Reedy Creek Improvement District (RCID or District) has about 23% of the overall water resource needs. Today, reclaimed water meets about 77% is irrigated with reclaimed water. In the future, the District and its customers will continue to pursue the conservation of our natural resources. Today, reclaimed water poses has been a water conservation initiative at RCID that will continue. Of the approximately 1,855 acres of irrigated area within the District, about 77% is irrigated with reclaimed water. It counts for their value when determining fertilization rates and should be aware of the presence of these constituents and account for their value when determining fertilization rates and when operating irrigation systems in close proximity to surface waters.

Nutrients in reclaimed water will vary widely with the source and level of treatment provided. Nutrients (principally nitrogen and phosphorus) are essential to all life forms, but excessive nutrients can lead to imbalances in aquatic flora and fauna, spawning algal blooms and nuisance species if levels exceed certain thresholds for extended periods. At RCID, most of the nutrients in the reclaimed water are removed in the treatment process (typically more than 95%) and those forms that remain are not normally readily available to plants and aquatic organisms. RCID’s reclaimed water averaged 1.65 mg/l (or 1.65 part per million) of total nitrogen and 0.13 mg/l of total phosphorus in 2014. These values represent excellent removal and are near the limits of achievable technology. Users of reclaimed water should be aware of the presence of these constituents and account for their value when determining fertilization rates and when operating irrigation systems in close proximity to surface waters.

Recycled water is a product of the wastewater treatment process. At RCID, wastewater is treated to an advanced level via biological means, filtered and disinfected. Results in 2014 show that it meets all of the primary and secondary drinking water standards as set by the U.S. Environmental Protection Agency, and is visually indistinguishable from tap water.

Service rates for reclaimed water are about 80% of those for potable water, and include a similar volumetric charge and a readiness-to-serve charge. The rate is intended to provide an economic incentive for customers to use reclaimed water in lieu of potable water, as well as to conserve the resource and discourage wasteful practices. Some of the benefits of using reclaimed water are:

- Conservation of the drinking water supply
- Drought resistant and not subject to water use restrictions
- Promotes sustainability and conservation of natural resources
- Delays the development of expensive alternative water supplies
- Reduces potential adverse impacts to wetlands and surface waters

The RCID RIBs are located in the northwest corner of the District and the site is bisected by the Western Beltway (Florida State road 429). The RCID RIBs are visible to passing motorists from both sides of the beltway between Seidel Road and Western Way.

A comparison of the latest analysis of the reclaimed water to the drinking water standards is provided in the accompanying table. While the reclaimed water typically meets the drinking water standards, it is not and should not be used for consumption, cooking, bathing or body contact, in pools or spas, or to wash edible crops. These restrictions in use are due to the slightly higher risk of disease transmission or ingestion of contaminant(s) with reclaimed water than with potable water.
## 2014 Reclaimed Water Quality Analysis Results

### Parameter Name | Units* | Conc. | Results (BDL **) | Drinking Water Standards
---|---|---|---|---
**Inorganics**
Antimony | mg/l | 0.0021 | 0.002 | 0.006
Arsenic | mg/l | <0.0015 | BDL | 0.1
Barium | mg/l | 0.0082 | 0.0082 | 2
Beryllium | mg/l | < 0.00012 | BDL | 0.004
Cadmium | mg/l | <0.00009 | BDL | 0.005
Chromium | mg/l | <0.001 | BDL | 0.01
Cyanide | mg/l | <0.0025 | BDL | 0.2
Fluoride | mg/l | 0.091 | 0.091 | 4
Lead | mg/l | <0.0004 | BDL | 0.015
Mercury | mg/l | <0.00005 | BDL | 0.002
Nickel | mg/l | 0.0035 | 0.0035 | 0.1
Nitrate as N | mg/l | 0.643 | 0.643 | 10
Nitrite as N | mg/l | < 0.005 | BDL | 1
Selenium | mg/l | <0.0005 | BDL | 0.05
Silver | mg/l | <0.00005 | BDL | 0.05
Sodium | mg/l | 83.2 | 83.2 | 160
Thallium | mg/l | <0.0003 | BDL | 0.002
**Volatile Organic Compounds**
Para (1,4)-dichlorobenzene | ug/l | <0.18 | BDL | 75
Vinyl chloride | ug/l | <0.33 | BDL | 1
1,1-dichloroethylene | ug/l | <0.32 | BDL | 7
1,2-dichloroethane | ug/l | <0.17 | BDL | 3
1,1,1-trichloroethane | ug/l | <0.27 | BDL | 200
1,1,2 -trichloroethane | ug/l | <0.22 | BDL | 5
1,2-dichloropropane | ug/l | <0.45 | BDL | 5
1,2,4-trichlorobenzene | ug/l | <0.18 | BDL | 70
Cis-1,2-dichloroethene | ug/l | <0.37 | BDL | 70
Dichloromethane (methylene chloride) | ug/l | <0.36 | BDL | 5
Ethylbenzene | ug/l | < 0.12 | BDL | 700
Monochlorobenzene | ug/l | <0.27 | BDL | 100
1,2-dichlorobenzene | ug/l | <0.17 | BDL | 600
Styrene | ug/l | <0.28 | BDL | 100
Tetrachloroethylene | ug/l | <0.30 | BDL | 3
Toluene | ug/l | <0.23 | BDL | 100
1,2-trans-dichloroethylene | ug/l | <0.24 | BDL | 100
Trichloroethylene | ug/l | <0.37 | BDL | 3
Xylenes | ug/l | <0.27 | BDL | 10,000
Carbon tetrachloride | ug/l | <0.22 | BDL | 3
Benzen | ug/l | <0.18 | BDL | 1
**Total Trihalomethanes (TTHM)** | ug/l | 52 | 52.0 | 80
---

### Parameter Name | Units | Conc. | Results (BDL **) | Drinking Water Standards
---|---|---|---|---
**Organics**
2,3,7,8-tetrachlorodibenzo-p-dioxin | ug/l | <0.00028 | BDL | 0.00003
2,4,6-dichlorophenoxyacetic acid | ug/l | <0.036 | BDL | 100
2,4,5-TP (Silvex) | ug/l | <0.06 | BDL | 50
Alachlor | ug/l | < 0.032 | BDL | 2
Atrazine | ug/l | < 0.023 | BDL | 3
Benzo(a)pyrene | ug/l | <0.030 | BDL | 2
Carbofuran | ug/l | <0.43 | BDL | 40
Chlordane (mix. tox. metabolites) | ug/l | <0.12 | BDL | 2
Dalapon | ug/l | 1 | 1 | 200
Bis(2-ethylhexyl)adipate | ug/l | <0.59 | BDL | 400
Bis (2-ethylhexyl) phthalate | ug/l | 3.8 | 3.8 | 6
Dibromochloropropane (DBCP) | ug/l | <0.0053 | BDL | 0.2
Dinoseb | ug/l | <0.15 | BDL | 7
Diquat | ug/l | <0.4 | BDL | 20
Endothall | ug/l | <6.3 | BDL | 100
Endrin | ug/l | <0.0022 | BDL | 0.02
Ethylene Dibromide (1,2-dibromomethane) | ug/l | <0.0023 | BDL | 0.02
Glyphosate | ug/l | <5.0 | BDL | 700
Heptachlor | ug/l | <0.0061 | BDL | 0.4
Heptachlor Epoxide | ug/l | <0.0017 | BDL | 0.2
Hexachlorobenzene | ug/l | <0.040 | BDL | 1
Hexachlorocyclopentadiene | ug/l | <0.041 | BDL | 50
Lindane | ug/l | <0.0023 | BDL | 2
Methoxychlor | ug/l | <0.0076 | BDL | 40
Oxamyl (vydate) | ug/l | <0.35 | BDL | 200
Pentachlorophenol | ug/l | <0.037 | BDL | 1
PCT | ug/l | <0.075 | BLD | 500
Polychlorinated Biphenyls (PCBs) | ug/l | <0.045 | BDL | 0.5
Simazine | ug/l | <0.034 | BDL | 4
Toxaphene | ug/l | <0.057 | BDL | 3
**Radiologicals**
Gross Alpha | pCi/l | <1.6 | - | 15
Radium 226 and 228 | pCi/l | <0.8 | BDL | 5
---

### Secondary Chemistry

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Units</th>
<th>Conc.</th>
<th>Results (BDL **)</th>
<th>Drinking Water Standards</th>
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<td>Aluminum, Total Recoverable</td>
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<td>0.2</td>
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<td>Sulfate</td>
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<td>Foaming Agents</td>
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<td>0.13</td>
<td>0.5</td>
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</tbody>
</table>

*Units:
mg/l are milligrams per liter or parts per million
ug/l are micrograms per liter of parts per billion
pCi/l are picocuries per liter

**BDL means below the detection limit of the analysis technique employed