

RP-1 Recycled Water Quality (2013)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.1	7.0	7.3
Turbidity	NTU	0.6	0.5	0.7
Total Coliform (7d median)	MPN/100mL	<2	<2	2
EC ²	µmhos/cm	795	776	821
TDS	mg/L	487	476	499
TOC	mg/L	5.8	5.4	6.4
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	138	121	145
TIN	mg/L	7.6	6.3	9.4
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	44	40	47
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	115	110	121
Fluoride	mg/L	0.2	0.2	0.3
Magnesium	mg/L	10	10	11
NO ₃ -N	mg/L	7.6	6.3	9.4
Sodium	mg/L	104	99	110
Sulfate	mg/L	47	41	52
Total Hardness	mg/L as CaCO ₃	152	141	162
TR Manganese	µg/L	12	6	17
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	12	9	14
TR Chromium	µg/L	1.0	0.8	2.2
TR Copper	µg/L	2	2	3
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	4	2	11
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	23	17	30
Silica	mg/L	25	24	27
Orthophosphate	mg/L	<0.6	<0.6	0.8

¹ Average, Minimum, and Maximum values based on monthly averages

² EC values based on 24-hour composite lab samples, not continuous monitoring

RP-4 Recycled Water Quality (2013)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.1	7.0	7.3
Turbidity	NTU	0.6	0.4	0.8
Total Coliform (7d median)	MPN/100mL	<2	<2	<2
EC ²	µmhos/cm	754	700	800
TDS	mg/L	457	428	492
TOC	mg/L	4.1	3.5	4.8
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	133	123	141
TIN	mg/L	4.0	2.5	6.0
Boron	mg/L	0.3	0.2	0.3
Calcium	mg/L	42	39	46
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	116	100	132
Fluoride	mg/L	0.2	0.1	0.2
Magnesium	mg/L	11	10	12
NO ₃ -N	mg/L	4.0	2.5	6.0
Sodium	mg/L	100	91	108
Sulfate	mg/L	50	43	58
Total Hardness	mg/L as CaCO ₃	148	138	157
Iron	µg/L	46	34	61
Silica	mg/L	23	19	27
Orthophosphate	mg/L	3.1	1.4	5.2

¹ Average, Minimum, and Maximum values based on monthly averages

² EC values based on 24-hour composite lab samples, not continuous monitoring

RP-5 Recycled Water Quality (2013)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	3
pH	units	7.1	6.8	7.3
Turbidity	NTU	0.8	0.4	1.4
Total Coliform (7d median)	MPN/100mL	<2	<2	3
EC ²	µmhos/cm	880	845	920
TDS	mg/L	520	507	538
TOC	mg/L	4.5	4.2	5.1
NH ₃ -N	mg/L	0.2	<0.1	0.4
Bicarbonate Alkalinity	mg/L as CaCO ₃	141	131	154
TIN	mg/L	6.6	5.1	7.0
Boron	mg/L	0.3	0.2	0.3
Calcium	mg/L	57	54	60
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	138	124	147
Fluoride	mg/L	0.2	0.1	0.3
Magnesium	mg/L	13	12	14
NO ₃ -N	mg/L	6.6	5.1	7.0
Sodium	mg/L	108	97	117
Sulfate	mg/L	60	52	79
Total Hardness	mg/L as CaCO ₃	195	182	201
TR Manganese	µg/L	9	2	26
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	30	19	53
TR Chromium	µg/L	1.1	0.9	1.7
TR Copper	µg/L	7	5	10
TR Cadmium	µg/L	<0.25	<0.25	0.28
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	3	3	6
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	46	35	58
Silica	mg/L	23	21	26

¹ Average, Minimum, and Maximum values based on monthly averages

² EC values based on 24-hour composite lab samples, not continuous monitoring

CCWRF Recycled Water Quality (2013)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.0	6.8	7.0
Turbidity	NTU	0.6	0.4	0.9
Total Coliform (7d median)	MPN/100mL	<2	<2	2
EC ²	µmhos/cm	894	865	915
TDS	mg/L	521	504	531
TOC	mg/L	4.8	4.5	5.2
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	137	124	151
TIN	mg/L	4.8	4.0	6.0
Boron	mg/L	0.3	0.2	0.3
Calcium	mg/L	53	48	56
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	145	129	154
Fluoride	mg/L	0.2	0.2	0.2
Magnesium	mg/L	13	12	14
NO ₃ -N	mg/L	4.7	3.9	6.0
Sodium	mg/L	113	105	124
Sulfate	mg/L	64	57	73
Total Hardness	mg/L as CaCO ₃	183	170	194
TR Manganese	µg/L	4	2	10
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	16	12	19
TR Chromium	µg/L	1.0	0.7	1.6
TR Copper	µg/L	6	6	7
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	3	2	8
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	41	22	57
Silica	mg/L	20	17	22

¹ Average, Minimum, and Maximum values based on monthly averages

² EC values based on 24-hour composite lab samples, not continuous monitoring

IEUA Recycled Water Quality (2013) ¹

Parameter	Units	Average ²	Minimum ²	Maximum ²
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	3
pH	units	7.1	6.8	7.3
Turbidity	NTU	0.7	0.4	1.4
Total Coliform (7d median)	MPN/100mL	<2	<2	3
EC ³	µmhos/cm	831	700	920
TDS	mg/L	496	428	538
TOC	mg/L	4.8	3.5	6.4
NH ₃ -N	mg/L	<0.1	<0.1	0.4
Bicarbonate Alkalinity	mg/L as CaCO ₃	137	121	154
TIN	mg/L	5.7	2.5	9.4
Boron	mg/L	0.3	0.2	0.3
Calcium	mg/L	49	39	60
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	129	100	154
Fluoride	mg/L	0.2	0.1	0.3
Magnesium	mg/L	12	10	14
NO ₃ -N	mg/L	5.7	2.5	9.4
Sodium	mg/L	106	91	124
Sulfate	mg/L	55	41	79
Total Hardness	mg/L as CaCO ₃	170	138	201
TR Manganese	µg/L	8	2	26
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	19	9	53
TR Chromium	µg/L	1.0	0.7	2.2
TR Copper	µg/L	5	2	10
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	3	2	11
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	37	17	58
Silica	mg/L	23	17	27

¹ IEUA RW quality includes RP-1, RP-4, RP-5, and CCWRF. Some RW customers may receive RW from each of these facilities dependent upon regional demands

² Average, Minimum, and Maximum values based on monthly averages

³ EC values based on 24-hour composite lab samples, not continuous monitoring