

SECTION 4
INFRASTRUCTURE ELEMENT
GOALS, OBJECTIVES, and POLICIES

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POTABLE WATER

GOAL I1

Provide safe efficient, cost effective and adequate public supply of potable water including, treatment, and distribution for the City of Deltona.

OBJECTIVE I1-PW1

The City of Deltona shall require the following policies which establish minimum level of service standards are met when planning capital improvements and reviewing applications for development approval.

Policy I1-PW1.1

The City of Deltona shall maintain the level of service standard providing for an annual average daily volume of 300 gallons of potable water per equivalent residential unit (ERU). Projected flow for commercial, industrial, and institutional land uses will be calculated utilizing Deltona Water ERU factors for water consumption, as specified in City land development regulations.

Policy I1-PW1.2

The City of Deltona shall require the installation of a centralized potable water distribution system for all development, in accordance with City land development regulations.

Policy I1-PW1.3

As a condition of development approval, the City of Deltona shall require developers to ensure proper fire flows, durations, and pressures are available. Minimum required fire flow rates for individual land uses shall be provided as required per the Florida Fire Prevention Code and applicable City Codes.

Policy I1-PW1.4

The City of Deltona shall require developers to provide and dedicate to the City or Volusia County potable water distribution systems and treatment facilities within any new development as provided for in the City's land development regulations. The design criteria and construction standards for any addition to the water system shall be in conformance with City specifications and acceptance requirements.

Policy I1-PW1.5

Individual potable water wells are not encouraged but allowed as per the following provided the well has been approved by the City of Deltona or other agencies, as appropriate;

- a. A legally subdivided lot 2.5 acres in size or greater which is designated as residential or agriculture on the Future Land Use Map; the lot is within a single family subdivision, and connection to a centralized potable water system is not available. Availability is defined as being less than or equal to 1,320 feet measured along or across right of ways or easements from the nearest property boundary to an existing City water line.

- b. Public natural resource based uses, public parks and non-staffed utility uses may be serviced by a potable well if connection to a centralized water system is not available. Availability is defined as being less than or equal to 1,320 feet measured along or across right of ways or easements from the nearest property boundary to an existing City water line.

Policy I1-PW1.6

The City of Deltona shall require treatment of its water supply be at a minimum, in accordance with State and Federal standards of purity.

Policy I1-PW1.7

The City of Deltona shall require that all new development located within an area encompassed by an adopted municipal water service area agreement shall comply with the adopted level of service standards. New development receiving City utilities not adjacent to a City limit and within the City's service area shall be required to execute a contingency to annex agreement prior to service establishment.

Policy I1-PW1.8

An existing potable water well may be upgraded, provided that a centralized potable water system is not available. However, connection to a centralized potable water system is required where said system is available in lieu of upgrading existing potable water well.

Policy I1-PW1.9

The January 2010 City Water Supply Work Plan is support documentation for the Deltona Comprehensive Plan.

Policy I1-PW1.10

The January 2010 City Water Supply Work Plan serves as support and guidance for the implementation of required water conservation policies and procedures.

Policy I1-PW1.11

As part of the next update to the City Water Supply Work Plan, the City shall identify and participate in financially/technically feasible alternative water source supply projects identified as part of the adopted St. Johns River Water Management District (SJRWMD) Regional Water Supply Plan.

Policy I1-PW1.12

The City shall ensure that adequate water supplies and facilities are available and in place consistent with the level of service established in policy I1-PW1.1 prior to issuing a certificate of occupancy or its functional equivalent.

Policy I1-PW1.13

Within the Deltona North service area, the City shall issue no development orders without first consulting with the County to determine whether adequate water supplies to serve the new

development will be available no later than the anticipated date of issuance by the City of a certificate of occupancy or its functional equivalent.

OBJECTIVE I1-PW2

The City of Deltona shall provide for an adequate level of service standard for potable water service to meet the needs of current and future residents of the City of Deltona.

Policy I1-PW2.1

The City of Deltona shall continue to diligently coordinate, share, and update information with the St. Johns River Water Management District (SJRWMD) and the Florida Department of Environmental Protection (FDEP), to meet City projected water demand.

Policy I1-PW2.2

The City of Deltona shall continue to develop facilities having the capability to access groundwater and financially feasible alternative water supplies of sufficient yield to provide the required potable water supply in the City water service areas.

Policy I1-PW2.3

The City of Deltona shall maintain a water conservation ordinance.

Policy I1-PW2.4

The City of Deltona shall collect and use impact fees, connection fees, utility revenues, or other methods, as deemed appropriate to offset the cost of the capacity necessitated by the impact of new users and to develop alternative water supplies.

Policy I1-PW2.5

The City of Deltona shall maintain a potable water treatment and distribution facilities master plan for the City water service areas that is based on the level of service standards contained in this Element.

Policy I1-PW2.6

The City of Deltona shall discourage the installation of individual shallow wells on residential and commercial lots for landscape irrigation, and shall require the use of reclaimed water for irrigation purposes where available. Availability shall be defined as less than or equal to 1,320 feet measured along or across right of ways or easements from the closest property boundary to the nearest reclaimed water line. New development shall be required to install reclaimed water infrastructure consistent with Policy I2-SS3.4 to obtain a development order and/or building permit.

Policy I1-PW2.7

The City of Deltona shall continue to require the use of potable water-conserving plumbing fixtures in all new development.

Policy I1-PW2.8

To further conserve water, the City or developer shall be required to extend reuse lines to development consistent with City land development regulations when reclaimed water becomes available. Availability shall be defined as less than or equal to 1,320 feet from the closest property line.

Policy I1-PW2.9

The City of Deltona shall require the use of reclaimed water by private landowners for non-potable water activities.

Policy I1-PW2.10

As allowed by FDEP and/or the SJRWMD, the City of Deltona shall require facilities to use reclaimed water for agricultural purposes, where the City supplies it.

Policy I1-PW2.11

To encourage water conservation activities, the City shall continue to do the following:

- a. Maintain an inclined rate structure;
- b. require the installation of individual service collection meters;
- c. assist in home leak inspections; and
- d. maintain and check flow meters.

Policy I1-PW2.12

To further encourage water conservation the City shall:

- a. Maintain a water conservation plan consistent with the SJRWMD water conservation plan;
- b. maintain the water wise landscaping requirements within the City land development regulations; and
- c. require the use and maintenance of rain sensors.

Policy I1-PW2.13

The City shall continue to promote the use of low impact development techniques to protect native vegetation with the intent of minimizing the need for future irrigation.

OBJECTIVE I1-PW3

Throughout the planning period, the City of Deltona shall encourage the use of existing and future facilities to the maximum extent possible.

Policy I1-PW3.1

The extension of water lines or establishment of centralized systems of potable water outside of City urban land use categories shall be prohibited unless said extension or facility construction will mitigate existing or potential problems of public health, safety, or welfare and water service area. The connection to City water outside of the City area (non-contiguous) and within the City's service area shall be associated with a contingency to annex agreement.

Policy I1-PW3.2

The City shall be the sole provider of centralized water service in the City's Chapter 180, F.S. service area franchise.

Policy I1-PW3.3

The City of Deltona shall negotiate agreements with developers for the City to provide potable water facilities in accordance with the proposed Water Supply Work Plan for the affected service area and the City's design and construction standards.

Policy I1-PW3.4

The City of Deltona shall coordinate and enter into interlocal agreements with Volusia County and other water suppliers to balance fluctuation in water demand, safeguard continuance of supply in case of plant or water main breakdown, and to provide required fire flows.

Policy I1-PW3.5

Consistent with public health and safety, adequate water supplies, and potable water facilities shall be in place and available to serve the "infilling" of developed areas.

Policy I1-PW3.6

The City may create Special Assessment Districts encompassing existing lots or subdivisions in the manner prescribed by City rules and regulations for the purposes of installing or improving centralized potable water systems.

Policy I1-PW3.7

Any existing privately owned package treatment facility shall be phased out and connected to a centralized public potable water system where possible. No new privately owned package treatment facilities serving more than one house or lot shall be approved, permitted, or constructed within the City despite whether it can be approved through other agencies.

OBJECTIVE I1-PW4

Throughout the planning period, the City of Deltona shall coordinate the provision of potable water service to ensure the efficient and cost effective delivery of this service.

Policy I1-PW4.1

The City should negotiate interlocal agreements with other service providers for the purpose of establishing interconnections for efficient resource management.

Policy I1-PW4.2

The City of Deltona shall coordinate the utility and transportation planning efforts to take advantage of the most economical construction and maintenance costs possible when installing utility lines and roads.

SANITARY SEWER

GOAL I2

Provide safe adequate cost effective and environmentally acceptable sanitary sewer systems for the City of Deltona.

OBJECTIVE I2-SS1

The City of Deltona shall require the following policies which establish minimum level of service standards, are met when planning capital improvements and for reviewing applications for development approval.

Policy I2-SS1.1

The City of Deltona adopts a level of service standard providing for an annual average daily volume of 284 gallons of domestic wastewater per equivalent residential unit. Projected flow for commercial, industrial, and institutional land uses will be calculated utilizing Deltona Water equivalent residential unit factors for water and wastewater service as illustrated in City land development regulations.

Policy I2-SS1.2

The City of Deltona shall provide wastewater treatment consistent with FDEP regulations at all City wastewater treatment plants.

Policy I2-SS1.3

The City of Deltona shall require the installation of a centralized sewer collection and transmission system, and reclaimed water mains in accordance with City land development regulations.

Policy I2-SS1.4

The City of Deltona requires that all new residential and non-residential development utilize and connect to a centralized sewer system where available. The City of Deltona has a very limited sewer system in close proximity to existing developed residential lots. Therefore, for all existing residential customers with associated septic systems, a connection to the City's sewer system, if available, shall be voluntary. Existing package treatment plants shall be connected to a central sewer system when connection to said system is available.

Policy I2-SS1.5

Deltona is serviced by centralized utilities including sanitary sewer. The City has an interest in protecting environmental resources and the public health, safety and welfare of its citizens as well as maximizing the investment in sanitary sewer infrastructure. Therefore the requirement to connect to centralized sewer system and the use of individual septic tanks are subject to the following criteria:

1. For existing, legally subdivided or platted lots that are eligible for building permit issuance, zoned or used for single family residential use where there are no suitable

sewer facilities immediately available, a septic tank may be used consistent with applicable regulations. A suitable sewer facility shall be a gravity sewer system. Immediately available means adjacent to the property boundary.

2. New lots created consistent with the City exempt subdivision regulations (no more than four lots) zoned and used for residential purposes, may use septic tanks, if a suitable sewer facility is not immediately available. A suitable sewer facility shall be a gravity sewer system. Immediately available means adjacent to the property boundary.
3. New residential or non-residential subdivisions involving the creation of a plat shall be served by centralized sewer system.
4. Projects involving site plan review consistent with City Land Development regulations shall be served by a centralized sewer system.
5. Notwithstanding sections 2-4 above, if the requirement to connect to a centralized sewer system creates a situation where the connection burden imposed is out of proportion to the benefits of maintaining and/or enhancing the wastewater system, an applicant may request a determination from the Development Review Committee (DRC) regarding the appropriateness of connecting. The Public Works Department shall submit a written recommendation to the DRC regarding the request. The DRC determination shall be subject to the following guidelines:
 - a. The impact on present and future sewer infrastructure and related operations;
 - b. Reasonableness of the request in light of present and future service capacity and obligations;
 - c. Decisions shall not be based solely on an economic hardship claimed by an applicant;
 - d. Whether the circumstances warrant a cost sharing agreement for service expansion or other arrangement beneficial to the City; and
 - e. Other technical requirements as applicable.

Policy I2-SS1.6

The City of Deltona shall require all individual residential and non-residential lot septic tanks to be located and constructed in a manner consistent with all applicable local, State, and Federal regulations, including the applicable Goals, Objectives, Policies, and level of service standards contained in this Comprehensive Plan. New package plants shall not be permitted.

Policy I2-SS1.7

The City of Deltona shall require all wastewater treatment facilities to be inspected on an established scheduled basis.

Policy I2-SS1.8

The City shall further expand its wastewater treatment capacity to support new development and redevelopment activities within the City for efficient use of regional resources to promote the City's health, safety, and welfare of its residents, and to balance capital public utility expenditures.

Policy I2-SS1.9

The City shall investigate methods in working with State and Federal agencies, including funding sources, to retrofit areas of the City that are currently served by septic systems. A priority for such retrofit activity, if deemed feasible, will be as follows:

- a. Correct threats to public health, safety, and welfare;
- b. Improve the environmental conditions of surface and ground water resources; and
- c. Encourage sustainable redevelopment and compact urban development patterns.

OBJECTIVE I2-SS2

Throughout the planning period, the City of Deltona shall maximize the use of existing facilities within sewer service areas.

Policy I2-SS2.1

The City of Deltona shall memorialize agreements with developers for the most efficient service provision costs and installation in accordance with the affected City sewer service area and the City's design and construction standards.

Policy I2-SS2.2

Consistent with public health and safety, centralized sanitary sewer facilities shall be in place and available to serve new development and redevelopment, unless otherwise vested under the City's Concurrency Management Ordinance or land development regulations as may be determined by the City Commission.

Policy I2-SS2.3

The City may create Special Assessment Districts encompassing existing lots or subdivisions, in the manner prescribed by State and City rules and regulations, for the purposes of installing or improving centralized wastewater systems.

Policy I2-SS2.4

When an existing privately owned package treatment facility is phased out and connected to a centralized public wastewater system, the owner of said private plant shall be required to assume the cost of the connection, the cost of abandonment, proper removal, and land restoration.

OBJECTIVE I2-SS3

The City of Deltona shall encourage the development of an effluent recharge, reuse and disposal program to recharge wetlands and groundwater supplies and provide irrigation water.

Policy I2-SS3.1

The City of Deltona shall require use of reclaimed water for irrigation and non-potable use for all new development and other appropriate uses.

Policy I2-SS3.2

The City of Deltona shall, consistent with State regulations, monitor water quality, especially with respect to wastewater plant operations and effluent disposal and, if necessary, develop an appropriate alternative management strategy, which may include reduction in wastewater effluent loadings and discharge rates.

Policy I2-SS3.3

The City of Deltona will execute long-term agreements with land owners to accept reclaimed water for irrigation.

Policy I2-SS3.4

Newly platted commercial or residential subdivisions shall be required to install reclaimed wastewater infrastructure to serve all lots and irrigated areas regardless if reclaimed water is not available as defined in Policy I1-PW2.10. Reclaimed water infrastructure shall include, but not be limited to lines, interconnects, etc.

Policy I2-SS3.5

The City shall continue to reuse 100% of normal weather wastewater generated at City water reclamation facilities and seek methods to use it to offset impacts to the Floridan Aquifer.

Policy I2-SS3.6

The City shall improve reclaimed water reuse by expanding and improving reclaimed water infrastructure including construction of additional rapid infiltration basins.

Policy I2-SS3.7

The City shall continue to meter individual reclaimed water connections.

OBJECTIVE I2-SS4

The City of Deltona shall coordinate with other service providers to develop plans to extend wastewater facilities and to expand wastewater treatment capacity necessary to accommodate projected 2030 wastewater service needs.

Policy I2-SS4.1

The City of Deltona shall annually designate as appropriate and financially feasible a portion of its capital improvements budget for the correction of existing deficiencies in its wastewater disposal system as determined by the application of the standards contained in this Element.

Policy I2-SS4.2

The City of Deltona shall collect and use impact fees to offset the cost of capacity necessitated by the impact of new users.

Policy I2-SS4.3

The City of Deltona shall maintain and update a wastewater collection, treatment facilities, and reclaimed water reuse master plan for the sewer service areas in the City that is based on year 2030 effluent projections and the level of service standards contained in this element.

SOLID WASTE

GOAL I3

The City of Deltona shall continue to seek the most efficient and cost effective solid waste collection that promotes recycling while reducing hauls to area landfills.

OBJECTIVE I3-SW1

The City of Deltona shall strive to assist the County's goal of reducing the waste stream for disposal in area landfills.

Policy I3-SW1.1

The City of Deltona shall participate in the education of the public to avoid products which are not recyclable, cannot be converted, or cannot be used as a resource or derived fuel.

Policy I3-SW1.2

The City of Deltona shall maintain programs designed to eliminate littering, illegal dumping, and promote appropriate refuse management.

Policy I3-SW1.3

The City shall educate the public regarding the problems, health hazards and additional costs that result from littering and illegal dumping. The City laws regarding solid waste should also be widely publicized. Citizen groups will be encouraged to report violations to the City.

Policy I3-SW1.4

The City shall coordinate with the appropriate enforcement agencies for the effective enforcement of anti-littering, illegal dumping laws, and refuse management.

OBJECTIVE I3-SW2

Locate and maintain solid waste facilities in a manner, which does not adversely affect residential neighborhoods or local streets.

Policy I3-SW2.1

Landfills and resource recovery facilities shall not be located in or adjacent to residential neighborhoods.

Policy I3-SW2.2

Avoid transfer truck traffic and reduce local haul (any refuse transported within the City of Deltona) on residential neighborhood streets.

Policy I3-SW2.3

The City of Deltona shall not allow future solid waste transfer stations and landfills within its City limits, due to the high percentage of residentially zoned and developed land within the City.

OBJECTIVE I3-SW3

Ensure that solid waste contractors operating in the City have available, quality solid waste disposal facilities and hazardous waste collection facilities that meet public needs, conform to state and federal standards, are managed properly, and are provided for in an efficient and coordinated manner.

Policy I3-SW3.1

Maintain an 8.6 pounds per capita per day disposal capacity at all solid waste facilities combined.

Policy I3-SW3.2

The City shall maintain a permit tracking system. This system shall be updated in a timely manner, with development and building activity. This information will be used to determine whether an area wide level of service is being maintained for the purposes of Solid Waste Concurrency Management.

Policy I3-SW3.3

Guidelines are established through the land development regulation process to regulate the location of private hazardous waste transport facilities.

STORMWATER

GOAL I4

To protect the health and safety of the public stormwater management facilities and services shall be properly maintained, environmentally sound, cost effective, and meet the community's present and future demands.

OBJECTIVE I4-STW1

The City shall continue to implement watershed Best Management Practices (BMPs).

Policy I4-STW1.1

The City of Deltona shall maintain a stormwater master plan.

Policy I4-STW1.2

The City shall:

- a. Consult with and obtain permits as may be necessary from proper regulatory authorities before initiating alteration for wetlands; and
- b. Recognize landowners' statutory and common-law vested private property rights, including riparian rights.
- c. Require engineered stormwater management areas and prohibit natural areas from also being used for stormwater management and/or runoff.

Policy I4-STW1.3

All land use and development approval decisions which impact water resources in Deltona shall conform to the comprehensive surface and groundwater watershed management plan, when approved by the City Commission. Such development activities shall also comply with the requirements of SJRWMD Rules and provide SJRWMD Permits to the City.

Level of Service for Storm Water Quantity and Quality:

- a. **Closed Basins LOS:** The City will establish a Level of Service design standard in closed drainage basins as follows: All development shall meet the minimum volume of retention equivalent to one-half inch of depth over the entire project area and the discharge hydrograph produced for the developed or redeveloped site shall not exceed, in terms of peak flow and total volume, the hydrograph produced by conditions existing before development or redevelopment for a 24 hour, 100 year frequency storm.
- b. **Basins with Outfall LOS:** The City will establish a Level of Service design standard in non-closed basins as follows: All development shall meet the minimum volume of retention equivalent to one-half inch of depth over the entire project area and the discharge hydrograph produced for the developed or redeveloped site shall not exceed, in terms of peak flow and total volume, the hydrograph produced by conditions existing before development or redevelopment for a 24 hour, 25 year frequency storm.

Policy I4-STW1.4

All new development and redevelopment projects shall meet or exceed applicable minimum State water quality standards. All new development or redevelopment projects shall also meet or exceed minimum environmental protection standards of the City of Deltona and Volusia County. Stormwater discharges from all new development and redevelopment projects shall also meet or exceed State water quality standards for Class III Waters.

OBJECTIVE I4-STW2

The City of Deltona shall maintain current standards regulating the design, construction, and management of drainage systems used for stormwater management.

Policy I4-STW2.1

The City of Deltona shall identify and prioritize drainage systems in need of retrofitting and upgrade these systems, as funding becomes available. Watershed studies will be used to identify and prioritize systems in need of retrofitting. The City of Deltona may apply for any grants and loans available from the DEP Revolving Loan Fund.

Policy I4-STW2.2

The City of Deltona shall continue with an inspection and enforcement program to ensure proper maintenance of stormwater management systems.

Policy I4-STW2.3

Best Management Practices for the control of erosion and sedimentation shall be employed for all construction and agricultural activities in order to protect natural water bodies, watercourses and wetland from off-site pollutants.

Policy I4-STW2.4

The City of Deltona shall continue to examine innovative stormwater Best Management Practices.

NATURAL GROUNDWATER AND AQUIFER RECHARGE**GOAL I5**

Protect the quality and quantity of the surficial and Floridan aquifer and protect and enhance the capabilities of the groundwater recharge areas for the present and future water supply of the City.

OBJECTIVE I5-NGW1

Consistent with the City's Water Supply Work Plan, potable water resources shall be identified, protected and conserved.

Policy I5-NGW1.1

The City of Deltona shall coordinate with the St. Johns River Water Management District and continue to monitor and evaluate groundwater resources.

Policy I5-NGW1.2

The City of Deltona shall determine water supply levels, including alternative sources of water, consistent with the City's Water Supply Work Plan.

Policy I5-NGW1.3

The City of Deltona shall promote the efficient use of groundwater supplies.

Policy I5-NGW1.4

The City of Deltona shall require the use of water conserving plumbing fixtures in all new development, subject to City and Florida building codes in effect.

Policy I5-NGW1.5

Prime (or high) aquifer recharge areas appropriate for development shall be developed so as to continue to maintain pre-development recharge condition.

Policy I5-NGW1.6

The City of Deltona will continue to manage infrastructure in order to promote reclaimed water reuse and increase water recharge.

OBJECTIVE I5-NGW2

The City of Deltona shall continue to appropriately protect and manage the water quality and quantity of the Upper Floridan and surficial Aquifer.

Policy I5-NGW2.1

The City of Deltona shall continue to enforce the local and State regulations pertaining to the protection of the surficial and Floridan Aquifers from such contaminants as hazardous and biological wastes, and petroleum products including, but not limited to: fuel oils, transportation fuels, machinery fluids, and their wastes.

Policy I5-NGW2.2

The City of Deltona shall maintain a wellhead/well-field protection ordinance which shall, at minimum, do the following:

- a. determine the zone of influence and/or area for protection for each public well field,
- b. determine restrictions for the handling and storage of hazardous substances in order to protect potable water supplies; and
- c. permit regional well fields to serve a multi-purpose function, such as conservation and passive public recreational facilities.

Policy I5-NGW2.3

The City should utilize water quality standards included in the “Stormwater and Watershed Management Master Plan,” as a benchmark for water quality, to determine if degradation, maintenance or improvement has occurred.