

POTABLE WATER SUBELEMENT
GOALS, OBJECTIVES AND POLICIES

Goal 1: Provide safe, reliable, cost effective potable water to all residents and business within the City’s water utility service areas and make capital improvements necessary to maintain or improve potable water services.

Objective 1: Health & Safety

The City shall ensure the provision of a safe and sanitary supply of potable water to customers in its service area through good operating practices.

Policy 1: Deliver safe and reliable potable water to residents and businesses in the City of Pompano Beach service area.

Policy 2: Maintain a conservation rate structure for potable water which provides a minimum level of usage at a cost effective rate

Policy 3: Maintain agreements for the delivery of safe and reliable potable water to City of Pompano Beach residents and businesses which are served by outside providers

Policy 4: Provide sufficient water to meet system designed fire flows while maintaining required system pressure.

Policy 5: Comply with all potable water standards and reporting requirements which pertain to health and safety

Policy 6: Potable water service providers should notify customers of supply interruptions as soon as possible and as clearly as possible.

Policy 7: Minimize the interruption of potable water service to customers and wasted water by responding quickly to breaks in water mains.

Policy 8: Follow industry standards in disinfecting water mains in order to maintain optimum chlorine residual levels.

Policy 9: The City of Pompano Beach shall review all proposed land use plan map amendments within City limits for adequacy of water supplies and identify any adverse impacts on the water supply system.

Objective 2: Level of Services

The City of Pompano Beach shall maintain the level of service standards at 191 or lower gallons per capita per day.

Policy 1: Capital improvement projects undertaken to maintain the established levels of service will be implemented in accordance with the schedule provided in the Capital Improvement Element of the Comprehensive Plan.

Policy 2: 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 3: The City shall annually evaluate the level of services standards in order to ascertain continued applicability.

Policy 4: 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	
Lime Softening Plant	40.00 million gallons per day in Design Capacity
Membrane Plant	10.00 million gallons per day in Design Capacity
Total	50.00 million gallons per day in Design Capacity 12.42 million gallons per day in Current Demand
Broward County	
2A Plant	30.00 million gallons per day in Design Capacity 12.32 million gallons per day in Current Demand
Broward County	
1A Plant	10.67 million gallons per day in Design Capacity 7.14 million gallons per day in Current Demand

Note: All demand figures are for 2013

Policy 5: Evaluate the need to update the Water Master Plan every five years.

Policy 6: Review the decennial U.S. Census data and adjust accordingly population projections.

Policy 7: The City of Pompano Beach will consult with the water supplier, prior to issuing the building permit or its functional equivalent, to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance of a certificate of occupancy or its functional equivalent by the City.

Objective 3: Coordination with other entities

The City shall through the use of Interlocal Agreements provide potable water service to customers outside the City limits, cooperate with Broward County Utilities which serves customers inside the City limits and maintain interconnections to the potable water systems.

Policy 1: Continue to provide safe and reliable potable water services to the City of Lighthouse Point service area according to Interlocal Agreement

Policy 2: Negotiate 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 3: Maintain agreements for the delivery of safe and reliable potable water to City of Pompano Beach residents which are served by outside providers.

Policy 4: Monitor development near the Town of Hillsboro Beach wellfield, which is located within the City of Pompano Beach city limits, to assist them in protecting their water supply.

Policy 5: Maintain agreements or memoranda of understanding which provide for various interconnections with other potable water entities which operate their own potable water systems

Policy 6: 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 7: Coordinate with City of Lighthouse Point, Town of Lauderdale by the Sea, and Broward County in the implementation of alternative water supply projects (primarily water reuse), establishment of level of service standards and resource allocations.

Objective 4: Capital Improvements

The City shall review and revise priorities for the replacement of facilities, correction of 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 the Capital Improvement Element, taking into account recent technology advances and regulatory requirements.

Policy 1: The construction of capital improvements will be prioritized based upon periodic review of the master plans, accounting for changes recent technology advances and regulatory requirements,

Policy 2: Where Potable water service is 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 3: 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 4: 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 Water Treatment Plant, Water Reuse Plant, reuse distribution system, potable water distribution system or wellfields

Policy 5: Utility Department will evaluate the need to update Master Plan every 5 years.

Policy 6: 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 and maintain fire flows.

Policy 7: 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 8: To minimize rate increases for customers, the City's Capital Improvement Plan will follow the recommendations of the Water Master Plan, Water Supply Plan and staff considerations which address the replacement of capital equipment near the end of the equipment life expectancy.

Policy 9: Rates for potable water usage shall include adequate funding for capital improvements.

Objective 5: 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 1: Water reuse practices in the aquifer recharge areas will assist in the replenishment of the aquifer and halt the westward flow of the saltwater intrusion line.

Policy 2: Continue to provide reuse water at a rate lower than potable water rate.

Policy 3: Continue to construct distribution lines for the Water Reuse plant, which will enable residents, businesses and city properties to utilize reuse water for outside irrigation functions at the minimum rate of \$300,000 per year .

Policy 4: Evaluate the need to update Water Reuse Master Plan every five years.

Policy 5: Seek available grants (federal, state and local) for the expansion of the reuse water distribution system

Policy 6: Encourage hook-ups to water reuse distribution system, especially large users, to decrease potable water usage for irrigation.

Policy 7: Install reuse distribution lines at a rate to meet Lower East Coast Water Supply Plan requirements for 2030.

Policy 8: Upgrade Water Reuse Facility to include advanced treatment in order to meet future water quality regulatory requirements for projects such as wellfield recharge.

Objective 6: Other Alternative Water Supply Sources

The City shall pursue alternative sources of raw water supply/treatment such as utilization of the Floridan Aquifer through reverse osmosis and to supplement the existing water reuse system.

Policy 1: The City shall pursue alternative water supply sources as recommended in the Water Master Plan based on need.

Policy 2: Develop Alternative Water Supplies, such as Reuse or Floridan aquifer wells, to satisfy projected water demands, which cannot be met through increased allocations in the Consumptive Use Permit.

Policy 3: Develop partnerships with other utilities, in order to minimize cost increases, investigating other alternative water supplies such as the use of the reuse water, stormwater reservoirs and stormwater recharge.

Policy 4: Continue exploring the water storage capabilities of the C-51 storage facility

Objective 7: Conservation

Conserve potable water resources through a proactive water conservation program

Policy 1: Maintain existing water surcharge fee which is levied during times of water shortages.

Policy 2: Current and future raw water withdrawals shall comply with the requirements of the SFWMD consumptive use permit

Policy 3: For all new building permits, water conserving fixtures shall be required.

Policy 4: Encourage the planting of “Florida Friendly” plants and support “Florida Friendly Best Management Practices for Protection of Water Resources by Green Industries, 2008”.

Policy 5: Continue the public education program to encourage water conservation

Policy 6: Maintain leak prevention and detection program such that unaccounted water loss is maintained at less than 10%.

- Policy 7: Continue to implement a formal water conservation program as required by the Consumptive Use Permit.
- Policy 8: Revise Code of Ordinances to include updated conservation program
- Policy 9: Participate in Broward County’s water conservation programs, such as “Mobile irrigation”, “Water Matters’ and “Know the Flow”.
- Policy 10: Adopt and enforce a year –round irrigation program as referenced in the City of Pompano Beach 10 year Water Supply Plan

Objective 8: 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 1: The City shall adhere to the restrictions of the Wellfield Protection Ordinance.
- Policy 2: The City shall adhere to the restrictions of the Consumptive Use Permit.
- Policy 3: Protect the integrity of the two wellfields by designating wellfield sites with a suitable land use designation which restricts inappropriate development.
- Policy 4: 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 5: Continue to monitor saltwater intrusion near eastern wells so that wells remain usable and that timely action to save the wells can be taken
- Policy 6: Prevent saltwater intrusion into eastern wellfield site by adding reuse water to prevent western movement of the saltwater intrusion line wellfield.
- Policy 7: 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.

Policy 8: Review all land use plan map amendments, rezonings and site plan applications to ensure that there is sufficient potable water resources available and that they pose no harmful impacts to the Biscayne Aquifer.

Objective 9: Maintenance Procedures

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

Policy 1: Maintain Water Treatment Plant Facility and Equipment such that Facility meets all regulatory requirements and that said equipment and facility are maintained and improved as needed.

Policy 2: A proper preventative maintenance program effectively requires 80- 90% of maintenance time, while emergency maintenance occupies only 10-20% of all maintenance hours (AWWA Manual 5).

Policy 3: Plant chemicals are handled such that 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 4: Preventative maintenance program for wells meets sanitary survey requirements.

Policy 5: Maintain a leak prevention and detection program such that unaccounted water loss is maintained at less than 10%.

Policy 6: 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 7: Maintain current interconnects with other Utilities to provide water in an emergency, and upgrade interconnects to meet backflow prevention requirements.

Policy 8: Maintain mutual aid agreements with organizations such as FLAWARN in order to mitigate disasters.

Policy 9: The water treatment facility and water reuse facility and distribution system shall maintain 100% compliance with all regulations.

Objective 10: Regulatory Matters

Comply with all water quality, operations and reporting regulations.

Policy 1: Average of plant inspections result in 90% rating or better.

Policy 2: Protect wells such that water quality meets all regulatory requirements.

Policy 3: Maintain an effective distribution system per American Water Works Association (AWWA) standards such that water quality within the distribution system meets regulatory requirements and water delivery meets demand.

Policy 4 Meet regulatory requirements as well as AWWA standards for flushing, backflow prevention, valve exercising and cross connection control.

Policy 5: The City's Building Inspection Division will perform residential reuse inspections and the City's Utilities Department will perform annual signage inspections as required by the Florida Department of Environmental Protection permit, the Broward County permit, and the City's Reuse Manual

Policy 6: To ensure coordination of the Comprehensive Plan with the Lower East Coast Water Supply Plan Update, approved by the South Florida Water Management District on September 12, 2013, and prepare updates to Water Supply Plan within 18 months of any future updates to the LEC as approved by the South Florida Water Management District.

Goal 2: Incorporate the best available data and science, into its policy and planning decisions for infrastructure, (recognizing the uncertainty associated with long range climate change predictions).**Objective 1: Southeast Florida Regional Climate Change Compact Ratification**

Policy 1: The City shall adopt the southeast Florida Regional Climate Change Compact Agreed Modified Guidance developed by the U.S. Army Corps as a starting point for climate change action.

Objective 2: Ensure Resiliency

The City shall ensure resiliency of existing and future water resources, water and wastewater infrastructure to the predicted impacts of climate impacts for the protection of water quality, flood damage and water shortages.

Policy 1: 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.

Policy 2: Provide for increase assessments needed for projected water and wastewater management as changing land use patterns occur under the potential impacts of climate change.

Policy 3: 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 future climate change impacts, and plan for infrastructure replacement and relocation as needed.

Policy 4: Continue to enforce mandatory reuse zones for commercial and multifamily property irrigation when reuse water is available.

Policy 5: 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 6: Improve resilience to coastal and inland flooding, salt water intrusion, and other related impacts of climate change and sea level rise through the Comprehensive Plan Amendments and related Elements, the Ten Year Water Supply Facility Work Plan, and the Water and Reuse Master Plans.

Objective 3: 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 1: 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.