

OBJECTIVE VI

Continue to coordinate with the SFWMD, SBDD, and CBDD to coordinate the extension of, capacity increases and other facility improvements to meet future needs.

Evaluation Measure Objective VI - The City's Environmental Services Division in coordination with the appropriate drainage facility agencies shall maintain a record of drainage facility operations relating to demand and capacity; and update the record for both the short term and long term planning horizons.

Policy 6.1 - Continue to coordinate with appropriate drainage facility agencies on an annual basis to review the status of the drainage system to meet future needs.

Policy 6.2 - Continue to coordinate with appropriate drainage facility agencies to maximize the use of existing facilities by all new development so as to discourage urban sprawl.

Policy 6.3 - All new land use amendments shall be consistent with existing and programmed drainage facilities.

Policy 6.4 - All new development permits shall be issued only when determined to be consistent with existing and programmed drainage facilities.

Policy 6.5 - LDR's will be updated by 2008 to reflect criteria in reviewing land use plan amendments for consistency with existing and programmed drainage facilities.

D. POTABLE WATER SUPPLY AND WATER RESOURCE MANAGEMENT COORDINATION

OBJECTIVE VII

Insure the adequate provision of potable water services within the community at the time of building permit issuance by maintaining the adopted level of service.

Evaluation Measure Objective VII - Continue to maintain the adopted level of service beyond the year 203⁵⁰.

Policy 7.1 - Maintain potable water service capacity through incorporation of any needed improvements into the City's Capital Improvements Program (*cross- reference CE Updated Policy 2.15 and CIE Policy 2.7*).

Policy 7.2 - Since potable water facilities have been determined to be available to serve the future population beyond the year 203~~50~~, monitor service demand and capacity yearly so as to identify any unforeseen facility deficiencies.

Policy 7.3 - Develop a plan for prioritizing needs and correcting deficiencies upon their identification, and that decisions regarding the location of infrastructure investments are made with priority for the lowest income neighborhoods.

Policy 7.4 - Peak and average flow design capacities shall not be exceeded.

Policy 7.5 - Continue to ensure that water supply and distribution mains provide adequate flow for both fire fighting and consumer needs.

Policy 7.6 - Level of service standard of ~~82.6881.25~~ gallons/capita/day is the level of service for the area served by the City of Pembroke Pines. s. Level of Service ~~127.113~~ gallons per day is the level of service for the area served by Broward County Water and Wastewater Services.

Policy 7.7 - The City will continue to update and adopt the 10-Year Water Supply Facilities Work Plan to increase the coordination between land use and future water supply planning within 18 months of the adoption of the regional water supply plan as required by Section 373.709 and Chapter 163, State Statutes, typically every five years.

Policy 7.8 – The adopted ~~2020~~ Broward County 10-Year Water Supply Facilities Work Plan, as adopted on ~~2/3/2021~~ March 3, 2026, is hereby incorporated by reference into the Comprehensive Plan.

Policy 7.9. The adopted 2020 City of Pembroke Pines 10-Year Water Supply Facilities Work Plan, adopted on February 3, 2021, is hereby incorporated into the City's Comprehensive Plan located within the appendix section of the Infrastructure Adoption Element.

Policy 7.10. The adopted 2015 City of Pembroke Pines 10-Year Water Supply Facilities Work Plan is hereby deleted in its entirety and replaced by the adopted 2021 City of Pembroke Pines 10-Year Water Supply Facilities Work Plan.

Policy 7.11. The adopted 2025 City of Pembroke Pines 10-Year Water Supply Facilities Work Plan Update adopted on [REDACTED] is hereby incorporated by reference into the City's Comprehensive Plan located within the appendix section of the Infrastructure Adoption Element

OBJECTIVE VIII

Continue to provide potable water services to meet demands within the City in an efficient, economical and environmentally sensitive manner beyond the year 203⁵⁰.

Evaluation Measures Objective VIII - Maintain record of water treatment operations relating to demand and capacity. Update both for the short term and long term planning horizons. Increase education efforts in the practices of water conservation beyond the year 203⁵⁰.

Policy 8.1 - Continue to encourage the use of water conservation devices in new construction.

Policy 8.2 - The City's Utility Division will increase water conservation education programs for the residents of the City beyond the year 203⁵⁰.

Policy 8.3 - Coordinate with the private sector for the extension or expansion of capacity to meet future demand.

Policy 8.4 - Continue to implement City of Pembroke Pines Code of Ordinances No. 996 which creates a water conservation plan for the City that is consistent with SFWMD's Chapter 40E-21(Water Shortage Plan).

Policy 8.5 - Continue to require the use of existing and programmed potable water facilities by all new development so as to discourage urban sprawl.

Policy 8.6 - Maximize utilization of existing potable water facilities by requiring hook-ups if water lines are within 1/4 mile from proposed subdivision or 100 ft. from a single family unit.

Policy 8.7 - All new land use amendments shall be consistent with existing and programmed potable water facilities (*cross-reference ICE Policy 2.11*).

Policy 8.8 - All new development permits shall be issued only when determined to be consistent with existing and programmed potable water facilities.

Policy 8.9 - LDR's will be updated by 2008 to reflect criteria in reviewing land use plan amendments for consistency with existing and programmed potable water facilities.

Policy 8.10 - The City will continue to update the infrastructure map on an as needed basis which shows potable water, sanitary sewer, groundwater and solid waste facilities.

OBJECTIVE IX

To ensure that the City of Pembroke Pines addresses the availability and appropriate use of regional water supplies as well as the impacts of development upon water resource management programs and planning efforts of the South Florida Water Management District, and those of other local, regional, state and federal agencies (*cross-reference update to existing FLU Objective X*).

Evaluation Measure Objective IX – Record of water use permits consistent with the City's adopted WSFP, South Florida Water Management District's (SFWMD) Lower East Coast Water Supply Plan, and the Broward County Integrated Water Resource Plan.

Policy 9.1 – The City will maintain a Water Supply Facilities Work Plan (WSFP) for at least a 10 year planning period addressing water supply facilities necessary to serve existing and future development within the City's water service area, consistent with the City's consumptive use permit.

Policy 9.2 – The City's WSFP is provided in the Appendix section ~~VI~~ of this element.

Policy 9.3 – The City's adopted WSFP will be updated at a minimum every five years within 18 months of updates of the SFWMD's Lower East Coast Water Supply plan that affect the City (*cross-reference FLU Policy 10.6, Updated IE Policy 10.6, CE Policy 2.18, and ICE Policy 1.9*).

Policy 9.4 – The WSFP will be used to prioritize and coordinate the replacement, expansion and/or upgrade of existing facilities used to withdraw, treat, transmit, store and distribute water to meet future needs.

Policy 9.5 – The City's WSFP considers, identifies and evaluates alternative sources of water that can be used to meet existing and future needs as well as alternative water supply project or projects available to the city should the city grow beyond the projected buildout date.

APPENDICES

APPENDIX I

City of Pembroke Pines 10 Year Water Supply Facilities Work Plan (2020)

APPENDIX II

City of Pembroke Pines 10 Year Water Supply Facilities Work Plan Update (2025)

INFRASTRUCTURE ELEMENT SUPPORT DOCUMENT

I. INTRODUCTION

The purpose of the Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element is to ensure the provision of necessary public facilities and services correlated to the future land use projections for the City of Pembroke Pines, to promote the conservation and protection of surface and groundwater resources with the goal of securing future water supplies, and for the preservation and enhancement of the regional ecosystem. The element consists of two parts: (1) The Support Document - A compilation of the Data and Analysis relative to the adequacy of facilities for future growth and development, and (2) The Adoption Document - Goals, Objectives and Policies related to the provision of the above infrastructure requirements. The majority of the adopted changes to the Infrastructure Element consist of updates to both the data and analysis, and the goals, objectives, and policies sections that reflect actual conditions and continuations in policies over the next planning horizons pursuant to the recommendations included in the City's Evaluation and Appraisal Report (EAR), adopted February 2006. In addition, Policies 2.2, 3.4, 4.4, and 5.5 were adopted as recommended by the EAR, and are consistent with the South Florida Regional Planning Council's Strategic Regional Policy Plan (Policy 2.4). Policies 7.7 and 10.6 provide for the City to adopt the Ten Year Water Supply Facilities Work Plan as required by State Statute to increase the coordination between land use and future water supply planning. Adoption of the Ten Year Water Supply Facilities Work plan is required within eighteen months of the adoption of the Lower East Coast Regional Water Supply Plan (adopted February 2007).

The work plan is required to be updated within 18 months after the SFWMD updates the regional supply plan. The SFWMD updated the Lower East Coast Regional Water Supply Plan in September 2013; therefore, the City is required to adopt the updates by March 2015. The updates include text amendments to the Future Land Use, Infrastructure and Conservation Elements and the City's 10 year water supply facilities work plan which was adopted by the City Commission in 2009 (Ordinance No. 1632). Updates were made to IE Policies 7.7 and 9.5. The SFWMD updated the Lower East Coast Regional Water Supply Plan in November 2018; therefore the City is required to adopt the updates by May 2020; however, due to Covid-19, the City's work plan was delayed. The updates for 2020 included text amendments to the Future Land Use, Infrastructure and Conservation Elements as well as the City's 10 Year water supply facilities work plan. The majority of changes were related to updating the planning horizons. The SFWMD updated the Lower East Coast Regional Water Supply Plan in September 2024. The City updated its Water Supply Plan and related Comprehensive Plan elements, including amendments to the Future Land Use, Infrastructure and Conservation

Elements. The majority of changes were related to updating the planning horizon, which is currently 2025 to 2035. The WSFWP, as adopted and updated, is incorporated within the Infrastructure adoption and support documents. The City's water supply and facilities can meet demand through the current 10-year planning horizon. No alternative water supply improvements are necessary.

This element is divided into subsections as follows:

- A. Sanitary Sewer
- B. Solid Waste
- C. Drainage
- D. Potable Water Supply and Water Resource Management Coordination
- E. Natural Groundwater Aquifer Recharge

The Data and Analysis section is located within the Support Document in the beginning part of the element and is provided for each subsection. The Adoption Document will follow the Support Document. The Sanitary Sewer, Drainage, and Potable Water Supply and Water Resource Management Coordination subsections each contain a policy which provides for the City to continue to update its maps on an as needed basis (see IE Policies 2.15, 5.6 and 8.10). Map No's IE-1 (Sanitary Sewer, Potable Water, and Solid Waste Facilities) and IE-2 (Drainage Facilities) are located in the IE - Appendix - Maps - Pages 1 and 2 respectively. All subsection objectives are followed by an evaluation measure.

The Data and Analysis has been submitted with respect to the annexed and de-annexed properties adjacent to Laguna Isles in the northwestern portion of the City of Pembroke Pines during the 2008 amendment cycle and is pending completion of the Chapter 163 process. All annexed property data and projections for the next planning horizons are included in the 10 year Water Supply Facilities Work Plan (Tables 2-7 and 2-4).

The 2002, 2004, and 2005 legislatures established a process for water supply planning, amending Chapters 163 and 373, F.S., to improve the coordination of water supply and land use planning. Senate Bills 360 and 444 strengthened the statutory linkage between the regional water supply plans prepared by the water management districts and local government comprehensive plans. The City of Pembroke Pines falls within the Lower East Coast Regional Water Supply Plan area and is required to ensure that adequate water supplies will be available to meet future demand by developing a 10-year water supply facilities work plan (WSFWP). The WSFWP includes alternative water supplies, water reuse and conservation programs as required by State Statute, and are incorporated into the City's Comprehensive Plan through the Potable Water Supply and Water Resource Management Coordination sub-element of the Infrastructure Element. Amendments have been made to the goals, objectives, and policies and data and analysis sections of the this element, along with Future Land Use, Conservation, Capital Improvements, and

Intergovernmental Coordination Elements addressing water supply planning requirements. Cross-reference notations have been added for all applicable amendments to the elements' goals, objectives and policies sections.

Changes to this element include an update of the existing goal, proposed Objective IX (cross reference – updated existing FLU Objective X), proposed Evaluation Measure for Objective IX, proposed Policies 9.1, 9.2, 9.3 (cross reference FLU Policy 10.6, CE Policy 2.18 and ICE Policy 1.9), 9.4, 9.5, 9.6, 9.7, and 9.8 (cross reference FLU Policy 11.13, ICE Policies 1.9 and 2.11). IE Policies 9.9 and 9.8 were modified in response to DCA's Objection, Recommendation and Comment report dated August 6th, 2008. Policy 9.9 was added in response to DCA's Objection, Recommendation and Comment report dated August 6th, 2008. Previously adopted Objective IX, its Evaluation Measure and Policies 9.1 through 9.6 have been renumbered as Objective X, and Policies 10.1 through 10.6. Proposed Policy 10.7 has been added under Objective X (cross reference CE Policy 2.17). Policies 7.6, 10.5, and 10.6 (cross reference FLU Policy 10.6, IE Policy 9.3, CE Policy 2.18, and ICE Policy 1.9) have been updated. Existing Policies IE 5.3, 5.8, Objective VIII, and existing policies 8.1 through 8.10 are consistent with water supply planning requirements. The proposed WSWFP has been incorporated within this element (See Appendix – Water Supply Facility Work Plan

SFWMD updated the ~~Lower East Coast Regional Water~~LECRWSP in November 2018 ~~and in September 2024~~; ~~therefore the City is required to adopt the updates by May 2020; however, due to Covid-19, the City's work plan was delayed.~~ The updates ~~for 2020~~ include text amendments to the Future Land Use, Infrastructure and Conservation Elements as well as the City's 10 Year water supply facilities work plan. The majority of changes were related to updating the planning horizons. ~~The City is updating the Future Land Use, Conservation, and Infrastructure adoption elements along with the updated WSWFP. The WSWFP, as adopted and updated, will be is~~ incorporated within the Infrastructure adoption element as well as the support element. ~~The City's water supply and facilities can meet demand through the current 10-year planning horizon. No alternative water supply improvements are necessary. No alternative water supply improvements were are necessary as the adopted level of service will be maintained through the year 2040.~~

Service Area. The Infrastructure Element service area consists of the entire City of Pembroke Pines.

Planning Horizons. The Infrastructure Element planning horizons are 2025~~0~~ and 2035~~0~~.

II. DATA AND ANALYSIS REQUIREMENTS

The area west of U.S. 27 acts as a catchment area for seepage through and under the South Florida Water Management levee on the eastern edge of the Conservation Area. There have been no improvements contemplated within this region because of the expectation that it will be maintained in an agricultural low-density posture. The South Broward Drainage District has proposed no improvements to the area west of U.S. 27 and the Borrow ditch lying west of U.S. 27 provides drainage of this property to both the C-9 Canal and C-11 Canal.

The general performance of the existing facilities, based upon the best available data and the operations of the drainage districts, indicates a very acceptable level of service being provided by the facilities. The general condition of the facilities is very good and the expected life of the facilities is long term. The manner in which the construction and improvement of the drainage facilities has occurred within the districts has been one that has limited the impacts to natural resources.

The pump stations for Canal Nos. 1, 2 and 3 have been constructed within the past fifteen years. At this time, there are no plans for any replacement, expansions, or relocation of these facilities. The pump station for Canal No. 4 has been in place for approximately twenty years and provides for all permitted and required drainage into Canal No. 4. The District completed several upgrades for this pump station in 2000. The location of the S-3 Pump Station will not change.

The South Broward Drainage District has prepared and updated a Master Water Control Plan as prepared by Calvin, Giordano & Associates, Inc., July 1998. This plan provides full protection to all lands within the District and has been prepared based upon the last criteria adopted by the South Florida Water Management District. The drainage district has always enjoyed an adequate level of service for providing this needed protection for the lands within its jurisdiction. Its existing facilities have performed adequately and are in good condition and, with general maintenance, are expected to provide long-term benefits to residents within the District. Existing regulations and programs outlined by the District maintain the functions of the natural drainage and groundwater recharge requirements of the area.

The South Broward Drainage District periodically has samples of water within the water bodies within the District tested, and this analysis indicates that for those parameters which are tested, there are no adverse conditions existing.

D. Potable Water Supply and Water Resource Management Coordination

The City of Pembroke Pines Water Treatment Plant provides potable water for the entire City of Pembroke Pines. The design capacity of the City's system in 2007 is 18 mgd. and the maximum day demand is ~~15.82~~16.09 MGD in 2025⁰ with a peak demand of ~~16.09~~16.57 MGD in 2040. The level of service for these facilities meets current standards and provides an adequate supply of water for the existing and

projected population of the entire City of Pembroke Pines.

Table 2-4 identifies the Utility Division's anticipated growth trends within the service area of the water plants which serve the entire City. It also identifies the per capita usage projected to occur utilizing the level of service standards updated in the Potable Water subsection of the Infrastructure Element (See IE Policy 7.6). IE Policy 7.6 reflects a level of service standard of ~~80.52~~81.25 gallons per capita per day. The previously adopted level of service was ~~106.82~~68 gallons per capita per day. These level of service standards are in conformance with the design capacity of the plant, including the projected and/or programmed improvements. Table 2-4 demonstrates that sufficient design capacity and levels of service will be available through the year 2040. No shortfalls in water supply are projected through 2040. The Ten Year WSFWP which includes additional data and analysis of the alternative water source project and future capacity is incorporated within this element (see Appendix – 10 Year Water Supply Facility Work Plan).

The level of service change based on the data of the WSFWP has been identified within updated IE Policy 7.6 of the Potable Water subsection of the Infrastructure Element. Both the current and projected level of service in the community is adequate for potable water facilities.

The level of service as identified above demonstrates a sufficient level in accordance with the Comprehensive Plan. The condition of the water plants is very good and the expected life of the plant is well beyond the year 203~~50~~. Impacts to natural resources are minimal and the withdrawal is monitored closely by the permit with the South Florida Water Management District.

There are a few individual water wells existing in the area of Southwest 196th Avenue where previously noted septic tanks are situated for large lot developments in that area. However, once the water lines are installed in this area, these residents will be required to hook up to the City's potable water system (see IE Policy 8.6). The supply of water for these small areas utilizing water wells is adequate in quantity and quality to meet federal and state standards. These facilities are monitored and permitted by the Broward County Health Department, which is an agency of the State of Florida.

Updates to the Potable Water section under Objective VII included modifying Policy 7.3 to provide that decisions regarding the location of infrastructure investments are made with priority for the lowest income neighborhoods consistent with the South Florida Regional Planning Council's Strategic Policy 2.4. Policy 7.7 has been updated to provide for the adoption of the 10-Year Water Supply Facilities Work Plan within 18 months after the adoption of the regional water supply plan as required by State Statutes. Objective VIII, Evaluation Measure for Objective VIII, and Policy 8.9 are modified for the new planning horizons. Policy 8.10 is modified to provide for continual updates to the infrastructure map on an as needed basis. The 202~~50~~ updates includes modifications for the new planning horizons as well as the updated

CONSERVATION ELEMENT ADOPTION DOCUMENT

III. GOALS, OBJECTIVES AND POLICIES

GOAL

Conserve, protect and appropriately utilize the City's natural resources.

OBJECTIVE I

Continue to protect, maintain or improve air quality in the City through 2030 in accordance with Broward County standards.

Evaluation Measure Objective I - Maintain records of permits reviewed by the Broward County Department of Planning and Environmental Protection.

Policy 1.1 - Continue to insure that all industrial uses within the community minimize the impact on air quality to the greatest extent possible through the utilization of the standards of the Broward County Department of Planning and Environmental Protection.

Policy 1.2 - Continue to implement the City's street tree planting program which aids in the maintenance of air quality.

Policy 1.3 - Continue to coordinate with Broward County, the State of Florida Department of Transportation, and other entities to facilitate alternative transportation modes, such as pedestrian walkways, bikeways, and public transit.

OBJECTIVE II

Conserve, appropriately use and protect the quantity and quality of the Region's water resources within the community ~~through 2030~~ in accordance with Broward County standards and the adopted Lower East Coast Regional Water Supply Plan, 2018 as adopted and updated for the applicable planning horizon.

Evaluation Measures Objective II - Annual record of development permits issued in compliance with Section 156.30, City Code and the Broward County Wellfield Protection Ordinance, as amended; Annual record of development permits issued that are in compliance with Section 50.35, City Code, which requires irrigation water to be provided through a non-potable water supply; and annual record of updates to the City's Ten Year WSFWP consistent with updates to the Lower East Coast Regional Water Supply Plan

Policy 2.1 - Continue to coordinate with the Broward County Department of Planning and Environmental Protection and implement Section 156.30, City Code, to comply with the Broward County Wellfield Protection Program.

CONSERVATION ELEMENT SUPPORT DOCUMENT

I. INTRODUCTION

A. Purpose

The purpose of the Conservation Element of the City of Pembroke Pines (CE) is to provide a guide for the conservation, use, and protection of natural resources within the City and immediately adjacent property. The Support Document which includes the data and analysis requirements section first identifies the significant resources occurring within the community and the impacts occurring on those resources. The Adoption Document which includes the Goals, Objectives, and Policies section follows the Support Document which will help to insure commitment to long-term programs. The adopted goal of this element will help the City to continue to conserve all of its natural resources and thereby provide a high quality of life for current and future residents of the City of Pembroke Pines. All of the objectives of the CE are followed by an evaluation measure.

The majority of the revisions to the Conservation Element consist of updates to both the Data and Analysis Requirements, and the Goals, Objectives, and Policies sections that reflect actual conditions and continuations in policies over the next planning horizons pursuant to the recommendations included in the City's recently adopted Evaluation and Appraisal Report (EAR), February 2006. In addition, the element contains several policies which were part of the Academic Village Amendment (DCA Reference No. 99-1) which was adopted by the City Commission on August 18, 1999, by Ordinance No. 1309. The adopted additions to this element primarily consist of policies that provide for the preservation of vegetative communities, and for the submittal and adoption of the Ten Year Water Supply Plan eighteen months after the adoption of the regional water supply plan, in accordance with State Statutes, and the adopted EAR.

The South Florida Water Management District (SFWMD) updated the Lower East Coast Regional Water Supply Plan in November 2018 and again in September 2024; therefore the City is required to adopt the applicable updates to its 10-Year Water Supply Facilities Work Plan (WSFWP) and Comprehensive Plan elements, by May 2020; however, due to Covid-19, the City's work plan was delayed. The updates for 2020 include text amendments to The City has updated its WSFWP and related Comprehensive Plan elements, including the Future Land Use, Infrastructure and Conservation Elements as well as the City's 10 Year water supply facilities work plan. The majority of changes were related to updating the planning horizon, which is currently 2025 to 2035s. The City is updating the Future Land Use, Conservation, and Infrastructure adoption elements along with the updated WSFWP. The WSFWP, as adopted and updated, will be incorporated within the Infrastructure adoption and support documents as well as the support element. The City's water supply and facilities can meet demand through the current 10-year planning horizon. No

alternative water supply improvements ~~were are~~ necessary ~~as the adopted level of service will be maintained through the year 2040.~~

The City is proposing to modify Objective IV and add policies 4.24 through 4.26 providing for the preservation and protection of the city's Bald Eagle active Bald Eagle nest. Tables CE-1 and 2 have also been updated.

On December 5th, 2017, the Broward County Commission passed Resolution No. 2017-558, designating the Buzzard's Roost Archeological Site as a historic resource. The site is identified on the City's Archeological map of the Conservation Element (CE-2) as BD92. As a result of this designation, the City is proposing to amend Policy 4.17 as follows:

Policy 4.17 - New archeological sites obtained from the Florida Master Site File Inventory were added to the City's natural resources map series (Map No. CE-2, CE – Appendix – Maps – Page 1) and will be updated on an as needed basis. The City hereby designates the Buzzards Roost Archeological site a historic resource which has a Florida Master Site File Number 8BD92, consistent with the Broward County designation pursuant to Resolution No. 2017-558, adopted December 5, 2017.

The above language has been reviewed with no objection by the county's Historic Preservation Officer, Rick Ferrer. In addition, the county does not require the City to take any action on Map No. CE-2.

Planning Horizons – The CE planning horizons are 202~~50~~ and 203~~50~~.

Service Area – The CE service area consists of the entire City of Pembroke Pines.

B. Physiography

The City of Pembroke Pines is situated in the southwestern portion of Broward County, which is the second largest county based upon population within the State of Florida. The County consists of approximately 1,200 square miles; however, only the eastern third (414 square miles) is considered within the planning or development area. Of these 414 square miles, the City of Pembroke Pines consists of approximately 34 square miles or approximately 9% of the entire County. The western part of the County (where Pembroke Pines is situated) is nearly level, generally a treeless plain that appears to be flat. The soils are organic and situated over a limestone base. In many places the soils are shallow; however, there are pockets of muck occurring throughout the western reaches of Pembroke Pines.

Prior to the diking of the Everglades, this area contained standing water for months at a time. However, since the draining of this area, the soils are fairly well drained organic soils subject to oxidation and subsidence. Occasionally, wild fires occur which burn off more of the organic soil, thereby decreasing the thickness of the material. Since

Management District, Broward County Water Management Division, Broward County Environmental Protection Department, and the City of Pembroke Pines. CE Policy 2.7 was adopted as recommended by the 1995 EAR to further protect the City's natural resources from pollution. CE Policy 3.2 provides for the implementation of land development regulations which manage hazardous waste in order to protect natural resources.

H. Current and Projected Water Needs

As noted in the Potable Water Element, there exists adequate capacity for the present/projected water needs through the year 2045. Projected water needs for the next ten years is ~~being submitted with the~~ shown in the Ten Year Water Supply Facilities Work Plan as adopted and updated.

The City of Pembroke Pines continues to comply with and endorses all programs of the South Florida Water Management District pertaining to water conservation and protection (See CE Policies 2.2, 2.3, 2.4, and 2.5) which provide for the implementation of applicable land development regulations and the roles of Broward County and the State of Florida in the conservation of water resources. Additionally, the City continues to endorse and comply with the Broward County Wellfield Protection Ordinance (See CE Policy 2.1 and FLU Policy 10.1) which further protects water quality.

The current and projected water needs and sources based upon residential, commercial, industrial and other uses can be found in Table 2-41.3 of the Ten Year Water Supply Facility Work Plan Update (2025) which updates and replaces IE-2 of the Infrastructure Element appendix section through the ~~year 2030~~ current ten year planning horizon. The Ten Year Water Supply Plan Update is required to be adopted within 18 months of the adoption of the regional water supply plan. Policies CE 2.15, 2.16, FLU 10.5, and IE 7.7 and 10.6 address the Ten Year Water Supply Plan requirements.

The 2002, 2004, and 2005 legislatures established a process for water supply planning, amending Chapters 163 and 373, F.S., to improve the coordination of water supply and land use planning. Senate Bills 360 and 444 strengthened the statutory linkage between the regional water supply plans prepared by the water management districts and local government comprehensive plans. The City of Pembroke Pines falls within the Lower East Coast Regional Water Supply Plan area and is required to ensure that adequate water supplies will be available to meet future demand, by developing a 10-year water supply facilities work plan (WSFWP). The WSFWP includes alternative water supplies, water reuse and conservation programs as required by State Statute, and are incorporated into the City's Comprehensive Plan through the Potable Water Supply and Water Resource Management Coordination sub-element of the Infrastructure Element. Amendments have been made to the goals, objectives, and policies and data and analysis sections of this element, along with Future Land Use, Infrastructure, Capital Improvements, and Intergovernmental Coordination Elements addressing water supply planning requirements. Cross-reference notations have been

added for all applicable amendments to the elements' goals, objectives and policies sections.

Conservation Element changes include Proposed Policies CE 2.17 (cross reference IE Policy 10.7), CE 2.18 (cross reference FLU Policy 10.6, IE Policy 9.3, and ICE Policy 1.9), and CE 2.19 (cross reference Existing CIE Policy 2.5). The changes also include updates to CE Objective II, Evaluation Measure for Objective II, and CE Policy 2.15 (cross reference IE Policy 7.1 and CIE Policy 2.7). Existing CE Policies 2.1 through 2.6, 2.11, 2.13, 4.11, 4.16, 4.21, and 4.22 are consistent with water supply planning requirements. In response to DCA's Objection, Recommendation and Comment report dated August 6th, 2008, CE Policy 4.23 has been added. The SFWMD updated the Lower East Coast Regional Water Supply Plan in November 2018 and again in September 2024; therefore the City is required to adopt the applicable updates by May 2020 to its 10-Year WSFWP and Comprehensive Plan elements. ; however, due to Covid-19, the City's work plan was delayed. The updates for 2020 include text amendments to The City has updated its WSFWP and related Comprehensive Plan elements, including the Future Land Use, Infrastructure and Conservation Elements as well as the City's 10 Year water supply facilities work plan. The majority of changes were related to updating the planning horizon~~s~~. The City is updating the Future Land Use, Conservation, and Infrastructure adoption elements along with the updated WSFWP. The WSFWP, as adopted and updated, is incorporated within the Infrastructure adoption and support documents. The City's water supply and facilities can meet demand through the current 10-year planning horizon. The WSFWP will be incorporated within the Infrastructure adoption element as well as the support element. ~~No alternative water supply improvements were are necessary, as the adopted level of service will be maintained through the year 2040.~~

The 2002, 2004, and 2005 legislatures established a process for water supply planning, amending Chapters 163 and 373, F.S., to improve the coordination of water supply and land use planning. Senate Bills 360 and 444 strengthened the statutory linkage between the regional water supply plans prepared by the water management districts and local government comprehensive plans. The City of Pembroke Pines falls within the Lower East Coast Regional Water Supply Plan area and is required to ensure that adequate water supplies will be available to meet future demand, by developing a 10-year water supply facilities work plan (WSFWP). The WSFWP includes alternative water supplies, water reuse and conservation programs as required by State Statute, and are incorporated into the City's Comprehensive Plan through the Potable Water Supply and Water Resource Management Coordination sub-element of the Infrastructure Element. Amendments were made to the goals, objectives, and policies section and Support Document of this element, along with Infrastructure, Conservation, Capital Improvements, and Intergovernmental Coordination Elements addressing water supply planning requirements. Cross-reference notations have been added for all applicable amendments to the elements' goals, objectives and policies sections.

Future Land Use Element changes include Proposed Policies 7.9 (cross reference existing IE Policy 8.7), 10.6 (cross reference IE Policy 9.3, CE Policy 2.18, and ICE Policy 1.9) and 11.13 (cross reference IE Policy 9.8, and ICE Policies 1.9 and 2.11). Existing FLU Objectives X (cross reference IE Objective IX) and XI were updated pursuant to the above requirements. Existing FLU Policies 12.1 and 13.3 are consistent with water supply planning requirements. In response to DCA's Objection, Recommendation and Comment report dated August 6th, 2008, FLU Policies 7.10, 7.11, 11.13, and 11.14 were added.

The work plan is required to be updated within 18 months after the SFWMD updates the regional supply plan. The SFWMD updated the Lower East Coast Regional Water Supply Plan (LECRWSP) in September 2013; therefore, the City is required to adopt the updates by March 2015. The updates include text amendments to the Future Land Use, Infrastructure and Conservation Elements and the City's 10 year water supply facilities work plan which was adopted by the City Commission in 2009 (Ordinance No. 1632). FLU Policies 7.7 and 10.5 were updated. The SFWMD updated the Lower East Coast Regional Water-LECRWSP in November 2018; therefore the City is required to adopt the updates by May 2020; however, due to Covid-19, the City's work plan was delayed. The updates for 2020 include text amendments to the Future Land Use, Infrastructure and Conservation Elements as well as the City's 10 Year wWater sSupply fFacilities Wwork Pplan (Work Plan). -The majority of changes were related to updating the planning horizons. The SFWMD updated the LECRWSP in September 2024. The City has updated its Work Plan and related Comprehensive Plan elements, including the Future Land Use, Infrastructure and Conservation Elements. The majority of changes are related to updating the planning horizon, which is currently 2025 to 2035. The Work Plan, as adopted and updated, is incorporated within the Infrastructure adoption and support documents. The City's water supply and facilities can meet

demand through the current 10-year planning horizon. No alternative water supply improvements are necessary.

The 2010 proposed changes include the reformatting of all elements into a support document and an adoption document. During the last EAR amendment process, DCA recommended the Comprehensive Plan Elements be reformatted into two documents, adoption and support documents. The adoption documents will typically consist of the goals, objectives and policies sections; permitted uses, non-residential intensity standards and future land use map of the Future Land Use Element; and the Ten Year Water Supply Facility Plan of the Infrastructure Element. The support documents typically consist of the data and analysis, implementation, and introduction sections of each element. Therefore, the permitted uses and non-residential intensity standards of this element have been deleted from this document and relocated to the Adoption Document of the Future Land Use Element. In addition to the above, the City is proposing a new residential land use category (High 25-50) subject to certain criteria which were developed to implement the City's redevelopment concepts for the eastern section of the city and to direct higher density residential toward areas where infrastructure exists and in closer proximity to public transit.

Proposed Policy 5.13 was added to be consistent with the Broward County Land Use plan adopted policy regarding the coordination of the county with the School Board on impacts resulting from land use plan amendment applications to the RAC, LAC, TOD and TOC categories.

On September 13, 2018, the Broward County Commission adopted the Broward Next Land Use Plan, which was an effort by the County to comprehensively update the County's land use planning program within the context of meeting the regional challenges of the county's future and anticipated population growth. The only portions of the City's future land use element affected by the proposed county changes is with respect to the County's Flexibility Zones and Rules which facilitates the arrangement of densities and intensities within the City boundaries. Prior to adoption of Broward Next, all municipalities in the county were divided into Flexibility Zones based on location and the physical attributes including street boundaries of each zone. Within each zone, the number of available reserve units which could be assigned to a non-residentially designated parcel of land was tabulated at 2 percent of total number of units permitted by land use designation. The total number of reserve units available for assignment for all the Flexibility Zones was 396. The Flexibility rules also provided a process for conversion of land use from residential to commercial and from commercial to residential without the need to apply for a land use plan amendment. The City of Pembroke Pines was divided into 13 Flexibility Zones. After adoption of Broward Next, municipalities were given the option of collapsing all the zones into one Unified Flexibility Zone.

On April 12, 2018, the Broward County Planning Council accepted the City's request to collapse all the zones into one Unified Flexibility Zone. The adopted county changes also

D. Potable Water

The City of Pembroke Pines Water Treatment Plant provides potable water for the entire City of Pembroke Pines. The design capacity of the City's system in 1990 was 12 mgd. and the demand for that facility was 8 mgd. with a peak demand of 12 mgd. In 2007, the design capacity of the city's system was 18 mgd.; however the plant is restricted to the 16.29 mgd allowed for by the South Florida Water Management Consumptive Use Permit (CUP). Currently, the demand for this facility is 13.5 mgd. The level of service for that facility meets current standards. The Infrastructure Element has been updated with respect to the annexed and de-annexed properties in the northwest portion of the city and effects on projected water use.

The expansion of the facility provides an adequate supply of water for the existing and projected population of the entire City of Pembroke Pines. Table 2-41.3 of the ~~proposed~~-10 Year Water Supply Facilities Work Plan (WSFWP) Update, provides an analysis of projected water use through 20450. No shortfalls in water supply are projected through 20450. Adequate water will be available to serve the City's residents through 20450.

E. Groundwater Recharge

The City of Pembroke Pines supports and complies with the Broward County Wellfield Protection Ordinance and the expansion of wellfields to provide potable water service for the future residents of Broward County, including the City of Pembroke Pines. Also, the City adheres to strict guidelines and standards for the pre-treatment of all stormwater discharge prior to discharge into the primary drainage system of the community in accordance with the criteria of the South Florida Water Management District, South Broward Drainage District, Central Broward Drainage District, and the Broward County Department of Planning and Environmental Protection. These pre-treatment standards continue to help insure that the aquifer is maintained to acceptable standards.