

ORDINANCE NO. 2007-45

SEMINOLE COUNTY, FLORIDA

AN ORDINANCE AMENDING THE VISION 2020 SEMINOLE COUNTY COMPREHENSIVE PLAN; AMENDING THE TEXT OF THE CAPITAL IMPROVEMENTS, CONSERVATION, FUTURE LAND USE, IMPLEMENTATION, INTERGOVERNMENTAL COORDINATION, AND POTABLE WATER ELEMENTS OF THE COMPREHENSIVE PLAN; PROVIDING FOR LEGISLATIVE FINDINGS; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

**WHEREAS**, the Board of County Commissioners of Seminole County (hereinafter referred to as the "Board") enacted Ordinance Number 91-13, adopting the 1991 Seminole County Comprehensive Plan, which was subsequently amended in accordance with State law; and

**WHEREAS**, the Board enacted Ordinance Number 2001-21, which renamed the 1991 Seminole County Comprehensive Plan to the "Vision 2020 Seminole County Comprehensive Plan" (hereinafter referred to as the "Plan"); and

**WHEREAS**, the Board has followed the procedures set forth in Sections 163.3184 and 163.3187, Florida Statutes, in order to further amend certain provisions of the Plan as set forth herein relating to Large Scale Plan Amendments; and

**WHEREAS**, the Board has substantially complied with the procedures set forth in the Implementation Element of the Plan regarding public participation; and

**WHEREAS**, the Seminole County Land Planning Agency held a public hearing with all required public notice for the purpose of providing recommendations to the Board of County

Commissioners with regard to the Plan amendments set forth herein; and

**WHEREAS**, the Board held public hearings with all required public notice for the purposes of hearing and considering the recommendations and comments of the general public, the Land Planning Agency, other public agencies, and other jurisdictions prior to final action on the Plan amendments set forth herein; and

**WHEREAS**, the Board hereby finds that the Plan, as amended by this Ordinance, is internally consistent with and compliant with the provisions of State law including, but not limited to, Part II, Chapter 163, Florida Statutes, and the State Comprehensive Plan, and the Strategic Regional Policy Plan of the East Central Florida Regional Planning Council; and

**WHEREAS**, the Plan amendments set forth herein have been reviewed by all required State agencies and the Objections, Recommendations and Comments Report prepared by the Department of Community Affairs has been considered by the Board; 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 each text amendment enacted by 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. Legislative Findings.** The above recitals are true and correct in form and include legislative findings, which are a material part of this Ordinance.

**Section 2. Text Amendments.** The text of the Plan is hereby amended as set forth in Exhibit A (attached hereto and incorporated herein by this reference) as noted in the following table:

Ord. Exh.	Attachment Number	Amendment Numbers	Amended Elements	LPA Hearing Date	BCC Hearing Dates
A	Attachment 1	06EX.TXT03.1.01 through .33 consecutively	Potable Water	07/12/2006	07/18/2006, 08/08/2006, 10/24/2006, 12/12/2006, 11/13/2007
	Attachment 2	06EX.TXT03.2.01, .02, .03, .04	Capital Improvements	Same	Same
	Attachment 3	06EX.TXT03.3.01 through .07	Conservation	Same	Same
	Attachment 4	<i>Notation only - not amended</i>	Drainage	NA	Same
	Attachment 5	06EX.TXT03.4.01, .02, .03, .04	Future Land Use	Same	Same
	Attachment 6	06EX.TXT03.5.01	Implementation	Same	Same
	Attachment 7	06EX.TXT03.6.01	Intergovernmental Coordination	Same	Same

**Section 3. Severability.**

(a) The enactment of this Ordinance includes six (6) text amendments.

(b) 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 4. Exclusion from County Code/Codification.**

(a) It is the intent of this Board that the provisions of this Ordinance shall not be codified into the Seminole County Code, but that the Code codifier shall have liberal authority to codify this Ordinance as a separate document or as part of or as a volume of the Land Development Code of Seminole County in accordance with prior directions given to the said Code codifier.

(b) The Code codifier is hereby granted broad and liberal authority to codify and edit the provisions of the Seminole County Comprehensive Plan, as amended.

**Section 5. Effective Date.**

(a) A certified copy of this Ordinance shall be provided to the Florida Department of State by the Clerk of the Board of

County Commissioners in accordance with State law.

(b) This Ordinance shall take effect upon filing a copy of this Ordinance with the Florida Department of State by the Clerk of the Board of County Commissioners; provided, however, that the effective date of the Plan amendments set forth herein shall be twenty-two (22) days after the Florida Department of Community Affairs' publication of a notice of intent to find the Plan amendments in compliance if no affected party challenges the Plan amendments, or, if an affected party challenges the Plan amendments, when a final order is issued by the Florida Department of Community Affairs or the Administration Commission determining that the amendments are in compliance in accordance with Section 163.3184, Florida Statutes, whichever occurs earlier. No development orders or development permits, if dependent upon an amendment, may be issued or commence before an amendment has become effective. If a final order of noncompliance is issued by the Administration Commission adopting a resolution affirming its effective status, a copy of which resolution shall be provided to the Florida Department of Community Affairs, Bureau of Local Planning, 2555 Shumard Oak Boulevard, Tallahassee, Florida 32399-2100 by the Clerk of the Board of County Commissioners.

**ENACTED** this 13th day of November 2007.

BOARD OF COUNTY COMMISSIONERS  
SEMINOLE COUNTY, FLORIDA

By: Brenda Carey  
BRENDA CAREY, Chairman

*Water Supply Facilities Work Plan - Exempt Large Scale Amendment  
to the Comprehensive Plan*

## EXHIBIT A

*Amended pages to Elements of the Comprehensive Plan are presented under the following attachment headings.*

*Where a policy has not been added or revised but is being noted only because of its applicability to the Work Plan, the policy number and title have been underlined. These underlines will not be reflected in the amended plan and are not given Amendment Numbers..*

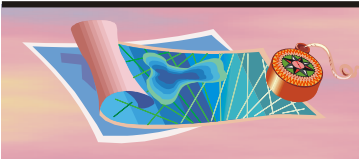
<b>Attachment Title</b>	<b>Amendment Numbering</b>
1. Potable Water Element	06EX.TXT03.1.01 through .33
2. Capital Improvements Element	06EX.TXT03.3.01, .02, .03, .04
3. Conservation Element	06EX.TXT03.2.01 through .07
4. Drainage Element	Notation Only
5. Future Land Use Element	06EX.TXT03.4.01, 02, 03, 04
6. Implementation Element	06EX.TXT03.5.01
7. Intergovernmental Element	06EX.TXT03.6.01

**ATTACHMENT 1**  
**Amendments to the Potable Water Element**  
**(06F.TXT03.1)**

- **Revision to Introduction**
- **Revision to Issues and Concerns**
- **Revision to Goals, Objectives and Policies**
- **Addition of new text section entitled: “Water Supply Facilities Work Plan**
- **Revision to Exhibits**

*(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)*





# Vision 2020 Comprehensive Plan Seminole County, Florida

## POTABLE WATER ELEMENT INTRODUCTION

As of 2007, Potable water is pumped from the ground, treated and distributed to residential and non-residential unincorporated Seminole County users through County, city and private water systems. ~~The County currently provides potable water service to four (4) major service areas in the unincorporated area: owns and operates nine water treatment plants in three service areas:~~

~~A~~• Southwest Service Area ~~--Served by the Lynwood plant; In 2004, Seminole County purchased seven (7) privately owned water treatment and distribution systems from Florida Water Services (FWS), which are now considered part of the Southwest Service Area (SWSA), although the service areas are not adjacent. One of the treatment facilities was abandoned since the purchase, and only the distribution system in that area is now maintained. The SWSA is supplied by the following water treatment plants (WTP) and other facilities all of which were former FWS utilities, except for Lynwood: Lynwood, Apple Valley, Dol Ray Manor, Druid Hills, Fern Park, Lake Brantley, Lake Harriet Estates, and Meredith Manor;~~

~~B~~• Southeast Service Area - Served by the Consumers, Indian Hills, and Lake Hayes ~~plants~~WTPs;~~and~~

~~X~~• Northwest Service Area - Served by the Heathrow, Hanover Woods, Lake Monroe ~~and Markam WTPs;~~ ~~and Country Club, and Greenwood Lakes plants.~~

• Northeast Service Area – Served by the Country Club and Greenwood Lakes WTPs.

Additional potable water service is provided to portions of unincorporated users areas by ~~the several cities~~ and private water providers as detailed in the Work Plan. ~~of Altamonte Springs, Casselberry, Lake Mary, Oviedo and Sanford, and by two major private water utilities.~~

The County operates the potable water system as a fee-based enterprise. To ensure a continued supply of water, the Water and Wastewater Division of the County's Environmental Services Department ~~does~~ prepares an annual budget and five-year capital plan for maintenance, replacement and capacity expansion based on a five-year master plan. Additionally, the County ~~works~~ coordinates with the cities and private utilities to share wholesale service and coordinates works with the St Johns River Water Management District regarding the long term projected growth of demand for water services in Seminole County.

In 2002, 2004, and 2005, the Florida Legislature added additional requirements for the long term planning and coordination of the use of all available water supplies. These requirements are being addressed by a Comprehensive Plan amendment to the Potable Water Element in 2007. These amendments are more fully discussed in the Issues and Concerns section of this Element.

~~In the past decade~~Since the early 1990's, public health and safety has been furthered by the expansion of the water fluoridation program and the adoption of a cross-connection control (backflow prevention) ordinance to reduce the chance of water contamination within the distribution system. Additionally, the Public Safety Department operates an underground fuel storage tank replacement program to reduce the possibility of ground water supply contamination.

(Revised: Amendment 06EX.TXT03.1.01, Ordinance 2007-XX45, 11/13/2007)



# Vision 2020 Comprehensive Plan Seminole County, Florida



The County requires all new developments to sign wastewater reuse agreements where reuse water is or will be available of all new development. Other methods to increase conservation include public education; periodic amendment of the Building Code requirements to require use of water saving devices in development; amendment of the Land Development Code to require the use of drought tolerant plant species and water conserving irrigation techniques (known as Xeriscaping); and application of a surcharge for excessive consumption. Approved conservation methods should may be used singly or in combination on a site-specific basis.

Additionally, St. Johns River Water Management District (SJRWMD District) and Seminole County have a joint agreement to equally share the cost of permanently plugging abandoned artesian wells in Seminole County, with owner consent. Abandoned wells are plugged by pumping grout cement through PVC pipe into the bottom of the well. Since the SJRWMD District-Seminole County Cost Share Program began in 1992, over 229 wells have been permanently plugged or repaired resulting in the reduction of approximately 22 million gallons per day from flowing onto the ground.

## Issue POT 5

### Levels Of Service

The State requires that local jurisdictions assure that adequate water supplies and potable water facilities meeting the adopted level of service, shall be in place and available to serve new development no later than the issuance by the County of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit, or its functional equivalent, the County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional equivalent. adopted levels of water service be maintained concurrent with the demand for those services.

The Goals, Objectives and Policies section establishes the County's level of service as 350 gallons of water per day (average daily flow) per Equivalent Residential Connection (ERC) for each individual service area. The amount of peak treatment facility capacity required is established as a minimum of 2.0 times the average daily flow. These levels of service shall also be applied for planning purposes to private and city utilities serving unincorporated customers unless a different level of service is authorized by the Florida Department of Environmental Protection or is adopted in a comprehensive plan.

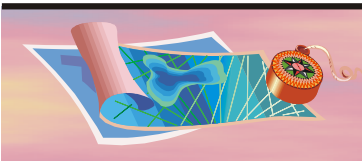
The County will continue to operate in compliance with all rules and requirements of FDEP, including, but not limited to, peak day, peak hour and service pressure requirements.

## Issue POT 6

### Future Water Supply

During 2000 and 2001, the St Johns River Water Management District (District) has worked to identify the water needs of the District through the year 2020. For the last 15 years, the District's water supply planning and assessment investigations have documented that the rate of withdrawal of groundwater in certain areas of the District is approaching the maximum rate that can be sustained without causing unacceptable adverse impacts to the water resources and related natural systems. Water supply planning results to date show that at some locations, withdrawal rates will likely approach or reach sustainable limits in the foreseeable future, well within the current 20-year planning horizon.





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The 2005 District Water Supply Plan (DWSP 2005) [also known as the Regional Water Supply Plan, (RWSP)] addressed current and future water use, traditional and alternative water sources, and water conservation efforts required to meet 2025 water supply needs, while sustaining water quality and protecting wetland and aquatic systems. It was adopted by the Governing Board in February 2006. The DWSP 2005 was designed to meet the requirements of the water supply planning provisions of Section 373, Florida Statutes (F.S.), and was based on a planning horizon extending through 2025. (The above text for this section was excerpted from: Technical Publication SJ2006-2, District Water Supply Plan, 2005)

The results of the DWSP 2005 -indicate the potential need for new regional facilities, new water storage methods and a much stricter consumptive use permitting for new and existing wells. The County will continue to be fully engaged in the regional process of addressing and resolving future water supply ~~these~~ issues.

(Revised: Amendment 06EX.TXT03.1.02, Ordinance 2007-~~XX~~45, 11/13/2007)

## Issue POT 7

### Water Supply Facilities Work Plan

In 2002, 2004, and 2005 the Legislature expanded the local government comprehensive plan requirements to strengthen coordination of water supply planning and local land use planning. Stronger coordination requirements resulted from concerns that groundwater withdrawals are approaching their limit in many areas of the State, and that alternative supplies must be identified, quantified and developed. These actions were envisioned as necessary additions to the implementation of local water conservation strategies and Florida Department of Environmental Protection permitted water reuse programs.

The most significant requirement was completion of a 10-year Water Supply Facilities Work Plan (Work Plan) by all counties and cities within areas designated as "priority water resource caution areas" (PWRCAs) by the District in the DWSP 2005. The DWSP 2005 was approved by its District Governing Board in February 2006. PWRCAs correspond to the regional water supply planning areas referred to in State law. These are areas where existing and reasonably anticipated sources of water and conservation efforts may not be adequate to 1) supply water for all existing legal uses and reasonably anticipated future needs, and 2) sustain the water resources and related natural systems.

The Work Plan must identify the current and planned water supply facilities and source(s) of water that will meet the projected demand within the local government's jurisdiction and must be adopted as part of the Potable Water Element. The Capital Improvements Element must also be amended to include projects listed in the first five years of the ten-year Work Plan. Additionally, appropriate goals, objectives and policies of these and other Plan elements must be amended or put in place in support of the Work Plan.

In 2006, the County began the amendment process to incorporate the Work Plan as required by law. Once adopted, the Work Plan shall be amended within eighteen months of the DWSP 2005 being updated. Annual updates of capital projects to maintain consistency with the Capital Improvements Element shall also be accomplished.



# Vision 2020 Comprehensive Plan Seminole County, Florida



## Meeting the Legislative Requirements

Wekiva Parkway and Protection Act (Wekiva Act) - Chapter 369, Part III – The Wekiva Act required the County to amend its comprehensive plan by December 1, 2006, to include an up-to-date 10-year Water Supply Facility Work Plan (Work Plan) for building potable water facilities necessary to serve existing and new development and for which the local government is responsible, as required by s. 163.3177(6)(c), F.S.

The County is meeting the requirements of the Wekiva Act by adopting a Work Plan that addresses both County facilities and service areas as well as service to unincorporated users outside County service areas by city and private water utilities. In doing so, the County is progressing toward addressing the full requirements of Chapter 163, F.S. The County transmitted its proposed Work Plan on August 8, 2006, to the Department of Community Affairs (Department) and the St Johns River Water Management District (District) for review and comment with the intent of adopting the Work Plan prior to the deadline. Following receipt of the Department's Objections, Recommendations and Comments (ORC) Report, County staff met with Department and District staff regarding the ORC and decided to continue the adoption hearing of the Work Plan to 2007 to allow time to properly address the Department's recommendations.

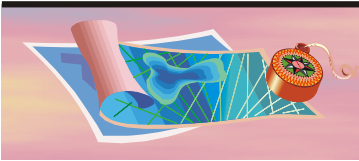
Chapter 163, Florida Statutes (F.S.) - (Chapter 163.3177(6)(c)) – Within 18 months after the District Governing Board approves an updated regional water supply plan, the elements [Potable Water, et al] must incorporate the alternative water supply project or projects selected by the local government from those identified in the regional water supply plan pursuant to s. 373.0361(2)(a) or proposed by the local government under s. 373.0361(7)(b), F.S.

The element must identify such alternative water supply projects and traditional water supply projects and conservation and reuse necessary to meet the water needs identified in s. 373.0361(2)(a), F.S., within the local government's jurisdiction and include a work plan, covering at least a 10 year planning period, for building public, private, and regional water supply facilities, including development of alternative water supplies, which are identified in the element as necessary to serve existing and new development. The work plan shall be updated, at a minimum, within 18 months after the governing board of a water management district approves an updated regional water supply plan, generally done every five (5) years.

The adoption of the Work Plan into the Potable Water Element in conjunction with other Comprehensive Plan amendments will meet the requirements of both the Wekiva Act and Chapter 163.

(Added: Amendment 06EX.TXT03.1.03, Ordinance 2007-~~XX~~45, 11/13/2007)





# Vision 2020 Comprehensive Plan Seminole County, Florida

## POTABLE WATER ELEMENT GOAL, OBJECTIVES AND POLICIES

### GOAL

The County shall provide quality public water facilities to serve existing and future development needs in a cost efficient, highly reliable, and environmentally sound manner.

### OBJECTIVE POT 1 ENVIRONMENTAL AND CONSERVATION POLICIES

The County shall ensure that the provision of water service and the operation of water treatment facilities under its control is accomplished in a manner which will minimize to the maximum practicable extent, any adverse impacts on the environment, public safety, residential neighborhoods and/or surrounding properties through the implementation of the following policies:

#### Policy POT 1.1 Back Flow Prevention

The County shall enforce its backflow prevention ordinance that enables the County to require inspection, testing and maintenance of backflow devices as well as the retrofitting of existing facilities to meet the requirements of the ordinance. The ordinance also provides for the use of sanctions such as citations and/or disconnection if standards are not met.

#### Policy POT 1.2 Safe Drinking Water Act

The County shall monitor amendments to the Safe Drinking Water Act, as amended. Significant amendments shall be brought to the Board's attention in a timely manner through a preliminary impact analysis statement provided to the Board by the Department of Environmental Services describing the range of known solutions, estimated cost of each and a future timetable to precisely identify the most appropriate and cost effective method of compliance.

#### Policy POT 1.3 Fluoridation

The County shall continue the existing program of water fluoridation.

#### Policy POT 1.4 Water Conservation Program

A The County shall ensure that current and proposed conservation practices meet or exceed conditions of the current Consumptive Use Permit (CUP), and

B Ensure such practices are consistent with conservation practices identified in the CUP technical staff report, and

C Ensure these practices are incorporated into the Potable Water Element's Water Supply Facilities Work Plan.

*(Added: Amendment 06EX.TXT03.1.04, Ordinance 2007-~~XX~~45, 11/13/2007)*

#### Policy POT 1.54 Conservation Devices

Each update of the Land Development Code or Building Code shall include new requirements or revisions for water conservation devices and methods as needed. Such methods might include but are not limited to provisions for the use of drought tolerant species and water conserving irrigation techniques (Xeriscaping), and surcharges for excessive consumption. —Approved conservation methods shall be used singly or in combination on a site-specific basis. The County shall coordinate with SJRWMD the





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District to reduce groundwater withdrawals for non-essential uses that consume large quantities of water (i.e. the filling of decorative fountains and ponds).

## **Policy POT 1.65**    **Emergency Water Conservation**

The County shall continue to have and shall amend, as necessary, the emergency water conservation ordinance to enable the County to limit water usage by methods that may include, but are not limited to, citations with fines in order to enforce restrictions, and surcharges for excessive consumption and use methods as are otherwise authorized by law. The ordinance shall, at a minimum, be consistent with the St. Johns River Water Management District's Emergency Water Conservation requirements.

## **Policy POT 1.76**    **Effluent Reuse**

The County shall continue to require all development to enter into effluent reuse agreements as a condition of sewer service. –Actual implementation of such agreements shall be based on, but not limited to, the following considerations: availability of effluent supply, distance from the facility, the nature of the soils and the nature of the development.

Additionally:

- A    The County shall ensure that current and proposed reuse practices meet or exceed conditions of Consumptive Use Permit (CUP), and
- B    Ensure such practices are consistent with the reuse practices identified in the CUP technical staff report, and,
- C    Ensure current and proposed reuse practices are consistent with the Regional Water Supply Plan, including the 2004 interim update, and other related reuse plans, and
- D    Ensure these practices are incorporated into the Potable Water Element's Water Supply Facilities Work Plan.

(Revised: Amendment 06EX.TXT03.1.05, Ordinance 2007-XX45, 11/13/2007)

## **Policy POT 1.87**    **Required Connection to Central Water Service**

The County shall require within the unincorporated urban area, as described in *Exhibit FLU: Urban/Rural Boundary*, connection to central water service where available as defined by Chapter 64E-6, F.A.C. or when a County capital project is scheduled and authorized to begin construction in the County's then current adopted annual budget or construction is committed to begin within one (1) year in an enforceable schedule contained within a binding developer's agreement.



# Vision 2020 Comprehensive Plan

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### OBJECTIVE POT 3 LEVELS OF SERVICE

The County shall establish and maintain a set level of service for each County potable water facility by providing facilities with sufficient capacity to meet projected service demands.

#### Policy POT 3.1 Levels of Service Standards

The County shall maintain adopted levels of service standards through the day-to-day activities of the Department of Environmental Services and the implementation of the adopted Capital Improvements Element and the adopted annual budget. Current and proposed level of service standards shall be consistent both in this policy and in the Potable Water Element's Water Supply Facilities Work Plan.  
*(Revised: Amendment 06EX.TXT03.1.06, Ordinance 2007-~~XX~~45, 11/13/2007)*

The following levels of service standards are adopted for each individual service area:

- A 350 gallons/day/Equivalent Residential Connection. Flow demands for commercial, industrial or other special developments differing from the flow values established by the serving utility shall be established from existing records or by estimated projections, using the best available data.
- B Fire flows in single family residential areas shall provide 600 gpm at a 20 psi residual pressure. Fire flows in commercial, institutional, industrial areas and apartment or multi-unit complexes shall provide 1,250 gpm at a 20 psi residual pressure.
- C Each peak treatment facility capacity shall be maintained at a minimum of two times (2) the permitted capacity.
- D These levels of service shall also be applied for planning purposes to private and city utilities serving unincorporated customers unless a different level of service is authorized by the Florida Department of Environmental Protection or as adopted in a comprehensive plan.
- E The County shall continue to operate in compliance with all rules and requirements of FDEP, as well as all other applicable laws, rules and regulations, including but not limited to peak day, peak hour and service pressure requirements.

#### Policy POT 3.2 Water Quality Master Plan

The County shall update the Water Quality Master Plan every five years. As part of the update, the County shall conduct a level of service review to determine if adjustment of the existing level is necessary based on, but not limited to, historical data and projected demand. The Water Supply Facilities Work Plan (Work Plan) shall be supported by the Water Quality Master Plan. The Work Plan shall be revised and updated as necessary to maintain consistency with the Master Plan.  
*(Revised: Amendment 06EX.TXT03.1.07, Ordinance 2007-~~XX~~45, 11/13/2007)*

#### Policy POT 3.3 New and Replacement Equipment

The County shall maintain the established levels of potable water service through the acquisition of new and replacement equipment in accordance with the adopted five year Capital Improvements Element.

#### Policy POT 3.4 Transmission Lines

The County shall ensure that future transmission lines are sized to adequately meet the projected demands of development according to development phasing needs based



# Vision 2020 Comprehensive Plan Seminole County, Florida



## OBJECTIVE POT 4 COORDINATION AND URBAN SPRAWL

The County shall coordinate the extension of lines or increase of facility capacity with adjacent municipal and private facilities and discourage urban sprawl through implementation of the following policies:

### Policy POT 4.1 Evaluation of Service Area Expansion

The County shall evaluate the impact on delivering adequate service to residents within the adopted service area as depicted in *Exhibit POT: Water Service Areas* prior to the expansion of a potable water service area outside the adopted service area boundaries. The County shall not expand the service area if the adopted level of service in the existing service area cannot be maintained or if the expansion will encourage urban sprawl.

### Policy POT 4.2 Methods of Providing Potable Water Outside of the Adopted Urban Service Area

Outside of the Adopted Urban Service Area as depicted in *Exhibit FLU; Special Area Boundaries*, the County shall:

- A Continue to rely primarily upon individual wells as the method of providing potable water to the residents and other occupants outside the urban services area.
- B Encourage private central systems that exist as of the adoption date of this Plan to continue to provide an adequate level of service to users in their respective service areas, although the County shall discourage them from expanding their service areas.
- C New development outside adopted central service areas shall not be designed nor constructed with central water and/or sewer systems.
- D Public and private central systems may be permitted in the future if it is clearly and convincingly demonstrated by the proponents of the system expansion that a health problem exists in a built but unserved area for which there is no other feasible solution. In such cases, the service area expansion plans will be updated concurrent with an area-wide administrative land use update.

### Policy POT 4.3 Existing Package Plants

Existing package plants (i.e., schools, mobile home parks) shall be requested by the County to hook-up to the County system when it becomes available.

### Policy POT 4.4 Wholesale Agreements

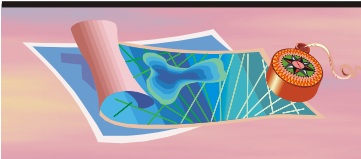
- The County shall enter into wholesale agreements with municipal and/or private utilities to encourage the most cost effective and efficient provision of water services and to avoid duplication of services during County expansion of capacity or lines when and where economically feasible and supportive of the County's long term water planning strategy.
- Wholesale agreements shall be incorporated as needed into the Support Documents of the Water Supply Facilities Work Plan (Work Plan) and designed to support and further advance the Work Plan.  
(Revised: Amendment 06EX.TXT03.1.08, Ordinance 2007-~~XX~~45, 11/13/2007)

### Policy POT 4.5 Extension of Service to New Development

The County shall continue to require new development to fund the cost of extending water lines to serve their development.







# Vision 2020 Comprehensive Plan Seminole County, Florida

## **OBJECTIVE POT 5 COORDINATION OF POTABLE WATER AND LAND USE PLANNING**

The County shall coordinate land use planning with the management of water source and supply plans through the Comprehensive Plan, local water supply initiatives and the St. Johns River Water Management District's Regional Water Supply Plan (DRWSP 2005).

(Added Objective and Policies: Amendment 06EX.TXT03.1.09, Ordinance 2007-~~XX~~45, 11/13/2007)

### **Policy POT 5.1 Ten Year Water Supply Facilities Work Plan**

The County shall maintain a Water Supply Facilities Work Plan (Work Plan) for at least a ten (10) year planning period addressing water supply facilities necessary to serve existing and future development within the County's water service areas and support other local and regional water supply plans. The Work Plan shall be incorporated wholly into the Potable Water Element of the Comprehensive Plan and be supported by data and analysis contained in separate documents noted in the Work Plan. Other elements of the Comprehensive Plan as noted in the Work Plan shall be amended as necessary to support and be consistent with the Work Plan.

(Added: Amendment 06EX.TXT03.1.10, Ordinance 2007-~~XX~~45, 11/13/2007)

### **Policy POT 5.2 Consistency of the Work Plan with the Capital Improvements Element**

Capital projects scheduled in the first five years of the ten year Work Plan shall be included in the Capital Improvements Element which is to be financially feasible. This schedule shall be updated annually as necessary to maintain consistency with the capital projects listed in the Work Plan and within 18 months following an update to the District Regional Water Supply Plan and subsequent revision to the Work Plan.

(Added: Amendment 06EX.TXT03.1.11, Ordinance 2007-~~XX~~45, 11/13/2007)

### **Policy POT 5.3 Coordination with the Seminole County Water Master Plan**

The County shall use the Work Plan in conjunction with the County Potable Water Master Plan to prioritize and coordinate the expansion and upgrade of facilities used to withdraw, transmit, treat, store and distribute potable water to meet future needs.

(Added: Amendment 06EX.TXT03.1.12, Ordinance 2007-~~XX~~45, 11/13/2007)

### **Policy POT 5.4 Coordination of Water and Land Use Planning**

The County shall coordinate the Water Supply Facilities Work Plan with the adopted Future Land Use Map and the adopted socio-economic data projections of the Comprehensive Plan. The County shall coordinate the Work Plan with the adopted Future Land Use Map in two ways:

- Long range water supply planning to meet future service demand shall be based upon the County's projection of socio-economic data done as part of each seven-year Evaluation and Appraisal Report or more frequently as needed. The projections for population, housing, employment, etc., are based on the vacant, buildable acres of each designated future land use category and therefore provide a reasonable estimate of future service demand by location and shall serve as the starting point upon which the ten-year water demand projections shall be based.



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- Prior to issuing a building permit, the County shall continue to require a concurrency review finding that the calculated water service demand can be met by available and as yet uncommitted facility capacity and water supply.  
*(Added: Amendment 06EX.TXT03.1.13, Ordinance 2007-~~XX~~45, 11/13/2007)*

### **Policy POT 5.5 Coordination and Consistency with District Regional Water Supply Plan**

The County shall coordinate with and be consistent with the St Johns River Water Management District's most current Regional Water Supply Plan (DRWSP) when proposing or amending the ten-year Water Supply Facilities Work Plan (Work Plan). At a minimum, this coordination shall take place within 18 months following an update to the DRWSP, generally done every five (5) years, and be documented in the text of the Work Plan. Where appropriate and feasible, the Work Plan shall include collaborative approaches with other local governments for water supply source use and development and water resource development.

*(Added: Amendment 06EX.TXT03.1.14, Ordinance 2007-~~XX~~45, 11/13/2007)*

### **Policy POT 5.6 Coordination with District and Local Water Providers**

The County shall coordinate and consider with the St Johns River Water Management District and other local governments on the development of efficient, cost-effective, and technically feasible water supply sources that will supplement future demands, without causing adverse impacts to water quality, wetlands, and aquatic systems. Consideration and coordination efforts made for each major water project shall be noted in the Work Plan. The County shall continue to work with the "Cooperators Group" of the District, County and Cities towards the development and evaluation of implementing a Countywide water supply plan.

*(Added: Amendment 06EX.TXT03.1.15, Ordinance 2007-~~XX~~45, 11/13/2007)*

### **Policy POT 5.7 Maximize Use of Facilities and Supply Sources**

The County shall seek to maximize the use of existing potable water facilities, when financially and technically feasible, through the implementation of management techniques that enhance a source of supply, sustain water resources and related natural systems, and/or optimize water supply yield.

*(Added: Amendment 06EX.TXT03.1.16, Ordinance 2007-~~XX~~45, 11/13/2007)*

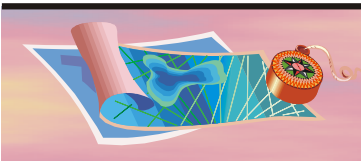
### **Policy POT 5.8 Assessment of Work Plan with Evaluation and Appraisal Report (EAR)**

The County shall assess as part of each EAR:

1. The extent to which the local government has considered the DRWSP and implemented a ten year Work Plan for building public, private, and regional water supply facilities, including the development of alternative water supplies, to meet the needs identified in the Potable Water Element.
2. The extent to which the County has been successful in identifying alternative water supply projects, traditional water supply projects, and conservation and reuse programs to meet the water needs identified in the DWSP 2005 or subsequent updates.

*(Added: Amendment 06EX.TXT03.1.17, Ordinance 2007-~~XX~~45, 11/13/2007)*





# Vision 2020 Comprehensive Plan Seminole County, Florida

## **Policy POT 5.9 Water Conservation Programs and Practices**

Implement and maintain the following conservation water programs and practices that will result in a reduction of potable water demand. A description of each is detailed in the Work Plan in the Potable Water Element:

1. Water Conservation Ordinance - By 01/01/2008, the County shall adopt an ordinance implementing an irrigation program that:
  - a. Includes the District Model Ordinance recommendations;
  - b. Exceeds the Model Ordinance by specifying the actual two (2) weekdays to which watering is restricted and also extends the restriction to watering with reclaimed/reuse water;
  - c. Allows Seminole County to levy fines directly through the billing system; and
  - d. Includes language allowing emergency measures to be enforced based on District water shortage orders.
2. System Water Audits - The County shall continue to aggressively seek to accurately identify water production, transmission, and use in order to maximize system efficiency and identify areas for further savings.
3. Public Education - The County shall continue the Water Conservation Coordinator's efforts of public education, including compliance with all individual requirements of the County's CUP and the District guidelines relative to education programs.
4. Residential Irrigation Audit Program - The County shall implement an expanded, formal residential irrigation audit program targeting high water users in the four major service areas for individual household irrigation audits.
5. Rate Structure Modification - The County shall continue to use the adopted rate resolution, implementing an aggressive, multi-tiered inverse block rate structure for potable and irrigation water.
6. Potential Future Conservation Programs - Seminole County has identified additional programs for potential future implementation, dependent upon the success of the efforts listed above. A detailed list and description of each program can be found in the County's formal conservation plan now under review by the District (February 2007).

*(Added: Amendment 06EX.TXT03.1.18, Ordinance 2007-~~XX~~45, 11/13/2007)*

## **Policy POT 5.10 Reclaimed Water Programs and Practices**

Implement and maintain the following reclaimed water programs and practices that will result in a reduction of potable water demand:

1. Reclaimed Ordinance - The County shall enforce the adopted ordinance requiring that residential development approved by the Board that is within one of the designated reclaimed service areas as depicted in *Exhibit POT: County Reclaimed Water System Areas*:
  - a. Install dual irrigation lines for new development in areas currently served or scheduled to be served by reclaimed water;
  - b. Connect existing water services once reclaimed is available;
  - c. Install irrigation meters; and
  - d. Install rain sensors.
2. Evaluate ~~of~~ the Reclaimed Water Program as part of each future Evaluation and Appraisal Report.
3. Residential Reclaimed Retrofits - The County shall complete the five (5) residential reclaimed retrofits listed in the Water Supply Facilities Work Plan per the schedule provided in Support Document #1.



# Vision 2020 Comprehensive Plan

## Seminole County, Florida



4. Reclaimed Augmentation Facility – The County shall design and construct a surface water reclaimed augmentation facility at Yankee Lake site per adopted CIP project list. The County shall create and implement a plan to eventually use surface water as the primary back-up source of to augment peak reclaimed water demands.
5. Tri-Party Agreement - The County shall continue to participate through a tri-party agreement with the Cities of Lake Mary and Sanford in implementing the North Seminole Regional Reclaimed Water And Surface Water Augmentation System Expansion and Optimization Project through the Joint Participation Agreement Between City Of Sanford, City Of Lake Mary, And Seminole County Providing For Reclaimed/Water Alternative Water Supply Distribution Infrastructure (Tri-Party Agreement).
6. Eastern Regional Reclaimed Water System – The County shall continue to maintain its agreement with the City of Orlando to maintain its reclaimed water allotment from the Iron Bridge Waste Water Treatment Plant for sale to the City of Oviedo and the University of Central Florida and the expansion of reclaimed service to new residential developments in identified reclaimed areas of the Southeast Service Area.

*(Added: Amendment 06EX.TXT03.1.19, Ordinance 2007-~~XX~~45, 11/13/2007)*

### **Policy POT 5.11 Compliance With the Wekiva Parkway and Protection Act**

The Work Plan is intended to meet the requirements of the Wekiva Parkway and Protections Act by addressing jurisdictional water facilities necessary to serve existing and new development for which the County is responsible.

*(Added: Amendment 06EX.TXT03.1.20, Ordinance 2007-~~XX~~45, 11/13/2007)*

### **Policy POT 5.12 Concurrency Requirements for Potable Water**

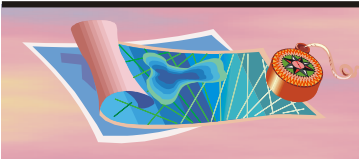
Adequate water supplies, and potable water facilities shall be in place and available to serve new development no later than the issuance by the County of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit or its functional equivalent, the County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional equivalent.

*(Added: Amendment 06EX.TXT03.1.21, Ordinance 2007-~~XX~~45, 11/13/2007)*

### **Policy POT 5.13 Meter Replacement Program**

The County shall initiate a meter replacement program by the end of 2008 to ensure the accurate measurement of customer usage. (Added: Amendment 06EX.TXT03.1.22, Ordinance 2007-~~XX~~45, 11/13/2007)





# Vision 2020 Comprehensive Plan Seminole County, Florida

## POTABLE WATER ELEMENT WATER SUPPLY FACILITIES WORK PLAN

### INTRODUCTION

The Water Supply Facilities Work Plan (Work Plan) is the County's plan to meet current average daily demands and the anticipated growth in demand for a ten-year planning period. The Work Plan sets out how sufficient water, to meet current and future demands, is to be obtained, treated, and distributed over the planning period and how water conservation practices are to be implemented.

Seminole County Environmental Services Department's potable water system is divided into four (4) main geographical service areas: Northeast, Northwest, Southeast and Southwest. The Northeast Service Area (NESA) and Northwest Service Area (NWSA) are two adjacent service areas, with a potable water interconnect that allows the transfer of water between both service areas, as necessary. The other two service areas, Southeast (SESA) and Southwest (SWSA), are geographically isolated. All four service areas have existing interconnects with adjacent cities or utility companies for emergency service (water can be provided or received). The SWSA also includes six satellite water systems purchased from Florida Water Services in 2004, each having independent treatment facilities, distribution systems, and emergency interconnects with adjacent providers. (See: *Exhibit POT: County Potable Water - Service Areas, Treatment Plants, Wells* and the same exhibit repeated in the Future Land Use Element, Exhibits section).

### Compliance with Chapter 163, F.S. and the 2005 District Water Supply Plan

The Work Plan is intended to address the requirements of Chapter 163, F.S. regarding the development of water supply sources and facility improvements and to assess the delivery of water service by other city and private water providers to unincorporated residents outside the County's areas of service.

Additionally, the Work Plan includes the Yankee Lake Reclaimed Water System Augmentation project selected from the St Johns Water Management District's (District) notice of May 2006 listing water supply development projects identified for the County in the 2005 District Water Supply Plan (DRWSP 2005). The County is now starting the process of implementing Phase 1 of the project, targeted at initially building a 5 MGD reclaimed water augmentation plant. In Phase 2, the project would be expanded to as much as 70 MGD of potable water production depending upon the number of funding partners participating in this regional project. At this time, bi-weekly meetings are being held with potential regional partners.

The County will also be lending support to Sanford's North Seminole Regional Reclaimed Water and Surface Water Augmentation System Expansion and Optimization project and to continue to maintain a development agreement with the City of Orlando regarding the Eastern Regional Reclaimed Water System.

By selecting a DRWSP 2005 project and supporting other such projects, it is the County's intent to demonstrate "coordination with and consideration of the District regional water supply plan". (See *letters of notification and response in Support Document No. 1 – Addendum*).

A more complete description of the State's requirements relative to work plans can be found in *Issue CON 3 Ground Water Supply – 2007 Update on Groundwater Water Supply* in the Conservation Element and *Issue POT 6 Future Water Supply* and *Issue POT 7 Water Supply Facilities Work Plan* in the Potable Water Element as well as *Policy CON 1.17, Policy IGC 3.3, Policy POT 5.1, 5.5, and 5.11*.

### Data and Analysis

This Work Plan is based on data and analysis prepared and compiled in the following support documents. The information provides support for the water demand projections, water supply alternatives, water conservation programs and practices, reuse programs and practices, and improvements to facilities that make up the overall Work Plan. Additionally, objectives and policies from the County's Comprehensive Plan supportive of the Work Plan are cited throughout. In particular, a new Objective was added to the Comprehensive Plan titled *Objective*





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POT 5 Coordination of Water and Land Use Management. Under this Objective are thirteen (13) new policies in support of the Work Plan.

Support Document No. 1: "Water Supply Facilities Work Plan", Reiss Environmental, August 2007, provides detailed information on the procedures used for calculation of population and demand projections, and more detailed descriptions of water supply, conservation, and reuse projects and programs included in the Work Plan. The support document also contains copies of both the County's most current reuse ordinance and conservation ordinances.

Support Document No. 1: "Addendum", Seminole County, October 2007 - This document supplements Support Document No. 1 dated August 2006. The document updates or adds to information not included in the original transmittal document and, in particular, provides information regarding the provision of service by city or private water utilities, either directly or indirectly, to unincorporated residents. Each item is discussed in this Work Plan. The Addendum materials will be integrated into the Support Document #1 at the next update.

Support Document No. 2: "Water Treatment Plant Evaluation Summary", Boyle Engineering Corp, April 2006, provides a detailed inventory and condition assessment of all County-owned water supply facilities, including source wells, treatment facilities, pumping stations, and distribution piping.

Support Document No. 3: "Water Quality Master Plan – Potable Water Section", Boyle Engineering Corp, late-2007, will detail planning and projects related to water facilities – collection, transmission, treatment, storage, pumps, wells, and distribution. Completion of the master plan update is planned for late 2007 with the results being used to program Work Plan capital projects into the 2012-2020 portion of the Work Plan planning period.

## **WATER SUPPLY FACILITIES WORK PLAN**

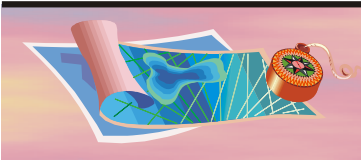
The Work Plan incorporates and continues the progressive plan that the County has been implementing over the past 10 years, based on seeking economical and environmentally-sound solutions for water supply and distribution. Adopted Comprehensive Plan policies which supporting the Work Plan are noted in parentheses.

The geographic service area for the Seminole County Work Plan includes the entire unincorporated area of the County. Within this unincorporated area, potable water service is delivered by three major types of utilities: County retail, city wholesale/retail, and private retail. Smaller subdivision providers and private wells serve the remainder of the unincorporated County.

The main components of the Work Plan are the following :

- I Water Facility Planning – Projections, needs, projects, funding , and concurrency
- II Groundwater Supply and Facilities Improvements - Development and optimization of groundwater supplies, treatment and distribution facilities
- III Water Conservation Programs and Practices – Details of water conservation efforts
- IV Water Reuse Programs and Practices – Expansion of reuse facilities to serve residential areas
- V Alternative Water Supply Projects - Evaluation of alternative water sources including surface water for reclaimed augmentation and potable water supply.
- VI Retail and Wholesale Cross-Service Between Water Providers - Evaluation of water service to unincorporated areas from other water providers





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## I Water Facility Planning

### A Projected Demands

Planning for provision of water supply service in each of the service areas is based upon projections of the County's future potable water demands by serviced area. Initial input for the water demand projections came from the adopted levels of service, adopted future land use designations and overall projected County population figures found in the Comprehensive Plan. (Support: Policy CIE 3.1 Adopted Level of Service Standards and Schedules of Capital Improvements).

As part of the County's current efforts to apply for and negotiate a new consolidated Consumptive Use Permit (CUP), revised water demands were generated according to projected population increases. A summary of the methodology for projecting future population is presented in Support Document No. 1, as well as the protocols used for the CUP application in converting these population figures into future potable water demands. The results of these efforts have received conceptual approval by the District, and these demands were used as a basis for this Work Plan in place of the projections used by the District in its Water Supply Assessment 2003 to support its District Water Supply Plan 2005. (Support: Policy POT 3.1 and Policy POT 5.4)

Projected demand for the major water use categories prepared by the District for the DWSP 2005 indicate that the demand for public supply will continue to grow significantly through 2025, that domestic self-supply will hold steady, that agriculture/recreational uses will drop by nearly half, and that commercial/industrial uses will remain at their current very low level of less than one percent. (See: Table 3, Seminole County Major Water Use Categories, in the Support Document No. 1 – Addendum).

The Potable Water Element, Exhibits section, Exhibit POT: Projections of Service Area Potable Water Demands/Permitted Groundwater Capacity presents the resulting potable water demands projected for the Seminole County Environmental Services Department's (SCESD's) service areas. This same table under the name of Exhibit CIE: Capacity/Improvements Summary is adopted into the Capital Improvements Element of the Comprehensive Plan. The projected deficits are addressed in Exhibit POT: Projected Water Use Consolidated (Consolidated) which provides the overall projected water uses, including offsets of potable water demand via reuse system expansion and conservation efforts. Note that both these tables have been accepted by the District as the working figures under which the County's application for a global CUP is now being considered. Note that the County continues to use its adopted Level of Service of 350 gpd/Equivalent Residential Unit – an industry standard – for planning purposes. While the current per capita rate used in Consolidated projections is somewhat higher than desired, this is expected to be lowered over time as full impact of the reuse and conservations programs replace and reduce the use of groundwater.

### B Potable Water Supplies and Facility Needs

Water supply planning and project programming is accomplished through the County's 20 year water quality master plan, updated every five years, and the County's overall Capital Improvement Program (CIP). The CIP is a list of approved and planned projects covering the next five years and updated annually. Funding sources are identified for each CIP project. (Support: Policy CIE 1.5, Policy CIE 1.12 and Policy POT 5.2)

Based on the potable water demand projections in Exhibit POT: Projected Water Use Consolidated, Seminole County is developing detailed plans for the provision of potable water over the next ten years and beyond, including groundwater supply, reuse, conservation, and alternative water supply projects.

Expected completion of the County's Potable Water Master Plan is late 2007. This document will become "Support Document No. 3" and will identify the CIP projects designed to "fill-in" the remaining 2012-2020 planning period of the Work Plan. (Support: Policy POT 3.2 and Policy POT 5.3)



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## C Work Plan Project Identification

The Work Plan is presented as covering an initial ten-year planning period from 2008 to 2018 plus an additional two years to 2020, the end of the County's adopted long range planning period. Note that the County's major groundwater and reuse/conservation projects will be completed by 2012 and are programmed into both the Work Plan and the five-year Capital Improvements Element (CIE) of 2008 with this amendment. These capital projects are displayed in *Exhibit POT: Major Work Plan Capital Projects* and in the *Exhibit CIE: Five Year Capital Schedule of Improvements – Water Supply Work Plan Projects*. Work Plan capital projects falling into the 2012 to 2020 period fall into two categories:

1 *Master Plan Projects* – These are projects still being finalized as part of the County's long range Potable Water Master Plan targeted at completion later in 2007. This 20-year planning document will become the Support Document No. 3 of the Water Supply Facilities Work Program and the projects will be adopted into the next amendment of the Work Plan.

2 *Alternative Water Supply Projects* – These are projects selected from the District's list whose scope and timing is subject to identifying funding partners. Active discussions with interested parties to become funding partners are now underway. Once funding partners are secured and interlocal agreements executed, a schedule of projects will be produced and adopted into the Work Plan and CIE, filling in additional years in the 2012 – 2020 planning period.

## D Work Plan Project Funding

On September 25, 2007, the ~~County~~ Board of County Commissioners (County Board) approved a two year budget that included \$182,117,885 dollars to fund the Work Plan projects shown in *Exhibit POT: Major Work Plan Capital Projects*. The dollars are shown in the years when they are available for use. A grey bar indicates the time period over which the projects will be expending their allotted funding if not in the first two years. Funding sources are identified for each CIP project. (Support: Policy CIE 1.5, Policy CIE 1.12 and Policy POT 5.2)

Additionally, a "project schedule" type depiction of the major capital projects is provided in *Exhibit POT: Major Work Plan Project Schedules*. In this exhibit, some projects are shown as having earlier planning phases already completed.

Funding by one or more of the following committed sources will be applied to the listed Work Plan projects: Beginning fund balance (cash), connection fee receipts, State grants for alternative water supply, and outside funding sources to include the Series 2006 Water and Sewer Revenue Bonds, issued December 7, 2006, and a subsequent bond issuance planned for 2009. The State Revolving Funds (SRF) may also be used as a funding source. The Series 2006 Bonds will provide approximately \$165,059,207, funding the majority of the CIP for the initial two years. Total borrowings through the five-year planning horizon are estimated at \$255,467,000. These dollars can be committed under the authority of the County Board or are guaranteed by executed interlocal agreements or contracts and do not rely on public referendum to enable their use. In this manner, the definition of "financial feasibility" is met.

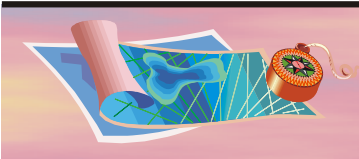
## E Concurrency Management

Seminole County will continue to operate a Concurrency Management System (CMS) as required by Chapter 163, F.S., and shall ensure that all development orders, permits and agreements are subject to the adopted CMS standards and provisions and that potable water facilities shall be in place and available to serve new development no later than the issuance by the County of a certificate of occupancy or its functional equivalent.

Prior to approval of a building permit or its functional equivalent, the County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional







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equivalent. (Support: Issue FLU 1 Concurrency Management, Policy CIE 3.4, Policy FLU 6.2, Policy IMP 2.5, Policy POT Application to New Development, and Policy POT 5.12).

## II Groundwater Supply and Facilities Improvements

Added to the Conservation Element is Issue CON 3 Ground Water Supply – 2007 Update on Groundwater Water Supply and noted is the support to the Work Plan provided by the entire Objective CON 1 Groundwater Protection. As part of “coordination with and consideration of the DRWSP, Policy CON 1.1 Groundwater Model/Assessment was revised to be supportive of the District regional water supply planning process.

Over the term of this work plan, the County will Complete the following projects to maintain and improve the supply of potable groundwater to its users:

- A Review and upgrade the six former Florida Water Services treatment facilities as needed addressing current storage, treatment and transmission capacities and distribution systems. The County is currently considering elimination of up to 5 of the water treatment plants, water service to be provided by interconnects and interlocal agreements for those locations. (CIP No. 00203201 and 00203301)
- B Replace the ground storage water tank at the Hanover Woods WTP. (CIP No. 00203401)
- C Perform any unanticipated water treatment facility improvements and repairs. (CIP No. 00056601)
- D Install Well #3 at the Country Club WTP to replace the lost capacity in the NESAs from the conversion of Well #2 at Greenwood Lakes to a monitoring well, (CIP No. 00178301), and construction of a new ground storage tank (CIP No. 00195401).
- E Rehabilitation of the Lake Monroe WTP. (CIP No. 00193301)
- F Perform water quality master planning and treatment plant improvements. (CIP No. 00195701)
- G Perform general potable well improvements (CIP No. 00201501) including:
  - 1 Well #7 at the Southeast Regional WTP.
  - 2 Wells #1 and 2 at the Druid Hills WTP.
  - 3 Wells #2, 4 and 5 at the Heathrow WTP.
- H Perform various improvements at the Markham WTP (CIP No. 00216601 and CIP No. 00216701). Improvements include two wells, a storage tank with aerator and two high service pumps. These improvements are intended to go forward and could serve as backup to Wells #2, 4 and 5 at Heathrow WTP.
- I Complete CUP consolidation for 4 main service areas with proposed increase in groundwater as well as a commitment to develop a surface water source by 2013.
- J Construct Aquifer Storage and Recovery facilities at the Markham WTP (CIP No. 00200401). Construction of an exploratory well is underway as of January 2007 to determine the feasibility of storage and recovery. The CIP includes design and construction of the facility.



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## III Water Conservation Programs and Practices

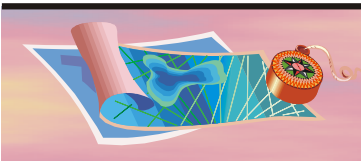
The County has a ten year history of providing reclaimed water to commercial users in certain areas for irrigation use, which has served to lower commercial potable water demands. The County has also consistently participated in water conservation education and infrastructure improvements, with programs implemented by the County's full-time Conservation Coordinator. With regulatory and water supply issues growing in importance, Seminole County sponsored a study of further conservation strategies to determine efficient and cost-effective methods for reducing potable water uses, particularly those which allow for demonstration by measurement of the actual water saved.

Based on an evaluation of water use patterns relative to land use (commercial, single-family, multi-family, etc.) and relative to service areas within the County (Northwest, Northeast, Southwest, Southeast), it was determined that the most effective conservation approach was a combination of continued and focused public education and other compliance-required programs, as well as minimization of current potable water use for irrigation. The significant conservation efforts described below are currently funded through the County's operational budget, unless otherwise noted. The use of reclaimed water to replace potable water is covered in the reuse section of this Work Plan. (Support: Policy CON 1.19)

Over the term of this Work Plan, the County will:

- A Periodically complete system water audits and implement remedial actions when irregularities are found. (Support: Policy POT 5.9.2)
- B Prepare a Conservation Plan under the Sanitary Sewer and Reclaimed Water Master Plan budget (CIP No. 00255201) by 2009 which will set out conservation practices and programs to be applied as appropriate across the County's four service areas and to specific areas as needed. As part of this project, a variety of implementation activities are also planned once the planning is complete. (Support: Policy POT 1.4)
- C Continue the Water Conservation Coordinator's efforts on public education, including compliance with all individual requirements of the County's CUP and District guidelines relative to education programs (Support: Policy POT 5.9.3). Seminole County is currently committed to expenditures of approximately \$100,000 annually to this effort, primarily associated with salaries and conservation program supplies. The program will include, but not be limited to:
  - 1 Televising water conservation public service announcements.
  - 2 Providing water conservation videos to local schools and community organizations.
  - 3 Constructing, maintaining, and publicizing water efficient landscape demonstration projects.
  - 4 Providing water conservation exhibits in public places such as trade shows, festivals, shopping malls, utility offices, and government buildings.
  - 5 Providing/sponsoring water conservation speakers to local schools and community organizations.
  - 6 Providing water conservation articles and/or reports to local news media.
  - 7 Displaying water conservation posters and distributing literature.
  - 8 Providing landscape irrigation audits and irrigation system operating instructions to local small businesses and residents (more information regarding the residential irrigation audit program is provided below).
  - 9 Establishing a water audit customer assistance program that addresses both indoor and outdoor water use.
  - 10 Developing tools to quantify water savings attributable to the public education program, wherever possible (e.g., recording addresses of low-flow showerhead exchanges, and estimating potential water savings and locations accordingly).





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- D Maintain a residential irrigation audit program. (Support: Policy POT 5.9.4). The County has implemented an expanded residential irrigation audit program targeting over 3,000 users in the four major service areas for individual audits. Evaluations suggest with confidence that the County can reduce overall potable water demand by approximately 1.9% through implementation of this program, at a relatively low cost per gallon saved. The County has approved the funding of the first six years of this program, at a level of \$150,000 per year, which will allow for one audit to be performed on each of the 3,000 homes identified for program inclusion.
- E Maintain an aggressive water conservation-promoting rate structure. (Support: Policy POT 5.9.5)
- F Monitor the success of the County's water conservation measures and evaluate one or more of the following additional measures, if needed and appropriate. (Support: Policy POT 5.9.6)
- 1 Expansion of the small business and residential irrigation audit program, as initial quantification of the program indicates that significant (20%+) water savings for customers undergoing irrigation audits can be realized.
  - 2 Ultra-low flow (ULF) toilet replacement education and incentive (rebate) program.
  - 3 Showerhead retrofit program.
  - 4 Assistance program to larger water users.
  - 5 Ordinance reform, including a proposal to mandate that new water customers verify that ULF toilets and low-flow showerheads be installed prior to initialization of potable water service by the County.
  - 6 Adoption of regulations that override green lawn deed restrictions.
  - 7 Allow development incentives for water efficient developments, such as those that use the Florida Water StarSM program, a point-based, new home certification program, similar to the federal Energy Star® program.
- G Initiate a meter replacement program targeting residential meters by the end of 2008. (CIP 00250201) (Support: Policy POT 5.13)
- H Require water-conserving plumbing devices including those required by the Florida Building Code. (Support: Policy POT 1.5)
- I Require Xeriscape (Waterwise) landscape and irrigation practices. (Support: Policy POT 1.5 and Policy CON 1.12)
- J Adopt by January 1, 2008 an irrigation and landscaping ordinance. (Support: Policy POT 5.9.1)
- K Require emergency water conservation measures during water shortage declarations by the District. (Support: Policy CON 1.16 and Policy POT 1.6)
- L Maintain the County's well-capping program in conjunction with the Seminole County Soil and Water Conservation District and the District. (Support: Policy CON 1.9 Well Capping Program)
- M Source Protection:
- 1 Enforce the County's wellhead protection ordinance. (Support: Policy CON 1.5 Wellfield Protection and Policy FLU 1.11 Wellfield Protection). This policy is enforced through Chapter 55 – Wellfield Protection of the County's Land Development Code.
  - 2 Expand the wellhead protection program by pursuing interlocal agreements with other entities. (Support: Policy CON 1.6 Intergovernmental Wellfield Protection)



# Vision 2020 Comprehensive Plan Seminole County, Florida



- 3 Protect aquifer recharge areas in general by enforcement of the Aquifer Protection Overlay Zoning classification (Support: Policy CON 1.3 Recharge Area Protection) and in the designated Rural Areas by applying specific development standards. (Support: Policy FLU 11.14 Protection of Natural Resources). Also see Exhibit FLU: FLU Series – Cones of Influence)
- 4 Continue evaluation of the use of septic tanks and effluent reuse relative to most effective recharge areas. (Support: Policy CON 1.4 Recharge Area Reuse; Support Document No. 1 – Addendum, Map 2 – Unincorporated Areas of Septic Service).
- 5 In the County's Evaluation and Appraisal Reports (EAR) include evaluation of the effectiveness of aquifer protection measures, policies and regulations and make revisions as necessary. (Support: Policy CON 1.2 Recharge Area Protection/Conservation Measures, Policy CON 1.3 Recharge Area Protection, and Policy DRG 3.8 Groundwater Recharge)

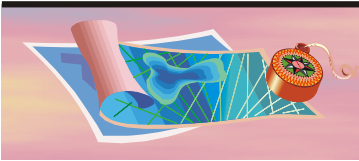
## **IV Water Reuse Programs and Practices**

The following details methods by which the use of reuse water will be increased and offset the demand for potable water. (Support: Policy CON 1.19). See Exhibit POT: County Reclaimed Water Service Areas.

Over the term of this Work Plan, the County will:

- A Continue to enforce the County's Reclaimed Ordinance (Ordinance 2006-12) (Support: Policy POT 5.10.1 and Policy POT 1.7) regarding requirement for effluent reuse agreements and ensuring that current and proposed reuse practices are consistent with the CUP and Regional Water Supply Plan
- B Maintain reuse supply to customers in its Northwest and Northeast service areas. (Support: Policy POT 5.10.1)
- C Expand the reuse system to supply existing residential areas in the Northwest Service Area (zone of highest per capita use). Completion of the following projects according to the schedule provided in Exhibit POT: Major Work Plan Project Schedules is expected to offset approximately 1.33 MGD of current potable water use for irrigation by 2010.
  - 1 The five phases of residential reuse retrofits are included in CIP project Nos. 00217301, 00217201, 00223001, 00223101, and 00223201. (Support: Policy POT 5.10.3)
  - 2 Improvements to reclaimed water storage and repump capacity include a new storage and repump facility near the Markham WTP. (CIP No. 00217801).
  - 3 Improvements to the distribution network for reclaimed water are planned for 2011 that will add two major reclaimed water mains along Markham Road and on SR 46 linking to the Yankee Lake RWRF entrance. Design, bidding, and construction are expected to take approximately 17 months for each.
- D Provide reuse water to future developments in areas of the Northeast, Northwest, and Southeast Service Areas shown in Exhibit POT: County Reclaimed Water System Areas. An additional 1.29 MGD of potable water is expected to be saved through expansion of the reuse system to these new areas. (Support: Policy POT 5.10.5 and 5.10.6)
- E Require mandatory hook-up to reclaimed systems where available, require meters to be installed on new reclaimed water connections, and require installation of rain sensors. (Support: Reclaim Ordinance 2006-12, Support Document No.1 – Addendum and Policy POT 5.10.1)





# Vision 2020 Comprehensive Plan Seminole County, Florida

- F Require new developments within existing or future areas of reuse water availability to install dual-lines for future connection to the expanding reuse system within the existing and future reuse connection area as depicted in. Exhibit POT: Northwest/Northeast Reclaimed Water System and Exhibit POT: Southeast Reclaimed Water System. (Support: Policy POT 5.10.1)
- G Maintain the Tri-party agreement with the cities of Sanford and Lake Mary relative to development of a regional reuse system to deliver reclaimed water to use in place of potable water for irrigation. The agreement, as amended in 2001 and 2005, allows for up to 2.75 mgd of reclaimed water to be supplied to the County, and provides for the parties to share the costs of expanding the City of Sanford's WRF reclaimed water supply from 7.3 mgd to 14.6 mgd by augmenting with water from Lake Monroe, and the costs of pumping station necessary to boost the pressure at the interconnection to Seminole County. The project is co-funded by USEPA and the three parties are to match 45% of the costs. The County is providing funding to the City of Sanford for improvements to the existing surface water reuse augmentation facility, and proposed storage facilities, both of which are currently under design through the City's Capital Improvements Program. This project is referred to as the North Seminole Regional Reclaimed Water and Surface Water Augmentation System Expansion and Optimization Project in the District's District Water Supply Plan 2005 and is more fully described in Sanford's February 2007 Water Supply Facilities' Work Plan, Chapter 8. (Support: Policy POT 5.10.5)
- H Construct and put into service by late 2009, the Seminole County Yankee Lake Reclaimed Water System Augmentation Project, a 10 mgd facility for treating raw water from the St. Johns River with an intake located just downstream from Lake Monroe. The project is a listed water supply development project in the District's District Water Supply Plan 2005. (CIP No. 00164301, 00181201, 00181601). (Policy POT 5.10.4)
- I Maintain an agreement with the City of Orlando to develop the Eastern Regional Reclaimed Water System to expand the use of reuse water allotted to Seminole County to include new residential development in the Southeast Service area as growth occurs in identified reuse service areas beyond the amounts now provided to the City of Oviedo and the University of Central Florida. (Support: Policy POT 5.10.6)
- J The County currently utilizes 5.0 mgd of its allotted 8.506 mgd (of the over 20 mgd of reclaimed water produced by Iron Bridge Treatment Plant), for contract sale of bulk reuse flow to the City of Oviedo (3 mgd) and the University of Central Florida (2 mgd). The remaining 3.506 mgd of reuse water is available for use in implementing the "Eastern Orange County and Seminole County's Regional Reclaimed Water Reuse Project in the District's District Water Supply Plan 2005 and will be completed in early 2007. The project includes a new 4 million gallon ground storage tank for reuse water, and associated transfer and high-service pumping stations. (CIP No. 00164501).
- K Implement a plan to minimize the use of potable groundwater as an initial back-up source used to augment peak reclaimed demands in the Northwest and Northeast Service Areas by switching entirely to reuse generated from the surface water reuse augmentation facility once on-line in 2009. (Support: Policy POT 5.10.4)
- L As part of completing each Comprehensive Plan Evaluation and Appraisal Report, evaluate the effectiveness of the reuse program and the opportunities for improvement. (Support: Policy CON 1.11, Policy POT 5.8 and Policy POT 5.10.2).





# Vision 2020 Comprehensive Plan Seminole County, Florida

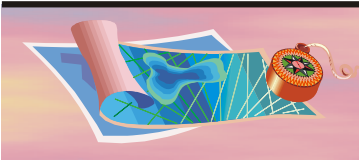


## V Alternative Water Supply Projects

*Over the term of this Work Plan, the County will:*

- A Complete the reuse projects identified in Reuse Facilities and Practices section of this Work Plan including the design and construction of a 10 mgd surface water reuse augmentation facility at the County's Yankee Lake site with an intake located on the St. Johns River just downstream of Lake Monroe. This project is made up of separate study, design, and construction (CIP Nos. 00164301, 00181201, and 00181601. (Support: Policy POT 5.10.4)
- B Design the Yankee Lake intake to allow for additional withdrawal for reuse augmentation and for potential future development of a surface water treatment facility for potable water. Based on current water demand projections, and the potable shortfall shown in Exhibit POT 2, it is expected that the County will develop a surface water source for use by 2017 (see Support Document #1, p. 3-9 and Exhibit POT: Projected Water Use Consolidated which indicates it is on-line in 2017). By 2025, this project will provide approximately 5 MGD of potable water to users in the Northeast and Northwest Service Areas via this new surface water potable treatment facility. (Support: Policy POT 5.10.4)
- C Continue to participate with the seven Cities located within the County and the District in the Seminole County "Cooperators Group" towards the development and evaluation of implementing a County-wide water supply plan. (Support: Policy POT 5.6)
- D On June 1, 2007, Seminole County responded to the Districts Water Supply Entity Notification Letter of May 30, 2006. The County's letter served as notification that Seminole County is implementing the Yankee Lake Reclaimed Water System Augmentation project identified in the DWSP 2005 (Project No. 55) in compliance with as required in Chap 163.3177.6c and s. 373.0361(2)(a), F.S. Design of the project is approximately 80% complete with bidding scheduled to start later this summer. The project will provide up to 10 MGD of water from the St. Johns River to augment the County's reclaimed water system. At the point when and if membrane technology is employed, raw and finished water calculations will be included in water production planning.
- E At this time, projects shown below with an "\*" are intended to be completed by the County regardless of decisions by the Cooperators Group while the remaining two projects will not be completed by the County, regardless of decisions by the Cooperators Group. (Support: Policy CON 1.18)
  - 1 \* Eastern Orange and Seminole Counties Regional Reclaimed Water Reuse Project
  - 2 \* North Seminole Regional Reclaimed Water and Surface Water Augmentation System Expansion and Optimization Project
  - 3 \* Seminole County Yankee Lake Reclaimed Water System Augmentation Project
  - 4 St. Johns River Near Lake Monroe Water Supply Development Project
  - 5 St. Johns River Near Deland Water Supply Development Project





# Vision 2020 Comprehensive Plan Seminole County, Florida

## VI Retail and Wholesale Cross-Service Between Water Providers

Unincorporated residents and businesses obtain potable water from one of four major types of providers: the County itself through County water lines, through city water lines, through for-profit utility water lines, and through water association lines.

Support Document No. 1 – Addendum provides basic information about these systems collected from on-line sources provided by the District. The water providers required to be addressed or noted are presented in the Addendum’s List of Public Water Suppliers in Seminole County. Information about the providers is provided in Table 1 - Base Data on Other Public Water Suppliers in Seminole County of the Addendum. The following exhibits display the other utility service areas, treatment plants, wells and the extent of water the line network in the County:

- 1 Exhibit POT: Other Potable Water Service Areas and Treatment Plants
- 2 Exhibit POT: County-wide Existing Water Supply Wells (Note: The original digital well map is no longer available. A new digital copy will be prepared and linked to the appropriate service areas as a part of the County’s upcoming EAR based amendments. In general, the majority of wells are closely associated with the water treatment plant and these are mapped within their service areas. For the County, only two added wells are planned and these are in close proximity to their plant – Markham Regional Water Treatment Plant – CIP 00216601. A new well will be drilled at the Country Club facility as a replacement for an existing well – CIP 00195401).
- 3 Exhibit POT: Countywide Water Line Network

For residents and areas provided retail service by County water utilities, the County performs master planning to ensure that current and future demands can be met and matches this planning with the long range development plan of the County.

For residents and areas provided retail service by city utilities, primarily Altamonte Springs and Casselberry, the County relies on each utility to include those unincorporated areas served in their planning for the continued delivery of service. Additionally, any development requests within the unincorporated County needing central water as a condition of development need to provide a letter verifying that the city utility could provide sufficient service to meet the development’s water demand and to do so in a manner that meets the County’s concurrency management system requirements as described elsewhere in this Work Plan. For residents and areas that provide retail service by private, for-profit, utilities or water associations, the same can be said as for the cities. All three providers serve primarily built-out or very slow growth areas with the exception of Sanford. (Addendum Support: Table 2 - Growth Projections in City Served Unincorporated Areas and Map 1 - Areas of Potable Water Cross-Service in Seminole County)

At this time, the County’s Comprehensive Plan contains a policy which directs the County to pursue joint planning agreements (JPA) with each of the cities to address the provision of services and facilities, among other things. In preparing these JPAs, the County can include under this topic methods of sharing data that will ensure adequate planning for the provision of water to those areas served. (Support: Policy FLU 7.2 Joint Planning Agreements). The City of Sanford is unique in that the County has already signed a utility interlocal making the City the designated service provider in a large area surrounding the City. (See Support Document No. 1 – Addendum, Map 1 - Areas of Potable Water Cross-Service in Seminole County, for the extent of the area). A letter of ability to service new development is required and the County’s concurrency policies would apply.



# Vision 2020 Comprehensive Plan Seminole County, Florida



The following describes the four methods by which potable water is provided by one water utility – County, city or private – to the service area of another utility or to unincorporated area customers located outside of one of the defined Seminole County potable water utility service areas.

## A City Utility Retail Water Service Provided to the Unincorporated Area

- 1 Unincorporated areas (excepting the Sanford/Seminole JPA area) are generally built-out with little expected growth during the planning period. Table 2 in the Support Document No. 1 – Addendum, compiles the County’s adopted socio-economic data for the key unincorporated traffic analysis zones served by the city utilities of Altamonte Springs and Casselberry as shown in Map 1 of the Addendum. The population change between 2008 and 2020 is projected to be 3%. These long standing service areas should be included in each city’s water supply planning and incorporated into their projections of future demand and facility capacity.
- 2 At the point when the ~~County~~ Board of County Commissioners is asked to approve a development within a city or private water utility’s service area, a letter is requested from the water provider attesting to and verifying their ability to provide the service required of the development.
- 3 Given that each of the cities is producing a detailed Water Supply Facilities Work Plan, it should be possible to include in future joint planning agreements with the cities a commitment to continue such service and formally account for future water demand in these areas. (Support: Exhibit FLU 7.2 Joint Planning Agreements).
- 4 1993 Sanford/County Joint Planning Agreement (JPA) identifying long range water and wastewater utility service planning areas. The agreement specifies that the area will be service by the City. Map 1 of the Addendum shows the area of unincorporated area subject to service as development occurs. For each development request to the County within the JPA area, the County requests written verification of the City of its ability to serve. (Support: Policy POT 5.12 Concurrency Requirements for Potable Water)
- 5 The City of Sanford also provides potable water on a wholesale basis to the Midway-Caanan Water Association which in turn provides water to users in the Midway Area of the unincorporated County east of the city and north of SR 46.

## B Private Utility Retail Water Service Provided to the Unincorporated Area

- 1 The service areas of private retail water providers to unincorporated residents are displayed in Exhibit POT: Other Potable Water Service Areas and Treatment Plants. While not producing water supply plans, development within these service areas is held to the same standard as the cities – a letter of verification that sufficient water is available to serve. Most private areas are built-out and expect very limited growth.

## C County Retail Water Service Provided to City Areas

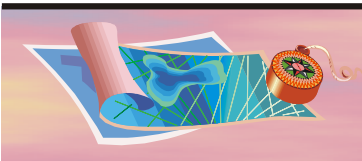
- 1 The County provides retail water service to approximately 65 single-family homes within Winter Springs to the built-out Tuscawilla Unit 2 subdivision. Estimated average daily service is 22,750 gpd delivered from the County’s Southeast Service Area. The service connections and demand are included in any water facilities and demand planning activities done for this service area by the County (under 0.1 mgd)

## D Water Provided Under Wholesale Agreements Between Providers

In addition to city and private retail service to the unincorporated area, there are a number of wholesale agreements maintained that are collectively referenced in the County’s Intergovernmental Coordination Element’s Exhibit IGC: Existing Coordination Mechanisms With Municipalities Within Seminole County under the Subject Area of “Utilities (Water, Reclaimed Water and Sewer) as “various interlocal agreements for wholesale service”. These agreements aid in the maximization of facility uses and efficient use of supply sources. (Policy POT 4.4 and Policy POT 5.7).







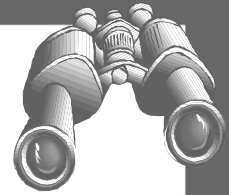
# Vision 2020 Comprehensive Plan Seminole County, Florida

Map 1 of the Addendum displays the major served areas. Note: Smaller areas with flows under 0.1mgd that are noted in this section are not mapped.

- 1 2004 agreement with the City of Oviedo for the City to provide potable water to the County's Black Hammock area. Seminole County in turn has allocated capacity to exchange with Oviedo as part of this agreement. No significant growth in this area beyond these original plans is expected, and no capital improvements are planned. Capacity to meet this off-set demand has been included and accounted for in all demand projections and plans for the Southeast service area and this should likewise be done by the City of Oviedo. Current ADF is .125MGD. No fixed amount of water is specified.
- 2 2001 agreement with the City of Altamonte Springs for the City to provide potable water the County's Donald Avenue Water System. No significant growth in this area is expected, and no capital improvements are planned. No fixed amount of water is specified. (Under .1 mgd)
- 3 1999 agreement with the City of Casselberry for the City to provide potable water the County's Sunlake/Sunshadow P.U.D. area. No significant growth in this area is expected, and no capital improvements are planned. No fixed amount of water is specified.
- 4 1996 agreement with the City of Oviedo for the County to provide up to 262,500 gpd of potable water the City's Oviedo Crossings DRI and Dovera Community Development District areas. No significant growth in this area beyond the original plans and the original agreement is expected, and no capital improvements are planned.
- 5 1992 agreement with the Sanlando Utilities Corporation to provide potable water to 68 residential units of the County's Wingfield North Subdivision. No significant growth in this area is expected, and no capital improvements are planned. No fixed amount of water is specified. (Under .1 mgd)
- 6 1988 agreement, amended in 1998 with the City of Sanford for the City to provide up to approximately 500,000 gpd of potable water the County's Chase Groves and Chase Property (The Cove) areas. No significant growth in this area is expected beyond original plans, and no capital improvements are planned.
- 7 1988 agreement to Luthern Haven for Seminole County to provide up to .075 mgd of water.

*(Added: Amendment 06EX.TXT03.1.23, Ordinance 2007-~~XX~~45, 11/13/2007) - (WSP WP Final 102007.doc)*





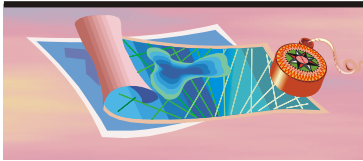
## EXHIBITS:

- Projections of Service Area Potable Water Demands/  
Permitted Goundwater Capacity (Added: Amendment  
06EX.TXT03.1.24, Ordinance 2007-~~XX45~~, 11/13/2007)
- Projected Water Use Consolidated (Added:  
Amendment 06EX.TXT03.1.25, Ordinance 2007-~~XX45~~, 11/13/2007)
- Major Work Plan Project Schedules (Added: Amendment  
06EX.TXT03.1.26, Ordinance 2007-~~XX45~~, 06/12/2007)
- Major Work Plan Capital Projects (Added:  
Amendment 06EX.TXT03.1.27, Ordinance 2007-~~XX45~~, 11/13/2007)
- County Reclaimed Water System Areas (Added: Amendment  
06EX.TXT03.1.28, Ordinance 2007-~~XX45~~, 11/13/2007)
- County Potable Water – Service Areas, Treatment Plants, and Wells  
(Added: Amendment 06EX.TXT03.1.29,  
Ordinance 2007-~~XX45~~, 11/13/2007)
- Other Potable Water Service Areas and Treatment Plants (Added:  
Amendment 06EX.TXT03.1.30, Ordinance 2007-~~XX45~~, 11/13/2007)
- County-wide Existing Water Supply Wells (Revised:  
Amendment 06EX.TXT03.1.31, Ordinance 2007-~~XX45~~, 11/13/2007)
- County-wide Water Line Network (Added: Amendment  
06EX.TXT03.1.32, Ordinance 2007-~~XX45~~, 11/13/2007)
- ~~Water Service Areas (Deleted: Amendment 06EX.TXT03.1.33,  
Ordinance 2007-~~XX45~~, 11/13/2007)~~



# VISION 2020





# Vision 2020 Comprehensive Plan Seminole County, Florida

## Projections of Service Area Potable Water Demands/Permitted Groundwater Capacity

Water Service Areas (mgd)	2005			
	Design Capacity (ADF) (1)	Permit SJRWMD Alloc (2)	Current Demand (ADF) (3)	Permit Surplus/Deficit
N West (4)	8.376	6.430	5.760	0.670
N East (4)(5)	3.709	3.020	2.280	0.740
S East (6)	13.233	9.154	8.470	0.684
S West	2.560	1.600	1.270	0.330
<b>TOTALS</b>	<b>27.878</b>	<b>20.204</b>	<b>17.780</b>	<b>2.424</b>
Blk Hmk (7)	0.175	NA	0.103	0.072
Water Service Areas (mgd)	2010			
	Design Capacity (ADF) (1)	Permit SJRWMD Alloc (2)	Projected Demand (3)	Permit Surplus/Deficit
N West (4)	8.376	8.230	9.480	-1.250
N East (4)(5)	3.709	3.020	2.650	0.370
S East (6)	13.233	9.154	11.390	-2.236
S West	2.560	1.690	1.550	0.140
<b>TOTALS</b>	<b>27.878</b>	<b>22.094</b>	<b>25.070</b>	<b>-2.976</b>
Blk Hmk (7)	0.175	NA	0.129	0.046
Water Service Areas (mgd)	2015			
	Design Capacity (ADF) (1)	Permit SJRWMD Alloc (2)	Projected Demand (3)	Permit Surplus/Deficit
N West (4)	8.376	8.230	10.860	-2.630
N East (4)(5)	3.709	3.020	3.120	-0.100
S East (6)	13.233	9.154	13.160	-4.006
S West	2.560	1.370	1.760	-0.390
<b>TOTALS</b>	<b>27.878</b>	<b>21.774</b>	<b>28.900</b>	<b>-7.126</b>
Blk Hmk (7)	0.175	NA	0.140	0.035
Water Service Areas (mgd)	2020			
	Design Capacity (ADF) (1)	Permit SJRWMD Alloc (2)	Projected Demand (3)	Permit Surplus/Deficit
N West (4)	8.376	8.230	11.960	-3.730
N East (4)(5)	3.709	3.020	3.550	-0.530
S East (6)	13.233	9.154	14.430	-5.276
S West	2.560	1.370	2.010	-0.640
<b>TOTALS</b>	<b>27.878</b>	<b>21.774</b>	<b>31.950</b>	<b>-10.176</b>
Blk Hmk (7)	0.175	NA	0.151	0.024

1 Physical plant permitted average day capacity.

Revision 2, Jan 25, 2007

2 Daily average pumping amount based on SJRWMD CUP permit allocation for the individual year and service area.

3 Projected demand is based historical flow information. Amounts have not been reduced due to reflect effects of proposed conservation or reclaimed water usage to offset use of potable water for irrigation. Current demand (2005) is consistent with the County's CUP application, which uses water demands from 9/1/04 – 8/31/05.

4 The Northwest and Northeast service areas are interconnected.

5 SJRWMD Northeast CUP expired November 30, 2003. Renewal application submitted to District. Previous allocation shown.

6 SJRWMD Southeast CUP expired December 31, 2003. Renewal application submitted to District. Previous allocation shown.

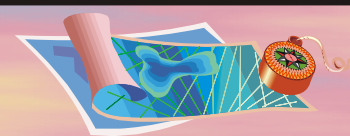
7 The Black Hammock Service Area is served through a wholesale contract with the City of Oviedo.

Note 1: Projected deficits are based on existing facility capacity and current conservation efforts.

Note 2: Six small, built-out private water facilities were absorbed mid-2004. These will be incorporated into the capacity/demand calculations beginning with the 2007 CIE.







**Projected Water Use Consolidated**

**Projected Water Use Consolidated (All Service Areas)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Year	Projected Served Population	Number of Units	Unadjusted Per Capita Usage (gpcd)	Unadjusted Household (mgd)	Commercial/Industrial (mgd)	Unadjusted Unaccounted (mgd)	Total Potable Demand (mgd)	Original Reuse Demand (mgd)	Total Annual (mgd)	Water Conservation Factor (%)	Conservation Offsets (mgd)	Reuse Retrofit Offsets (mgd)	Total Reuse Demand (mgd)	Increased Population Density Offsets (mgd)	Adjusted Unaccounted (mgd)	Total Potable Demand (mgd)	Adjusted per capita (gpcd)	Total Groundwater (mgd)	Total Alternative Source Water (mgd)	Year
2006	105,297	41,293	165.0	17.37	2.20	1.70	21.28	1.48	22.76	0.0	0.00	0.00	1.48	0.00	1.70	21.28	165.0	21.28	0.00	2006
2007	109,212	42,828	166.4	18.17	2.35	1.78	22.30	1.48	23.78	0.4	0.09	0.00	1.51	0.00	1.78	22.20	165.6	22.20	0.00	2007
2008	113,126	44,363	167.7	18.97	2.49	1.87	23.33	1.48	24.81	0.8	0.18	0.50	2.35	0.01	1.81	22.58	161.6	22.58	0.00	2008
2009	117,041	45,898	167.9	19.65	2.62	1.94	24.20	1.48	25.68	1.2	0.26	0.52	2.38	0.00	1.87	23.35	161.2	23.35	0.00	2009
2010	120,956	47,434	168.0	20.32	2.74	2.01	25.07	1.48	26.55	1.5	0.35	1.09	3.65	0.00	1.88	23.50	156.1	23.50	0.00	2010
2011	124,871	48,969	167.9	20.97	2.86	2.07	25.90	1.48	27.38	1.9	0.45	1.11	3.68	0.02	1.93	24.19	155.3	24.19	0.00	2011
2012	128,785	50,504	167.8	21.61	2.98	2.14	26.73	1.48	28.21	2.2	0.54	1.13	3.72	0.04	1.99	24.87	154.5	24.87	0.00	2012
2013	132,700	52,039	167.7	22.25	3.10	2.20	27.56	1.48	29.04	2.3	0.59	1.15	3.76	0.06	2.05	25.60	154.1	25.60	0.00	2013
2014	136,178	53,403	167.6	22.82	3.20	2.26	28.28	1.48	29.76	3.0	0.79	1.17	3.78	0.07	2.09	26.07	152.7	25.60	0.48	2014
2015	139,101	54,549	167.5	23.30	3.29	2.31	28.90	1.48	30.38	3.5	0.94	2.58	5.68	0.06	2.00	25.02	141.8	25.60	-0.58	2015
2016	142,023	55,695	167.5	23.78	3.37	2.36	29.51	1.48	30.99	4.0	1.10	2.63	5.76	0.08	2.03	25.38	140.7	25.60	-0.21	2016
2017	144,946	56,842	167.4	24.27	3.45	2.41	30.12	1.48	31.60	4.0	1.12	2.68	5.85	0.09	2.07	25.90	140.6	25.60	0.30	2017
2018	147,869	57,988	167.4	24.75	3.52	2.46	30.73	1.48	32.21	4.0	1.14	2.73	5.93	0.11	2.11	26.41	140.5	25.60	0.81	2018
2019	150,792	59,134	167.4	25.24	3.60	2.51	31.34	1.48	32.82	4.0	1.16	2.78	6.02	0.13	2.15	26.92	140.4	25.60	1.32	2019
2020	153,714	60,280	167.3	25.72	3.68	2.56	31.95	1.48	33.43	4.0	1.19	2.83	6.10	0.15	2.19	27.43	140.2	25.60	1.83	2020
2021	156,637	61,426	167.4	26.21	3.77	2.61	32.59	1.48	34.07	4.0	1.21	2.87	6.18	0.17	2.24	27.97	140.2	25.60	2.37	2021
2022	159,560	62,572	167.4	26.71	3.86	2.66	33.23	1.48	34.71	4.0	1.23	2.92	6.25	0.19	2.28	28.50	140.1	25.60	2.91	2022
2023	162,483	63,719	167.4	27.20	3.95	2.71	33.87	1.48	35.35	4.0	1.26	2.96	6.33	0.22	2.32	29.04	140.1	25.60	3.45	2023
2024	165,405	64,865	167.4	27.70	4.05	2.76	34.50	1.48	35.98	4.0	1.28	3.01	6.40	0.24	2.37	29.58	140.0	25.60	3.98	2024
2025	168,328	66,011	167.5	28.19	4.14	2.81	35.14	1.48	36.62	4.0	1.31	3.06	6.48	0.26	2.41	30.12	140.0	25.60	4.52	2025

**Table 2 Footnotes (Consolidated)**

Columns A,U: Year

Column B: Projected Served (residential) Population (single and multi family) estimated from County Planning Department Data.

Column C: Number of (residential) Units served estimated by dividing the Projected Served (residential) Population (column A) by the average persons per unit (column A/2.55).

Column D: Unadjusted per capita (residential) Usage was calculated as the historical five-year average residential flow (2001-2005).

Column E: Unadjusted household (potable demand). Note that a 6% drought factor was added. Equation: (column B\*column D/1000000) + (column B\*column D/1000000)\*0.06

Column F: Commercial/industrial. Calculated by applying per employee potable water usage factors by projected employment figures. See RAI 5 Item 4c. For more information.

Column G: Unadjusted unaccounted for flow, calculated using an 8% flow factor. Equation: [(column E + column F)/0.92] - (column E + column F)

Column H: Total Potable Demand, calculated as the sum of unadjusted potable demand. Equation: column E + column F + column G

Column I: Original Reclaimed (Demand), calculated as existing reclaimed demand (in 2005).

Column J: Total Annual, calculated as the sum of potable demand (column H) and existing reclaimed demand (column I).

Column K: Water Conservation Factor (%), as discussed in Items 7a. And 7b. of the response to RAI 5.

Column L: Conservation Offsets, calculated by applying the water conservation factor in column K to the sum of unadjusted household and commercial/industrial potable demand: Equation: (column E + column F) \* [column K/100]

Column M: Reuse Retrofit Offsets, calculated as outlined in the response to Item 11 of RAI 5.

Column N: Total Reclaimed Demand, calculated as outlined in the response to Item 11 of RAI 5. Note that the total reclaimed demand in column N is required to meet the reclaimed offsets listed in column M.

Column O: Increased Population Density Offsets, calculated by assuming 20% of population growth in RAI 5, in excess of the population figures in RAI 4, uses 80 gpcd, instead of the 5-year average value in column D.

Column P: Adjusted Unaccounted, calculated by applying an 8% factor to the sum of adjusted household and commercial/industrial potable demand. Equation: [(column E + column F - column L - column M - column O)/0.92] - (column E + column F - column L -

Column Q: Total Potable Demand, calculated as the sum of adjusted potable demand. Equation: (column E + column F + column P - column L - column M - column O); OR (column S + column T)

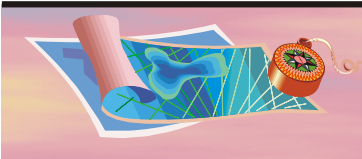
Column R: Adjusted (residential) per capita, calculated by dividing Total Potable Demand by the population. Equation: [(column E - column L - column M - column O)/(column B)]\*1000000

Column S: Total Groundwater, calculated as the Total Potable Demand, but never exceeding the value at year 2013 (cell S10)

Column T: Total Alternative Source Water, calculated as the Total Potable Demand minus the Total Groundwater, starting at year 2014. Equation: (column Q - column S)







# Vision 2020 Comprehensive Plan Seminole County, Florida

## Major Work Plan Project Schedules

CTY	Activity Description	FY06	FY07	FY08	FY09	FY10	FY11	FY12
<b>Water Supply</b>								
<b>COUNTRY CLUB WELL 3</b>								
00178301	COUNTRY CLUB WELL 3 Planning FY07		■					
00178301	COUNTRY CLUB WELL 3 Program Management FY07		■	■				
00178301	COUNTRY CLUB WELL 3 Design FY07		■					
00178301	COUNTRY CLUB WELL 3 Bid FY07		■					
00178301	COUNTRY CLUB WELL 3 Const FY07			■				
00178301	COUNTRY CLUB WELL 3 CM FY07			■				
<b>WATER QUALITY PLANT UPGRADES</b>								
00195701	WATER QUALITY PLANT UPGRADES Plan FY07		■					
00195701	WATER QUALITY PLANT UPGRADES PM FY07		■	■				
00195701	WATER QUALITY PLANT UPGRADES Design FY07		■					
00195701	WATER QUALITY PLANT UPGRADES Const FY07			■				
00195701	WATER QUALITY PLANT UPGRADES CM FY07			■				
00195701	WATER QUALITY PLANT UPGRADES PM FY08			■	■			
00195701	WATER QUALITY PLANT UPGRADES Plan FY08			■				
00195701	WATER QUALITY PLANT UPGRADES Design FY08			■				
00195701	WATER QUALITY PLANT UPGRADES Const FY08				■			
00195701	WATER QUALITY PLANT UPGRADES CM FY08				■			
00195701	WATER QUALITY PLANT UPGRADES PM FY09				■	■		
00195701	WATER QUALITY PLANT UPGRADES Plan FY09				■			
00195701	WATER QUALITY PLANT UPGRADES Design FY09				■			
00195701	WATER QUALITY PLANT UPGRADES Const FY09					■		
00195701	WATER QUALITY PLANT UPGRADES CM FY09					■		
00195701	WATER QUALITY PLANT UPGRADES PM FY10					■	■	

■ Early Bar  
■ Progress Bar  
■ Critical Activity

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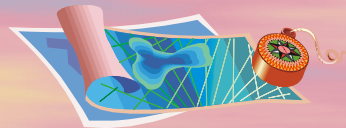
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Start Date  
Finish Date  
Run Date

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# Vision 2020 Comprehensive Plan Seminole County, Florida

CTY	Activity Description	FY06	FY07	FY08	FY09	FY10	FY11	FY12
<b>WATER QUALITY PLANT UPGRADES</b>								
00195701	WATER QUALITY PLANT UPGRADES Plan FY10					■		
00195701	WATER QUALITY PLANT UPGRADES Design FY10					■		
00195701	WATER QUALITY PLANT UPGRADES Const FY10					■		
00195701	WATER QUALITY PLANT UPGRADES CM FY10					■		
00195701	WATER QUALITY PLANT UPGRADES PM FY11						■	
00195701	WATER QUALITY PLANT UPGRADES Plan FY11						■	
00195701	WATER QUALITY PLANT UPGRADES Design FY11						■	
00195701	WATER QUALITY PLANT UPGRADES Const FY11						■	
00195701	WATER QUALITY PLANT UPGRADES CM FY11						■	
<b>MARKHAM PLANT WELLS 4 &amp; 5</b>								
00216601	MARKHAM PLANT WELLS 4 & 5 Planning		■					
00216601	MARKHAM PLANT WELLS 4 & 5 Prog.Mgmt		■	■				
00216601	MARKHAM PLANT WELLS 4 & 5 Design		■					
00216601	MARKHAM PLANT WELLS 4 & 5 Bid			■				
00216601	MARKHAM PLANT WELLS 4 & 5 Const			■				
00216601	MARKHAM PLANT WELLS 4 & 5 CM			■				
<b>MARKHAM PLANT H2S TREATMENT</b>								
00216701	MARKHAM PLANT H2S TREATMENT Plan	■						
00216701	MARKHAM PLANT H2S TREATMENT PM	■	■	■				
00216701	MARKHAM PLANT H2S TREATMENT Desig	■	■					
00216701	MARKHAM PLANT H2S TREATMENT Permit		■					
00216701	MARKHAM PLANT H2S TREATMENT Bid			■				
00216701	MARKHAM PLANT H2S TREATMENT Const			■				
00216701	MARKHAM PLANT H2S TREATMENT CM			■				

■ Early Bar  
■ Progress Bar  
■ Critical Activity

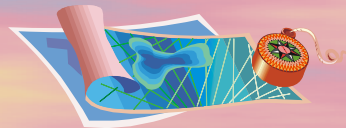
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# Vision 2020 Comprehensive Plan Seminole County, Florida

CTY	Activity Description	FY06	FY07	FY08	FY09	FY10	FY11	FY12
<b>Reuse</b>								
<b>YANKEE LK ROAD RECLAIMED MAIN</b>								
00181201	YANKEE LK ROAD RECLAIMED MAIN Planning	■						
00181201	YANKEE LK ROAD RECLAIMED MAIN PM	■	■	■				
00181201	YANKEE LK ROAD RECLAIMED MAIN Design	■	■					
00181201	YANKEE LK ROAD RECLAIMED MAIN 30% Design Due		◆					
00181201	YANKEE LK ROAD RECLAIMED MAIN 60% Design Due		◆					
00181201	YANKEE LK ROAD RECLAIMED MAIN 90% Design Due		◆					
00181201	YANKEE LK ROAD RECLAIMED MAIN Bid		■					
00181201	YANKEE LK ROAD RECLAIMED MAIN Const.			■	■			
00181201	YANKEE LK ROAD RECLAIMED MAIN CM			■	■			
<b>RESIDENTIAL RECLAIM RETROFIT PH II</b>								
00217201	RESIDENTIAL RECLAIM RETROFIT PH II Des.Selection	■						
00217201	RESIDENTIAL RECLAIM RETROFIT PH II PM	■	■	■	■			
00217201	RESIDENTIAL RECLAIM RETROFIT PH II Desig		■					
00217201	RESIDENTIAL RECLAIM RETROFIT PH II Bid			■				
00217201	RESIDENTIAL RECLAIM RETROFIT PH II Const			■	■			
00217201	RESIDENTIAL RECLAIM RETROFIT PH II CM			■	■			
<b>RESIDENTIAL RECLAIM RETROFIT PH I</b>								
00217301	RESIDENTIAL RECLAIM RETROFIT PH I PM	■	■	■				
00217301	RESIDENTIAL RECLAIM RETROFIT PH I Bid		■					
00217301	RESIDENTIAL RECLAIM RETROFIT PH I Const		■	■				
00217301	RESIDENTIAL RECLAIM RETROFIT PH I CM		■	■				
<b>MARKHAM RECLAIM STORAGE/REPUMP</b>								
00217801	MARKHAM RECLAIM STORAGE/REPUMP Plan			■				
00217801	MARKHAM RECLAIM STORAGE/REPUMP PM			■	■			



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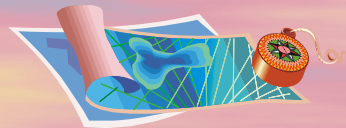
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# Vision 2020 Comprehensive Plan Seminole County, Florida

CTY	Activity Description	FY06	FY07	FY08	FY09	FY10	FY11	FY12
<b>MARKHAM RECLAIM STORAGE/REPUMP</b>								
00217801	MARKHAM RECLAIM STORAGE/REPUMP Design			█				
00217801	MARKHAM RECLAIM STORAGE/REPUMP Bid			█				
00217801	MARKHAM RECLAIM STORAGE/REPUMP Const.				█			
00217801	MARKHAM RECLAIM STORAGE/REPUMP CM				█			
<b>RESIDENTIAL RECLAIM RETROFIT PH III</b>								
00223001	RESIDENTIAL RECLAIM RETROFIT PH 3 Plan		█					
00223001	RESIDENTIAL RECLAIM RETROFIT PH 3 PM (Design)		█					
00223001	RESIDENTIAL RECLAIM RETROFIT PH 3 Desig		█					
00223001	RESIDENTIAL RECLAIM RETROFIT PH 3 Bid				█			
00223001	RESIDENTIAL RECLAIM RETROFIT PH 3 PM (Const)				█			
00223001	RESIDENTIAL RECLAIM RETROFIT PH 3 Const.				█			
00223001	RESIDENTIAL RECLAIM RETROFIT PH 3 CM				█			
<b>RESIDENTIAL RECLAIM RETROFIT PH IV</b>								
00223101	RESIDENTIAL RECLAIM RETROFIT PH 4 PM FY08			█				
00223101	RESIDENTIAL RECLAIM RETROFIT PH 4 Plan			█				
00223101	RESIDENTIAL RECLAIM RETROFIT PH 4 Design			█				
00223101	RESIDENTIAL RECLAIM RETROFIT PH 4 Bid				█			
00223101	RESIDENTIAL RECLAIM RETROFIT PH 4 PM FY09				█			
00223101	RESIDENTIAL RECLAIM RETROFIT PH 4 Const.				█			
00223101	RESIDENTIAL RECLAIM RETROFIT PH 4 CM				█			
<b>RESIDENTIAL RECLAIM RETROFIT PH V</b>								
00223201	RESIDENTIAL RECLAIM RETROFIT PH 5 Plan			█				
00223201	RESIDENTIAL RECLAIM RETROFIT PH 5 PM FY08			█				
00223201	RESIDENTIAL RECLAIM RETROFIT PH 5 Design			█				



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- █ Early Bar
- █ Progress Bar
- █ Critical Activity

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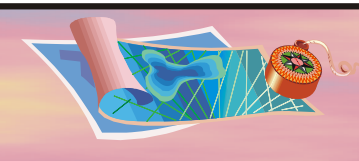
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## Seminole County Environmental Services Capital Improvement Program



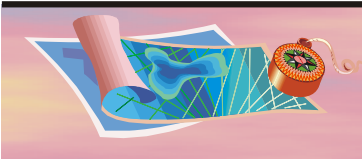




# Vision 2020 Comprehensive Plan Seminole County, Florida

CTY	Activity Description	FY06	FY07	FY08	FY09	FY10	FY11	FY12
<b>RESIDENTIAL RECLAIM RETROFIT PH V</b>								
00223201	RESIDENTIAL RECLAIM RETROFIT PH 5 Bid			■				
00223201	RESIDENTIAL RECLAIM RETROFIT PH 5 Const.				■			
00223201	RESIDENTIAL RECLAIM RETROFIT PH 5 CM				■			
00223201	RESIDENTIAL RECLAIM RETROFIT PH 5 PM FY09				■			
<b>Conservation</b>								
<b>WASTEWATER/RECLAIM MASTER PLAN</b>								
00255201	WASTEWATER/RECLAIM MASTER PLAN FY07	■						
00255201	WASTEWATER/RECLAIM MASTER PLAN Prog. Mgn't FY07		■					
00255201	WASTEWATER/RECLAIM MASTER PLAN FY10					■		
00255201	WASTEWATER/RECLAIM MASTER PLAN Prog. Mgn't FY10					■		
<b>Alternative Water</b>								
<b>YANKEE LK ALTERNATIVE WATER</b>								
00164301	Water Supply and Risk Mgn't Plan Development	■						
00164301	Water Supply and Risk Mgn't Plan Prog.Mgmt	■						
00164301	YANKEE LK ALTERNATIVE WATER Planning		■					
00164301	YANKEE LK ALTERNATIVE WATER Design		■					
00164301	YANKEE LK ALTERNATIVE WATER Permitting		■					
<b>YANKEE LK SURFACE WATER PLANT</b>								
00181601	YANKEE LK SURFACE WATER PLANT Ph. II Procurement		■					
00181601	YANKEE LK SURFACE WATER PLANT Ph. II Plan		■					
00181601	YANKEE LK SURFACE WATER PLANT Ph. II PM		■					
00181601	YANKEE LK SURFACE WATER PLANT Ph. II Bid			■				
00181601	YANKEE LK SURFACE WATER PLANT Ph. II Const.			■				
00181601	YANKEE LK SURFACE WATER PLANT Ph. II CM			■				
				BASB DCA Report Summary		Sheet 5 of 6		Start Date Finish Date Run Date
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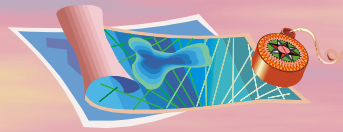
# Vision 2020 Comprehensive Plan Seminole County, Florida

CTY	Activity Description	FY06	FY07	FY08	FY09	FY10	FY11	FY12
<b>Water Resources</b>								
<b>MARKHAM AQUIFER STORAGE WELL</b>								
00200401	MARKHAM AQUIFER STORAGE WELL PM							
00200401	MARKHAM AQUIFER STORAGE WELL Const.							
00200401	MARKHAM AQUIFER STORAGE WELL Testing							

Above projects were selected from the Capital Improvement Program as key projects. Please refer to Water Supply Facilities Plan 2007 for a list and schedule of all Capital Improvement Projects regarding water supply.

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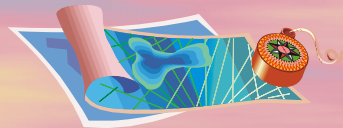




**Major Work Plan Capital Projects**

Project #	Project Title	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Funding
<b>MAJOR POTABLE WATER CAPITAL PROJECTS</b>															
00021701	<b>Oversizings &amp; Extensions</b>	\$ 240,820	\$ 1,953,450	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	To oversize and/or extend as necessary, reclaimed water and sewer mains that are developer constructed in support of the County's Master Plan Requirements. Design and construction reimbursements to developer are via amendments to their utility agreements. Projects CIP 000217-01 oversizing/extensions - sewer, and CIP 000217-01 oversizing/extensions - water have been combined. Project is necessary to oversize and/or extend as necessary, reclaim water and sewer mains that are developer constructed in support of the County's Master Plan Requirements.														
00024803	<b>Telemetry &amp; SCADA System Improvements</b>	\$ 329,972	\$ 156,276	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	This is an on-going program that supports monitoring and control for County water plant operations. Project is necessary to maintain and sustain the regulatory compliance levels of the County's Supervisory Control and Data Acquisition of utility infrastructure performance.														
00056601	<b>Potable Water Treatment Plant Rehabilitation</b>	\$ 787,029	\$ 803,122	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Project scope includes required upgrades to the County's sixteen existing Water Treatment Facilities as recommended by the County's Utility Master Plan and regulatory compliance. Projects are necessary to implement facility rehabilitation required to meet changing hydraulics due to growth and to extend service life and compliance with FDEP regulations. The following system needs have been identified: 1. Convert the existing Greenwood Lakes High Service Pump controls from constant speed to variable speed, and implement hydraulic piping modifications for raw and finished water mains. 2. Lake Hayes Water Plant hydraulic improvements.														
00064501	<b>Potable Water Distribution System Improvements</b>	\$ 1,109,313	\$ 289,400	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Rehabilitation to existing County-wide water distribution systems. Ongoing program to improve and sustain reliability of the water piping and valving within systems. This work shall include installation of valves, system interconnections and line looping. Project is necessary to restore/improve hydraulic line capacity in conjunction with other defined CIP Distribution projects from Utility Master Plan. The list of Interconnect improvements have been reviewed and prioritized. Chase Grove, Chase Grove Airport, Lake Mary/SEMCO/Sanford, Technology Park, Country Club Rd, Lynwood 1, 2, 3, Casselberry 1, 2, 3, Orange County/Seminole 1, 2, 3, Fern Park, Casselberry Sunshadows 1, 2, Casselberry and Red Bud, Casselberry and Howel Branch, Casselberry and Old Howel Branch, Oviedo Crossings A, B, C, City of Oviedo, Black Hammock, City of Longwood, Trailer Park, Seminole Town Center, Five Points 1, 2, 3.														
00064606	<b>East Lake Drive Potable Water Main</b>	\$ 91,612	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct a new 12 inch water main in conjunction with the roadway construction project. The project is necessary to adjust the existing water main in conjunction with the roadway improvements, and to extend the water main to provide a looped system to provide for better system pressures.														
00065101	<b>Lake Emma Road Utility Replacement/Upgrade</b>	\$ 2,026,906	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct 12 inch and 10 inch water mains and 8 inch force main along Lake Emma Road between Sand Pond Road and Deerview Place. Project delivered in conjunction with 00665101- Lake Emma Rd Utility Adjustments - Sewer The project is necessary to adjust and upgrade the existing water main and force main to avoid conflicts with the new roadway construction and to increase the hydraulic capacities.														
00065201	<b>Potable Water Replacements for Minor Roads</b>	\$ 763,038	\$ 578,800	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permitting and construction of adjustments to existing utilities during minor roadway improvements, stormwater improvements, intersection improvements and sidewalk improvements associated with Public Works Minor Roads Program. This group of projects are necessary to support various stormwater, traffic and roadway construction projects.														
00067201	<b>Monroe Rd (CR 15) Utilities Replacement</b>	\$ 1,073,531	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct a 4 inch force main and 10 inch water main between Maronda Way and Orange Blvd in conjunction with roadway construction by Public Works. Projects CIP 00067201 - CR 15 Utility Adjustments - Water, and CIP 00067201 - CR 15 Utility Adjustments - Sewer have been combined. The project is necessary to adjust the existing water main and force main to avoid conflicts during roadway construction.														
00115701	<b>Chemical Feed Systems Rehabilitation</b>	\$ 647,265	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit, and install chemical feed pumps, tanks, and appurtenances at 11 County Water Treatment Plant Sites. FDEP regulations require disinfection for all Drinking Water Systems. System refurbishment is needed to maintain compliance.														
00168801	<b>Southeast Service Area Potable Water Main Ph II</b>	\$ 3,340,372	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Construct 9,000 feet of 24 inch potable water transmission main on Florida Power & Light easement (south of Chapman Rd) from SR 426 to SR 434. This project provides improved hydraulics in the Southeast service area. Project is necessary to provide potable water from Southeast Regional Water Treatment Plant to the area served by Lake Hayes Water Treatment Plant.														
00178101	<b>Bunell Road Potable Water Main Replacement</b>	\$ 300,050	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Project scope includes relocation of 2,300 linear feet of 8 inch water main along Bunell Rd and Eden Park Ave in conjunction with roadway project. Project is necessary to relocate existing utilities due to roadway improvements.														
00178301	<b>Country Club Well #3</b>	\$ 598,988	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct one 1200 gallon per minute potable water supply well and associated piping, electrical and control systems. The project is needed to maintain the capacity of the plant to meet current and future demand projections in the Northeast service area.														
00193101	<b>Markham Woods Road Utilities</b>	\$ 188,515	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design and construct a 12 inch water main on Markham Woods Road from Acre Court to Greentree Lane and from Heathrow Elementary School to Markham Road. Project is necessary to complete a hydraulic loop and improve the potable water distribution capacity in the Northwest service area per the approved Master Plan.														



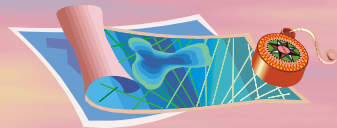


# Vision 2020 Comprehensive Plan Seminole County, Florida

Project #	Project Title	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Funding
00193301	<b>Lake Monroe Water Treatment Plant Rehabilitation</b>	\$ 1,178,012	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Rehabilitation of Lake Monroe Water Treatment Plant including ground storage tank, high service pumps and controls. Project is necessary because of the deterioration of the existing steel water ground storage and pumping systems.														
00193601	<b>Bear Lake Woods Road Potable Water Main Interconnect</b>	\$ 330,405	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design and construct water main interconnect with Orange County at Bear Lake Woods Rd. Project is necessary to provide an emergency source of potable water.														
00194101	<b>Automated Valve Improvements</b>	\$ 88,575	\$ 115,760	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Project scope is to design and install automatic valves and metering for critical locations within water mains, force mains and reclaimed mains Project is necessary to implement improvements to system valves for automation via the SCADA system, enabled metering of flows, and sustain system reliability.														
00195401	<b>Country Club Water Treatment Plant- Ground Storage Tank</b>	\$ -	\$ 694,560	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design and construct a new ground storage tank and refurbish the existing aerator at the Country Club Water Treatment Plant. The project is necessary to supplement existing storage capacity with an additional storage tank to meet current and projected peak demands.														
00195501	<b>Potable Water Quality - Distribution System Improvements</b>	\$ 62,187	\$ 5,788,000	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Evaluation of primary and secondary water quality characteristics in existing distribution system and design and construction of water system modifications and additions to improve water quality. Project is necessary to ensure existing customer base continues to receive water with quality parameters meeting FDEP regulatory guidelines.														
00195701	<b>Potable Water Quality - Treatment Plant Improvements</b>	\$ 1,122,708	\$ 11,576,000	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit & construct improvements to meet compliance with existing and future regulations regarding water quality and disinfection by-products while simultaneously improving drinking water aesthetic characteristics. Project is necessary to maintain compliance with water quality regulatory requirements through Treatment Plant improvements as determined by the Water Quality Master Plan.														
00200501	<b>Critical Well Sites/Lift Stations - Emergency Power System</b>	\$ -	\$ 405,160	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Emergency power systems to maintain service during power outages for any reason.														
00201101	<b>Consumptive Use Permit Consolidation</b>	\$ 176,872	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Permitting activities to consolidate the County's CUPs for the Northwest, Northeast, Southeast and Southwest service areas. Project is necessary to consolidate four service areas and renew the County's CUP to meet growth needs with the most cost effective sources of water.														
00201501	<b>Potable Well Improvements</b>	\$ 255,638	\$ 231,520	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Project scope encompasses the 46 existing groundwater production wells that supply the existing water treatment facilities. The project will include Well Head Protection improvements, modifications and upgrades to well. Project is necessary in order to maintain regulatory compliance and water quality criteria for all existing groundwater wells.														
00203101	<b>Security Improvements/Enhancements</b>	\$ 487,797	\$ 131,520	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	To provide optimum deterrent, detection, assessment and response capabilities for internal and external threats to the County's utility infrastructure. This ongoing project is phased to mitigate threats by consequence and probability. Project is necessary to secure the County's utility infrastructure and ensure public health and safety														
00203201	<b>Potable Water Distribution System Upgrade- FL Wtr Aquisition</b>	\$ 1,939,285	\$ 2,877,107	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct distribution system upgrades to Apple Valley, Meredith Manor, Dol Ray Manor, Druid Hills and Lake Harriet service areas to bring these systems up to County standards. Project is necessary to ensure customers receive potable water with quality parameters meeting the DEP regulatory guidelines and levels of service consistent with the County's goals.														
00203301	<b>Potable Water Treatment Plant Upgrade - FL Water Aquisition</b>	\$ 1,058,219	\$ 1,874,187	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design and construct water treatment plant upgrades to Apple Valley and decommission Meredith Manor, Dol Ray Manor, Lake Brantley, Druid Hills and Lake Harriet. Project is necessary to ensure customers continue to receive potable water with quality parameters meeting the DEP regulatory guidelines and levels of service consistent with the County's goals.														
00203401	<b>Hanover Woods Water Treatment Plant- Ground Storage Tank</b>	\$ -	\$ 187,531	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct ground storage tank for Hanover Water Treatment Plant. Project is necessary to upgrade existing storage facility to meet peak demands for existing customer base.														
00203801	<b>Fern Park Water Distribution System Improvements</b>	\$ 264,293	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Project is to design and construct 240 feet of 8-inch water line along O'Brien Ave to Jaffa Dr., 1100 feet of 8-inch water line along South St between Driftwood Dr and Lauren Ct and 110 feet of waterline along Highland Dr. In addition, the Fern Park Water Treatment Plant. Project is necessary to upgrade the distribution piping in former Florida Water Service-owned area and connect this system to the County's existing Southeast service area water distribution system along US 17/92.														
00207801	<b>Orange Boulevard Utilities</b>	\$ 3,417,377	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct 24 inch, 16 inch and 12 inch water main, 24 inch, 16 inch and 8 inch force main, and 20 inch and 16 inch reclaimed main between CR46A and SR46. Projects CIP 00207801 Orange Blvd Utility Adjustments, CIP 0024701 Orange Blvd Utility Adjustments and CIP 00217701 Orange Blvd Utility Adjustments are combined. Project is necessary to upgrade the existing water main and sanitary force main and add a reclaimed main to improve service to customers and to sustain system hydraulics.														





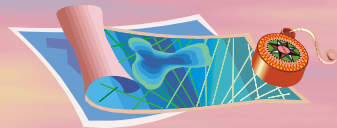


# Vision 2020 Comprehensive Plan Seminole County, Florida

Project #	Project Title	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Funding
00212901	<b>Southwest Area Potable Water Main Replacements</b>	\$ -	\$ 277,824	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design permit and construct replacement of 6,500 feet of pipe on Everet St, Jerome Way, Timothy St, Caufield St, and Martex Dr and replace with new 8-inch water main This project is necessary due to deteriorated infrastructure and the need to maintain service levels.														
00214701	<b>Rising Sun Boulevard Potable Water Main</b>	\$ 116,225	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct 1,200 feet of 12-inch water main on Rising Sun Blvd from Red Bug Lake Rd to La Mesa Ave. Project is necessary as identified in the 2003 Utility Master Plan to improve system hydraulics.														
00214801	<b>Dodd Road Potable Water Main Phase II</b>	\$ -	\$ 57,880	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct a 16 inch water main on Dodd Road from Red Bug Road to Biscayne Drive and on Howell Branch Road from Dodd Road to Bear Gully Road The Project is required to improve system hydraulics consistent with the Utilities Master Plan.														
00216501	<b>Elder Road / Orange Boulevard Potable Water Main</b>	\$ 2,699,810	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit, and construct approximately 5,500 linear feet of 12 inch potable water main and 6,300 linear feet of 10 inch Sanitary Force Main along Elder Rd and Orange Blvd, and approximately 4,500 linear of 8 inch potable water mains along Kastner Place & Dolgner. Project delivered in conjunction with CIP 00273301- Elder Force Main. Project is necessary as identified in 2003 Master Plan to address deficiencies in hydraulic transmission capacity and pressure.														
00216601	<b>Markham Regional Water Treatment Plant Improvements</b>	\$ 1,713,150	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct two Floridan Aquifer wells and associated yard piping, electrical and control systems. The project is necessary to increase the capacity of Markham Regional Water Treatment Plant from 10.368 million gallons per day to 13.824 million gallons per day to meet projected demands and provide redundancy in the wellfield.														
00216701	<b>Markham Water Treatment Plant -Forced Draft Aeration</b>	\$ 2,864,295	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct forced draft aerators to remove hydrogen sulfide, new biological treatment system to reduce odors, new generator and yard piping, electrical and control systems. The Project is necessary to comply with new Florida Department of Environmental Protection regulations for the removal of hydrogen sulfide in ground water supply wells.														
00216901	<b>Long Pond Road / Markham Woods Road Potable Water Main</b>	\$ 750,448	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, Permit and Construct 4,100 linear feet of new 16-inch water main along Long Pond Road from Northwest/Northeast interconnect to Markham Woods Road. Project is necessary per the 2003 Utility Master Plan to complete a hydraulic loop.														
00249801	<b>CRA Fern Park Utilities</b>	\$ 136,687	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	The need for new utilities were identified in the US 17/92 CRA Water & Sewer Expansion Study. New water and sewer mains are planned for the west side of the project corridor. Projects CIP 00249801 - CRA Fern Park Utilities - Water, and CIP 00249801 - CRA Fern Park have been combined. Project is necessary to support the Community Redevelopment Agency planned for the enhancement of State Road 17/92 corridor. The enhancements includes expansion of water and sewer service.														
00254201	<b>I-4 at 17/92 Ramp B-1 Interchange Utilities Replacement</b>	\$ 290,198	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Project scope entails design, permitting and construction in accordance with Joint Project Agreement (JPA) with the Florida Department of Transportation (FDOT) for relocation of existing utilities within the new interchange area at US 17/92 Ramp B1. Project delivered in conjunction with CIP 00254201 - I4/B1 Ramp US 17-92 Utility - Sewer. FDOT plans to construct a new exit ramp from I-4 at US 17/92. The ramp support columns are in conflict with the County's water and sewer lines and relocation of the County lines will be necessary.														
<b>ALTERNATIVE WATER SUPPLY</b>															
00164301	<b>Yankee Lake Regional Surface Water Facility Design</b>	\$ 1,980,660	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Prepare 50 percent design package for a regional surface water facility on the County's Yankee Lake site to include a surface water intake structure, treatment plant and storage facilities. Treatment facility will treat surface water to augment the County. Project is necessary to provide an augmentation supply for the public access reclaimed water system. Project is identified in St Johns River Water Management District (SJRWMD) Water Supply Plan and is partially funded by SJRWMD.														
00181201	<b>Yankee Lake Road/SR 46 Reclaimed Water Transmission Main</b>	\$ 1,242,010	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct 1600 linear feet of 24-inch reclaimed main from Longwood Markham Rd and SR 46 to Yankee Lake Rd and SR 46. 6,100 linear feet of 30-inch reclaimed main from the south side of SR 46 north to Yankee Lake Water Reclamation Facility. Project is necessary to provide capacity to serve the existing and future Northwest Service Area reclaimed water system from the Yankee Lake Water Reclamation Facility.														
00181601	<b>Yankee Lake Regional Surface Water Plant Construction</b>	\$ 42,020,895	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Construct a 10 MGD surface Water Treatment Plant to provide an augmented reclaimed water supply with base components sized for a potential increase to 45 MGD. Project is necessary to augment alternative water supplies in support of Consumptive Use Permit and existing water demand.														
<b>RECLAIMED/CONSERVATION PROJECTS</b>															
00164501	<b>Eastern Regional Reclaimed Water System</b>	\$ 1,256,535	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Interlocal agreement with City of Orlando for the design, permit and construct a reclaimed transmission system along SR 434 and McCulloch Road and a storage and pumping system at the Iron Bridge Wastewater Treatment Plant to serve Seminole County, City of Oviedo and UCF. The Project is required to provide reclaimed water in the Southeast service area for Seminole County customers for wholesale service to the UCF and City of Oviedo														
00164601	<b>City Of Oviedo/Seminole County Reclaimed Water System</b>	\$ 210,255	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Interlocal agreement with City of Oviedo to design, permit and construct a 24 inch reclaimed water transmission main along McCulloch Road from Lockwood Boulevard to Old Lockwood Road and on Old Lockwood Road from McCulloch Road to Oviedo city limits at Lockwood Boulevard. The Project is necessary to provide reclaimed water to Seminole County customers in the Southeast service area along McCulloch Road and Old Lockwood Road and to provide wholesale reclaimed water to the City of Oviedo.														
00182301	<b>Markham Woods Road Reclaimed</b>	\$ 3,786,013	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Phase II: Construct a 20-inch reclaimed water main and 12-inch force main on Markham Woods Rd from Timberbrook Dr to Lake Markham Rd. and 12-inch potable water main. Project is necessary to improve sanitary sewer, potable water, and reclaimed water service along Markham Woods Rd according to Utilities Master Plan.														





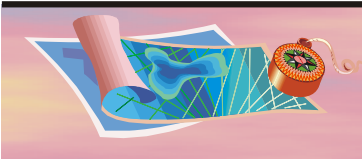


# Vision 2020 Comprehensive Plan Seminole County, Florida

Project #	Project Title	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Funding
00182901	<b>Greenwood Lakes Reclaimed Water Ground Storage Tank #2</b>	\$ 148,890	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct a second 1.75 million gallon reclaimed water ground storage tank at the Greenwood Lakes Rapid Infiltration Basins facility. Project is necessary to provide more reliable reclaimed water service to customers during peak usage hours by increasing storage capacity.														
00195201	<b>Yankee Lake Water Reclamation Facility Expansion</b>	\$ 15,098,064	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Phase I: Expansion to 3.5 MGD based on construction of diffusers, slide gates equalization basin, sludge treatment improvements and sludge dewatering system. Phase II: Expand to 5.0 MGD with construction of pretreatment upgrade and additional equalization basin. Project is necessary to provide for regulatory compliance given increased flows into the Yankee Lake Regional Water Reclamation Facility and required rehabilitation of existing facilities.														
00200901	<b>AAA Drive Reclaimed Water Main</b>	\$ 560,868	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Project scope entails design, permitting and installation of 3,200 linear feet of 8-inch reclaim water main along AAA Drive from International Parkway to the end of AAA Drive. Project is necessary to meet specific conditions set forth in the County's Northwest Service Area consumptive use permit issued by the St. John's River Water Management District.														
00217101	<b>Heathrow Boulevard Reclaimed Water Main</b>	\$ 2,829,571	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct a 16-inch reclaimed water main along CR 46A from International Pkwy to Orange Blvd along Heathrow Blvd and a 12-inch main from Orange Blvd to Bridgewater Dr. To provide reclaimed water to several subdivisions within Heathrow in conjunction with Residential Reclaimed Retrofit Phases III through V.														
00217201	<b>Residential Reclaimed Water Main Retrofit Phase II</b>	\$ 6,417,763	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct reclaimed water distribution system to retrofit the Alauka Lakes subdivision with reclaimed water service for an estimated groundwater offset of 0.62 MGD. Project is necessary to comply with the District's Northwest CUP requirement for the County to reduce potable water demand from groundwater supplies.														
00217301	<b>Residential Reclaimed Water Main Retrofit Phase I</b>	\$ 942,048	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct reclaimed water distribution system to retrofit Heathrow Woods, Magnolia Plantation, Bristol Park, Chestnut Hill and East Camden subdivisions with reclaimed water service for an estimated groundwater offset of 1.09 MGD. Project is necessary to comply with the District's Northwest CUP requirement for the County to reduce potable water demands from groundwater supplies.														
00217401	<b>Longwood Markham Road Utility Improvements</b>	\$ 6,876,600	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct a 12 inch water main, 8 inch force main and 24 inch reclaimed water main along Longwood-Markham Road between Markham Road and State Road 46. Projects CIP 00217401 - Longwood/Markham Rd - Sewer, CIP 00217401 - Longwood/Markham Rd - Reclaimed, and CIP 00217401 Longwood/Markham Rd - water have been combined. The project is necessary to improve water and sewer service to customers and to sustain system pressures in the northwest service area. The reclaimed water main will provide a major transmission route to the northwest service area.														
00217601	<b>Northwest Reclaimed Water System Augmentation Well</b>	\$ 472,562	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construction of augmentation source for reclaimed water prior to implementation of surface water augmentation. Project is necessary to augment reclaim water supplies to meet conditions in County's Northwest service area CUP.														
00217801	<b>Markham Reclaimed Water Storage &amp; Repump Facility</b>	\$ 2,361,956	\$ 2,315,200	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct a 3.0 million gallon storage tank, high service pumps, yard piping, electrical and control systems and miscellaneous site work. The Project is necessary to provide storage and pumping facilities for reclaimed water in the Northwest service area as identified in the reclaimed section of the County's Utilities Master Plan.														
00223001	<b>Residential Reclaimed Water Main Retrofit Phase III</b>	\$ 353,317	\$ 7,686,230	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct reclaimed water distribution system to retrofit Alauka, Lake Markham Preserve Phase I and Carisbrook subdivisions with reclaimed water service for an estimated groundwater offset of 0.34 MGD. Project is necessary to comply with the District's Northwest CUP requirements for the County to reduce potable water demand from groundwater supplies.														
00223101	<b>Residential Reclaimed Water Main Retrofit Phase IV</b>	\$ 382,348	\$ 13,450,923	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct reclaimed water distribution system to retrofit Stonebridge, Breckenridge Heights, Wemby Park, Wyntree and Lakeside subdivisions, with reclaimed water service for an estimated groundwater offset of 0.33 MGD. Project is necessary to comply with District's Northwest CUP requirement for the County to reduce potable water demand from groundwater supplies.														
00223201	<b>Residential Reclaimed Water Main Retrofit Phase V</b>	\$ -	\$ 10,221,262	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct reclaimed water distribution systems to retrofit Cherry Ridge, Burlington Oakes, Kentford Gardens and Heron Ridge subdivisions with reclaimed water service for an estimated groundwater offset of 0.33 MGD. Project is necessary to comply with the District's Northwest CUP requirement for the county to reduce potable water demand from groundwater supplies.														
00243301	<b>Greenwood Lakes RIB Site Potable Water Booster Station</b>	\$ -	\$ 731,520	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct pumping and chlorination system improvements for an additional 1.75MG potable water storage tank. Project is necessary due to the population growth in the Northwest area which requires existing facilities to be expanded.														
00247901	<b>Orange Boulevard Reclaim Main</b>	\$ 2,203,631	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct 24 inch, 16 inch and 12 inch water main, 24 inch, 16 inch and 8 inch force main, and 20 inch and 16 inch reclaimed main between CR46A and SR46. Projects CIP 00247901 Orange Blvd Utility Adjustments, CIP 0024701 Orange Blvd Utility Adjustments and CIP 00217701 Orange Blvd Utility Adjustments are combined. The project is necessary to upgrade the existing water main and sanitary force main and add a reclaimed main to improve service to customers and to sustain system.														
<b>WATER RESOURCE PROJECTS</b>															
00200401	<b>Markham Water Treatment Plant Aquifer Storage &amp; Recovery</b>	\$ 121,075	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Interlocal agreement with St. Johns River Water Management District to construct an aquifer storage and recovery well on a County easement at the Wilson Elementary School on Orange Boulevard. The project is necessary to provide additional potable water storage capacity for the Northwest Service Area to be used during times of high customer demand.														
<b>Note:</b>	The grey bars to the right of dollar figures represent the time period over which that particular project is to be completed. In some cases, projects began prior to 2008 and will finish beyond 2008.														

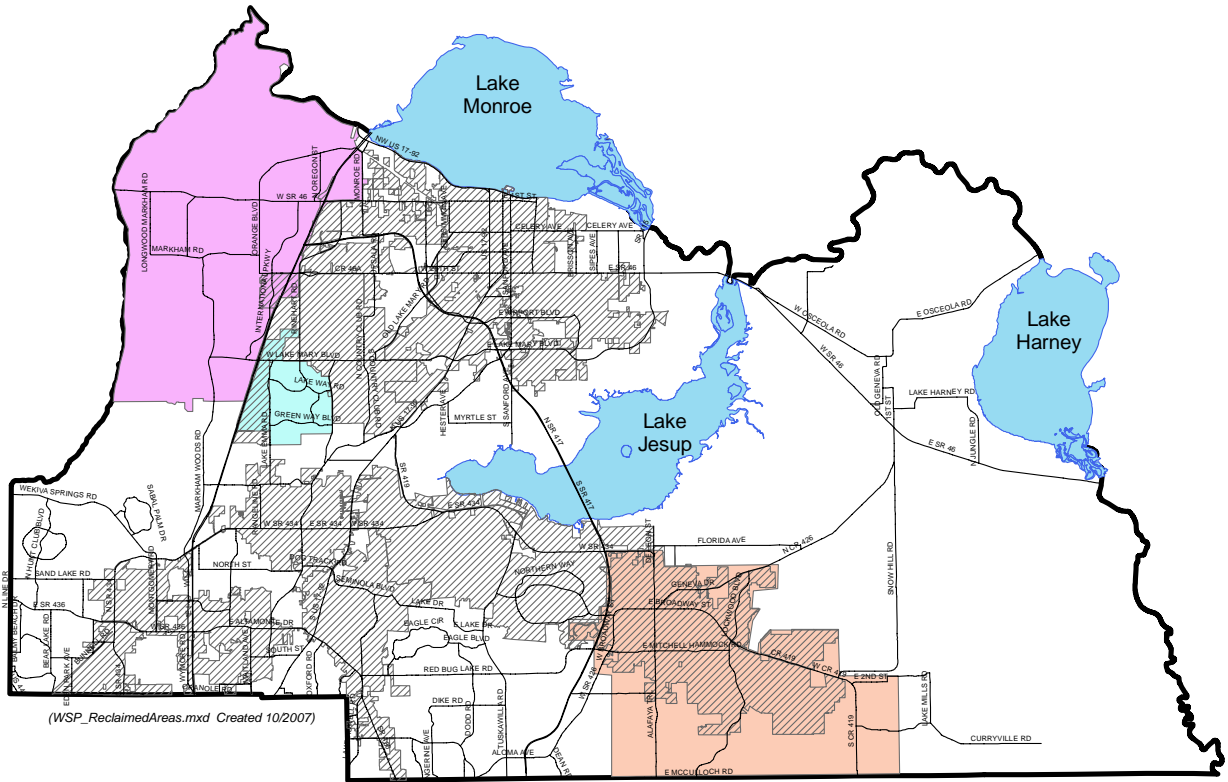
**Foot note:** One or more of the following committed funding sources will be applied to the listed Water Work Plan CIP projects: Beginning fund balance (cash), connection fee receipts, State grants for alternative water supply, and outside funding sources to include the Series 2006 Water and Sewer Revenue Bonds, issued December 7 2006 and a subsequent bond issuance planned for in 2009. The State Revolving Funds (SRF) may also be used as a funding source. The Series 2006 Bonds will provide approximately \$165,059,207, funding the majority of the CIP for the initial two years. Total borrowings through the five-year planning horizon are estimated at \$255,467,000. These dollars can be committed under the authority of the Board of County Commissioners or are guaranteed by executed interlocal agreements or contracts and do not rely on public referendum to enable their use. In this manner, the definition of "financial feasibility" is met. (CieProjectsWorkDataSet.xls)





# Vision 2020 Comprehensive Plan Seminole County, Florida





## County Reclaimed Water Service Areas



(WSP\_ReclaimedAreas.mxd Created 10/2007)

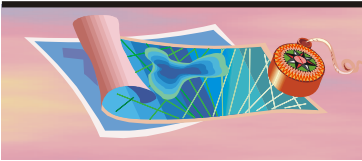
### LEGEND

#### County Reclaimed Water Service Areas

-  Northeast
-  Northwest
-  Southeast
-  Municipal Area

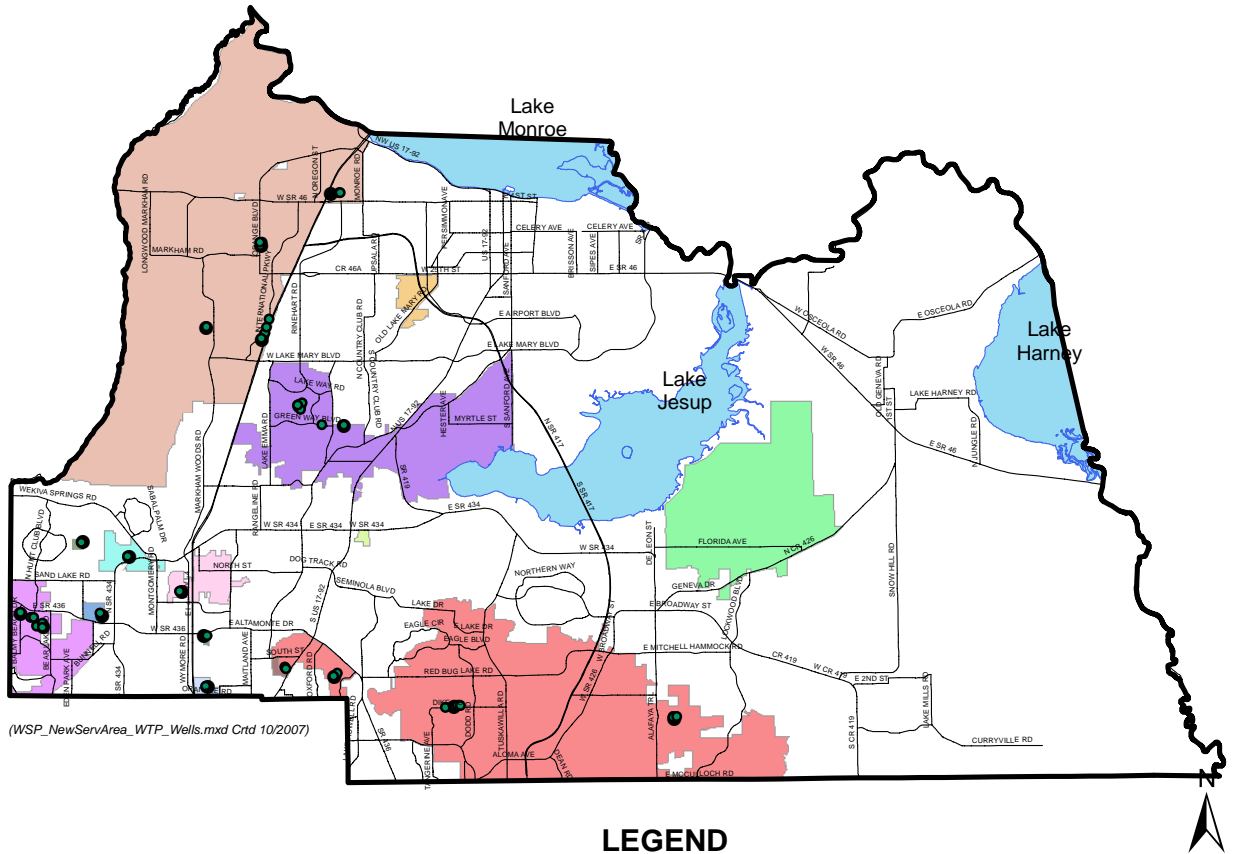
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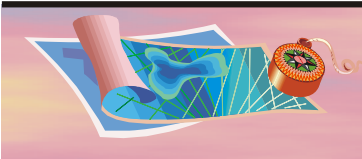




# Vision 2020 Comprehensive Plan Seminole County, Florida

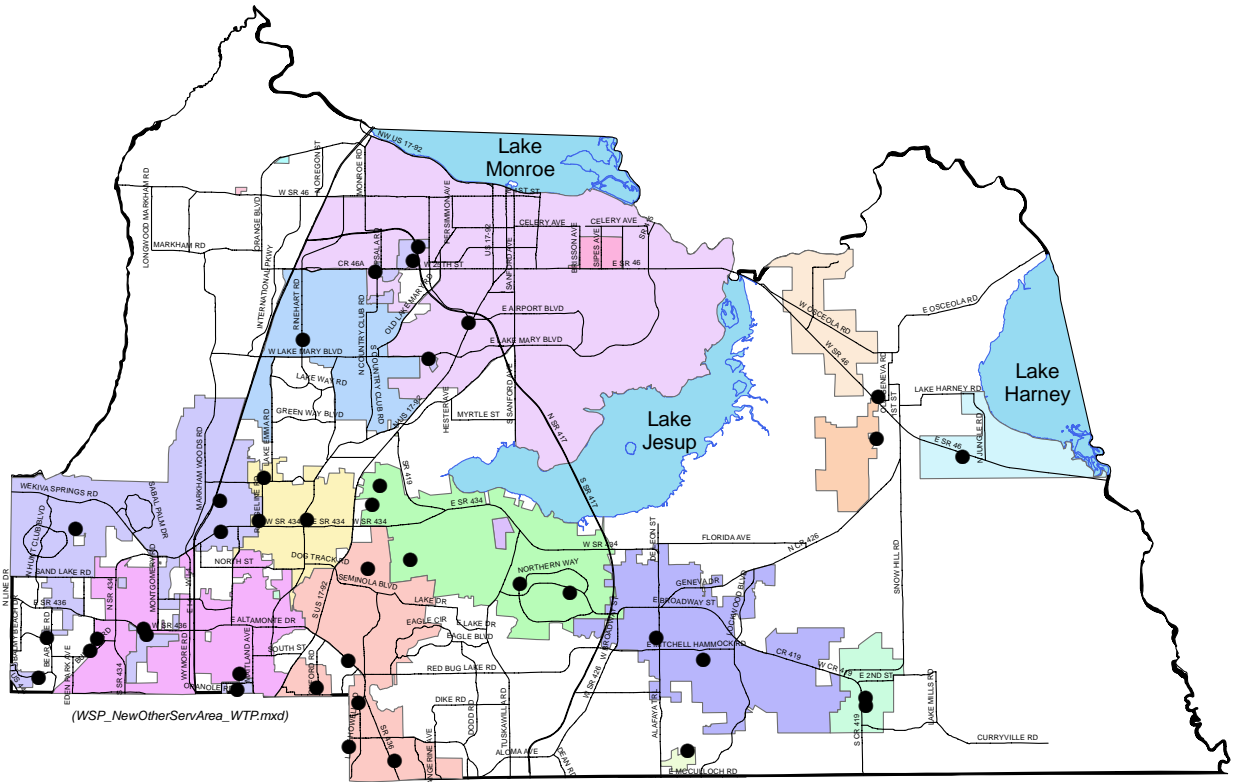
## County Potable Water Service Areas, Treatment Plants, Wells





# Vision 2020 Comprehensive Plan Seminole County, Florida

## Other Water Utility Service Areas and Treatment Plants



(WSP\_NewOtherServArea\_WTP.mxd)

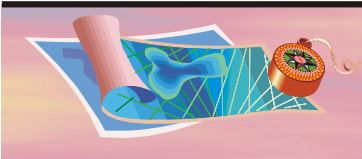


### LEGEND

- Non-County Water Treatment Plants
- AQUA UTILITIES
- CITY OF ALTAMONTE SPRINGS
- CITY OF CASSELBERRY
- CITY OF LAKE MARY
- PALM VALLEY ASSOC.
- SEMINOLE WOODS
- SPRING HAMMOCK
- TOWN & COUNTRY R.V. RESORT
- TUSKAWILLA TRAILS
- CITY OF LONGWOOD
- CITY OF OVIEDO
- CITY OF SANFORD
- CITY OF WINTER SPRINGS
- LAKE HARNEY WATER ASSOC.
- MIDWAY CANAAN UTILITIES
- MULLET LAKE WATER ASSOC.
- TWELVE OAKS CAMPGROUND
- UTILITIES INC.

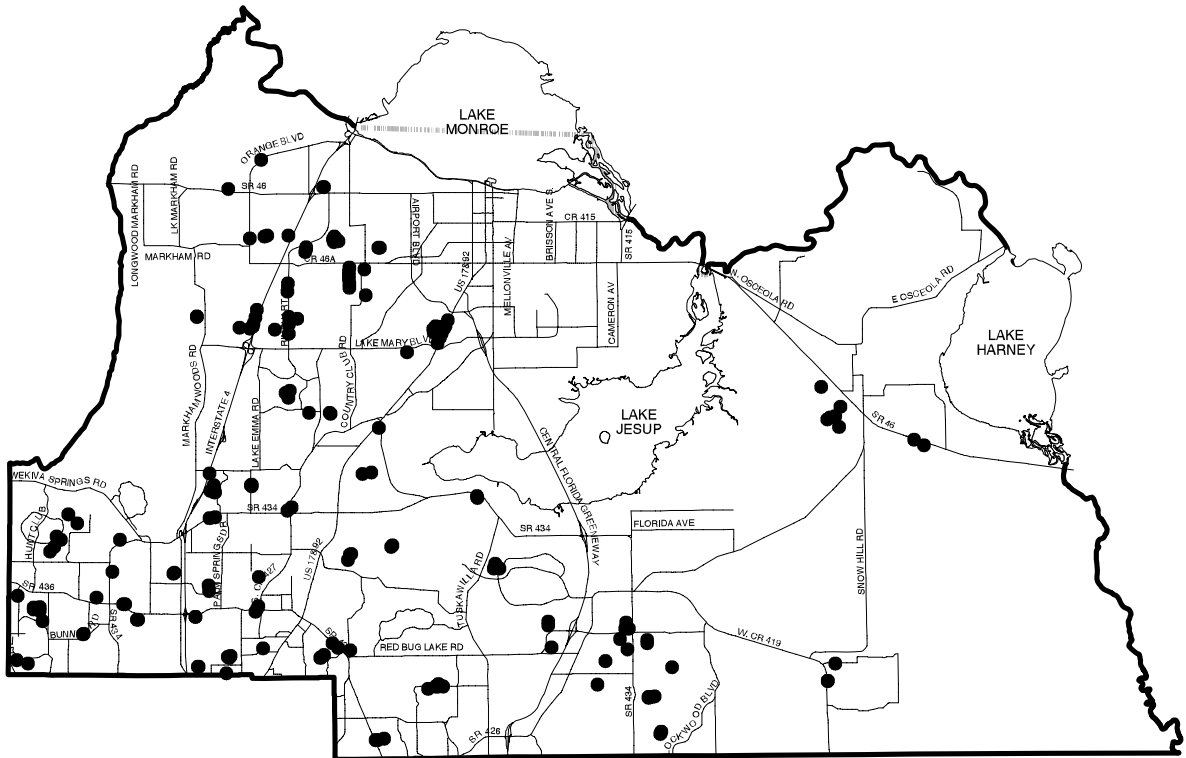
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# Vision 2020 Comprehensive Plan Seminole County, Florida

## Existing County-wide Water Supply Wells

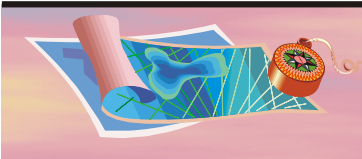


### LEGEND

- Existing Water Supply Wells

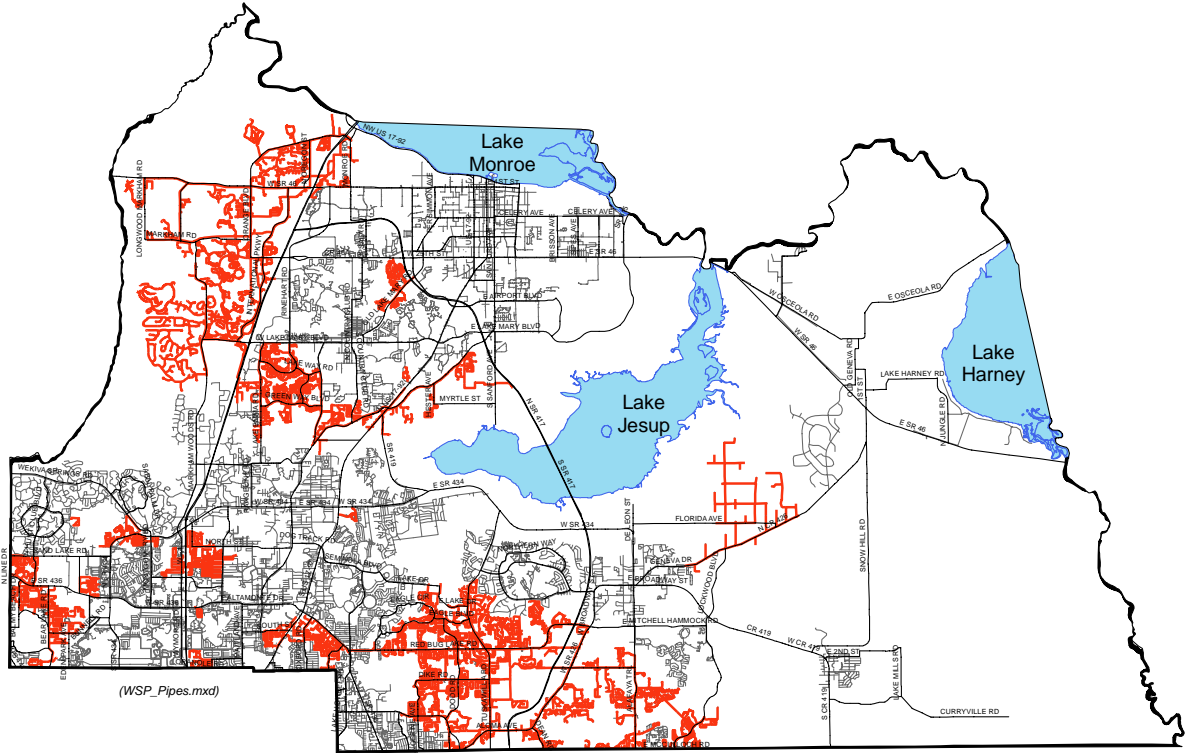






# Vision 2020 Comprehensive Plan Seminole County, Florida

## County-wide Water Line Network



(WSP\_Pipes.mxd)

### LEGEND

- Seminole County Water Line Network
- County-wide Water Line Network

(Effective date of information: 2007)

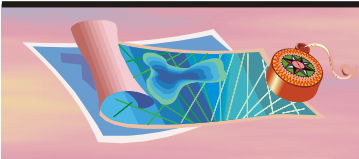




**ATTACHMENT 2**  
**Amendments to the Capital Improvements Element**  
**(06F.TXT03.2)**

- **Revision to Goals, Objectives and Policies**
- **Revision to Exhibits**

*(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)*



# Vision 2020 Comprehensive Plan Seminole County, Florida

## CAPITAL IMPROVEMENTS ELEMENT GOALS, OBJECTIVES, AND POLICIES

### GOAL

Implement a capital planning program that provides and maintains in a timely, efficient, and fiscally prudent manner public facilities and services which protect the public health, safety and welfare; adequately serve existing and new development; are consistent with Seminole County's future land use plan; achieve and maintain adopted facility levels of service; maintain the existing infrastructure; and minimize public costs.

### OBJECTIVE CIE 1 ADOPTION AND UPDATE OF CAPITAL IMPROVEMENTS ELEMENT

The Capital Improvements Element shall be used to guide the programming and implementation of public facility improvements to correct existing deficiencies, repair and replace worn out or obsolete facilities and to accommodate previously approved and new growth in an efficient, cost effective, and timely manner.

#### Policy CIE 1.1 **County Responsibility for Maintaining Level of Service**

The Capital Improvements Element shall include an annual schedule of the capital improvements for which Seminole County has fiscal responsibility to maintain the level of service standards adopted in the public facility elements of the Comprehensive Plan. (See Exhibits CIE: Facility LOS at rear of element).

#### Policy CIE 1.2 **Annual Review and Update**

The Capital Improvements Element shall concentrate on the first five years of capital needs, shall be financially feasible and shall be reviewed and updated annually. (See five year capital schedules of improvements for each facility element in the Exhibits Section at the rear of this element).

#### Policy CIE 1.3 **Florida Department of Transportation Capital Projects**

The schedule of capital improvements shall recognize as financially feasible the transportation projects within Seminole County included in the first three years of the adopted five-year FDOT work program.

#### Policy CIE 1.4 **Capital Improvements Element Amendments**

A Plan amendment shall be required to eliminate, defer or delay construction of any road or mass transit facility or service which is needed to maintain the adopted level of service standard and which is listed in the five-year schedule of improvements.

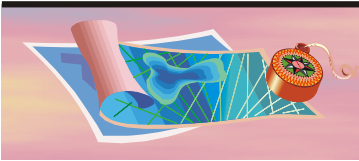
#### Policy CIE 1.5 **Capital Improvements Element Consistency With Other Elements**

The schedule of capital improvements shall be based upon the future land use and public facility elements of the Comprehensive Plan and shall be consistent with all other elements of this Plan.

#### Policy CIE 1.6 **Coordination With Annual Budgets**

Adoption of annual budgets shall include a specific capital budget, which shall implement adequate funding sources and be consistent with the Capital Improvements Element.





# Vision 2020 Comprehensive Plan Seminole County, Florida

- Maintenance or enhancement of services through opportunities to incorporate improved technology and materials; and
- Opportunities for future fiscal efficiencies through such activities as reuse of existing facilities, renewal/rehabilitation to extend useful life, and spreading major periodic renewal/replacement cost burdens over time.

These provisions for renewal/replacement shall be incorporated in the CIE and implemented through annual budget adoptions.

## **Policy CIE 1.10 Alternative Funding Sources**

To ensure optimum strategies for financial feasibility, the County shall review and evaluate available and potential funding sources to ensure a financial strategy exists to adequately fund the five-year Capital Improvements Element. If alternative funding sources are not successfully adopted and implemented on the schedule identified, Seminole County shall either:

- Increase the rates of current revenue sources or implement other available sources such that the schedule of capital improvements is adequately funded in each year; or
- Amend the Future Land Use, Capital Improvements Element and public facility elements including level of service standards and the schedule of capital improvements, as appropriate and necessary, such that internal consistency of the Comprehensive Plan and financial feasibility are maintained.

## **Policy CIE 1.11 Funding of Public Transportation Services**

The Board of County Commissioners shall, at its discretion and in accordance with law, make use of fuel tax revenues and other legal revenue sources for the purpose of funding public transportation capital, operations and maintenance as identified in the Seminole County Comprehensive Plan Capital Improvements Element (CIE). Such revenues may be expended for the public transportation services identified in the CIE including but not limited to capital facilities, operations and maintenance. These services may be provided directly by the County or may be contracted for through public or private service providers. *(Added: Amendment 02F.TXT02; Ordinance 2002-55, 12/10/2002)*

## **Policy CIE 1.12 Maintaining Consistency With Water Supply Facilities Work Plan**

A The County shall include in its annual update of the County's financially feasible five (5) year capital improvements project listing the first five (5) years of the ten (10) year Water Supply Facilities Work Plan (Work Plan) to ensure consistency between the Potable Water Element and the Capital Improvements Element.

B Exhibit CIE: Capacity/Improvements Summary within the CIE Exhibit: Facility Program - Potable Water/Sanitary Sewer of the CIE Element shall be updated annually to be consistent with the Work Plan's annually updated table of facility capacity, water demand, and permitted groundwater capacity.

C Exhibit CIE: Facility LOS – All Facilities of the CIE Element shall be updated as necessary to be consistent with existing and proposed levels of service policies adopted in the Potable Water Element and Work Plan.

*(Added: Amendment 06EX.TXT03.2.01, Ordinance 2007-~~XX~~45, 11/13/2007)*





# Vision 2020 Comprehensive Plan Seminole County, Florida



## OBJECTIVE CIE 3 LOS AND DEVELOPMENT APPROVALS

By adoption and implementation of the Seminole County Comprehensive Plan, land use decisions shall require maintenance of adopted level of service standards and shall be coordinated with the Capital Improvements Element and public facility elements including the adopted schedule of capital improvements.

### **Policy CIE 3.1 Adopted Level of Service Standards and Schedules of Capital Improvements**

*Exhibit CIE: Facility LOS - All Facilities* shall identify the adopted level of service standards for each public facility. *Exhibits CIE: Facility Program* for individual elements or *Exhibits CIE: Schedule of Improvements* for multiple facility programs shall detail the annually adopted five-year financially feasible capital expenditure program supporting the goals, objectives and policies of the Plan.

### **Policy CIE 3.2 Application to New Development**

For the purposes of approving new development subsequent to adoption of this Comprehensive Plan, all adopted public facility level of service standards and schedules of capital improvements, except for Public Safety and Libraries, shall be applied and evaluated in any new development reviews and approvals consistent with policies of the Implementation Element. A final development order shall be issued only if this evaluation finds that the needed public facilities that meet the adopted level of service standards are available or are assured to be available concurrent with the impacts of the development. Preliminary development orders shall only be issued with the condition that no rights to obtain final development orders or development permits, nor any other rights to develop the subject property are granted or implied by the County's approval of the preliminary development order.

### **Policy CIE 3.3 Five-Year LOS and Impact Assessment**

To guide provision of adequate public facilities concurrent with the impacts of development, the schedule of capital improvements for each public facility type shall be accompanied by a summary evaluation of capacity needs and availability for at least the five-year period.

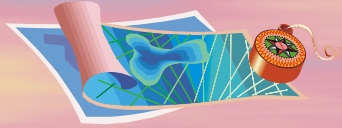
### **Policy CIE 3.4 Concurrency Management**

Seminole County shall continue to operate a concurrency management system pursuant to the Implementation Element which, in conjunction with Policy 3.2 and the other policies of this Capital Improvements Element, will ensure that development orders and permits are issued in a manner that will assure that the necessary public facilities and services will be available at adopted level of service standards concurrent with the impacts of that development.

For potable water, adequate water supplies and potable water facilities shall be in place and available to serve new development no later than the issuance by the County of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit or its functional equivalent, the County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional equivalent.

(Revised: Amendment 06EX.TXT03.2.02, Ordinance 2007-~~XX~~45, 11/13/2007)





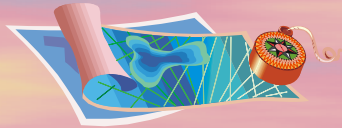
# Vision 2020 Comprehensive Plan Seminole County, Florida

## CAPITAL IMPROVEMENTS EXHIBITS

The following exhibits are in support of the Potable Water Element's Water Supply Facilities Work Plan:

- Capacity/Improvements Summary (Replaced: Amendment 06EX.TXT03.2.03, Ordinance 2007-~~XX45~~, 11/13/2007)
- Five-Year Capital Schedule of Improvements - Water Supply Work Plan Projects (Added: Amendment 06EX.TXT03.2.04, Ordinance 2007-~~XX45~~, 11/13/2007)





# Vision 2020 Comprehensive Plan Seminole County, Florida

## Capacity/Improvements Summary

Water Service Areas (mgd)	2005			
	Design Capacity (ADF) (1)	Permit SJRWMD Alloc (2)	Current Demand (ADF) (3)	Permit Surplus/Deficit
N West (4)	8.376	6.430	5.760	0.670
N East (4)(5)	3.709	3.020	2.280	0.740
S East (6)	13.233	9.154	8.470	0.684
S West	2.560	1.600	1.270	0.330
<b>TOTALS</b>	<b>27.878</b>	<b>20.204</b>	<b>17.780</b>	<b>2.424</b>
Blk Hmk (7)	0.175	NA	0.103	0.072
Water Service Areas (mgd)	2010			
	Design Capacity (ADF) (1)	Permit SJRWMD Alloc (2)	Projected Demand (3)	Permit Surplus/Deficit
N West (4)	8.376	8.230	9.480	-1.250
N East (4)(5)	3.709	3.020	2.650	0.370
S East (6)	13.233	9.154	11.390	-2.236
S West	2.560	1.690	1.550	0.140
<b>TOTALS</b>	<b>27.878</b>	<b>22.094</b>	<b>25.070</b>	<b>-2.976</b>
Blk Hmk (7)	0.175	NA	0.129	0.046
Water Service Areas (mgd)	2015			
	Design Capacity (ADF) (1)	Permit SJRWMD Alloc (2)	Projected Demand (3)	Permit Surplus/Deficit
N West (4)	8.376	8.230	10.860	-2.630
N East (4)(5)	3.709	3.020	3.120	-0.100
S East (6)	13.233	9.154	13.160	-4.006
S West	2.560	1.370	1.760	-0.390
<b>TOTALS</b>	<b>27.878</b>	<b>21.774</b>	<b>28.900</b>	<b>-7.126</b>
Blk Hmk (7)	0.175	NA	0.140	0.035
Water Service Areas (mgd)	2020			
	Design Capacity (ADF) (1)	Permit SJRWMD Alloc (2)	Projected Demand (3)	Permit Surplus/Deficit
N West (4)	8.376	8.230	11.960	-3.730
N East (4)(5)	3.709	3.020	3.550	-0.530
S East (6)	13.233	9.154	14.430	-5.276
S West	2.560	1.370	2.010	-0.640
<b>TOTALS</b>	<b>27.878</b>	<b>21.774</b>	<b>31.950</b>	<b>-10.176</b>
Blk Hmk (7)	0.175	NA	0.151	0.024

1 Physical plant permitted average day capacity.

Revision 2, Jan 25, 2007

2 Daily average pumping amount based on SJRWMD CUP permit allocation for the individual year and service area.

3 Projected demand is based historical flow information. Amounts have not been reduced due to reflect effects of proposed conservation or reclaimed water usage to offset use of potable water for irrigation. Current demand (2005) is consistent with the County's CUP application, which uses water demands from 9/1/04 – 8/31/05.

4 The Northwest and Northeast service areas are interconnected.

5 SJRWMD Northeast CUP expired November 30, 2003. Renewal application submitted to District. Previous allocation shown.

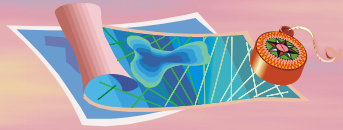
6 SJRWMD Southeast CUP expired December 31, 2003. Renewal application submitted to District. Previous allocation shown.

7 The Black Hammock Service Area is served through a wholesale contract with the City of Oviedo.

Note 1: Projected deficits are based on existing facility capacity and current conservation efforts.

Note 2: Six small, built-out private water facilities were absorbed mid-2004. These will be incorporated into the capacity/demand calculations beginning with the 2007 CIE.



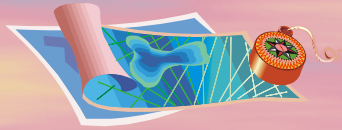


# Vision 2020 Comprehensive Plan Seminole County, Florida

## Five Year Capital Schedule of Improvements Water Supply Work Plan Projects

<u>Project #</u>	<u>Project Title</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>
00021701	Oversizings & Extensions	\$ 240,820	\$ 1,953,450	-	-	-
00024803	Telemetry & SCADA System Improvements	\$ 329,972	\$ 156,276	-	-	-
00056601	Potable Water Treatment Plant Rehabilitation	\$ 787,029	\$ 803,122	-	-	-
00064501	Potable Water Distribution System Improvements	\$ 1,109,313	\$ 289,400	-	-	-
00064606	East Lake Drive Potable Water Main	\$ 91,612	\$ -	-	-	-
00065101	Lake Emma Road Utility Replacement/Upgrade	\$ 2,026,906	\$ -	-	-	-
00065201	Potable Water Replacements for Minor Roads	\$ 763,038	\$ 578,800	-	-	-
00067201	Monroe Rd (CR 15) Utilities Replacement	\$ 1,073,531	\$ -	-	-	-
00115701	Chemical Feed Systems Rehabilitation	\$ 647,265	\$ -	-	-	-
00168801	Southeast Service Area Potable Water Main Ph II	\$ 3,340,372	\$ -	-	-	-
00178101	Bunnel Road Potable Water Main Replacement	\$ 300,050	\$ -	-	-	-
00178301	Country Club Well #3	\$ 598,988	\$ -	-	-	-
00193101	Markham Woods Road Utilities	\$ 188,515	\$ -	-	-	-
00193301	Lake Monroe Water Treatment Plant Rehabilitation	\$ 1,178,012	\$ -	-	-	-
00193601	Bear Lake Woods Road Potable Water Main Interconr	\$ 330,405	\$ -	-	-	-
00194101	Automated Valve Improvements	\$ 88,575	\$ 115,760	-	-	-
00195401	Country Club Water Treatment Plant- Ground Storage	\$ -	\$ 694,560	-	-	-
00195501	Potable Water Quality - Distribution System Improver	\$ 62,187	\$ 5,788,000	-	-	-
00195701	Potable Water Quality - Treatment Plant Improvement	\$ 1,122,708	\$ 11,576,000	-	-	-
00200501	Critical Well Sites/Lift Stations - Emergency Power Syst	\$ -	\$ 405,160	-	-	-
00201101	Consumptive Use Permit Consolidation	\$ 176,872	\$ -	-	-	-
00201501	Potable Well Improvements	\$ 255,638	\$ 231,520	-	-	-
00203101	Security Improvements/Enhancements	\$ 487,797	\$ 131,520	-	-	-
00203201	Potable Water Distribution System Upgrade- FL Wtr A	\$ 1,939,285	\$ 2,877,107	-	-	-
00203301	Potable Water Treatment Plant Upgrade - FL Water Ac	\$ 1,058,219	\$ 1,874,187	-	-	-
00203401	Hanover Woods Water Treatment Plant- Ground Stor	\$ -	\$ 187,531	-	-	-
00203801	Fern Park Water Distribution System Improvements	\$ 264,293	\$ -	-	-	-
00207801	Orange Boulevard Utilities	\$ 3,417,377	\$ -	-	-	-
00212901	Southwest Area Potable Water Main Replacements	\$ -	\$ 277,824	-	-	-
00214701	Rising Sun Boulevard Potable Water Main	\$ 116,225	\$ -	-	-	-





# Vision 2020 Comprehensive Plan Seminole County, Florida

<u>Project #</u>	<u>Project Title</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>
00214801	Dodd Road Potable Water Main Phase II	\$ -	\$ 57,880	-	-	-
00216501	Elder Road / Orange Boulevard Potable Water Main	\$ 2,699,810	\$ -	-	-	-
00216601	Markham Regional Water Treatment Plant Improvement	\$ 1,713,150	\$ -	-	-	-
00216701	Markham Water Treatment Plant -Forced Draft Aeratic	\$ 2,864,295	\$ -	-	-	-
00216901	Long Pond Road / Markham Woods Road Potable Wa	\$ 750,448	\$ -	-	-	-
00249801	CRA Fern Park Utilities	\$ 136,687	\$ -	-	-	-
00254201	I-4 at 17/92 Ramp B-1 Interchange Utilities Replacem	\$ 290,198	\$ -	-	-	-
00164301	Yankee Lake Regional Surface Water Facility Design	\$ 1,980,660	\$ -	-	-	-
00181201	Yankee Lake Road/SR 46 Reclaimed Water Transmissi	\$ 1,242,010	\$ -	-	-	-
00181601	Yankee Lake Regional Surface Water Plant Constructio	\$ 42,020,895	\$ -	-	-	-
00164501	Eastern Regional Reclaimed Water System	\$ 1,256,535	\$ -	-	-	-
00164601	City Of Oviedo/Seminole County Reclaimed Water Sy	\$ 210,255	\$ -	-	-	-
00182301	Markham Woods Road Reclaimed	\$ 3,786,013	\$ -	-	-	-
00182901	Greenwood Lakes Reclaimed Water Ground Storage T	\$ 148,890	\$ -	-	-	-
00195201	Yankee Lake Water Reclamation Facility Expansion	\$ 15,098,064	\$ -	-	-	-
00200901	AAA Drive Reclaimed Water Main	\$ 560,868	\$ -	-	-	-
00217101	Heathrow Boulevard Reclaimed Water Main	\$ 2,829,571	\$ -	-	-	-
00217201	Residential Reclaimed Water Main Retrofit Phase II	\$ 6,417,763	\$ -	-	-	-
00217301	Residential Reclaimed Water Main Retrofit Phase I	\$ 942,048	\$ -	-	-	-
00217401	Longwood Markham Road Utility Improvements	\$ 6,876,600	\$ -	-	-	-
00217601	Northwest Reclaimed Water System Augmentation W	\$ 472,562	\$ -	-	-	-
00217801	Markham Reclaimed Water Storage & Repump Facility	\$ 2,361,956	\$ 2,315,200	-	-	-
00223001	Residential Reclaimed Water Main Retrofit Phase III	\$ 353,317	\$ 7,686,230	-	-	-
00223101	Residential Reclaimed Water Main Retrofit Phase IV	\$ 382,348	\$ 13,450,923	-	-	-
00223201	Residential Reclaimed Water Main Retrofit Phase V	\$ -	\$ 10,221,262	-	-	-
00243301	Greenwood Lakes RIB Site Potable Water Booster Stat	\$ -	\$ 731,520	-	-	-
00247901	Orange Boulevard Reclaim Main	\$ 2,203,631	\$ -	-	-	-
00200401	Markham Water Treatment Plant Aquifer Storage & Re	\$ 121,075	\$ -	-	-	-

(CieProjectsWorkDataSet.xls)





**ATTACHMENT 3**  
**Amendments to the Conservation Element**  
**(06F.TXT03.3)**

- **Revision to Issues and Concerns**
- **Revision to Goals, Objectives and Policies**

*(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)*

# Vision 2020 Comprehensive Plan Seminole County, Florida



## Issue CON 3

### Ground Water Supply

Both the quantity and quality of available potable water supplies is an increasing concern as Seminole County continues at a high rate of growth.

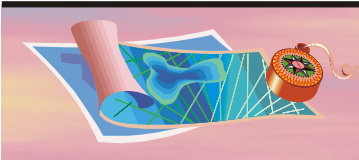
In 1986 Seminole County undertook a Ground Water Supply Study to assess the availability and quality of potable water supplies. The study includes a Countywide (including portions of Orange County) model of the Floridan Aquifer and evaluated; existing and future water demands, critical water supply areas; salt-water intrusion and future wellfield locations. The groundwater study final report was issued in August 1991. This report estimated that the County is currently overdrafting more potable water than is being recharge. The study reports that the County will not be able to meet projected water demands without substantial conservation programs. A task force of County, municipal and private water supply agencies was created to assess study results and develop recommended water conservation programs, and recommend further study needs. Upon completion of the Ground Water model a study will be conducted to identify wellfield protection zones surrounding public well fields, which are depicted in *Exhibit FLU: Existing Water Supply Wells*. A wellfield protection ordinance has been adopted to regulate and develop performance standards for uses within protection zones, which may impact groundwater quality. Since that time, the St. Johns River Water Management District has completed a lengthy study process of the water supply issues of the entire St. Johns River basin, of which Seminole County is a part. Seminole County has been designated as priority water caution area as a result of this study process, known as Water 2020. This study indicated that the Floridan Aquifer, our primary source of groundwater is scheduled to significantly decrease in volume during the next planning horizon and it identified alternatives for water supply to offset these decreases, most notably, surface water. There are multiple issues related to establishment of a surface water supply system, including siting of facilities, costs, and minimum flows and levels, to name a few. Seminole County recently (2000) partnered with the St. Johns River Water Management District to initiate a feasibility study of surface water opportunities within the middle basin and is currently providing staff representatives on several key advisory groups relative to the entire water supply planning process. Seminole County should maintain an active role in this process and play a major role as a facilitator of interests with the various stakeholders.

### 2007 Update on Groundwater Water Supply

For the last 15 years, the SJRWMD's water supply planning and assessment investigations have documented that the rate of withdrawal of groundwater in certain areas of the SJRWMD is approaching the maximum rate that can be sustained without causing unacceptable adverse impacts to the water resources and related natural systems. Water supply planning results to date show that at some locations, withdrawal rates will likely approach or reach sustainable limits in the foreseeable future, well within the current 20-year planning horizon.

The 2005 District Water Supply Plan (DWSP 2005) [also known as the Regional Water Supply Plan, (RWSP)] addresses current and future water use and traditional and alternative water sources and water conservation required to meet 2025 water supply needs while sustaining water quality and protecting wetland and aquatic systems. The DWSP 2005 is designed to meet the requirements of the water supply planning provisions of Section 373, Florida Statutes (F.S.), and is based on a planning horizon extending through 2025. (The above text for this section was excerpted from: Technical Publication SJ2006-2, District Water Supply Plan, 2005).





# Vision 2020 Comprehensive Plan Seminole County, Florida

The County is currently in the process of creating a Water Supply Facilities Work Plan (Work Plan) based on the County's future service needs and which will be consistent with and coordinated with the DWSP 2005. The Work Plan can be found in the Potable Water Element of the Comprehensive Plan.

(Revised: Amendment 06EX.TXT03.3.01, Ordinance 2007-~~XX~~45, 11/13/2007)

## Issue CON 4

### Air quality

Air quality is an issue requiring increased attention as Seminole County continues to grow. It may become necessary to evaluate the feasibility of establishing an air quality-monitoring program and to review and amend existing regulations.

Air quality in Seminole County is currently monitored by either the Florida Department of Environmental Protection or required as part of major development (DRI) approval. The County itself does not have an air quality monitoring program as Seminole County has no major point source generators and auto traffic historically has not been congested enough to warrant monitoring. However, anticipated future traffic increases may require monitoring.



# Vision 2020 Comprehensive Plan Seminole County, Florida



## CONSERVATION ELEMENT GOALS, OBJECTIVES AND POLICIES

### GOAL

Preserve, properly manage and, where possible, enhance the quantity, quality and function of Seminole County's natural resources for existing and future generations; to include, but not be limited to the following natural resources: air, surface waters, groundwater supplies, soils/minerals, wetlands, native habitat and wildlife, floodplain, endangered, threatened and species of special concern, open spaces, aquifer recharge areas, and historic and archaeological resources.

### OBJECTIVE CON 1 GROUNDWATER PROTECTION - (ENTIRE OBJECTIVE IS NOTED AS APPLICABLE)

The County shall continue to make use of new and By 2005, build upon existing studies as the basis for ~~to~~ establishing a programs, practices and policies ~~to that~~ protect both the quantity and quality of groundwater resources and recharge areas.

#### **Policy CON 1.1 Groundwater Model/Assessment**

The County shall work with the St. Johns River Water Management District, USGS, Department of Environmental Protection, and interested parties to evaluate its long range water conservation plan as part of the Water 2020 SJRWMD regional water supply planning process, including participation in working groups and advisory groups on supply planning, minimum flows and levels, and other aspects of the process, including facilitation of input from stakeholder groups.

*(Revised: Amendment 06EX.TXT03.3.02, Ordinance 2007-~~XX~~45, 11/13/2007)*

#### **Policy CON 1.2 Recharge Area Protection/Conservation Measures**

The County shall evaluate its groundwater conservation measures and policies for regulation of water usage, reduction of land use densities in critical areas, water use restrictions and irrigation alternatives as part of each Comprehensive Plan Evaluation and Appraisal Report (EAR).

#### **Policy CON 1.3 Recharge Area Protection**

The County shall evaluate its aquifer recharge overlay zoning classification which sets alternative design criteria and standards to protect the functions of most effective aquifer recharge areas as part of each Comprehensive Plan Evaluation and Appraisal Report (EAR).

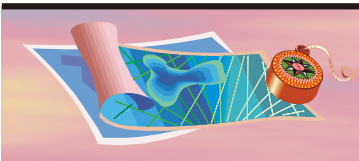
#### **Policy CON 1.4 Recharge Area Reuse**

The County shall continue to evaluate the use of septic systems and effluent reuse systems within most effective recharge areas and determine any long term negative impacts on groundwater quality and, if appropriate, adopt and develop additional regulations governing their use.

#### **Policy CON 1.5 Wellfield Protection**

The County shall continue to monitor and abide by ~~monitor~~ Federal and State regulations to support establishment of wellfield zones of protection beyond those already established and shall consider enacting into the land development code, additional protection and programs as warranted by changes in Federal and State policy. *(Revised: Amendment 06EX.TXT03.3.03, Ordinance 2007-~~XX~~45, 11/13/2007)*





# Vision 2020 Comprehensive Plan Seminole County, Florida

**Policy CON 1.6 Intergovernmental Wellfield Protection**

The County shall pursue agreements with municipalities and private water utilities for development and implementation of the Wellfield Protection Program.

**Policy CON 1.7 Underground Tank Program**

The County shall continue to implement and administer an underground storage tank program coordinated with and consistent with requirements of the Department of Environmental Regulation and other appropriate agencies to ensure groundwater resources are protected.

**Policy CON 1.8 Underground Tank Regulations**

The County shall, by 2005, review existing regulations and, if appropriate, develop County standards governing the refurbishment and replacement of underground tanks.

**Policy CON 1.9 Wellcapping Program**

The County shall continue to coordinate with the Soil Conservation Service and the St. Johns River Water Management District with regard to the capping of County owned free flowing wells and the funding of a joint program for capping of private wells.

**Policy CON 1.10 Geneva Lens (Bubble) Protection**

The County shall continue to assess the water supply limitations of the Geneva lens (bubble) and establish appropriate land use densities and measures to protect its critical recharge functions. The Geneva lens, depicted in *Exhibit FLU: Resource Protection Areas*, should be assessed in conjunction with the St. Johns River Water Management District study of the Geneva Lens.

**Policy CON 1.11 Effluent Reuse**

The County shall evaluate its expanded effluent reuse program as part of each Comprehensive Plan Evaluation and Appraisal Report (EAR). The program shall, at a minimum, evaluate the following:

- A Implementing expanded ~~effluent takeback dual-line~~ systems for County operated wastewater facilities in an economically and environmentally sound manner;
- B Requiring new development to install ~~effluent takeback dual-~~lines at the time of development where reuse programs are programmed or exist. This includes the identification of service areas where reuse may be applied and development of a phased implementation program;
- C Implementing existing sewer agreement takeback provisions;
- D Mechanisms to transport and dispose of reuse water within the most effective recharge areas;
- E Incentives for encouraging reuse systems;
- F Reuse programs may be appropriate; and

*(Revised: Amendment 06EX.TXT03.3.04, Ordinance 2007-~~XX~~45, 11/13/2007)*





# Vision 2020 Comprehensive Plan

## Seminole County, Florida



### **Policy CON 1.12 Xeriscape Regulation**

The County shall continue to enforce and evaluate its Xeriscape regulations which, at a minimum, sets standards for the use of native and drought tolerant species, removal of exotics, vegetative clearing and efficient irrigation to maximize conservation of water resources. The evaluation process shall consider the existing arbor and landscaping requirements of the Land Development Code requirements with special attention given to the DEP's prohibited plant list and the Florida Exotic Pest Plant Council's Category 1 and 2 lists.

### **Policy CON 1.13 Safe Withdrawal Rates**

The County shall coordinate with the St. Johns River Water Management District and surrounding jurisdictions to determine safe withdrawal rates and appropriate land use intensities to ensure an adequate water supply for existing and future needs and shall seek cooperation with the District on continued development of a water budget model.

### **Policy CON 1.14 Private Well Withdrawal**

The County shall cooperate with the St. Johns River Water Management District to monitor the impacts of private well withdrawals on the Floridan Aquifer.

### **Policy CON 1.15 Minimize Water Withdrawal/Transport**

The County shall minimize the withdrawal or transport of water to future developments which would adversely impact existing well production.

### **Policy CON 1.16 Emergency Water Conservation**

The County shall continue to utilize, as necessary, the Emergency Water Conservation ordinance to enable the County to limit water usage by methods that may include, but are not limited to, citations with fines in order to enforce restrictions and surcharges for excessive consumption and use methods as are otherwise authorized by law. The ordinance shall at a minimum be consistent with the St. Johns River Water Management District's Emergency Water Conservation requirements.

### **Policy CON 1.17 Ten-Year Water Supply Facilities Work Plan Water Supply Plan**

A The County shall assess projected water needs and sources for at least a ten-year planning period as part of creating and maintaining a Water Supply Facilities Work Plan (Work Plan) within the Potable Water Element. Capital projects planned during the first five years of the Work Plan shall also be shown in the Capital Improvements Element.

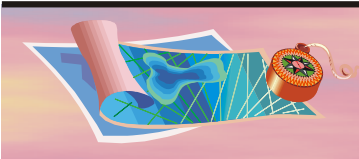
B The Work Plan shall address each major type of water supply project – groundwater use optimization, conservation, reuse, and development of alternative water supply sources and water resources. For each project type, a detailed description of the project schedule, major activities and capital projects shall be provided and updated as necessary.

*(Added: Amendment 06EX.TXT03.3.05, Ordinance 2007-~~XX~~45, 11/13/2007)*

### **Policy CON 1.18 Coordination with Regional Water Supply Plan**

The Work Plan shall be updated within 18 months following an update to the District Regional Water Supply Plan. The County shall coordinate with the St Johns River Water Management District's most recent water supply plan when proposing or amending the ten-year Water Supply Facilities Work Plan (Work Plan). This coordination shall be documented in the text of the Work Plan with each amendment. Where appropriate





# Vision 2020 Comprehensive Plan Seminole County, Florida

and feasible, the Work Plan shall include collaborative approaches with other local governments for water supply source use and development, and water resource development.

(Added: Amendment 06EX.TXT03.3.06, Ordinance 2007-~~XX~~45, 11/13/2007)

## **Policy CON 1.19    Articulation of Water Conservation and Reuse Programs and Practices**

Water conservation and reuse programs and practices that are part of the Seminole County Water Supply Facilities Work Plan (Work Plan) are detailed in Potable Water Element Policy POT 5.9 Water Conservation Programs and Practices and Policy POT 5.10 Reuse Water Programs and Practices.

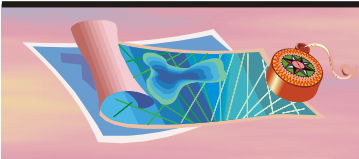
(Added: Amendment 06EX.TXT03.3.07, Ordinance 2007-~~XX~~45, 11/13/2007)



**ATTACHMENT 4**  
**Amendments to the Drainage Element**  
***(Notation Only)***

- **Notation of Applicable Policy**

*(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)*



# Vision 2020 Comprehensive Plan Seminole County, Florida

**Policy DRG 3.7      Education Program/Brochure**

The County shall continue its commitment to its public education program, supporting all appropriate videos, brochures, and other means of providing education in the following instructional areas: the causes and potential for flooding; the importance of natural conditions and vegetation to water quality maintenance; the importance of keeping drainage ways unobstructed; available County information such as Flood Insurance Rate Maps; County and State Code requirements; and ways to maintain water quality of lakes, conveyances and retention ponds. Brochures for public dissemination shall continue to be developed.

**Policy DRG 3.8      Groundwater Recharge**

The County shall continue to evaluate its protection of recharge areas with each Evaluation and Appraisal Reporting cycle and amend regulations as necessary to ensure that natural recharge of groundwater from rainfall is not decreased.

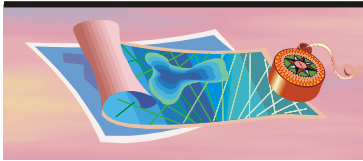


**ATTACHMENT 5**  
**Amendments to the Future Land Use Element**  
**(06F.TXT03.4)**

- **Revision to Issues and Concerns**
- **Revision to Goals, Objectives and Policies**

*(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)*





# Vision 2020 Comprehensive Plan Seminole County, Florida

## FUTURE LAND USE ELEMENT ISSUES AND CONCERNS

### Issue FLU 1

#### Concurrency Management

Section 163.3180(2)(a) ~~Rule 9J-5.006(3)(c)3, Florida Administrative Code (FAC)~~, requires that sanitary sewer, solid waste, drainage, adequate water supplies and potable water facilities and services at established level of service standards shall be in place and available to serve new development no later than the issuance by the County of a certificate of occupancy or its functional equivalent, and that, prior to approval of a building permit or its functional equivalent, the County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be ~~are~~ available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional equivalent.

Parks and recreation facilities to serve new development shall be in place or under actual construction no later than 1 year after issuance by the County of a certificate of occupancy or its functional equivalent; however, acreage for such facilities shall be dedicated or acquired by the County prior to issuance of a certificate of occupancy or its functional equivalent, or funds in the amount of the developer's fair share shall be committed no later than the County's approval to commence construction.

Transportation facilities needed to serve new development shall be in place or under actual construction within 3 years after the County approves a building permit or its functional equivalent that results in traffic generation ~~concurrent with the impacts of development, or that development orders and development permits are conditioned on the availability of facilities and services.~~

The Seminole County Comprehensive Plan (the "Plan") future land use designations were developed after a review of long range facility and service plans. The County's Concurrency Management System (CMS) is intended to serve the long term interests of the citizens of Seminole County by implementing a managed growth perspective that monitors the capacity of important concurrency public facilities and services and maintains the high quality of life that the citizens of Seminole County now enjoy. The CMS includes specific procedures and criteria to ensure that level of service standards adopted in the Plan will be achieved or exceeded. The CMS evaluates final development orders to ensure that the adopted levels of service standards for transportation, potable water, sanitary sewer, solid waste, mass transit, stormwater drainage, and recreation are met. Currently, impact fees are collected for roads, fire and rescue systems, libraries, and schools.

(Revised: Amendment 06EX.TXT03.04.01, Ordinance 2007-~~XX~~45, 11/13/2007)

### Issue FLU 2

#### Mixed Use and Higher Intensity Planned Development (HIP) Standards

Rule 9J-5.006(2)(c)1, FAC, requires all land use map designations to have allowable uses and intensity ranges to project growth and facility and service needs. Rule 9J-5.006(3)(c)5,(4)(c), FAC, encourages policies for the implementation of mixed use classifications, if locally desired.

The *Exhibit FLU: Future Land Use* and *Exhibit FLU: Future Land Use Designations and Allowable Zoning Classifications* defines types, densities and intensities and allowable zoning classifications for all conventional land uses in the County. The Mixed Development,



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## Seminole County, Florida



- 3 The County shall continue to enforce Land Development Code regulations to ensure that future land development and public improvement activities limit and mitigate disruption to or damage of sites determined to be significant historical resources, both structural and archaeological. Land Development Code provisions shall be based on the guidelines and criteria listed in this policy and, at a minimum, consider criteria and procedures for protecting, reporting and evaluating the on-site discovery of artifacts. Mitigation, incentives, disincentives and long term protection guidelines for historically significant sites shall also be addressed.
- B Guidelines and Criteria For Preservation and Protection of Historic Resources  
The criteria for evaluating historic resources as significant shall include, but not be limited to, the following adapted for the "Criteria For Listing" of the National Register Of Historical Places:
- 1 That the resource be associated with events that have made a significant contribution to the broad patterns of history; or
  - 2 That the resource be associated with the lives of persons significant in the past; or
  - 3 That the resource embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (e.g., historic district); or
  - 4 That the resource has yielded, or may be likely to yield, information important in prehistory or history.

Guidelines for evaluation and assessment of historical resources shall be based on but not limited to the Secretary of the Department of Interior's Guidelines for Architectural and Engineering Documentation and the Historic Preservation Compliance Review Program of the Florida Department of State, Division of Historical Resources, in particular Chapter 4, Standards for Conducting, Reporting, and Reviewing Archaeological and Historic Site Assessment Survey Activities.

### **Policy FLU 1.10 Water Quality and Drainage Control**

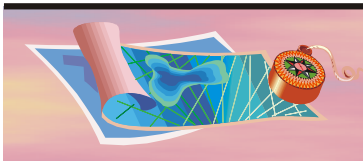
The County shall continue to require water quality and drainage control for all new subdivisions and site plans adjacent to water bodies to prevent unnecessary shoreline disruption and maintain water quality through existing Land Development Code provisions which requires, at a minimum:

- A A permit for all water quality and drainage control activities in waters and wetlands; and
- B Restoration of disturbed areas to their natural state.

### **Policy FLU 1.11 Wellfield Protection**

The County shall provide protection for areas surrounding public water supply wellfields through the regulatory framework of the United States Environmental Protection Agency, the Florida Department of Environmental Protection, the Florida Department of Health and the St Johns River Water Management District. The applicable rules and regulations of these agencies are contained in the County's Wellfield Protection Ordinance, Chapter 55 of the Land Development Code of Seminole County.





# Vision 2020 Comprehensive Plan Seminole County, Florida

## OBJECTIVE FLU 6 PUBLIC FACILITIES AND SERVICES

The County shall require that all development be consistent with the approved Capital Improvements Element or facility and service plans in order to discourage urban sprawl, meet adopted level of service standards and thereby minimize attendant public costs through the implementation of the following policies:

### Policy FLU 6.1 Development Orders, Permits and Agreements

The County shall ensure that all development orders, permits and agreements are consistent with the adopted level of service standards and provisions of the Capital Improvements Element and the appropriate facility element as well as all other provisions of this Plan.

### Policy FLU 6.2 Concurrency Requirements

The County shall ensure that all development orders, permits and agreements are subject to the adopted Concurrency Management System standards and provisions and that the County will ensure the availability of both that public facilities capacity and services water supply capacity sufficient needed to serve the development are available at at the adopted level of service consistent with the Implementation Element of this Plan.

The County shall ensure that all development orders, permits and agreements are subject to the adopted Concurrency Management System standards and provisions and that potable water facilities shall be in place and available to serve new development no later than the issuance by the local government of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit or its functional equivalent, the local government shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the local government of a certificate of occupancy or its functional equivalent.

*(Revised: Amendment 06EX.TXT03.4.02, Ordinance 2007-XX45, 11/13/2007)*

### Policy FLU 6.3 Infrastructure and Phasing Requirements

The County shall require that all development provide services and facilities or phase the development as a condition of approval if development needs precede adopted service and facility plans and Capital Improvements Program and adopted levels of service can be maintained.

### Policy FLU 6.4 Priority for Water and Sewer Service

The County shall evaluate the impact on delivering adequate service to residents within the established service area prior to the expansion of a potable water or sewer service area outside the adopted service area boundaries. The County will not expand a service area if the adopted level of service cannot be maintained.

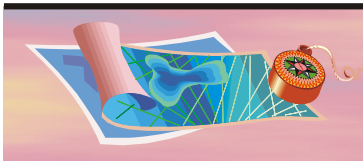
### Policy FLU 6.5 Private Investment Above Land Development Code Requirements

The County shall require private investment in infrastructure improvements above and beyond Land Development Code requirements (e.g., feeder roads, aerial fire apparatus, right-of-way, signalization, access improvements, transit facilities, stormwater, etc.) where improvements are needed to accommodate the development and to minimize attendant public costs associated with growth.

### Policy FLU 6.6 Concurrency Management

The above policies shall be implemented consistent with the policies of the Implementation Element.





# Vision 2020 Comprehensive Plan Seminole County, Florida

## OBJECTIVE FLU 7 INTERGOVERNMENTAL COORDINATION

The County shall continue to coordinate with the cities and other agencies to facilitate consistent facility and land use plans, provide cost-effective services, maintain compatible land uses, and ensure coordination of resource planning and management plans. The County shall coordinate with responsible local, regional and State authorities and private utility companies, as appropriate, in the establishment of level of service standards for public facilities. Upon adoption of the County and adjacent governments' comprehensive plans, the County shall initiate further coordination efforts, if necessary, to ensure consistency with adopted level of service standards

### Policy FLU 7.1 **Joint Planning Agreements (JPAs) with the City of Winter Springs**

The County shall pursue the adoption of a joint planning agreement with the City of Winter Springs to address, at a minimum, future annexations, provision of services and facilities and land use compatibility in the East Rural Area of Seminole County. The JPA shall also include agreement on future densities and intensities of properties that may be annexed and a procedure for resolution of any future conflicts and/or disputes. It shall also include criteria for when and how the urban boundary can be amended and standards for cut through traffic.

### Policy FLU 7.2 **Joint Planning Agreements**

The County shall pursue Joint Planning Agreements with each of the cities in Seminole County to address, at a minimum, future annexations, provision of services and facilities and land use compatibility.

### Policy FLU 7.3 **Future Service Areas**

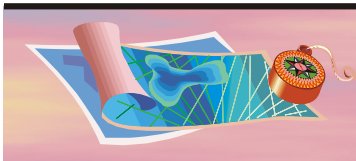
The County shall provide the most cost-effective services to future development by establishing future service area boundaries and through the use of interlocal agreements for water, sewer, drainage, fire protection, and other public facilities.

### Policy FLU 7.4 **School Sites**

The County shall continue coordination and interaction with the School District with regard to locating future school sites, in the acquisition of sites during the development approval process and as to all related matters. The County shall encourage the location of public schools proximate to urban residential areas concurrent with development and the provision of concurrency public facilities, and concurrency public facilities are budgeted for in the appropriate Capital Improvements Plan. At a minimum, public school sites shall be located based on the following criteria:

- A Public school sites shall be located within the County's Urban Growth Boundary or be compatible with compact urban growth patterns; provided, however, that elementary schools, by nature of their service characteristics, are compatible in rural areas but only when located proximate to existing established residential communities;
- B Public school sites shall be served by adequate concurrency public facilities;





# Vision 2020 Comprehensive Plan Seminole County, Florida

- C Require that new development outside adopted central service areas shall not be designed nor constructed with central water and/or sewer systems. Public and private central systems may be permitted in the future if it is clearly and convincingly demonstrated by the proponents of the system expansion that a health problem exists in a built but unserved area for which there is no other feasible solution. In such cases, the service area expansion plans will be updated concurrent with an areawide administrative land use update.

**Policy FLU 11.11 Methods of Providing Sanitary Sewer Outside of the Adopted Urban Service Area (as depicted in *Exhibit FLU: Special Area Boundaries*)**

Consistent with the provision of services and facilities within the Rural Area, the County shall:

- A Continue to rely primarily upon individual septic tank systems as the method of disposal of wastewater outside the urban services area;
- B Encourage private central systems that exist as of the effective date of this Plan to continue to provide an adequate level of service to users in their respective service areas, although the County shall discourage the expansion of service areas;
- C Require that new development outside adopted central service areas shall not be designed nor constructed with central water and/or sewer systems. Public and private central systems may be permitted in the future if it is clearly and convincingly demonstrated by the proponents of the system expansion that a health problem exists in a built but unserved area for which there is no other feasible solution. In such cases, the service area expansion plans will be updated concurrent with an areawide administrative land use update.

**Policy FLU 11.12 Methods of Managing Stormwater**

Consistent with the provision of services and facilities within the Rural Area, the County shall:

- A Regulate stormwater management consistent with Countywide regulations with the objective of maximizing aquifer recharge, minimizing flooding and protecting wetland systems; and
- B Continue to use Municipal Service Benefit Units to fund drainage improvements when appropriate.

**Policy FLU 11.13 Methods of Collecting and Disposing of Solid Wastes**

Consistent with the provision of services and facilities within the Rural Area, the County shall continue to use the solid and hazardous waste collection and disposal systems provided throughout the County to serve the Rural Area.

**Policy FLU 11.14 Protection of Natural Resources**

The County shall:

- A Protect wetland and flood prone areas in the Rural Area consistent with the provisions of the Future Land Use and Conservation Elements of this Plan and through the potential purchase of properties with funds deriving from the Natural Lands Program authorized by voter referendum in 1990.
- B Periodically re-evaluate the effectiveness of the County Arbor Ordinance, referenced by Policy FLU 1.6.





# Vision 2020 Comprehensive Plan

## Seminole County, Florida



- C Protect groundwater systems in the Rural Area as depicted in *Exhibit FLU: Special Area Boundaries*, including, but not limited to, the “Geneva Lens” by:
  - 1 Continuing to permit only large lot residential development in the Rural Area to minimize water consumption and maximize aquifer recharge due to small impervious surface areas;
  - 2 Relying on a system of small individual residential wells for the provision of potable water that disperse the potentially adverse effects of groundwater drawdown associated with excessive pumping of the aquifer;
  - 3 Relying on properly installed and periodically inspected septic tanks on large lots that return water to the aquifer to be the primary system of wastewater disposal; and
  - 4 Relying on stormwater management systems designed as required by the Rural Subdivision standards enacted in accordance with the provisions of this Plan to maximize recharge of stormwater into the aquifer.
- D Protect the Econlockhatchee River in East Seminole County by:
  - 1 Regulating development adjacent to the River in accordance with the existing Wetlands Overlay Zoning Classification (see Policy FLU 1.3);
  - 2 Regulating development adjacent to the Econlockhatchee River in accordance with the Econlockhatchee River Protection Overlay Standards Classification;
  - 3 Purchasing properties, when appropriate, with funds from the Natural Lands Program and other Federal, State, and regional programs; and
  - 4 Enforcing provisions in the Land Development Code regarding additional bridge crossings of the Econlockhatchee River.
- E Protect the St. Johns River by:
  - 1 Continuing to enforce the existing Wetlands Overlay Zoning Classification (see Policy FLU 1.3); and
  - 2 Purchasing properties, when appropriate, with funds from the Natural Lands program and other Federal, State and regional programs.

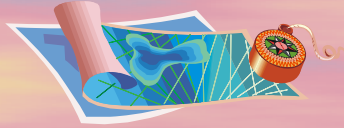
### Policy FLU 11.15 Code Enforcement and Implementation

#### A General

The County shall:

- 1 Continue to enforce Rural Subdivision Standards, as necessary, designed to meet the unique needs of the Rural Area;
- 2 Continue to provide inspection and code enforcement services in the East Rural Area; and





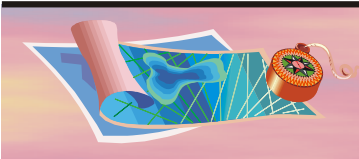
# Vision 2020 Comprehensive Plan Seminole County, Florida

## FUTURE LAND USE EXHIBITS

The following exhibits are in support of the Potable Water Element's Water Supply Facilities Work Plan:

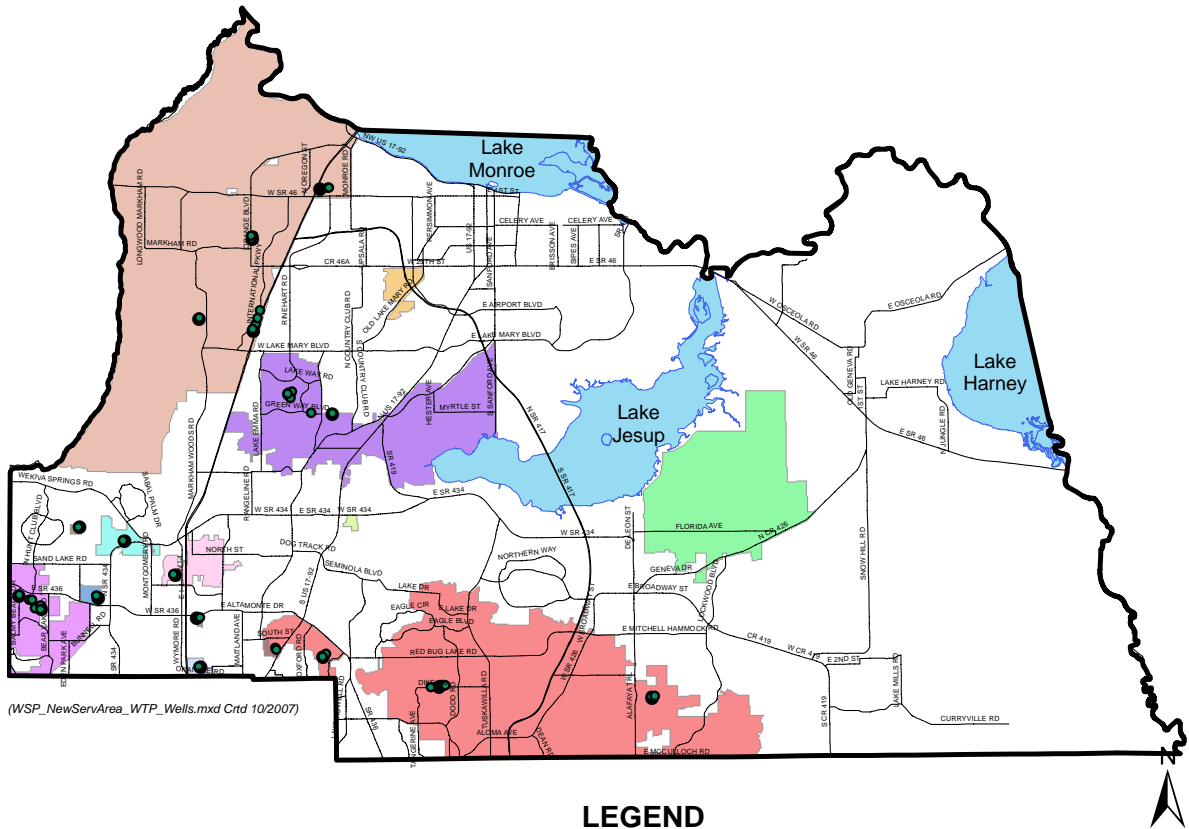
- *FLU Series - County Potable Water – Service Areas, Treatment Plants, Wells*  
*(Added: Amendment 06EX.TXT03.4.03, Ordinance 2007-45, 11/13/2007)*
- *FLU Series - Cones of Influence*  
*(Added: Amendment 06EX.TXT03.4.04, Ordinance 2007-45, 11/13/2007)*



















# Vision 2020 Comprehensive Plan Seminole County, Florida

## FLU Series - County Potable Water Service Areas, Treatment Plants, Wells



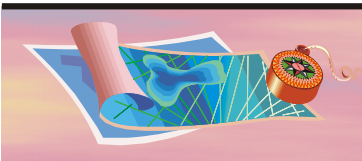
### LEGEND

	DRUID HILLS		NORTHWEST		SOUTHWEST
	FERN PARK		SOUTHEAST		SUNSHADOW
	APPLE VALLEY		LAKE BRANTLEY		
	BLACK HAMMOCK		LAKE HARRIET		
	CHASE GROVES		MEREDITH MANOR		
	DOL RAY MANOR		NORTHEAST		

- Seminole County Water Treatment Plants
- Seminole County Water Wells

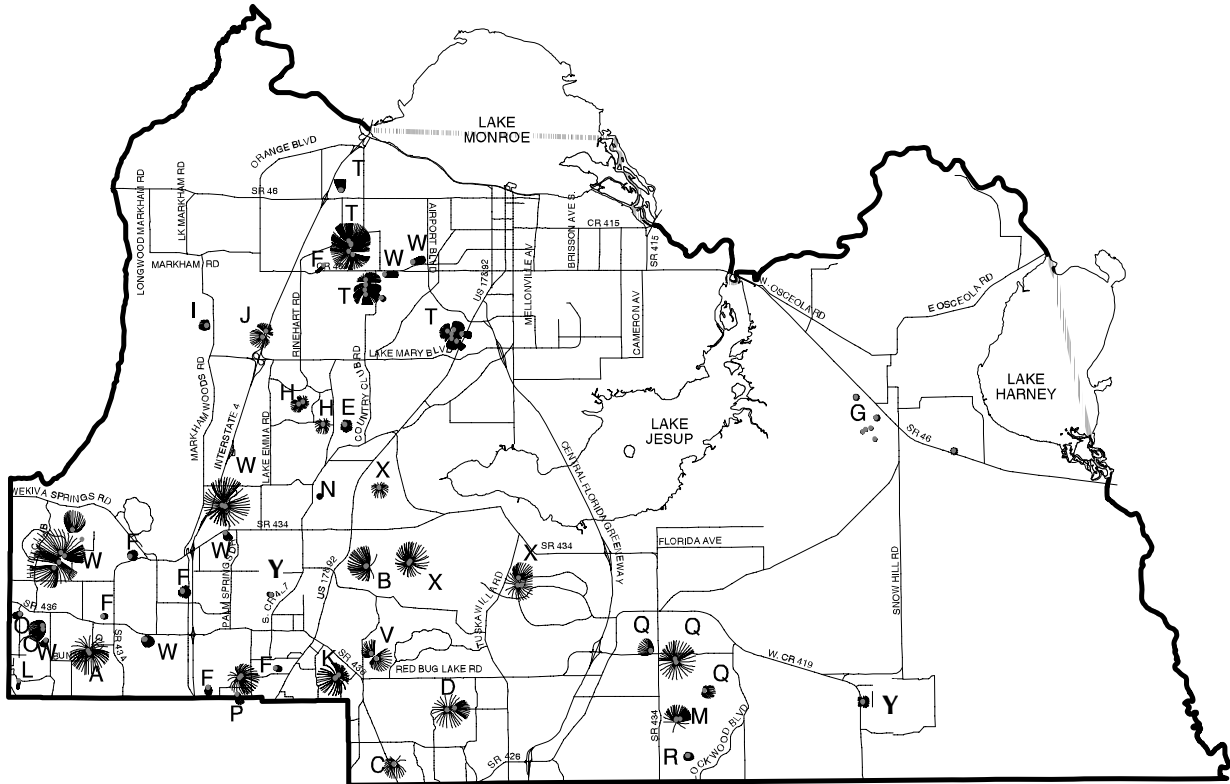
(Effective date of information: 2007)





# Vision 2020 Comprehensive Plan Seminole County, Florida

## FLU Series - Cones of Influence



### LEGEND

- |                             |                               |                         |
|-----------------------------|-------------------------------|-------------------------|
| A Altamonte Springs         | I SemCo Hanover Woods         | Q Oviedo                |
| B Casselberry North         | J Sem Co - Heathrow/Lake Mary | R Palm Valley           |
| C Casselberry South         | K SemCo - Indian Hills        | T Sanford               |
| D SemCo - Consumers         | L UI - Jansen                 | <u>V Closed</u>         |
| E SemCo – Country Club      | M SemCo – Lake Hayes          | W Utilities Inc         |
| F <u>SemCo – Former FWS</u> | N Longwood                    | X Winter Springs        |
| G Geneva Area Water Assoc   | O SemCo - Lynood              | <u>Y Aqua Utilities</u> |
| H SemCo - Greenwood Lakes   | P UI - Oakland Shores         |                         |



**ATTACHMENT 6**  
**Amendments to the Implementation Element**  
**(06F.TXT03.5)**

- **Revision to Goals, Objectives and Policies**

*(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)*



# Vision 2020 Comprehensive Plan Seminole County, Florida



- ⊞2. No rights to obtain final development orders under which development activity impacting public facilities may ensue, or to obtain development permits, nor any other rights to develop the subject property shall be deemed to have been granted or implied by the County's approval of the development order without a determination having previously been made that the capacity of public facilities will be available in accordance with law.

## **Policy IMP 2.5 Development Orders: Capacity Determinations and Availability**

The availability of public facility capacity to support development orders or permits issued pursuant to Policies IMP 2.3 and IMP 2.4A. shall be concurrent with the impacts of such development and shall be determined in accordance with the following:

### A Potable Water, Sewer, Solid Waste, and Drainage Facilities:

- ⊞1. The necessary facilities and services are in place at the time a development permit is issued; or
- ⊞2. Development orders and permits are issued subject to the condition that the necessary facilities and services will be in place when the impacts of the development occur; or
- ⊞3. The necessary facilities are under construction at the time a development order or permit is issued; or
- ⊞4. The necessary facilities are guaranteed in an enforceable development agreement meeting the requirements of the Concurrency Management System Rules of the Department of Community Affairs (Rule 9J-5). The agreement must guarantee that the necessary facilities will be in place when the impacts of the development occur.

### B Potable Water Facilities:

- 1. For potable water, adequate water supplies, and potable water facilities shall be in place and available to serve new development no later than the issuance by the County of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit or its functional equivalent, the County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional equivalent.

*(Revised: Amendment 06EX.TXT03.5.01, Ordinance 2007-~~XX~~45, 11/13/2007)*

### ⊞C Parks and Recreation Facilities:

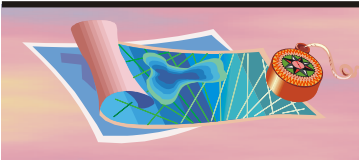
- ±• Any of the provisions of section A.1.-A.4. listed above for potable water, sewer, solid waste and drainage; or
- ±• The necessary facilities are the subject of a binding executed contract which provides for the commencement of the actual construction of the required facilities within one (1) year of the issuance of the development order or permit; or
- ±• The necessary facilities are guaranteed in an enforceable development agreement which requires



**ATTACHMENT 7**  
**Amendments to the Intergovernmental Element**  
**(06F.TXT03.6)**

- **Revision to Goals, Objectives and Policies**

*(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)*



# Vision 2020 Comprehensive Plan Seminole County, Florida

## OBJECTIVE IGC 3 COORDINATION OF PLAN WITH REGIONAL, STATE AND FEDERAL AGENCIES

Seminole County shall coordinate its Comprehensive Plan with the plans and programs of regional, State and Federal agencies in order to more effectively and efficiently address cross jurisdictional issues through implementation of the following policies:

### Policy IGC 3.1 Compliance of State Development with Local Regulations

The County shall continue to review all State and other government development activities for consistency with the Plan and land development regulations. Such development will be considered subject to local regulation unless found to be statutorily exempt, in which case the County shall rely on other coordination mechanisms, including, but not limited to, informal negotiation, to ensure the compatibility of the development with County land development regulations.

### Policy IGC 3.2 Division of Historical Resources

The County will continue to coordinate with the Department of State, Division of Historical Resources on Developments of Regional Impacts and CDBG site reviews, maintenance of the Florida Master Site File (FMSF), and matching grants for identification, evaluation and planning for the management of historical resources within Seminole County.

### Policy IGC 3.3 Plan Coordination

Seminole County shall coordinate its comprehensive planning activities with the plans and programs of regional, State and Federal agencies by, at minimum, continuing to coordinate with the following agencies: East Central Florida Regional Planning Council; St. Johns River Water Management District; Metropolitan Planning Organization (METROPLAN ORLANDO); Central Florida Regional Transportation Authority (LYNX), the Florida Departments of Environmental Protection, Transportation, and Community Affairs; the Florida Public Service Commission, the Seminole County Expressway Authority, the Florida Highway Patrol; and the Federal Agencies of Housing and Urban Development, Federal Transit Administration, Federal Environmental Protection Agency, Federal Emergency Management Agency and the Army Corps of Engineers. The County shall also seek legislative action by the Florida Legislature when the needs of the County so require. The County shall continue to work on issues with the Florida Association of Counties and shall consider working with the Florida League of Cities in so much as the County is now a charter County.

The Water Supply Facilities Work Plan (Work Plan) – The St Johns River Water Management District (District) updates the District Regional Water Supply Plan (DRWSP) every five (5) years. The County's Work Plan shall be updated within 18 months following an update to the DRWSP per Policy POT 5.5 Coordination and Consistency with District Regional Water Supply Plan. This coordination shall be documented in the text of the Work Plan with each amendment.

Additionally, where appropriate and feasible, the Work Plan shall include collaborative approaches with the District and other local governments for water supply source use and development, and water resource development per Policy POT 5.6 Coordination with District and Local Water Providers.

(Revised: Amendment 06EX.TXT03.6.01, Ordinance 2007-~~XX~~45, 11/13/2007)

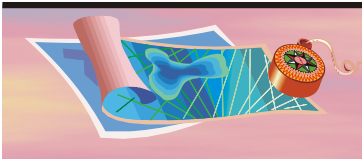


## INTERGOVERNMENTAL COORDINATION ELEMENT EXHIBIT

The following exhibit is in support of the Potable Water Element's Water Supply Facilities Work Plan:

- *Exhibit IGC Existing Coordination Mechanisms With Municipalities Within Seminole County*





# Vision 2020 Comprehensive Plan Seminole County, Florida

## Existing Coordination Mechanisms With Municipalities Within Seminole County

SUBJECT AREA	COORDINATION MECHANISM	RESPONSIBLE COUNTY DEPARTMENT	EFFECTIVENESS
<b>ALL SEMINOLE COUNTY MUNICIPALITIES</b>			
Intergovernmental coordination and conflict mediation	Council of Local Governments of Seminole County (CLGSC, formerly CALNO)	Board of County Commissioners, Planning and Development	Satisfactory
Intergovernmental coordination	Mayors/Managers Working Group	County Manager's Office	Satisfactory
Housing	Interlocal Agreements for HOME and Emergency Shelter Grants and Community Development Block Grant Programs	Planning and Development	Satisfactory
Telecommunications	Interlocal Agreements for Fiber Optics Communication Network and related infrastructure (All cities except Longwood and a pending one with Oviedo)	Information Technologies	Satisfactory
Comprehensive Planning and Land Use	Seminole County Planning Technical Advisory Committee. Interlocal Agreements for Notification of Land Use Activity. (All cities except Longwood)	Planning and Development	Needs Improvement
Transportation (Impact Fees, Concurrency and One Cent Sales Tax)	Formal and informal agreements with City Public Works/Engineering Departments	Public Works	Satisfactory
Utilities (Water, Reclaimed Water and Sewer)	Various Interlocal Agreements for wholesale service	Environmental Services	Satisfactory
Geographical Information System (GIS)	Interlocal Agreement for information sharing of GIS digital maps	Information Technologies	Satisfactory
Emergency Rescue/Fire Protection	First Response Agreement (All cities except Oviedo)	Public Safety	Satisfactory
Recycling	Intergovernmental Recycling Committee	Public Works	Satisfactory

