

RP-1 Recycled Water Quality (2016)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.2	7.1	7.4
Turbidity	NTU	0.6	0.5	0.7
Total Coliform (7d median)	MPN/100mL	<2	<1	<2
EC ²	µmhos/cm	830	788	862
TDS	mg/L	530	512	563
TOC	mg/L	5.4	5.2	5.6
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	153	142	164
TIN	mg/L	6.6	5.3	8.9
Boron	mg/L	0.2	0.2	0.2
Calcium	mg/L	46	43	50
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	110	103	119
Fluoride	mg/L	0.3	0.2	0.3
Magnesium	mg/L	9	8	10
NO ₃ -N	mg/L	6.6	5.3	8.9
Sodium	mg/L	96	88	103
Sulfate	mg/L	52	40.4	61.1
Total Hardness	mg/L as CaCO ₃	151	140	166
TR Aluminium	µg/L	48	32	63
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	18	13	23
TR Chromium	µg/L	<0.5	<0.5	0.7
TR Copper	µg/L	4	3	6
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Manganese	µg/L	12	3	37
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	3	2	4
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	27	21	31
Silica	mg/L	26	23	29
Orthophosphate	mg/L	<0.6	<0.6	<0.6

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 (2016)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.1	6.9	7.2
Turbidity	NTU	0.4	0.3	0.4
Total Coliform (7d median)	MPN/100mL	<2	<1	<2
EC ²	µmhos/cm	784	741	837
TDS	mg/L	462	434	500
TOC	mg/L	4.1	3.4	4.6
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	139	120	157
TIN	mg/L	4.7	3.1	6.4
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	41	32	46
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	111	92	130
Fluoride	mg/L	0.2	0.1	0.3
Iron	µg/L	48	41	55
Magnesium	mg/L	9	8	11
NO ₃ -N	mg/L	4.7	3.1	6.3
Sodium	mg/L	94	79	109
Sulfate	mg/L	53	40	71
Total Hardness	mg/L as CaCO ₃	141	114	154
Silica	mg/L	23	15	28
Orthophosphate	mg/L	3.2	1.8	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 (2016)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.0	6.9	7.2
Turbidity	NTU	0.9	0.6	1.1
Total Coliform (7d median)	MPN/100mL	<2	<1	<2
EC ²	µmhos/cm	913	888	955
TDS	mg/L	540	508	568
TOC	mg/L	5.0	4.8	5.3
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	124	115	132
TIN	mg/L	6.5	5.8	7.3
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	53	46	59
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	143	138	147
Fluoride	mg/L	0.2	0.1	0.2
Magnesium	mg/L	12	11	13
NO ₃ -N	mg/L	6.4	5.8	7.2
Sodium	mg/L	102	96	110
Sulfate	mg/L	64	53	87
Total Hardness	mg/L as CaCO ₃	182	164	195
TR Aluminium	µg/L	<25	<25	<25
TR Arsenic	µg/L	<2	<2	2
TR Barium	µg/L	33	28	38
TR Chromium	µg/L	0.7	0.5	0.8
TR Copper	µg/L	9	6	12
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Manganese	µg/L	8	4	16
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	3	3	3
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	54	51	60
Silica	mg/L	20	18	22

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 (2016)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<3
TSS	mg/L	<2	<2	<3
pH	units	7.0	6.9	7.1
Turbidity	NTU	0.7	0.5	0.9
Total Coliform (7d median)	MPN/100mL	<2	<1	<2
EC ²	µmhos/cm	956	894	1,051
TDS	mg/L	564	522	618
TOC	mg/L	6.3	5.2	7.3
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	114	93	131
TIN	mg/L	5.5	4.8	6.2
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	46	35	54
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	148	134	165
Fluoride	mg/L	0.2	0.1	0.3
Magnesium	mg/L	12	10	15
NO ₃ -N	mg/L	5.5	4.8	6.2
Sodium	mg/L	118	109	136
Sulfate	mg/L	92	79	121
Total Hardness	mg/L as CaCO ₃	163	129	194
TR Aluminium	µg/L	63	<25	92
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	17	11	21
TR Chromium	µg/L	0.7	<0.5	1.0
TR Copper	µg/L	8	6	10
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Manganese	µg/L	13	2	28
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	3	2	3
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	71	60	92
Silica	mg/L	16	14	19

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 (2016) ¹

Parameter	Units	Average ²	Minimum ²	Maximum ²
BOD	mg/L	<2	<2	<3
TSS	mg/L	<2	<2	<3
pH	units	7.1	6.9	7.4
Turbidity	NTU	0.6	0.3	1.1
Total Coliform (7d median)	MPN/100mL	<2	<1	<2
EC ³	µmhos/cm	871	741	1051
TDS	mg/L	524	434	618
TOC	mg/L	5.2	3.4	7.3
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	132	93	164
TIN	mg/L	5.8	3.1	8.9
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	47	32	59
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	128	92	165
Fluoride	mg/L	0.2	0.1	0.3
Magnesium	mg/L	10	8	15
NO ₃ -N	mg/L	5.8	3.1	8.9
Sodium	mg/L	103	79	136
Sulfate	mg/L	65	40	121
Total Hardness	mg/L as CaCO ₃	159	114	195
TR Aluminium	µg/L	45	<25	92
TR Arsenic	µg/L	<2	<2	2
TR Barium	µg/L	23	11	38
TR Chromium	µg/L	0.6	<0.5	1.0
TR Copper	µg/L	7	3	12
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Manganese	µg/L	11	2	37
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	3	2	4
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	51	21	92
Silica	mg/L	21	14	29

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