

## RP-1 Recycled Water Quality (2014)

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	7.2	7.1	7.4
Turbidity	NTU	0.6	0.6	0.7
Total Coliform (7d median)	MPN/100mL	<2	<2	<2
EC <sup>2</sup>	µmhos/cm	827	798	880
TDS	mg/L	542	504	602
TOC	mg/L	5.6	5.2	6.0
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	145	122	161
TIN	mg/L	5.6	3.1	7.6
Boron	mg/L	0.3	0.2	0.3
Calcium	mg/L	48	44	51
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	121	107	132
Fluoride	mg/L	0.2	0.2	0.3
Magnesium	mg/L	10	9	11
NO <sub>3</sub> -N	mg/L	5.5	3.0	7.6
Sodium	mg/L	107	96	116
Sulfate	mg/L	58	44	80
Total Hardness	mg/L as CaCO <sub>3</sub>	159	149	171
TR Manganese	µg/L	11	4	21
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	15	13	17
TR Chromium	µg/L	0.9	<0.5	1.4
TR Copper	µg/L	3	2	5
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	3
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.27	<0.25	0.51
TR Zinc	µg/L	23	20	25
Silica	mg/L	24	22	27
Orthophosphate	mg/L	<0.6	<0.6	<0.6

<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 (2014)

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	7.3
Turbidity	NTU	0.5	0.3	0.7
Total Coliform (7d median)	MPN/100mL	<2	<2	<2
EC <sup>2</sup>	µmhos/cm	793	747	835
TDS	mg/L	488	451	526
TOC	mg/L	4.2	4.0	4.6
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	0.1
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	131	108	152
TIN	mg/L	5.0	3.2	7.1
Boron	mg/L	0.3	0.2	0.3
Calcium	mg/L	43	37	47
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	120	105	134
Fluoride	mg/L	0.2	0.1	0.2
Magnesium	mg/L	10	8	12
NO <sub>3</sub> -N	mg/L	5.0	3.2	6.9
Sodium	mg/L	106	96	114
Sulfate	mg/L	59	52	74
Total Hardness	mg/L as CaCO <sub>3</sub>	148	136	156
Iron	µg/L	41	29	61
Silica	mg/L	21	7	25
Orthophosphate	mg/L	5.9	3.0	11.5

<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 (2014)

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	6.8	6.7	6.9
Turbidity	NTU	1.1	0.8	1.5
Total Coliform (7d median)	MPN/100mL	<2	<2	<2
EC <sup>2</sup>	µmhos/cm	877	838	900
TDS	mg/L	550	508	581
TOC	mg/L	4.6	4.2	5.0
NH <sub>3</sub> -N	mg/L	0.2	<0.1	0.5
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	134	118	149
TIN	mg/L	5.7	4.2	8.0
Boron	mg/L	0.3	0.1	0.3
Calcium	mg/L	56	39	63
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	136	123	154
Fluoride	mg/L	0.2	0.1	0.4
Magnesium	mg/L	12	8	14
NO <sub>3</sub> -N	mg/L	5.7	4.1	7.9
Sodium	mg/L	96	27	114
Sulfate	mg/L	65	51	79
Total Hardness	mg/L as CaCO <sub>3</sub>	186	131	212
TR Manganese	µg/L	20	4	31
TR Arsenic	µg/L	<2	<2	2
TR Barium	µg/L	20	12	27
TR Chromium	µg/L	0.8	<0.5	1.1
TR Copper	µg/L	6	4	8
TR Cadmium	µg/L	<0.26	<0.25	0.38
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	3
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	34	25	43
Silica	mg/L	22	19	29

<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 (2014)

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	6.7	7.1
Turbidity	NTU	0.5	0.3	0.7
Total Coliform (7d median)	MPN/100mL	<2	<2	<2
EC <sup>2</sup>	µmhos/cm	910	833	961
TDS	mg/L	574	538	619
TOC	mg/L	4.7	4.2	4.9
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	<0.4
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	120	89	139
TIN	mg/L	5.0	4.1	6.1
Boron	mg/L	0.3	0.2	0.3
Calcium	mg/L	51	46	57
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	145	133	158
Fluoride	mg/L	0.2	0.1	0.3
Magnesium	mg/L	11	10	13
NO <sub>3</sub> -N	mg/L	4.8	4.1	5.8
Sodium	mg/L	122	106	172
Sulfate	mg/L	91	65	189
Total Hardness	mg/L as CaCO <sub>3</sub>	174	160	191
TR Manganese	µg/L	2	1	6
TR Arsenic	µg/L	<2	<2	2
TR Barium	µg/L	14	8	18
TR Chromium	µg/L	1.0	0.5	1.4
TR Copper	µg/L	6	5	9
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	4
TR Selenium	µg/L	<2	<2	2
TR Silver	µg/L	<0.26	<0.25	0.34
TR Zinc	µg/L	40	26	54
Silica	mg/L	18	16	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

## IEUA Recycled Water Quality (2014)<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	6.7	7.4
Turbidity	NTU	0.7	0.3	1.5
Total Coliform (7d median)	MPN/100mL	<2	<2	<2
EC <sup>3</sup>	µmhos/cm	852	747	961
TDS	mg/L	539	451	619
TOC	mg/L	4.8	4.0	6.0
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	0.5
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	133	89	161
TIN	mg/L	5.3	3.1	8.0
Boron	mg/L	0.3	0.1	0.3
Calcium	mg/L	49	37	63
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	130	105	158
Fluoride	mg/L	0.2	0.1	0.4
Magnesium	mg/L	11	8	14
NO <sub>3</sub> -N	mg/L	5.2	3.0	7.9
Sodium	mg/L	108	27	172
Sulfate	mg/L	68	44	189
Total Hardness	mg/L as CaCO <sub>3</sub>	167	131	212
TR Manganese	µg/L	11	1	31
TR Arsenic	µg/L	<2	<2	2
TR Barium	µg/L	16	8	27
TR Chromium	µg/L	0.9	0.5	1.4
TR Copper	µg/L	5	2	9
TR Cadmium	µg/L	<0.25	<0.25	0.38
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	4
TR Selenium	µg/L	<2	<2	2
TR Silver	µg/L	<0.26	<0.25	0.51
TR Zinc	µg/L	32	20	54
Silica	mg/L	21	7	29

<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