

Exhibit A to ord  
NO. 04-004  
04R1

**CHAPTER 6 (D)**

**ST. LUCIE COUNTY**

**COMPREHENSIVE PLAN UPDATE**

**POTABLE WATER SUB-ELEMENT**

Prepared by:

St. Lucie County  
Board of County Commissioners

St. Lucie County  
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REVISED THROUGH - JANUARY 6, 2004

## POTABLE WATER SUB-ELEMENT GOALS, OBJECTIVES AND POLICIES

**GOAL 6D.1: PROVIDE NEEDED PUBLIC UTILITIES IN A MANNER WHICH RESULTS IN THE MOST EFFECTIVE, ENVIRONMENTALLY SOUND, SAFE AND ECONOMIC POTABLE WATER SYSTEMS CONSISTENT WITH PRESENT DEMAND AND FUTURE GROWTH REQUIREMENTS AND PROMOTES ORDERLY, COMPACT URBAN GROWTH.**

**Objective 6D.1.1:** The County shall provide potable water facilities that do not promote urban sprawl.

**Policy 6D.1.1.1:** The utility service areas, as delineated in the Water and Wastewater Master Plan, will be determined on the basis of economy and efficient operation but will not promote linear or leapfrog development. The utility service areas shall be reviewed and updated every 5 years (beginning 2002).

**Policy 6D.1.1.1b:** The County will determine the most cost effective and efficient means of providing potable water service to all areas of the urban service as depicted in Policy 1.1.5.1 in a manner that will not promote linear or leapfrog development consistent with Policy 1.1.5.2. The County utility department will publish on an annual basis a Service Availability Report setting forth the availability of potable water service from the various potential suppliers of such service to the unincorporated areas of the County that meets the requirements of Goal 6D.1 and this Policy.

**Policy 6D.1.1.2:** Provision of regional (not including package treatment plants) potable water service shall be limited to the utility service availability options set forth in the annual Service Availability Report described in Policy 6D.1.1.1b.

**Objective 6D.1.2:** The County shall implement procedures for ensuring that when a development permit is issued, pursuant to the then current Service Availability Report, adequate facility capacity is available or will be available to serve the development concurrent with the impacts, in order to meet the adopted level of service standards.

**Policy 6D.1.2.1:** All development will be specifically conditioned on the availability of services necessary to maintain level of service standards as adopted within this Comprehensive Plan.

## POTABLE WATER SUB-ELEMENT GOALS, OBJECTIVES AND POLICIES

- Policy 6D.1.2.2 The level of service standard for those areas of the unincorporated County served by Ft. Pierce Utilities Authority shall be 332 gallons per capita per day (Ft. Pierce Utilities Authority, 1999).
- Policy 6D.1.2.3 The level of service standard for potable water systems other than those owned and operated by Ft. Pierce Utilities Authority shall be permanent and seasonal residents - 100 gpcd, employees - 120 gpcd and school students - 20 gpcd (gallons per day per capita).
- Policy 6D.1.2.4 The County shall include in the annual Service Availability Report an update of all improvements, expansions, or increases in the capacities of facilities, of the various potential suppliers of service to the unincorporated areas of the County to ensure compatibility with the established level of service standards for such facilities.
- Policy 6D.1.2.5 The County shall prepare annual summaries of capacity and demand information for each facility of the various potential suppliers of service to the unincorporated areas of the County.
- Policy 6D.1.2.6 Development within the unincorporated areas of the County will only be permitted when such development ties into or makes provision for tying into a regional or sub-regional system that is available as set forth in the annual Service Availability Report.
- Policy 6D.1.2.7 The County shall require that developments of regional impact determine the available quantity and quality of water resources for treatment to potable water beneath the development; determine the effect of withdrawal on surrounding environment, users and potential users; and make such information available to the County.
- Objective 6D.1.3 The County will establish and maintain a five-year and twenty-year schedule of capital improvement needs for the public facilities in the recognized County service areas.**
- Policy 6D.1.3.1 By December 2003, the County will form a committee, composed of representatives from the appropriate County departments, for the purpose of evaluating and ranking capital improvement projects proposed for inclusion in the five-year capital improvement schedule.

## POTABLE WATER SUB-ELEMENT GOALS, OBJECTIVES AND POLICIES

Policy 6D.1.3.2 The following public facility improvements within a facility type are to be considered in the following order of priority, as determined by the Board of County Commissioners:

- A. Replacement of obsolete or worn out facilities, including repair, remodeling and renovation of facilities that contribute to achieving and/or maintaining levels of service.
- B. New facilities that reduce or eliminate existing deficiencies in levels of service.
- C. New facilities that provide the adopted levels of service for new growth during the next five fiscal years, as updated by the annual review of the Capital Improvements Element.
- D. Improvements to existing facilities, and new facilities that significantly reduce the operating cost of achieving and/or maintaining levels of service.
- E. New facilities that exceed the adopted levels of service for new growth during the next five fiscal years by either:
  - 1. providing excess public facility capacity that may be needed by future growth beyond the next five fiscal years, or
  - 2. providing higher quality public facilities that are contemplated in the County's normal design criteria for such facilities.
- F. Facilities not described in Subsections A through E, above, but which the County is obligated to complete, provided that such obligation is evidenced by a written agreement the County executed prior to July 31, 1990.
- G. All facilities scheduled for construction or improvement in accordance with this Policy shall be evaluated to identify any plans of State agencies or the South Florida Water Management District that affect, or will be affected by, the proposed capital improvement.
- H. Project evaluation may also involve additional criteria that are unique to each type of public facility, as described in other elements of this Comprehensive Plan.

## POTABLE WATER SUB-ELEMENT GOALS, OBJECTIVES AND POLICIES

Policy 6D.1.3.3 In the event that the planned capacity of public facilities is insufficient to serve all applicants for development orders, the Board of County Commissioners will schedule capital improvements to serve developments in the following order of priority:

- A. previously approved orders permitting new development,
- B. new orders permitting redevelopment, and
- C. new orders permitting new development.

**Objective 6D.1.4** The County shall take steps to insure that entities in the unincorporated County are adequately served, and in order to protect our drinking water shall investigate needs for waste disposal other than septic tanks and sewage systems.

Policy 6D.1.4.1 The County shall encourage interlocal agreements between FPUA and Martin County for an emergency connection at the County line on Hutchinson Island.

**Objective 6D.1.5** The County shall coordinate with the other potential providers of central potable water service within the unincorporated areas of the County so that the extension of, or increase in the capacity of, facilities to meet future potable water capacity is available when needed.

Policy 6D.1.5.1 Prior to issuance of a building permit, the County shall require that all applicants provide verification that water service can be provided in conformance with the policies in this plan and that adequate system capacity is available if a central system is to be utilized.

### **GOAL 6D.2 THE COUNTY SHALL AGGRESSIVELY IDENTIFY, PROTECT, CONSERVE, AND BEST UTILIZE THE COUNTY'S AVAILABLE WATER SUPPLY RESOURCES.**

**Objective 6D.2.1** By December 31, 2004, the County will update and the wellfield protection plan for public potable water supply sources in or adjacent to the unincorporated County.

## POTABLE WATER SUB-ELEMENT GOALS, OBJECTIVES AND POLICIES

- Policy 6D.2.1.1     By December 2003, the County shall in conjunction with FDEP, SFWDM, County Public Health Unit, and existing utility systems, determine an map all the location of existing public potable water supply wells which are permitted to withdraw 100,000 gpd or greater. The County shall annually update this map and keep copies this map on file.
- Policy 6D.2.1.2     The County shall in conjunction with FDEP, SFWMD, County Public Health Unit, utilities and other potential providers of central potable water service establish the probable location of public potable water supply wells in the County.
- Policy 6D.2.1.3     The County shall in conjunction with SFWMD, USGS, or other agencies, establish the shallow aquifer characteristics of proposed public potable water supply wells to allow approximation of the zones of influence of public potable water supply wells and shall develop regulations or restrictions, consistent with, and in coordination with existing State regulations to discourage or restrict the location of new or expanded activities that would or could impact upon the public potable water supply wells.
- Policy 6D.2.1.4     The County shall identify land uses which may not be compatible with and may contribute to the degradation of public potable water supply wells.
- Policy 6D.2.1.5     The County shall condition the issuance of development orders or permits on demonstration of the compatibility of the proposed land uses with existing or future public potable water supply wells.
- Policy 6D.2.1.6     By July 2004 , the County shall establish a fee system to provide funding for development and implementation of a wellfield protection plan.
- Objective 6D.2.2     The County shall continue to develop a comprehensive water conservation program incorporating, at a minimum, the following policies.**
- Policy            The County shall continue to require water saving devices in new construction, consistent with the requirements of the Florida Building Code.

## POTABLE WATER SUB-ELEMENT GOALS, OBJECTIVES AND POLICIES

- 6D.2.2.1
- Policy  
6D.2.2.2 The County shall enforce the landscaping portion of the existing land development regulations and on an ongoing basis require more exacting provisions for native landscaping plants and xeriscaping.
- Policy  
6D.2.2.3 The Land Development Regulations shall require wastewater reuse plans for new sewage treatment plants operating above 250,000 gallons per day. Any new reuse plan shall be approved by the FDEP.
- Policy  
6D.2.2.4 The County shall encourage reuse and reclamation of water for irrigation, landscape, agriculture, and industry as an alternative to the use of potable water supplies.
- Policy  
6D.2.2.5 The County shall provide for education of the public concerning the need for water conservation and the use of gray water for irrigation.
- Policy  
6D.2.2.6 No Conditional Uses for sand mining and no rezonings to Industrial, Extraction (IX) will be granted within public potable water supply recharge areas designated through the Wellfield Protection Ordinance; when the information is available to designate aquifer recharge areas, this policy will be revised through a Comprehensive Plan Amendment to include those areas.
- Objective  
6D.2.3 By December 2005, the County shall the Upper East Coast Water Supply Plan, prepared by the SFWMD, by amending the land development regulations to identify water available and allocation rates to protect natural systems from competing water uses.**
- Policy  
6D.2.3.1 For normal, average rainfall years, water availability, use, allocation, and management plans, the County shall prevent the increasing water demands from reducing the important ecological, recreational and navigational values provided by the natural systems.
- Policy  
6D.2.3.2 Water use, allocation, and management plans for emergency drought and flood situations shall avoid irreversible impacts on ecological systems and minimize long term adverse impacts.

## **POTABLE WATER SUB-ELEMENT GOALS, OBJECTIVES AND POLICIES**

Policy 6D.2.3.3 The County shall not rely upon water supply sources outside its jurisdictional boundaries to meet the water supply needs of new growth and development until water availability, use, allocation and management plans have been adopted for the proposed source area which specifically allocate water for such use.

### **GOAL 6D.3 THE COUNTY SHALL INSTITUTE A PROGRAM TO IDENTIFY AND AVAILABILITY OF PUBLIC POTABLE WATER SUPPLIES REQUIRED TO PROVIDE FOR THE GROWTH NEEDS IN THE UNINCORPORATED COUNTY**

Objective 6D.3.1 In cooperation with the SFWMD, the County shall, by December 2002, complete a master plan which determines and quantifies groundwater resources available to growth areas in both the surficial and Floridan aquifers, evaluates methods of treatment, considers environmental impact, considers alternative financing options, and provides a schedule for County acquisition of water service.

Policy 6D.3.1.1 The County shall continually update the Water and Wastewater Master Plan to identify and provide for public water supplies to include:

1. Identification of areas of high growth potential which are (or will be) isolated by existing service areas, natural geographic boundaries, political boundaries, low growth potential areas, or other demarcations.
2. Projection of population growth in these areas.
3. Inventory of existing water treatment plants within the area, their condition, and their potential for acquisition.
4. Establishment of needs of a public water system, based on level of service, provision of service by potential suppliers of water and population as established above.

Policy 6D.3.1.2 The County shall as part of the Master Plan Update process, authorize or cause to be authorized, a treatment and transport study to determine the recommended methods for supplying water treatment and transport, if necessary, for each service area identified under Policy 6D.3.1.1.

## POTABLE WATER SUB-ELEMENT GOALS, OBJECTIVES AND POLICIES

The studies will include:

1. A review of needs, based on projected population and level of service.
2. An inventory of available water quantity and quality data.
3. An analysis of potential aquifer sources, well locations, treatment methods, environmental effects, waste disposal considerations, and economic costs and efficiencies.
4. Recommended method of treatment.
5. An evaluation of environmental effects, waste disposal considerations, and costs.
6. Identification of transfer needs and alternatives to deliver treated or raw water from the source to the distribution system.
7. An application to SFWMD for water withdrawal from the selected aquifer(s).
8. Identification of transfer needs and alternatives to deliver treated or raw water from the source to the distribution system.
9. An application to SFWMD for water withdrawal from the selected aquifer(s).
10. A recommendation for wellfield location, configuration, source aquifer, number and spacing of wells.
11. Recommended method of treatment.
12. An evaluation of environmental effects, waste disposal considerations, and costs.

**Objective 6D.3.2** The County shall provide, where feasible, public water supply service within the unincorporated areas of the County; criteria for evaluating the feasibility of providing such public water service will be part of each Water Master Plan Update.

## POTABLE WATER SUB-ELEMENT GOALS, OBJECTIVES AND POLICIES

Policy  
6D.3.2.1

The County shall authorize engineering and financial studies for areas identified under Policy 6D.3.1.1, which studies will include:

1. Review of area needs and time frame for development.
2. Preliminary identification of facility development necessary to meet the needs and timing of provision of public water service.
3. Preliminary cost estimates and a schedule of capital expenditure projects financial considerations, including recommended method of funding, rate structure and revenue projections.

Policy  
6D.3.2.2

The cost of all new potable water infrastructure and distribution systems shall be borne by those who directly benefit from the improved facilities.

Policy  
6D.3.2.3

In order to provide the most cost effective and efficient provision of public water service within the unincorporated areas of the County, the County shall communicate with the other potential providers of public water service regarding availability of and willingness to provide public water service from such providers to meet the needs of development within the unincorporated areas of the County.

Policy  
6D.3.2.4

By December 31, 2005, in order to provide maximum coverage of potable water delivery on South Hutchinson Island Service Area, for the 5-year planning period and through buildout of the area, the County shall implement the Water and Wastewater Master Plan, by determining if the following identified facility needs and/or improvements will be required:

1. The acquisition of the FPUA water lines on South Hutchinson Island.
2. The acquisition of the MCU water lines on South Hutchinson Island.
3. Increase the capacity of the existing distribution system by increasing the diameters and interconnecting FPUA and MCU water systems on South Hutchinson Island.

## POTABLE WATER SUB-ELEMENT GOALS, OBJECTIVES AND POLICIES

4. Install a water transmission main across the Indian River Lagoon at a feasible location that will eventually interconnect with Port St. Lucie Utilities.
5. Enter into a bulk water purchase agreement with MCU.
6. Enter into a bulk water purchase agreement with FPUA.
7. Construct and operate a County owned Water Treatment Plant on South Hutchinson Island.

Policy 6D.3.2.5 By December 31, 2005, in order to provide maximum coverage of potable water delivery within the North County Service Areas, for the 5-year planning period and through buildout of the area, the County shall implement the Water and Wastewater Master Plan, by determining if the following identified facility needs and/or improvements will be required:

1. Expansion of the Holiday Pines WTP into a Regional Water Treatment Plant, increasing the facility by 0.75 mgd by 2005, 1.75 mgd by 2008 and 2.75 by 2015.
2. The installation of a Floridan Well.
3. Expand the distribution system along Indrio Road from US Highway #1 to I-95 Interchange, along US Highway No. 1 to Harbor Branch and St. Lucie Village, to the St. Lucie Airport Industrial Park.
4. Provide service to the existing developments within the North County Service Area.
5. Research and provide alternative raw water sources from either Surficial Wells or Floridan Aquifer Wells.
6. Construct and operate by 2020, a new regional water treatment plant to be located south of Indrio Road and east of Taylor Dairy Road.
7. Create a program for disposal of Reverse Osmosis concentrate from the Holiday Pines Water Treatment Plant and proposed Regional Water Treatment Plant.

## POTABLE WATER SUB-ELEMENT GOALS, OBJECTIVES AND POLICIES

Policy  
6D.3.2.6

By December 31, 2005, in order to provide maximum coverage of potable water delivery within the North Hutchinson Island Service Area, for the 5-year planning period and through buildout of the area, the County shall implement the Water and Wastewater Master Plan, by determining if the following facility needs and/or improvements will be required:

1. Implement the following planned water system improvements
  - a. Construct a 1.0 MG water storage tank and re-pump facility at the Bryn Mawr Site.
  - b. Rehabilitate/replace portions of the existing distribution system.
  - c. Replace portions of the water line distribution system.
2. Interconnect the existing system with Vero Beach to insure future delivery of services.
3. Direction drill from the North County.

