

City of Pinellas Park Reclaimed Water Program

I. DEFINITIONS

BACKFLOW PREVENTION: Either a reduced pressure backflow prevention device, a double check valve assembly, a dual check valve, or other device, approved by the State of Florida Department of Environmental Protection, which protects the City of Pinellas Park Water System at the service connection by isolating within the customer's property any potential pollution or contamination through cross-connection.

BILLING: The charge made for reclaimed water service. This charge may be made on a separate invoice or may be included on the monthly utility bill.

CITY: The City of Pinellas Park, Florida.

CROSS-CONNECTION: Any physical connection or arrangement which could allow the movement of fluids between the potable water system and any other piping system, such as the reclaimed water system.

CUSTOMER: The actual user of the reclaimed water.

D.I.P.: Ductile iron pipe.

ADMINISTRATOR OF PUBLIC WORKS (ALSO REFERRED TO AS THE ADMINISTRATOR): The individual responsible for the technical and operational activities of the Public Works Department of the City of Pinellas Park.

DISCONTINUATION OF SERVICE: Cessation of service.

DISTRIBUTION MAINS: Those conduits used to supply reclaimed water to service lines from transmission lines.

DIVISION: The Water/Utilities Design Division of the Public Works Department of the City of Pinellas Park, Florida.

IRRIGATION CONTROL VALVE: The manually operated valve controls total reclaimed water flow to the customer's property located at the point of customer connection.

PRESSURE REDUCING VALVE: A hydraulically operated single seated and controlled by a direct-acting spring loaded, diaphragm valve to reduce the psi (pounds per square inch) to a desired constant downstream pressure regardless of a changing flow rate or varying inlet pressure. Acceptable products are Watt Series 115 or 223.

PVC: Polyvinyl chloride pipe.

RATES: Those charges assessed on a metered consumption basis or flat rate and which are subject to change as approved by the City Council from time to time.

RECLAIMED WATER: Water that has received a level of treatment as required by the Florida Department of Environmental Protection and is ideal for lawn sprinkling but is not suitable for human or animal consumption primarily due to the chemical salts, or nutrients, remaining in the water.

SERVICE LINE: The conduit for reclaimed water that runs from the distribution main to the property line.

TRUNK MAIN: Those conduits used to supply reclaimed water from the pumping station or treatment plant to the distribution mains.

WYE STRAINER: A mesh screen housed in a brass body with a self-cleaning blow-off outlet. On installations of four (4) inches or larger, an iron body WYE strainer may be used.

II. GENERAL PROCEDURES

CITY SERVICE

Reclaimed water service may be provided for properties located within the water and/or sewer district of the City of Pinellas Park that comply with the provisions detailed in this section.

All applications for service will be reviewed by the Water Division Director/Utilities Design Division Director who will approve such service only if an adequate supply of treated wastewater is and will be available to meet all anticipated needs. The Utilities Design Division Director will review and technically approve all service line sizes and all other necessary design components.

OUTSIDE CITY LIMITS SERVICE

Reclaimed water service may be provided for properties located outside the city limits of the City of Pinellas Park. A surcharge of 25% will be charged to all unincorporated properties served by the City. At the City's option and convenience, service to properties strategically located along transmission routes may be provided on an individual basis.

AVAILABILITY OF SERVICE

The existence of a reclaimed water main adjacent to or near the premises of an applicant for service does not necessarily mean that the service is available to that location.

PUBLIC EASEMENT REQUIREMENT

No facility will be installed under the provisions described in this manual and accepted for maintenance by the City unless it is in a dedicated public right-of-way or dedicated public easement. Any new easement will have a minimum width of ten (10) feet. No obstruction of any kind will be planted, built or otherwise created within the limits of the easement or right-of-way without written permission of the Water Division Director/Utilities Design Division Director.

OWNERSHIP

All reclaimed water facilities and appurtenances, other than on-site plumbing, when constructed or accepted by the City, will become and remain the property of the City. No person will by payment of any charges, nor by causing any construction of facilities accepted by the City, acquire any interest or right in any of these facilities, or any portion of the facility, other than the privilege of having the property connected for reclaimed water services in accordance with this manual and any amendments.

SERVICE LINES

Service lines will be as required by the property served, but will in no case be less than one (1) inch in diameter. Sizes of service lines required by an applicant are subject to approval by the Water Division Director/Utilities Design Division Director.

EXTENSION APPROVALS

Reclaimed water extensions for improvements will be accepted by the City upon the appropriate approval of the Water Division Director.

RIGHT TO REFUSE SERVICE

No payment of any costs, submission of any petition or other act to receive reclaimed water service will guarantee such service. The City will have the right, at all times, to refuse to extend service on the basis of a use detrimental to the system, inadequate supply of reclaimed water, lack of payment of required

fees, or for any other reason which, in the judgment of the Water Division Director/Utilities Director, will cause the extension not to be to the benefit of the City.

FIRE PROTECTION

Hydrants may be installed on mains constructed with the City at such locations as deemed appropriate by the Water Division Director/Utilities Design Division Director. Where such hydrants are installed on the reclaimed system, these hydrants are to be used for secondary fire fighting services and are intended to supplement certified potable fire protection system. All fire hydrants installed on the reclaimed water system will be protected by a hydrant lock.

PROCESS USE

Reclaimed water service may be provided to commercial and industrial customers as a source of water for cooling and process applications. All applications for service will be reviewed by the Water Division Director/Utilities Design Division Director who will approve such service. All reclaimed water for cooling/process use must be discharged to the sanitary sewer and must meet all City, State and Federal discharge regulations. A sewer charge for processing of said discharge will be applied in addition to the cost of the reclaimed water.

EXTENT OF CITY MAINTENANCE

All facilities that have been accepted by the City will become the property of the City and will be operated and maintained by the City. No person will do any work nor be reimbursed for any work on the system, unless written authorization from the City is received prior to the work being accomplished. The City will make reasonable effort to inspect and keep its facilities in good repair, but assumes no liability for any damage caused by the system that is beyond the control of normal maintenance nor due to situations not previously reported to the Division. This will include, but not be limited to, damage due to breaking of pipes, poor quality of water caused by unauthorized or illegal entry of foreign material into the system, faulty operation of the fire protection facilities or other reasons.

The property owner/customer will be responsible for the maintenance of all plumbing facilities, including gate valves, irrigation lines and appurtenances, on the property served by the City. The City reserves the right to disconnect the service to any property that does not maintain their system. In addition, should the customer require reclaimed water at a different pressure, or different quality, or in any way from what is normally supplied by the City, he or she will be responsible for the necessary devices to make these adjustments, which may be installed with the approval of the Water Division Director/Utilities Design Director. Such devices and the repair thereof, will be the sole responsibility of the property owner/customer.

DELINQUENT ACCOUNTS

All utility bills are due when rendered. After twenty-five (25) days, all outstanding balances are penalized at the rate of ten (10) percent. On the forty-fifth (45) day, the account may be discontinued without notice. If service is discontinued for nonpayment, the account is subject to delinquent fees, reinstatement fees and additional deposits. All fees, including deposit and outstanding account balances must be paid in full prior to reestablishing service. If a meter is removed, an additional meter installation fee will be rendered.

DISCONTINUANCE OF SERVICE BY THE CITY

The City may discontinue reclaimed water service to any customer due to any infraction of procedures and regulations, nonpayment of bills, tampering with any service, plumbing cross-connections with another water source, or any reason that may be detrimental to the system. Should a discontinued service be turned on without authorization, then the Division will remove the service and make an additional charge as established by current City ordinance.

EXISTING SERVICE REINSTATED

Existing services may be reinstated by the customer's application for such service and the payment of any appropriate fees or other charges as contained within the City ordinance. There will be a fee for service reinstatement.

SERVICE INTERRUPTION

The City reserves the right to temporarily discontinue service to any portion of, or the entire reclaimed water system, as deemed necessary by the Water Division Director/Utilities Design Division Director. Service interruptions may be caused by such matters as Acts of God, plant failure, maintenance of the system, or the inability of the City to meet water quality requirements. The City will not be liable for any damages or loss suffered by the property owners' and/or customer.

RUN-OFF CONTROL

The property owner and/or customer will be responsible for the operation of any irrigation systems to ensure that neither ponding nor run-off from the spray site occurs as a result of the spray irrigation of the reclaimed water. The property owner and/or customer will operate irrigation systems at all times in a prudent manner and will curtail irrigation during storm weather conditions.

UNAUTHORIZED WORK ON THE RECLAIMED WATER SYSTEM

No person, unless expressly authorized in writing by the Director or his/her designee, shall tamper with, work on, or in any way alter or damage any City reclaimed water facility.

INSPECTION

To insure that the City's regulations and procedures are being observed, the City reserves the right, but not the duty, of inspecting, removing and/or securing any or all devices installed by the customer which connect to or control the reclaimed water. Each reclaimed water customer will, through their initial application for reclaimed water service, give prior written consent to entry upon their premises, and thereby waive any other written notice for such inspection, although attempts will be made to limit such inspection to day-light hours. Failure of the City to obtain such a written waiver will not affect the City's right to proceed with the inspection. Refusing to permit an authorized City representative or Pinellas County Health Department or other appropriate City representative to enter onto the premises for the purpose of inspecting the customers' reclaimed water system pursuant to these regulations and procedures will be grounds for immediate discontinuation of reclaimed water service by the City to the subject premises.

REINSPECTION

In the event the customer fails the initial inspection, one re-inspection will be provided at no charge. All subsequent re-inspection will require the filing of a re-inspection application. There will be a fee for each re-inspection.

III. OBTAINING RECLAIMED WATER SERVICE

APPLICATION FOR CONNECTION TO RECLAIMED SERVICE LINE

Application for reclaimed water service will be made in the City of Pinellas Park Utility Billing office located at 5141 - 78th Avenue by completing and signing an application form. A connection fee must be prepaid and payment must accompany the signed application form.

The City will attempt to the best of its ability to deliver an adequate supply of reclaimed water of good quality at all times. However, no guarantees can be provided due to circumstances beyond its control. Therefore, the customer will be required to complete a Hold Harmless Agreement as part of the application prior to the connection.

SERVICE APPLICATION PREREQUISITE - CUSTOMER RESPONSIBILITY

No system with a cross-connection to the potable water system or other source of water will be considered for connection to the reclaimed water system. All reclaimed systems including services and materials used for cross-connection control must be approved in writing by the Water Division Director/Utilities Design Division Director. The system will not include devices, faucets or other connections that could permit the reclaimed water to be used for any purpose other than irrigation, unless such uses and system have been approved in writing by the Water Division Director/Utilities Design Division Director.

IRRIGATION CONTROL VALVE

All connections to the reclaimed water system will have an irrigation control valve (gate valve supplied to residential customers on the service connection by the City) installed after the master control valve. For residential customers, the irrigation control valve is to be located prior to the WYE strainer and/or pressure reducing valve, as required, and after the master control valve are to be enclosed with an appropriate valve box and/or meter box as required.

CROSS-CONNECTION CONTROL

In all premises where reclaimed water service is provided, the public potable water supply will be protected by an approved backflow prevention device. Also devices and materials installed for cross-connection must be in accordance with requirements of the Florida Department of Environmental Protection and/or City of Pinellas Park and will be installed by the City of Pinellas Park.

In all premises where there is reclaimed water or other auxiliary water supply, there will be no physical connection between such non-potable supply and the customer's potable water system. Where such a cross-connection is found, it will be disconnected. Before re-connection of service, the public potable water supply will be protected against the possibility of future cross-connection as defined previously in this section. Additional devices may be required as specified by the Water Division Director/Utilities Design Division Director and installed at the customer's expense. The back flow prevention devices will be replaced and rehabilitated at five (5) year intervals by the City at the customer's expense.

To determine the presence of any potential hazards to the public potable water system, the Pinellas County Health Department and/or other appropriate City Department(s) will have the right to enter upon the premises of any customer at any time, upon giving appropriate notice and showing proper credentials, although attempts will be made to limit such inspection to daylight hours. Each customer of reclaimed water service will, by application, give prior written consent to such entry upon said premises.

WYE STRAINER

It is recommended, but not required, that all residential customers install a brass wye strainer with a self-cleaning blow off outlet, painted purple, and installed on the service line between the irrigation control valve and pressure reducing valve (if used). The correct screen size is 20 mesh.

PRESSURE REDUCING VALVE

The operating pressure of the reclaimed water system is a maximum of 110 pounds per square inch (psi). Therefore, it is recommended, but not required, that all residential customers install a pressure reducing valve. The pressure reducing valve is to be painted purple and installed on the service line downstream of the wye strainer (if used). The pressure reducing valve may be located in the same box with the wye strainer. Approved pressure reducing valves are a Watts Series 223 or approved equal.

RESIDENTIAL RECLAIMED WATER

PRE-INSPECTION CHECK LIST

- ✓ All above ground piping must be painted purple.
- ✓ An optional brass "Y" (WYE) strainer and brass pressure reducing valve (if used) should be installed in a separate box (painted purple) located either on the homeowner's property or in a location that provides easy access to the operation of the customer's irrigation system.
- ✓ Disconnect and cap all wells/lake connections/present irrigation service lines before connecting to the reclaimed water. The disconnection must be visible for City personnel to inspect.
- ✓ A below ground irrigation system or quick connect hose attachment is acceptable for connection to the reclaimed water system. Quick connect hose attachments will be installed on the customer's hose by the City's reclaimed water personnel. (NOTE: A below ground irrigation system must be extended into the customer service box and connected.)
- ✓ Do not directly irrigate vegetable gardens. (Bubbler or drip irrigation is allowed.)
- ✓ Sprinkler heads must be adjusted to eliminate over-spray to non-turf areas. No ponding or run-off is allowed.
- ✓ The homeowner, or the homeowner's representative, must be present during the inspection to operate the system for the City's inspector, unless prior arrangements have been made with the Reclaimed Water Inspector.
- ✓ No unauthorized use of the reclaimed water is allowed. The filling of swimming pools, car washing, drinking, use in residential air conditions, etc., is not allowed. Reclaimed water may not be piped into any residential building.
- ✓ In the event the customer fails inspection, one re-inspection will be provided at no charge. All subsequent re-inspections will require the filing of a re-inspection application and fee payment.

CONTACT 541-0774 IF YOU HAVE ANY QUESTIONS REGARDING INSPECTION.

APPLICATION FOR RECLAIMED WATER
And
HOLD HARMLESS AGREEMENT

NAME: _____ Account # _____

ADDRESS: _____

SERVICE SIZE: _____

Type of Service Requested:

_____ Hose Connection

_____ In-Ground Sprinkler System

I, the undersigned Applicant, have read and understand the City of Pinellas Park's Policies and Procedures for Reclaimed Water Service. I agree to restrict use of Reclaimed Water solely to the purpose(s) described in this application. I understand that due to the composition of Reclaimed Water, it is not approved for human consumption or for certain other uses, and I agree that I will not make any non-approved use thereof. I further understand that Reclaimed Water may not be appropriate for irrigation of certain types of vegetation, and I will obtain information from sources independent of the City about the appropriateness of the use of Reclaimed Water before applying the same to any vegetation. I agree that the City will not be held liable for damages that may result from uses of Reclaimed Water for purposes not included in this application, and I agree to indemnify and hold harmless the City from all claims and judgments arising there from against the City.

Signed: _____ Date: _____

Please submit application and connection fee to the City of Pinellas Park, P.O. Box 1100, Pinellas Park, FL 33780-1100 or fax to (727) 541-0811.

I am requesting to place the connection fee on my utility bill as follows:

Two payments of \$50.00 ea. ___

Five payments of \$20.00 ea. ___

Four payments of \$25.00 ea. ___

Ten payments of \$10.00 ea. ___

Initial Approval - Department: _____ **Date:** _____

Inspection Approval: _____ **Date:** _____

This will acknowledge receipt of \$ _____, from _____

Address _____, in payment of a connection charge

for a _____ inch service.

It is understood and agreed that the owner of the described premises shall be responsible for prompt payment to the City of Pinellas Park, Florida for all City utilities furnished by the City to the described properties in accordance with City Ordinance.

It is further agreed that in the event the owner or other occupant shall permit any bill rendered by the City of Pinellas Park for service furnished to these premises to become delinquent, the City shall have the right to take and apply the deposit to the delinquent account, with any part of the deposit remaining to be refunded to the customer of record.

It is further agreed that taking and application of the deposit does not relieve the property owner of his/her obligation to the City in the event charges for services are in excess of the amount of the deposit. It is further agreed that the City will have the right to enter the above premises to inspect the reclaimed water piping and fittings, to discontinue city utilities for nonpayment of service charges, for tampering with the service (includes meter and appurtenances), for cross-connections with another service or water source, or for any other reason that may be detrimental to the City system.

I acknowledge that my use of Reclaimed Water is governed by Chapter 10 of the City's Code of Ordinances, and I agree to abide by all provisions thereof.

The City of Pinellas Park, Florida

QUICK FACTS

Cost Savings and Benefits:

- **Contains Nutrients that Promote Lawn Growth**
- **Reduces Annual Lawn Fertilizing Needs**
- **Helps to Conserve Local Ground Water Supplies**
- **Useful Alternative for a Previously Unwanted Resource**
- **Defers the Need for expansion of the Potable Water Facilities**
- **No Sewer Charge on the Reclaimed Water Consumption**

HOW TO OBTAIN RECLAIMED WATER SERVICE:

When the reclaimed water main and service line has been inspected, approved and accepted, a letter will be sent to the service address notifying them that the service is available. Upon receipt of the notice, the property owner must contact the City to arrange for the service connection.

Call the Utility Billing Division at 541-0711, Monday through Friday, between the hours of 8:00 a.m. and 5:00 p.m. Availability of the service can be determined over the phone. If the answer is a tentative "YES", an application packet will be prepared and forwarded to you for your signature. Should your service request be approved, you will be required to pay the connection fee and deposit. A service inspection date will then be scheduled.

The connection fee is reduced by 50% for properties that connect within the first ninety (90) days of availability. During this same time period, the deposit will be waived for reclaimed water service.

PROHIBITED USES OF RECLAIMED WATER:

**DRINKING
SWIMMING POOLS
CAR WASHING
CLEANING**

RECLAIMED WATER IS AVAILABLE FOR IRRIGATION USE ONLY

INSTALLATION SPECIFICATIONS

BACKFLOW PREVENTION

In conjunction with the Reclaimed Water Program, and in accordance with the Federal Clean Water Act, the City of Pinellas Park will be updating prevention devices to protect the public water system. The device will be installed at the time the reclaimed water is connected. This is to advise you of a situation that a few residents have experienced when the backflow prevention device became operational.

In the past, inadvertently, the public water main has provided a "cushion" that absorbed potential pressure build-up in a home plumbing system caused by water expansion as water is heated in the hot water tank. The device prevents back flowing into the City main, and, as a result, the point of relief will be at the hot water heater through a mechanism called a TEMPERATURE & PRESSURE CONTROL VALVE (TP) if the system pressure and/or water temperature is higher than normal.

When the pressure exceeds 100 pounds per square inch (PSI), discharge may occur indicating the mechanism is functioning as designed. However, water may overflow only the immediate area of your hot water heater if the discharge line does not extend from the hot water heater through an outside wall. The installation of a pressure relief valve on any outside faucet, set a 90 psi will terminate discharge from your hot water unit and alleviate this problem.

SOLUTION TO THERMAL EXPANSION

There are a number of products available in today's market to address the thermal expansion issue. However, at this point in time, there are only two that will provide long-term service, a properly sized thermal expansion tank or a ball cock and relief valve assembly, these devices can be purchased on the open market and installed by the property owner and/or a licensed plumbing contractor.

THERMAL EXPANSION TANK

This properly sized device is the most accepted method of controlling thermal expansion and is recognized by the hot water heater industry in their literature and warranties.

BALL COCK AND RELIEF VALVE ASSEMBLY

The triple purpose toilet tank ball cock valve is designed to provide protection from thermal expansion as well. The device is designed to be installed in place of your present ball cock assembly in your toilet tank. The assembly will govern and limit the domestic water system preset static pressure to 80 pounds per square inch (psi).

Either solution requires periodic maintenance to ensure that the device is in good continuous working order. For more information regarding these assemblies, you should contact your local plumbing supplier.

RESTRICTIONS:

- No person shall connect to any reclaimed water system or otherwise use reclaimed water without an approved application from the City for such service.
- The injection of any chemicals into the reclaimed water system by anyone not so authorized by the City Manager is prohibited.
- The use of reclaimed water shall be in accordance with City Ordinance and with Chapter 62-610, Florida Administrative Code as amended.
- The use of reclaimed water shall be limited to irrigation of residential lawns, golf courses, parks, cemeteries, landscaped areas, public rights-of-way, and any use permitted by Chapter 62-610, Florida Administrative Code, as amended and not prohibited herein or in Chapter 9 of the City of Pinellas Park Code of Ordinances.
- Reclaimed water shall not be used in the plumbing system within any building or structure, except as permitted under and in full compliance with Chapter 62-610, Florida Administrative Code, as amended, and in full compliance with Chapter 9 of the City of Pinellas Park Code of Ordinances.
- Reclaimed water shall not be used within twenty-five (25) feet of an unplugged irrigation well that penetrates below the unconfined aquifer system.
- Reclaimed water shall not be directly discharged to surface waters, including but limited to holding or storage ponds and retention lakes.
- Reclaimed water shall not be allowed to pond on, or to run off from, the irrigation site.
- Reclaimed water shall not come in direct contact with edible crops that are not to be peeled, skinned, cooked or thermally processed before consumption.
- Only one property shall be served from each City-owned metering device, except for properties served by master meters.

WHAT'S NEXT AND WHAT TO EXPECT?

Once the connection fee has been paid, the Water Department will schedule a crew that will install a double check valve on the potable water system.

A reclaimed water crew will be scheduled to install the reclaimed water meter.

After all pre-inspection items have been completed the customer should call to schedule an appointment with an inspector.

The inspector will verify that the irrigation system being connected to the reclaimed water system is not connected to any other source.

A quick connect hose assembly will require the installation of a special connection device on the customer's hose. A City crew will supply and install the connection device. Note: The hose must be at least a 5/8" hose. Reclaimed hose may be purchased from the City in 50' and 100' lengths, the cost is approximately \$.71 per foot.

During the initial stages of distribution, reclaimed water may be a milky white color with a slightly unpleasant order. This condition is temporary and will disappear as usage increases. The milky color is from the lubricant used in the piping and the order is produced because the initial flows of reclaimed water are very low. Neither the color nor the order will affect the product.

Upon completion of installation, the Utility Billing Division will be notified to begin billing. Reclaimed water meters are read/estimated the same as the potable meter servicing the property. Billing for reclaimed water will be as an addition to the current billing for the property.

Using Reclaimed Water will not only save money, but will conserve a valuable resource, water. **SAVE AND USE IT AGAIN, PINELLAS PARK!**

Reclaimed Water/Potable Water Cost Comparison Based on 25, 000 gallons

	Irrigation using Reclaimed Water	Irrigation using Potable Water
	\$8.00	
		\$ 96.20 Water
		\$ 84.00 Sewer
		\$ 9.62 Tax
Total	\$8.00	\$189.92
Each additional 1,000 gallons	\$.25	\$ 8.43

"IRRIGATING WITH RECLAIMED WATER"

*The information listed on 205 species of plants vs. reclaimed water was assessed
By the University of Florida's Institute of Food and Agricultural Science through
"Project Greenleaf, 1986".*

RECLAIMED WATER "FRIENDLY"

"TREES"

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Apple	No	Hardy
Australian Pine	No	Med
Banana	No	Low
Black Olive	Yes	Low
Black Sapote	No	Med
Brazilian Pepper	No	Hardy
Cajeput (Punk) Tree	No	Hardy
Carambola	No	Med
Carrotwood	No	Med
Cherry Laurel	Yes	Hardy
Chinaberry	No	Hardy
Chinese Elm	No	Hardy
Dahoon Holly	Yes	Hardy
Dalbergia Sissoo	No	Med
Drake Elm	No	Hardy
Fig	No	Hardy
Florida Slash Pine	Yes	Hardy
Franjipani	No	Med
Golden Rain Tree	No	Hardy
Grapefruit	No	Med
Guava	No	Hardy
Indian Rosewood	No	Med
Indian Rubber Tree	No	Med
Italian Cypress	No	Hardy
Laurel Fig (Cuban Laurel)	No	Med
Lemon	No	Med
Lemon Bottlebrush	No	Hardy
Ligustrum (Privet)	No	Hardy
Lime	No	Med
Live Oak	Yes	Hardy

"TREES" (con't)

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Loquat	No	Hardy
Monkey Puzzle Tree	No	High
Norfolk Island Pine	No	Med
Orange	No	Med
Oriental Arbor Vitae	No	Hardy
Peach	No	Hardy
Pecan	No	Hardy
Pomegranate	No	Hardy
Sapodilla	No	Med
Schefflera	No	Low
Sea Grape	Yes	Med
Silk Oak	No	Med
Southern Magnolia	Yes	Hardy
Sweetgum	Yes	Hardy
Tangerine	No	Med
Torulosa Juniper	No	Hardy
Water Oak	Yes	Hardy
Wax Myrtle	Yes	Hardy
Weeping Bottle Brush	No	Hardy
Weeping Fig	No	Med
Yew Podocarpus	No	Hardy

"PALMS"

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Araca Palm	No	Med
Cabbage Palm	No	Hardy
Canary Island Date Palm	No	Hardy
Chinese Fan Palm	No	Hardy
European Fan Palm	No	Hardy
Fishtail Palm	No	Med
Lady Palm	No	Hardy
Paurotis Palm	Yes	Hardy
Pindo Palm	No	Hardy
Ponytail Palm	No	Med
Pygmy Date Palm	No	Hardy
Queen Palm	No	Med
Scrub Palmetto	Yes	Hardy
Senegal Palm	No	Hardy
Washingtonia Palm	No	Hardy

"GROUND COVERS"

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Aloe	No	Med
Asparagus Fern	No	Hardy
Bromeliads	No	Hardy
Confederate Jasmine	No	Hardy
Coontie	Yes	Hardy
Creeping Juniper	No	High
Daylily	No	Hardy
Dwarf Carissa Boxwood	No	Med
Dwarf Pittosporum	No	Hardy
English Ivy	No	Hardy
Hottentot Fig	No	Med
Junipers	No	Hardy
Kalanchoe	No	Hardy
Liriope	No	Hardy
Mondo Grass	No	Hardy
Oyster Plant	No	Hardy
Potos	No	Med
Purple Queen	No	Med
Purslane (Moss Rose)	No	Hardy
Rosemary	No	Hardy
Society Garlic	No	Hardy
Spider Plant	No	Med
Wandering Jew	No	Med
Wedelia	No	Hardy

"SHRUBS"

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
African Daisy	No	Low
African Iris	No	Hardy
Agave	No	Med
Allamanda	No	Med
Asparagus Fern	No	Hardy
Bamboo	No	Low
Begonia	No	Low
Bird of Paradise	No	Med
Boston Fern	No	Hardy
Bougainvillea	No	Med
Burford Holly	No	Hardy
Canna Lillies	No	Med
Cape Honeysuckle	No	Med

"SHRUBS"(con't)

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Carissa Boxwood	No	Med
Century Plant	Yes	Hardy
Chrysanthemum	No	Hardy
Copper Leaf	No	Low
Coral Plant	No	Med
Crape Jasmine	No	Med
Croton	No	Low
Crown of Thorns	No	Med
Dracena	No	Low
Dwarf Oleander	No	Hardy
Dwarf Shefflera	No	Med
Dwarf Yaupon Holly	Yes	Hardy
Firecracker Plant	No	Med
Gerbera Daisy	No	Hardy
Heather	No	Med
Heliconia	No	Med
Hibiscus	No	Med
Indian Hawthorn	No	Hardy
Iris	No	Hardy
Japanese Boxwood	No	Hardy
Joseph's Coat	No	Hardy
King Sago	No	Med
Lantana	No	Hardy
Lisianthus	No	Med
Maiden Hair Fern	No	Med
Monstera	No	Med
Oleander	No	Hardy
Opuntia Cactus	Yes	Med
Orange Castrum	No	Med
Oriental Arbor Vitae	No	Hardy
Pampas Grass	No	Hardy
Papaya	No	Low
Periwinkle	No	Med
Petunia	No	Hardy
Philodendron	No	Med
Pittosporum	No	Hardy
Plumbago	No	Med
Purple Allamanda	No	Med
Queen Sago	No	Med
Red Firethorn	No	Hardy
Sandankwa Viburnum	No	Hardy
Sedge	No	Hardy

"SHRUBS"(con't)

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Silver Queen	No	Low
Spanish Bayonet	Yes	Hardy
Spineless Yucca	Yes	Hardy
Sweet Viburnum	No	Hardy
Ti Plant	No	Med
Travellers Tree	No	Med
Variegated Bougainvillea	No	Med
Variegated Hibiscus	No	Med
Yaupon Holly	Yes	Hardy
Yellow Shrimp Plant	No	Med
Zebra Plant	No	Med

"VINES"

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Allamanda	No	Med
Coral Vine	No	Hardy
Night Blooming Cereus	No	Low
Purple Allamanda	No	Med
Trumpet Vine	No	Hardy

**"RECLAIMED WATER FRIENDLY
WHICH MAY NEED ADDITIONAL MAINTENANCE"**

These plants are reclaimed water friendly; however, extra maintenance may be needed to promote a thriving landscape. Low projection spray heads and/or drip irrigation are recommended for these plants, as water being sprayed on the leaves may cause the water to congregate at the pointed part of the leaves -- causing leaf burn or possible shedding of the leaves. The root systems of the plants are generally very hardy and can be irrigated with the reclaimed water.

"TREES"

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Avocado	No	Low
Camphor Tree	No	Hardy
Cherimoya	No	Med
Crape Myrtle	No	Hardy
Jacaranda	No	Hardy
Kumquat	No	Hardy
Laurel Oak	Yes	Hardy
Logan	No	Med
Lychee	No	Med
Mango	No	Med
Orchid Tree	No	Hardy
Persimmon	No	Med
Red Maple	Yes	Hardy
Silver Maple	No	Hardy
Weeping Willow	No	Hardy

"SHRUBS"

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Aralia	No	Low
Blue Sage	No	Hardy
Caladium	No	Low
Camellia	No	Hardy
Downy Jasmine	No	Med
False Aralia	No	Low
Gardenia	No	Hardy
Geranium	No	Low
Hydrangea	No	Hardy
Ixora	No	Med
Marigold	No	Low
Orange Jasmine	No	Hardy

"SHRUBS"(con't)

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Pentas	No	Low
Poinsettia	No	Med
Powder Puff Tree	No	Hardy
Red Leaf Photinia	No	Hardy
Rose	No	Hardy
Shrimp Plant	No	Low
Surinam Cherry	No	Hardy
Verbena	No	Hardy

**"RECLAIMED WATER FRIENDLY
WHICH MAY NEED ADDITIONAL MAINTENANCE"**

GROUND COVERS

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Bugle Weed	No	Hardy
Peperomia	Yes	Med

VINES

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Bleeding Heart	No	Med
Passion Flower	No	Low

"RECLAIMED WATER UNFRIENDLY"

SHRUBS

<u>Common Name</u>	<u>Fl Native</u>	<u>Frost Tolerant</u>
Chinese Privet	No	Hardy
Dwarf Azalea	No	Hardy
Formosa Azalea	No	Hardy

FOR ADDITIONAL INFORMATION, CONTACT THE PINELLAS COUNTY COOPERATIVE EXTENSION SERVICE AT (727) 582-2100, ASK FOR LOCAL NURSERY WHEN PURCHASING YOUR LANDSCAPING PLANTS, OR CALL THE CITY OF PINELLAS PARK, RECLAIMED WATER DIVISION AT 541-0774.