	79.4	52	0.00	4.1	0.20	4.21	0.00	0.00	4.21
TOTAL		**128.285**	37.614	55.458	13.053	22.160				0.00			123.82	4.64	0.00	**128.46**
AVG		**4.138**	1.213	1.789	0.421	0.715	65.2	85.7	55	0.00	5.1	0.22	3.99	0.15	0.00	4.14
MIN		**3.338**	0.864	1.444	0.284	0.426	54.6	68.1	29	0.00	2.7	0.15	1.95	0.00	0.00	3.15
MAX		**5.018**	1.612	2.130	0.526	1.058	81.9	104.4	74	0.00	8.6	0.26	5.10	1.59	0.00	5.19

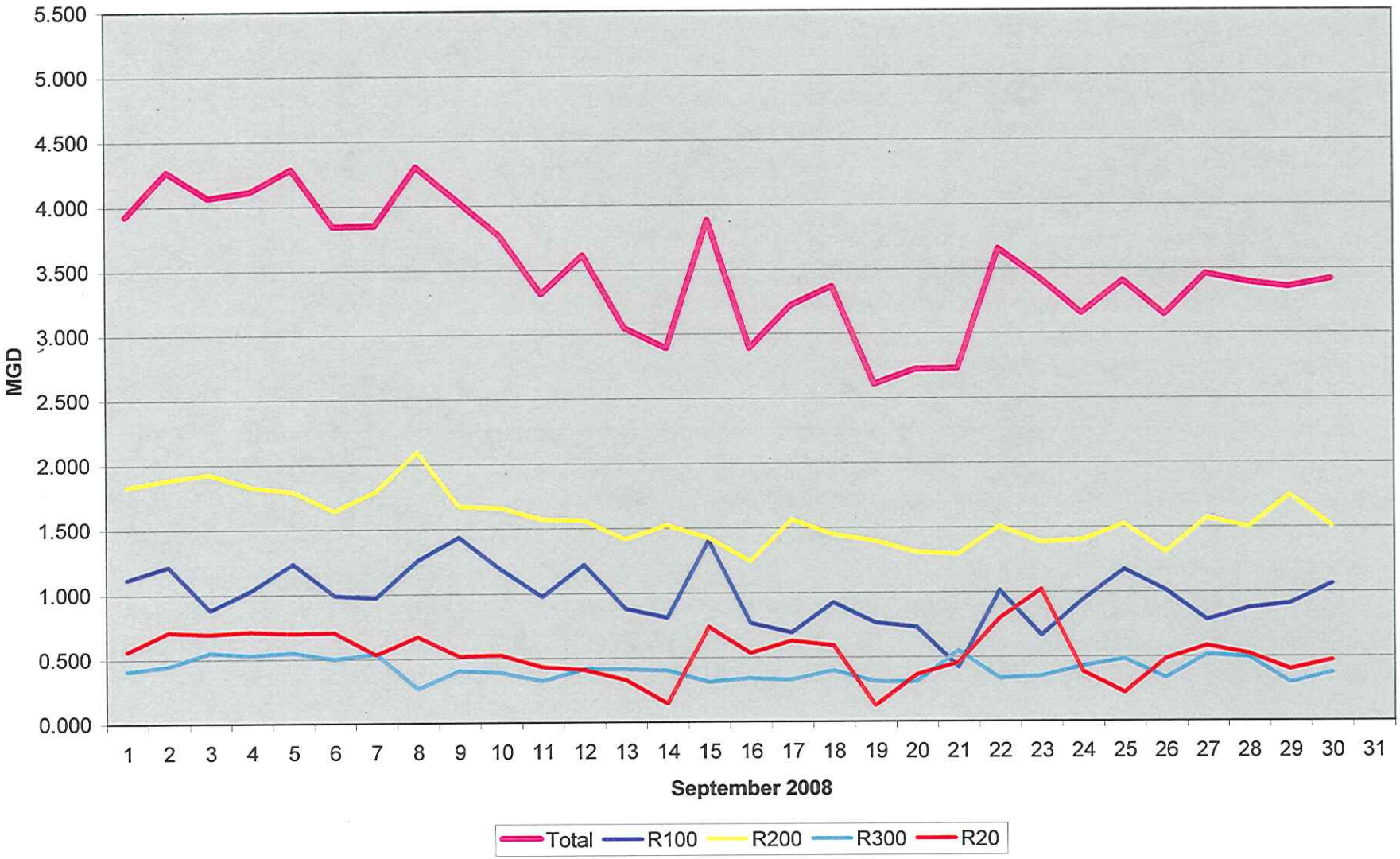
DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
September 2008

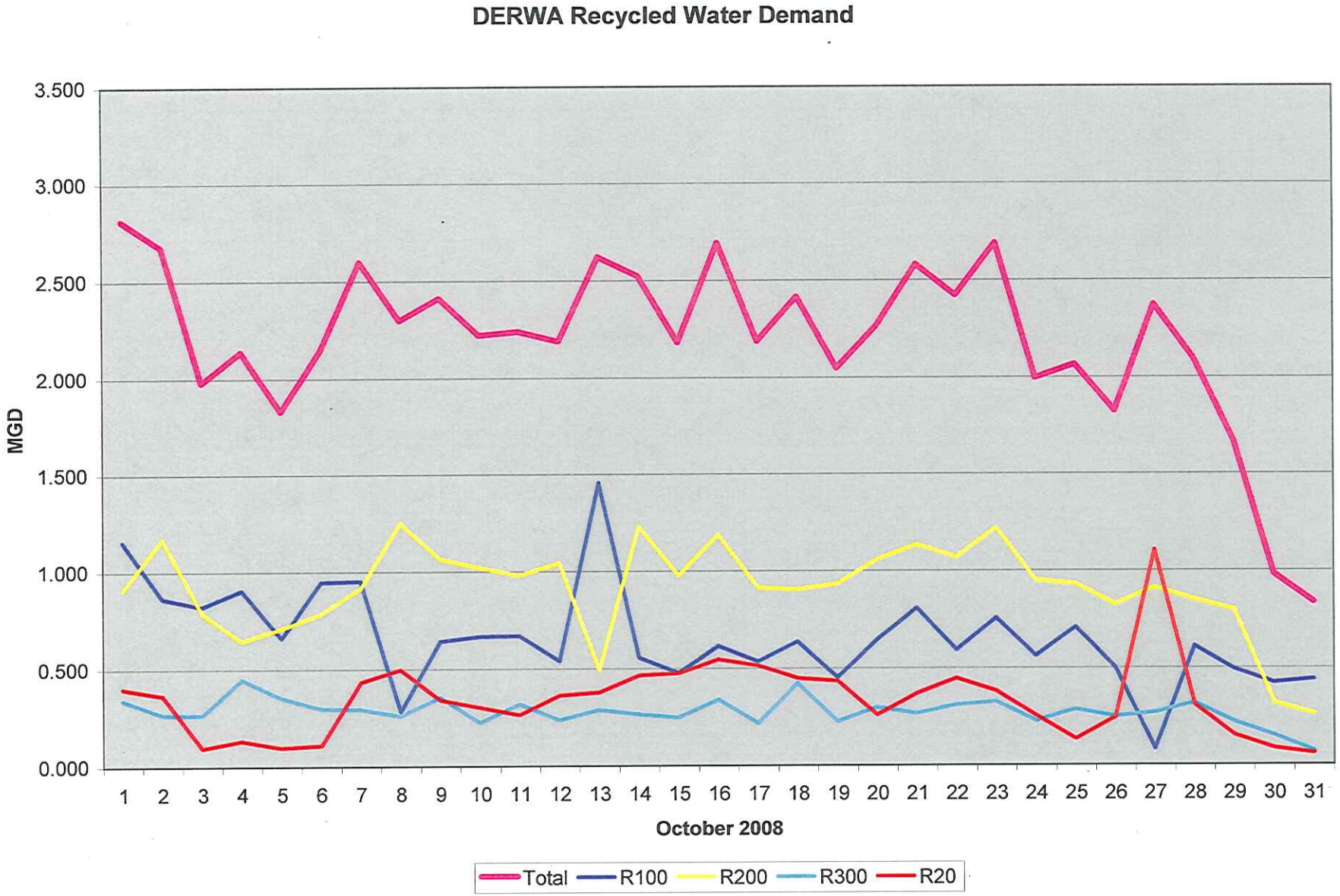
		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Mon	3.930	1.120	1.833	0.412	0.565	69.7	86.7	28	0.00	4.6	0.25	3.73	0.00	0.00	3.73
2	Tue	4.271	1.218	1.887	0.451	0.716	71.0	93.4	30	0.00	2.8	0.23	3.75	0.00	0.00	3.75
3	Wed	4.069	0.885	1.929	0.556	0.699	74.2	98.7	30	0.00	2.3	0.23	4.19	0.00	0.00	4.19
4	Thu	4.116	1.035	1.830	0.535	0.717	79.3	104.8	28	0.00	4.6	0.23	5.09	0.00	0.00	5.09
5	Fri	4.289	1.238	1.792	0.555	0.704	70.8	104.0	28	0.00	2.7	0.23	3.93	0.00	0.00	3.93
6	Sat	3.845	0.994	1.641	0.503	0.707	72.4	105.0	29	0.00	2.4	0.22	3.83	0.00	0.00	3.83
7	Sun	3.850	0.977	1.794	0.543	0.536	67.3	96.4	39	0.00	4.2	0.22	4.13	0.00	0.00	4.13
8	Mon	4.304	1.262	2.097	0.272	0.674	57.6	80.4	63	0.00	5.6	0.19	4.21	0.00	0.00	4.21
9	Tue	4.042	1.438	1.674	0.410	0.520	55.6	68.8	71	0.00	7.1	0.16	3.23	0.00	0.00	3.23
10	Wed	3.773	1.191	1.661	0.394	0.527	66.3	92.2	56	0.00	5.0	0.17	3.38	0.40	0.00	3.78
11	Thu	3.316	0.978	1.573	0.328	0.436	63.6	94.0	63	0.00	4.3	0.17	3.10	1.72	0.00	4.82
12	Fri	3.618	1.224	1.564	0.418	0.411	57.7	79.3	70	0.00	6.5	0.16	2.87	0.02	0.00	2.89
13	Sat	3.049	0.885	1.414	0.417	0.333	58.8	79.6	65	0.00	6.0	0.16	2.11	0.23	0.00	2.33
14	Sun	2.894	0.814	1.524	0.406	0.149	60.7	89.4	65	0.00	4.2	0.16	1.75	1.25	0.00	2.99
15	Mon	3.885	1.406	1.423	0.315	0.740	60.2	86.8	65	0.00	3.9	0.15	3.04	0.24	0.00	3.28
16	Tue	2.891	0.770	1.245	0.341	0.535	56.8	81.5	68	0.00	6.1	0.14	3.68	0.00	0.00	3.68
17	Wed	3.221	0.694	1.565	0.330	0.631	57.9	75.5	67	0.00	5.8	0.15	4.10	0.00	0.00	4.10
18	Thu	3.368	0.926	1.449	0.400	0.593	59.9	77.4	66	0.00	4.7	0.16	2.96	0.00	0.00	2.96
19	Fri	2.608	0.770	1.396	0.314	0.128	58.9	79.3	69	0.00	4.8	0.15	2.62	0.00	0.00	2.62
20	Sat	2.720	0.735	1.310	0.311	0.364	62.0	81.8	74	0.00	5.2	0.10	2.31	0.00	0.00	2.31
21	Sun	2.725	0.424	1.294	0.551	0.457	63.7	80.1	72	0.00	4.6	0.13	2.63	0.00	0.00	2.63
22	Mon	3.656	1.013	1.508	0.335	0.800	68.8	98.1	52	0.00	2.8	0.17	2.24	0.00	0.00	2.24
23	Tue	3.424	0.669	1.383	0.352	1.020	73.7	108.6	43	0.00	1.2	0.17	1.02	1.86	0.00	2.89
24	Wed	3.154	0.939	1.401	0.429	0.385	68.7	101.5	39	0.00	2.4	0.18	3.96	1.52	0.00	5.48
25	Thu	3.406	1.173	1.525	0.484	0.223	66.8	100.1	40	0.00	2.2	0.18	3.04	0.84	0.00	3.88
26	Fri	3.142	1.013	1.307	0.339	0.483	67.1	98.1	49	0.00	2.5	0.17	0.02	1.70	0.00	1.72
27	Sat	3.458	0.785	1.571	0.517	0.585	70.6	95.3	44	0.00	1.2	0.17	1.26	1.79	0.00	3.05
28	Sun	3.394	0.875	1.499	0.499	0.521	53.3	94.1	51	0.00	2.5	0.16	2.08	1.22	0.00	3.29
29	Mon	3.355	0.909	1.747	0.298	0.400	66.0	85.0	71	0.00	5.7	0.13	2.81	0.27	0.00	3.08
30	Tue	3.416	1.061	1.508	0.377	0.470	70.7	97.2	61	0.00	2.8	0.14	2.63	0.00	0.00	2.63
TOTAL		**105.187**	29.423	47.343	12.393	16.027				0.00			89.66	13.05	0.00	**102.71**
AVG		**3.506**	0.981	1.578	0.413	0.534	65.0	90.4	53	0.00	4.0	0.17	2.99	0.43	0.00	3.42
MIN		**2.608**	0.424	1.245	0.272	0.128	53.3	68.8	28	0.00	1.2	0.10	0.02	0.00	0.00	1.72
MAX		**4.304**	1.438	2.097	0.556	1.020	79.3	108.6	74	0.00	7.1	0.25	5.09	1.86	0.00	5.48

DERWA Recycled Water Demand



DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
October 2008

		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Wed	2.814	1.156	0.908	0.345	0.404	68.2	97.0	48	0.00	3.1	0.15	2.71	0.00	0.00	2.71
2	Thu	2.677	0.866	1.171	0.271	0.369	62.2	76.4	75	0.00	4.4	0.12	2.78	0.00	0.00	2.78
3	Fri	1.981	0.824	0.790	0.270	0.097	59.9	74.5	67	0.02	4.3	0.09	2.97	0.00	0.00	2.97
4	Sat	2.141	0.907	0.645	0.453	0.135	57.1	69.9	76	0.32	6.4	0.09	1.67	0.00	0.00	1.67
5	Sun	1.833	0.663	0.712	0.358	0.100	59.1	73.6	66	0.00	4.1	0.13	1.66	0.00	0.00	1.66
6	Mon	2.147	0.950	0.786	0.302	0.110	62.7	90.5	68	0.00	1.9	0.13	1.83	0.00	0.00	1.83
7	Tue	2.602	0.955	0.914	0.298	0.435	65.7	95.4	59	0.01	1.8	0.15	2.06	0.00	0.00	2.06
8	Wed	2.299	0.285	1.253	0.263	0.499	62.2	94.1	57	0.00	2.6	0.15	2.53	0.00	0.00	2.53
9	Thu	2.414	0.644	1.067	0.360	0.344	54.3	75.9	52	0.00	3.3	0.14	2.32	0.00	0.00	2.32
10	Fri	2.222	0.669	1.021	0.227	0.305	49.9	62.9	25	0.00	8.7	0.17	2.39	0.00	0.00	2.39
11	Sat	2.241	0.672	0.980	0.323	0.265	51.3	66.1	27	0.00	7.6	0.17	2.58	0.00	0.00	2.58
12	Sun	2.191	0.543	1.044	0.240	0.365	50.7	68.4	29	0.00	4.9	0.16	1.99	0.00	0.00	1.99
13	Mon	2.624	1.458	0.493	0.292	0.380	53.7	81.3	39	0.00	2.3	0.14	2.18	0.00	0.00	2.18
14	Tue	2.525	0.559	1.232	0.269	0.465	63.7	96.9	43	0.00	1.1	0.13	2.61	0.00	0.00	2.61
15	Wed	2.182	0.479	0.977	0.251	0.476	61.0	86.2	47	0.00	0.8	0.13	2.41	0.00	0.00	2.41
16	Thu	2.695	0.616	1.188	0.343	0.547	56.7	87.1	45	0.00	1.1	0.14	2.50	0.00	0.00	2.50
17	Fri	2.187	0.537	0.914	0.220	0.516	58.9	93.8	47	0.00	0.9	0.12	2.77	0.00	0.00	2.77
18	Sat	2.416	0.638	0.905	0.425	0.449	59.7	90.5	55	0.00	4.0	0.12	2.16	0.00	0.00	2.16
19	Sun	2.049	0.452	0.934	0.228	0.434	55.4	79.3	74	0.00	4.4	0.10	2.41	0.00	0.00	2.41
20	Mon	2.263	0.646	1.057	0.301	0.259	55.9	76.7	69	0.00	3.5	0.10	2.30	0.00	0.00	2.30
21	Tue	2.582	0.809	1.135	0.268	0.370	61.6	91.2	40	0.00	1.5	0.13	2.38	0.00	0.00	2.38
22	Wed	2.421	0.592	1.071	0.312	0.446	63.9	86.0	37	0.00	3.0	0.14	2.61	0.00	0.00	2.61
23	Thu	2.691	0.758	1.222	0.328	0.382	57.6	90.6	47	0.00	0.5	0.11	2.19	0.00	0.00	2.19
24	Fri	1.997	0.562	0.951	0.228	0.255	55.8	93.0	47	0.00	0.6	0.12	2.56	0.00	0.00	2.56
25	Sat	2.065	0.710	0.933	0.289	0.135	52.7	84.2	50	0.00	0.7	0.12	2.20	0.00	0.00	2.20
26	Sun	1.825	0.503	0.826	0.251	0.245	66.6	98.9	52	0.00	0.6	0.11	2.31	0.00	0.00	2.31
27	Mon	2.372	0.084	0.913	0.270	1.105	61.1	93.1	69	0.00	1.6	0.08	1.81	0.00	0.00	1.81
28	Tue	2.095	0.612	0.850	0.322	0.310	63.8	99.2	61	0.00	1.7	0.10	1.76	0.00	0.00	1.76
29	Wed	1.670	0.493	0.799	0.224	0.154	58.5	90.2	57	0.00	1.1	0.10	1.82	0.00	0.00	1.82
30	Thu	0.982	0.422	0.321	0.154	0.085	45.6	52.5	76	0.03	2.1	0.02	1.70	0.00	0.00	1.70
31	Fri	0.837	0.440	0.264	0.073	0.060	60.1	81.4	61	0.08	5.4	0.08	1.43	0.00	0.00	1.43
TOTAL		**68.039**	20.503	28.275	8.758	10.503				0.46			69.61	0.00	0.00	**69.61**
AVG		**2.195**	0.661	0.912	0.283	0.339	58.6	83.8	54	0.01	2.9	0.12	2.25	0.00	0.00	2.25
MIN		**0.837**	0.084	0.264	0.073	0.060	45.6	52.5	25	0.00	0.5	0.02	1.43	0.00	0.00	1.43
MAX		**2.814**	1.458	1.253	0.453	1.105	68.2	99.2	76	0.32	8.7	0.17	2.97	0.00	0.00	2.97


DERWA Recycled Water Demand
3.500
3.000
2.500
2.000
1.500
1.000
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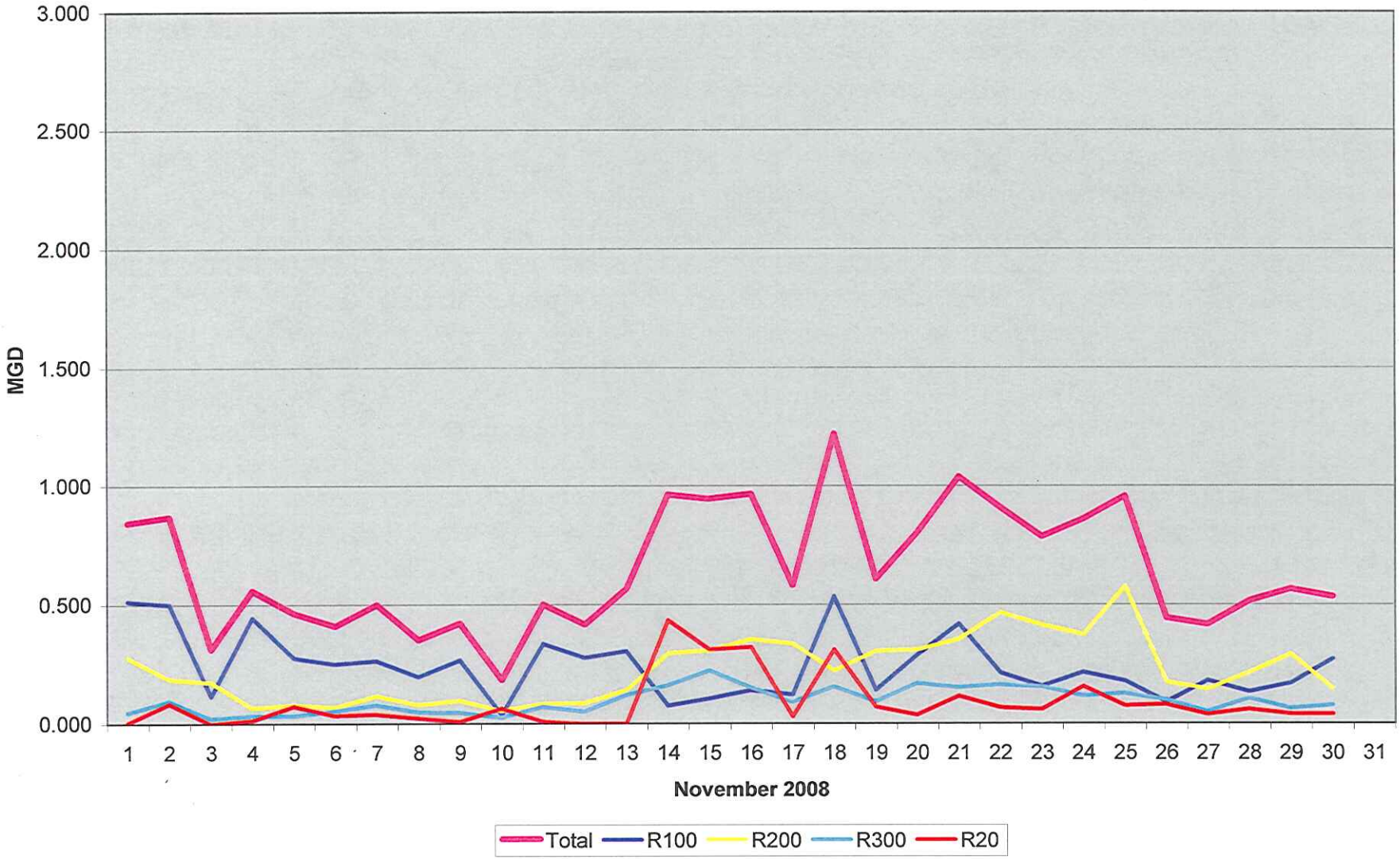
MGD
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
October 2008
Total
R100
R200
R300
R20

DUBLIN SAN RAMON SERVICES DISTRICT
DERWA Recycled Water Daily Demand
November 2008

		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Sat	0.845	0.515	0.277	0.048	0.005	60.3	68.4	72	1.02	6.7	0.04	0.00	0.00	0.00	0.00
2	Sun	0.871	0.502	0.188	0.096	0.085	58.8	68.9	79	0.23	4.6	0.06	0.00	0.00	0.00	0.00
3	Mon	0.313	0.116	0.174	0.022	0.000	54.0	64.6	83	0.28	4.6	0.05	0.00	0.94	0.00	0.94
4	Tue	0.559	0.445	0.066	0.034	0.015	52.4	60.6	70	0.00	4.9	0.07	0.00	0.36	0.00	0.36
5	Wed	0.465	0.277	0.079	0.034	0.075	51.3	65.4	66	0.02	1.4	0.07	0.00	0.00	0.00	0.00
6	Thu	0.410	0.252	0.069	0.054	0.035	57.3	68.6	65	0.00	1.1	0.08	0.00	0.00	0.00	0.00
7	Fri	0.500	0.264	0.117	0.080	0.040	55.8	74.3	74	0.00	0.8	0.08	0.00	0.00	0.00	0.00
8	Sat	0.353	0.198	0.079	0.050	0.025	53.1	62.7	88	0.08	3.0	0.02	0.00	0.00	0.00	0.00
9	Sun	0.422	0.267	0.097	0.048	0.010	54.6	63.1	74	0.00	6.0	0.08	0.00	0.00	0.00	0.00
10	Mon	0.185	0.038	0.054	0.028	0.065	53.0	69.5	78	0.00	2.5	0.06	0.00	1.15	0.00	1.15
11	Tue	0.502	0.337	0.083	0.072	0.010	55.7	70.5	79	0.00	2.0	0.04	0.01	0.14	0.00	0.15
12	Wed	0.416	0.277	0.087	0.053	0.000	58.9	78.8	80	0.00	1.8	0.07	0.00	0.00	0.00	0.00
13	Thu	0.566	0.305	0.140	0.121	0.000	57.9	83.5	79	0.01	1.2	0.06	0.00	0.00	0.00	0.00
14	Fri	0.964	0.075	0.294	0.161	0.434	63.1	81.2	42	0.01	4.2	0.14	0.00	0.77	0.00	0.77
15	Sat	0.947	0.105	0.307	0.224	0.311	64.5	86.2	55	0.00	1.9	0.09	0.00	1.20	0.00	1.20
16	Sun	0.966	0.141	0.354	0.151	0.320	56.7	80.2	73	0.00	1.1	0.08	0.00	1.16	0.00	1.16
17	Mon	0.581	0.123	0.336	0.092	0.030	53.0	77.3	74	0.00	0.5	0.07	0.00	1.54	0.00	1.54
18	Tue	1.221	0.534	0.222	0.155	0.310	49.0	82.0	72	0.01	0.8	0.07	0.00	0.42	0.00	0.42
19	Wed	0.607	0.141	0.304	0.092	0.070	42.5	61.4	84	0.00	3.1	0.05	0.00	0.98	0.00	0.98
20	Thu	0.802	0.287	0.309	0.169	0.036	44.4	61.0	84	0.00	2.5	0.04	0.00	0.84	0.00	0.84
21	Fri	1.038	0.418	0.354	0.151	0.115	45.5	66.5	54	0.01	2.0	0.08	0.00	0.88	0.00	0.88
22	Sat	0.908	0.213	0.466	0.163	0.067	44.1	71.4	65	0.00	1.2	0.06	0.00	0.91	0.00	0.91
23	Sun	0.785	0.156	0.413	0.155	0.060	42.8	66.2	77	0.01	1.0	0.06	0.00	0.98	0.00	0.98
24	Mon	0.859	0.215	0.373	0.116	0.155	42.8	64.6	80	0.01	1.3	0.04	0.00	1.02	0.00	1.02
25	Tue	0.957	0.179	0.577	0.126	0.075	42.8	51.2	84	0.00	0.8	0.01	0.00	1.09	0.00	1.09
26	Wed	0.443	0.089	0.174	0.100	0.080	41.8	43.9	92	0.34	0.6	0.00	0.00	1.23	0.00	1.23
27	Thu	0.415	0.181	0.145	0.050	0.039	45.5	60.2	84	0.00	3.1	0.04	0.00	0.76	0.00	0.76
28	Fri	0.515	0.133	0.215	0.107	0.060	43.0	54.4	86	0.00	2.0	0.02	0.00	0.62	0.00	0.62
29	Sat	0.565	0.170	0.290	0.064	0.040	50.1	73.2	77	0.01	2.9	0.06	0.00	0.67	0.00	0.67
30	Sun	0.533	0.270	0.146	0.077	0.039	52.5	71.9	89	0.01	1.1	0.05	0.00	0.46	0.00	0.46
TOTAL		**19.513**	7.224	6.789	2.893	2.607				2.05			0.02	18.12	0.00	**18.14**
AVG		**0.650**	0.241	0.226	0.096	0.087	51.6	68.4	75	0.07	2.4	0.06	0.00	0.60	0.00	0.60
MIN		**0.185**	0.038	0.054	0.022	0.000	41.8	43.9	42	0.00	0.5	0.00	0.00	0.00	0.00	0.00
MAX		**1.221**	0.534	0.577	0.224	0.434	64.5	86.2	92	1.02	6.7	0.14	0.01	1.54	0.00	1.54

DERWA Recycled Water Demand



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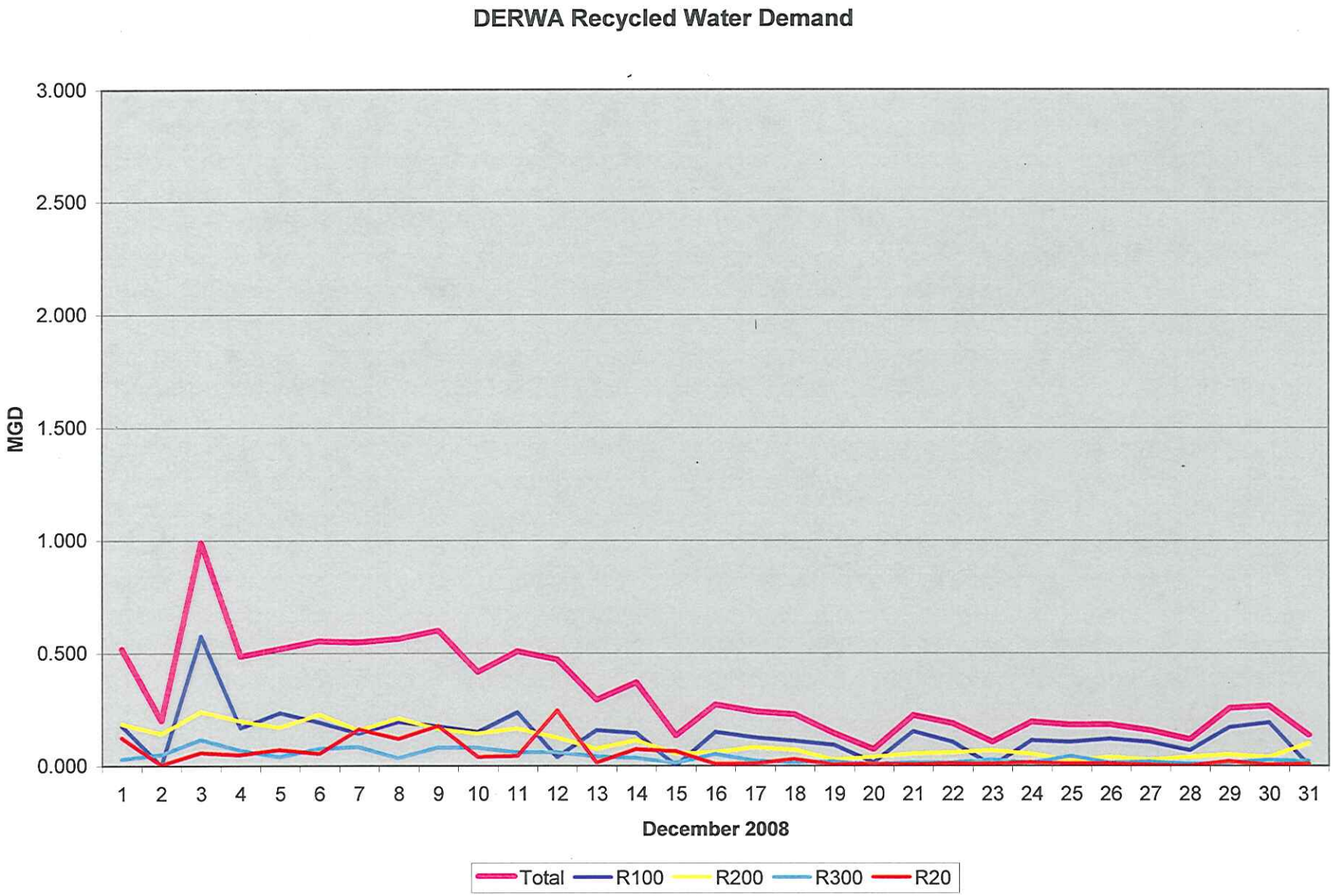
December 2008

		Recycled Water Customer Demand (MG)					Weather Conditions						Production (MG)			
Date:	Day:	Total	R100	R200	R300	R20	Mean Temp °F	Max Temp °F	Avg Humidity	Rainfall inches	Avg Wind mph	Eto inches	SF-UV Recycled	MF-UV Recycled	Potable	Total
1	Mon	0.519	0.177	0.186	0.031	0.125	47.1	71.6	93	0.01	2.0	0.04	0.00	0.47	0.00	0.47
2	Tue	0.202	0.002	0.143	0.052	0.005	47.5	66.5	90	0.00	1.6	0.04	0.00	0.14	0.00	0.14
3	Wed	0.993	0.575	0.241	0.117	0.060	43.8	63.0	92	0.01	1.7	0.05	0.00	0.47	0.00	0.47
4	Thu	0.487	0.168	0.199	0.070	0.050	47.7	60.8	82	0.00	2.3	0.05	0.00	0.40	0.00	0.40
5	Fri	0.520	0.236	0.171	0.041	0.072	47.0	69.2	77	0.01	1.5	0.06	0.00	0.37	0.00	0.37
6	Sat	0.554	0.194	0.228	0.077	0.055	45.2	69.3	83	0.00	1.0	0.05	0.00	0.32	0.00	0.32
7	Sun	0.549	0.144	0.156	0.086	0.163	44.1	63.6	90	0.01	2.1	0.03	0.00	0.60	0.00	0.60
8	Mon	0.564	0.196	0.211	0.036	0.120	43.8	53.6	89	0.00	2.1	0.01	0.00	0.63	0.00	0.63
9	Tue	0.601	0.176	0.164	0.083	0.177	44.3	57.3	72	0.00	2.5	0.06	0.00	0.54	0.00	0.54
10	Wed	0.417	0.151	0.144	0.083	0.040	42.0	66.9	72	0.01	1.0	0.06	0.00	0.54	0.00	0.54
11	Thu	0.509	0.237	0.166	0.061	0.045	40.3	68.2	70	0.00	1.2	0.05	0.00	0.51	0.00	0.51
12	Fri	0.473	0.040	0.126	0.061	0.246	40.8	61.9	79	0.01	2.9	0.05	0.00	0.97	0.00	0.97
13	Sat	0.293	0.159	0.076	0.044	0.015	38.4	48.0	62	0.00	7.5	0.06	0.00	0.40	0.00	0.40
14	Sun	0.370	0.146	0.112	0.036	0.075	33.1	48.0	84	0.55	2.4	0.03	0.00	0.11	0.00	0.11
15	Mon	0.134	0.001	0.054	0.014	0.065	36.8	45.0	83	0.28	4.0	0.04	0.00	0.84	0.00	0.84
16	Tue	0.272	0.151	0.059	0.053	0.009	39.1	46.4	94	0.15	2.6	0.01	0.00	0.30	0.00	0.30
17	Wed	0.241	0.125	0.082	0.024	0.010	36.5	52.3	62	0.00	2.5	0.05	0.00	0.00	0.00	0.00
18	Thu	0.228	0.111	0.072	0.016	0.030	37.8	56.8	78	0.04	3.9	0.04	0.00	0.00	0.00	0.00
19	Fri	0.143	0.092	0.026	0.020	0.005	45.2	56.2	80	0.27	4.5	0.03	0.00	0.00	0.00	0.00
20	Sat	0.073	0.015	0.040	0.008	0.010	36.0	56.7	81	0.01	0.9	0.04	0.00	0.46	0.00	0.46
21	Sun	0.224	0.152	0.053	0.014	0.005	35.5	42.5	89	0.26	1.7	0.01	0.00	0.13	0.00	0.13
22	Mon	0.188	0.106	0.058	0.014	0.010	38.1	48.2	75	0.04	4.7	0.05	0.00	0.00	0.00	0.00
23	Tue	0.105	0.000	0.068	0.028	0.009	37.4	52.1	67	0.09	1.6	0.03	0.00	0.55	0.00	0.55
24	Wed	0.195	0.113	0.053	0.014	0.015	39.2	45.0	86	0.12	3.2	0.02	0.00	0.23	0.00	0.23
25	Thu	0.181	0.106	0.022	0.043	0.010	41.3	51.3	71	0.62	11.0	0.07	0.00	0.00	0.00	0.00
26	Fri	0.182	0.119	0.040	0.014	0.010	41.3	61.4	65	0.00	1.8	0.05	0.00	0.00	0.00	0.00
27	Sat	0.157	0.106	0.026	0.020	0.005	43.5	64.2	79	0.00	1.0	0.05	0.00	0.05	0.00	0.05
28	Sun	0.117	0.069	0.040	0.008	0.000	48.1	68.7	82	0.00	0.9	0.05	0.00	0.45	0.00	0.45
29	Mon	0.255	0.171	0.051	0.014	0.020	48.5	70.6	83	0.00	1.5	0.05	0.00	0.33	0.00	0.33
30	Tue	0.265	0.192	0.040	0.028	0.005	49.0	68.3	83	0.01	1.6	0.05	0.00	0.00	0.00	0.00
31	Wed	0.136	0.004	0.100	0.022	0.010	44.5	64.2	80	0.00	2.0	0.05	0.00	0.74	0.00	0.74
TOTAL		**10.146**	4.234	3.205	1.232	1.476				2.50			0.00	10.54	0.00	**10.53**
AVG		**0.327**	0.137	0.103	0.040	0.048	42.0	58.6	80	0.08	2.6	0.04	0.00	0.34	0.00	0.34
MIN		**0.073**	0.000	0.022	0.008	0.000	33.1	42.5	62	0.00	0.9	0.01	0.00	0.00	0.00	0.00
MAX		**0.993**	0.575	0.241	0.117	0.246	49.0	71.6	94	0.62	11.0	0.07	0.00	0.97	0.00	0.97


DERWA Recycled Water Demand
3.000
2.500
2.000
1.500
1.000
0.500
0.000
MGD
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
December 2008
Total
R100
R200
R300
R20