



Plan It! Pompano

POTABLE WATER SUB-ELEMENT

Purpose and Direction: The purpose of the Water Sub-Element is to set the policy direction to enable delivery of potable water services that are efficient, affordable and reliable even during a time of increasing threat to fresh water supplies due to sea level rise and the salt water intrusion that is part of the inevitable impacts of climate change.

The goal of this element is to protect our fresh water supply and maintain water treatment and distribution systems designed and maintained at the highest level to be durable, resilient, and sustainable to serve future generations to the maximum extent feasible and cost effective.

Goals, Objectives, and Policies

Goal 7A: Provide safe, reliable, sustainable, cost effective potable water to all residents and business within the City's water utility service areas and make the capital improvements necessary to maintain or improve potable water services.

Objective 07A.01.00 – Health & Safety

The City shall ensure the provision of a safe supply of potable water to customers in its service area through regulatory compliance and best operating and management practices.

Policy 07A.01.01

Deliver safe and reliable potable water to residents and businesses in the City of Pompano Beach service area.

Policy 07A.01.02

Maintain a conservation rate structure for potable water that provides a minimum level of usage at a cost effective rate.

Policy 07A.01.03

Provide sufficient water to meet system designed fire flows while maintaining required system pressure.

Policy 07A.01.04

Comply with all potable water standards and reporting requirements.

Policy 07A.01.05

Potable water service providers should notify customers of supply interruptions as soon as possible.

Policy 07A.01.06

Minimize the interruption of potable water service to customers and wasted water by responding quickly to breaks in water mains.

Policy 07A.01.07

Follow industry standards in disinfecting water mains in order to maintain optimum chlorine residual levels.

Policy 07A.01.08

The City of Pompano Beach shall review all proposed land use plan map amendments within the City limits for adequacy of water supplies.

Objective 07A.02.00 – Level of Service

The City of Pompano Beach shall maintain the level of service standard of 161 or lower gallons per capita per day.

Policy 07A.02.01

Capital improvement projects undertaken to maintain the established level of service standard will be included in the Capital Improvement Element of the Comprehensive Plan and implemented through the 5-Year Capital Improvements Plan (CIP) which is updated annually.

Policy 07A.02.02

The projected levels of service shall be the minimum levels of service maintained during the ten (10) year review period of the Consumptive Use Permit and ten (10) year Water Supply Plan planning periods.

Policy 07A.02.03

The City shall evaluate the level of services standards every five years in order to determine continued applicability.

Policy 07A.02.04

The design capacities and current (2007) demands for the Pompano Beach Water Facility and the Broward County Water Facilities 1A and 2A are as follows:

Pompano Beach Water Treatment Capacity

Lime Softening Plant:	40.00 million gallons per day in Design Capacity
Membrane Plant:	10.00 million gallons per day demand in 2019

Total:	50.00 million gallons per day in Design Capacity
	15.41 million gallons per day in 2019 demand

Broward County Water Treatment Capacity

2A Plant	40.00 million gallons per day in Design Capacity
	12.9 million gallons per day in 2019 demand

1A Plant	16.0 million gallons per day in Design Capacity
	7.45 million gallons per day in 2019 demand

Policy 07A.02.05

Update the Water Master Plan every five years.

Policy 07A.02.06

Review the decennial U.S. Census data and compare to the City's projected population projections to determine if any adjustments in population expectations are necessary.

Policy 07A.02.07

Prior to site plan approval, the anticipated water demand for a project will be determined to ensure that adequate water supply will be available to serve the new development.

Objective 07A.03.00 – Coordination with Other Entities

The City shall, through the use of Interlocal Agreements, provide potable water service to customers in Lighthouse Point and Lauderdale by the Sea; will work with Broward County Utilities which serves customers inside the City limits; and will maintain interconnections to these potable water systems.

Policy 07A.03.01

Continue to provide safe and reliable potable water services to the City of Lighthouse Point service area in accordance with the adopted Interlocal Agreement.

Policy 07A.03.02

Maintain an Interlocal Agreement or memorandum of understanding with the Town of Lauderdale by the Sea for the continued provision of safe and reliable potable water services.

Policy 07A.03.03

Maintain agreements for the delivery of safe and reliable potable water to City of Pompano Beach residents which are served by Broward County Water & Wastewater Services.

Policy 07A.03.04

Monitor development near the Town of Hillsboro Beach wellfield (925 NE 36th Street), which is located within the City of Pompano Beach city limits, to assist them in protecting their water supply. With continued sea level rise, salt water intrusion will eventually become a threat to that wellfield.

Policy 07A.03.05

Maintain agreements or memoranda of understanding which provide for various interconnections with other potable water entities which operate their own potable water systems

Policy 07A.03.06

Share information concerning ongoing water supply needs, especially through the 10-year Water Supply Plan process, with City of Lighthouse Point, Town of Lauderdale by the Sea, and Broward County.

Policy 07A.03.07

Coordinate with the City of Lighthouse Point and Broward County in the implementation of alternative water supply projects (primarily water reuse), establishment of level of service standards and resource allocations.

Objective 07A.04.00 – Capital Improvements

Taking into account recent technology advances and regulatory requirements, the City shall review and revise priorities for the replacement of facilities, correction of any existing water supply and facility deficiencies and provisions for future water supply and facility needs, as developed in the Water Master Plan, for inclusion in the City's 5 year Capital Improvement Plan and Capital Improvements Element.

Policy 07A.04.01

The construction of capital improvements will be prioritized based upon periodic review of the Water Supply, Treatment and Reuse Master Plans, accounting for changes in recent technology advances and regulatory requirements.

Policy 07A.04.02

Where potable water infrastructure improvements are required concurrent with private development, it shall be the responsibility of the developer to provide these systems (except in unique State or Federal grant situation).

Policy 07A.04.03

Whenever possible, the City shall attempt to supplement potable water improvements with funding from additional revenue sources including the issuance of City revenue bonds.

Policy 07A.04.04

Prepare Master Plans for system improvements and submit recommended improvements for the first five years in the City of Pompano Beach Capital Improvement Plan. Water system improvements shall include improvements to the Water Treatment Plants, the Water Reuse Plant, the reuse distribution system, the potable water distribution system or the wellfields

Policy 07A.04.05

The Utility Department will update the Water and Reuse Master Plans every 5 years.

Policy 07A.04.06

Upgrade water mains and lines, as suggested in the Water Master Plan, at strategic locations to meet current and future demand as well as maximize water quality, sustainability and maintain fire flows.

Policy 07A.04.07

To minimize the interruption of potable water service to customers due to breaks in water mains, the City's Capital Improvement Plan will follow recommendations in the Water Master Plan which addresses water line replacement at an economically feasible rate.

Policy 07A.04.08

To minimize rate increases for customers, the City's Capital Improvement Plan will follow the recommendations of the Water Master Plan, Water Supply Plan, Asset Management Program and staff considerations which address the replacement of capital equipment near the end of the equipment life expectancy.

Policy 07A.04.09

Rates for potable water usage shall include adequate funding for capital improvements and regulatory requirements.

Objective 07A.05.00 – Water Reuse

The existing water reuse facility will reduce consumption of potable water supplies for non-potable water purposes, thereby conserving limited supplies of potable water.

Policy 07A.05.01

Water reuse practices in the aquifer recharge areas will assist in the replenishment of the aquifer and slow the westward flow of the saltwater intrusion line.

Policy 07A.05.02

Continue to invest a minimum of \$400,000 per year in the construction of reuse distribution lines for the Reuse Water plant to enable residents, businesses and city properties to utilize reuse water for outdoor irrigation.

Policy 07A.05.03

Update the Water Reuse Master Plan every five years.

Policy 07A.05.04

Seek available grants (federal, state and local) for the expansion of the reuse water distribution system.

Policy 07A.05.05

To decrease potable water usage for irrigation, slow the westward movement of the salt water intrusion line, and reduce treated wastewater disposal demand, consider enacting a mandatory reuse connection for all residential properties like the one that exists for multifamily, commercial and Lighthouse Point customers.

Policy 07A.05.06

Install reuse distribution lines at a rate to meet the needs identified in the Lower East Coast Water Supply Plan.

Policy 07A.05.07

Upgrade the Water Reuse Facility to include advanced treatment in order to meet future water quality regulatory requirements.



Objective 07A.06.00 – Other Alternative Water Supply Sources

Policy 07A.06.01

The City shall pursue alternative water supply sources as recommended in the Water Master Plan based on need.

Policy 07A.06.02

Develop alternative water supplies, such as reuse or buying into the C-51 basin project, to satisfy projected water demands.

Policy 07A.06.03

Develop partnerships with other utilities, in order to minimize cost increases of investigating other alternative water supplies such as the use of reuse water, stormwater reservoirs and stormwater recharge.

Policy 07A.06.04

Explore the water storage capabilities of the C-51 storage facility and invest in that project's capacity to meet the City's water needs.

Objective 07A.07.00 – Conservation

Conserve potable water resources through a proactive water conservation program.

Policy 07A.07.01

Maintain the existing water surcharge fee which is levied during times of water shortages.

Policy 07A.07.02

Current and future raw water withdrawals shall comply with the requirements of the SFWMD consumptive use permit

Policy 07A.07.03

For all new building permits, water conserving fixtures shall be required.

Policy 07A.07.04

Encourage the planting of "Florida Friendly" plants and support "Florida Friendly Best Management Practices for Protection of Water Resources by Green Industries".

Policy 07A.07.05

Continue the public education program to encourage water conservation and to provide technology upgrades, like the free Dropcountr App, to provide the most recent tools for water use monitoring and conservation.

Policy 07A.07.06

Maintain leak prevention and detection program such that unaccounted water loss is maintained at less than 10%.

Policy 07A.07.07

Continue to implement a formal water conservation program as required by the Consumptive Use Permit.

Policy 07A.07.08

Revise the Code of Ordinances to include updates to the water conservation program

Policy 07A.07.09

Participate in Broward County's water conservation programs, such as the "Mobile Irrigation Lab" and "Know the Flow".

Policy 07A.07.10

Comply with Broward County's year round irrigation rule as referenced in the City of Pompano Beach 10 year Water Supply Plan.

Objective 07A.08.00 – Aquifer Resource and Protection

The City shall operate the potable water system and water reuse system in a manner that treats the Biscayne Aquifer as a renewable resource and protects it from depletion.

Policy 07A.08.01

The City shall adhere to the restrictions of the Wellfield Protection Ordinance.

Policy 07A.08.02

The City shall adhere to the restrictions of the Consumptive Use Permit.

Policy 07A.08.03

Protect the integrity of the two wellfields by designating wellfield sites with a suitable land use designation which restricts inappropriate development.

Policy 07A.08.04

Protect the integrity of the two wellfields by City ownership of the wellfield sites or restrictive easements on the wellfield sites and water lines from the wells.

Policy 07A.08.05

Continue to monitor saltwater intrusion so that timely action can be taken to protect the eastern wells to the maximum extent possible and to determine when they must be removed from use.

Policy 07A.08.06

Slow saltwater intrusion into the eastern wellfield by adding reuse water to recharge the aquifer in the vicinity of the eastern wellfield.

Policy 07A.08.07

Follow recommended practices and make improvements to the wells in the eastern and western wellfields as recommended in the Water Master Plan as necessary to maintain capacity and water quality. Lock in and protect the eight future western well sites in Palm Aire.

Policy 07A.08.08

Review all land use plan map and text amendments, rezonings and site plan applications to ensure that there is sufficient potable water resources available to serve the proposed development.

Objective 07A.09.00 – Maintenance Procedures

Follow recommended utility maintenance industry standards and construct required improvements to assure proper operating capabilities as recommended in the Water Master Plan.

Policy 07A.09.01

Maintain the water treatment plant facility and equipment such that the facility meets all regulatory requirements and that said equipment and facility are maintained and improved as needed.

Policy 07A.09.02

Plant chemicals are handled according to OSHA and SDS sheets to ensure all safety requirements are met in order to prevent accidents resulting in injury, loss of life, disruption of service or costs due to environmental remediation or liability.

Policy 07A.09.03

Ensure the preventative maintenance program for wells meets sanitary survey requirements.

Policy 07A.09.04

Maintain a leak prevention and detection program such that unaccounted water loss is maintained at less than 10%.

Policy 07A.09.05

Maintain an active Emergency Response Plan to prevent loss of human life, damage to property and to provide for continuation of service in the event of natural or man-made disaster.

Policy 07A.09.06

Maintain current interconnects with other Utilities to provide water in an emergency, and upgrade interconnects to meet backflow prevention requirements.

Policy 07A.09.07

Maintain mutual aid agreements with organizations such as FLAWARN in order to mitigate disasters.

Policy 07A.09.08

The water treatment facility, water reuse facility and distribution system shall maintain 100% compliance with all regulations.

Objective 07A.10.00 – Regulatory Matters

Comply with all water quality, operations and reporting regulations.

Policy 07A.10.01

Ensure Department of Environmental Protection inspections result in a finding of compliance.

Policy 07A.10.02

Protect wells such that water quality meets all regulatory requirements.

Policy 07A.10.03

Maintain an effective distribution system per the American Water Works Association (AWWA) standards such that water quality within the distribution system meets regulatory requirements and water delivery meets demand.

Policy 07A.10.04

Meet regulatory requirements as well as AWWA standards for flushing, backflow prevention, valve exercising and cross connection control.

Policy 07A.10.05

To ensure coordination of the Comprehensive Plan with the Lower East Coast (LEC) Water Supply Plan Updates, continue to adopt the necessary updates to the Water Supply Plan within 18 months of any adopted update to the LEC.

Goal 7B: Incorporate the best available data and science, into policy and planning decisions for infrastructure, recognizing the impacts associated with long range climate change.

Objective 07B.01.00 – Southeast Florida Regional Climate Change Compact

The City shall be an active member of the Southeast Florida Climate Change Compact and will follow the policy direction provided by the Compact.

Policy 07B.01.01

The City shall adopt the Southeast Florida Regional Climate Change Compact sea level rise projections, which are anticipated to be updated at least every 5-years, as the basis for sea level rise planning and adaptation initiatives.

Objective 07B.02.00 – Ensure Resiliency

The City shall take actions to maximize the resiliency of existing and future water resources, and water and wastewater infrastructure, from the predicted impacts of climate change which include sea level rise related salt water intrusion and associated fresh water shortages as well as flood damages from increased rain and flooding from rain and storm surge caused by increased hurricane size and intensity.

Policy 07B.02.01

Identify public water infrastructure at risk from sea level rise and other climate change related impacts and provide periodic updated assessments no later than every five years in the Water, Reuse and Wastewater Master Plan.

Policy 07B.02.02

Provide for increases assessments needed for projected water and wastewater management as changing land use patterns occur under the potential impacts of climate change.

Policy 07B.02.03

Protect existing well fields, surface storage facilities, control structures, water and wastewater treatment plants and transmission infrastructure from increased coastal flooding, sea level rise, saltwater intrusion, and other potential climate change impacts, and plan for infrastructure replacement and relocation as needed.

Policy 07B.02.04

Continue to enforce mandatory reuse connection for commercial and multifamily property irrigation when reuse water is available.

Policy 07B.02.05

Continue to support a comprehensive saltwater intrusion monitoring program, together with the South Florida Water Management District and the United States Geological Survey that provides measurable movement of the saltwater intrusion line.

Policy 07B.02.06

Improve resilience against salt water intrusion, and other related impacts of climate change and sea level rise through the Comprehensive Plan related Elements, the Ten Year Water Supply Facility Work Plan, and the Water and Reuse Master Plans.

Objective 07B.03.00 – Intergovernmental Coordination

The City shall create and maintain effective intergovernmental coordination and ongoing communication that supports sustainable water supplies and resource protection while maintaining climate change preparedness.

Policy 07B.03.01

Collaborate with local, regional, state and federal partner agencies on developing the scientific, technical knowledge and integrated modeling efforts and continuous data collection needed to understand the potential impacts of climate change on the region's water resources.