#### **RESOLUTION 15-75**

BE IT RESOLVED that the City hereby approves that certain Panama City Beach Water Supply Facilities Work Plan, updated February, 2015, relating to the identification and planning of water supply sources and facilities needed to serve existing and anticipated development and redevelopment within the City, in substantially the form attached and presented to the Council today, with such changes, insertions or omissions as may be approved by the City Manager, whose execution of such agreement shall be conclusive evidence of such approval.

THIS RESOLUTION shall be effective immediately upon passage.

PASSED in regular session this 26 day of March, 2015.

CITY OF PANAMA CITY BEACH

ATTEST:

Holly White, City Clerk

To Smith, Deputy City Clerk

# CITY OF PANAMA CITY BEACH WATER SUPPLY FACILITIES WORK PLAN



#### **Prepared By:**

City of Panama City Beach Building and Planning Department

Adopted December, 2010 (Ordinance No. 1182) Updated February, 2015 (Ordinance No. )

#### **TABLE OF CONTENTS**

#### 1.0 INTRODUCTION

- 1.1 Statutory History
- 1.2 Statutory Requirements

#### 2.0 BACKGROUND INFORMATION

- 2.1 Overview
- 2.2 Traditional and Alternative Water Supplies

#### 3.0 DATA AND ANALYSIS

- 3.1 Population Information
- 3.2 Current and Future Areas Served
- 3.3 Potable Water Level of Service Standard
- 3.4 Bulk Sales Agreements
- 3.4.1 Applicable System Information
- 3.5 Population and Potable Water Demand Projections
- 3.6 Conservation and Reuse Programs

#### 4.0 CAPITAL IMPROVEMENTS

- 5.0 CURRENT COMPREHENSIVE PLAN GOALS, OBJECTIVES AND POLICIES THAT IMPLEMENT THE RECOMMENDATIONS OF THE WATER SUPPLY PLAN
- 6.0 PROPOSED AMENDMENTS TO THE GOALS, OBJECTIVES AND POLICIES OF THE COMPREHENSIVE PLAN AND REPLACEMENT PAGES

#### 1.0 INTRODUCTION

The purpose of the City of Panama City Beach Water Supply Facilities Work Plan (Work Plan) is to identify and plan for the water supply sources and facilities needed to serve existing development, new development, and redevelopment within the City. Chapter 163\_3177, F.S., requires local governments to prepare and adopt Work Plans into their comprehensive plans within 18 months after the water management district approves a regional water supply plan or its update. The Northwest Florida Water Management District (NWFWMD) approved the Region III 2014 Regional Water Supply Plan Update in March 2014.

Residents of the City of Panama City Beach obtain their water from the City which purchases treated water from Bay County Utility Services, and is responsible for ensuring that enough capacity is available for existing and future customers. The City of Panama City Beach Water Supply Facilities Work Plan (Work Plan) will reference the initiatives already identified in Bay County County's 10-year Work Plan since the City is a wholesale buyer. According to state guidelines, the Work Plan and the comprehensive plan amendment must address the development of traditional and alternative water supplies, bulk sales agreements and conservation and reuse programs that are necessary to serve existing and new development for at least a 10-year planning period.

The City's Work Plan is divided into six sections:

Section 1 – Introduction

Section 2 – Background Information

Section 3 – Data and Analysis

Section 4 – Capital Improvements

Section 5 - Current Comprehensive Plan Goals, Objectives and Policies that Implement the Recommendations of the Water Supply Plan

Section 6 – Proposed Amendments to the Goals, Objectives and Policies of the Comprehensive Plan and Replacement Pages

#### 1.1 <u>Statutory History</u>

The Florida Legislature enacted bills in the 2002, 2004, and 2005 sessions to address the state's water supply needs. These bills, especially Senate Bills 360 and 444 (2005 legislative session), significantly changed Chapter 163 and 373 Florida Statutes (F.S.) by strengthening the statutory links between the regional water supply plans prepared by the water management districts and the comprehensive plans prepared by local governments. In addition, these bills established the basis for improving coordination between the local land use planning and water supply planning.

#### 1.2 **Statutory Requirements**

Each local government must comply with the following requirements:

- 1. Coordinate appropriate aspects of its comprehensive plan with the appropriate water management district's regional water supply plan [163.3177(4) (a), F.S.].
- 2. Ensure that its future land use plan is based upon availability of adequate water supplies and public facilities and services [s.163.3177(6)(a), F.S., effective July 1, 2005]. Data and analysis demonstrating that adequate water supplies and associated public facilities will be available to meet projected growth demands must accompany all proposed Future Land Use Map amendments submitted to the Department for review. The submitted package must also include an amendment to the Capital Improvements Element, if necessary, to demonstrate that adequate public facilities will be available to serve the proposed Future Land Use Map modification.
- 3. Ensure that adequate water supplies and facilities area available to serve new development no later than the date on which the local government anticipates issuing a certificate of occupancy and consult with the applicable water supplier prior to approving building permit, to determine whether adequate water supplies will be available to serve the development by the anticipated issuance date of the certificate of occupancy [s.163.3180 (2)(a), F.S., effective July 1, 2005]. This "water supply concurrency" is now in effect, and local governments should be complying with the requirement for all new development proposals. In addition, local governments should update their comprehensive plans and land development regulations as soon as possible to address these statutory requirements. The latest point at which the comprehensive plan must be revised to reflect the concurrency requirements is at the time the local government adopts plan amendments to implement the recommendations of the Evaluation and Appraisal Report (EAR).
- 4. For local governments subject to a regional water supply plan, revise the General Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element (the "Infrastructure Element"), within 18 months after the water management district approves an updated regional water supply plan, to:
  - a. Identify and incorporate the alternative water supply project(s) selected by the local government from projects identified in the updated regional water supply plan, or the alternative project proposed by the local government under s. 373.0361(7), F.S. [s. 163.3177(6)(c), F.S.];
  - b. Identify the traditional and alternative water supply projects, bulk sales agreements, and the conservation and reuse programs necessary to meet current and future water use demands within the local government's jurisdiction [s. 163.3177(6)(c), F.S.]; and

- c. Include a water supply facilities work plan for at least a 10-year planning period for constructing the public, private, and regional water supply facilities identified in the element as necessary to serve existing and new development. [s. 163.3177(6)(c), F.S.] Amendments to incorporate the water supply facilities work plan into the comprehensive plan are exempt from the twice-a-year amendment limitation. [s. 163.3177(6)(c), F.S.]
- 5. Revise the Five-Year Schedule of Capital Improvements to include any water supply, reuse, and conservation projects and programs to be implemented during the five-year period.
- 6. To the extent necessary to maintain internal consistency after making changes described in Paragraph 1 through 5 above, revise the Conservation Element to assess projected water needs and sources for at least a 10-year planning period, considering the appropriate regional water supply plan, the applicable District Water Management Plan, as well as applicable consumptive use permit(s). [s.163.3177 (6)(d), F.S.]
  - If the established planning period of a comprehensive plan is greater than ten years, the plan must address the water supply sources necessary to meet and achieve the existing and projected water use demand for established planning period, considering the appropriate regional water supply plan. [s.163.3167 (13), F.S.]
- 7. To the extent necessary to maintain internal consistency after making changes described in Paragraphs 1 through 5 above, revise the Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with applicable regional water supply plans and regional water supply authorities' plans. [s.163.3177(6)(h)1., F.S.]
- 8. Address in the EAR, the extent to which the local government has implemented the 10-year water supply facilities work plan, including the development of alternative water supplies, and determine whether the identified alternative water supply projects, traditional water supply projects, bulk sales agreements, and conservation and reuse programs are meeting local water use demands. [s.163.3191 (2)(1), F.S.]

#### 2.0 BACKGROUND INFORMATION

#### 2.1 Overview

The City of Panama City Beach was incorporated in 1972. Between 1990 and 2000, the City of Panama City Beach population grew from 4,051 to 7,671, an increase of 89 percent. In 2008 according to The University of Florida's Bureau of Economic and Business Research (BEBR) it was estimated that the City's population had increased to 13,453 and in 2009 to 13,831 permanent residents an 81 percent increase since 2000.

However in 2010 (BEBR) estimated the population had declined to 13,777 and in 2011 to 12,025. In 2012 the City's population was estimated to have slightly increased to 12,067 and 2014's estimate is 12,191. Based on local knowledge, City staff has determined that the City did not actually experience a decline in population from 2009 to 2012 but rather the estimates are experiencing a correction based on overestimating permanent populations leading up to 2009 as a result of the large amount of condominium units that had been recently constructed. It is likely the BEBR estimates of population for the City assumed a higher rate of permanent residents in the newly constructed resort condominiums than actually occurred.

It is estimated that the City supplies potable water to an additional 30,353 permanent residents outside the city limits who are located within the City's potable water service area. It is also estimated that the city's service area accommodates 80% of the County's 2,000,000 yearly vacationers which stay an average of 5.7 days resulting in 11,367,412 annual lodged visitors (2013 Visitor Profile & Impact Report, Young Strategies, Inc. and the Bay County Tourist Development Council).

New development, expansion of the City limits and population growth is expected to continue. The City has ample vacant land within and surrounding the City limits for future development.

An evaluation of existing land uses revealed that of the City's 12,480 total gross acreage, (12.6%) is under residential use. The remaining gross acreages consist of such uses as commercial/tourist (9.71%); industrial (.52%); institutional (1.79%); transportation, communication, utilities (12.01%); agriculture (3.58%); vacant (26.29%), lakes (1.18%) and conservation/recreation (32.32%). Residential and non-residential growth is anticipated to continue. From 2013 through 2014, the City's Building Department records indicated permits were issued for 201 new single family units, 256 multifamily units and 86 permits were issued for commercial construction.

#### 2.2 <u>Traditional and Alternative Water Supplies</u>

In March 2014, the NWFLWMD Governing Board directed the development of an updated regional water supply plan (RWSP) to identify alternative water supply sources in Region III of the District and to update the population estimates.

The primary concern identified in the original RWSP was salt-water intrusion in the upper portion of the Floridan Aquifer due to ground water withdrawals for potable water supply. More recently, coastal ground water withdrawals in the region have been largely abandoned, with most public supply demand being met by the use of Deer Point Reservoir. The RWSP estimates that 90% of Bay County's population is served by public water supply systems.

#### **Traditional Water Supplies**

The primary traditional source of potable water in Bay County is the Deer Point Lake Reservoir. According to the RWSP, Bay County is permitted to withdraw up to 98 mgd through the year 2040 which is adequate to meet the area's long-term demands. However, there is a concern that this source is vulnerable to saltwater intrusion from a storm surge associated with a Category 3 or larger hurricane, as well as drought conditions.

#### **Alternative Water Supplies**

According to the updated RWSP adopted by the District in March 2014, the 2010 public water supply demand in Region III was estimated at 27.20 million gallons per day (MGD). Demand for 2035 is projected at 36.51 mgd.

In an effort to ensure a reliable water source for Bay County in the event of failure to the Deer Point Reservoir Dam or at the William's Bayou Pumping Station, Bay County is pursuing an alternate water supply pumping station at the northern most portion of the reservoir. The pumping station will be located in the Econfina Creek basin that supplies the majority of the water to the reservoir. Bay County will evaluate and meet any regulatory requirements in cooperation with the NWFWMD.

#### 3.0 DATA AND ANALYSIS

#### 3.1 **Population Information**

The City's existing and future population figures are derived from the City's Planning Department and the Bureau of Economic and Business Research (BEBR). As stated previously, between 1990 and 2000 the City of Panama City Beach population grew from 4,051 to 7,671, an increase of 89 percent.

Largely based on BEBR estimations, from 2000 to 2007 the City grew at an average rate of 7.4% per year which consisted of 569 new residents per year or 3,980 total new residents. Of the 3,980 new residents, most of the growth occurred between 2003 and 2007. During this time, it was estimated that the City experienced an average growth rate of 10.21% or 3,731 new residents.

During the period 2007-2008 (BEBR) estimated a (15.5%) increase in population to 13,453 or a (9.4% growth rate since 2000). However in 2010 BEBR estimated the population had declined to 13,777 and in 2011 to 12,025. In 2012 the City's population was estimated to have slightly increased to 12,067 and 2013's estimate was 12,094. Based on local knowledge, City staff has determined that the City did not actually experience a decline in population from 2009 to 2012 but rather the estimates are experiencing a correction based on over-estimating permanent populations leading up to 2009 as a result of the large amount of condominium units that had been recently

constructed. It is likely the State estimates of population for the City assumed a higher rate of permanent residents in the newly constructed resort condominiums than actually occurred.

In the last year the City has experienced an increase in commercial and residential development and tourism. As a result, staff estimates a population growth rate of 5.5% that will continue based upon a linear projection of the growth rate that occurred over a 7 year period from 2000 to 2007 and the observations mentioned above. Panama City Beach is projected to have a population of approximately 13,461 in 2015, 17,593 residents in 2020, 22,993 in 2025, 30,051 in 2030 and 39,276 in 2035.

TABLE 1

HISTORICAL PERMANENT RESIDENT POPULATION AND PROJECTIONS FOR THE CITY LIMITS

<u>YEAR</u>	PERMANENT RESIDENTS
2000	7,671
2005	8,972
2006	10,005
2007	11,651
2008	13,453
2010	13,777
2013	12,094
2015	13,461*
2020	17,593*
2025	22,993*
2030	30,051*
2035	39,276*

#### \* Projections

The City also supplies water outside the city limits (area depicted in section 3.2). The table below represents the projected unincorporated populations through 2035. The unincorporated area populations of the beach were derived by the Bay County Planning and Zoning Department as reported in the Bay County Water Supply Facilities Work Plan, (2014).

TABLE 2
HISTORICAL PERMANENT RESIDENT POPULATION AND
PROJECTIONS FOR THE SERVICE AREA

		Unincorporated	
<b>YEAR</b>	City Pop.	<b>Population</b>	<b>Total Residents</b>
2000	7,671	18,595	26,266
2005	8,972	19,294	28,194
2006	10,005	19,993	29,998
2010	13,777	20,554**	34,331**
2015	13,461	30,500*	43,961*
2020	17,593	32,330*	49,923*
2025	22,993*	33,946*	56,939*
2030	30,051*	35,473*	65,524*
2035	39,276*	36,714*	75,990*

<sup>\*=</sup> Projection

Additionally Panama City Beach is the major attraction for many visitors to the county and tourists greatly outnumber permanent residents. Based on information from the Panama City Beach Tourist Development Council approximately 2,000,000 tourists spent the night in Bay County in 2013 with an average stay of 5.7 days resulting in 11,367,412 annual lodged visitors (2013 Visitor Profile & Impact Report, Young Strategies, Inc. and the Bay County Tourist Development Council).

July accounts for approximately 16% or 1,818,785 annual lodged visitors. Of these Bay County tourists, it is estimated that 80% or about 1,455,029 annual lodged visitors vacationed within the City's potable water service area during the peak tourism month of July, 2013. This number does not include visitors that day-trip to the City. The fourth of July weekend has historically represented the peak tourism time of July and it is estimated 100,000 vacationers visit the area during this time. It is anticipated tourism numbers will continue to increase at about 3% per year.

The table below projects the seasonal population for the service area (which includes the City Limits) on a peak day in any year.

<sup>\*\*=</sup> Estimate

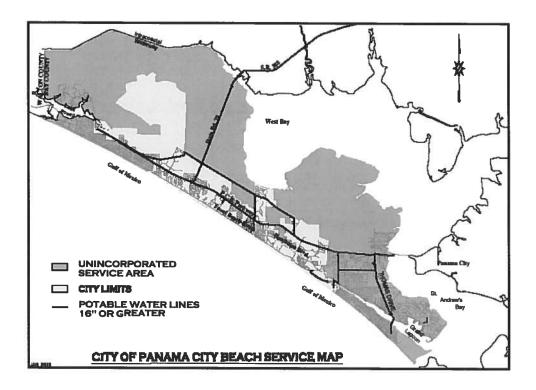
TABLE 3

## PANAMA CITY BEACH SERVICE AREA PEAK DAILY SEASONAL AND PERMANENT POPULATION

	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>
TOTAL RES. POP. Within City and Service Area	34,331	43,961*	49,923*	56,939*	65,524*	75,990*
PEAK DAILY SEASONAL POPULATION		103,000*	106,000*	109,000*	112,000*	116,000*
TOTAL PEAK DAILY POPULATION		146,961*	155,923*	165,939*	177,524*	191,990*

<sup>\*=</sup>Projection

#### 3.2 <u>Current and Future Areas Served</u>



#### 3.3 Potable Water Level of Service Standard

Panama City Beach uses the following as its level of Service for the provision of potable water:

- A. Level of service of 125 gallons per capita per day average.
- B. Pressure: 30 psi at point of delivery.

#### 3.4 **Bulk Sales Agreements**

#### **Bulk Sales Agreements**

The City currently has an interlocal agreement with Bay County for the provision of potable water from Deer Point Lake. The Bay County Water Treatment Plant consists of two parallel treatment trains, first is a compact Actiflo-type, and second is a conventional surface water type treatment train that is permitted to treat 60 mgd. The last upgrade to the system accommodates future phased expansions to 78 and 96 mgd when needed. Raw water is supplied from Deerpoint Reservoir via the Williams Bayou pumping station. The pump station has present capacity to pump approximately 92 MGD via 5 pumps. It is important to note that Bay County completed an upgrade to the station that added another pump and allows for drawdowns of the reservoir in conjunction with the FWC. The raw water is pumped to the Water Treatment Facility via 54" & 48" transmission mains. Treated water is

stored in three (3) ground storage tanks that have a combined nominal capacity of 12 million gallons. Finished water is pumped to the distribution system via eight (8) high service pumps. The water is supplied to the wholesale consecutive system and retail customers via distribution system that extends to serve all municipalities and Bay County retail customers. The distribution system consists of +/- 560,000 LF of pipes ranging in size from 2" to 48".

The agreement between the County and the City, which expires in the year 2042, states that 26.4 million gallons per day (mgd) were available to the City in 2010 with best efforts to provide increasing amounts each year up to 33.79 mgd in the year 2020. The City receives 100% of its treated water from Bay County via two delivery points at bridges crossing St. Andrew Bay and West Bay. That water is stored and re-pumped on demand to meet the City's water needs. The current available pumping and transmission capacity is approximately 37.8 mgd. The contract with the County has been designed to increase each year by approximately 4% per year in order to continue to have capacity available for growth. Additionally, the City has completed construction of treated water storage tanks with volumes of 7, 7, 5, 4 and 2 million gallons, which gives the City an additional 25 million gallons of working reserve for peak season and fire flow demand.

The daily average water demand from January 1, 2014 through December 31, 2014 was 11.15 mgd on a monthly average with a daily peak usage of 18.65 mgd. For the remainder of 2015, it is projected the potable water system will see a demand of a daily average of 11.59 mgd and a daily peak usage of 18.88. The County's available capacity to supply potable water to the City in 2010 was 26.4 mgd, which leaves an excess capacity of 15.25 mgd on a daily average and an excess capacity of 7.75 mgd on daily peak usage. Table 4 shows the historical potable water usage and capacity while Table 5 shows the projected usage and capacity from 2015 to 2020.

The City has also implemented a water reclaimed system that will make highly treated effluent from the wastewater system available for irrigation to new subdivisions and commercial developments. With the implementation of this reclaim system, it is estimated that the 20% of total potable water consumption usually used in these new subdivisions for irrigation will be replaced by reclaimed water.

#### 3.4.1 Applicable System Information

Consumptive Use Agreement Number: S910142

Raw Water Allocation Information: N/A

Average Annual Daily and Maximum Monthly (Daily) Allocations: Per

agreement with Bay County - see Section 3.4

Applicable Source Limitations (dry season, wellfields, and priority): N/A

Required Off-sets: N/A

Expiration Date(s) by Source: 2042 per agreement with Bay County. Bay County's Consumptive Use Agreement is active as long as bonding is active or until the year 2040.

Treatment Facilities and Planning Schedules: N/A

Methods and Treatment Losses in the CUP: N/A

Permitted Florida Dept. of Environmental Protection (FDEP) Capacities: N/A

Storage Facilities: See Section 3.4

Interlocal Agreements and Bulk Sales: See Section 3.4

Interconnects, Distribution and Associated Responsibilities (emergency or on-

going): See Section 3.4

Treatment and Distribution System Losses: N/A

Outstanding Compliance Issues (required upgrades or expansion etc.): N/A

#### 3.5 **Population and Potable Water Demand Projections**

The following tables show the historical usage, expected demands, and remaining capacity of the potable water system.

TABLE 4

Historical Potable Water Usage (in mgd)

	<u>2005</u>	<u>2008</u>	2009	2014
Daily Average	12.23	11.47	11.25	11.15
Daily Peak	18.40	19.93	18.33	18.65
Capacity	23.10	25.00	25.69	26.40
Remaining Capacity (Daily Avg.)	10.87	13.53	14.44	15.25
Remaining Cap. (Daily Peak)	4.70	5.07	7.36	7.75

Source: Panama City Beach Water Consumption History and Projections, City of Panama City Beach Utilities Department.

<u>TABLE 5</u>

<u>Projected Daily Potable Water Usage (in mgd)</u>

	<u>2015</u>	<u>2020</u>	<u>2025</u>
Total Average Daily Usage:	11.59	13.47	15.64
Total Peak Daily Usage:	18.88	21.78	25.30
Capacity:	29.86	33.79	33.79
Remaining Capacity (Daily Avg)	18.27	20.32	18.15
Remaining Capacity (Peak Daily)	10.98	12.01	8.49

Source: Panama City Beach Water Consumption History and Projections, 2015, City of Panama City Beach Utilities Department and the City of Panama City Beach Building and Planning Department.

Note: The data in Table 5 is derived from the population projections shown in Table 3.

Table 4 shows the historical potable water usage from 2005 to 2013. At all times the City has had capacity to handle the daily average demand and the peak daily demand.

Table 5 shows the projected potable water demand for 2015 to 2025. The projected flows show an anticipated increasing capacity available for daily average flow and peak daily flow at a minimum through 2020.

#### 3.6 <u>Conservation and Reuse Programs</u>

The City currently includes 3,000 gallons of water usage in the base monthly charge. A rate study was completed in 2012 to determine whether the current rate structure was sufficient to allow for proper operation, maintenance and capital improvement to the system during the study period through 2016. As recommended, water and sewer rates are now being annually adjusted at 2% or less per year through 2016, when another rate study will be completed and its recommendations proposed to the City Council at its conclusion. Any recommendations on conservation measures will need to be weighed against the economic conditions at that time as well as the other conservation measures the City is already undertaking such as reuse, meter replacement, and requiring native species in landscaping design.

The City has completed a reuse system that now serves most of the city including a retrofit of six (6) older neighborhoods previously only served by septic tanks. The City has further required installation of reuse infrastructure in most new residential and commercial construction development along PCB Parkway (US 98) built during the past 10 years. Where reuse water is available, the use of potable water for irrigation is prohibited. With the implementation of this reclaim system, it is estimated that the 20% of total potable water consumption usually used in these new subdivisions for irrigation will be replaced by reclaimed water.

To support the public access reuse system and eliminate discharge to West Bay, the City purchased 2,900 acres of land for a wet weather discharge area west of SR 79, and constructed a second 5 million gallon reuse water storage tank at its reclaimed irrigation pumping facility on N. Gulf Boulevard. The wet weather discharge area has been designated as Conservation on the Future Land Use Map and became fully operational in April 2011, eliminating any effluent discharges to West Bay. The park is currently being further improved with additional nature trails and educational areas. The City will continue to support any NWFWMD water reuse projects and implementation of new regulations or programs designed to increase the volume of reclaimed water used and public acceptance of reclaimed water.

Additionally, the City is approximately eighty-five percent (85%) completed with retrofitting the older residential subdivisions with new touch-read meters. The new meters are expected to significantly reduce the amount of lost water in the system

from previously undetected leaks. The program will be evaluated for effectiveness. The City is currently spending about \$200,000 annually on meter replacement and testing.

#### 4.0 CAPITAL IMPROVEMENTS

All major capital projects scheduled for the system to address overall capacity have been completed. The system now has the necessary storage and pumping capacity in place to meet anticipated needs for the next 10 years. Supply capacity is also adequate for the same time period via the water supply agreement with Bay County. Various small capital projects to provide better distribution system performance via "loop" connections, and replacement of old galvanized and PVC small diameter piping will be scheduled during the next 10 years.

These capital projects will coordinate land uses with available and projected fiscal resources and a financially feasible schedule of capital improvements.

## 5.0 CURRENT COMPREHENSIVE PLAN GOALS, OBJECTIVES AND POLICIES THAT IMPLEMENT THE RECOMMENDATIONS OF THE WATER SUPPLY PLAN

Below are the Goals, Objectives and Policies already in the Comprehensive Plan that implement the recommendations of the Water Supply Plan. In addition to these provisions and as previously stated, the City receives its potable water from Deer Point Lake rather than by wells which is significant because the 1998 Water Supply Assessment (WSA) recognized coastal public supply wells were subject to salt water intrusion and caused a decline in the coastal Floridan Aquifer levels by as much as eighty (80) feet.

#### Comprehensive Plan Sections

#### Section 1 Introduction

<u>POLICY 1.6</u>: The City shall prepare written findings on the proposed development's concurrency. To be concurrent, one or more of the following conditions for each facility type must be met:

## Sanitary Sewer, Solid Waste, Drainage, and Potable Water

A. The necessary facilities or services are in place at the time a Development Permit is issued; or,

- B. A Development Permit is issued subject to the condition that specifically identified, necessary facilities or services will be in place when the impacts of the development occur, failing which the Certificate of Occupancy will not be issued; or,
- C. The necessary facilities are under construction at the time a permit is issued; or,
- D. The necessary facilities and services are specifically identified and guaranteed in an enforceable development agreement that includes the provisions of (1),(2), or (3) above. Such an agreement must guarantee that the necessary facilities and services will be in place when the impacts of the development occur. enforceable development agreement may include, but is not limited to, development agreements pursuant to Section 163.3220, Fla. Stat., or an agreement or Development Order issued pursuant to Chapter 380, Fla. Stat.
- E. Prior to approval of a building permit or its functional equivalent, the City will make a determination whether adequate water supply to serve the new development will be available no later than the anticipated date of issuance by the City of a certificate of occupancy or its functional equivalent.

## Section 7 Sanitary Sewer, Solid Waste, Stormwater Drainage, Potable Water and Aquifer Recharge Element

#### Sanitary Sewer Sub Element

<u>POLICY 7.3:</u> The extension of reuse lines and sanitary sewer lines into unsewered subdivisions will be funded by a combination of user fees, impact fees, bonds, state revolving loans, and grants.

<u>POLICY 7.4:</u> The City's reuse system will continue to be expanded as such projects become financially feasible in order to further the City's potable water conservation efforts

#### Potable Water Sub Element

- OBJECTIVE 3: Upon adoption of this Plan, require use of water conservation measures and techniques.
- <u>POLICY 3.1</u>: The City shall enforce the use of water conservation plumbing fixtures and equipment, as required in 553.14 Fla.Stat.
- <u>POLICY 3.2</u>: The City shall undertake emergency measures specified in the <u>Northwest Florida Water Management District Water Shortage Plan</u> in the event of a potable water emergency.
- <u>POLICY 3.3:</u> The City shall pursue additional revenue sources to fund water supply and facility projects.
- <u>POLICY 3.4:</u> The City shall regularly review the potable water impact fees to ensure they are adequate to fund system improvements for new development, redevelopment, and to maintain and repair the existing system.
- <u>POLICY 3.5:</u> The City will continue to examine the extent to which interconnectivity is possible with water facilities of other local jurisdictions.
- <u>POLICY 3.6:</u> The City will coordinate with the Northwest Florida Water Management District and Bay County to protect the water quality of Deer Point Lake and any new alternative water supply source.
- <u>POLICY 3.7:</u> The City will conduct a rate study in 2016 and upon its conclusion will consider rate structures that improve water conservation such as: full cost rate structures, inclining block rates, and seasonal rates.
- <u>POLICY 3.8:</u> The City will continue to encourage water conservation through land development regulations by requiring the preservation and use of native vegetation, when possible, as well as encouraging xeriscaping.

#### Section 10 Intergovernmental Coordination Element

- <u>GOAL:</u> Coordinate with governmental agencies to promote efficient and effective delivery of services and facilities.
- OBJECTIVE 1: Coordinate with Bay County concerning availability of public services to serve existing and future development.
- <u>POLICY 1.1:</u> Continue to provide facility impact statements for development located within the unincorporated areas.

<u>POLICY 1.2:</u> Coordinate with appropriate government agencies and Bay County to ensure maintenance of adopted levels of service standards.

<u>POLICY 1.5:</u> The City will coordinate with the Northwest Florida Water Management District and Bay County to protect the water quality of Deer Point Lake and any new alternative water supply source.

POLICY 1.6: The City will coordinate with the Northwest Florida Water Management District and Bay County to develop alternative water sources which will aid in drought-proofing the region and minimizing any potential vulnerability to public water supplies as a result of a hurricane storm surge.

<u>POLICY 1.7:</u> The City will coordinate with the most recent Northwest Florida Water Management District water supply plan in projecting future supply and demand on potable water and alternative sources when preparing amendments to the Comprehensive Plan.

<u>POLICY 1.8:</u> The City will update the Water Supply Facilities Work Plan and Comprehensive Plan, as needed, within 18 months after the Northwest Florida Water Management District updates the Region III Regional Water Supply Plan.

#### Groundwater Aguifer Recharge Sub-Element

OBJECTIVE 1: The City will protect against salt-water intrusion of the Floridan Aquifer.

POLICY 1.1: The City will coordinate with the Northwest Florida Water Management District and Bay County to protect the water quality of Deer Point Lake and any new alternative water supply source.

## 6.0 PROPOSED AMENDMENTS TO THE GOALS, OBJECTIVES AND POLICIES OF THE COMPREHENSIVE PLAN

Although the City's current Comprehensive Plan addresses many recommendations of the Water Supply Plan, additional amendments to the Comprehensive Plan are necessary to be consistent with the Water Supply Plan. Below are recommended changes with deletions shown in <a href="mailto:strikethrough-">strikethrough-</a> and additions shown in <a href="mailto:bold and underline.">bold and underline.</a> The recommended replacement pages to the Comprehensive Plan follow.

1. Tables 6 and 7 of the Potable Water Section of the Sanitary Sewer, Solid Waste, Stormwater Drainage, Potable Water, and

- Aquifer Recharge Element will be revised to be consistent with Tables 5 4 and 6 5 in Section 3.5 of this Work Plan.
- 2. Policy 3.7 of the Potable Water Section of the Sanitary Sewer, Solid Waste, Stormwater Drainage, Potable Water and Aquifer Recharge Element will be revised to show the City will do an updated rate study in 2016.