# PUBLIC FACILITIES ELEMENT

CITY OF ZEPHYRHILLS 2025 COMPREHENSIVE PLAN

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# PUBLIC FACILITIES ELEMENT

## PURPOSE

This element of the Comprehensive Plan describes the existing facilities, adopted levels of services and projected needs for potable water, wastewater, solid waste disposal and drainage within the community. The drainage sub-element also addresses groundwater recharge. Each of the four sub-elements is addressed separately.

## POTABLE WATER

### Background

Typically, a potable water supply system is composed of a source which supplies raw (untreated) potable water, a treatment component to render water safe and palatable, storage facilities to balance available supply with varying demand and a distribution system to transport water between production components and consumers in the service area.

Water sources commonly consist of surface water bodies and impoundments, groundwater or some combination of the two. The quality of source water determines the treatment required for human consumption. Treatment removes impurities from raw water to improve water quality as it relates to public health or aesthetic concerns. Although the treatment process adds to the cost of supplying water, it also expands the range of raw water sources that can be utilized for public consumption.

Potable water is conveyed to the consumer via a network of pipes and storage tanks that comprise the water distribution system. Large transmission lines, referred to as distribution mains, carry water to the largest divisions of the service area and interconnect with a network of smaller lines which eventually provide for the individual user service connections. The interconnection of these components into nested flow loops provides for multiple routes by which water can be circulated within the system in response to shifts in the location of demand.

Water is delivered under pressure within the distribution system to ensure flows that are adequate to meet demand. In addition to location shifts, demand for water also varies with time. Demand fluctuates throughout the day, usually exhibiting morning and evening peaks corresponding to periods of highest residential use. Localized demand peaks also occur when the system is utilized for firefighting purposes. In order to provide adequate quantities and pressure to meet peak use and fire flow demands, storage tanks are linked with the distribution at strategic locations. During low demand periods, these tanks are filled as water is pumped into the system. During peak demand periods, water flows from the tanks back into the system to augment flows and maintain pressure. A combination of ground level and elevated storage tanks are commonly used. Elevated tanks are the most economical. Many systems also include auxiliary pumps that operate only during peak demand periods.

### Regulatory Framework

#### *Federal Regulation*

The federal government has established quality standards for the protection of water for public use, including operations standards and quality controls for public water systems. These regulations are provided in the Safe Drinking Water Act, Public Law 93-523. This law directed the Environmental Protection Agency (EPA) to establish minimum drinking water standards. EPA

standards are divided into categories: primary, those required for public health, and secondary, those recommended for aesthetic quality.

### *State Regulation*

In accordance with federal requirements, the Florida Legislature has adopted the Florida Safe Drinking Water Act, §403.850 through §403.864, FS. The Florida Department of Environmental Protection (FDEP) is the state agency responsible for implementing this act. In this regard, FDEP has promulgated rules classifying and regulating public water systems under Chapter 62-22, FAC. The primary and secondary standards of the Federal Safe Drinking Water Act are mandatory in Florida. Also, any plans for significant water line extension, well or tank modification, or water facilities for new development must be submitted to FDEP for approval. The City submits monthly operating and laboratory analysis reports to FDEP relative to the City's potable water system.

- Water Restrictions: The City requires compliance with Pasco County's water use rules which prohibit watering between the hours of 8:00 a.m. to 6:00 p.m. and no more than once a week.

- High Efficiency Plumbing Fixtures: The City requires compliance with the Florida Building Code standards for low volume fixtures in all new development.

- Conservation Rate Structure: The City has adopted a tiered water rate structure that incentivizes water customers to conserve water. The "In-City" residential rates structure is: 0 to 10,000 gallons - $1.34; 10,001 to 15,000 gallons - $1.68; 15,001 to 20,000 gallons - $2.01; and 20,000+ gallons - $2.68. "Out of City" rates are similarly tiered but are higher. Master metered commercial uses are charged a flat rate of $1.34 (In-City). Metered irrigation "In-City" is rated: 0 to 15,000 gallons - $1.34; 15,001 to 20,000 gallons - $2.01; and 20,000+ gallons - $2.68.

- Reclaimed Water Policies & Regulations: The City's reclaimed water program is promoted via distribution of informational materials to water customers. The reclaimed water regulations include connection, interconnection and discharge restrictions, including requirement that new development install a reclaimed or other non-potable water distribution system. Reclaimed water customers are individually metered and charged a flat rate. The City requires new development to provide infrastructure to connect private wells to reclaimed water lines to supplement irrigation water.

## Existing Conditions

## WASTEWATER

### Present System

The City of Zephyrhills Utilities Department operates a wastewater collection, treatment and disposal system consisting of gravity mains, force mains with 45 lift stations, a treatment plant and spray irrigation disposal system (See Map PUB-2). Sewage sludge is disposed of by hauling to Shady Hill disposal site. Present wastewater treatment capacity is 2.25 MGD.

The City has completed designing a retrofit of the WWTP to enhance the quality of effluent to be suitable for reuse or irrigation water. This treated water will be used on the municipal golf course and other recreation areas.

The Housing Element projects a total demand of 5,138 dwelling units in the year 2005 and 5,462 dwelling units in the year 2010. Assuming that each dwelling unit requires 168 gal/day of wastewater treatment and that residential demand accounts for 70 percent of wastewater load, 2005 and 2010 wastewater treatment demand are projected:

| | | |
|---|---|---|
| Residential demand: 5,138 dwelling units x 168 gallons per day | = | 863,184 gal/day |
| Nonresidential demand: 30 % of total demand | = | 402,071 gal/day |
| ***Total 2005 Wastewater Treatment Demand*** | | ***1,265,255 gal/day*** |

| | | |
|---|---|---|
| Residential demand: 5,462 dwelling units x 168 gallons per day | = | 917,616 gal/day |
| Nonresidential demand: 30 % of total demand | = | 427,426 gal/day |
| ***Total 2010 Wastewater Treatment Demand*** | | ***1,345,042 gal/day*** |

## Levels of Service

The City of Zephyrhills will continue to provide a municipal wastewater treatment system which complies with EPA and DEP effluent criteria with capacity to treat at least 168 gallons per day per dwelling unit or equivalent (see Appendix – Estimated Domestic Sewage Flows). Design capacity of the municipal wastewater treatment plant will be a minimum of 80% of average daily water sales to customers of the City water system. Exceptions for septic tank use will require a minimum lot area of one acre and will be permitted as a temporary disposal method only.

**TABLE PUB-1**
**ESTIMATED DOMESTIC SEWAGE FLOWS***
**CITY OF ZEPHYRHILLS**

| **Type of Establishment** | | **Gallons/day** |
|---|---|---|
| *COMMERCIAL* : | | |
| Airport | a) per passenger | 5 |
| | b) add per employee (per 8 hour shift) | 20 |
| Barber & Beauty Shops (per chair) | | 100 |
| Bowling alleys (toilet wastes only per lane) | | 100 |
| Country Club | a) per resident | 100 |
| | b) per member | 25 |
| | c) per employee (per 8 hour shift) | 20 |
| Dentist Office | a) per wet chair | 200 |
| | b) per non-wet chair | 50 |
| Doctor Office (per doctor) | | 250 |
| Factories, exclusive of industrial wastes (gallons per employee per 8 hr. shift) | | |
| | a) no showers provided | 20 |
| | b) showers provided | 35 |
| Food Service operations | a) ordinary restaurant (per seat) | 50 |
| | b) 24-Hour restaurant (per seat) | 75 |
| | c) single service articles only (per seat) | 25 |
| | d) bar and cocktail lounge (per seat) | 30 |
| | e) drive-in restaurant (per car space) | 50 |
| | f) carry-out only (1) per 100 sq.ft. of floor space | 50 |
| | (2) add per employee (per 8 hr. shift) | 20 |
| Hotels and Motels | a) regular (per room) | 150 |
| | b) resort hotels, camps, cottages (per person) | 75 |
| | c) add for establishments w/self service | 400 |
| Office Building (per employee per 8 hour shift) | | 20 |
| Service Stations (per water closet and per urinal) | | 250 |
| Shopping Centers without food or laundry (per sq. ft. of floor space) | | 0.1 |
| Stadiums, race tracks, ball parks (per seat) | | 5 |
| Stores (per sq. ft. of floor space) | | 0.1 |
| Swimming and bathing facilities, public (per person) | | 10 |
| Theatres | a) indoor, auditorium (per seat) | 5 |
| | b) outdoor, drive-ins (per space) | 10 |
| Trailer or Mobile Home Park (per trailer space) | | 200 |
| Travel trailer or recreational vehicle park (overnight) (per trailer space) | | |
| | a) Travel trailer, without water and sewer hook-up | 75 |
| | b) Travel trailer, with water and sewer hook-up | 100 |
| *INSTITUTIONAL:* | | |
| Churches | | 3 |
| Hospitals (per bed) (does not include kitchen wastewater flows) | | 200 |
| Nursing, rest homes (per bed) (does not include kitchen wastewater flows) | | 100 |
| Parks, public picnic | a) with toilets only (per person) | 5 |
| | b) with bathhouse, showers and toilets (per person) | 10 |
| Public institutions other than schools and hospitals (per person) (does not include kitchen wastewater flows) | | 100 |
| **Type of Establishment** | (*Institutional continued)* | **Gallons/day** |
| Schools | a) day-type | 15 |
| | b) add for showers | 5 |
| | c) add for cafeteria | 5 |
| | d) add for day school workers | 15 |
| | e) boarding | 75 |
| Work or construction camps, semi-permanent (per worker) | | 50 |
| *RESIDENTIAL:* | | |
| Residences | a) single or multiple family (per dwelling unit) | |
| | 1 bedroom and 600 sq. ft. or less heated or cooled area | 150 |

| | |
|---|---|
| 2 bedrooms and 601-1000 sq. ft. heated or cooled area | 300 |
| 3 bedrooms & 1001-2000 sq. ft. heated or cooled area | 450 |
| 4 bedrooms and more than 2000 sq. ft. heated or cooled area | 600 |
| b) other (per occupant) | 75 |

Footnotes:

1) For food service operation, kitchen wastewater flows shall normally be calculated as 66 percent of the total establishment wastewater flow.
2) Systems serving high volume establishment, such as fast food restaurants and service stations located near interstate highways, require special sizing consideration due to above average sewage volume expected from restroom facilities.
3) For residences, the volume of waste water shall be calculated as 50 percent blackwater and 50 percent graywater.
4) Where the number of bedrooms indicated on the floor plan and the corresponding heated and cooled area of a dwelling unit in Table II do not coincide, the criteria which will result in the greatest estimated sewage flow shall apply.

SOURCE: HRS rule 10D-6, Table II.

## Wastewater System Needs

In 1988 the City of Zephyrhills and Pasco County executed an interlocal wastewater service area agreement that gives the City first right to service developments outside the City and within the boundaries of the service area. (See Map PUB -2).

All developed areas within the present municipal jurisdiction are served by the City wastewater system with few exceptions. There are a few scattered single residences which were built with septic tanks prior to annexations. City policy is to require these residences to be connected to City sewers when they become available. The only major exception is a mobile home park of approximately 150 spaces and a mobile home subdivision of 48 lots which were developed before annexation. Although City sewers are adjacent to both sites, the City has not pursued installing sewers because the landowners have not wanted to bear the initial connection costs. Soils at the mobile home subdivision (south of "C" Avenue are also classified as "Tavares-Urban Land").

No area has been annexed which cannot be served with City sewer. There are several privately owned collection systems outside the City but within the delineated sewer service area. These are primarily mobile home and RV parks under a single ownership.

A complete engineering analysis of the sewer system was completed in 1986 to support a revenue bond issue for expansion of the wastewater treatment plant. Principal recommendations of this study were:

- Upgrade several lift stations
- Install new lift stations
- Reroute sewage flow in some stations to accommodate anticipated growth
- Enlarge the treatment plant by 50% to 2.25 MGD
- Change the method for disposing of effluent

The recommended improvements to lift stations and force mains were implemented beginning in 1987. Enlargement of the treatment plant was completed in 1990. There are no other current deficiencies of the wastewater collection/treatment system.

Existing City policy requires developers of sites not previously served by an adequate wastewater collection system to bear 100% of the cost to extend and connect to the City wastewater collection system. If the extended system is capable of serving intervening land, the developer receives a credit of 16% of construction costs to be applied to future sewer connection fees. This policy requires no outlay of City funds for sewer system expansion and assures that an adequate collection capacity is in place before issuance of any development order which would require sewer service. As a result of this policy, there are no deficiencies of the wastewater collection system other than those which predated the 1986 policy. (These deficiencies are described above.)

There are no known seriously deteriorated sewer lines. City crews routinely clean lift stations, manholes and trunk lines. The most frequent repair item is replacement of lift station pumps and motors. The City maintains an inventory of replacements for those items.

Sizing of future lift stations/force mains and routing of sewage flow will be consistent with the system plan which should be adequate beyond the horizon year of 2020. The county also requires the city to implement a new system that will process our sludge and transport it to the county for disposal by the end of 1999.

## SOLID WASTE

### Present Disposal Means

The City of Zephyrhills Sanitation Department operates a solid waste collection system. Yard trash is disposed of in a City-owned composting facility. Domestic waste is disposed of in the Pasco County landfill east of Dade City. Domestic waste, including yard waste is hauled to a Pasco County transfer station on Handcart Road. The general performance of the City solid waste collection is adequately served by the County based on the current levels of service standard available to the City. The general condition and expected life of the County facilities are excellent and will provide continued services into the future based on the minimal growth being experienced in the City of Zephyrhills. Obviously there are no impacts to the natural resources in the City as all solid waste is collected and sent to Pasco County outside the city limits. Identified hazardous wastes, such as motor oil and batteries, are stored at the City garage and ultimately collected by commercial services. The only private/commercial solid waste services licensed to operate within the City are large roll off dumpsters used at construction sites and for East Pasco Medical Center and Publix.

The geographic service area provided solid waste collection extends to the following boundaries: North -- Grand Horizons subdivision (south of Kossik Road); South -- Emerald Point sub-division and the Flea Market (Chancey Road); East -- Zephyrhills Municipal Airport and West -- Silver Oaks subdivision (Simons Road). The predominant types of land uses served are single family residential, mobile homes and commercial.

### Level of Service

The City of Zephyrhills will continue to provide a minimum of two domestic waste pickups each week for all residential and commercial clients.

The City of Zephyrhills will continue to participate in the Pasco County solid waste disposal system. The design capacity of the Pasco County resource recovery plant is based on a level of

service of 1.5 ton/year/dwelling unit. The City of Zephyrhills LOS standard for solid waste disposal is 1.5 ton/year/dwelling unit on equivalent non-residential development.

The projected solid waste facility needs for the City are adequately supplied for the next five years based on the projected demand at current local level of service standards. The estimated 1999 population of Zephyrhills was 9,200. The total solid waste collected in 1999 was 10,745 tons (including residential and commercial). The projected total of solid waste to be collected in five years is 12,583 tons. The projected future totals are significantly less than the current LOS standard. Based on recent development permitting and land use's as shown on the Future Land Use Map there is a surplus of capacity available to handle future growth.

Anticipated regulation of hazardous waste disposal may ultimately require more sophisticated means of hazardous waste collection, storage and disposal. The City will also make an effort to educate the citizens on proper collection and disposal of hazardous waste through mailings. This subject has not yet been adequately addressed at the State level. The City is not aware of any other solid waste problems that exist in the City. Efforts will be made to remain updated on any opportunities and/or technologies that arise on improving solid waste management.

Pasco County has developed a mass burn incinerator with a landfill/ashfill in northwest Pasco County. When this system is on-line, the east Pasco landfill will presumably be closed. All municipalities within Pasco County have entered into an interlocal agreement to be a party to this new solid waste disposal system. The design capacity of the system is 1050 tons/day. The projected volume from Zephyrhills is approximately 31 tons/day during the peak season. This represents approximately 3% of design capacity allocated to Zephyrhills. The City, through the county system, currently recycles approximately one-third of its solid waste.

## DRAINAGE AND RECHARGE

### Present Drainage and Groundwater Recharge

Zephyrhills is situated south of an east-west ridge that divides the Hillsborough River Basin to the south and the Withlacoochee River Basin to the north. The Lake Zephyr drainage system, west of the City, eventually flows south to the Hillsborough River.

Lake Zephyr is a major natural drainage basin extends approximately one mile east of Handcart Road and one-half mile north of Geiger Road. Downstream, the outfall from Lake Zephyr is channeled via a man-made ditch to U.S. 301 near Chancey Road. From U.S. 301 the outfall is not well defined as water flows across open land to the Hillsborough River. The area of the upper Lake Zephyr drainage basin, which is subject to periodic flooding (100 year flood), has been delineated by consulting engineers for Pasco County and the Southwest Florida Water Management District. That portion of this flood hazard area within the City is shown on MAP PF-3.

Lake Zephyr is an integral element of the stormwater drainage system for the City of Zephyrhills and the upper Lake Zephyr drainage basin. Most of the City is drained by surface swales to retention ponds with no outfall. The stormwater retention areas located in the City are depicted on Map PF-3. The structural drainage system within the City is composed of two retention ponds, pumps and force mains to Lake Zephyr. The larger pond and pump is located on the east side of US 301 and north of 6th Avenue. This pond was expanded to a retention volume of approximately 30,000 cubic yards in 1989. A new pump and emergency generator has also been installed. This pump has a capacity of 2,400 gal/minute.

A smaller pond and pump is located on the west side of 1st Street and south of 14th Avenue. This pond and pump was constructed in 1988 and has sufficient capacity to pump 6,000 gallons per minute to Lake Zephyr.

Both of the ponds with pumps in drainage basins are almost totally developed. All development since 1984 is required to retain on-site a volume equal to a 25 year storm event with an intensity of 3.6 inches of rainfall in one hour. This requirement for on-site retention, and the general practice of providing for drainage by non-structural conveyance, both contribute positively to groundwater recharge. Current policy requiring on-site stormwater retention for new development and redevelopment should result in no additional capacity need for the existing structural drainage system within the time frame of this Comprehensive Plan.
The groundwater system underlying Zephyrhills consists of the shallow surficial water table and the deeper Floridan Aquifer. The shallow water table is subject to infiltration from rainfall through well-drained sandy soils except where impervious surfaces exist. The Floridan Aquifer is estimated to be between 2,800 and 3,200 feet thick in the Zephyrhills area. Hydrologists have estimated that Florida's deep aquifers contain more than a quadrillion gallons of fresh groundwater. The Zephyrhills area has limited confining beds over the aquifer which serves to increase the aquifer recharge rate. A topographic map (refer to the Appendix) provided by SWFWMD depicts areas identified as prime or high groundwater recharge levels. The City is on the edge between the low-to-moderate and the high recharge areas of the State. The Green Swamp wetland area east of Zephyrhills is considered a moderate recharge area.

The City has tapped 8 potable water wells into the Floridan Aquifer which creates the potential for infiltration of the aquifer at the well sites. As a condition of issuing a consumptive use permit, SWFWMD requires protection of the wellfield area to prevent aquifer contamination. There are no known instances of aquifer contamination from Zephyrhills wells.

## Level of Service

The rate of stormwater discharge from new developments shall be equal to, or less than, the rate of discharge that existed prior to development.

On-site drainage facilities for any new project shall accommodate the stormwater runoff resulting from a storm of 25 year frequency (3.6 inches of rainfall in an hour).

All fill within the 100-year floodplain shall be compensated by creation of storage for an equal or greater volume elsewhere within the 100-year floodplain.

All proposed buildings within the 100-year floodplain shall be constructed so that finished floor elevations are above the elevation of the 100-year flood.

Cones of influence around all City-owned water wells will be defined and protected consistent with applicable State regulations.

## Drainage and Recharge Needs

Over the past 20 years the City has commissioned various separate studies on stormwater drainage.

As a result of improvements made over the past 20 years, only one primary flood-prone area remains. That area, Fort King Road and 14th Avenue, is part of proposed improvements by

Florida Department of Transportation to widen and resurface Hwy 301 which lies immediately to the west. In 1997/1998, the City experienced abnormal high rainfall that resulted in drainage problems at Silver Oaks and Meadowood subdivisions. The City is coordinating with SWFWMD to address the problems and for solutions to avoid future drainage problems.

As the City continues to grow, the potential increase in run-off as a result of converting undeveloped areas to impervious areas could add to the storm water drainage flows. Such increases would seriously affect the City's existing drainage system. The City has made a firm commitment to regulate growth and to require new development to retain run-off on-site.

The City of Zephyrhills has adopted the FEMA-recommended model Flood Damage Prevention Regulations which essentially prohibits any future development with a finished floor elevation below an established Base Flood Elevation. This applies only to a relatively minor area adjacent to Lake Zephyr.

Land Development Code, Subdivision Regulations, Section 5064, addresses Storm Water Management. The essential requirement is to retain the runoff from a 25-year storm event with an intensity of 3.6 inches per hour.

Zoning Regulations require approval of a specific site plan for all development except a single family residence or a duplex. A part of the site plan review is for on-site stormwater retention. A development permit is not issued without a permit from SWFWMD.

Future development regulations will be expanded to address restriction of development from wetlands. (See Objective CON-2-1 in the Conservation Element).

The pattern of development within the City is expected to remain relatively stable during the next few years with slow growth mostly by annexing areas adjacent to the City. The major impact in the urban area will come from gradual reduction of some of the area available for recharge to the water table. To offset this impact, the City stormwater drainage regulations emphasize the preservation of natural drainage features and the use of drainage retention structures to maximize aquifer recharge.

**Protection of Wellfields, Cones of Influence**

Policies to prevent contamination of water sources and to protect well heads and cones of influence have been established in the City of Zephyrhills Land Development Code, which was adopted in March 1990.

Policies for protection include, but are not limited to:

- requiring a report submitted and signed by a professional engineer or geologist licensed in
- Florida;
- detailing the impact of the proposed development on the ground water;
- no new uses of land shall be allowed which would require or involve storage;
- use or manufacture of hazardous materials; and
- no new wells shall be permitted or constructed in the surficial, intermediate or Floridan aquifer system except as approved by the Utilities Superintendent.

The Land Development Code further details these restrictions and the materials restricted. The LDC further refers to methods of obtaining a wellfield management permit, clean-up and containment, denial, suspension or revocation of permits, new storage facilities, monitoring, replacement, maintenance, and enforcement action. This Code, also known as Ordinance 519, has the full force of law and is an integral part of site plan development within the City of Zephyrhills.

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## GOALS, OBJECTIVES AND POLICIES

### Introduction

Pursuant to Chapter 163.3177(3)(a)(b), F.S., and Chapter 9J-5.016(3)(a)(b)(c), F.A.C., the following represents the Goals, Objectives and Policies of the Public Facilities Element. In addition to statutory requirements, the Goals, Objectives and Policies were developed in keeping with the character, conditions, both environmental and social, and desires of the community. These Goals, Objectives and Policies are intended to provide guidance for maintaining the City's adopted levels of service standards for potable water, wastewater, stormwater drainage and solid waste to infrastructure serving the Zephyrhills area, and to protect water recharge areas lying within the greater Zephyrhills vicinity.

### Implementation

Unless otherwise stated, the implementation of objectives and associated policies contained in this Section shall be through the development, adoption, and application of regulations set forth in the City Code of Ordinances and Land Development Code.

The following policies are intended to establish a basis for assuring the availability of public facilities and infrastructure in a timely manner to support rational growth consistent with the Future Land Use Plan.

**GOAL PUB-1:** THE CITY SHALL PROVIDE A SUFFICIENT SUPPLY OF WATER OF APPROPRIATE QUALITY FOR ALL BENEFICIAL USES WITHIN THE ZEPHYRHILLS UTILITY SERVICE AREA.

**OBJECTIVE PUB-1-1** Secure sufficient raw water supplies, provide treatment capacity and implement conservation programs to meet the demands of existing and future potable water customers.

**POLICY PUB-1-1-1:** The City shall maintain the potable water level of service standard of 126 gallons per day per capita.

**POLICY PUB-1-1-2:** The City will continue to encourage use of the lowest quality water available and suitable to a given purpose. Programs shall be developed that provide for water reuse alternatives in lieu of wastewater and stormwater disposal to surface water bodies.

**POLICY PUB 1-1-3:** The City will implement construction codes which require state-of-the–art water conservation techniques for new construction.

**POLICY PUB-1-1-4:** The City will continue to enforce provisions of the Southwest Florida Water Management District Water Shortage Plan, Chapter 40D-21, Florida Administrative Code.

**POLICY PUB 1-1-5:** Investigate the feasibility of wet-weather storage option as a water source to augment reclaimed water flows.

**POLICY PUB 1-1-6:** The City shall maintain the Zephyrhills Water Supply Facilities Work Plan pursuant to Section 163.3177(6)(c), F.S. The Work Plan shall incorporate traditional and alternative water supply projects and conservation and reuse programs deemed necessary to meet the City's water supply needs over the comprehensive planning period.

**OBJECTIVE PUB-1-2:** Continue to provide DEP approved potable water distribution to all developed land within the corporate limits which is capable of delivering an average daily flow of 300 gallons per dwelling unit. The City will continue to monitor the capacity of the facilities that may require future expansion.

**POLICY PUB-1-2-1:** The City shall extend public water distribution lines to serve all residences within the present City limits, and to future annexed areas within three years after annexation. The Level of Service standard to be provided based on an average household size of 2.1 x 100 gal. per capita per day, plus 30% of the total for non-residential uses is 300 gal/day/du. (2.1 x 100 = 210 + 90 = 300). The 30% for non-residential use is based on current water consumption records of the City Utilities Department. For purposes of estimating non-residential water consumption, refer to the Appendix of this element.

**POLICY PUB-1-2-2:** No building permits will be issued for new residential, office or commercial development which is not served by a public water supply.

**POLICY PUB-1-2-3:** All properties within 200 feet of a public water supply will be required to connect to the public water supply within 120 days after availability unless served by another DEP approved private system.

**OBJECTIVE PUB-1-3:** Continue to provide quantity of water for each specific development with sufficient residual pressure to meet fire suppression standards of ISO.

**POLICY PUB-1-3-1:** No Certificate of Occupancy will be issued for new buildings which cannot be protected from fire damage by an adequate means of fire suppression.

**POLICY PUB-1-3-2:** Local regulations to protect water supplies will apply to privately-owned systems within the City's jurisdiction as well as the City owned system.

**POLICY PUB-1-3-3:** Site Plan review of proposed development within a delineated cone-of-influence will identify appropriate mitigation measures.

**OBJECTIVE PUB-1-4:** The City shall discourage urban sprawl and encourage compact development and a separation of urban and rural land uses by directing new development to areas currently served by potable water facilities to maximize the use of existing potable water distribution facilities before extending service to areas currently unserved by potable water facilities.

**POLICY PUB-1-4-1:** The City shall prioritize public funding, timing and location of capital improvement projects for potable water facilities which promote infill of areas to utilize existing potable water facilities.

**POLICY** PUB-1-4-2: The City shall develop priorities that maximize the use of existing public facilities and establish a plan for replacement, possible future facility deficiency corrections and future facility needs.

**GOAL** PUB-2: PROVIDE ENVIRONMENTALLY ACCEPTABLE MEANS OF COLLECTION, TREATMENT AND DISPOSAL OF WASTEWATER.

**OBJECTIVE** PUB-2-1: The City‘s well protection program will continue to evaluate all new development through the site plan review process.

**POLICY** PUB-2-1-1: The City will annually establish priorities for replacement, corrections and improvements of the sanitary sewer system.

**POLICY** PUB-2-1-2: City staff will continue to coordinate with FDEP and the Pasco County Health Department to identify any known point sources of water pollution with the Zephyrhills area.

**POLICY** PUB-2-1-3: City Council will not annex additional territory which encompasses a point source of water pollution without a specific plan and agreement to satisfactorily mitigate the pollution.

**OBJECTIVE** PUB-2-2: The City will continue to maximize the use of existing sanitary sewer facilities and strongly discourage urban sprawl by carefully reviewing infrastructure expansion. (All Septic tanks within cone of influence area have been eliminated.)

**POLICY** PUB-2-2-1: City Council will assign priority for extensions of the wastewater collection system to areas of the City presently served by septic tanks located within the zones described above.

**POLICY** PUB-2-2-2: The City will vigorously enforce present policy to require all development to connect to a public sewer when the wastewater collection line is within 200 feet of the property.

**POLICY** PUB 2-2-3: Future annexations will not be approved if existing of proposed development is/would be on septic tanks and lies within an area of concern as described above unless the land owner and City agree to extend the wastewater collection system.

**OBJECTIVE** PUB-2-3: Provide FDEP approved pre-treatment of non-domestic liquid waste before discharge to the wastewater collection system.

**POLICY** PUB-2-3-1: All existing non-residential users of the municipal wastewater system will be reviewed to identify potential sources of non-domestic liquid waste; interviews will be conducted with managers of potential generators to determine what types of waste are being discharged to the wastewater system and the adequacy of pre-treatment; specific remedies (if needed) will be negotiated with the property owner and approved by City Council.

**OBJECTIVE** PUB-2-4: Provide sufficient wastewater treatment capacity to satisfy current and at least 10-years projected needs within the Zephyrhills service area by identifying potential extensions or increase of capacity of facilities.

**POLICY** PUB-2-4-1: The City will expand wastewater treatment capacity to accommodate projected population growth within the service area: when this expansion is complete the City will annually reassess projected growth, plant utilization experience, future commitments, and the current water quality standards to provide sufficient lead time to plan future expansion as appropriate. The LOS standard is an average daily flow of 168 gal/day/du and a peak daily flow of 200 gal/day/du plus 30% reserve for non-residential users. This Level of Service is based on current City Utility Department records which indicate that approximately 80% of water sold to customers enters the WWTP.

**GOAL** PUB-3: DISPOSE, COLLECT AND TREAT SOLID WASTE GENERATED WITHIN THE CITY OF ZEPHYRHILLS IN AN ENVIRONMENTALLY SAFE AND COST EFFECTIVE MANNER.

**OBJECTIVE** PUB-3-1: Address environmental issues on the closure of the City landfill.

**POLICY** PUB-3-1-1: All appropriate monitoring with DEP of the City Class III (closed) landfiill will continue.

**POLICY** PUB-3-1-2: The Class III landfill was closed in compliance with DEP (10/31/91).

**OBJECTIVE** PUB-3-2: Continue reduction in the volume of solid waste entering the waste disposal system to provide sufficient solid waste capacity to satisfy current and future demands with the Zephyrhills area.

**POLICY** PUB 3-2-1: The City will educate the citizens on recycling efforts and hazardous materials with information on proper disposal.

**POLICY** PUB-3-2-2: Expand use of yard waste for compost and mulch in maintaining parks and other City properties.

**POLICY** PUB-3-2-3: The City will continue to participate in the Pasco County solid waste disposal system. The Level of Service Standard for the county facility is 1,050 ton/day and 1.5 tons of solid waste per year per dwelling unit.

**GOAL** PUB-4: ELIMINATE FLOODING OF ALL STRUCTURES WITHIN THE CITY.

**OBJECTIVE** PUB-4-1: Continue to correct local flooding conditions in at least one isolated depression each year until all such areas have been corrected.

**POLICY** PUB-4-1-1: City staff will delineate all areas of localized flooding and develop plans for corrective measures to be incorporated into the Capital Improvements Element.

**POLICY** PUB-4-1-2: New development or redevelopment is not permitted unless the finished floor elevation is at least 8 inches above the crown of the adjacent road unless waived by the Building Official and at or above the 100 year flood elevation.

**POLICY** PUB-4-1-3: All new development or redevelopment is required to provide on-site retention of stormwater of sufficient capacity to assure that post-development runoff is no greater than pre-development runoff. The adopted level of service standard is a 25-year storm of 3.6 inches of rainfall in 1 hour. Improvements undertaken to correct existing localized ponding of water will be based on meeting or making progress toward achievement of the adopted LOS standards for drainage facilities.

**POLICY** PUB 4-1-4: Implement Flood Damage Prevention Regulations within the FEMA designated 100-year flood prone area.

**POLICY** PUB-4-1-5: City Council will cooperate with FDOT, FDEP, SWFWMD and all other appropriate regulatory agencies to design and implement an acceptable storm-water drainage system for US 301 within the City, including the granting of easements within public rights-of-way, relocation of water and sewer lines where needed and financially feasible, and modification of building setback requirements as appropriate.

**POLICY** PUB-4-1-6: Existing City owned retention ponds, pumps, pipes and other elements of a stormwater system will be periodically inspected and maintained in good working order.

**POLICY** PUB-4-1-7: Property owners who do, or permit others to fill in swales, block culverts, deposit debris or otherwise encroach upon any element of the public stormwater drainage system will be assessed the cost of removal, repair or other corrective actions of the City.

**POLICY** PUB-4-1-8: Driveway permits will be granted unless the driveway is designed to accommodate cross drainage as determined by City staff.

**OBJECTIVE** PUB 4-2: Continue to ensure that existing and future land uses do not adversely impact the functions of natural groundwater aquifer recharge areas and natural drainage features within the City.

**POLICY** PUB-4-2-1: The City's Land Development Regulations shall require that wetlands and natural groundwater aquifer recharge areas be included as part of the site development plan. These areas can be used to meet open space, aesthetics, water retention and partial park requirements.

**POLICY** PUB-4-2-2: Land uses (such as dry cleaners, service stations, and heavy industrial uses) which are potential users, handlers or producers of toxic, hazardous or carcinogenic substances or wastes shall be prohibited within identified aquifer recharge areas. Other prohibited uses within these protected areas include

wastewater treatment plants, percolation ponds, stormwater disposal wells and excavations that intersect the water table.

**GOAL PUB-5:** DEVELOP AN INTEGRATED STORMWATER MANAGEMENT SYSTEM AND GROUNDWATER AQUIFER PROTECTION.

**OBJECTIVE PUB-5-1:** Prepare a master drainage/stormwater management plan for the City by 2002. The plan should address correcting existing facility deficiencies, coordination of the extension or increase of facilities capacity and maximize the use of existing facilities. (Drainage for the Airport will be addressed site specific as property develops.)

**POLICY PUB-5-1-1:** The airport will assume financial responsibility for development of the airport master drainage plan.

**POLICY PUB-5-1-2:** Developers will be financially responsible for on-site stormwater detention.

**POLICY PUB-5-1-3:** The City will be responsible for the cost of off-site drainage facility construction and maintenance.

**POLICY PUB 5-1-4:** Priority for replacement, correcting existing drainage facility deficiencies, and providing for future facility needs will be based on the following:

- physical feasibility
- ratio of cost of improvement to value of effected property
- number of persons residing within the drainage area benefiting from the improvement

**OBJECTIVE PUB-5-2:** The City shall maintain or improve water quality by prohibiting runoff that will contribute pollutants to degrade water quality consistent with Rule 9J-5.011(c)5., F.A.C.

**POLICY PUB-5-2-1:** The design of drainage facilities shall comply with the ambient water quality standards of SWFWMD, DEP, and Chapter 17 – 25 and other applicable water quality regulations for discharge.

**OBJECTIVE PUB-5-3:** Reduce demand for groundwater resources and the need for potable water system expansion by promoting and practicing water conservation and expanding access to alternative water supplies.

**POLICY PUB-5-3-1:** The City shall continue to expand the reclaimed water system to provide alternatives to groundwater withdrawals for irrigation and other nonpotable water uses and to reduce the need for wastewater and stormwater disposal to surface water bodies.

**POLICY PUB-5-3-2:** The City shall prohibit use of potable water for irrigation in the Zephyrhills Future Service Area where reclaimed water is available.

**POLICY PUB-5-3-3:** The City shall develop partnerships with community groups, developers and agencies, such as the Southwest Florida Water Management District and

University of Florida / IFAS (Florida Yards & Neighborhoods Program), to promote awareness of water conservation needs and practices, and distribute water conservation information in one or more of the following ways: website, newsletters, brochures, speakers bureau presentations and displays at community events.

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