

Potable Water Supply, Wastewater & Reuse Element

GOAL ONE: HIGH QUALITY AND AFFORDABLE POTABLE WATER WILL BE AVAILABLE TO MEET THE EXISTING AND PROJECTED DEMANDS OF PINELLAS COUNTY UTILITY CUSTOMERS.

1.1. Objective: Pinellas County shall continue to cooperate on a regional level to ensure that adequate and dependable supplies of potable water are available to meet existing and projected potable water demands, and shall coordinate the issuance of building permits and development orders with the availability of potable water. Policies 1.1.1 through 1.1.4 represent the adopted level of service standards for potable water systems serving Pinellas County.

1.1.1. Policy: Except as otherwise provided in the Master Water Supply Contract and in the associated Interlocal Agreement, all potable water required by Pinellas County Utilities to serve its customers shall be supplied by Tampa Bay Water.

1.1.2. Policy: In the event that Tampa Bay Water determines that the regional system has experienced a “shortfall” or “production failure” as defined in the Interlocal Agreement, Pinellas County shall respond with one or more of the following actions and alternatives:

- a. Institute additional water conservation measures;
- b. Halt or otherwise restrict the issuance of development orders and permits;
- c. Develop new sources of potable water within the parameters of the Interlocal Agreement;
- d. Purchase potable water from suppliers other than Tampa Bay Water;
- e. Cooperate with Tampa Bay Water, the Southwest Florida Water Management District, and the affected local governments to develop a regional response to the situation; and
- f. Use actions and alternatives not identified within this policy.

1.1.3. Policy Pinellas County shall use the following Level of Service when preparing its annual 5-year and 20-year potable water demand projections for the Pinellas County Water Demand Planning Area, which are required by the Master Water Supply Contract to enable Tampa Bay Water to formulate its capital improvement program:

Pinellas County Water Demand Planning Area (gpcpd)

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|-------|------|------|------|------|------|------|------|------|------|------|
| Year | 1990 | 1994 | 1995 | 1997 | 2000 | 2005 | 2010 | 2015 | 2020 | 2025 |
| gpcpd | 150 | 145 | 135 | 125 | 125 | 120 | 120 | 120 | 115 | 115 |

gpcpd = gallons per capita per day

- 1.1.4 Policy: To determine whether adequate capacity is available for a development or redevelopment project in the unincorporated County that is served by a municipal potable water system, Pinellas County will utilize the level of service standards adopted by the municipal service provider.
- 1.1.5. Policy: To facilitate land use planning and to support concurrency management, Pinellas County will track trends in water demand on an annual basis to be able to anticipate, and plan for, changing trends in water use and water availability.
- 1.1.6 Policy: Pinellas County will continue to utilize its Concurrency Management System and Groundwater Protection program as one means of linking land and water management, and assuring the availability and reliability of the potable water resource.
- 1.1.7 Policy: Pinellas County will continue to support the value of local and regional partnerships in the provision of potable water supply, and will coordinate its water supply facilities planning with Tampa Bay Water and the Southwest Florida Water Management District and with their respective Master Water Plan and Regional Water Supply Plan.
- 1.2. Objective: Pinellas County Utilities will maintain a Ten Year Workplan, that includes the relevant recommendations of the Regional Water Supply Plan, and incorporates a six-year schedule of Capital Improvements, in order to correct existing deficiencies, to replace worn out or obsolete facilities, to fund new and ongoing conservation initiatives, to provide the facilities and programs to meet retail and wholesale customer needs, and to accommodate desired future growth.
- 1.2.1. Policy: A Capital Improvements Program should be prepared on an annual basis for the purpose of evaluating and ranking projects what are proposed for inclusion in the Six year Schedule of Improvements, as well as for inclusion in the Comprehensive Plan.
- 1.2.2. Policy: Pinellas County shall rely upon Tampa Bay water to develop additional potable water supply sources to meet the wholesale and retail customer needs of Pinellas County Utilities except as otherwise provided in the Master Water Supply Contract and in the associated Interlocal Agreement.

- 1.2.3. Policy: Pinellas County Utilities will account for the potable water supply needs of its wholesale and retail customers in the population estimates and projections provided annually to Tampa Bay Water, and in the County's capital facilities planning, consistent with the provisions within the individual interlocal agreements with municipal governments.
- 1.3. Objective: The County shall prioritize its capital improvement projects to meet projected potable water treatment, distribution and asset management needs through the Year 2025.
- 1.3.1. Policy: Projects shall be undertaken in accordance with the schedule provided in the Capital Improvements Element of this Plan, but will be considered yearly based on available funds and the project's urgency.
- 1.3.2. Policy: By January 2010, Pinellas County Utilities will implement a potable water asset management program in order to promote better tracking, management, identification and scheduling of necessary facility upgrades and improvements.
- 1.4. Objective: Pinellas County Utilities will be a model of economic sustainability by developing innovative ways to provide affordable and competitively-priced potable water.
- 1.4.1. Policy: Pinellas County will continue to discuss at the regional level the cost of water associated with the existing water supply partnership and its impact not only on the citizens of Pinellas County but also on the local economy and the ability to attract and retain light industrial/high tech employers.
- 1.4.2. Policy: Pinellas County will evaluate the feasibility of expanding available utility product choices to its customers in order to generate additional operating revenue.
- 1.4.3. Policy: Pinellas County Utilities will establish water rates that are determined by sound fiscal policy, are competitive and provide value consistent with best business practices of national high performance water suppliers.
- 1.4.4. Policy: Pinellas County will coordinate wholesale and retail rates with the Capital Improvements Planning Cycle and Tampa Bay Water's unitary rate, and considering comparative rates and value provided by other water suppliers in the region.
- 1.4.5. Policy: Pinellas County will continue to work with municipalities supplying water to unincorporated areas to encourage services proportionate to the additional surcharge unincorporated residents pay for potable water services.

- 1.5. Objective: Pinellas County shall continue to provide to its customers high quality and safe potable water in accordance with, at a minimum, standards set by the United States Environmental Protection Agency, the Florida Department of Environmental Protection and the Pinellas County Public Health Unit.
- 1.5.1. Policy: Pinellas County shall continue to provide the necessary treatment to improve corrosion control for treated water, as needed.
- 1.5.2. Policy: Pinellas County shall continue to collect samples from treatment plant influent and effluent in order to monitor the quality of water being discharged to the distribution system.
- 1.5.3. Policy: Pinellas County shall continue to collect samples at pumping stations and designated locations throughout the distribution system in order to monitor water quality.
- 1.5.4. Policy: Pinellas County Utilities will continue to work with its wholesale water provider, Tampa Bay Water, to ensure continued provision of quality water to all customers of Pinellas County Utilities.
- 1.5.5. Policy: Because the regional supply is obtained from multiple sources of differing qualities, Pinellas County Utilities will continue to evaluate how best to provide consistency in the quality of the potable supply.
- 1.5.6. Policy: In order to provide a consistent quality of water to existing potable water customers, Pinellas County Utilities will continue to utilize methods such as corrosion inhibition and residual disinfection technologies and enhancements.
- 1.6. Objective: The County shall continue to promote the concept that potable water sources and groundwater recharge areas are regional resources that should be protected to ensure adequate water supply capacity and equitable distribution.
- 1.6.1. Policy: Pinellas County shall continue to coordinate and collaborate with the Southwest Florida Water Management District and Tampa Bay Water in order to enable the refinement of respective methods of water demand forecasting, and to arrive at mutual understandings of both agency and local government data needs and uses.

GOAL TWO: WASTEWATER COLLECTION, TREATMENT, REUSE AND DISPOSAL FACILITIES ARE AVAILABLE TO SAFELY MEET EXISTING AND FUTURE DEMANDS, IN A MANNER THAT CONTRIBUTES TO WATER CONSERVATION, AND DOES NOT DEGRADE THE SURROUNDING NATURAL ENVIRONMENT.

- 2.1. Objective: Pinellas County Utilities (PCU) shall provide the levels of service necessary for proper wastewater treatment, reuse and disposal in order to ensure the protection of its citizens and the environment and to provide

adequate wastewater treatment capacity for all current and projected wastewater facility demands of Pinellas County Utility customers.

- 2.1.1. Policy: Wastewater flows associated with existing and permitted development cannot exceed the wastewater treatment plant's permitted design capacity.
- 2.1.2. Policy: Treated effluent and biosolids shall meet all pertinent federal, state and local standards and regulations for treatment, reuse and disposal.
- 2.1.3 Policy: Pinellas County will, for concurrency management purposes, annually compare wastewater flows to permitted treatment capacity to determine the percentage of available capacity and assess whether permitted treatment capacity exceeds the needs of existing and committed development. If available treatment capacity meets this standard, development can be permitted.
- 2.1.4 Policy: Unpredictable situations where permitted capacity is temporarily exceeded due to unanticipated situations such as limited/extreme weather conditions shall not impact the determination of level of service conditions.
- 2.1.5 Policy: If an annual assessment evidences that a capacity deficit could occur within 10 years, Pinellas County Utilities will prepare a more detailed capacity analysis as directed by 62-600.405, F.A.C, and determine whether facility expansion is required or if the service area is built out.
- 2.1.6. Policy: Peak design flow capacity shall be between 1.5 and 2.5 times the average daily flow for each sanitary sewer system, based on the individual characteristics of the system.
- 2.1.7. Policy: To determine whether adequate capacity is available for a development or redevelopment project in the unincorporated County that is served by a municipal wastewater system, Pinellas County will utilize the level of service standards adopted by the municipal service provider.
- 2.1.8. Policy: The concurrency management program adopted by the Pinellas County Board of County Commissioners shall recognize that wastewater treatment plants must be in compliance with the operational permit requirements of the State Department of Environmental Protection regarding the availability of capacity.
- 2.1.9. Policy: By 2010, Pinellas County Utilities will, in conjunction with the Planning Department, identify whether there are service areas where additional treatment capacity may be required within the next 10 and 20 years, and will develop appropriate recommendations

that are economically feasible and environmentally sound to address any potential treatment deficiencies.

- 2.1.10. Policy: All regulations pertaining to the safe and efficient operation of sanitary sewer facilities, surface water discharge, and reclaimed water use shall be adhered to (as indicated in the Regulatory Framework section of the Potable Water Supply, Wastewater and Reuse Element).
- 2.2. Objective: Wastewater Treatment facilities and their operation shall continue to be protected from natural disasters, and, consistent with regulatory requirements for siting, will not represent a public safety hazard or a public nuisance.
- 2.2.1. Policy: All federal, state and local regulations pertaining to the siting construction and operation of wastewater facilities (as indicated in the Regulatory Framework section of the Sanitary Sewer Element) shall continue to be adhered to.
- 2.2.2. Policy: No future siting of any wastewater treatment plant shall occur within the Coastal Storm Area.
- 2.2.3. Policy: Pinellas County Utilities will continue to maintain existing infrastructure, including within the Coastal Storm Area, where directed by individual interlocal agreements.
- 2.3. Objective: A Capital Improvements Program will be prepared annually for the purpose of evaluating the current implementation schedule for improvements. The purpose of the program is to:
1. Evaluate and prioritize new projects for inclusion in the Six-Year Schedule of Improvements;
 2. Modify existing priorities as determined by the Capacity Management Operations and Maintenance (CMOM) Program and the Utilities Asset Management Program;
 3. Modify funding strategies so that all facets of the wastewater collection, treatment and reuse system meet customer needs, operate optimally, and are environmentally sound.
- 2.3.1. Policy: Maximizing the use of existing wastewater treatment facilities, rather than constructing new treatment facilities, will be a priority.
- 2.3.2. Policy: Priority in the Capital Improvements Program will be given to projects that address existing facility deficiencies or needs, and projects to accommodate future development will have secondary priority.

- 2.3.3. Policy: By January 2010, Pinellas County Utilities will implement a sanitary sewer and reclaimed water asset management program in order to promote better tracking, management, identification and scheduling of facility upgrades and improvements.
- 2.3.4. Policy: Pinellas County will continue to submit updates to the Capacity, Management Operation and Maintenance (CMOM) plan every five years to the United States Department of Environmental Protection (USEPA), will continue to conduct self-audits of its wastewater operations, and will address and implement pertinent results of these audits where necessary.
- 2.3.5. Policy: Pinellas County Utilities will ensure the proper maintenance and integrity of the wastewater and reuse system infrastructure and make the necessary funding commitments to correct facility deficiencies or maintenance problems.
- 2.4. Objective: Pinellas County will continue its commitment to a regional wastewater system.
- 2.4.1. Policy: Preservation and restoration of ground and surface water quality, including the protection of associated habitats, shall be a priority in the consideration of wastewater treatment, reuse and disposal methods.
- 2.4.2. Policy: In conjunction with the annual Capital Improvement Program, Pinellas County Utilities shall prioritize and provide regional sewer service to those areas where it is determined to be feasible, and in order to prevent degradation of the natural environment.
- 2.4.3. Policy: The County shall require hook-up to the regional wastewater system within six months of it becoming available pursuant to the wastewater provisions of the Pinellas County Code, and will enforce hook-up requirements in those watersheds where onsite sewage disposal systems are a known pollution problem.
- 2.4.4. Policy: By 2010, Pinellas County Utilities will develop various educational materials for residents and businesses regarding options available to them to comply with connection requirements for onsite sewage treatment and disposal systems.
- 2.4.5. Policy: New and replacement onsite sewage treatment and disposal systems shall be prohibited in those areas where geology and soils indicate possible contamination of surface waters from seepage as long as a regional system is available.
- 2.4.6. Policy: Pinellas County Utilities shall continue to develop regional alternatives to onsite sewage treatment and disposal systems and

will work with municipalities on a case by case basis to develop solutions where feasible.

- 2.4.7. Policy: Pinellas County Utilities shall establish dialogues with interested municipalities to determine the feasibility of transporting wastewater across service boundaries.
- 2.4.8. Policy: Onsite sewage treatment and disposal system use shall not conflict with determinations to be made by the wellfield protection program regarding the County's wellhead protection area. Commercial and industrial onsite sewage treatment and disposal systems are prohibited in the County's wellhead protection area.
- 2.4.9. Policy: Single family residential onsite sewage treatment and disposal systems are exempt from the requirements of the County's wellfield protection program provided they meet the minimum requirement of one unit per two acres.
- 2.4.10. Policy: Onsite sewage treatment and disposal systems shall only be permitted in those areas with geology and soils conducive to effective and sanitary operation and which comply with the requirements of Chapter 10D-6 (Standards for Onsite Disposal Systems) of the Florida Administrative Code.
- 2.5. Objective: Pinellas County shall provide adequate wastewater treatment and disposal capacity for all current Pinellas County Utilities customers, and projected customers where feasible.
- 2.5.1. Policy: By 2010, Pinellas County Utilities shall identify those service areas requiring additional treatment capacity, develop a set of economically feasible and environmentally sound recommendations for additional capacity, and implement programs as needed to accommodate future need where feasible.
- 2.5.2. Policy: Pinellas County Utilities will continue to use the best available technologies in order maximize the use of its wastewater resources for beneficial reuse purposes.
- 2.5.3. Policy: Pinellas County will continue to dispose of biosolids from the wastewater treatment process in an environmentally progressive and resource-efficient manner by recycling the product for beneficial purposes.

GOAL THREE: PINELLAS COUNTY SHALL CONTINUE TO BE A LEADER IN THE USE OF RECLAIMED WATER, RESOURCE CONSERVATION AND OTHER ALTERNATIVE TECHNOLOGIES AS A MEANS OF REDUCING DEMAND ON POTABLE WATER RESOURCES AND LIMITING THE IMPACT OF FRESH WATER WITHDRAWALS ON THE NATURAL ENVIRONMENT.

- 3.1. Objective: Pinellas County will continue to operate and maintain Pinellas County’s reclaimed water program.
 - 3.1.1. Policy: Pinellas County shall continue its current use of available reclaimed water, minimizing the potable water demand of its Pinellas County Utility customers.
 - 3.1.2. Policy: Reclaimed water offsets potable water demand, but it is not a potable water supply source and will not be used as a means to recharge or augment potable supplies due to public health concerns.
 - 3.1.3. Policy: The Pinellas County Board of County Commissioners is responsible for setting rates, determining utility rate structures and controlling decisions on metering and use of reclaimed water.
 - 3.1.4. Policy: Priority for distribution of reclaimed water will be given to residential subdivisions.
 - 3.1.5. Policy: Pinellas County Utilities will continue to educate residents about the benefits and proper use of reclaimed water.
- 3.2. Objective: Pinellas County Utilities shall continue to operate a comprehensive and proactive water conservation program to reduce the demand on, and promote the sustainability of, the potable water resource and protect the natural environment.
 - 3.2.1. Policy: The County shall continue its comprehensive educational program with specifically targeted messages for residential, commercial industrial and institutional consumers to discourage waste and encourage the conservation of potable water resources.
 - 3.2.2. Policy: The County shall enforce existing requirements, and establish new requirements and procedures as needed, to assure that low water usage plumbing fixtures are used in all new buildings or in conjunction with renovations.
 - 3.2.3. Policy: To promote water conservation, Pinellas County will continue to educate the public regarding Florida Friendly Landscaping with native and drought tolerant plantings, and the benefits of Florida-friendly landscaping as a means of reducing the overall use of potable water.
 - 3.2.4. Policy: Pinellas County will develop, encourage and participate in education efforts such as the Healthy Lawns Program directed at encouraging Florida Friendly Landscaping and reducing irrigation demands.
 - 3.2.5. Policy: All new landscaping at Pinellas County’s urban/constructed facilities will have 80% of their irrigated landscaped area in native or drought-

tolerant landscaping, and existing County facilities will be retrofitted as funding is available.

- 3.2.6. Policy: Where financially feasible, Pinellas County Utilities will implement programs, such as a the Water Audit Program, the Rain Shut-off Gauge Program, and the Soil Moisture Sensor Program, to encourage home owners and business owners to conserve water.
- 3.2.7. Policy: Pinellas County will, as long as financially feasible, implement programs for industrial and commercial businesses designed to conserve potable water (e.g., the Industrial/Commercial spray valve replacement program and the Conservation Hotel and Motel Program, or C.H.A.M.P.)
- 3.2.8. Policy: Where financially feasible, Pinellas County will continue its incentive program for single-family homeowners who wish to install shallow wells for the purpose of irrigation in areas not identified for service by a wastewater reuse system and where the hydrogeologic characteristics are suitable.
- 3.2.9. Policy: The County shall limit the consumptive demand on potable water sources by requiring all new non-residential and multi-family developments to install and use shallow wells, open surface water bodies if appropriate, or reclaimed water for landscape irrigation.
- 3.3. Objective: The County shall support resource conservation consistent with the Pinellas County's approved Reuse Master Plan.
 - 3.3.1. Policy: Reuse of treated wastewater is the preferred method of effluent disposal over surface water discharge.
 - 3.3.2. Policy: Reuse Master Plan Reclaimed water will continue to be distributed according to the service areas established in the Reuse Master Plan.
 - 3.3.3. Policy: Pinellas County Utilities shall work with appropriate agencies and departments to investigate additional wastewater reuse options which replace industrial and commercial demands on the potable water supply.
 - 3.3.4. Policy: New development shall conform to the County building code requiring installation of water conservative plumbing fixtures.
 - 3.3.5. Policy: Pinellas County will continue to reuse 100 percent of its wastewater where feasible and will continue to refine and optimize its reclaimed water system.

- 3.4. Objective: Pinellas County will consider utilizing storage technologies such as Aquifer Storage and Recovery (ASR) or above-ground storage in order to reduce demand on potable water resources and limit the impact of fresh water withdrawals on the natural environment.
- 3.4.1. Policy: Pinellas County will continue to investigate the optimization of ASR technology and assess the efficiency and financial feasibility of storage technology as a means to provide greater stability to the reclaimed water supply.