

## CHAPTER 10

### SANITARY SEWER, SOLID WASTE, STORMWATER, POTABLE WATER, AND NATURAL GROUNDWATER AQUIFER RECHARGE ELEMENT (INFRASTRUCTURE ELEMENT)

Section 10.01 Purpose: The purpose of this Chapter (element) is to provide for necessary public facilities and services correlated with the Future Land Use Maps (projections) and consistent with the goals, objectives and policies contained in this Ordinance.

Section 10.02 Data and Analysis: This Chapter (element) is based upon the data and analysis requirements pursuant to 9J-5.011(1)(2), F.A.C. and 9J-5.005(2), F.A.C. Reference Sections 5.03, 5.06 and 5.07 of this Ordinance and Chapter 7 of the Foundation Documents.

Section 10.03 Natural Groundwater Aquifer Recharge: NOT APPLICABLE. There are no identified prime (potable) groundwater or aquifer recharge areas within the City for the Floridan aquifer (reference Chapter 7, Exhibit A, Foundation Documents). Goals, Objectives and Policies regarding the sand and gravel aquifer are included at Section 10.08 of this Ordinance.

Section 10.04 Sanitary Sewer Goals, Objectives and Policies: The Goals, Objectives and Policies for sanitary sewer are as follows:

Goal 10.A - The provision of an environmentally safe and efficient wastewater collection, treatment and disposal system.

Objective 10.A.1 - Correct existing wastewater facility deficiencies, replace obsolete or worn out facilities and maximize the use of existing facilities.

Policy 10.A.1.1 - Cooperate with Okaloosa County and the City of Valparaiso in expansion of the Regional Wastewater Treatment Plant to a 4 MGD facility by 2012.

Policy 10.A.1.2 - The LOS standards for sanitary sewer within the City shall be 100 gallons per capita per day (average daily demand) for both collection and treatment.

Policy 10.A.1.3 - The LDC shall contain detailed methodologies for determining available capacity and the impact upon capacity of any proposed development.

Policy 10.A.1.4 - The City will maintain an infiltration/inflow rate of twenty (20%) percent of average daily flow or better (reference Table 14-1).

Policy 10.A.1.5 - The City prohibits package treatment plants. Nothing in this policy shall be interpreted to prohibit pre-treatment facilities when necessary to serve individual businesses or industry (also, see Policy 11.B.2.3).

Objective 10.A.2 - Coordinate extensions of the collection system and increase in capacity of the entire system with the Future Land Use Maps and future facility needs upon adoption of this Ordinance.

Policy 10.A.2.1 - Extension of collection systems shall be provided by the private sector and consistent with the Future Land Use Maps (Figures 7-1, 7-2 and 7-3) (reference Policy 14.A.4.2).

Policy 10.A.2.2 - Prioritization of the reconstruction or rehabilitation of existing collection lines will be accomplished pursuant to Policy 14.A.1.3 of this Ordinance.

Policy 10.A.2.3 - The City will continue its practice of "pay as you go" growth as it occurs by periodically adjusting sewer impact fees and user fees as necessary (reference Policy 14.A.1.2).

Section 10.05 Solid Waste Goals, Objectives and Policies: The Goals, Objectives and Policies for solid waste are as follows:

Goal 10.B - An environmentally safe, efficient and cost effective system for the collection and disposal of solid waste.

Objective 10.B.1 - Correct existing solid waste facility deficiencies, coordinate the increase in capacity of facilities to meet future needs and maximize the use of existing facilities.

Policy 10.B.1.1 - The City shall continue enforcement of Chapter 8 of the City Code (Garbage and Refuse) so that all solid waste generated within the City is properly collected and disposed of.

Policy 10.B.1.2 - The City shall transport solid waste collected within the City to the disposal facilities provided by Okaloosa County. These facilities include a transfer station in the south end of Okaloosa County. Solid waste from the transfer station will be transported to a regional land-fill outside this area thereby maximizing the life of existing land-fills within Okaloosa County for use by present and future residents.

Policy 10.B.1.3 - The City shall continue to participate in the Okaloosa County recycling program so that a reduction in the solid waste stream going to landfills is reduced. Note: The program is designed to remove at least 30% of the solid waste from the waste stream. Significantly, as of the transmittal date of this Ordinance, Niceville is experiencing an approximate 80% participation rate.

Policy 10.B.1.4 - The LOS standards for solid waste within the City of Niceville shall be five (5) pounds per capita per day.

Section 10.06 Stormwater Management Goals, Objectives and Policies: The Goals, Objectives and Policies for stormwater management are as follows:

Goal 10.C - An environmentally safe and efficient stormwater management system.

Objective 10.C.1 - Correct existing stormwater management facility deficiencies and maximize the use of existing facilities.

Policy 10.C.1.1 - The City shall continue its practice of not issuing development permits for projects not meeting the design criteria for correcting existing deficiencies or meeting future stormwater requirements.

Policy 10.C.1.2 - The City shall continue its practice of correcting localized stormwater problems so that LOS standards are maintained (reference Policy 10.C.2.2 and Table 14-1).

Policy 10.C.1.3 - The City shall require the use of swale drainage on roadways (existing or new) to the maximum extent possible. Perforated pipe shall be used in situations where piping is necessary (also, see Policy 11.A.2.2).

Policy 10.C.1.4 - The City shall continue its periodic inspection program of stormwater control structures to insure the proper functioning of such structures.

Policy 10.C.1.5 - The LDC shall include land use regulations (reference Policy 7.A.1.2). In addition, the LDC shall include regulations which require site specific development plans to protect natural drainage features and incorporate such features into the site planning and development process.

Objective 10.C.2 - Provide stormwater management facilities concurrent with demand created by future development in accordance with the LDC.

Policy 10.C.2.1 - Installation of stormwater management facilities made necessary by new development shall be the responsibility of the developer (reference Policy 14.A.4.2).

Policy 10.C.2.2 - The LOS standards for stormwater shall be:

- a. Treat the first inch of run-off on-site (one-half inch minimum). That amount will vary depending on the amount of impervious surface, from one-half inch up to one inch. For discharges into Outstanding Florida Waters, must treat an additional fifty percent (50%) of the applicable treatment volume; and
- b. Must provide detention so that the peak rate of post development run-off will not exceed the pre-development peak rate of run-off for the 25 year, 24 hour design storm event, utilizing a Natural Resources Conservation Service (NRCS) Type II distribution with an antecedent moisture condition II. Required detention volume must be available within 14 days following the design storm event.

Note: The LDC shall include design and performance standards pursuant to Section 62-25.025, F.A.C. and Section 62-3, F.A.C.

Policy 10.C.2.3 - The criteria used to establish priorities for replacing stormwater management facilities or correcting facility deficiencies and providing for future stormwater management needs shall be as specified in Policy 14.A.1.3. In addition, the City shall install necessary pipes and under drains pursuant to the activities described in Table 7-3 of the Foundation Document and shall implement the right-of-way improvements pursuant to Table 7-3 of the Foundation Document. The first priority items shall be the pipes and under drains (reference Table 14-1).

Policy 10.C.2.4 - The City shall continue to implement its Stormwater Management Plan, adopted in 2006, that addresses the identification, prioritization, funding, and needed infrastructure improvements to resolve stormwater quantity and quality problems.

Section 10.07 Potable Water Goals, Objectives and Policies: The Goals, Objectives and Policies for potable water are as follows:

Goal 10.D - An environmentally safe and efficient system for the provision of potable water.

Objective 10.D.1 - Correct facility deficiencies, replace obsolete or worn out facilities and maximize the use of existing facilities by implementing recommendations of the January 2004 Water System Facilities Plan for the City of Niceville.

Policy 10.D.1.1 - The LOS standard for potable water within the City shall be 124 gallons per capita per day (average daily demand).

Policy 10.D.1.2 - The City shall implement recommendations of the City of Niceville Water System Facilities Plan which includes the projected needs through 2020. Elements of this Plan for infrastructure improvements and water conservation programs are defined and funded in the approved Capital Improvement Plan.

Policy 10.D.1.3 – The City shall implement recommendations from the Northwest Florida Water Management District’s Regional Water Supply Plan.

Policy 10.D.1.4 – The City will participate in the updates of the NFWFMD’s water supply assessments, and updates of the District Water Supply Plan to enable the City to design and implement an effective water supply plan.

Policy 10.D.1.5- The City shall adopt and maintain a Water System Facilities Plan for at least a 10-year planning period addressing water supply facilities necessary to serve existing and future development within the City’s water service area and in conjunction with the City’s Consumptive Use Permit.

Policy 10.D.1.6- The Water System Facilities Plan will be used to prioritize and coordinate the expansion and upgrade of facilities used to withdraw, transmit, treat, store and distribute potable water to meet future needs.

Policy 10.D.1.7- The City will maximize the usage of existing potable water facilities through the implementation of management techniques that can enhance sources of supply, sustain water

resources and related natural systems, and/or optimize water supply yields. These techniques may include, but are not limited to, system interconnectivity, reclaimed water usage, and water conservation.

Policy 10.D.1.8- The City will examine, to the extent possible, the use to interconnectivity of water facilities with other local jurisdictions as recommended by the NFWFMD Regional Water Supply Plan.

Policy 10.D.1.9- The City has adopted a model Xeriscape ordinance that requires all new development to employ the Xeriscape landscaping techniques.

Objective 10.D.2 - Provide potable water facilities concurrent with demand (reference Chapter 6) upon adoption of the LDC (reference Policy 7.A.1.1).

Policy 10.D.2.1 - Cost for potable water facilities will be funded by user fees, special assessments or other devices determined appropriate by the City.

Policy 10.D.2.2 - Cost for water line extensions made necessary by new development shall be funded in total by the developer (reference Policy 14.A.4.2).

Policy 10.D.2.3 – The City shall use an Inclining-block rate water billing system to promote the use of water conservation.

Objective 10.D.3 - Continually conserve potable water resources upon adoption of the LDC (reference Policy 7.A.1.1).

Policy 10.D.3.1 - The City will cooperate with the Regional Utility Authority for water supply planning and financing alternatives.

Policy 10.D.3.2 - The City shall continue to study and evaluate the use of surface water to meet future potable water demands.

Policy 10.D.3.3 - An area of water resources concern has been established by the Northwest Florida Water Management District to protect the area's water resources from depletion, saltwater intrusion or man induced contamination, or from any other activity which may substantially affect the quality or quantity of the area's water resources. Within the area, the NFWFMD has established lower permit thresholds, management (maximum) and minimum levels, and stipulates any limiting conditions as necessary to monitor, manage, and control the use of water. The City of Niceville shall cooperate with the NFWFMD in its establishment of any areas of water resources concerns which may impact the corporate limits of the City of Valparaiso.

Policy 10.D.3.4 - The City shall include, within the LDC, appropriate regulations to assist in the enforcement of the regulations which accompany the declaration referenced in Policy 10.D.3.3 above. Specifically, the LDC shall include relevant portions of Section 40A-2.801, et. seq. of the

Florida Administrative Code in order to provide for regulatory provisions to protect the quality and quantity of groundwater serving the City.

Policy 10.D.3.5 - The LDC shall include a water saving devices ordinance to further reduce potable water demand.

Policy 10.D.3.6 - The City shall continue to inform the public of water conservation techniques and strategies by periodic publication of information in the City's monthly newsletter, Sunshine.

Policy 10.D.3.7- The City shall continue to focus on the following conservation strategies:

- Require Water reduction devices in construction:
- Require Xeriscaping for most types of development to the extent possible:
- Require native vegetation:
- Incorporate in advance water conservation practices in building and land development codes:
- Continue use of concurrency management system to ensure adequate water supply is in place prior to issuance of a building permit:
- Require the use of reclaimed water where applicable:
- To the extent possible, investigate complaints regarding leaks or high water bills:
- Equip City-operated irrigation systems with rain sensors and/or soil moisture monitoring devices.

Section 10.08 Natural Groundwater Aquifer Recharge Goals Objectives and Policies: The goals, objectives and policies for the natural groundwater aquifer recharge (sand and gravel aquifer) sub-element are as follows:

Goal 10.E - Provide for the recharge of the sand and gravel aquifer from rainfall. Note: The Floridan Aquifer is not recharged within the City (reference Exhibit 7A, Chapter Seven, Foundation Document). The sand and gravel aquifer is not used for potable water purposes.

Objective 10.E.1 - The LDC shall include regulations which protect the function of the sand and gravel aquifer and the recharge potential for such aquifer. The regulations shall be developed pursuant to Policies 10.E.1.1 and 10.E.1.2, among others.

Policy 10.E.1.1 - The LDC shall include regulations which insure the continuation of adequate open spaces within the City so that rainfall may reach the sand and gravel aquifer through percolation.

Policy 10.E.1.2 - The LDC shall include provisions pursuant to Policies 7.A.1.2(a)(b)(d)(e)(f)(g)(h), 7.A.2.3(b), 7.A.3.2, 7.A.3.4, 7.A.4.1, 7.A.4.3, 7.A.4.6, 7.A.8.4, 7.A.10.1, 7.A.10.2, 8.E.3.1, 9.A.2.4, 9.A.2.5, 10.A.1.5, 10.C.1.1, 10.C.1.2, 10.C.1.2, 10.C.2.3, 10.D.3.1, 10.D.3.2, 10.D.3.3, 10.D.3.4, 11.A.1.1, 11.A.1.2, 11.A.1.4, 11.A.1.7, 11.A.2.1, 11.A.2.2, 11.A.4.1, 11.A.8.1, 11.A.9.1, 11.A.9.3, 11.B.2.1, 11.B.2.2, 11.B.2.3, 11.B.3.1, 11.B.4.1, 12.A.1.1, 12.A.1.2, 12.A.1.3, among others.