

RP-1 Recycled Water Quality (2017)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.1	6.8	7.2
Turbidity	NTU	0.5	0.4	0.7
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC ²	µmhos/cm	753	719	787
TDS	mg/L	450	408	477
TOC	mg/L	5.8	5.3	6.4
NH ₃ -N	mg/L	<0.1	<0.1	<0.3
Bicarbonate Alkalinity	mg/L as CaCO ₃	132	108	149
TIN	mg/L	6.6	5.4	8.3
Boron	mg/L	0.2	0.2	0.2
Calcium	mg/L	40	25	46
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	105	96	115
Fluoride	mg/L	0.3	0.2	0.3
Magnesium	mg/L	9	7	10
NO ₃ -N	mg/L	6.6	5.4	8.3
Sodium	mg/L	86	79	96
Sulfate	mg/L	44	39	51
Total Hardness	mg/L as CaCO ₃	137	119	155
TR Aluminium	µg/L	94	41	140
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	15	11	21
TR Chromium	µg/L	<0.5	<0.5	0.6
TR Copper	µg/L	4	4	8
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Manganese	µg/L	6	3	15
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	28	23	41
Silica	mg/L	23	19	27
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 (2017)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	6.9	6.8	7.1
Turbidity	NTU	0.5	0.4	0.6
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC ²	µmhos/cm	694	640	807
TDS	mg/L	412	384	481
TOC	mg/L	5.1	4.4	6.1
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	118	82	138
TIN	mg/L	4.5	2.7	7.3
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	34	28	40
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	101	88	130
Fluoride	mg/L	0.2	<0.1	0.2
Iron	µg/L	53	43	64
Magnesium	mg/L	9	7	11
NO ₃ -N	mg/L	4.5	2.7	7.3
Sodium	mg/L	84	75	97
Sulfate	mg/L	44	40	52
Total Hardness	mg/L as CaCO ₃	122	98	141
Silica	mg/L	18	4	21
Orthophosphate	mg/L	3.9	1.5	7.8

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

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

RP-5 Recycled Water Quality (2017)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<4
pH	units	7.0	6.8	7.2
Turbidity	NTU	0.8	0.6	1.0
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC ²	µmhos/cm	842	802	868
TDS	mg/L	490	466	523
TOC	mg/L	5.0	4.4	5.7
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	129	107	164
TIN	mg/L	6.2	5.2	7.0
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	51	44	55
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	128	119	137
Fluoride	mg/L	0.2	0.1	0.2
Magnesium	mg/L	11	10	12
NO ₃ -N	mg/L	6.2	5.2	7.0
Sodium	mg/L	92	83	104
Sulfate	mg/L	62	55	79
Total Hardness	mg/L as CaCO ₃	172	150	184
TR Aluminium	µg/L	<42	<25	146
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	23	19	34
TR Chromium	µg/L	0.7	<0.5	1.4
TR Copper	µg/L	7	4	11
TR Cadmium	µg/L	<0.25	<0.25	0.55
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Manganese	µg/L	21	12	29
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	0.29
TR Zinc	µg/L	41	21	55
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 (2017)

Parameter	Units	Average ¹	Minimum ¹	Maximum ¹
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	3
pH	units	6.9	6.8	7.2
Turbidity	NTU	0.7	0.4	1.0
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC ²	µmhos/cm	817	758	869
TDS	mg/L	472	456	499
TOC	mg/L	5.7	5.2	6.7
NH ₃ -N	mg/L	<0.1	<0.1	0.2
Bicarbonate Alkalinity	mg/L as CaCO ₃	117	99	136
TIN	mg/L	5.3	4.1	6.3
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	44	36	52
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	119	111	128
Fluoride	mg/L	0.2	0.1	0.2
Magnesium	mg/L	9	8	10
NO ₃ -N	mg/L	5.3	4.1	6.3
Sodium	mg/L	99	92	113
Sulfate	mg/L	82	67	104
Total Hardness	mg/L as CaCO ₃	147	129	170
TR Aluminium	µg/L	72	36	152
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	14	9	20
TR Chromium	µg/L	0.7	<0.5	1
TR Copper	µg/L	7	6	11
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Manganese	µg/L	15	1	31
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	54	39	64
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 (2017) 1

Parameter	Units	Average ²	Minimum ²	Maximum ²
BOD	mg/L	<2	<2	<3
TSS	mg/L	<2	<2	<4
pH	units	7.0	6.8	7.2
Turbidity	NTU	0.6	0.4	1.0
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC ³	µmhos/cm	776	640	869
TDS	mg/L	456	384	523
TOC	mg/L	5.4	4.4	6.7
NH ₃ -N	mg/L	<0.1	<0.1	<0.3
Bicarbonate Alkalinity	mg/L as CaCO ₃	124	82	164
TIN	mg/L	5.7	2.7	8.3
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	42	25	55
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	113	88	137
Fluoride	mg/L	0.2	0.1	0.3
Magnesium	mg/L	9	7	12
NO ₃ -N	mg/L	5.6	2.7	8.3
Sodium	mg/L	90	75	113
Sulfate	mg/L	58	39	104
Total Hardness	mg/L as CaCO ₃	145	98	184
TR Aluminium	µg/L	69	<25	92
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	17	9	34
TR Chromium	µg/L	0.6	<0.5	1.4
TR Copper	µg/L	6	4	11
TR Cadmium	µg/L	<0.25	<0.25	0.55
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Manganese	µg/L	14	1	31
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	41	21	64
Silica	mg/L	19	4	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