

## RP-1 Recycled Water Quality (2021)

Parameter	Units	Average <sup>1</sup>	Minimum <sup>1</sup>	Maximum <sup>1</sup>
BOD	mg/L	<2	<2	2
TSS	mg/L	<2	<2	<2
pH	units	7.1	6.9	7.2
Turbidity	NTU	0.7	0.5	0.8
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC <sup>2</sup>	µmhos/cm	798	787	812
TDS	mg/L	469	454	483
TOC	mg/L	7.2	6.7	8.1
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	156	148	163
TIN	mg/L	3.5	2.6	4.4
Boron	mg/L	0.3	0.3	0.3
Calcium	mg/L	44	41	48
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	115	103	128
Fluoride	mg/L	0.2	0.2	0.4
Magnesium	mg/L	9	8	10
NO <sub>3</sub> -N	mg/L	3.5	2.5	4.3
Sodium	mg/L	97	92	105
Sulfate	mg/L	49	44	52
Total Hardness	mg/L as CaCO <sub>3</sub>	148	140	157
TR Aluminium	µg/L	137	41	220
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	17	13	20
TR Chromium	µg/L	0.6	<0.5	1
TR Copper	µg/L	4	2	7
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	11
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	4	3	5
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	35	26	53
Silica	mg/L	24	22	26
Orthophosphate	mg/L	3.8	<0.8	12.0

<sup>1</sup> Average, Minimum, and Maximum values based on monthly averages

<sup>2</sup> EC values based on 24-hour composite lab samples, not continuous monitoring

## RP-4 Recycled Water Quality (2021)

Parameter	Units	Average <sup>1</sup>	Minimum <sup>1</sup>	Maximum <sup>1</sup>
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.1	7.0	7.2
Turbidity	NTU	0.4	0.3	0.5
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC <sup>2</sup>	µmhos/cm	774	751	793
TDS	mg/L	459	448	469
TOC	mg/L	5.5	5.0	5.9
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	0.1
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	145	134	159
TIN	mg/L	4.0	3.4	4.7
Boron	mg/L	0.3	0.3	0.3
Calcium	mg/L	40	37	42
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	110	102	124
Fluoride	mg/L	0.2	0.2	0.3
Iron	µg/L	47	12	81
Magnesium	mg/L	10	8	11
NO <sub>3</sub> -N	mg/L	4.0	3.4	4.6
Sodium	mg/L	99	92	104
Sulfate	mg/L	52	49	54
Total Hardness	mg/L as CaCO <sub>3</sub>	140	129	150
Silica	mg/L	22	18	27
Orthophosphate	mg/L	3.8	1.5	6.0

<sup>1</sup> Average, Minimum, and Maximum values based on monthly averages

<sup>2</sup> EC values based on 24-hour composite lab samples, not continuous monitoring

## RP-5 Recycled Water Quality (2021)

Parameter	Units	Average <sup>1</sup>	Minimum <sup>1</sup>	Maximum <sup>1</sup>
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	6.9	6.8	7.0
Turbidity	NTU	0.5	0.4	0.8
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC <sup>2</sup>	µmhos/cm	947	936	978
TDS	mg/L	534	505	552
TOC	mg/L	5.5	5.3	5.7
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	0.2
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	156	148	163
TIN	mg/L	5.8	4.5	7.1
Boron	mg/L	0.3	0.3	0.3
Calcium	mg/L	44	41	48
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	115	103	128
Fluoride	mg/L	0.2	0.2	0.4
Magnesium	mg/L	9	8	10
NO <sub>3</sub> -N	mg/L	5.7	4.4	7.0
Sodium	mg/L	97	92	105
Sulfate	mg/L	49	44	52
Total Hardness	mg/L as CaCO <sub>3</sub>	148	140	157
TR Aluminium	µg/L	<25	<25	<25
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	33	21	44
TR Chromium	µg/L	0.6	<0.5	1
TR Copper	µg/L	4	2	7
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	0.6
TR Manganese	µg/L	4	3	7
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	4	3	5
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	35	26	53
Silica	mg/L	19	18	20

<sup>1</sup> Average, Minimum, and Maximum values based on monthly averages

<sup>2</sup> EC values based on 24-hour composite lab samples, not continuous monitoring

## CCWRF Recycled Water Quality (2021)

Parameter	Units	Average <sup>1</sup>	Minimum <sup>1</sup>	Maximum <sup>1</sup>
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.0	6.8	7.1
Turbidity	NTU	0.6	0.5	0.8
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC <sup>2</sup>	µmhos/cm	909	889	954
TDS	mg/L	516	493	534
TOC	mg/L	6.7	6.0	7.2
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	146	137	160
TIN	mg/L	4.7	4.3	5.3
Boron	mg/L	0.3	0.3	0.3
Calcium	mg/L	45	41	48
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	117	108	126
Fluoride	mg/L	0.3	0.2	0.3
Magnesium	mg/L	9	8	10
NO <sub>3</sub> -N	mg/L	4.7	4.3	5.3
Sodium	mg/L	104	99	113
Sulfate	mg/L	69	58	76
Total Hardness	mg/L as CaCO <sub>3</sub>	149	142	156
TR Aluminium	µg/L	103	68	146
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	13	10	15
TR Chromium	µg/L	<0.6	<0.5	1
TR Copper	µg/L	3	2	4
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Manganese	µg/L	9	4	16
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	4	3	5
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	34	25	49
Silica	mg/L	16	12	19

<sup>1</sup> Average, Minimum, and Maximum values based on monthly averages

<sup>2</sup> EC values based on 24-hour composite lab samples, not continuous monitoring

## IEUA Recycled Water Quality (2021) <sup>1</sup>

Parameter	Units	Average <sup>2</sup>	Minimum <sup>2</sup>	Maximum <sup>2</sup>
BOD	mg/L	<2	<2	2
TSS	mg/L	<2	<2	<2
pH	units	7.0	6.8	7.2
Turbidity	NTU	0.6	0.3	0.8
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC <sup>3</sup>	µmhos/cm	857	751	978
TDS	mg/L	495	448	552
TOC	mg/L	6.2	5.0	8.1
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	0.2
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	151	134	163
TIN	mg/L	4.5	2.6	7.1
Boron	mg/L	0.3	0.3	0.3
Calcium	mg/L	43	37	48
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	114	102	128
Fluoride	mg/L	0.2	0.2	0.4
Magnesium	mg/L	9	8	11
NO <sub>3</sub> -N	mg/L	4.5	2.5	7.0
Sodium	mg/L	99	92	113
Sulfate	mg/L	55	44	76
Total Hardness	mg/L as CaCO <sub>3</sub>	146	129	157
TR Aluminium	µg/L	88	<25	170
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	21	10	44
TR Chromium	µg/L	<0.5	<0.5	1
TR Copper	µg/L	4	2	7
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	16
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	4	3	5
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	35	25	53
Silica	mg/L	20	12	27

<sup>1</sup> 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

<sup>2</sup> Average, Minimum, and Maximum values based on monthly averages

<sup>3</sup> EC values based on 24-hour composite lab samples, not continuous monitoring

## RP-1/RP-4 Recycled Water Quality (2021)

Parameter	Units	Average <sup>1</sup>	Minimum <sup>1</sup>	Maximum <sup>1</sup>
BOD	mg/L	<2	<2	2
TSS	mg/L	<2	<2	<2
pH	units	7.1	6.9	7.2
Turbidity	NTU	0.5	0.3	0.8
Total Coliform (7d median)	MPN/100mL	<1	<1	<1
EC <sup>2</sup>	µmhos/cm	786	751	812
TDS	mg/L	464	448	483
TOC	mg/L	6.4	5.0	8.1
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	0.1
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	150	134	163
TIN	mg/L	3.8	2.6	4.7
Boron	mg/L	0.3	0.3	0.2
Calcium	mg/L	42	37	48
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	112	102	128
Fluoride	mg/L	0.2	0.2	0.4
Magnesium	mg/L	10	8	11
NO <sub>3</sub> -N	mg/L	3.8	2.5	4.6
Sodium	mg/L	98	92	105
Sulfate	mg/L	50	44	54
Total Hardness	mg/L as CaCO <sub>3</sub>	144	129	157
TR Aluminium (RP-1 Only)	µg/L	137	41	220
TR Arsenic (RP-1 Only)	µg/L	<2	<2	<2
TR Barium (RP-1 Only)	µg/L	17	13	20
TR Chromium (RP-1 Only)	µg/L	0.6	<0.5	1
TR Copper (RP-1 Only)	µg/L	4	2	7
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	6	3	11
TR Mercury (RP-1 Only)	µg/L	<0.05	<0.05	<0.05
TR Nickel (RP-1 Only)	µg/L	4	3	5
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	35	26	53
Silica	mg/L	23	18	27
Orthophosphate	mg/L	3.8	<0.8	7.8

<sup>1</sup> Average, Minimum, and Maximum values based on monthly averages

<sup>2</sup> EC values based on 24-hour composite lab samples, not continuous monitoring