

**SEMINOLE COUNTY GOVERNMENT
AGENDA MEMORANDUM**

SUBJECT: Continued from 2/28/06 BCC Meeting - County Code Amendments for Reclaimed Water

DEPARTMENT: Environmental Services **DIVISION:** Administration

AUTHORIZED BY: *John Cirello* **CONTACT:** *J. Dennis Westrick* **EXT.** 2040
John Cirello, Director **J. Dennis Westrick, PEI Manager**

Agenda Date 3/14/06 **Regular** **Consent** **Work Session** **Briefing**
Public Hearing – 1:30 **Public Hearing – 7:00**

MOTION/RECOMMENDATION:

Adopt ordinance repealing sections 6.1 and 9.23, Appendix F of the Land Development Code of Seminole County; amending Chapter 270, Part 4, Article III of the Seminole County Code by creating Sections 270.225 through 270.229 related to reclaimed water.

BACKGROUND:

Seminole County owns and operates two water reclamation facilities and is a stakeholder in the City of Orlando's Iron Bridge Regional Wastewater Facility. Reclaimed water is produced at each of these facilities and is a valuable resource for offsetting potable water used for irrigation. The County currently supplies reclaimed water within portions of its service areas which is used by commercial customers for irrigation of landscaping. Demand for water is increasing due to continued growth in the county and the need to comply with mandates from the water management district requires the expansion of the reclaimed water program within the county. Therefore, Seminole County is planning for an expansion of its reclaimed water program to serve existing and future residential customers. In order to facilitate the expansion of the reclaimed water program, certain changes are required in the County's Codes and a Reclaimed Water Ordinance is necessary to implement the program. As authorized by the BCC, this item was publicly advertised February 16, 2006.

Attachments:
Ordinance 2006-_____
Economic Impact Statement

Reviewed by: _____
Co Atty: *X. Dietrich* 3-6-06
DFS: N/A _____
Other: _____
DCM: *[Signature]* _____
CM: *[Signature]* _____

File No. PHESA03

AN ORDINANCE REPEALING SECTIONS 6.1 and 9.23, APPENDIX F OF THE LAND DEVELOPMENT CODE OF SEMINOLE COUNTY; AMENDING CHAPTER 270, PART 4, ARTICLE III, OF THE SEMINOLE COUNTY CODE BY CREATING SECTIONS 270.225 THROUGH 270.229; PROVIDING FOR PURPOSE OF RECLAIMED WATER SERVICE PROMULGATION AND ENFORCEMENT; PROVIDING FOR USE OF RECLAIMED WATER; PROVIDING ADMINISTRATIVE REQUIREMENTS; PROVIDING FOR RECLAIMED WATER SYSTEM REQUIREMENTS; PROVIDING FOR CODIFICATION; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Board of County Commissioners (Board) has evaluated the provisions of the County's land development regulations relative to a reclaimed water program, and has concluded that certain provisions of the County's Codes should be amended to address the Board's concerns pertaining to technical modification of the program to allow additional utilization of reclaimed water and to protect the potable water supply in the County; and

WHEREAS, the purpose of this ordinance is to create a Reclaimed Water Program for Seminole County; and

WHEREAS, compliance with St. Johns River Water Management District permits and policies coupled with demands of a growing population have increased the need for additional water conservation measures; and

WHEREAS, the highest priority for use of potable water is for human consumption, it is the intent of the County to minimize the use of potable water supplies for nonpotable uses and the substitution of irrigation-quality wastewater effluent

for nonpotable uses provides a primary water conservation method that serves to protect the integrity of the aquifer to maintain groundwater supply to existing legal uses and future generations; and

WHEREAS, the County recognizes that reclaimed water is a valuable resource, this Ordinance will outline County management and enforcement responsibilities that facilitate use of reclaimed water to the greatest extent possible to replace the use of potable water for nonpotable uses; and

WHEREAS, significant involvement has been achieved relative to the proposed changes to the County's Codes as set forth in this Ordinance; and

WHEREAS, the Board of County Commissioners of Seminole County hereby finds that this Ordinance is consistent with the objectives, goals and policies of the Seminole County Comprehensive Plan; and

WHEREAS, the Seminole County Home Rule Charter requires that an Economic Impact Statement be prepared to address the potential fiscal impacts and economic costs of this Ordinance upon the public and taxpayers of Seminole County and such Economic Impact Statement has been prepared and has been made available for public review and copying prior to the enactment of this Ordinance in accordance with the provisions of the Seminole County Home Rule Charter,

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF SEMINOLE COUNTY, FLORIDA:

Section 1. Appendix F, Section 6.1, Land Development Code of Seminole County, is hereby repealed in its entirety:

~~**6.1 General Considerations**~~

~~(a) Purpose. The County reuse water system is presently available for the express purpose of irrigation.~~

~~(b) Design~~

~~(1) Reuse water systems will be designed to the same standards set forth in the applicable provisions of Section 2 and the applicable requirements of Rule 17-610, Florida Administrative Code except as otherwise noted in this Section.~~

~~(2) Flows are to be based on an annual calculated daily usage using sound irrigation practices.~~

~~(3) If the County reuse system is to be utilized for irrigation of the property, the reuse system shall not be physically connected to any existing wells or potable water systems. Connections to the County reuse main will be metered.~~

~~(4) The minimum allowable cover over reuse pipe is 36" from the top of the pipe to final finished grade.~~

~~(c) Required Submittals for Permit~~

~~In addition to an executed reclaimed water agreement, a site plan with the following information must also be submitted to be reviewed and approved by the Division:~~

~~(1) Sprinkler layout and point(s) of connection to the County reuse system.~~

~~(2) The area of land to be irrigated, in acres.~~

~~(3) The latitude and longitude of the site.~~

~~(4) The total area of the property in acres.~~

~~(5) The average irrigation application rate, in inches per week.~~

~~(6) The general composition of the plants being irrigated, i.e., wax myrtle, oak trees, sod, etc.~~

Section 2. Appendix F, Section 9.23, Land Development Code of Seminole County, is hereby repealed in its entirety.

~~9.23 RECLAIMED WATER FACILITIES~~

~~Implementation of the County's reclaimed water system requires careful management on the part of the County and an ongoing educational awareness by the consumer with regard to cross connection control. Reclaimed water use by the consumer shall meet the following requirements:~~

~~(a) All reclaimed water systems and facilities shall comply with Chapter 62-610, F.A.C.~~

~~(b) All potable water lines entering an area irrigated by reclaimed water shall attach appropriate approved backflow prevention assemblies in accordance with this Section.~~

~~(c) No connection shall be permitted between the reclaimed water system and a potable water system, source, or~~

~~any private irrigation well. All private irrigation wells shall be physically disconnected from the reclaimed water system.~~

~~(d) No reclaimed water shall be permitted to enter buildings or dwelling units without specific written approval from the County's Water and Sewer Division Manager or his designee.~~

~~(e) A minimum 75-foot setback shall be required from any potable water well to the reclaimed water system.~~

~~(f) The reclaimed water lines shall have a minimum separation of five (5) feet center to center, or three (3) feet outside to outside, whichever is greater, from potable water lines and sewer collection lines.~~

~~(g) Pantone Purple .522C color coding and markings shall be used to differentiate reclaimed water lines from potable water lines and sewer collection lines.~~

~~(h) All irrigated areas shall be a minimum of one hundred (100) feet from outdoor public eating, drinking or bathing facilities (swimming pools, etc.), unless low trajectory spray heads and/or landscape buffers are used to prevent aerosol drift.~~

~~(i) Ponding and runoff of reclaimed water shall not be allowed.~~

~~(j) Washing of vehicles with reclaimed water shall take place on pervious surfaces. Runoff shall not be permitted.~~

~~Specific written approval from the Water and Sewer Division Manager or designee shall be obtained prior to car washing or installing car washing facilities.~~

~~(k) Hose bibbs and/or hand operated connections and outlets shall be contained in underground vaults or boxes and appropriately tagged or labeled. Hose bibb connection vaults and boxes shall be locked and/or a special tool required to operated the hose bibb or outlet. The Water & Sewer Division Manager or designee shall have final approval of hose bibb requirements.~~

~~(l) Signs informing the public of the use of reclaimed water shall be conspicuously and strategically placed throughout the area to be irrigated (that is, at the meter and areas visible to the public). Notification on score cards shall be used when irrigating golf courses.~~

Section 3. Chapter 270, Part 4, Article III, Seminole County Code is hereby amended to read as follows:

Secs. 270.22530-270-250 Reserved.

Section 4. Chapter 270, Part 4, Article III, Seminole County Code, Secs. 270.225 through 270.229, are hereby created to read as follows:

Sec. 270.225. Purpose. The County's Reclaimed Water System is presently available for the primary purpose of irrigation.

Sec. 270.226. Promulgation And Enforcement.

(a) Connection Guidelines for Existing Utility Customers

(1) Upon notification from the Environmental Services Department Director (Director) that reclaimed water is available, the customer shall disconnect the irrigation system from the potable water system within six (6) months of the notification. For the purposes of this Section, the term available means that a reclaimed water line is located within one hundred fifty feet (150') from the customer's property boundary.

(2) Any existing residential customer with landscaping that meets all standards for water-efficient landscaping set forth in Sec. 30.1229 shall not be required to disconnect from the potable water system as long as such property continues to meet the water-efficient landscaping standards and to irrigate the landscaping in a water conserving manner. The Director, or his/her designee, shall determine compliance with the water-efficient landscaping standards for purposes of this exemption.

(b) Irrigation Meters

(1) Reclaimed water meters shall be installed and potable water irrigation meters removed during connection to the reclaimed water service line. No irrigation with potable water from the County's potable water system shall occur if reclaimed water is available.

(2) In the event that the County is unable to deliver an adequate supply of reclaimed water, and has provided written notification to its customers, irrigation using potable water from a hose bib shall be allowed.

(3) The customer's reclaimed water irrigation system shall not be cross-connected to the potable water system.

(c) Petition for Variance

(1) Any customer requesting a variance from the provisions of this Section may file a petition for variance in the form of a letter to the Director.

(2) No variance shall be approved by the Director unless the petitioner affirmatively demonstrates that alternative measures will be implemented which achieve the same level of potable water demand reduction as the provision for which a variance is requested. Potable water demand reduction must be demonstrated within three (3) months of the date of variance approval. Extensions may be granted by the Director upon adequate justification.

(3) Failure to achieve potable water demand reduction within three (3) months of variance approval shall result in discontinuation of irrigation water service.

Sec. 270.227. Use Of Reclaimed Water

(a) Supply

The County shall deliver to the best of its ability, an adequate supply of reclaimed water at all times; provided, however, that no guarantees can be provided to deliver specific quantities at specific times. The County reserves the right to temporarily discontinue service to the Reclaimed Water System, or a portion thereof, as deemed necessary by the Director.

(b) Conservation of Reclaimed Water

(1) The County recognizes that reclaimed water is a valuable resource. Reclaimed water shall be used only to the extent necessary for irrigation of lawns, landscaping, individual plants, and other similar uses.

(2) A functioning rain sensor device that interrupts the irrigation cycle when activated is required on all irrigation systems utilizing reclaimed water.

(c) Restrictions on Use of Reclaimed Water

The following uses or conditions shall not be permitted for reclaimed water:

(1) entry into buildings or dwelling units;

(2) filling swimming pools, hot tubs, spas, or wading pools, or for other body contact recreation including, but not limited to, playing in sprinklers;

(3) pressurizing fire hydrants or sprinkler systems for fire protection;

(4) irrigating crops intended for human consumption;

(5) washing pets, equipment, structures, driveways, or vehicles by residential customers;

(6) ponding or runoff;

(7) release or discharge to open water bodies including, but not limited to, lakes, rivers, canals, and ditches; or

(8) application to properties containing subsurface drainage tiles or plates.

(d) Wells

(1) Customers with existing irrigation wells may continue to use wells for irrigation purposes after reclaimed water is available; provided, however, that the customer shall ensure that all irrigation wells are physically disconnected from the potable and Reclaimed Water System.

(2) The County shall not provide reclaimed water service where wells are used as a source of potable water and where buffer zones, as required by the Florida Department of Environmental Protection, cannot be maintained.

(3) Wells intended for use as potable water shall not be installed within seventy-five feet (75') of existing areas where reclaimed water is available.

Sec. 270.228. Administrative Requirements

(a) Application for Reclaimed Water Service

Prior to the provision of reclaimed water by the County, an applicant shall submit, on a form provided by the Department, an application to purchase Reclaimed Water Service. The applicant shall state the area of land to be irrigated in acres. Flows shall be based on an annual calculated daily usage not to exceed one and a half inches (1½")per week.

(b) The applicant shall attend a health and safety presentation provided by the Environmental Services Department.

(c) Right to Refuse Service

No payment of costs, submittal of an application, or other act required to receive Reclaimed Water Service shall guarantee such service. The Department shall 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 sole judgment of the Director, applying sound engineering principles, may cause the extension to not be of benefit to the County. Any fees submitted to the Department shall be returned to the applicant upon determination by the Department to not provide service.

(d) Fees

Reclaimed water service charges shall be established by Resolution as adopted from time to time by the Board of County Commissioners. The Board of County Commissioners may adopt a

schedule of charges for the different customer and service classifications as established herein, and may further provide for charges for particular uses within each classification.

(e) Non-Transferability of Reclaimed Water

Any reclaimed water capacity allocated for a property shall be used only for the property for which the capacity was allocated. The capacity allocation shall run with the land and is transferred with ownership of the property if written notification was provided to the County on the appropriate County form prior to the property transfer. Reclaimed water cannot be sold or transferred to another person or entity.

(f) Discontinuing Service

The County may discontinue Reclaimed Water Service to any customer due to non-compliance with the provisions established hereunder, nonpayment of bills, tampering with any service equipment, cross-connections with another water source, or for any reason detrimental to the utility system. The County shall terminate service until the condition is corrected and all costs due the County are paid. These costs may include, but are not limited to, delinquent billings, fines, and payment for any damage caused to the utility system. Should discontinued Reclaimed Water Service be turned on without Department authorization, the Department shall remove the service equipment and make an additional charge as provided hereunder.

Sec. 270.229 Reclaimed Water System Requirements

(a) Public Easement Requirements

(1) No reclaimed water mains shall be accepted by the County for maintenance unless located in public rights-of-way or public easements suitable for such purpose. Any new easement shall be adequately sized to accommodate the construction, installation, and maintenance of any Reclaimed Water System component.

(2) No obstructions shall be planted, built, or otherwise created within the limits of an easement or right-of-way without the written permission of the Director. Obstructions may include, but are not limited to, permanent structures, plants larger than groundcover, and all items listed as nuisance items in Sec. 95.3. Removal of obstructions, and all repairs necessitated by said removal, shall be the responsibility of the property owner as required by Sec. 95.11.

(b) Ownership and Maintenance

(1) All reclaimed water facilities and appurtenances, up to and including the reclaimed water meter, other than on-site irrigation systems, shall become and remain the property of the County. After acceptance by the County, such facilities and appurtenances shall be maintained by the County and may be removed or changed by the County at any time. The property owner shall convey to the County a perpetual easement to operate

and maintain the service line and point of connection if located on privately owned property, as a precondition of receiving Reclaimed Water Service from the County. By constructing or installing facilities or appurtenances accepted by the County, no person shall acquire any interest or right therein other than the privilege of connecting to the Reclaimed Water System and receiving services therefrom. No person shall perform any work or be reimbursed for any work on the Reclaimed Water System without written authorization by the Director prior to commencement of the work.

(2) The County shall make a reasonable effort to inspect and maintain the facilities and appurtenances in good repair but assumes no liability for any damage caused by the system in situations beyond the control of normal maintenance or not reported to, or known by the County in sufficient time to cause repairs. These situations may include, but are not limited to, damage due to breaking of pipes and poor quality of water caused by unauthorized or illegal entry of foreign material into the system.

(3) All irrigation systems constructed on private property, except components of the Reclaimed Water System located in utility easements, shall remain the property of and be operated and maintained by the owner. Each owner shall be responsible for maintaining the irrigation system in good

working condition. The County may disconnect the service to any property that does not maintain the Reclaimed Water System or irrigation system in good working condition.

(4) The County shall not be responsible for maintenance of or damage caused by water escaping from the service pipe or any other pipe fixture on the outlet side of the meter.

(5) Should the property owner require reclaimed water service at different pressures, or in any way different from that normally supplied by the County, the property owner shall be responsible for installing the necessary devices to make the adjustments and for obtaining prior written approval from the Director to make the adjustments.

(c) Connection Responsibility and Cost

Cost for connecting to the County's reclaimed water system shall be established by Resolution as adopted from time to time by the Board of County Commissioners.

(d) Cross Connection and Backflow Prevention

(1) In all premises where Reclaimed Water Service is provided, the potable water supply shall be protected by an approved backflow prevention device. No cross connection shall be permitted. All design and construction of Reclaimed Water Systems shall conform to cross-connection and backflow prevention procedures set forth in Section 9. Backflow

prevention devices shall be installed and maintained annually as specified herein.

(2) No connection shall be permitted between the Reclaimed Water System and an irrigation well. All irrigation wells shall be physically disconnected from the Reclaimed Water System.

(3) To determine the presence of any potential hazards to the public potable water system, County personnel may enter upon the premises of any customer receiving reclaimed water for the purposes of conducting an inspection. Each customer of reclaimed water shall, by reclaimed water service application, give implied consent to such entry upon the premises.

(4) In the event a cross-connection is found on property provided Reclaimed Water Service, the Director may immediately discontinue potable and Reclaimed Water Service to said property. Before service may be resumed, the customer shall remove the cross connection, perform other corrections and install any devices required by the Director.

(e) Construction and Design Standards

(1) Existing irrigation systems may connect to reclaimed water provided no cross-connections exist and the potable water supply is protected by an approved backflow prevention device. All vaults, valves, and outlets connected to

Reclaimed Water Systems shall be labeled to warn the public that the water is not safe for drinking.

(2) Any irrigation system provided by the customer shall consist of an underground system with permanently placed sprinkle devices or below ground hose bibs contained in a locked valve box. The systems shall not include devices, above ground faucets, or other connections that could permit the reclaimed water to be used for any purpose other than irrigation unless such uses and systems have been approved in writing by the Director.

(3) The County shall require appropriately sized reclaimed meters for all Reclaimed Water System customers. Installation and maintenance of reclaimed meters shall comply with guidelines developed for meters established herein.

(4) Every service line provided by the customer shall have an easily accessible and fully protected master control valve on the discharge side of the meter.

(5) All common landscape irrigation spray heads may be used with reclaimed water; however, within one hundred feet (100') from outdoor public eating, drinking, and bathing facilities, low trajectory nozzles, or another similar device to minimize aerosol formation, shall be used.

(6) All reclaimed water lines shall be installed in a manner such that the minimum horizontal and vertical separation

between existing potable water mains and sewer mains is in accordance with Chapter 62-555, F.A.C., as amended.

(7) For newly installed irrigation systems, all pipes and ground level or above appurtenances shall be adequately identified by color and advisory signs. Coloration and signage standards shall be consistent with Chapter 62-610, F.A.C., as amended. All vaults, valves, and outlets on Reclaimed Water Systems shall be labeled to warn the public that the water is not safe for drinking. Signs denoting areas irrigated by reclaimed water shall be posted in a conspicuous manner so as to notify people accessing the area of the use of reclaimed water for irrigation purposes. Signs shall be provided and installed at locations determined by the County. Pantone Purple .522C color coding and markings shall be used to differentiate reclaimed water lines from potable water lines and sewer collection lines.

(f) Unauthorized Work on Reclaimed Water System

No person, unless expressly authorized by the Director, shall tamper with, work on, or in any way alter or damage any County reclaimed water appurtenance. Tampering or working on shall include, but is not limited to, opening or closing valves, or causing any water to flow from the system. No unauthorized person shall cut into or make any connection with the system.

(g) Inspections

(1) To ensure compliance with provisions of Section 9, the County may inspect, remove, and/or secure any or all devices installed by the customer which connect to or control the Reclaimed Water System.

(2) Inspections shall occur annually in accordance with the requirements set forth in Chapter 62.610, F.A.C. The Department may perform additional inspections at reasonable times with such frequency as is necessary to establish compliance with Section 9.

(3) Failure to permit authorized County personnel to enter onto the premises for the purpose of inspecting the customer's Reclaimed Water System pursuant to this Section shall be grounds for immediate discontinuance of the Reclaimed Water Service by the County to the subject premises.

(h) Chemical Injections

No person shall inject any chemical into a Reclaimed Water System.

Section 5. Codification. It is the intention of the Board of County Commissioners that the provisions of this Ordinance shall become and be made a part of the Seminole County Code and the Land Development Code of Seminole County. It is the further intention of the Board of County Commissioners that the word "Ordinance" may be changed to "Section," "Article," or other appropriate word or phrase and that the sections of this Ordinance

may be renumbered or relettered to accomplish such intention; provided, however, that Sections 5, 6 and 7 shall not be codified.

Section 6. Severability. If any provision of this Ordinance or the application thereof to any person or circumstance is held invalid, it is the intent of the Board of County Commissioners that the invalidity shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are declared severable.

Section 7. Effective Date. This Ordinance shall take effect upon filing a copy of this Ordinance with the Department of State by the Clerk of the Board of County Commissioners.

ENACTED this ____ day of _____, 2006.

BOARD OF COUNTY COMMISSIONERS
SEMINOLE COUNTY, FLORIDA

By: _____
CARLTON HENLEY, Chairman

SD/ss

4/27/05 1/12/06

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ECONOMIC IMPACT STATEMENT

DATE: February 10, 2006

DEPT./DIVISION: Env. Services

CONTACT PERSON: J. Dennis Westrick, P.E.

EXTENSION: 2040

DESCRIBE PROJECT/PROPOSAL:

This ordinance establishes criteria necessary for the County to expand its **Reclaimed Water** program to the individual residential parcel, or customer level.

DESCRIBE THE DIRECT ECONOMIC IMPACT OF THE PROJECT/ PROPOSAL UPON THE OPERATION OF THE COUNTY:

Utility operations of the County's Environmental Services Department (ESD) will be impacted as they are required to operate and maintain these utility assets. Repairs and replacements will become base budget items in future periods as the residential program expands.

Efforts of the County's One-Stop-Permitting (OSP)/Streamlining process will require revision to incorporate reclaimed water asset title conveyance, easements, etc. Coordination of the Planning, County Attorney's and Environmental Services offices is necessary to complete revisions to the OSP/Streamlining processes. The economic impacts of these changes within OSP are immaterial.

Requirements associated with meter reading and maintenance are of marginal impact to the ESD staff and can be accommodated by existing staff levels through the normal planning horizon. Meter sets associated with major retro-fit efforts are expected to be contracted as part of the infrastructure installation.

Utility construction inspections will realize a marginal impact as well. Again no impact to staffing levels is anticipated.

DESCRIBE THE DIRECT ECONOMIC IMPACT OF THE PROJECT/ PROPOSAL UPON THE PROPERTY OWNERS/TAX PAYERS/CITIZENS WHO ARE EXPECTED TO BE AFFECTED:

Property owners may incur additional infrastructure costs during development associated with this ordinance. Estimates of design and construction associated with the reclaimed water infrastructure installation are approximately \$33.75 per linear foot for six inch pipe.

Individual utility customers receiving reclaimed water service will be marginally impacted in the transition from potable supply for irrigation. Direct costs will be incurred for connecting existing irrigation facilities to the new source of supply. Given the proposed rate structure for residential reclaimed water is less than that of potable water,

customers substituting reclaimed for potable will realize reduced monthly billings.

IDENTIFY ANY POTENTIAL INDIRECT ECONOMIC IMPACTS, POSITIVE OR NEGATIVE WHICH MIGHT OCCUR AS A RESULT OF THE PROJECT PROPOSAL:

Provision of reclaimed water to residents of Seminole County offers significant economic and conservation incentives. The expansion of the County's reclaimed water to the residential level of users also represents significant savings in required groundwater withdrawal requirements, thereby both conserving and extending this limited resource.