

RP-1 Recycled Water Quality (2019)

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	7.3
Turbidity	NTU	0.7	0.6	0.9
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC ²	µmhos/cm	800	751	807
TDS	mg/L	521	468	593
TOC	mg/L	7.1	6.0	8.4
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	155	123	178
TIN	mg/L	3.7	2.3	5.0
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	44	41	47
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	105	94	123
Fluoride	mg/L	0.2	0.2	0.4
Magnesium	mg/L	9	8	10
NO ₃ -N	mg/L	3.7	2.2	5.0
Sodium	mg/L	94	87	100
Sulfate	mg/L	45	40	49
Total Hardness	mg/L as CaCO ₃	146	137	152
TR Aluminium	µg/L	83	57	110
TR Arsenic	µg/L	<2	<2	2
TR Barium	µg/L	17	11	23
TR Chromium	µg/L	<0.5	<0.5	0.8
TR Copper	µg/L	4	<2	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	10	4	11
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	5	3	14
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	39	32	48
Silica	mg/L	11	9	13
Orthophosphate	mg/L	<0.3	<0.3	0.5

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 (2019)

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	7.2
Turbidity	NTU	0.5	0.3	0.9
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC ²	µmhos/cm	728	700	789
TDS	mg/L	419	390	469
TOC	mg/L	5.2	4.7	6.3
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	130	109	151
TIN	mg/L	4.3	3.6	5.7
Boron	mg/L	0.3	0.2	0.3
Calcium	mg/L	36	30	40
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	102	91	124
Fluoride	mg/L	0.2	0.1	0.3
Iron	µg/L	49	32	66
Magnesium	mg/L	9	8	11
NO ₃ -N	mg/L	4.3	3.6	5.7
Sodium	mg/L	87	79	95
Sulfate	mg/L	46	39	53
Total Hardness	mg/L as CaCO ₃	129	114	143
Silica	mg/L	20	15	25
Orthophosphate	mg/L	4.2	1.9	8.4

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 (2019)

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	7.3
Turbidity	NTU	0.8	0.6	1.0
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC ²	µmhos/cm	942	924	1,016
TDS	mg/L	543	513	600
TOC	mg/L	5.5	5.0	6.1
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	134	116	155
TIN	mg/L	5.9	2.7	10.5
Boron	mg/L	0.3	0.2	0.3
Calcium	mg/L	57	51	69
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	157	148	167
Fluoride	mg/L	0.1	0.1	0.2
Magnesium	mg/L	14	11	17
NO ₃ -N	mg/L	5.9	2.7	10.3
Sodium	mg/L	102	92	107
Sulfate	mg/L	60	50	74
Total Hardness	mg/L as CaCO ₃	199	176	244
TR Aluminium	µg/L	<25	<25	<25
TR Arsenic	µg/L	<2	<2	3
TR Barium	µg/L	34	24	47
TR Chromium	µg/L	<0.5	<0.5	<0.5
TR Copper	µg/L	7	4	8
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	0.6
TR Manganese	µg/L	23	4	66
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	4	3	4
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	48	33	56
Silica	mg/L	19	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 (2019)

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	7.0
Turbidity	NTU	0.6	0.5	0.7
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC ²	µmhos/cm	856	794	905
TDS	mg/L	524	482	545
TOC	mg/L	6.7	5.5	7.7
NH ₃ -N	mg/L	<0.1	<0.1	0.2
Bicarbonate Alkalinity	mg/L as CaCO ₃	116	102	134
TIN	mg/L	4.8	4.0	5.6
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	44	36	53
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	136	120	158
Fluoride	mg/L	0.1	0.1	0.2
Magnesium	mg/L	11	9	14
NO ₃ -N	mg/L	4.8	4.0	5.6
Sodium	mg/L	107	94	123
Sulfate	mg/L	72	47	110
Total Hardness	mg/L as CaCO ₃	154	137	192
TR Aluminium	µg/L	95	43	131
TR Arsenic	µg/L	<2	<2	2
TR Barium	µg/L	9	7	11
TR Chromium	µg/L	<0.5	<0.5	<0.5
TR Copper	µg/L	7	4	9
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Manganese	µg/L	7	1	15
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	3	3	4
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	54	47	63
Silica	mg/L	16	14	18

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 (2019) ¹

Parameter	Units	Average ²	Minimum ²	Maximum ²
BOD	mg/L	<2	<2	2
TSS	mg/L	<2	<2	<2
pH	units	7.0	6.8	7.3
Turbidity	NTU	0.7	0.3	1.0
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC ³	µmhos/cm	832	700	1016
TDS	mg/L	529	468	600
TOC	mg/L	6.1	4.7	8.4
NH ₃ -N	mg/L	<0.1	<0.1	0.2
Bicarbonate Alkalinity	mg/L as CaCO ₃	134	102	178
TIN	mg/L	4.7	2.3	10.5
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	45	30	69
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	125	91	167
Fluoride	mg/L	0.2	0.1	0.4
Magnesium	mg/L	11	8	17
NO ₃ -N	mg/L	4.7	2.2	10.3
Sodium	mg/L	98	79	123
Sulfate	mg/L	56	39	110
Total Hardness	mg/L as CaCO ₃	157	114	244
TR Aluminium	µg/L	68	<25	92
TR Arsenic	µg/L	<2	<2	3
TR Barium	µg/L	20	7	47
TR Chromium	µg/L	<0.5	<0.5	0.8
TR Copper	µg/L	6	4	9
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	1	66
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	4	3	14
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	51	33	63
Silica	mg/L	17	9	25

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

RP-1/RP-4 Recycled Water Quality (2019)

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	7.3
Turbidity	NTU	0.6	0.3	0.9
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC ²	µmhos/cm	764	700	807
TDS	mg/L	521	468	593
TOC	mg/L	6.2	4.7	8.4
NH ₃ -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO ₃	142	109	178
TIN	mg/L	4.0	2.3	5.7
Boron	mg/L	0.2	0.2	0.2
Calcium	mg/L	40	30	47
Carbonate Alkalinity	mg/L as CaCO ₃	0	0	0
Chloride	mg/L	104	91	124
Fluoride	mg/L	0.2	0.1	0.4
Magnesium	mg/L	9	8	11
NO ₃ -N	mg/L	4.0	2.2	10.3
Sodium	mg/L	91	79	100
Sulfate	mg/L	45	39	53
Total Hardness	mg/L as CaCO ₃	138	114	152
TR Aluminium (RP-1 Only)	µg/L	83	57	110
TR Arsenic (RP-1 Only)	µg/L	<2	<2	2
TR Barium (RP-1 Only)	µg/L	17	11	23
TR Chromium (RP-1 Only)	µg/L	<0.5	<0.5	0.8
TR Copper (RP-1 Only)	µg/L	4	<2	6
TR Cadmium (RP-1 Only)	µg/L	<0.25	<0.25	<0.25
TR Lead (RP-1 Only)	µg/L	<0.5	<0.5	<0.5
TR Manganese (RP-1 Only)	µg/L	10	4	11
TR Mercury (RP-1 Only)	µg/L	<0.05	<0.05	<0.05
TR Nickel (RP-1 Only)	µg/L	5	3	14
TR Selenium (RP-1 Only)	µg/L	<2	<2	<2
TR Silver (RP-1 Only)	µg/L	<0.25	<0.25	<0.25
TR Zinc (RP-1 Only)	µg/L	39	32	48
Silica	mg/L	16	9	25
Orthophosphate	mg/L	2.3	<0.3	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