

13**AGENDA ITEM
Planning & Zoning**

Meeting

10/15/2026

MEETING DATE**TO:** Planning and Zoning Board Members**DATE:** October 8, 2026**FROM:** Neal Shinkre, P.E., Director, Utilities**PHONE:** 904 209-2721**SUBJECT OR TITLE:** COMPAMD 26-01 Wellhead Protection Adoption Hearing**AGENDA TYPE:** Business Item, Legislative, Recommendation**PRESENTER:** Lex Taylor, Deputy County Attorney**BACKGROUND INFORMATION:**

Since the original St. Johns County Land Development Code in 1999 and Comprehensive Plan, significant technological and regulatory advancements have been made related to wellhead protection. Based on increased density in the County and its need for future well sites, SJCUD proposes to bring the County Comp Plan and Land Development code into compliance with State law and alignment with current best practices. This Comprehensive Plan Amendment was sent to the State for Review. This is the second reading and public hearing of the proposed Comp Plan Amendment. If approved to proceed through the public hearing process, the Comp Plan Amendment will be sent to the State for recommendations.

SUGGESTED MOTION/RECOMMENDATION/ACTION:

Motion to Recommend adoption of COMPAMD26-01 Wellhead Protection.



Growth Management Department
COMP Plan Amendments 2026-01

To: Planning and Zoning Agency

From: Lex Taylor, Deputy County Attorney

Date: October 15, 2026

Subject: **Comprehensive Plan (COMP Plan) Amendments 2026-__ for Wellhead Protection - Second Reading – Final Hearing**

Hearing Dates: PZA – August 20, 2026 (First Hearing -- PZA)
BCC – September 1, 2026 (Transmittal Hearing -- BCC)
PZA – October 15, 2026 (tentative Second PZA)
BCC – October 20, 2026 (tentative Final Hearing)

Commissioner District: N/A

BACKGROUND

Since the original St. Johns County Land Development Code in 1999 and that version of the Comprehensive Plan, significant technological and regulatory advancements have been made related to wellhead protection. Based on increased density in the County and its need for future well sites, SJCUD proposes to amend the restrictions related to wellhead protection. Aligning the restriction with current State of Florida regulations and the St. Johns Water Management District brings us into compliance with state law and allows for correct placement of new County wells.

SJCUD must secure 20-30 additional well sites to meet its future water supply projections. Due to increased density, obtaining these sites has become challenging. Many sites are not feasible, too expensive, or sellers are unwilling to negotiate the purchase of a site. The County has committed to serving approved developments, and water supply planning and well construction must stay ahead of the completion of these developments.

The Florida Administrative Code (FAC) 62-761 mandates the wellhead protection radius to be 500 feet. This has always been the distance prescribed, and the majority of Florida municipalities and utilities have aligned with the state requirement. For example, Clay, Duval, Flagler, Putnam, and Alachua Counties all state 500 feet as the wellhead protection area. SJCUD is not proposing to reduce the overall 1,000 feet wellhead protection area (Floridan Aquifer Secondary Zone), but only make an exception for retail fuel stations provided that such facilities incorporate storage systems installed with secondary containment as required in Chapter 62-761, F.A.C.

The current version of the LDC allows for special use permits within the 500-foot wellhead protection area which is in conflict with state law, so the change from 200 feet to 500 feet from the County is what the County has been required to enforce and matches State law.

A typical SJCUD well is 450 feet deep so does not impact anything that a surficial well would impact. Well construction includes a casing covering the shaft fully until the pumping zone. It is capped at the surficial aquifer and only draws from the Floridan aquifer. St. Johns County's geology is not karst like other parts of Florida that have natural springs. The confining layer in St. Johns County protects the aquifer from surficial impacts. The attached hydrogeological report and standard well construction detail contain more information.

In addition, the SJRWMD issues the consumptive use permits for SJCUD wells and therefore dictates much of the wellfield management. SJCUD must protect water quality for its wells, as well as surrounding wells. Pumping rates are lowered for this protection, which necessitates more wells. SJCUD's Wellfield Optimization Plan Report (June 2015) is available if more detail is needed on SJCUD's wellfield management.

SJCUD staff reached out to other water providers in St. Johns County to verify their support. There were no objections to this proposed change.

AMENDMENT SUMMARY

A red-line copy of the amendments is included as **Attachments** to this report. Changes consist of the following:

Objective D.4.4 and D.5.4 are modified to bring the Comprehensive Plan into alignment with the proposed Land Development Code changes. The changes increase the primary zone of protection from 200 feet to 500 feet to mirror state law and mirror what the County is required to enforce. They remove the ability to get a special use permit within the primary zone to comply with State law. Minor changes to stormwater regulation

are modified because St. Johns Water Management District monitors the position of all wellheads and regulates stormwater accordingly.

CORRESPONDENCE/PHONE CALLS

As of the writing of this staff report, Staff has not received related calls.

BOARD DIRECTION

Comprehensive Plan Amendment 2026-01 was transmitted to Tallahassee. Action today may include transmitting adopting the Comprehensive Plan amendment as presented or with modifications or moving to deny the Comprehensive Plan Amendment. If the direction given today is to transmit this item to Tallahassee with or without modifications, the State's recommendation will be brought back to the Board at a future meeting for further action.

ATTACHMENTS

1. Hydrogeological Report
2. Well Standard Detail
3. Ordinance
4. **Exhibit A** and **Exhibit B** (clean)
5. Redline



General Geology and Hydrogeology of St. Johns County

Proposed Ordinance Amendments for
Wellhead Protection
Supporting Information

Prepared by St. Johns County
Utility Department

August 25, 2025

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I. General Geology and Hydrogeology of St. Johns County

A review of the hydrogeology in St. Johns County, Florida (study area) was conducted using existing hydrogeologic data, published reports, drilling and geophysical logging data, and well construction and testing records obtained from wells located throughout the county. Data from these sources were compiled to illustrate cross sections of the generalized hydro stratigraphy underlying the study area.

Figure 1 presents a general summary and description of the hydrogeologic framework in the study area. Figure 2 provides a location map for the cross sections (A–A' and B–B') shown in Figures 3 and 4, respectively.

A. Hydrogeologic Framework

The geological setting of the study area consists of a thick sequence of carbonate rock and unconsolidated to semi-consolidated clay, silt, and sand deposits that overlie a basement of complex metamorphic strata. The principal aquifer systems underlying the study area are contained within sediments ranging in age from the Late Cretaceous to the Holocene. From shallowest to deepest, these aquifer systems include the Surficial Aquifer (SA), the Floridan Aquifer System (FAS), and the Cretaceous Aquifer System (CAS).

The geologic units that comprise the SA, FAS, and CAS, from youngest to oldest, include undifferentiated deposits of Pliocene and Late Miocene age, the Hawthorn Group of Miocene age, the Ocala Limestone of Late Eocene age, the Avon Park Formation of Middle Eocene age, the Oldsmar Formation of Early Eocene age, the Cedar Keys Formation of Paleocene age, and the Lawson Limestone and Navarro Group of Upper Gulfian age (Figure 1).

Rocks comprising these geologic formations generally dip to the north-northeast and are shallower in the southern portion of the county. Variations in the thickness and distribution of these stratigraphic units are depicted in Figures 3 and 4. Groundwater quality in the area is variable and generally degrades toward the south, becoming more mineralized with depth.

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SYSTEM	SERIES	GEOLOGIC FORMATION	LITHOLOGIC CLASSIFICATION	AQUIFER SYSTEM		HYDROLOGIC UNIT
Quaternary	Holocene/ Pleistocene	Undifferentiated Deposits	Sand, silt, and shell deposits	Surficial Aquifer		Surficial Aquifer
Tertiary	Pliocene Miocene	Hawthorn Group	Clay, silt, sand, and carbonate deposits	FLORIDAN AQUIFER SYSTEM	UCU	Upper Confining Unit
	Eocene	Ocala Limestone	Fossiliferous limestone porous		UFA	Upper Floridan Aquifer
		Avon Park	Fossiliferous and dolomitic limestone variable		MSCU	Middle Semi Confining Unit
					Lower Floridan Aquifer	Upper Avon Park Permeable Zone
						Confining to Semi Confining Unit
						Semi-Confining Unit (MAPCU)
						Lower Avon Park Permeable Zone
	Oldsmar Formation	Micritic and dolomitic limestone	Lower Floridan Aquifer		GMU Confining Unit	
	Paleocene	Cedar Keys Formation			Interbedded dolomite and anhydrites	Fernandina Permeable Zone
LCU				Lower Confining Unit		
Cretaceous	Upper Gulfian	Lawson Limestone	Dolomitic limestone, fossiliferous, porous	Cretaceous Aquifer System	Lawson Limestone	
		Rocks of Navarro Age			Chalk, Clay, and Sand	Navarro Group

Figure 1: Generalized Hydro stratigraphy of St. Johns County, Florida

B. Surficial Aquifer

The geologic units comprising the Surficial Aquifer (SA) in the study area consist predominantly of discontinuous, interbedded lenses of unconsolidated, fine- to medium-grained quartz sand, shell, and clay deposits of the Pleistocene, Holocene, and Late Miocene series. The base of the SA is expected to occur at an elevation of approximately –25 to –100 feet mean sea level (msl) and generally lies between 25 and 120 feet below land surface (bls) in the study area.

The SA is underlain by approximately 50 to 310 feet of Miocene-age phosphatic sands, dolomitic silts, and clay deposits (Hawthorn Group) that comprise the upper confining unit (UCU) of the Floridan Aquifer System (FAS). As shown in Figure 3, the thickness of the UCU increases in the northern part of the county, where it generally ranges from 180 to 310 feet. In the southern part of the county, it decreases to roughly 50–150 feet. The silt and clay deposits of the UCU form an effective confining layer that restricts the exchange of water between the underlying FAS and the SA.

C. Floridan Aquifer System

The FAS is the principal underground source of drinking water in the region due to its water quality and production potential. Except for the UCU, the hydrogeologic units comprising the FAS, in descending order, include the Upper Floridan Aquifer (UFA), the middle semiconfining unit (MSCU), the Lower Floridan Aquifer (LFA), and the lower confining unit (LCU).

The LFA is subdivided into three distinct aquifer zones:

- Upper Avon Park permeable zone (UAPPZ)
- Lower Avon Park permeable zone (LAPPZ)
- Fernandina permeable zone (FPZ)

These zones are separated by two intervening confining units: the middle Avon Park Composite Unit (MAPCU) and the Glauconite Marker Unit (GMU). The geologic units comprising the FAS, from youngest to oldest, include the Ocala Limestone, the Avon Park Formation, and the Oldsmar Formation. The Cedar Keys Formation forms the lower boundary of the FAS.

D. Upper Floridan Aquifer

The UFA occurs below the Hawthorn Group and is contained within the carbonates of the Ocala Limestone. In the southern part of the county, it also includes the carbonate rocks of the upper Avon Park Formation. This sequence consists primarily of poorly to moderately indurated, fossiliferous limestone with relatively high effective porosity and permeability, grading into moderately indurated limestone and sparse dolomitic limestone.

In general, the UFA dips to the north-northeast and is inferred to occur at depths ranging from approximately –90 feet msl in the southwestern county to more than –350 feet msl in the extreme north. Based on lithologic and geophysical logging data from water-supply wells throughout the county, its thickness is estimated at 200–300 feet. Hydraulic data from the St. Johns River Water Management District (SJRWMD) Northeast Florida (NEF) regional model indicate transmissivity values generally range from 20,000 to 500,000 feet squared per day (ft^2/d). Constant-rate pumping tests in the Tillman Ridge Wellfield suggest transmissivity of the UFA in the CR 207 wastewater basin is on the order of 28,000–55,000 ft^2/d .

Water-quality conditions in the UFA were evaluated using existing groundwater sampling data from thirty UFA wells in the study area. These data, obtained from the SJRWMD water-quality database, were compiled into a TDS concentration contour map (Figure 5). Water in the UFA is fresh in the

northern county and brackish in the south. TDS concentrations range from about 200 mg/L in the northwest to approximately 5,000 mg/L in the southeast. The high-TDS water in the southern county is attributed to vertically induced migration of saline water from deeper FAS zones, driven by UFA discharge through submarine springs east of Crescent Beach (Spechler and Hampson, 1984).

E. Middle Semiconfining Unit (MSCU)

The MSCU underlies the UFA and is estimated to range from 100 to 400 feet in thickness across the study area. This unit separates the UFA from the underlying LFA and generally consists of low-permeability limestone and dolomite deposits within the Avon Park Formation. The degree of vertical fluid movement through the MSCU varies across the county, depending on its vertical hydraulic conductivity. Based on the SJRWMD NEF groundwater model, leakance through the MSCU is low in the northern part of the county (10^{-6} to 10^{-5} per day) and increases by several orders of magnitude in the southern half, which may have contributed to upward migration of deep saline water into shallower aquifer zones in this area (Figure 3).

F. Lower Floridan Aquifer (LFA)

The LFA underlies the MSCU and comprises three discrete water-producing zones separated by intra-aquifer confining units. These zones occur within the carbonates of the Avon Park Formation:

- Upper Avon Park permeable zone (UAPPZ)
- Lower Avon Park permeable zone (LAPPZ)
- Fernandina permeable zone (FPZ)

The UAPPZ occurs at depths of approximately –700 to –900 feet msl in the study area and generally ranges from 50 to 200 feet in thickness, depending on location. It supplies water to Duval County and parts of northeast St. Johns County, where its groundwater is fresh with relatively low TDS concentrations. As in the UFA, water quality in the UAPPZ degrades southward—TDS exceeds 10,000 mg/L in the middle to southern half of the county (Figure 3).

The middle Avon Park Composite Unit (MAPCU) separates the UAPPZ from the deeper LAPPZ, providing roughly 100 to 200 feet of confinement between them. The top of the LAPPZ lies between –1,050 and –1,200 feet msl and is several hundred feet thick. Water quality in the LAPPZ is poorly understood due to limited well data, but is expected to be brackish to saline throughout the study area, especially in the southern half of the county.

The Glauconite Marker Unit (GMU) underlies the LAPPZ and is composed of interbedded dolomite

and anhydrite deposits in the upper Oldsmar Formation. Its low-permeability rocks form an effective confining layer between the LAPPZ and the FPZ. In the study area, the GMU occurs at depths of –1,300 to –1,600 feet msl and ranges from 300 to 500 feet in thickness. Drilling, sampling, and geophysical-logging data from an FPZ test monitoring well (SJ0025) in northeast St. Johns County indicate that the GMU is an excellent confining unit: flow logs and head differences, as well as a sharp chloride increase—from 38 mg/L in the LAPPZ to 16,210 mg/L in the FPZ—demonstrate its effectiveness.

G. Fernandina Permeable Zone

The FPZ underlies the GMU and is the lowermost permeable zone of the LFA. It is composed of highly permeable, fractured limestone and dolomite that make up the lower portion of the Oldsmar Formation. The FPZ is estimated to occur at depths ranging from –1,650 to –1,950 feet mean sea level (msl) and is 150 to 300 feet thick in the study area. It contains saline, highly mineralized groundwater. Based on recent water-quality samples from the FPZ monitoring well in northeast St. Johns County, TDS concentrations in this zone are on the order of 30,000 mg/L and are expected to exceed 10,000 mg/L elsewhere in the county.

H. Lower Confining Unit

The LCU lies below the FPZ and consists of lower Eocene to Paleocene, gypsiferous carbonates of the Cedar Keys Formation. It is estimated to occur from –1,950 to –2,200 feet msl and range from 250 to 500 feet in thickness. Primary porosity in these rocks is filled with anhydrite or gypsum, making them nearly impermeable and thus an effective confining unit. This unit forms the base of the Floridan Aquifer System (FAS) in the area and separates it from the underlying Cretaceous Aquifer System.

I. Lawson Limestone

In the study area, the Lawson Limestone is the uppermost permeable zone of the CAS, separated from the FPZ by the Cedar Keys Formation. This sequence of carbonate rock consists primarily of light-colored, fossiliferous, dolomitic limestone with relatively high effective porosity and permeability.

The Lawson Limestone is estimated to occur at depths between –2,200 and –2,600 feet msl and to range from 200 to 300 feet in thickness. Based on fluid-resistivity logs obtained from previous oil- and gas-exploratory wells, the TDS concentration in the Lawson Limestone is inferred to be on the order of 50,000 mg/L or more.

J. Navarro Confining Unit

The Navarro Confining Unit underlies the Lawson Limestone and consists of low-permeability sand, clay, and chalk deposits. Drilling records from exploratory oil- and gas-wells in the study area indicate that this unit is composed predominantly of white chalk grading into well-indurated shale.

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Figure 2: Cross Section Location Map

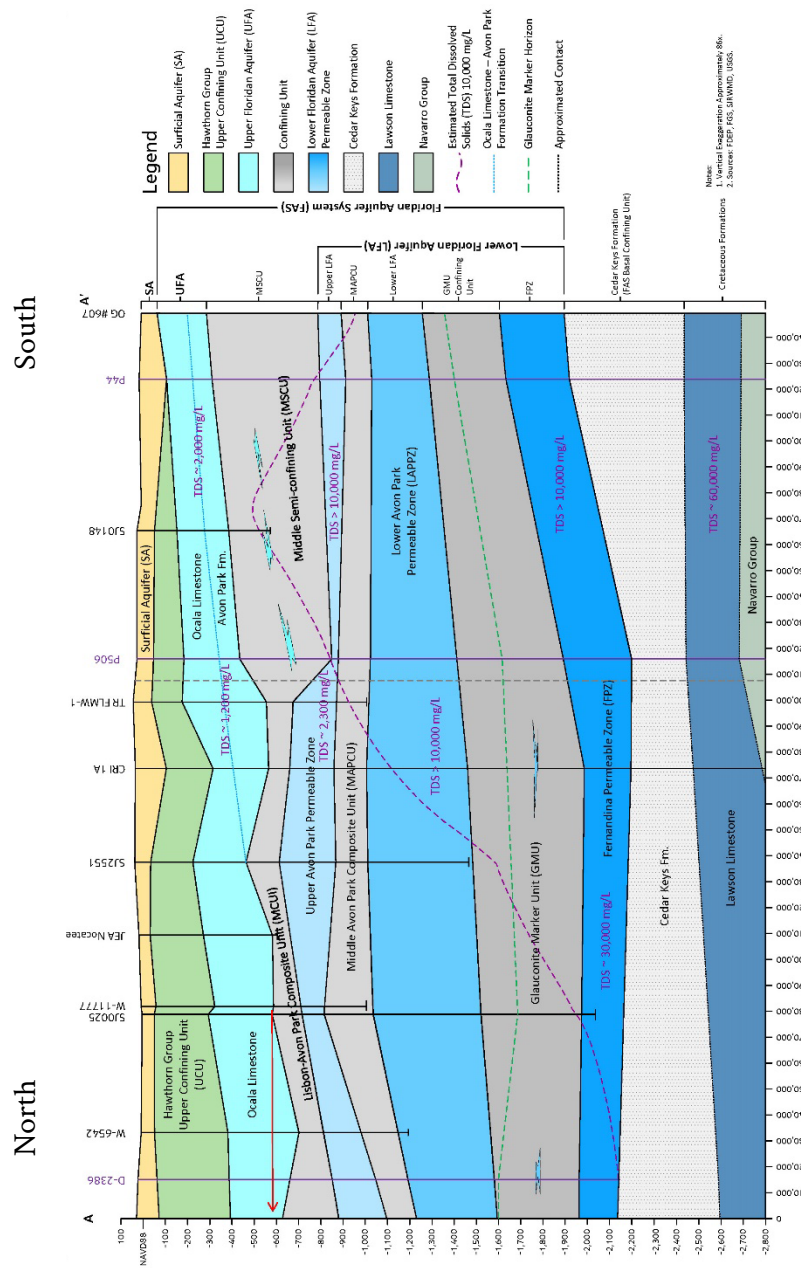


Figure 3 Cross Section A (North – South)

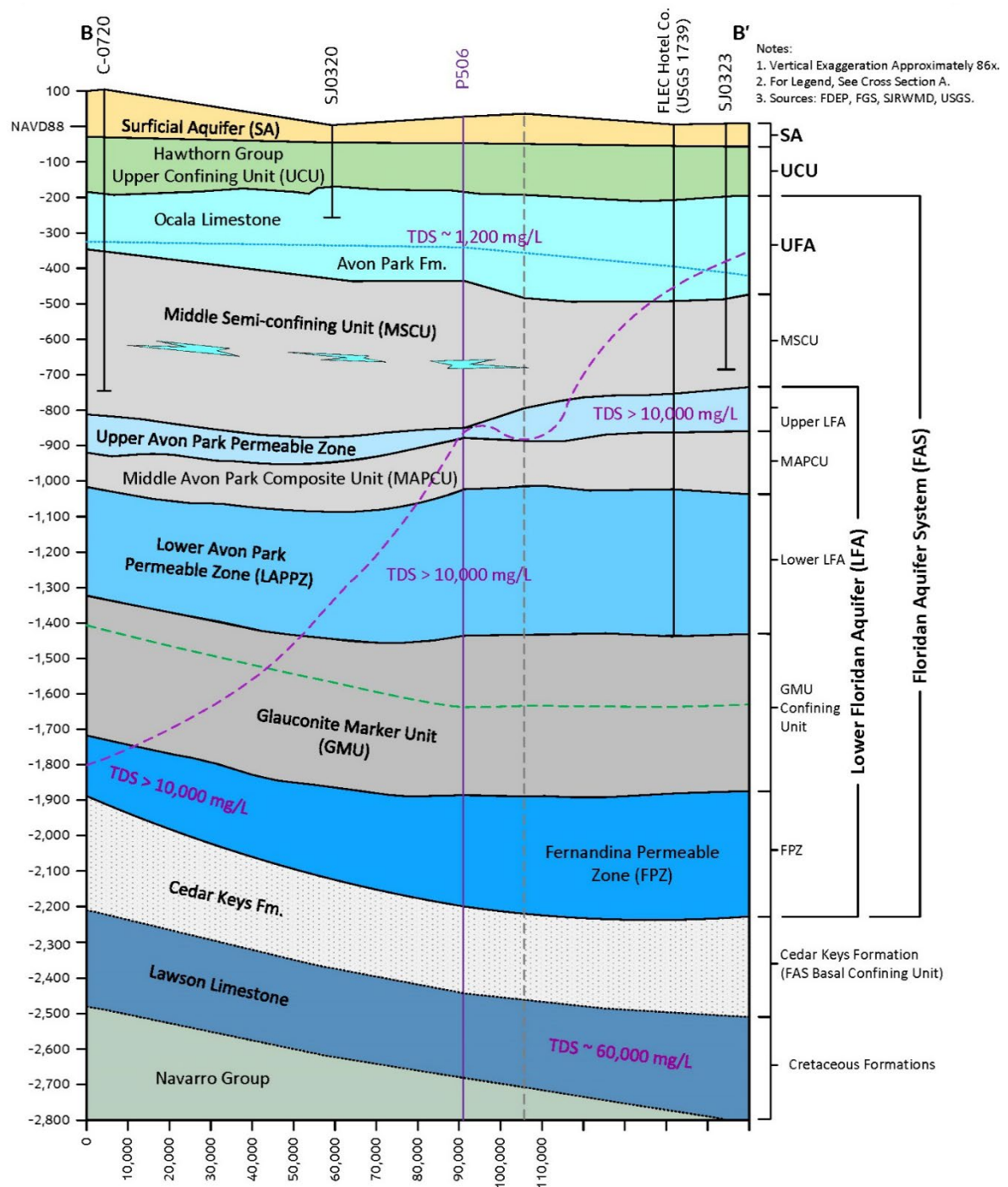


Figure 4: Cross Section B (West – East)

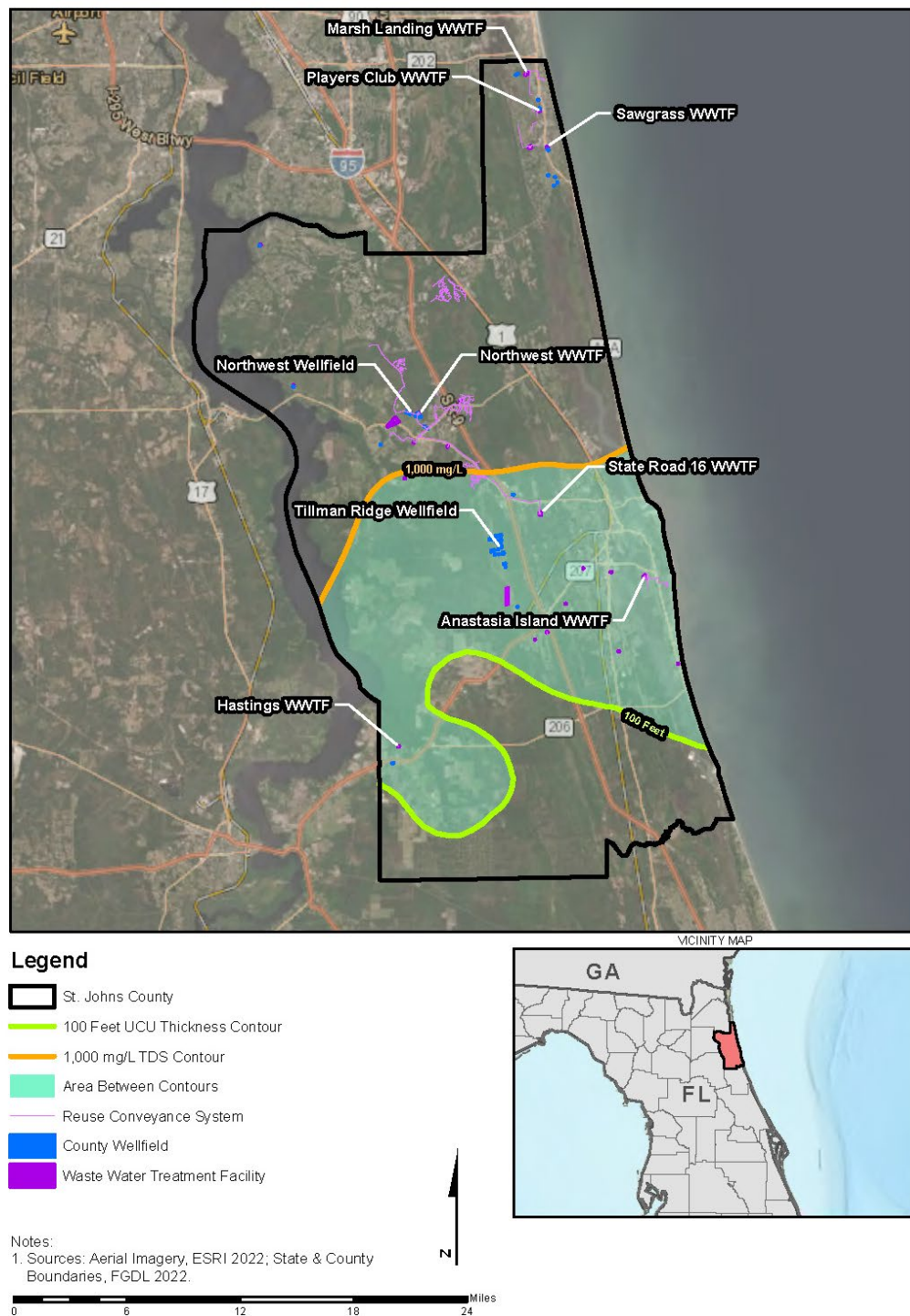


Figure 5: TDS Concentration Contour Map

II. Typical St. Johns County Public Supply Well

The construction of a typical public water-supply well in St. Johns County involves installing and grouting a production casing into the top of the Ocala Limestone, the geologic formation that contains the Upper Floridan Aquifer (UFA). The production casing seals off the discontinuous, interbedded lenses of unconsolidated sand, silt, and clay that form the Upper Confining Unit (UCU) and provides a conduit for safe, efficient groundwater extraction from the Floridan Aquifer System (FAS). Additionally, the casing and grout seal create a protective barrier against potential surface or near-surface contaminants.

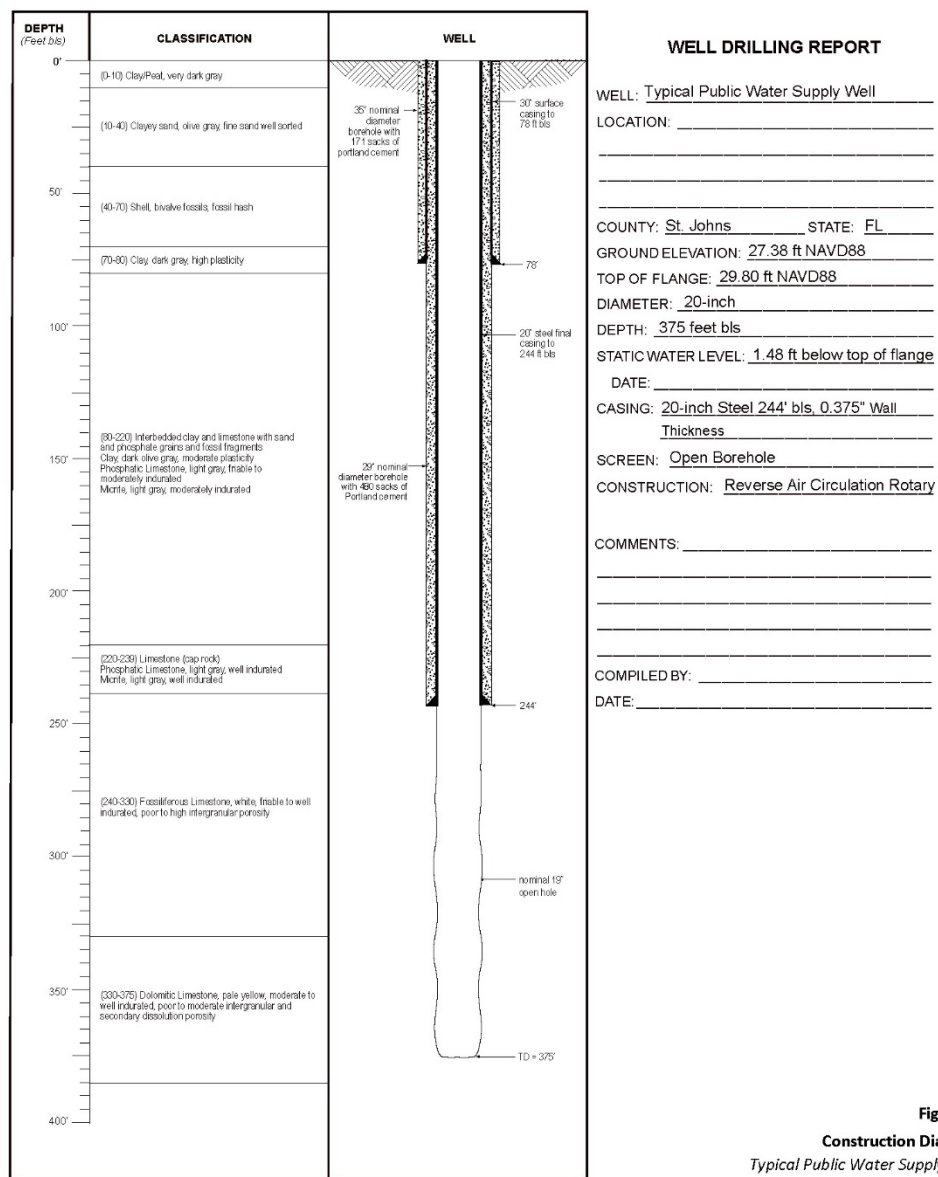
A typical well also includes a concentric outer (surface) casing of larger diameter, installed and grouted prior to the production casing. The surface casing is normally set within the upper 80 feet of the borehole and seated into the top of the UCU, sealing off the Surficial Aquifer (SA) from deeper formations during drilling. Its primary purposes are to stabilize the borehole for production-casing installation and to provide an additional layer of protection against contaminants.

Once casing is in place, an open borehole is drilled below the production casing and typically completed within the carbonate rocks of the UFA. The silt and clay of the UCU form an effective confining layer that restricts water exchange between the UFA and the SA, offering natural protection of the groundwater source.

In summary, public-supply wells in St. Johns County are completed into the FAS and constructed with at least two steel casings—surface and production—grouted with cement from casing shoe to land surface. A 5- to 7-inch-thick cement grout seal protects the well from potential surface or near-surface contamination in the shallower SA.

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General Geology and Hydrogeology of St. Johns County



III. FDEP Wellhead Protection Area Supporting Information

Under Chapter 62-521, Florida Administrative Code (F.A.C.), the Florida Department of Environmental Protection (FDEP) designates a wellhead protection area (WPA) as a 500-foot radial setback around a potable-water well. Within this area, the most stringent measures apply to safeguard the groundwater source. Section 62-521.400, F.A.C., prohibits installing new aboveground or underground hazardous-waste tanks regulated under Chapter 62-730, F.A.C.

Reducing the radial setback for a new underground storage tank from 1,000 feet to 500 feet within the WPA secondary zone for the Floridan Aquifer would meet the minimum FDEP requirements in Chapter 62-521, F.A.C., and align with surrounding counties' practices.

- In Duval County, the WPA consists of a 750-foot radial setback. However, within a 500-foot radius of an existing potable water well, the prohibitions and uses established by Section 62-521.400, F.A.C., are adopted by reference.
- In Putnam County, a well-field protection zone consists of a 500-foot fixed radius around all community water-system wellheads, as defined by the FDEP.
- Clay County, Florida follows the FDEP guidelines for wellhead protection that establishes a 500-foot radius Wellhead Protection Area (WPA) around wells serving community and non-transient non-community public water systems.
- Flagler County's wellhead protection requirements are codified in Section 6.03.00 (Wellfield Protection) of the Flagler County Code of Ordinances. Owners or developers must furnish copies of all applicable EPA, DEP, DOH, or SJRWMD permits, permit applications, amendments, and monitoring reports to the county. This WPA defines a "zone of exclusion" as all land within a 200-foot radius of an existing or designated protected wellhead.

A. Duval County – Link to code

https://library.municode.com/fl/jacksonville/codes/code_of_ordinances/286353?nodeId=TITXEN_AF_CH366GRSUWAREMA_PT4WEPR_S366.404ESMAWEPRAR

B. Putnam County – Link to code

https://library.municode.com/fl/putnam_county/codes/code_of_ordinances?nodeId=COOR_CH45_LADECO_ARTVIREPRST_DIV6POWAWEFIPR

C. Clay County – Link to code

https://library.municode.com/fl/clay_county/codes/code_of_ordinances?nodeId=CO_CH19WAWAWAMA_ARTIPE_DIV1GE

D. Flagler County – Link to code

https://library.municode.com/fl/flagler_county/codes/code_of_ordinances?nodeId=FLCOCOORAPXCLADECO_ARTVIREPRST_6.03.00WEPR_6.03.01PUIN

ORDINANCE NO. 2026 - _____

AN ORDINANCE OF ST. JOHNS COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA, AMENDING PORTIONS OF THE 2050 COMPREHENSIVE PLAN (ORDINANCE NO. 2010-38, AS AMENDED) SPECIFICALLY AMENDING SECTION D (INFRASTRUCTURE ELEMENT – POTABLE WATER SUB-ELEMENT) OBJECTIVE D.4.4 (SURFACE WATER AND GROUNDWATER QUALITY) AND OBJECTIVE D.5.4 (WELLHEAD PROTECTION) TO AMEND AND CLARIFY USES AND ACTIVITIES WITHIN THE COUNTY’S WELLHEAD RESOURCE PROTECTION AREA FOR CONSISTENCY WITH CHAPTER 62-521, FLORIDA ADMINISTRATIVE CODE AND CURRENT BEST PRACTICES; PROVIDING FOR FINDINGS OF FACT; PROVIDING FINDINGS OF CONSISTENCY; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Chapter 125 and 163, Florida Statutes authorizes the Board of County Commissioners to prepare, adopt, implement, and enforce Comprehensive Plans and Land Development Regulations to guide and control development within the County; and

WHEREAS, Section 163.3184 and 163.3187 Florida Statutes establish the procedures for the process for the adoption and amendment of local comprehensive plans; and

WHEREAS, protection of potable water supplies and groundwater resources is a matter of public health, safety, and environmental concern; and

WHEREAS, the Florida Department of Environmental Protection (FDEP) has adopted Wellhead Protection requirements pursuant to Chapter 62-521, Florida Administrative Code, which establish a Wellhead Protection Area defined as a five hundred (500) foot radial setback distance around a potable water well to provide protection from contamination of groundwater resources; and

WHEREAS, St. Johns County currently implements a Wellhead Protection Area of one thousand (1,000) feet surrounding public potable water supply wells, which consists of a primary and secondary protection zone intended to provide enhanced local protection of groundwater resources beyond the minimum protections established by Chapter 62-521, Florida Administrative Code; and

WHEREAS, St. Johns County desires to amend certain provisions of the Comprehensive Plan to maintain consistency with FDEP standards within the primary zone and to update prohibitions and restriction within secondary zone based on current best practices and to provide greater flexibility in water supply planning; and

WHEREAS, these proposed Comprehensive Plan amendments are designed to be compliant with 2025 Senate Bill 180, and does not create any more burdensome or restrictive procedures, the effect of this proposed amendment will be to reduce burdens and restrictions bringing County regulations into compliance with state law and allow for the use of modern best practices; and

WHEREAS, the proposed Comprehensive Plan amendments are attached hereto as *Exhibit “A”* and *Exhibit “B”* respectively; and

WHEREAS, the Board of County Commissioners finds that adoption of this Ordinance will continue the protection of potable water supplies and groundwater resources and is in the best interests of the public health, safety, and welfare of the citizens of St. Johns County.

NOW THEREFORE BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF ST. JOHNS COUNTY, FLORIDA:

SECTION 1. COMPREHENSIVE PLAN AMENDMENT. Objectives D.4.4 and D.5.4 of the St. Johns County Comprehensive Plan are amended to read as provided in the attached as ***Exhibit “A”*** and ***Exhibit “B”*** respectively, incorporated herein as part of this Ordinance.

SECTION 2. LEGISLATIVE FINDINGS OF FACT. The above recitals and WHEREAS clauses are true and correct and are hereby adopted as legislative findings and incorporated herein by reference and made a part hereof. The 2026 Comprehensive Plan amendments described in Section 1 hereof are based upon the following Findings of Fact:

- (a) The amendments were fully considered after public hearing pursuant to legal notice duly published as required by Law.
- (b) The amendments are consistent with the Florida Department of Environmental Protection Wellhead Protection Rules.
- (c) The amendments are consistent with the applicable sections of the St. Johns County Comprehensive Plan and the Land Development Code.

SECTION 3. The remaining portions of the St. Johns County Comprehensive Plan, Ordinance No. 2010-38, as amended, and the 2026 Future Land Use Map, as amended, which are not in conflict with the provisions of this ordinance, shall remain in full force and effect. Nothing in this Ordinance shall be deemed as amending or rescinding portions of the St. Johns County Comprehensive Plan unless specifically addressed.

SECTION 4. Inclusion and Codification into the Comprehensive Plan. It is the intent of the St. Johns County Board of County Commissioners that the provisions of this Ordinance shall be codified and made part of the St. Johns County Comprehensive Plan, Ordinance No. 2010-38, as previously amended, and that the sections and attachments of this ordinance may be renumbered, reorganized, re-lettered, and appropriately incorporated into the Comprehensive Plan in order to accomplish such intentions. It is the intent of the St. Johns County Board of County Commissioners that scriveners and typographic errors which do not change the tone or tenor of this Ordinance may be corrected during codification and may be authorized by the County Administrator or designee, without public hearing, by filing a corrected or recodified copy of the same with the Clerk of the Board.

SECTION 5. Should any section, subsection, sentence, clause, phrase or portion of this ordinance be held invalid or unconstitutional by any court of competent jurisdiction, such portions shall be deemed a separate, distinct and independent provision and shall not affect the validity of the remaining portions.

SECTION 6. These amendments to the St. Johns County Comprehensive Plan shall be effective thirty-one (31) days after the state land planning agency notifies the local government that the plan amendment package is complete. If timely, challenged, within thirty (30) days after adoption, the amendment does not become effective until the state land planning agency or Administration Commission enters a final order determining the adopted amendment to be in compliance.

SECTION 7. This ordinance shall be recorded in a book of land use regulation ordinances kept and maintained by the Clerk of Court in accordance with Section 125.68, Florida Statutes.

PASSED AND ENACTED BY THE BOARD OF COUNTY COMMISSIONERS OF ST. JOHNS COUNTY, FLORIDA, THIS _____ DAY OF _____ 2026.

**BOARD OF COUNTY COMMISSIONERS OF
ST. JOHNS COUNTY, FLORIDA**

BY: _____
Clay Murphy, Chair

ATTEST: Brandon J. Patty
Clerk of the Circuit Court & Comptroller

BY: _____
Deputy Clerk

Objective D.4.4
Surface Water and Groundwater Quality

The County's potable water system shall continue to meet the standards of Federal, State, and Regional drinking water regulations. These standards shall help ensure drinking water quality.

Policies

D.4.4.1 The County shall establish a mechanism to protect the SJRWMD designated Surficial and Floridan Aquifer Recharge Areas. The County will work with the SJRWMD to educate the public on major ground water issues of concern in the county.

D.4.4.2 Future public water supply well fields shall be located in areas where development and potential future contamination impacts are minimized.

D.4.4.4 The County shall utilize water quality data and appropriate biological indicators to design water management practices that facilitate the maintenance or improvement of the existing water quality of the available resources to meet state water quality standards.

D.4.4.5 The County shall maximize the use of conservation measures before considering the use of alternative water supplies or interbasin transfer of water.

D.4.4.6 The County shall continue to implement the wellhead protection regulations in the Land Development Code, consistent with Wellhead Protection rule, Chapter 62-521, F.A.C. and the ground water protection measures administered by DEP regulatory programs, which include Wellhead Protection Area restrictions as specified below:

A. Prohibited Activities, Wellhead Protection Area

The following activities are prohibited in the Wellhead Resource Protection Areas:

1. New sanitary landfills, including new phosphogypsum piles, and any other disposal of a solid waste, or solid waste transfer facility, as permitted under Rule 62-701.200, F.A.C.
2. New Industrial Land Use designations.
3. New Interim wastewater treatment plants, unless Advanced Wastewater Treatment (AWT) standards and other regulatory requirements for Community Wastewater Treatment Plants are met.

4. New concentrated animal feeding operations as defined in Rule 62-670.200, F.A.C.
5. New dairy farm storage and treatment facilities, high intensity areas, and land application areas as defined in Rule 62-670.200, F.A.C.
6. Discharge of stormwater into depressions with direct or demonstrated hydrologic connection to the Surficial Aquifer.
7. Any new land applications of sludge and septage.
8. New underground storage facilities or storage tanks. Except, replacement of an existing underground storage tank system regulated under Chapter 62-761, F.A.C., within the same excavation, or the addition of new underground storage tanks regulated under Chapter 62-761, F.A.C., at a facility with other such existing underground storage tanks is exempt from this provision, provided that the replacement or new underground storage tank system is installed with secondary containment as required in Chapter 62-761, F.A.C.

Objective D.5.4

Wellhead Protection

The County shall continue to protect the wellhead areas by continuing the application and enforcement of its existing Land Development Regulations. The County shall also coordinate with the St. Johns River Water Management District to ensure adequate recharge rates and water quality to support the present and future population, economic development opportunities, and natural system needs.

Policies

D.5.4.1 The County shall continue to implement the wellhead protection regulations in the Land Development Code, which include primary and secondary zones restrictions as specified below:

- (a) preservation of native vegetation
- (b) use of native drought tolerant plants
- (c) construction limitations within the 100-year floodplain, environmentally sensitive lands, and SJRWMD designated surficial and Floridian aquifer recharge areas
- (d) implementation of water loss prevention

D.5.4.2 The County shall protect wellfield protection areas of public potable water consistent with Chapter 62-521, F.A.C. and the Land Development Code by:

- (a) prohibiting the generation or manufacture of contaminants, solvents, pesticides, fertilizers, or other hazardous waste within wellfield protection areas.
- (b) prohibiting or restricting the installation or establishment of petroleum pipelines, underground and aboveground storage tanks, or hazardous industrial uses within wellfield protection areas.
- (c) prohibiting or restricting the storage or use of contaminants, solvents, pesticides, fertilizers, hazardous waste, industrial uses within wellfield protection areas.

Objective D.4.4
Surface Water and Groundwater Quality

The County's potable water system shall continue to meet the standards of Federal, State, and Regional drinking water regulations. These standards shall help ensure drinking water quality.

Policies

D.4.4.1 The County shall establish a mechanism to protect the SJRWMD designated Surficial and Floridan Aquifer Recharge Areas. The County will work with the SJRWMD to educate the public on major ground water issues of concern in the county.

D.4.4.2 Future public water supply well fields shall be located in areas where development and potential future contamination impacts are minimized.

D.4.4.4 The County shall utilize water quality data and appropriate biological indicators to design water management practices that facilitate the maintenance or improvement of the existing water quality of the available resources to meet state water quality standards.

D.4.4.5 The County shall maximize the use of conservation measures before considering the use of alternative water supplies or interbasin transfer of water.

D.4.4.6 The County shall continue to implement the wellhead protection regulations in the Land Development Code, consistent with Wellhead Protection rule, Chapter 62-521, F.A.C. and the ground water protection measures administered by DEP regulatory programs, which include ~~primary and secondary zones~~ Wellhead Protection Area restrictions as specified below:

A. Prohibited Activities, ~~Primary Zone, Surficial and Floridan Aquifer~~ Wellhead Protection Area

The following activities are prohibited in the ~~Primary Zones of~~ Wellhead Resource Protection Areas:

1. ~~—— The Primary Zone Wellhead Protection Area shall be a zone of exclusion for all Uses except existing residential Uses, Uses functionally related to the water supply system, open space, parks, and playgrounds. For the Surficial Aquifer only, no parking areas, Structures, or other impervious surfaces, other than those surfaces that are accessory to existing residential Uses, will be permitted in this zone except for playing courts, open air shelters, and other similar recreation facilities. An exemption shall be allowed for one single family dwelling unit per Parcel or Lot that may be within~~

~~this zone of exclusion, provided that Parcel or Lot was created on or before the adoption of the St. Johns County Comprehensive Plan.~~

2. New sanitary landfills, including new phosphogypsum piles, and any other disposal of a solid waste, or solid waste transfer facility, as permitted under Rule 62-701.200, F.A.C.
3. New Industrial Land Use designations.
4. New Interim wastewater treatment plants, unless Advanced Wastewater Treatment (AWT) standards and other regulatory requirements for Community Wastewater Treatment Plants are met.
5. New concentrated animal feeding operations as defined in Rule 62-670.200, F.A.C.
6. New dairy farm storage and treatment facilities, high intensity areas, and land application areas as defined in Rule 62-670.200, F.A.C.
7. Discharge of stormwater into depressions with direct or demonstrated hydrologic connection to the Surficial Aquifer.
8. Any new land applications of sludge and septage.
9. New underground storage facilities or storage tanks. Except, replacement of an existing underground storage tank system regulated under Chapter 62-761, F.A.C., within the same excavation, or the addition of new underground storage tanks regulated under Chapter 62-761, F.A.C., at a facility with other such existing underground storage tanks is exempt from this provision, provided that the replacement or new underground storage tank system is installed with secondary containment as required in Chapter 62-761, F.A.C.

~~10. Stormwater management ponds~~

~~B. Prohibited Activities, Secondary Zone, Surficial Aquifer (see Surficial Aquifer Recharge Objective D.5.4).~~

~~C. Restricted Activities, Secondary Zone, Floridan Aquifer~~

~~The following activities are restricted in the Wellhead Resource Protection Areas (RPA), for the Secondary Zone, Floridan Aquifer: These activities may be allowed subject to review and approval of a Special Use Permit. These activities may also require a Development Permit from the County in accordance with Part~~

~~9.01.00 of the Land Development Code.~~

~~1.——Sludges~~

~~Existing sludge spreading activities in an RPA must be permitted by and meet the requirements of state and local environmental permitting agencies and this Part.~~

~~2.——Septages~~

~~Existing septage spreading activities in an RPA must be permitted by and meet the requirements of state and local environmental permitting agencies and this Part.~~

~~3.——Hazardous Wastes~~

~~Any new facility that uses, handles, stores, or generates hazardous wastes in an RPA above thirty (30) gallons in a liquid form, or six (6) pounds of solid, must be permitted by and meet the requirements of the Florida Department of Environmental Protection and this Part.~~

~~4.——New sanitary landfills, including new phosphogypsum piles, and any other disposal of a solid waste, or solid waste transfer facility, as permitted under Rule 17-701.020, F.A.C.~~

~~5.——New concentrated animal feeding operations as defined in Rule 17-670.200, F.A.C.~~

~~6.——New dairy farm storage and treatment facilities, high intensity areas, and land application areas as defined in Rule 17-670.200, F.A.C.~~

~~7.——New underground storage facilities.~~

Objective D.5.4

Wellhead Protection

The County shall continue to protect the wellhead areas by continuing the application and enforcement of its existing Land Development Regulations. The County shall also coordinate with the St. Johns River Water Management District to ensure adequate recharge rates and water quality to support the present and future population, economic development opportunities, and natural system needs.

Policies

D.5.4.1 The County shall continue to implement the wellhead protection regulations in the Land Development Code, which include primary and secondary zones restrictions as specified below:

- (a) preservation of native vegetation
- (b) use of native drought tolerant plants
- (c) construction limitations within the 100-year floodplain, environmentally sensitive lands, and SJRWMD designated surficial and Floridian aquifer recharge areas
- (d) implementation of water loss prevention

D.5.4.2 The County shall protect wellfield protection areas of public potable water consistent with Chapter 62-521, F.A.C and the Land Development Code by:

- (a) prohibiting the generation or manufacture of contaminants, solvents, pesticides, fertilizers, or other hazardous waste within wellfield protection areas.
- (b) prohibiting or restricting the installation or establishment of petroleum pipelines, underground and aboveground storage tanks, or hazardous industrial uses within wellfield protection areas.
- (c) prohibiting or restricting the storage or use of contaminants, solvents, pesticides, fertilizers, hazardous waste, industrial uses within wellfield protection areas.