

## RP-1 Recycled Water Quality (2012)

<b>Parameter</b>	<b>Units</b>	<b>Average <sup>1</sup></b>	<b>Minimum <sup>1</sup></b>	<b>Maximum <sup>1</sup></b>
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.2	7.0	7.3
Turbidity	NTU	0.8	0.5	1.1
Total Coliform (7d median)	MPN/100mL	<2	<2	<2
EC <sup>2</sup>	µmhos/cm	772	721	804
TDS	mg/L	464	441	480
TOC	mg/L	5.8	5.1	6.7
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	<0.1
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	141	130	155
TIN	mg/L	6.4	4.8	8.4
Boron	mg/L	0.2	0.2	0.4
Calcium	mg/L	43	38	49
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	112	96	132
Fluoride	mg/L	0.2	0.1	0.3
Magnesium	mg/L	10	9	11
NO <sub>3</sub> -N	mg/L	6.4	4.7	8.3
Sodium	mg/L	97	84	104
Sulfate	mg/L	44	38	52
Total Hardness	mg/L as CaCO <sub>3</sub>	147	134	164
TR Manganese	µg/L	8	6	14
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	13	10	15
TR Chromium	µg/L	0.9	<0.5	1.3
TR Copper	µg/L	2	1	4
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	<0.25	<0.25	<0.25
TR Zinc	µg/L	26	22	31
Silica	mg/L	25	21	30
Orthophosphate	mg/L	<0.6	<0.6	1.5

<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-4 Recycled Water Quality (2012)

<b>Parameter</b>	<b>Units</b>	<b>Average <sup>1</sup></b>	<b>Minimum <sup>1</sup></b>	<b>Maximum <sup>1</sup></b>
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.1	7.0	7.2
Turbidity	NTU	0.8	0.3	1.3
Total Coliform (7d median)	MPN/100mL	<2	<2	<2
EC <sup>2</sup>	µmhos/cm	728	682	767
TDS	mg/L	434	407	451
TOC	mg/L	3.9	3.3	4.4
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	0.1
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	135	114	150
TIN	mg/L	3.9	2.5	5.5
Boron	mg/L	0.2	0.2	0.3
Calcium	mg/L	42	39	47
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	109	97	120
Fluoride	mg/L	0.2	0.2	0.2
Magnesium	mg/L	10	8	11
NO <sub>3</sub> -N	mg/L	3.8	2.4	5.5
Sodium	mg/L	88	76	98
Sulfate	mg/L	45	37	53
Total Hardness	mg/L as CaCO <sub>3</sub>	146	130	163
Iron	µg/L	43	37	52
Silica	mg/L	96	80	113
Orthophosphate	mg/L	3.3	1.8	5.6

<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-5 Recycled Water Quality (2012)

<b>Parameter</b>	<b>Units</b>	<b>Average <sup>1</sup></b>	<b>Minimum <sup>1</sup></b>	<b>Maximum <sup>1</sup></b>
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	3
pH	units	7.0	6.7	7.3
Turbidity	NTU	1.1	0.6	1.4
Total Coliform (7d median)	MPN/100mL	<2	<2	3
EC <sup>2</sup>	µhos/cm	882	839	925
TDS	mg/L	514	498	532
TOC	mg/L	4.4	4.0	4.6
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	<0.5
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	140	129	149
TIN	mg/L	6.8	5.9	7.8
Boron	mg/L	0.3	0.2	0.3
Calcium	mg/L	56	53	62
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	138	127	150
Fluoride	mg/L	0.2	0.1	0.2
Magnesium	mg/L	13	11	14
NO <sub>3</sub> -N	mg/L	6.7	5.7	7.7
Sodium	mg/L	100	91	110
Sulfate	mg/L	59	48	69
Total Hardness	mg/L as CaCO <sub>3</sub>	192	183	212
TR Manganese	µg/L	20	5	34
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	26	17	33
TR Chromium	µg/L	1.0	0.8	1.2
TR Copper	µg/L	7	5	10
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	<0.25	<0.25	<0.25
TR Zinc	µg/L	41	32	54
Silica	mg/L	23	22	26

<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 (2012)

<b>Parameter</b>	<b>Units</b>	<b>Average <sup>1</sup></b>	<b>Minimum <sup>1</sup></b>	<b>Maximum <sup>1</sup></b>
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	<2
pH	units	7.1	7.0	7.2
Turbidity	NTU	0.6	0.3	0.8
Total Coliform (7d median)	MPN/100mL	<2	<2	7
EC <sup>2</sup>	µhos/cm	882	842	904
TDS	mg/L	505	491	517
TOC	mg/L	4.7	4.1	5.3
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	<0.2
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	136	117	152
TIN	mg/L	4.7	3.9	6.3
Boron	mg/L	0.3	0.2	0.3
Calcium	mg/L	49	45	54
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	140	115	154
Fluoride	mg/L	0.2	0.1	0.4
Magnesium	mg/L	12	11	13
NO <sub>3</sub> -N	mg/L	4.7	3.8	6.3
Sodium	mg/L	106	90	117
Sulfate	mg/L	64	51	73
Total Hardness	mg/L as CaCO <sub>3</sub>	173	159	189
TR Manganese	µg/L	16	8	24
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	15	10	23
TR Chromium	µg/L	1.0	0.8	1.3
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 Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	3	2	7
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	43	35	68
Silica	mg/L	19	14	22

<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 (2012)<sup>1</sup>

<b>Parameter</b>	<b>Units</b>	<b>Average<sup>2</sup></b>	<b>Minimum<sup>2</sup></b>	<b>Maximum<sup>2</sup></b>
BOD	mg/L	<2	<2	<2
TSS	mg/L	<2	<2	3
pH	units	7.1	6.7	7.3
Turbidity	NTU	0.8	0.3	1.4
Total Coliform (7d median)	MPN/100mL	<2	<2	7
EC <sup>3</sup>	µmhos/cm	816	682	925
TDS	mg/L	479	407	532
TOC	mg/L	4.7	3.3	6.7
NH <sub>3</sub> -N	mg/L	<0.1	<0.1	<0.5
Bicarbonate Alkalinity	mg/L as CaCO <sub>3</sub>	138	114	155
TIN	mg/L	5.5	2.5	8.4
Boron	mg/L	0.3	0.2	0.4
Calcium	mg/L	48	38	62
Carbonate Alkalinity	mg/L as CaCO <sub>3</sub>	0	0	0
Chloride	mg/L	124	96	154
Fluoride	mg/L	0.2	0.1	0.4
Magnesium	mg/L	11	8	14
NO <sub>3</sub> -N	mg/L	5.4	2.4	8.3
Sodium	mg/L	98	76	117
Sulfate	mg/L	53	37	73
Total Hardness	mg/L as CaCO <sub>3</sub>	164	130	212
TR Manganese	µg/L	15	5	34
TR Arsenic	µg/L	<2	<2	<2
TR Barium	µg/L	18	10	33
TR Chromium	µg/L	1.0	0.8	1.3
TR Copper	µg/L	5	1	10
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	7
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	37	22	68
Silica	mg/L	41	14	113
Orthophosphate	mg/L	3.3	<0.6	5.6

<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