

## VII. Reclaimed Water Data Summary.

The results of all analyses performed on Reclaim water are summarized in tables with monthly and annual averages (and in some cases annual totals) calculated. Graphs of monthly averages are presented.

South Bay Water Reclamation plant began reclaim water production on July 6, 2006.

- A. Reclaimed Water Data Summaries
- B. Reclaimed Water Graphs
- C. Daily Values of Selected Parameters
- D. Total Coliform Data Summaries
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## A. Reclaimed Water Data Summaries

The results of all analyses performed on the SBWRP Reclaim are summarized in tables with monthly and annual averages (and in some cases annual totals) calculated.

South Bay Water Reclamation Plant  
Annual Recycled Water Turbidity Report - 2009

Data from in-plant meter <sup>4</sup>

Date	Average Daily Turbidity (NTU)	Minimum Daily <sup>1</sup> Turbidity (NTU)	Maximum Daily <sup>2</sup> Turbidity (NTU)	Time over <sup>3</sup> 5 ntu's (minutes)
Jan	0.53	0.43	0.62	0
Feb	0.70	0.52	1.38	0.02
Mar	0.94	0.67	1.9	0.02
Apr	0.52	0.38	0.71	0
May	0.28	0.18	0.85	0
Jun	0.37	0.27	0.98	0.01
Jul	0.38	0.34	1.2	0.01
Aug	0.26	0.24	0.37	0
Sep	0.21	0.18	0.31	0
Oct	0.42	0.38	0.49	0
Nov	0.36	0.29	0.44	0
Dec	0.57	0.55	0.71	0
Average:	0.46			

<sup>1</sup> Minimum Daily value is the average recorded for the month.

<sup>2</sup> Maximum Daily value is the average recorded value for the month.

<sup>3</sup> Total time for the month.

<sup>4</sup> Compliance monitoring point, values taken from the DCS Point (S29AI0203), located at the UV Vault in Area 29 (Tertiary UV Disinfection System)

SOUTH BAY WATER RECLAMATION PLANT

Annual 2009

Reclaim Water  
(SB\_REC\_WATER\_34)

	Flow (mgd)	pH	Biochemical Oxygen Demand (mg/L)	Total Suspended Solids (mg/L)	Volatile Suspended Solids (mg/L)	Total Dissolved Solids (mg/L)	Turbidity (NTU)
JANUARY -2009	4.89	7.39	<2.0	1.4	<1.6	953	1.31
FEBRUARY -2009	5.36	7.46	<2.0	<1.4	<1.6	1100	1.10
MARCH -2009	4.45	7.52	2.4	2.3	1.6	1050	1.45
APRIL -2009	2.97	7.50	<2.0	<1.4	<1.6	1000	1.34
MAY -2009	1.32	7.55	<2.0	<1.4	<1.6	1020	0.91
JUNE -2009	1.07	7.59	<2.0	<1.4	<1.6	1000	0.81
JULY -2009	0.25	7.70	<2.0	<1.4	<1.6	972	0.74
AUGUST -2009	0.31	7.65	<2.0	<1.4	ND	952	0.66
SEPTEMBER-2009	0.16	7.64	<2.0	<1.4	<1.6	955	0.73
OCTOBER -2009	2.09	7.61	<2.0	1.5	<1.6	883	0.88
NOVEMBER -2009	2.94	7.67	<2.0	<1.4	<1.6	933	0.72
DECEMBER -2009	5.79	7.47	<2.0	<1.4	<1.6	963	2.32
Average	2.63	7.56	0.2	0.4	0.1	982	1.08

ND=not detected

South Bay Water Reclamation Plant  
Physical Data

Annual 2009

Source: Analytes	MDL Units	SB_REC_WATER_34 03-FEB-2009	SB_REC_WATER_34 05-MAY-2009	SB_REC_WATER_34 04-AUG-2009	SB_REC_WATER_34 06-OCT-2009
Ammonia-N	.3 MG/L	ND	ND	ND	0.5
BOD (Biochemical Oxygen Demand)	2 MG/L	2.2	ND	ND	ND
Hexane Extractable Material	1.2 MG/L	6.5	2.0	1.7	4.1
Conductivity	10 UMHOS/CM	1650	1550	1450	1490
MBAS (Surfactants)	.03 MG/L	0.5	0.2	0.2	0.2
pH (grab)	PH	7.3	7.6	7.6	7.5
Total Alkalinity (bicarbonate)	20 MG/L	179	169	152	154
Total Dissolved Solids	28 MG/L	1530	973	952	941
Total Suspended Solids	1.4 MG/L	2.2	ND	ND	ND
Volatile Suspended Solids	1.6 MG/L	2.1	ND	ND	ND
Total Kjeldahl Nitrogen	1.6 MG/L	2.1	1.6	ND	ND
Turbidity	.13 NTU	1.2	1.0	0.8	0.5

ND= Not Detected

SOUTH BAY WATER RECLAMATION PLANT  
SB\_REC\_WATER\_34 Reclaimed Water- Annual Averages

Annual 2009

Analyte:	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron
MDL:	47	2.9	.4	.039	.022	7
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2009	NR	NR	NR	NR	NR	313
FEBRUARY -2009	157	ND	0.60	67.0	ND	343
MARCH -2009	NR	NR	NR	NR	NR	317
APRIL -2009	NR	NR	NR	NR	NR	313
MAY -2009	187	ND	0.95	74.5	ND	346
JUNE -2009	NR	NR	NR	NR	NR	303
JULY -2009	NR	NR	NR	NR	NR	315
AUGUST -2009	145	ND	4.39	61.1	ND	359
SEPTEMBER-2009	NR	NR	NR	NR	NR	309
OCTOBER -2009	96	ND	0.73	65.3	ND	321
NOVEMBER -2009	NR	NR	NR	NR	NR	319
DECEMBER -2009	NR	NR	NR	NR	NR	281
=====	=====	=====	=====	=====	=====	=====
Annual Average:	146	ND	1.67	67.0	ND	320

Analyte:	Cadmium	Chromium	Copper	Iron	Manganese	Mercury
MDL:	.53	1.2	2	37	.24	.09
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2009	NR	NR	NR	ND	22.9	NR
FEBRUARY -2009	ND	ND	9.9	ND	29.5	ND
MARCH -2009	NR	NR	NR	ND	27.3	NR
APRIL -2009	NR	NR	NR	45	22.9	NR
MAY -2009	ND	<1.20	11.6	54	14.7	ND
JUNE -2009	NR	NR	NR	ND	14.2	NR
JULY -2009	NR	NR	NR	ND	11.5	NR
AUGUST -2009	ND	<1.20	20.1	136	10.7	ND
SEPTEMBER-2009	NR	NR	NR	ND	7.3	NR
OCTOBER -2009	ND	1.25	7.6	<37	14.7	ND
NOVEMBER -2009	NR	NR	NR	ND	7.7	NR
DECEMBER -2009	NR	NR	NR	70	17.1	NR
=====	=====	=====	=====	=====	=====	=====
Annual Average:	ND	0.31	12.3	25	16.7	ND

Analyte:	Nickel	Selenium	Thallium	Chloride	Fluoride	Sulfate
MDL:	.53	.28	3.9	7	.05	9
Units:	UG/L	UG/L	UG/L	MG/L	MG/L	0.5 MG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2009	NR	NR	NR	228	0.50	212
FEBRUARY -2009	4.25	0.52	ND	253	0.82	204
MARCH -2009	NR	NR	NR	263	0.51	217
APRIL -2009	NR	NR	NR	234	0.70	254
MAY -2009	3.76	0.89	ND	232	0.52	241
JUNE -2009	NR	NR	NR	215	0.53	223
JULY -2009	NR	NR	NR	217	0.45	208
AUGUST -2009	6.17	3.00	ND	213	0.44	207
SEPTEMBER-2009	NR	NR	NR	209	0.45	205
OCTOBER -2009	3.84	0.58	ND	219	0.47	186
NOVEMBER -2009	NR	NR	NR	246	0.63	209
DECEMBER -2009	NR	NR	NR	227	0.57	228
=====	=====	=====	=====	=====	=====	=====
Annual Average:	4.51	1.25	ND	230	0.55	216

ND= Not Detected  
NA= Not Analyzed

SOUTH BAY WATER RECLAMATION PLANT  
SB\_REC\_WATER\_34 Reclaimed Water- Annual Averages

Annual 2009

Analyte:	Total Cyanides	MBAS (surfactants)	Percent Sodium	Calcium	Magnesium	Potassium
MDL:	.002	.03		.04	.1	.3
Units:	MG/L	MG/L	Calculated %	MG/L	MG/L	MG/L
JANUARY -2009	NR	0.31	54.7	77.2	30.3	17.9
FEBRUARY -2009	0.0024	0.52	53.8	74.4	32.3	16.9
MARCH -2009	NR	0.20	52.8	92.2	34.2	19.0
APRIL -2009	NR	0.25	54.7	83.4	34.6	19.4
MAY -2009	0.0025	0.20	54.3	80.8	31.5	18.7
JUNE -2009	NR	0.21	54.7	79.0	28.9	20.8
JULY -2009	NR	0.15	54.0	73.3	26.6	21.6
AUGUST -2009	0.0029	0.19	55.8	68.0	25.7	17.8
SEPTEMBER-2009	NR	0.14	55.1	71.9	26.2	19.2
OCTOBER -2009	0.0034	0.17	57.7	71.6	28.0	19.7
NOVEMBER -2009	NR	0.15	57.4	66.5	29.9	20.0
DECEMBER -2009	NR	0.20	56.1	74.4	28.1	19.8
Annual Average:	0.0028	0.22	55.1	76.1	29.7	19.2

Analyte:	Sodium	Calcium Hardness	Magnesium Hardness	Total Hardness	Total Dissolved Solids	Lithium
MDL:	1	.04	.1	.1	28	.002
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
JANUARY -2009	189	193	124	317	953	0.03
FEBRUARY -2009	182	186	132	318	1100	0.03
MARCH -2009	203	231	140	371	1050	0.05
APRIL -2009	208	209	142	351	1000	0.03
MAY -2009	194	202	129	331	1020	0.04
JUNE -2009	190	198	118	316	1000	0.04
JULY -2009	173	183	109	292	972	0.04
AUGUST -2009	175	170	105	275	952	0.04
SEPTEMBER-2009	176	180	107	287	955	0.04
OCTOBER -2009	200	179	115	294	883	0.04
NOVEMBER -2009	195	166	123	289	933	0.03
DECEMBER -2009	192	186	115	301	963	0.05
Annual Average:	190	190.3	122	312	982	0.04

Analyte:	Cobalt	Molybdenum	Vanadium	Nitrate	Ortho Phosphat	Total Alkalinity (bicarbonate)
MDL:	.85	.89	.64	.04	.2	20
Units:	UG/L	UG/L	UG/L	MG/L	MG/L	MG/L
JANUARY -2009	NR	NR	NR	27.1	5.91	154
FEBRUARY -2009	ND	3.87	ND	27.3	8.79	179
MARCH -2009	NR	NR	NR	21.4	1.67	182
APRIL -2009	NR	NR	NR	29.0	4.64	171
MAY -2009	ND	3.48	ND	29.1	2.76	169
JUNE -2009	NR	NR	NR	27.5	2.01	179
JULY -2009	NR	NR	NR	28.6	4.92	163
AUGUST -2009	ND	3.47	ND	33.5	1.43	152
SEPTEMBER-2009	NR	NR	NR	34.1	1.35	154
OCTOBER -2009	ND	3.40	<0.6	33.9	1.90	154
NOVEMBER -2009	NR	NR	NR	31.7	5.95	161
DECEMBER -2009	NR	NR	NR	19.7	4.77	163
Annual Average:	ND	3.56	0.000	28.6	3.84	165

ND= Not Detected  
NA= Not Analyzed

SOUTH BAY WATER RECLAMATION PLANT  
Reclaimed Water

Annual 2009

Source:		SB_REC_WATER_34	SB_REC_WATER_34	SB_REC_WATER_34	SB_REC_WATER_34
Date:		03-FEB-2009	05-MAY-2009	04-AUG-2009	06-OCT-2009
Sample ID:	MDL Units	P458542	P468816	P481355	P490617
=====	=====	=====	=====	=====	=====
Aluminum	47 UG/L	157	187	145	96
Antimony	2.9 UG/L	ND	ND	ND	ND
Arsenic	.4 UG/L	0.60	0.95	4.39	0.73
Barium	.039 UG/L	67	75	61	65
Beryllium	.022 UG/L	ND	ND	ND	ND
Boron	7 UG/L	343	346	359	321
Cadmium	.53 UG/L	ND	ND	ND	ND
Chromium	1.2 UG/L	ND	<1.20	<1.20	1.25
Cobalt	.85 UG/L	ND	ND	ND	ND
Copper	2 UG/L	10	12	20	8
Iron	37 UG/L	ND	54	136	<37
Lead	2 UG/L	ND	ND	ND	ND
Manganese	.24 UG/L	29.5	14.7	10.7	14.7
Mercury	.09 UG/L	ND	ND	ND	ND
Molybdenum	.89 UG/L	3.87	3.48	3.47	3.40
Nickel	.53 UG/L	4.25	3.76	6.17	3.84
Selenium	.28 UG/L	0.52	0.89	3.00	0.58
Silver	.4 UG/L	ND	ND	ND	ND
Thallium	3.9 UG/L	ND	ND	ND	ND
Vanadium	.64 UG/L	ND	ND	ND	<0.64
Zinc	2.5 UG/L	38	33	37	32
Bromide	.1 MG/L	0.41	0.35	0.26	0.19
Chloride	7 MG/L	253	239	210	225
Fluoride	.05 MG/L	0.82	0.63	0.36	0.49
Nitrate	.04 MG/L	27.3	32.1	34.4	40.5
Ortho Phosphate	.2 MG/L	8.8	2.8	1.1	1.4
Sulfate	9 MG/L	204	275	212	219
Calcium	.04 MG/L	74	81	68	72
Lithium	.002 MG/L	0.03	0.04	0.04	0.04
Magnesium	.1 MG/L	32	32	26	28
Potassium	.3 MG/L	17	19	18	20
Sodium	1 MG/L	182	194	175	200
Calcium Hardness	.1 MG/L	186	202	170	179
Magnesium Hardness	.4 MG/L	133	130	106	115
Total Hardness	.4 MG/L	319	331	276	294
Cyanides, Total	.002 MG/L	0.002	0.003	0.003	0.003
Sulfides-Total	.18 MG/L	ND	ND	ND	ND
Total Kjeldahl Nitrogen	1.6 MG/L	2.1	1.6	ND	ND
Ammonia-N	.3 MG/L	ND	ND	ND	0.5
Percent Sodium	PERCENT	53.8	54.3	55.8	57.7
Total Organic Carbon	MG/L	12.5	NR	NR	9.0

ND= Not Detected  
NR= Not Required



SOUTH BAY WATER RECLAMATION PLANT  
Reclaimed Water

Radioactivity

Annual 2009

Source	Sample Date	Sample ID	Gross Alpha Radiation	Gross Beta Radiation
=====	=====	=====	=====	=====
SB_REC_WATER_34	03-FEB-2009	P458542	2.1 ± 1.9	20.2 ± 3.8
SB_REC_WATER_34	05-MAY-2009	P468816	3.2 ± 2.2	20.2 ± 4.7
SB_REC_WATER_34	04-AUG-2009	P481355	1.7 ± 1.7	18.1 ± 4.2
SB_REC_WATER_34	06-OCT-2009	P490617	-0.6 ± 1.6	21.7 ± 4.3

ND= Not Detected

Units in picocuries per Liter (pCi/L)

South Bay Water Reclamation Plant  
Reclaimed Water  
Chlorinated Pesticides

Annual Report 2009

Analyte	MDL	Units	03-FEB-2009	05-MAY-2009	04-AUG-2009	06-OCT-2009
			P458542	P468816	P481355	P490617
Aldrin	7	NG/L	ND	ND	ND	ND
BHC, Alpha isomer	7	NG/L	ND	ND	ND	ND
BHC, Beta isomer	3	NG/L	ND	ND	ND	ND
BHC, Delta isomer	3	NG/L	ND	ND	ND	ND
BHC, Gamma isomer	5	NG/L	ND	ND	ND	ND
Alpha (cis) Chlordane	3	NG/L	ND	ND	ND	ND
Gamma (trans) Chlordane	4	NG/L	ND	ND	ND	ND
Alpha Chlordene		NG/L	NA	NA	NA	NA
Gamma Chlordene		NG/L	NA	NA	NA	NA
Cis Nonachlor	3	NG/L	ND	ND	ND	ND
Dieldrin	3	NG/L	ND	ND	ND	ND
Endosulfan Sulfate	6	NG/L	ND	ND	ND	ND
Alpha Endosulfan	4	NG/L	ND	ND	ND	ND
Beta Endosulfan	2	NG/L	ND	ND	ND	ND
Endrin	2	NG/L	ND	ND	ND	ND
Endrin aldehyde	9	NG/L	ND	ND	ND	ND
Heptachlor	8	NG/L	ND	ND	ND	ND
Heptachlor epoxide	4	NG/L	ND	ND	ND	ND
Methoxychlor	10	NG/L	ND	ND	ND	ND
Mirex	10	NG/L	ND	ND	ND	ND
o,p-DDD	4	NG/L	ND	ND	ND	ND
o,p-DDE	5	NG/L	ND	ND	ND	ND
o,p-DDT	3	NG/L	ND	ND	ND	ND
Oxychlordane	6	NG/L	ND	ND	ND	ND
PCB 1016	4000	NG/L	ND	ND	ND	ND
PCB 1221	4000	NG/L	ND	ND	ND	ND
PCB 1232	360	NG/L	ND	ND	ND	ND
PCB 1242	4000	NG/L	ND	ND	ND	ND
PCB 1248	2000	NG/L	ND	ND	ND	ND
PCB 1254	2000	NG/L	ND	ND	ND	ND
PCB 1260	2000	NG/L	ND	ND	ND	ND
PCB 1262	930	NG/L	ND	ND	ND	ND
p,p-DDD	3	NG/L	ND	ND	ND	ND
p,p-DDE	4	NG/L	ND	ND	ND	ND
p,p-DDT	8	NG/L	ND	ND	ND	ND
Toxaphene	330	NG/L	ND	ND	ND	ND
Trans Nonachlor	5	NG/L	ND	ND	ND	ND
Heptachlors	8	NG/L	0	0	0	0
Endosulfans	6	NG/L	0	0	0	0
Polychlorinated biphenyls	4000	NG/L	0	0	0	0
Chlordane + related cmpds.	6	NG/L	0	0	0	0
DDT and derivatives	8	NG/L	0	0	0	0
Hexachlorocyclohexanes	7	NG/L	0	0	0	0
Aldrin + Dieldrin	7	NG/L	0	0	0	0
Chlorinated Hydrocarbons	4000	NG/L	0	0	0	0

NA= Not Analyzed

ND= Not Detected

Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

South Bay Water Reclamation Plant  
 Reclaimed Water  
 OrganoPhosphorous  
 Annual 2009

Analyte	MDL Units	05-MAY-2009	06-OCT-2009
		P468816	P490617
Demeton O	.15 UG/L	ND	ND
Demeton S	.08 UG/L	ND	ND
Diazinon	.03 UG/L	ND	ND
Guthion	.15 UG/L	ND	ND
Malathion	.03 UG/L	ND	ND
Parathion	.03 UG/L	ND	ND
Dichlorvos	.05 UG/L	ND	ND
Dibrom	.2 UG/L	ND	ND
Ethoprop	.04 UG/L	ND	ND
Phorate	.04 UG/L	ND	ND
Sulfotepp	.04 UG/L	ND	ND
Disulfoton	.02 UG/L	ND	ND
Dimethoate	.04 UG/L	ND	ND
Ronnel	.03 UG/L	ND	ND
Trichloronate	.04 UG/L	ND	ND
Merphos	.09 UG/L	ND	ND
Dichlofenthion	.03 UG/L	ND	ND
Tokuthion	.06 UG/L	ND	ND
Stirophos	.03 UG/L	ND	ND
Bolstar	.07 UG/L	ND	ND
Fensulfothion	.07 UG/L	ND	ND
EPN	.09 UG/L	ND	ND
Coumaphos	.15 UG/L	ND	ND
Mevinphos, e isomer	.05 UG/L	ND	ND
Mevinphos, z isomer	.3 UG/L	ND	ND
Chlorpyrifos	.03 UG/L	ND	ND
Thiophosphorus Pesticides	.15 UG/L	0.000	0.000
Demeton -O, -S	.15 UG/L	0.000	0.000
Total Organophosphorus Pesticides	.3 UG/L	0.000	0.000

ND= Not Detected

South Bay Water Reclamation Plant  
 Reclaimed Water  
 Organo-Tins  
 Annual 2009

Analyte	MDL	Units	SB_REC_WATER_34	SB_REC_WATER_34	SB_REC_WATER_34	SB_REC_WATER_34
			03-FEB-2009	05-MAY-2009	04-AUG-2009	06-OCT-2009
			P458542	P468816	P481355	P490617
			=====	=====	=====	=====
Tributyltin	2	UG/L	ND	ND	ND	ND
Dibutyltin	7	UG/L	ND	ND	ND	ND
Monobutyltin	16	UG/L	ND	ND	ND	ND

ND= Not Detected

South Bay Water Reclamation Plant

Reclaimed Water - Phenols

Annual 2009

Analyte	MDL	Units	03-FEB-2009	05-MAY-2009	04-AUG-2009	06-OCT-2009
			P458542	P468816	P481355	P490617
2-chlorophenol	1.32	UG/L	ND	ND	ND	ND
4-chloro-3-methylphenol	1.67	UG/L	ND	ND	ND	ND
2,4-dichlorophenol	1.01	UG/L	ND	ND	ND	ND
2,4-dimethylphenol	2.01	UG/L	ND	ND	ND	ND
2,4-dinitrophenol	2.16	UG/L	ND	ND	ND	ND
2-methyl-4,6-dinitrophenol	1.52	UG/L	ND	ND	ND	ND
2-nitrophenol	1.55	UG/L	ND	ND	ND	ND
4-nitrophenol	1.14	UG/L	ND	ND	ND	ND
Pentachlorophenol	1.12	UG/L	ND	ND	ND	ND
Phenol	1.76	UG/L	ND	ND	ND	ND
2,4,6-trichlorophenol	1.65	UG/L	ND	ND	ND	ND
=====						
Total Chlorinated Phenols	1.67	UG/L	0.00	0.00	0.00	0.00
Total Non-Chlorinated Phenols	2.16	UG/L	0.00	0.00	0.00	0.00
=====						
Total Phenols	2.16	UG/L	0.00	0.00	0.00	0.00
=====						
2-methylphenol	2.15	UG/L	ND	ND	ND	ND
3-methylphenol(4-MP is unresolved)		UG/L	NA	NA	NA	NA
4-methylphenol(3-MP is unresolved)	2.11	UG/L	ND	ND	ND	ND
2,4,5-trichlorophenol	1.66	UG/L	ND	ND	ND	ND

ND= not detected

South Bay Water Reclamation Plant  
Reclaimed Water - Base/Neutrals

Annual 2009

Analyte	MDL	Units	03-FEB-2009	05-MAY-2009	04-AUG-2009	06-OCT-2009
			P458542	P468816	P481355	P490617
Acenaphthene	1.8	UG/L	ND	ND	ND	ND
Acenaphthylene	1.77	UG/L	ND	ND	ND	ND
Anthracene	1.29	UG/L	ND	ND	ND	ND
Benzidine	1.52	UG/L	ND	ND	ND	ND
Benzo[A]anthracene	1.1	UG/L	ND	ND	ND	ND
3,4-benzo(B)fluoranthene	1.35	UG/L	ND	ND	ND	ND
Benzo[K]fluoranthene	1.49	UG/L	ND	ND	ND	ND
Benzo[A]pyrene	1.25	UG/L	ND	ND	ND	ND
Benzo[G,H,I]perylene	1.09	UG/L	ND	ND	ND	ND
4-bromophenyl phenyl ether	1.4	UG/L	ND	ND	ND	ND
bis(2-chloroethoxy)methane	1.01	UG/L	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.38	UG/L	ND	ND	ND	ND
Bis-(2-chloroisopropyl) ether	1.16	UG/L	ND	ND	ND	ND
4-chlorophenyl phenyl ether	1.57	UG/L	ND	ND	ND	ND
2-chloronaphthalene	1.87	UG/L	ND	ND	ND	ND
Chrysene	1.16	UG/L	ND	ND	ND	ND
Dibenzo(A,H)anthracene	1.01	UG/L	ND	ND	ND	ND
Butyl benzyl phthalate	2.84	UG/L	ND	ND	ND	ND
Di-n-butyl phthalate	3.96	UG/L	ND	ND	ND	ND
Bis-(2-ethylhexyl) phthalate	8.96	UG/L	ND	ND	ND	ND
Diethyl phthalate	3.05	UG/L	ND	ND	ND	ND
Dimethyl phthalate	1.44	UG/L	ND	ND	ND	ND
Di-n-octyl phthalate	1	UG/L	ND	ND	ND	ND
3,3-dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND
2,4-dinitrotoluene	1.36	UG/L	ND	ND	ND	ND
2,6-dinitrotoluene	1.53	UG/L	ND	ND	ND	ND
1,2-diphenylhydrazine	1.37	UG/L	ND	ND	ND	ND
Fluoranthene	1.33	UG/L	ND	ND	ND	ND
Fluorene	1.61	UG/L	ND	ND	ND	ND
Hexachlorobenzene	1.48	UG/L	ND	ND	ND	ND
Hexachlorobutadiene	1.64	UG/L	ND	ND	ND	ND
Hexachlorocyclopentadiene	1.25	UG/L	ND	ND	ND	ND
Hexachloroethane	1.32	UG/L	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	1.14	UG/L	ND	ND	ND	ND
Isophorone	1.53	UG/L	ND	ND	ND	ND
Naphthalene	1.65	UG/L	ND	ND	ND	ND
Nitrobenzene	1.6	UG/L	ND	ND	ND	ND
N-nitrosodimethylamine	1.27	UG/L	ND	ND	ND	ND
N-nitrosodi-n-propylamine	1.16	UG/L	ND	ND	ND	ND
N-nitrosodiphenylamine	3.48	UG/L	ND	ND	ND	ND
Phenanthrene	1.34	UG/L	ND	ND	ND	ND
Pyrene	1.43	UG/L	ND	ND	ND	ND
1,2,4-trichlorobenzene	1.52	UG/L	ND	ND	ND	ND
Polynuc. Aromatic Hydrocarbons	1.77	UG/L	0.0	0.0	0.0	0.0
Base/Neutral Compounds	8.96	UG/L	0.0	0.0	0.0	0.0

Additional analytes determined

1-methylphenanthrene	1.46	UG/L	ND	ND	ND	ND
2-methylnaphthalene	2.14	UG/L	ND	ND	ND	ND
2,3,5-trimethylnaphthalene	2.18	UG/L	ND	ND	ND	ND
Perylene	1.41	UG/L	ND	ND	ND	ND
Benzo[e]pyrene	1.44	UG/L	ND	ND	ND	ND
Biphenyl	2.29	UG/L	ND	ND	ND	ND
2,6-dimethylnaphthalene	2.16	UG/L	ND	ND	ND	ND
1-methylnaphthalene	2.18	UG/L	ND	ND	ND	ND

ND= Not Detected

SOUTH BAY WASTEWATER TREATMENT PLANT  
Priority Pollutants Purgeable Compounds, EPA Method 624 Report

Annual 2009

Analyte	MDL	Units	SB_REC_WATER_34	SB_REC_WATER_34	SB_REC_WATER_34	SB_REC_WATER_34
			03-FEB-2009	05-MAY-2009	04-AUG-2009	06-OCT-2009
			P458545	P468819	P481358	P490620
Dichlorodifluoromethane	.66	UG/L	ND	ND	ND	ND
Chloromethane	.5	UG/L	0.6	ND	<0.5	ND
Vinyl chloride	.4	UG/L	ND	ND	ND	ND
Bromomethane	.7	UG/L	ND	ND	ND	ND
Chloroethane	.9	UG/L	ND	ND	ND	ND
Trichlorofluoromethane	.3	UG/L	ND	ND	ND	ND
Acrolein	1.3	UG/L	ND	ND	ND	ND
1,1-dichloroethane	.4	UG/L	ND	ND	ND	ND
Methylene chloride	.3	UG/L	0.88*	0.6	0.6	0.81*
trans-1,2-dichloroethene	.6	UG/L	ND	ND	ND	ND
1,1-dichloroethene	.4	UG/L	ND	ND	ND	ND
Acrylonitrile	.7	UG/L	ND	ND	ND	ND
Chloroform	.2	UG/L	11.6	7.0	19.3	22.0
1,1,1-trichloroethane	.4	UG/L	ND	ND	ND	ND
Carbon tetrachloride	.4	UG/L	ND	ND	ND	ND
Benzene	.4	UG/L	ND	ND	ND	ND
1,2-dichloroethane	.5	UG/L	ND	ND	ND	ND
Trichloroethene	.7	UG/L	ND	ND	ND	ND
1,2-dichloropropane	.3	UG/L	ND	ND	ND	ND
Bromodichloromethane	.5	UG/L	8.9	3.8	10.9	11.3
2-chloroethylvinyl ether	1.1	UG/L	ND	ND	ND	ND
cis-1,3-dichloropropene	.3	UG/L	ND	ND	ND	ND
Toluene	.4	UG/L	ND	ND	ND	ND
trans-1,3-dichloropropene	.5	UG/L	ND	ND	ND	ND
1,1,2-trichloroethane	.5	UG/L	ND	ND	ND	ND
Tetrachloroethene	1.1	UG/L	ND	ND	ND	ND
Dibromochloromethane	.6	UG/L	5.2	1.7	4.6	4.3
Chlorobenzene	.4	UG/L	ND	ND	ND	ND
Ethylbenzene	.3	UG/L	ND	ND	ND	ND
Bromoform	.5	UG/L	0.9	ND	ND	ND
1,1,2,2-tetrachloroethane	.5	UG/L	ND	ND	ND	ND
1,3-dichlorobenzene	.5	UG/L	ND	ND	ND	ND
1,4-dichlorobenzene	.4	UG/L	ND	ND	ND	ND
1,2-dichlorobenzene	.4	UG/L	ND	ND	ND	ND
Halomethane Purgeable Cmpnds	.7	UG/L	1.5	0.0	0.0	0.0
Total Dichlorobenzenes	.5	UG/L	0.0	0.0	0.0	0.0
Total Chloromethanes	.5	UG/L	12.2	7.6	19.9	22.0
Purgeable Compounds	1.3	UG/L	27.2	13.1	35.4	37.6

Additional analytes determined

Allyl chloride	.6	UG/L	ND	ND	ND	ND
Methyl tert-butyl ether	.4	UG/L	ND	ND	ND	ND
Chloroprene	.4	UG/L	ND	ND	ND	ND
1,2-dibromoethane	.3	UG/L	ND	ND	ND	ND
2-butanone	6.3	UG/L	ND	ND	ND	ND
Methyl methacrylate	.8	UG/L	ND	ND	ND	ND
2-nitropropane	12	UG/L	ND	ND	ND	ND
4-methyl-2-pentanone	1.3	UG/L	ND	ND	ND	ND
meta,para xylenes	.6	UG/L	ND	ND	ND	ND
ortho-xylene	.4	UG/L	ND	ND	ND	ND
Isopropylbenzene	.3	UG/L	ND	ND	ND	ND
Styrene	.3	UG/L	ND	ND	ND	ND
Benzyl chloride	1.1	UG/L	ND	ND	ND	ND
1,2,4-trichlorobenzene	.7	UG/L	ND	ND	ND	ND
Methyl Iodide	.6	UG/L	ND	ND	ND	ND
Carbon disulfide	.6	UG/L	ND	ND	ND	ND
Acetone	4.5	UG/L	6.3	5.3	ND	6.0

\* Method blank was above the MDL for this analyte. ND= not detected

South Bay Water Reclamation Plant  
Reclaimed Water - Benzidines

Annual 2009

Source:		SB_REC_WATER_34	SB_REC_WATER_34	SB_REC_WATER_34	SB_REC_WATER_34
Date:	MDL Units	03-FEB-2009	05-MAY-2009	04-AUG-2009	06-OCT-2009
		P458542	P468816	P481355	P490617
		=====	=====	=====	=====
3,3-dichlorobenzidine	2.44 UG/L	ND	ND	ND	ND
Benzidine	1.52 UG/L	ND	ND	ND	ND

ND= Not Detected

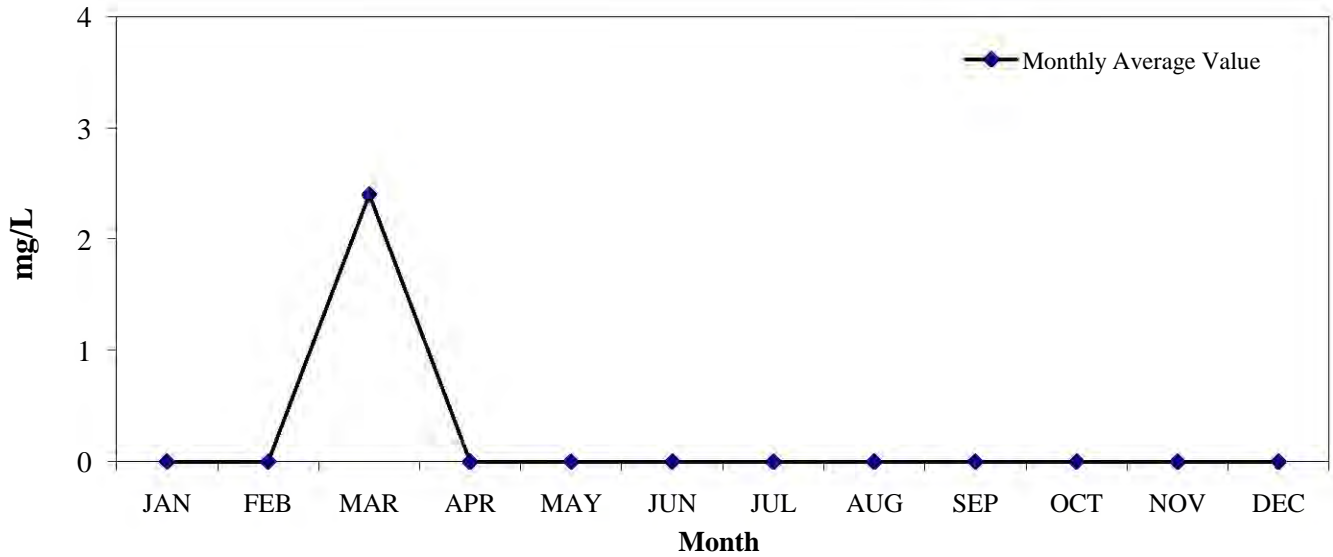


## B. Reclaimed Water Graphs

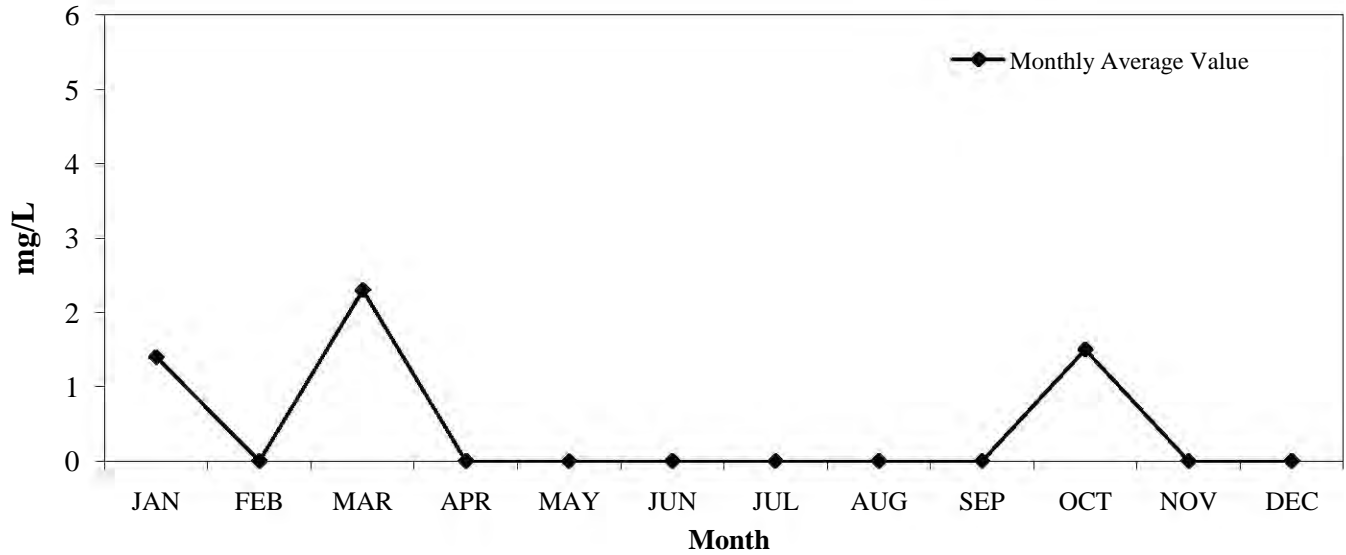
Graphs of monthly averages for permit parameters with measurable concentration averages.

Please note that many of the graphs are on expanded scales. That is, they normally don't go to zero concentrations but show, in magnified scale, that range of concentrations where variation takes place. This makes differences and some trends obvious that might normally not be noticed. However, it also provides the temptation to interpret minor changes or trends as being of more significance than they are. Frequent reference to the scales and the actual differences in concentrations is therefore necessary.

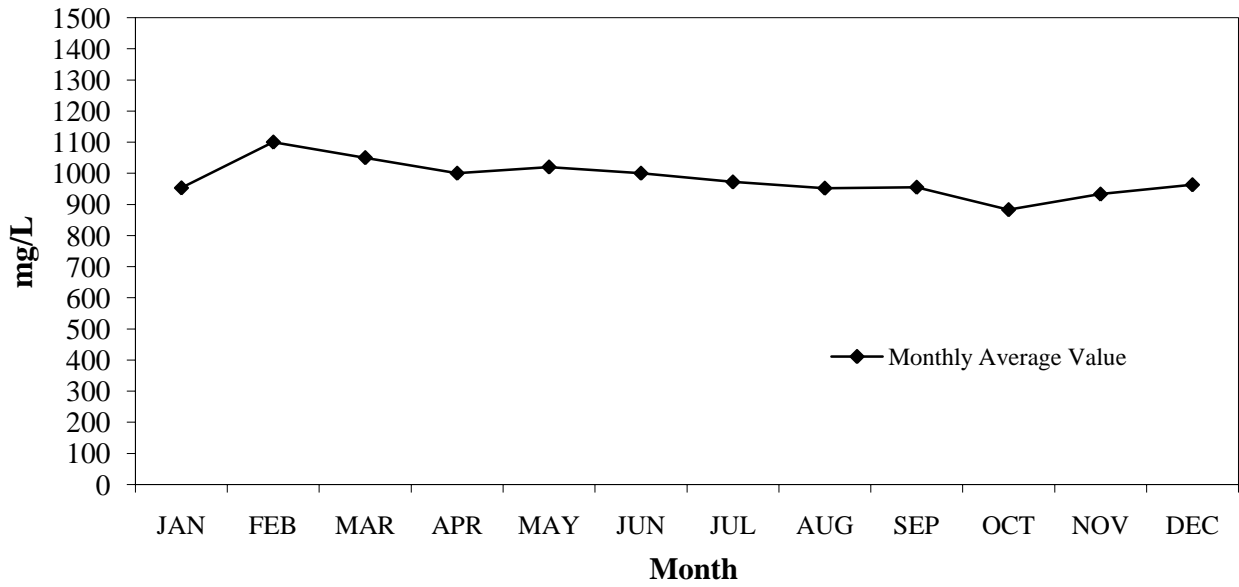
2009 South Bay Reclaim Water  
Biological Oxygen Demand



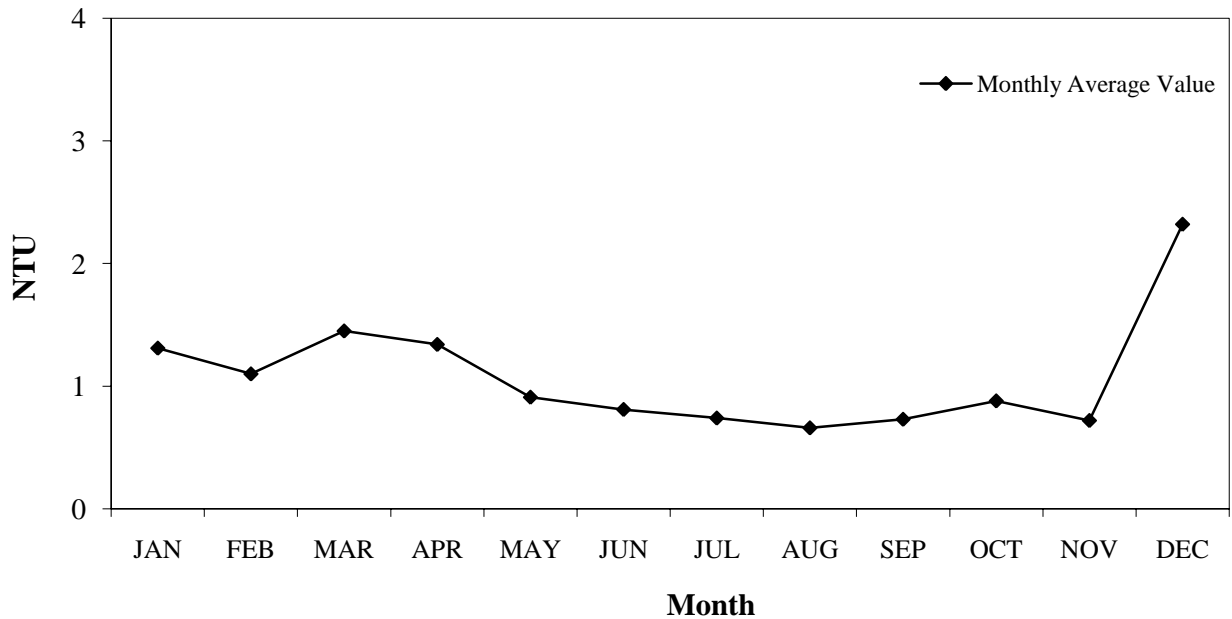
2009 South Bay Reclaim Water  
Total Suspended Solids



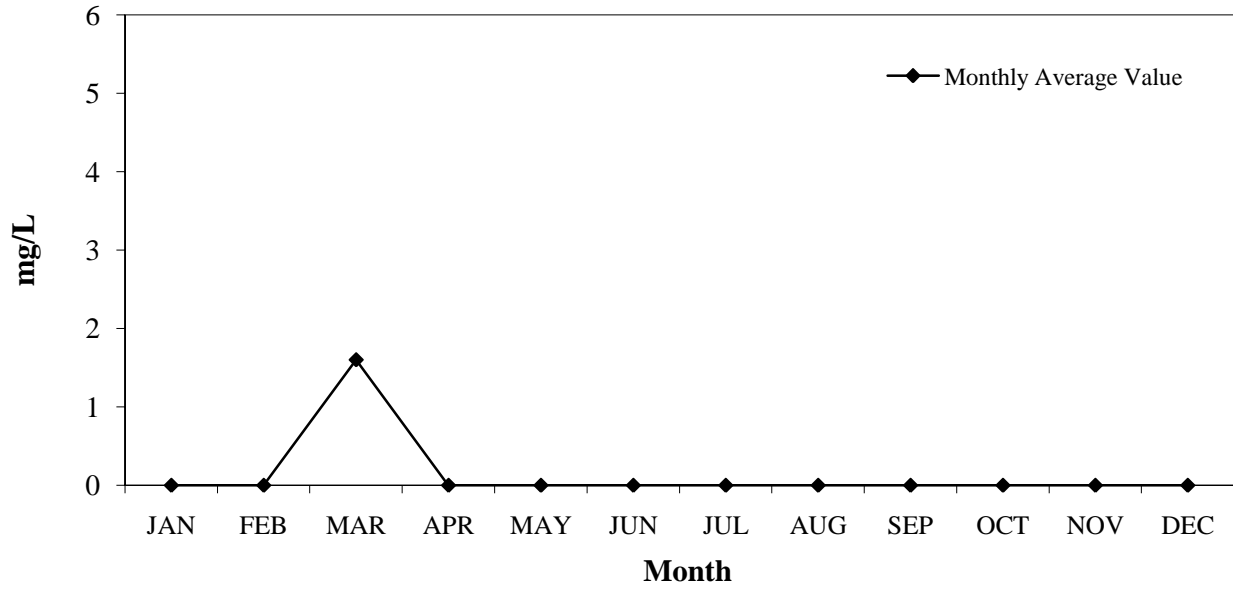
2009 South Bay Reclaim Water  
Total Dissolved Solids



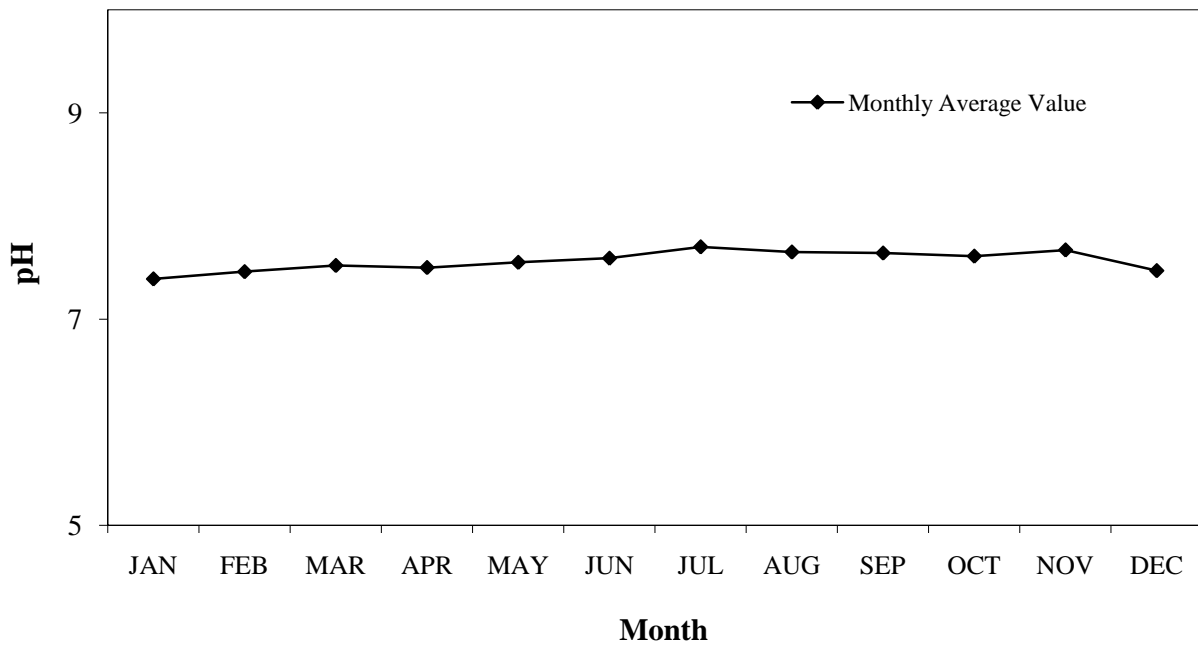
2009 South Bay Reclaim Water  
Turbidity



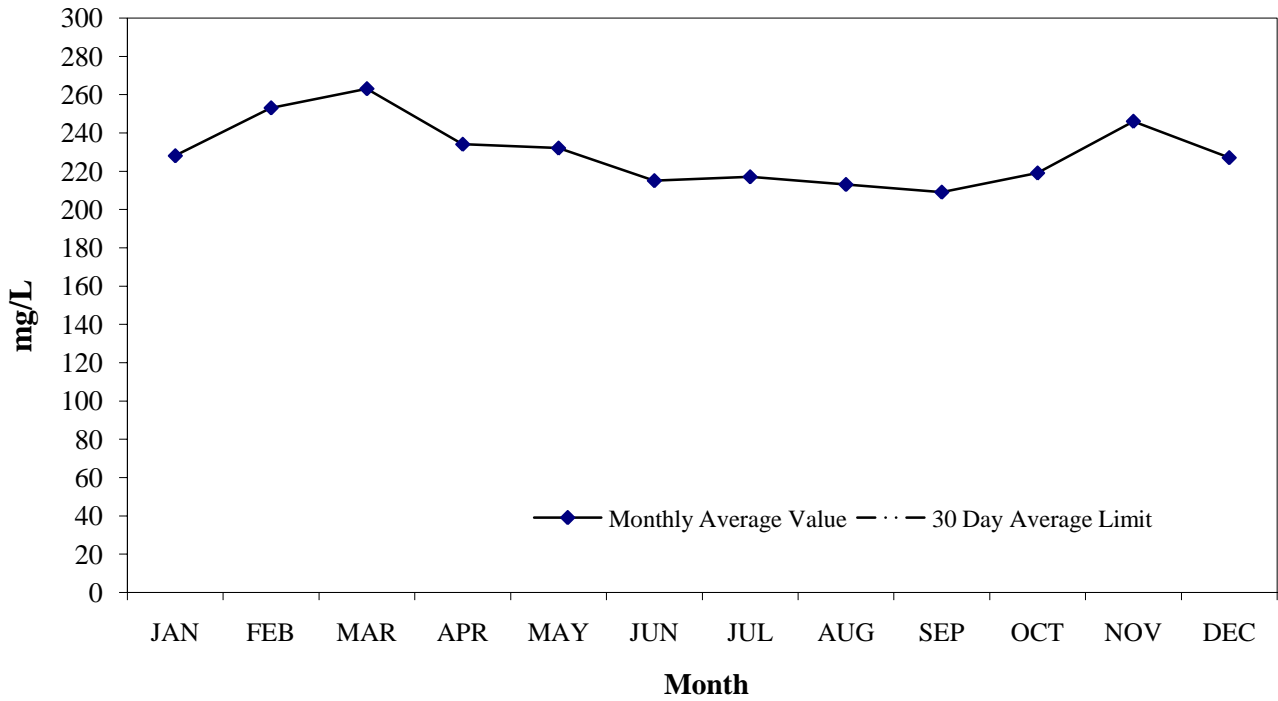
2009 South Bay Reclaim Water  
Volatile Suspended Solids



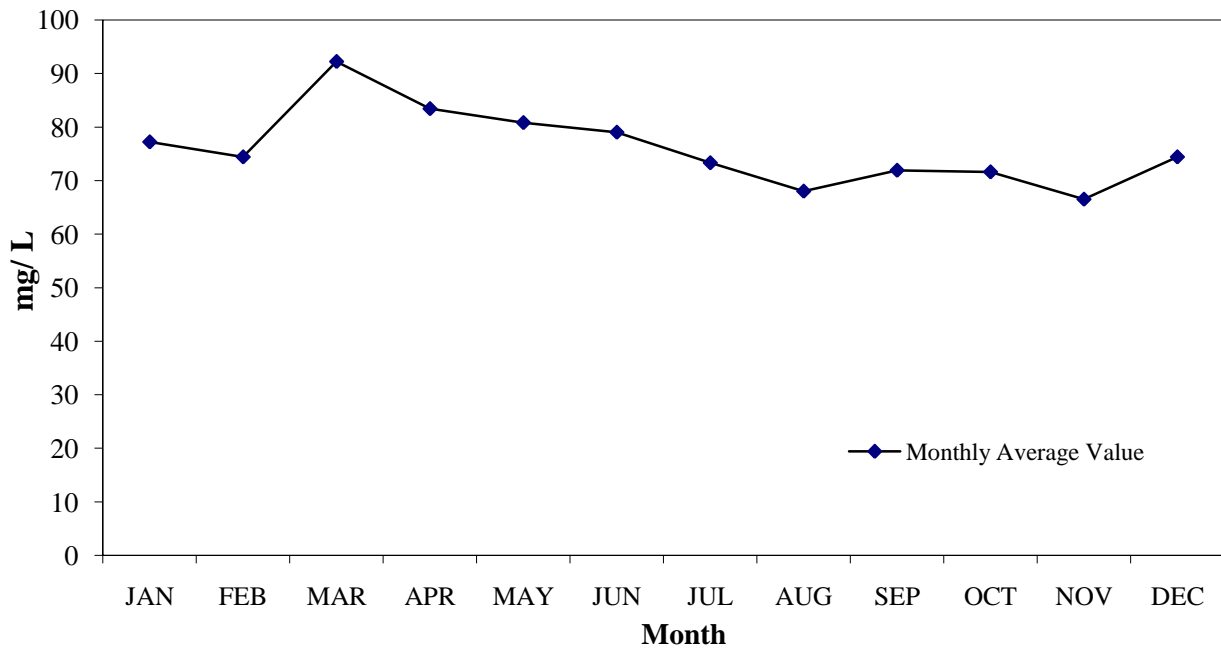
2009 South Bay Reclaim Water  
pH



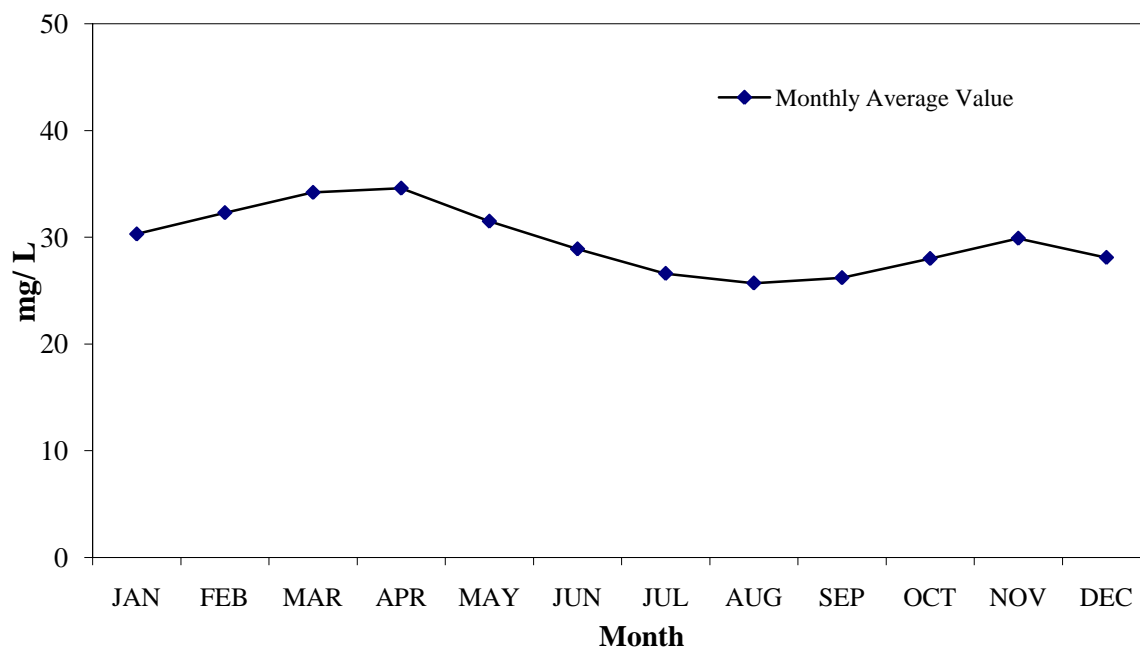
2009 South Bay Reclaim Water  
Chloride



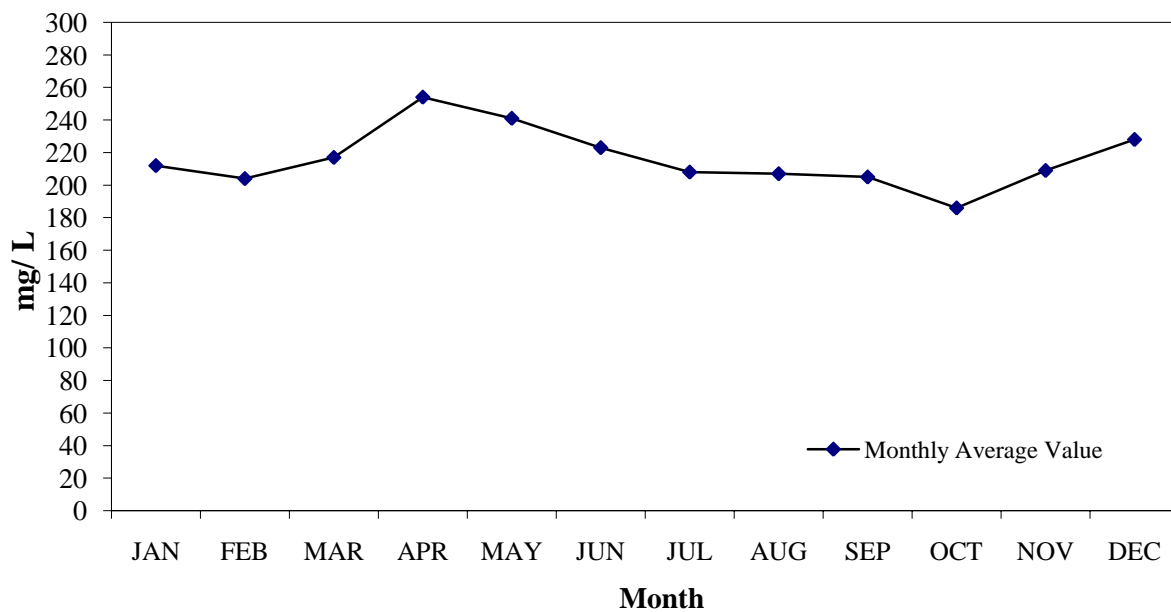
2009 South Bay Reclaim Water  
Calcium



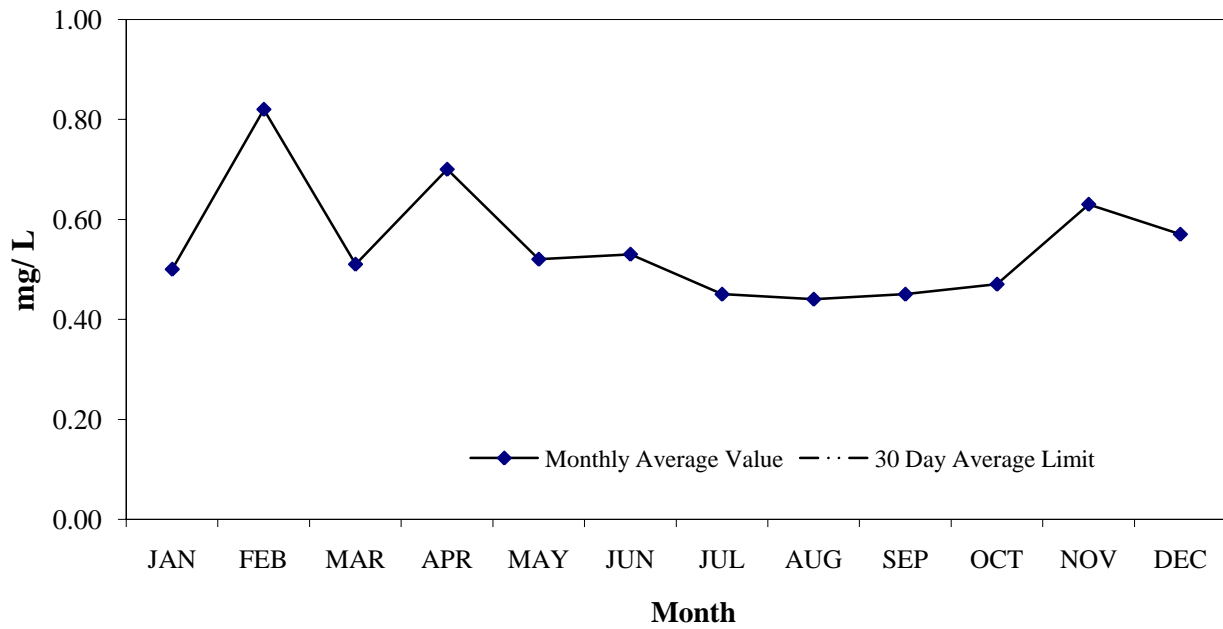
2009 South Bay Reclaim Water  
**Magnesium**



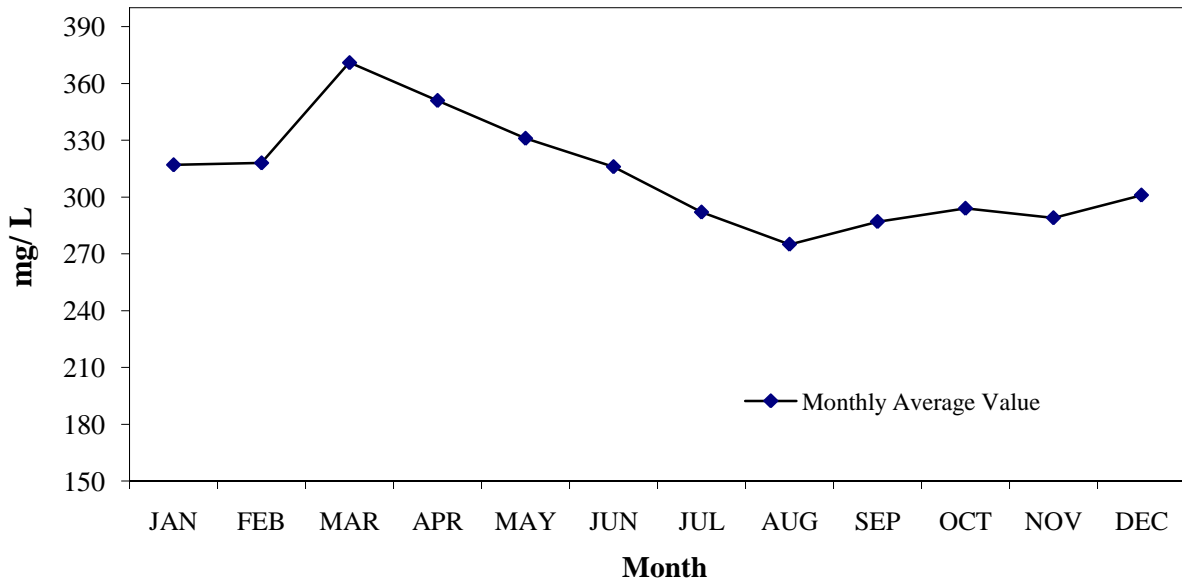
2009 South Bay Reclaim Water  
**Sulfate**



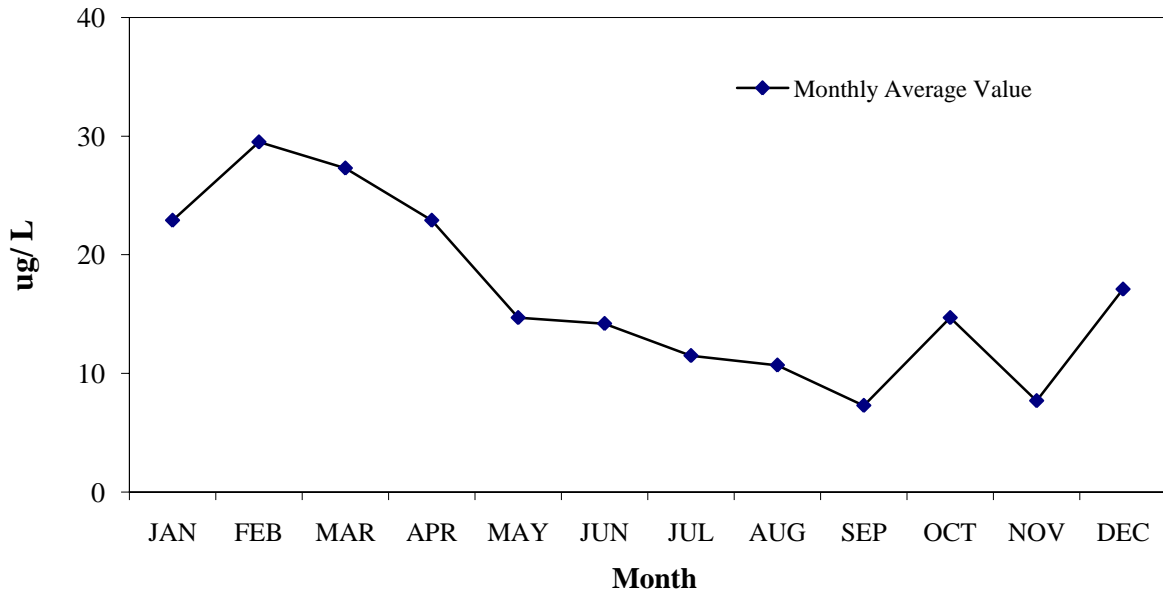
2009 South Bay Reclaim Water  
**Fluoride**



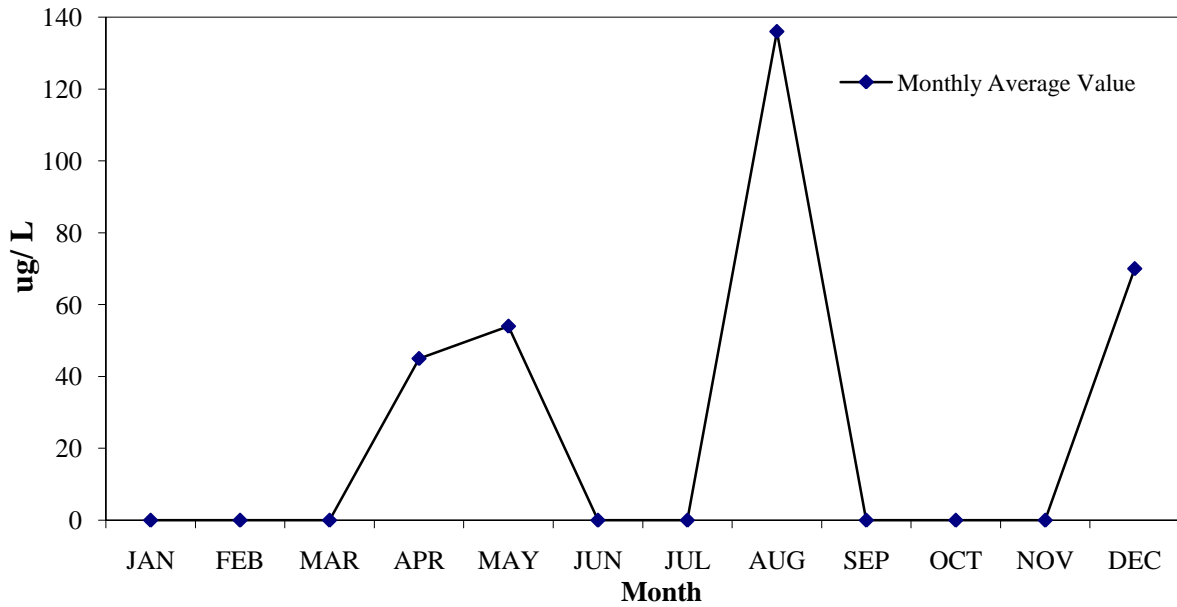
2009 South Bay Reclaim Water  
**Total Hardness**



2009 South Bay Reclaim Water  
**Manganese**

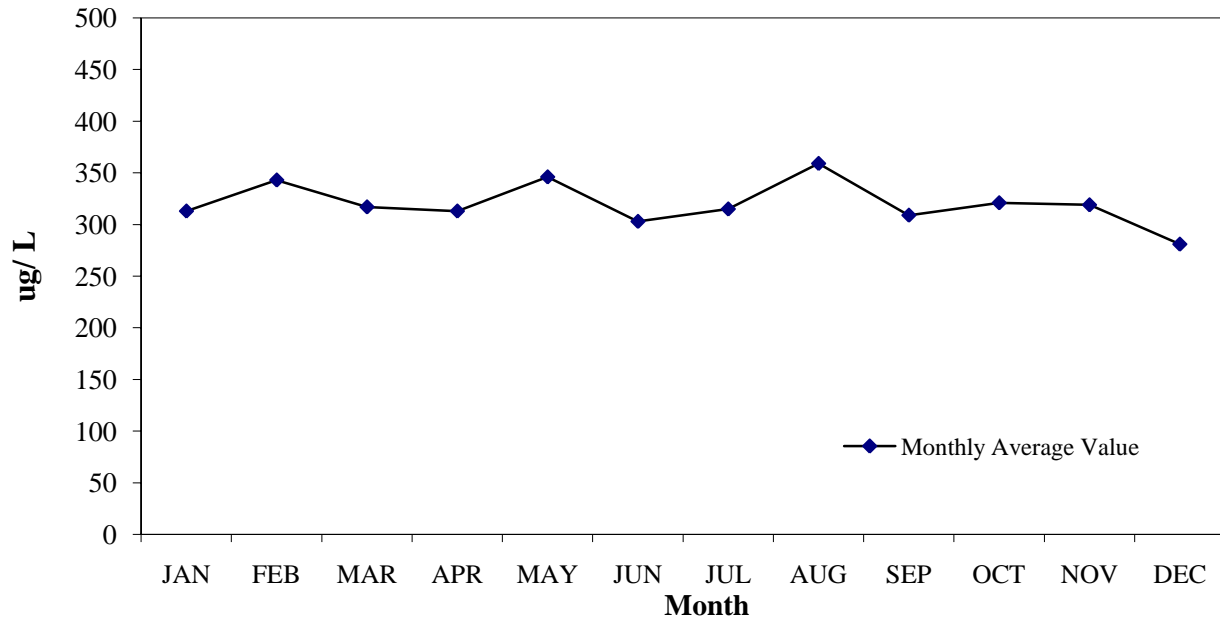


2009 South Bay Reclaim Water  
**Iron**

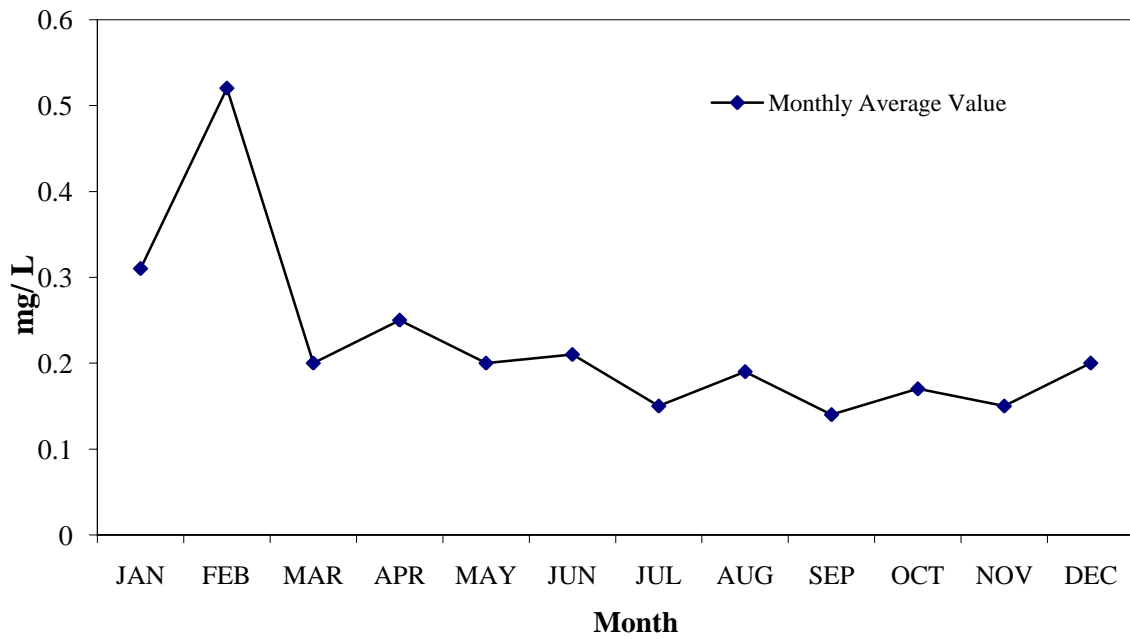




2009 South Bay Reclaim Water  
**Boron**



2009 South Bay Reclaim Water  
**MBAS**

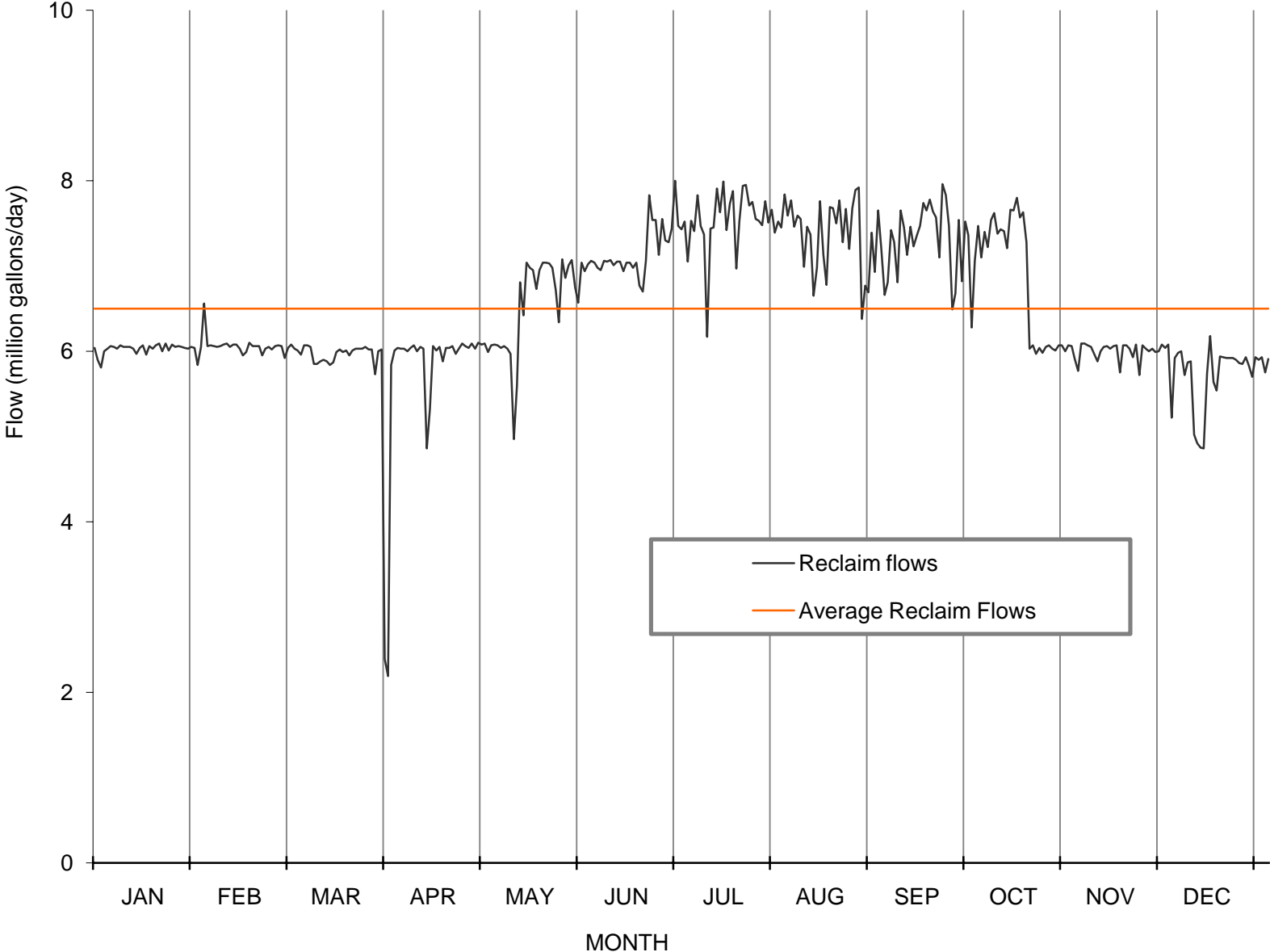


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### C. Daily Values of Selected Parameters.

Daily values of selected parameters (e.g. TSS, Flow, BOD, etc.) are tabulated and presented graphically; statistical summary information is provided.

# South Bay Wastewater Reclamation Plant 2009 Reclaimed Production Flows



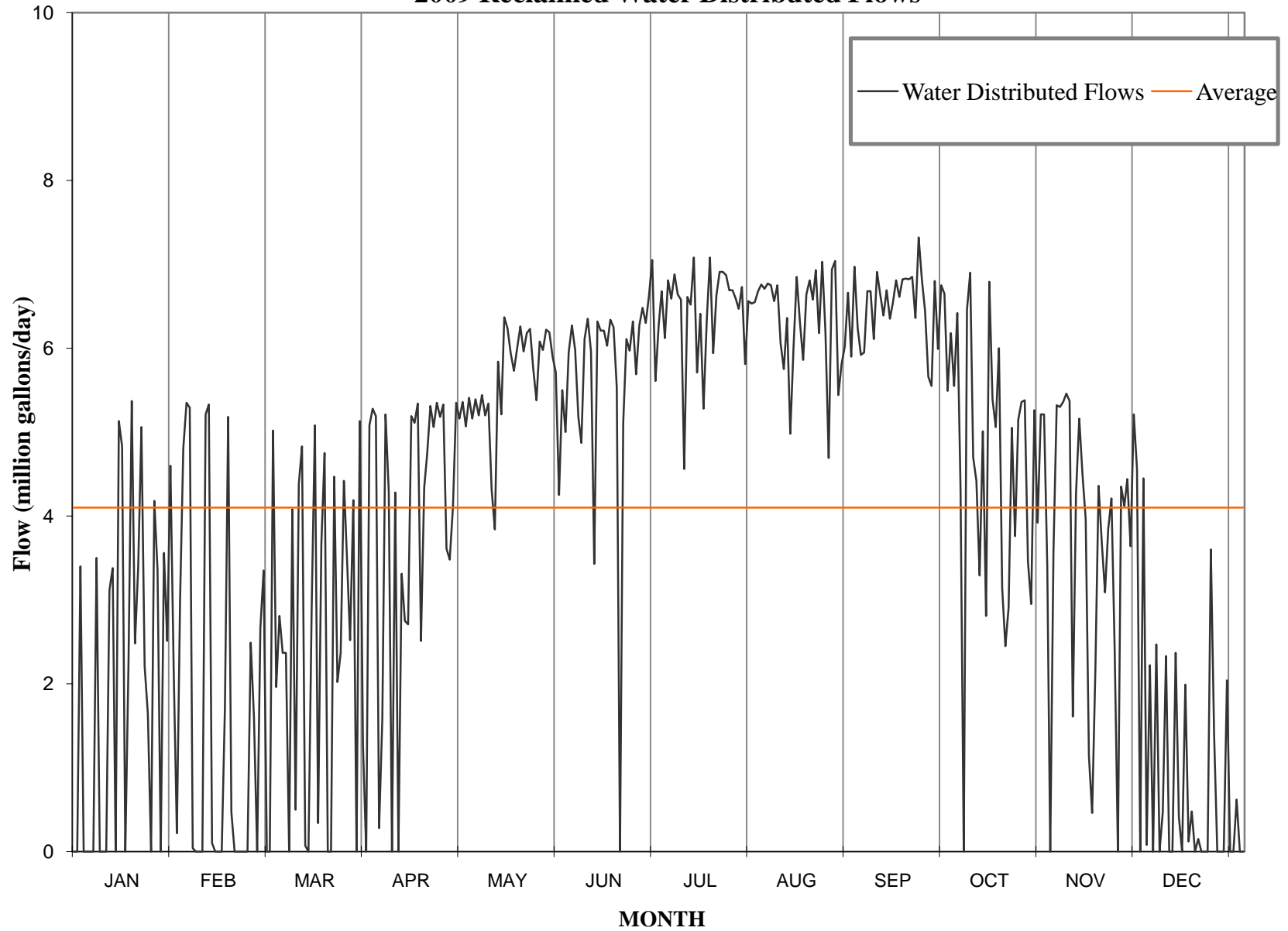
**Daily Flows - Reclaim Water Produced in 2009**

Days	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	6.04	6.04	5.92	2.39	6.08	7.04	7.47	7.52	7.65	7.06	5.91	5.22	
2	5.90	5.84	6.04	2.19	6.09	6.94	7.43	7.45	7.21	7.47	5.77	5.92	
3	5.81	6.05	6.08	5.84	5.99	7.02	7.52	7.84	6.66	7.10	6.09	5.98	
4	6.00	6.56	6.03	6.01	6.07	7.06	7.05	7.59	6.81	7.40	6.09	6.00	
5	6.03	6.06	6.01	6.04	6.08	7.04	7.53	7.77	7.42	7.22	6.07	5.72	
6	6.06	6.07	5.96	6.03	6.07	6.98	7.41	7.46	7.28	7.54	6.05	5.87	
7	6.05	6.06	6.07	6.03	6.04	6.95	7.83	7.59	6.81	7.62	5.97	5.88	
8	6.03	6.05	6.07	6.00	6.06	7.06	7.47	7.55	7.65	7.38	5.88	5.02	
9	6.07	6.06	6.05	6.04	6.03	7.05	7.37	6.99	7.45	7.43	6.00	4.92	
10	6.05	6.08	5.85	6.07	5.97	7.07	6.17	7.46	7.13	7.41	6.05	4.87	
11	6.05	6.09	5.85	6.00	4.97	7.01	7.44	7.37	7.46	7.21	6.06	4.86	
12	6.05	6.05	5.88	6.05	5.60	7.05	7.45	6.65	7.23	7.66	6.03	5.74	
13	6.03	6.08	5.90	6.03	6.81	7.05	7.91	6.98	7.36	7.65	6.06	6.18	
14	5.97	6.08	5.88	4.86	6.42	6.94	7.63	7.76	7.47	7.80	6.07	5.64	
15	6.04	6.03	5.84	5.32	7.04	7.04	7.99	7.13	7.74	7.57	5.75	5.54	
16	6.07	5.95	5.87	6.06	6.98	7.04	7.42	6.78	7.65	7.63	6.07	5.94	
17	5.96	5.99	5.99	6.01	6.95	6.98	7.73	7.69	7.78	7.28	6.07	5.93	
18	6.06	6.10	6.02	6.05	6.73	7.04	7.88	7.68	7.64	6.03	6.03	5.92	
19	6.03	6.06	5.99	5.88	6.95	6.77	6.97	7.50	7.57	6.07	5.93	5.92	
20	6.07	6.06	6.01	6.04	7.04	6.70	7.53	7.77	7.10	5.97	6.08	5.92	
21	6.09	6.06	5.95	6.04	7.04	7.06	7.94	7.28	7.96	6.04	5.72	5.90	
22	6.00	5.95	6.01	6.06	7.03	7.83	7.95	7.67	7.83	5.98	6.07	5.86	
23	6.09	6.03	6.03	5.97	6.98	7.54	7.71	7.20	7.47	6.05	6.03	5.85	
24	6.01	6.05	6.03	6.03	6.72	7.54	7.75	7.68	6.49	6.07	6.00	5.93	
25	6.08	6.02	6.03	6.09	6.34	7.13	7.55	7.89	6.68	6.03	6.03	5.83	
26	6.05	6.06	6.05	6.06	7.08	7.55	7.53	7.92	7.54	6.01	5.99	5.70	
27	6.06	6.07	6.02	6.04	6.86	7.30	7.48	6.38	6.82	6.07	6.00	5.93	
28	6.05	6.06	6.02	6.09	7.01	7.28	7.76	6.77	7.52	6.07	6.08	5.90	
29	6.04		5.73	6.03	7.07	7.44	7.51	6.69	7.36	6.00	6.04	5.93	
30	6.03		6.00	6.10	6.75	8.00	7.66	7.39	6.28	6.07	6.08	5.75	Annual
31	6.05		6.02		6.57		7.39	6.93		6.06		5.91	Summary
<b>Average</b>	6.03	6.06	5.97	5.72	6.50	7.15	7.53	7.37	7.30	6.80	6.00	5.73	6.51
<b>Minimum</b>	5.81	5.84	5.73	2.19	4.97	6.70	6.17	6.38	6.28	5.97	5.72	4.86	2.19
<b>Maximum</b>	6.09	6.56	6.08	6.10	7.08	8.00	7.99	7.92	7.96	7.80	6.09	6.18	8.00
<b>Total</b>	186.9	169.7	185.2	171.5	201.4	214.5	233.4	228.3	219.0	211.0	180.1	177.5	2378.4

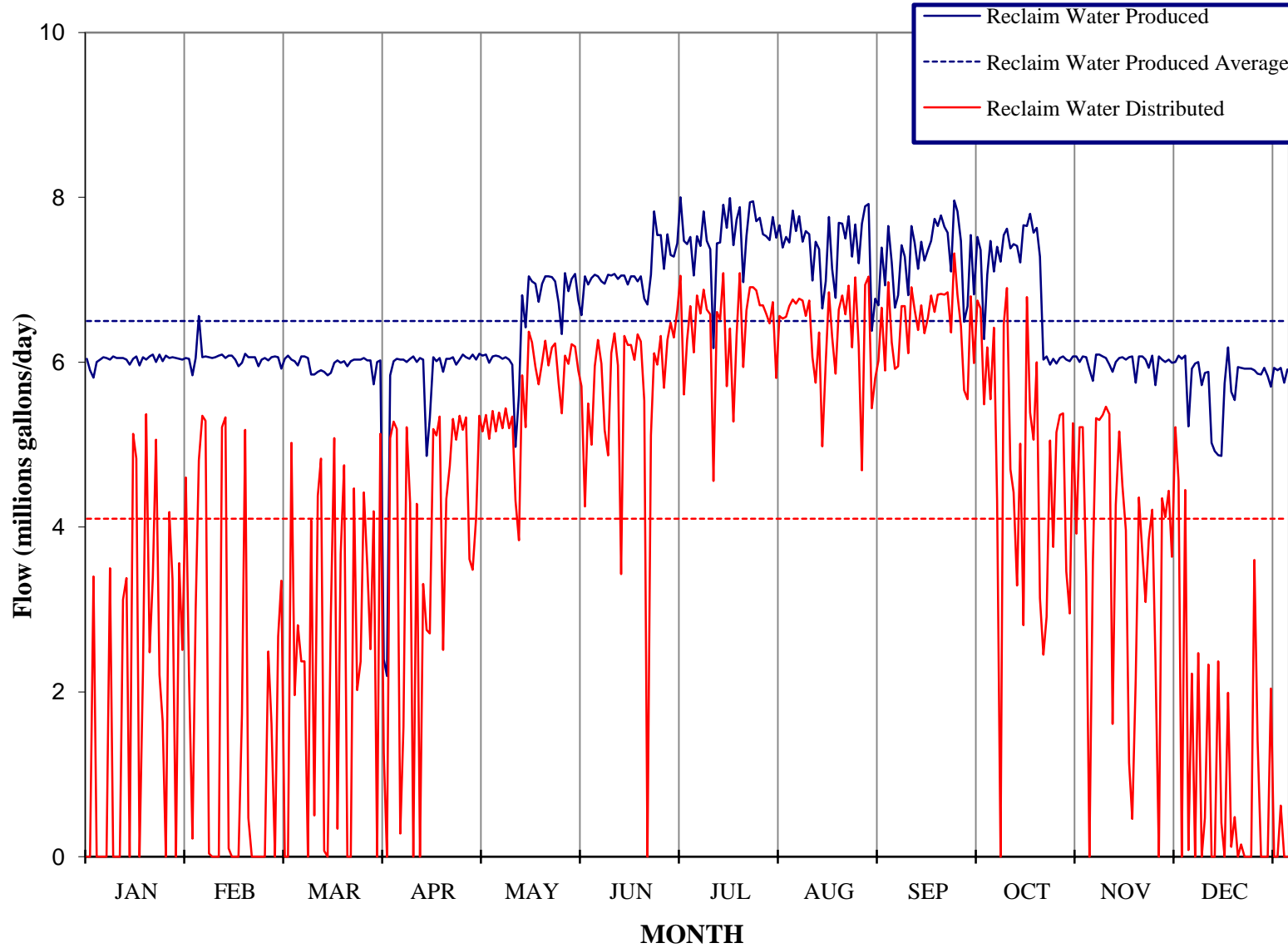
**Daily Flows - Reclaim Water Distributed in 2009**

Days	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.00	2.20	3.35	1.26	5.16	4.25	5.61	6.55	6.97	6.18	0.00	0.08	
2	0.00	0.22	0.00	0.00	5.36	5.50	6.27	6.68	6.24	5.55	3.58	2.22	
3	3.40	3.00	0.00	5.08	5.07	5.00	6.68	6.76	5.92	6.42	5.32	0.00	
4	0.00	4.81	5.02	5.28	5.41	5.95	6.12	6.71	5.95	4.32	5.30	2.47	
5	0.00	5.35	1.96	5.19	5.16	6.27	6.81	6.77	6.68	0.00	5.36	0.00	
6	0.00	5.29	2.81	0.28	5.39	5.98	6.59	6.75	6.68	6.46	5.46	0.47	
7	0.00	0.04	2.37	1.58	5.20	5.18	6.88	6.56	6.11	6.90	5.37	2.33	
8	3.50	0.00	2.37	5.21	5.44	4.87	6.64	6.75	6.91	4.70	1.61	0.00	
9	0.00	0.00	0.00	4.29	5.20	6.11	6.58	6.06	6.64	4.42	4.27	0.00	
10	0.00	0.00	4.08	0.00	5.34	6.35	4.56	5.75	6.39	3.29	5.16	2.37	
11	0.00	5.21	0.50	4.28	4.32	5.96	6.61	6.36	6.69	5.01	4.50	0.41	
12	3.12	5.33	4.38	0.00	3.84	3.43	6.52	4.98	6.35	2.81	3.96	0.00	
13	3.38	0.10	4.83	3.31	5.84	6.32	7.08	6.00	6.54	6.79	1.14	1.99	
14	0.00	0.00	0.07	2.75	5.21	6.21	5.71	6.85	6.81	5.39	0.46	0.12	
15	5.13	0.00	0.00	2.71	6.37	6.21	6.41	6.31	6.61	5.06	2.16	0.48	
16	4.83	0.00	2.92	5.19	6.24	6.03	5.28	5.86	6.82	6.00	4.36	0.00	
17	0.00	1.73	5.08	5.11	5.94	6.34	6.33	6.64	6.83	3.14	3.68	0.15	
18	2.27	5.18	0.34	5.34	5.73	6.25	7.08	6.81	6.82	2.45	3.09	0.00	
19	5.37	0.47	3.67	2.51	6.00	5.53	5.94	6.58	6.85	2.91	3.85	0.00	
20	2.48	0.00	4.75	4.34	6.26	0.00	6.63	6.93	6.36	5.05	4.21	0.00	
21	3.39	0.00	0.00	4.74	5.96	5.11	6.91	6.18	7.32	3.76	2.40	3.60	
22	5.06	0.00	0.00	5.31	6.18	6.11	6.91	7.03	6.82	5.15	0.00	1.41	
23	2.21	0.00	4.47	5.06	6.23	5.97	6.87	6.19	6.44	5.36	4.35	0.00	
24	1.64	0.00	2.02	5.35	5.75	6.32	6.69	4.69	5.66	5.38	4.12	0.00	
25	0.00	2.49	2.37	5.18	5.38	5.69	6.69	6.94	5.55	3.46	4.44	0.00	
26	4.18	1.61	4.42	5.33	6.08	6.27	6.59	7.04	6.80	2.95	3.64	2.04	
27	3.36	0.00	3.53	3.61	5.98	6.48	6.47	5.44	5.99	5.26	5.21	0.00	
28	0.00	2.67	2.52	3.48	6.22	6.30	6.73	5.81	6.75	3.92	4.56	0.00	
29	3.56		4.19	4.11	6.19	6.63	5.81	6.02	6.65	5.21	0.00	0.62	
30	2.51		0.00	5.35	5.90	7.05	6.56	6.66	5.49	5.21	4.45	0.00	
31	4.60		5.13		5.71		6.53	5.90		3.40		0.00	
<b>Average</b>	2.06	1.63	2.49	3.71	5.61	5.66	6.42	6.34	6.49	4.58	3.53	0.67	4.10
<b>Minimum</b>	0.00	0.00	0.00	0.00	3.84	0.00	4.56	4.69	5.49	0.00	0.00	0.00	1.55
<b>Maximum</b>	5.37	5.35	5.13	5.35	6.37	7.05	7.08	7.04	7.32	6.90	5.46	3.60	6.00
<b>Total</b>	64.0	45.7	77.2	111.2	174.1	169.7	199.1	196.6	194.6	141.9	106.0	20.8	125.1

### South Bay Wastewater Reclamation Plant 2009 Reclaimed Water Distributed Flows



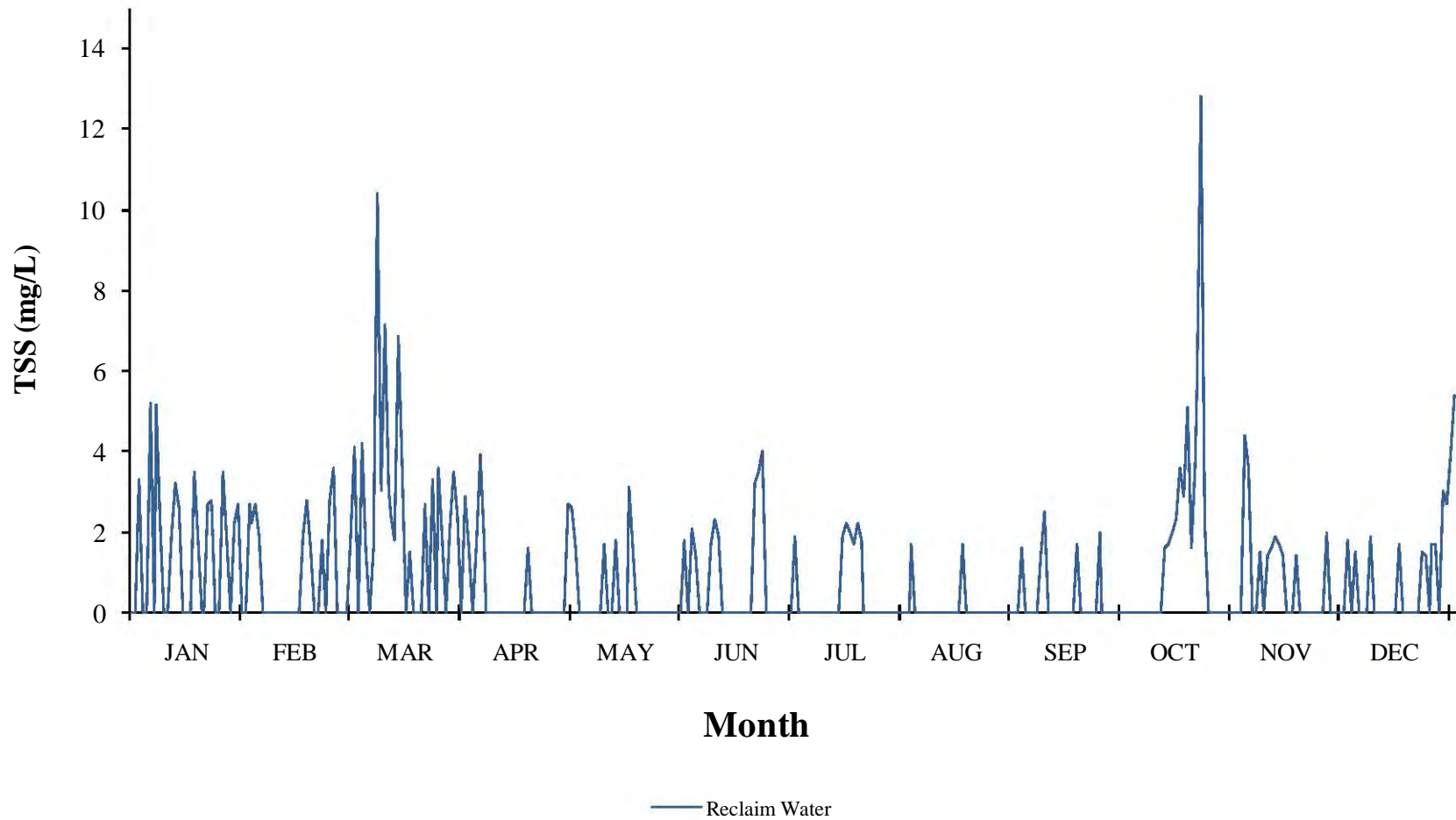
## South Bay Wastewater Reclamation Plant 2009 Reclaim Water Produced and Distributed Flows





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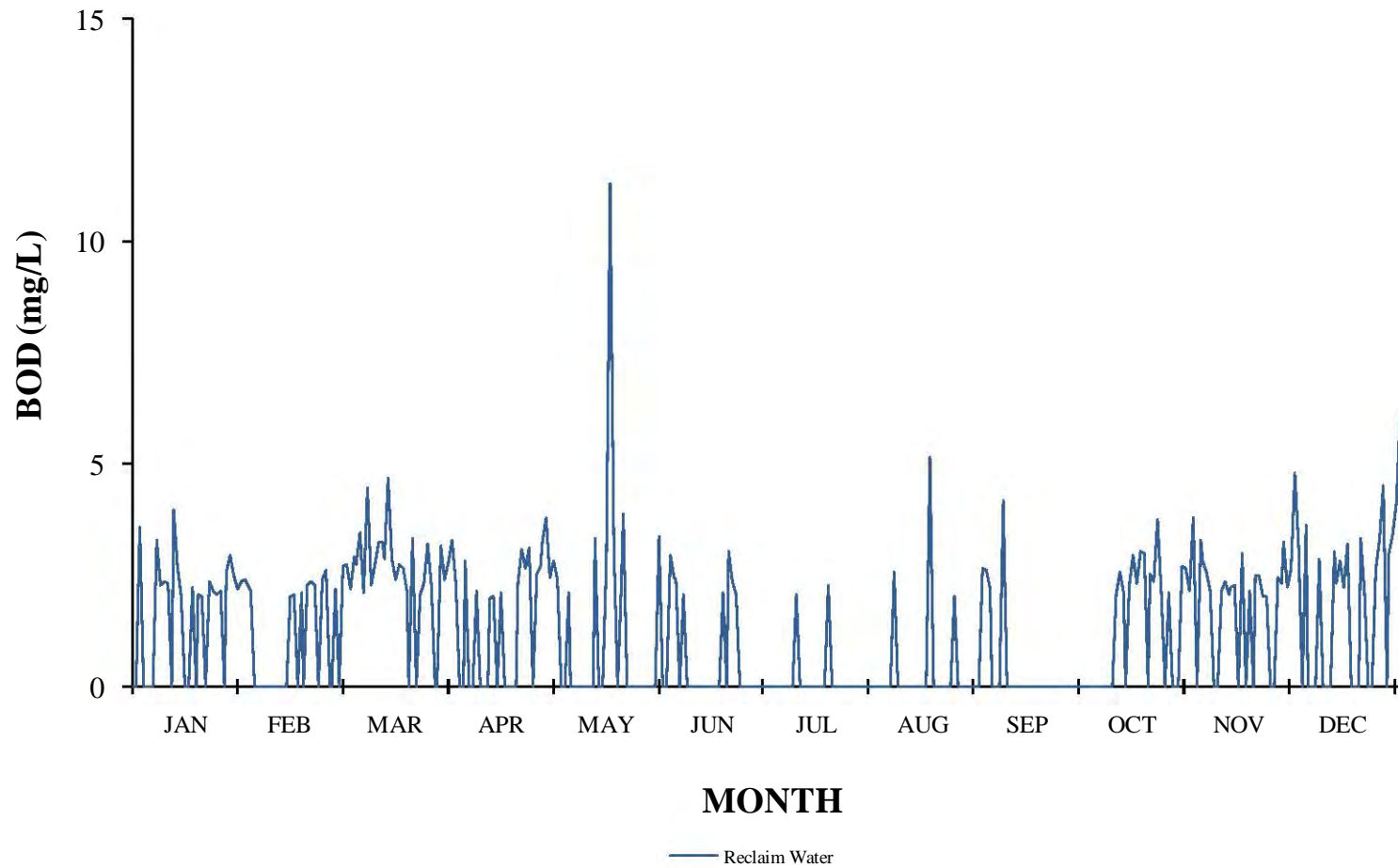
## South Bay Wastewater Reclamation Plant 2009 Total Suspended Solids



Daily Reclaimed Water TSS Values in 2009

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	ND	ND	ND	ND	2.60	1.80	1.90	ND	1.60	ND	4.40	1.50	
2	ND	2.70	1.90	2.90	1.60	ND	ND	1.70	ND	ND	3.60	ND	
3	3.30	2.20	4.10	1.60	ND	2.10	ND	ND	ND	ND	ND	ND	
4	ND	2.70	ND	ND	ND	1.40	ND	ND	ND	ND	ND	ND	
5	ND	1.90	4.20	1.70	ND	ND	ND	ND	ND	ND	1.50	1.90	
6	5.20	ND	1.50	3.90	ND	ND	ND	ND	1.40	ND	ND	ND	
7	ND	ND	ND	1.80	ND	ND	ND	ND	2.50	ND	1.40	ND	
8	5.14	ND	1.60	ND	ND	1.70	ND	ND	ND	ND	1.60	ND	
9	2.30	ND	10.40	ND	ND	2.30	ND	ND	ND	ND	1.90	ND	
10	ND	ND	3.00	ND	1.70	1.90	ND	ND	ND	1.60	1.70	ND	
11	ND	ND	7.14	ND	ND	ND	ND	ND	ND	1.70	1.40	ND	
12	1.90	ND	3.02	ND	ND	ND	ND	ND	ND	2.00	ND	ND	
13	3.20	ND	2.45	ND	1.80	ND	ND	ND	ND	2.30	ND	1.70	
14	2.60	ND	1.80	ND	ND	ND	1.90	ND	ND	3.60	ND	ND	
15	ND	ND	6.86	ND	ND	ND	2.20	ND	ND	2.90	1.40	ND	
16	ND	ND	3.63	ND	ND	ND	2.00	1.70	1.70	5.10	ND	ND	
17	ND	1.90	ND	ND	3.10	ND	1.70	ND	ND	1.60	ND	ND	
18	3.50	2.80	1.50	ND	1.60	ND	2.20	ND	ND	3.70	ND	ND	
19	1.80	1.60	ND	1.60	ND	ND	1.80	ND	ND	5.70	ND	1.50	
20	ND	ND	ND	ND	ND	3.20	ND	ND	ND	12.80	ND	1.40	
21	ND	ND	ND	ND	ND	3.50	ND	ND	ND	2.20	ND	ND	
22	2.70	1.80	2.70	ND	ND	4.00	ND	ND	2.00	ND	ND	1.70	
23	2.80	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.00	1.70	
24	ND	2.80	3.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	
25	ND	3.60	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.00	
26	3.50	ND	3.60	ND	ND	ND	ND	ND	ND	ND	ND	2.70	
27	1.80	ND	1.86	ND	ND	ND	ND	ND	ND	ND	ND	3.90	
28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	5.40	
29	2.20		2.10	ND	ND	ND	ND	ND	ND	ND	1.80	5.50	
30	2.70		3.50	2.70	ND	ND	ND	ND	ND	ND	ND	2.20	
31	ND		2.40		ND		ND	ND		ND		ND	
Ave	2.98	2.40	3.46	2.31	2.07	2.43	1.96	1.70	1.84	3.77	2.06	2.62	2.47
Min	1.80	1.60	1.50	1.60	1.60	1.40	1.70	1.70	1.40	1.60	1.40	1.40	1.40
Max	5.20	3.60	10.40	3.90	3.10	4.00	2.20	1.70	2.50	12.80	4.40	5.50	12.80

## South Bay Wastewater Reclamation Plant 2009 Biochemical Oxygen Demand



Daily BOD Values 2009

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	ND	2.37	ND	2.78	2.83	ND	ND	ND	2.62	ND	3.29	3.63	
2	ND	2.4	2.7	3.27	2.41	ND	ND	ND	2.21	ND	2.82	ND	
3	3.57	2.22	2.75	2.3	ND	2.94	ND	ND	ND	ND	2.59	ND	
4	ND	2.16	2.18	ND	ND	2.46	ND	ND	ND	ND	2.17	ND	
5	ND	ND	2.92	ND	2.12	2.41	ND	ND	ND	ND	ND	2.88	
6	ND	ND	2.73	2.81	ND	ND	ND	2.58	4.19	ND	ND	ND	
7	ND	ND	3.46	ND	ND	2.06	ND	ND	ND	ND	2.15	ND	
8	3.3	ND	2.11	ND	ND	ND	ND	ND	ND	2.07	2.36	ND	
9	2.26	ND	4.45	2.17	ND	ND	2.06	ND	ND	2.56	2.06	3.03	
10	2.37	ND	2.27	ND	ND	ND	ND	ND	ND	2.09	2.23	2.32	
11	2.31	ND	2.74	ND	ND	ND	ND	ND	ND	ND	2.29	2.82	
12	ND	ND	3.26	ND	ND	ND	ND	ND	ND	2.28	ND	2.25	
13	3.97	ND	3.25	2	3.31	ND	ND	ND	ND	2.97	2.98	3.21	
14	2.68	ND	2.85	2.03	ND	ND	ND	ND	ND	2.33	ND	ND	
15	2.03	2.01	4.69	ND	ND	ND	ND	ND	ND	3.04	2.16	ND	
16	ND	2.06	2.88	2.11	2.77	ND	ND	5.14	ND	2.99	ND	ND	
17	ND	ND	2.39	ND	11.3	ND	ND	ND	ND	ND	2.49	3.34	
18	2.25	2.1	2.72	ND	3.16	2.12	2.27	ND	ND	2.51	2.47	2.17	
19	ND	ND	2.64	ND	ND	ND	ND	ND	ND	2.36	2.02	ND	
20	2.05	2.26	2.15	ND	2.3	3.02	ND	ND	ND	3.74	2.04	ND	
21	2.01	2.38	ND	2.32	3.9	2.36	ND	ND	ND	2.1	ND	2.62	
22	ND	2.26	3.31	3.08	ND	2.07	ND	ND	ND	ND	ND	3.27	
23	2.35	ND	ND	2.67	ND	ND	ND	2.03	ND	2.11	2.44	4.5	
24	2.13	2.4	2.05	3.11	ND	ND	ND	ND	ND	ND	2.3	ND	
25	2.06	2.62	2.34	ND	ND	ND	ND	ND	ND	ND	3.25	3.01	
26	2.14	ND	3.19	2.54	ND	ND	ND	ND	ND	ND	2.22	3.42	
27	ND	ND	2.28	2.69	ND	ND	ND	ND	ND	2.69	2.64	4.13	
28	2.58	2.19	ND	3.23	ND	ND	ND	ND	ND	2.64	4.8	6.19	
29	2.94		ND	3.78	ND	ND	ND	ND	ND	2.17	3.17	2.68	
30	2.5		3.16	2.44	ND	ND	ND	ND	ND	3.81	ND	2.8	
31	2.21		2.39		3.38		ND	2.64		ND		ND	
Ave	2.51	2.26	2.84	2.67	3.75	2.43	0.14	0.40	0.30	1.43	1.90	1.88	1.88
Min	2.01	2.01	2.05	2.00	2.12	2.06	2.06	2.03	2.21	2.07	2.02	2.17	2.00
Max	3.97	2.62	4.69	3.78	11.30	3.02	2.27	5.14	4.19	3.81	4.80	6.19	11.30



E. UV Performance 2009

UV PERFORMANCE REPORT  
CY 2009

Monthly Averages

Date	UV	UV DOSE	BANK 1	BANK 2	BANK 3	BANK 4
	TRANSMITTANCE		POWER	POWER	POWER	POWER
	pct	mj/cm2	pct	pct	pct	pct
Jan-09	67.89	163.95	56.00	54.72	57.39	57.89
Feb-09	66.31	167.40	65.25	52.50	57.39	65.50
Mar-09	65.26	179.32	69.61	63.65	64.48	65.91
Apr-09	67.44	169.17	63.33	60.59	49.07	59.96
May-09	67.29	155.38	57.03	50.81	55.00	56.74
Jun-09	68.70	151.32	56.28	58.90	59.55	59.48
Jul-09	71.51	152.52	56.84	56.00	56.74	58.32
Aug-09	72.65	154.09	56.45	52.97	55.06	56.32
Sep-09	71.70	155.76	57.37	54.07	55.83	54.93
Oct-09	69.66	158.80	52.30	55.80	56.63	57.33
Nov-09	67.47	155.18	0.00	65.89	66.07	64.93
Dec-09	65.08	158.02	0.00	70.00	70.00	67.40
Average	68.41	160.08	49.20	57.99	59.33	60.39

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