

CITY OF CAPE CANAVERAL

Reclaimed Water Policies and Regulations Manual



Water Reclamation Facility
601 Thurm Boulevard
PO Box 326
Cape Canaveral, Florida 32920
Phone: (321) 868-1240
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Reclaimed Water

Fact Sheet

What is Reclaimed Water?

Reclaimed water, sometimes referred to as reuse water, is wastewater that has been treated and transformed into a product that is clean, clear, and odorless. Reclaimed water has been subjected to strict quality standards established by Florida Department of Environmental Protection (FDEP).

Cape Canaveral's reclaimed water is treated to advanced wastewater treatment standards at the City's Water Reclamation Facility. It has undergone a high level of disinfection and is continuously monitored and analyzed by our skilled technicians to ensure consistent high quality and compliance with regulations.

While reclaimed water is not suitable for drinking, it is great for irrigation and it can be used on residential or commercial lawns, roadway medians, parks and other landscaped areas. Currently this product is available to a large portion of the City of Cape Canaveral however, not everyone has access. This is because reclaimed water is carried through a separate pipe system from drinking water. If you are not sure if you have access to reclaimed water, please call Public Works Services to see if your address has access.

Besides reducing the demand on drinking water supplies, reclaimed water offers a form of environmental protection through wise disposal of wastewater. Effluent that would have been discharged into the Indian River Lagoon is reused for other purposes. This reduction of effluent discharge helps Cape Canaveral meet current regulations regarding surface discharge while benefiting all of us by conserving drinking water supplies.

Why Should You Use Reclaimed Water?

Reclaimed water:

1. Is not restricted by St. Johns River Water Management District (SJRWMD).
2. Has a low salt content and will not harm sensitive plants.
3. Has a low iron content and will not stain walkways or buildings.
4. Does not have an order, unlike some wells.
5. Reduces demand on drinking water and groundwater sources.
6. Recharges the shallow surface aquifer with fresh water.
7. Reduces the amount of effluent discharged into the Indian River Lagoon system.



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Procedures for Connecting to Reclaimed Water

Step 1 – Public Information Requirements

This information is given as a packet and is mandatory for the property owner, resident, management company or homeowner association. This information explains the system and answers questions you may have prior to connecting to the City's Reclaimed Water System.

Step 2 – Application/Conditional Reuse Permit

Submission of a completed application form and appropriate connection fee are necessary to initiate a request for connection to the reclaimed water system. An application is included in this packet. Additional copies are available on our website at www.cityofcapecanaveral.org, City Hall located at 105 Polk Ave, or at the Water Reclamation Facility located at 601 Thurm Boulevard.

1. The application is to be filled out by the property owner, resident, management company or homeowner association and returned along with the applicable fee to the Water Reclamation Facility located at 601 Thurm Boulevard, Cape Canaveral, FL 32920.
2. After the application has been reviewed and approved a conditional permit will be issued. At that time the City will schedule the installation of the service tap/box. The person making the application can then proceed to ready their private irrigation system for connection by fulfilling the requirements in steps 3, 4, and 5.

Step 3 – Private Irrigation System Requirements

For connection to the City's Reclaimed Water System, the following is required:

1. Irrigation System

- a. An in-ground irrigation system for land application.
- b. The retrofitting of an existing system.
- c. The installation of a new sprinkler system.

The above can be completed by the home owner, resident, management company or homeowner's association having control of such property.

Note: *Irrigation systems must be designed so that the spray does not go into the street, into swimming pools, onto public sidewalks, etc. during normal use periods. You must keep irrigation contained to your property.*

2. Hand control valve

A hand control valve must be installed and accessible on the user's side of service as close to the City's curb stop valve (City's Service Line) as possible. This valve is for your convenience and is to shut off the reclaimed water supply to your sprinkler system in the event of a down-stream break. The hand control valve may be installed in the City's service box if there is adequate space.

Note: *The City's curb stop valve (City's Service Line valve) is to be opened or closed by City personnel only. The installer must contact the City's Water Reclamation Facility to turn the system on and off during, or after construction to flush or pressure check the system.*

3. Recommendation for Irrigation Installation:



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Components and material for your system should be compatible with pressures up to 100 psi. The recommended piping is schedule 40 PVC pipe. Avoid mist heads due to vaporization at this pressure. In-ground, pop-up water droplet heads are recommended. However, if your system currently has mist heads, you may install Pressure Compensating Screens, which will eliminate fogging caused by high pressure. The recommended water cycle is three (3) times a week, mornings or evenings. Therefore, a timer and zone system are important parts of your irrigation system. However, hand control valves for zoning are acceptable.

Where new lines are installed, other than the main supply line to the sprinkler system, it is recommended that these lines be marked as *RECLAIMED WATER* by the use of purple tape or paint to prevent cross connections. It is mandatory that piping and outlets conveying non-potable water be adequately and durably identified by a distinctive color purple for reclaimed water and yellow for other non-potable water supplies so it is readily distinguished from piping carrying potable water.

The installation of a backflow device is mandatory for the protection of the Potable Water Supply (drinking water) where Reclaimed Water is on the same property.

1. Type of Approved Devices:

COMMERCIAL

REDUCED PRESSURE

| Manufacturer | Model # | Sizes |
|--------------|-------------|----------------|
| Febco | 825Y | ¾" through 10" |
| Hersey | F.R.P.II | ¾" through 12" |
| Hersey | 6 C.M. | 3" through 10" |
| Ames | 4000 | 3" through 10" |
| Watts | Series 9099 | ¾" through 10" |
| Cla-Val | RP-1 | 2" through 10" |

RESIDENTIAL

DOUBLE CHECK VALVES

| Manufacturer | Model # | Sizes |
|--------------|-----------|-----------------------------------|
| Conbraco | 40-104-A2 | ¾" Replacement Seats |
| Conbraco | 40-105-A2 | 1" Replacement Seats |
| Hersey | FDC | ¾" Replacement Seats |
| Watts | 007 | ¾" and 1" Replacement Seats |
| Wilkins | 950A | ¾" and 1" Brass Replacement Seats |

All check valves shall be complete assemblies and approved by the AWWA-USC's, FCC& HR-ASSE with serial numbers! Backflow, if required, will be ordered by City personnel.

2. Installation

The installation and required testing of all backflow devices will be performed by the City of Cocoa Utilities Department. Test results must be sent to the following:

City of Cocoa
Utilities Department
Attention: Water Meter & Cross Control Supervisor
600 School Street
Cocoa, Florida 32922

City of Cape Canaveral
Water Reclamation Facility
Attention: Reclaimed Water Coordinator
P.O. Box 326
Cape Canaveral, Florida 32920



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Important Note about your water heater: Where the installation of a backflow device is installed on a potable water line, provisions other than the manufacturer's water heater temperature/pressure relief valve must be provided in the system, per Standard Plumbing Code 613.2, 1994 edition. Your plumber should be consulted on this.

Step 5 – Inspection/Final Reuse Permit

The Water Reclamation Facility shall be notified of any and all water connections or related requirements to the use of the reclaimed water system, including cross connection protection and devices.

1. When to Call for Inspection

- a. When completed connection is made to the City's reclaimed water service (curb stop) valve in the service box.
- b. When a Hand Control Valve is installed on the user's side of the City's valve.
- c. When the in ground irrigation system is ready for use.
- d. When the backflow Device is installed and tested.

2. Inspection Results/System Activation

- a. All inspections must be in compliance. When all requirements are met, the City will issue a Final Reuse Permit and the system will be activated.
- b. Annual spot inspections will be completed by City personnel with all violations noted.

More Important Information

- Cross-connection to the potable water system is strictly prohibited.
- If a cross-connection between the potable and reclaimed water system is discovered, the reclaimed water will immediately be discontinued.
- Reclaimed water shall not be used to fill swimming pools, hot tubs, or wading pools. [62-610.469(4)]
- Low trajectory nozzles or other means to minimize aerosol formation shall be used within 100 feet from outdoor public eating, drinking, or bathing facilities. [62-610.471(6)]
- The public shall be notified of the use of reclaimed water by posting of reclaimed water advisory signs or stickers. [62.610.468(2)]
- No water cooled air conditioning will be connected to the reclaimed water irrigation system.
- Hose bib shall be located only in the purple reuse box underground and will be locked with a padlock when not in use.
- If during an inspection the hose bib is found to be unlocked when not in use, the reuse customer will receive a notice of violation with 10 days to come into compliance. If after 10 days the customer is not in compliance, the City will lock out the hose bib.
- All hose bibs must be clearly labeled as non-potable water with "Do Not Drink" annotated in both English and Spanish along with the equivalent standard international symbol. 



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- A hose connection vacuum breaker should be installed on each faucet or Hose Bibb that is connected to the potable water supply to prevent backflow to the reuse water supply.
- No connection to a well or quick disconnects. Note: Wells may be retained, but must be completely separate from the reclaimed system.
- No overhead irrigation system without approval from the City's Water Reclamation Department.
- Irrigation of edible crops that will be peeled, skinned, cooked or thermally processes before consumption is allowed. Direct contact of the reclaimed water with such edible crops is allowed.
- Reclaimed Irrigation Systems located along Public Accesses or Pedways must use a low trajectory nozzle for irrigating the area. This will help control aerosol formations.

Note: *Customer whose reclaimed water system is in violation of any reclaimed water policies and procedures shall be subject to immediate discontinuance of service. Any discontinuance of service shall not relieve any person of liability for civil action, criminal or municipal ordinance violation prosecution.*

Re-inspection Fee

A customer whose service has been involuntarily discontinued or disrupted for violations will be charged a \$50.00 reconnection and inspection fee.

Summary

- Step 1.** Review reclaimed water information packet
- Step 2.** Submit application and fee. Conditional permit issued upon approval.
- Step 3.** Meet requirements for connection to reclaimed water system.
- Step 4.** Meet backflow device requirements.
- Step 5.** Call for inspection. Final permit issued upon satisfactory inspection. System is activated.

The Cape Canaveral City Council adopted Resolution 2001-04 on February 6, 2001 to keep the cost of reclaimed water to its customers as low as possible. The following reclaimed water connection fees have been established and shall be reviewed annually by City Council:

- a. Single Family, Townhouse, Duplex and Triplex Units: **\$475.00** for each required backflow device.
 - i. City of Cape Canaveral Application Fee: \$315.00 - make check payable to the City of Cape Canaveral.
 - ii. City of Cocoa Utilities Backflow Install Fee: Pricing varies – Please contact the City of Cocoa Utilities for cost at your address.
- b. Multifamily Apartment Complexes, Condominium Developments, and Mobile Home Parks: **\$500.00** for each required backflow devise installed by property owner.
- c. Commercial and Industrial: **\$500.00** for each required backflow devise installed by property owner.



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Note: For additional information regarding availability of reclaimed water in your area, please visit the City's website at: www.cityofcapecanaveral.org, or contact June Clark, Reclaimed Water Coordinate at via phone at 321-868-1240 or via email at: j.clark@cityofcapecanaveral.org.

Reclaimed Watering Hours

South Section – South of Washington Ave. (yellow on the map)

7am – 10am Monday through Friday
8am – 10am Saturday and Sunday

North Section – North of Washington Ave. (purple on the map)

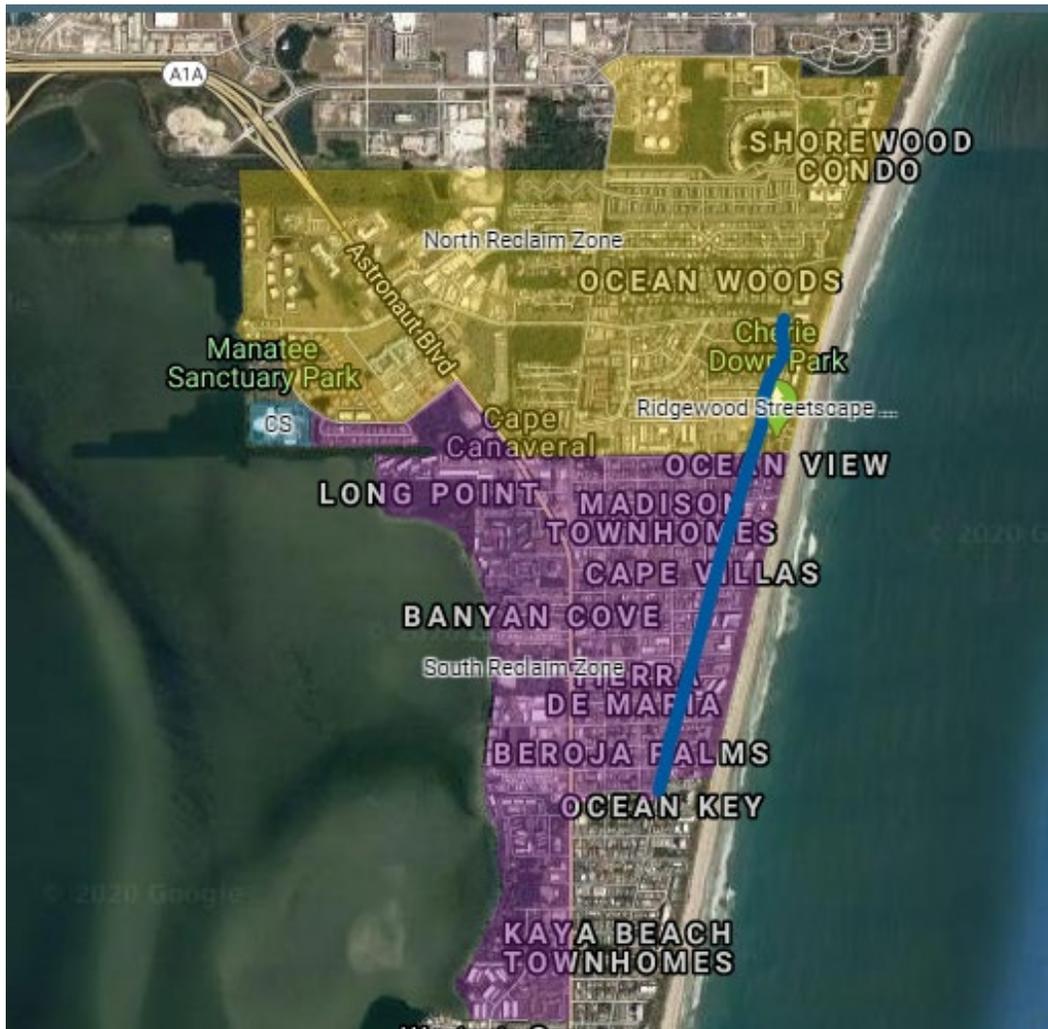
6pm – 9pm Monday through Friday
6pm – 8pm Saturday and Sunday

Ridgewood Ave. Streetscape (blue on the map)

11pm – 1130 pm Monday through Wednesday
11pm – 1130 pm Friday through Sunday

Please conserve water by only watering your lawn twice weekly. If you have any questions or concerns, please call June Clark, Reclaimed Water Coordinator at (321) 868-1240

THANK YOU FOR YOUR COOPERATION.





Reclaimed Water

Reclaimed Water and Storm Water Rates

| | 2018/2019 | 2019/2020 | 2020/2021 |
|----------------|-----------|-----------|-----------|
| 1" Pipe | \$ 7.72 | \$ 7.92 | \$ 8.12 |
| 2" Pipe | \$ 33.93 | \$ 35.63 | \$ 37.41 |
| 4" Pipe | \$101.79 | \$106.88 | \$112.23 |

Note: Rates effective beginning October 1st of each fiscal year.

Storm Water

The Storm Water Utility is supported by an assessment of \$96 in 2019 for the typical residential property. The fee for large, multi-unit properties, as well as commercial and industrial properties, is based on the size of the property and the amount of impervious area that inhibits percolation of storm water (including asphalt, concrete and structures). The City's monthly fee formula is based upon the standard "Equivalent Residential Unit" (ERU). Using a median impervious area of residential condominium parcels, the City computed an "ERU value" of 2,074 square feet, which is used to calculate the number of ERUs attributable to each tax parcel. In general, the monthly fee formula is as follows:

| Property Type | ERU/Storm Water Utility Fee |
|-------------------------------------|---|
| Mobile Homes | 0.79 ERU (\$6.32) |
| Single-Family Residential Flat Rate | 1.00 ERU (\$8.00 for the average home) |
| Multi-Family Residential | Variable ERU (\$8.00 per number of units) |
| Commercial | Variable ERU (Impervious area/2,074 square feet x \$8.00) |



Procedures for Disconnecting Reclaimed Water

How does using Reclaimed Water help?

- **Keeps harmful nutrients out of the Lagoon:** Reclaimed water usage reduces the quantity of effluent discharged into the Indian River Lagoon system.
- **Low mineral content:** Reclaimed water has a low salt content which will not harm sensitive plants and a low iron content which will not stain walkways or buildings. Also, unlike well water, it does not have an odor.
- **Affordable alternative:** Reclaimed water is cheaper than using fresh water and eliminates the expense of drilling, pumping or maintaining wells.
- **Helps maintain the aquifer:** Reclaimed water usage reduces the demand on potable and groundwater sources and recharges the shallow surficial aquifer with fresh water.

The City of Cape Canaveral's Reclaimed Water System is striving to meet a conservation goal by developing, expanding and promoting an alternative water system, and serves as a major component of the City's Water Conservation Program. Besides reducing the demand on potable water supplies, a reclaimed water system offers a form of environmental protection through the wise disposal of wastewater. Effluent that would have otherwise been discharged into the Indian River Lagoon, is "re-used" for other purposes. This reduction of effluent discharge helps the City of Cape Canaveral meet current legislation regulating surface discharge, while benefiting all of us by conserving drinking water supplies.

How to Disconnect Reclaimed Water Service

Residents wishing to discontinue existing Reclaimed Water service must complete the Reclaimed Water Disconnection Form located at the end of this document.

Disconnections requested at rental/leased properties are subject to authorization by the property owner.

When services are terminated, the City will place a lock on the property's utility access valve. To resume service to a property, the property owner must contact the City to have the lock removed.

For more information contact Public Works Services at [\(321\) 868-1240](tel:3218681240)