COLLIER COUNTY GROWTH MANAGEMENT PLAN

PUBLIC FACILITIES ELEMENT Potable Water Sub-Element

Prepared for COLLIER COUNTY BOARD OF COUNTY COMMISSIONERS Adopted October, 1997

AMENDMENTS TO COLLIER COUNTY GROWTH MANAGEMENT PLAN PUBLIC FACILITIES ELEMENT Potable Water Sub-Element

Symbol	DATE AMENDED	ORDINANCE NO.
**	October 28, 1997	Ordinance No. 1997-57
(I)	October 22, 2002	Ordinance No. 2002-54
(II)	February 11, 2003	Ordinance No. 2003-07
(III)	June 19, 2002	***Ordinance No. 2002-32
(IV)	September 10, 2003	Ordinance No. 2003-44
(V)	June 7, 2005	Ordinance No. 2005-25
(VI)	January 25, 2007	****Ordinance No. 2007-10
(VII)	February 24, 2009	Ordinance No. 2009-04

^{****} Based on 2004 EAR, Evaluation and Appraisal Report

- *** The above Ordinance No. 2002-32 was adopted on June 19, 2002. However, due to legal challenges, it did not become effective until the Florida Department of Community Affairs issued its Final Order on July 22, 2003.
 - ** This is the EAR-based amendment (1996 EAR). Due to the magnitude of the changes which included reformatting the entire Element, affecting every page of the Element a Roman Numeral is not assigned.
 - * Indicates adopted portions

Note: The support document was completely updated with the adoption of Ordinance No. 2003-44. That update was prepared by Greeley and Hansen, Consultants to the Collier County Public Utilities Engineering Dept. The support document will continue to be updated as current information becomes available.

(VI) I. INTRODUCTION

The purpose of the Potable Water Sub-Element is to provide for the health and safety of the residents of Collier County by ensuring adequate potable water supply and distribution facilities that are cost-effective and environmentally sound. Such facilities may be provided through the Collier County Water-Sewer District, private utilities, other public utilities that operate within portions of the unincorporated County, or (in certain areas) private supply wells. In addition to the supply and distribution of potable water for residential and commercial purposes, the Potable Water Sub-Element also contains provisions related to establishment of new potable water sources, water conservation, and irrigation.

Goal, Objectives and Policies Potable Water Sub-Element

GOAL:

TO PROTECT THE HEALTH AND SAFETY OF THE PUBLIC BY ENSURING ACCESS TO ENVIRONMENTALLY SOUND, COST EFFECTIVE AND IMPLEMENTABLE POTABLE WATER FACILITIES AND SERVICES.

(IV)(VI) OBJECTIVE 1:

The County shall locate and develop potable water supply sources to meet the future needs of the County owned and operated systems, said supply sources meeting the minimum Level of Service Standards established by this Plan. The development and utilization of new potable water supply sources and the acquisition of land necessary for such development shall be based upon the information, guidelines and procedures identified within the County's Ten-Year Water Supply Facilities Work Plan (as updated annually), the Collier County Water-Sewer Master Plan, and the Lower West Coast Water Supply Plan prepared by the South Florida Water Management District.

(IV)(VI) Policy 1.1:

The County shall continue to expand the ASR (Aquifer Storage and Recovery) system as a potential emergency and seasonal potable water source.

(VI) Policy 1.2:

The County shall continue to implement a program for the protection of existing and potential potable water supply sources.

(IV)(VI) Policy 1.3:

The County shall continue to identify sufficient quantities of water sources to meet the County's estimated growth-related needs. Potential water sources to meet the County's 2025 water demands include raw water from Hawthorn Zone I Aquifer (Intermediate Aquifer System) and Lower Hawthorn Aquifer (Florida Aquifer System), identified within the County's 2005 Water Master Plan. The County shall use these water sources as well as alternative sources, as permitted by the State, to meet the County's needs.

(VI) Policy 1.4:

The County shall coordinate with the South Florida Water Management District and other regulatory agencies in implementing effective linkages between growth management and water planning.

(VI) Policy 1.5:

The County shall coordinate with the South Florida Water Management District in the development of the Water Master Plan Update, which is the primary planning document for the Collier County Water-Sewer District.

(VI) Policy 1.6:

The County shall coordinate with the South Florida Water Management District to produce future plans for water supply as described within the Water Master Plan Updates that ensure the County's ability to maintain its stated Level of Service standard.

(VII)(VI) Policy 1.7:

The County has developed the Ten-Year Water Supply Facilities Work Plan, dated August 2008, in accordance with the water supply guidelines of the most current version of the South Florida Water Management District's Lower West Coast Water Supply Plan. The County's Ten-Year Water Supply Facilities Work Plan is attached hereto incorporated by reference.

(I)(VI) OBJECTIVE 2:

The County shall implement the following policies to make certain that public and private sector potable water service utilities provide, repair and/or replace potable water supply, treatment and distribution facilities to correct existing deficiencies in their respective service areas as may be required to meet or exceed the Level of Service Standards established in this Plan. In addition, public sector potable water service utilities shall be expanded as necessary to provide for future growth, as provided for in the following policies.

(VI) Policy 2.1:

The Collier County Water-Sewer District shall continue the development of a Collier County Regional Potable Water System consistent with the Capital Improvement Element and the Collier County Water-Sewer Master Plan to correct existing deficiencies and provide for future growth.

(I)(III)(IV)(V)(VI) **Policy 2.2**:

Consistent with the growth policies of the Future Land Use Element of this Plan, provision of central potable water service by the County is limited to the service areas shown in this Plan and depicted on the Collier County Water District Boundaries maps (Figure PW-1 and Figure PW-1.1); the Existing and Future Potable Water Service Areas maps (Figure PW-2 and Figure PW-2.1), which includes the Rural Transition Water and Sewer District; and, to areas where the County has legal commitments to provide facilities and services as of the date of adoption of this Plan. Additionally, the County may serve Towns, Villages, Hamlets, and Compact Rural Developments within the Rural Lands Stewardship Area Overlay at the County's discretion; presently, the County has no plans to serve any portion of the Rural Lands Stewardship Area Overlay. This Overlay is depicted on the countywide Future Land Use Map and map series.

Within the Rural Lands Stewardship Area Overlay: Hamlets and those Compact Rural Developments one hundred (100) acres or less in size may be served by central potable water facilities; Towns, Villages, and those Compact Rural Developments greater than one hundred (100) acres in size are required to be served by central potable water facilities; and, Compact Rural Developments one hundred (100) acres or less in size may be required to be served by central potable water facilities, depending upon the permitted uses within the Compact Rural Development. These facilities may be provided by the private sector, an independent water authority, or some other non-County utility.

For the purposes of this policy and policies 2.4, 5.1, and 5.3, within the Rural Lands Stewardship Area Overlay, the term "central potable water facilities" includes decentralized community treatment systems. Innovative alternative water treatment systems such as decentralized community treatment systems shall not be prohibited by this policy provided that they meet all applicable regulatory criteria.

(VI) Policy 2.3:

The Collier County Water and Wastewater Authority (Authority), established by County Ordinance Number 96-6, regulates the operations of private sector potable water treatment

(VII) = Plan Amendment by Ordinance No. 2009-04 on February 24, 2009

utilities that provide potable water supply services to portions of unincorporated Collier County. All such private sector potable water supply service providers are required to meet the County's adopted potable water treatment Level Of Service (LOS). All private sector potable water supply service providers shall file an annual statement with the Authority that provides current operating information regarding the private sector service provider, including, but not limited to: a statement of current policies and service criteria, the LOS maintained by the service provider and whether such level of service meets the County's LOS Standard for potable water treatment. The annual report shall also document any necessary or projected facility expansion and/or replacement projects that are required to correct observed deficiencies.

(I)(III)(IV)(V)(VI)

Policy 2.4:

Collier County shall permit development of potable water supply systems as follows: within the Designated Urban Areas of the Plan, including the outlying urban areas of Immokalee, Copeland, Chokoloskee, Plantation Island, and Port of the Islands; within the areas depicted on the Collier County Water District Boundaries map (Figure PW-1); within the Existing and Future Potable Water Service Areas map (Figure PW-2), which includes the Rural Transition Water and Sewer District; in Sending Lands within the Rural Fringe Mixed Use District when Density Blending, as provided for in the Density Rating System of the Future Land Use Element, is utilized; in Towns, Villages, Hamlets and Compact Rural Developments within the Rural Lands Stewardship Area Overlay; and, in areas where the County has legal commitments to provide facilities and services as of the date of adoption of this Plan. For lands located within the Collier County Water-Sewer District, but in which County water service is not currently available, non-County potable water supply systems shall only be allowed on an interim basis until County service is available.

Individual potable water supply wells may be permitted within the areas depicted on the Collier County Water District Boundaries map (Figure PW-1) on an interim basis until County water service is available; individual potable water supply wells may be permitted in all Urban designated areas outside of the areas depicted on Figure PW-1 on an interim basis until a centralized potable water supply system is available; individual potable water supply wells may be permitted in the Rural Transition Water and Sewer District, depicted on the Existing and Future Potable Water Service Areas map (Figure PW-2), on an interim basis until County water service is available; individual potable water supply wells may be permitted in Sending Lands within the Rural Fringe Mixed Use District when Density Blending, as provided for in the Density Rating System of the Future Land Use Element, is utilized, on an interim basis until County water service is available; and, individual potable water supply wells may be permitted on lands outside of the Urban designated areas, outside of areas depicted on Figure PW-1, and outside of Towns, Villages and those Compact Rural Developments greater then one hundred (100) acres in size within the Rural Lands Stewardship Area Overlay - all areas where potable water supply systems are not anticipated. However, individual potable water supply wells may or may not be permitted within Compact Rural Developments one hundred (100) acres or less in size, depending upon the uses permitted within the Compact Rural Development. Also, in Towns, Villages, and those Compact Rural Developments greater than one hundred (100) acres in size. potable water supply wells are allowed to serve no more than 100 acres, on an interim basis only, until central service is available.

(IV)(VI) Policy 2.5:

The County shall continue enforcement of ordinances requiring connection of existing and new development to central potable water systems when they become available. Connections to a central system shall be made pursuant to Collier County Ordinance 01-73, adopted December 11, 2001.

(IV)(VI) Policy 2.6:

Where Community Development Districts, or other similar special districts are established to provide a tool for developers to finance infrastructure or other purposes, wholly or partially within the Collier County Water-Sewer District, water service shall be connected to the regional system, and internal facilities shall be conveyed, when acceptable, to the Collier County Water-Sewer District for operation and ownership in accordance with Collier County Ordinance 01-57, adopted October 23, 2001, or its latest revision, and District construction and operating policies.

(VI) OBJECTIVE 3:

Pursuant to Chapter 163.3202, F.S., including any amendments thereto, Collier County has implemented procedures to ensure that at the time a development order is issued, potable water facility capacity that meets or exceeds the minimum Level of Service Standards established herein is available or will be available to serve the development under the guidelines established for concurrency in the Capital Improvement Element of this Plan.

(IV)(VI) Policy 3.1:

The following Level of Service Standards are hereby adopted and shall be used as the basis for determining the availability of facility capacity and the demand generated by a development:

Review of the historical ratio of residential to non-residential demand indicated that approximately 17% of the total water usage is non-residential. Thus the residential demand is 154 gcpd and the total finished water demand is 185 gpcd.

FACILITY CAPACITY

(VI) FACILITY/SERVICE AREA		FACILITY/SERVICE AREA	LEVEL OF SERVICE STANDARD	
(IV)(V	/ I)	Collier County Water-Sewer District	185 gpcd	
(IV) (IV)(V	/ I)	Goodland Water District Marco Island Water District	185 gpcd	
(IV)(V	71)	Marco Shores CITY OF NAPLES FACILITIES	185 gpcd	
(IV)(V		Unincorporated Service Area EVERGLADES CITY FACILITIES	185gpcd	
` /\	,	Unincorporated Service Area	185 gpcd	
(VI)		INDEPENDENT DISTRICTS		
(VI)	Orangetree Utilities		100gpcd	
(VI)	Immokalee Water and Sewer District		100gpcd	
(VI)	Florida Governmental Utilities Authority		100gpcd	

(VI) Policy 3.2:

In order to ensure that the Level of Service Standards contained in Policy 3.1 are maintained, methodologies for determining available capacity and demand shall incorporate appropriate peak demand coefficients for each facility and for the type of development proposed.

(VI) Policy 3.3:

The Level of Service Standards contained in Policy 3.1 are the minimum criteria for replacement, expansion or increase in capacity of potable water supply facilities.

(VI) Policy 3.4:

The County will annually review historical potable water demand records and adjust the Level of Service Standards contained in Policy 3.1 if so indicated by the annual review.

(VI) OBJECTIVE 4:

The County shall continue to promote conservation of potable water supplies by developing and implementing an integrated, comprehensive conservation strategy which will identify specific consumption per capita goals.

(VI) Policy 4.1:

The County shall negotiate agreements with area golf courses to accept and use treated wastewater effluent for irrigation when and where such treated effluent is available from existing and future wastewater treatment plants.

(VI) Policy 4.2:

The County shall continue to connect existing and future publicly owned lands suitable for irrigation with treated wastewater effluent, such as government building grounds, parks, and highway medians when economically feasible.

(VI) Policy 4.3:

The County shall continue to connect existing and future privately owned lands suitable for irrigation with treated wastewater effluent, such as cemeteries, nurseries and commercial/industrial parks when economically feasible.

(IV)(VI) Policy 4.4:

At such time as a source of treated effluent becomes available, the County shall permit the construction and connection of dual water systems (i.e., separate potable water and treated wastewater effluent networks) to the County's treated effluent irrigation system in new subdivisions, provided that said connection causes no adverse impact to the potable water system.

(IV)(VI) Policy 4.5:

Where Community Development Districts, or other similar special districts are established to provide a tool for developers to finance infrastructure or other purposes, wholly or partially within the Collier County Water-Sewer District, and where such districts make provisions for irrigation via dual systems utilizing effluent and/or other irrigation sources, said systems shall be connected to the regional system when available, and all internal irrigation systems shall remain in private ownership and be master metered by the County.

(VI) Policy 4.6:

The County shall promote the use of xeriscape techniques (drought resistant landscaping) to minimize potable water use for landscape irrigation.

(IV)(VI) Policy 4.7

The County shall seek to expand the availability of irrigation water from supplemental sources through connection of such sources to the County's reclaimed water system.

(VI) OBJECTIVE 5:

The County shall discourage urban sprawl and the proliferation of private sector potable water service suppliers in an effort to maximize the use of existing public facilities through the development order approval process by implementing the following policies.

(I)(II)(III)(IV)(V)(VI)Policy 5.1:

The County shall discourage urban sprawl by permitting universal availability of central potable water systems only: in the Designated Urban Area, in Receiving and certain Neutral Lands within the Rural Fringe Mixed Use District, in the Designated Urban-Rural Fringe Transition Zone Overlay, and in the Rural Settlement District, all of which are depicted on the Future Land Use Map, and in Towns, Villages, Hamlets and Compact Rural Developments within the Rural Lands Stewardship Area Overlay. These areas are further identified as: within the Collier County Water District Boundaries on Figure PW-1 of the Potable Water Sub-element, except the outlying urban areas of Immokalee, Copeland, Chokoloskee, Plantation Island, and Port of the Islands; or within the Rural Transition Water and Sewer District Boundaries on Figure PW-2 of the Potable Water Sub-element; or in Sending Lands within the Rural Fringe Mixed Use District when Density Blending, as provided for in the Density Rating System of the Future Land Use Element, is utilized; within the Rural Lands Stewardship Area Overlay, as each Town, Village, Hamlet, and Compact Rural Development is designated; and, in areas where the County has legal commitments to provide facilities and service outside the Urban Area as of the date of adoption of this Plan.

(IV)(VI) Policy 5.2:

The County shall discourage urban sprawl and the proliferation of private sector and/or package potable water treatment systems through the development order approval process to ensure maximum utilization of the existing and planned public facilities. No existing private sector or potable water treatment systems shall be permitted to add customers unless all Levels of Service Standards are met, and operations are in conformance with all FDEP permits.

(I)(VI) Policy 5.3:

As provided for in the Rural Lands Stewardship Area Overlay, and in Policies 2.2 and 2.4 of this Sub-Element, central potable water systems are permitted in Towns, Villages, Hamlets, and Compact Rural Developments. Though not anticipated, it is possible that central potable water system distribution lines may extend through lands not designated as a Town, Village, Hamlet or Compact Rural Development; in such instance no properties designated other than as a Town, Village, Hamlet or Compact Rural Development is are permitted to connect to these distribution lines.

(III)(IV)(VI) Policy 5.4:

Under criteria, projects may be eligible for central potable water service from Collier County Utilities, or a private sector/independent district, within the Rural Transition Water and Sewer District, depicted on the Existing and Future Potable Water Service Areas map (Figure PW-2) of this Potable Water Sub-element, subject to availability. Qualifying criteria shall be limited to the requirements and incentives established in the Future Land Use and Conservation and Coastal Management Elements of this Plan to obtain preservation standards established for environmentally sensitive lands in the Sending Lands of the Rural Fringe Mixed Use District (RFMUD). Criteria for potable water service eligibility may include, but are not limited to, plans for development, which utilize creative planning techniques such as clustering, density blending, rural villages, and transfer of development rights (TDRs) from RFMUD Sending Lands. Criteria for eligibility may be amended and additional Sending and Receiving Lands may be designated in the future. Central Potable Water distribution lines, within the Rural Transition Water and Sewer District, may extend through Sending Lands; however, no properties designated as Sending Lands are permitted to connect to the distribution lines.