

**POLK COUNTY
DEVELOPMENT REVIEW COMMITTEE
STAFF REPORT**

DRC Date: April 6, 2023	Level of Review: 4
PC Date: June 5, 2024	Type: LDC Text Amendment
BoCC Date: June 18, 2024	Case Numbers: LDCT-2024-13
July 16, 2024	Case Name: Green Swamp Density Measurement LDC Text
November 5, 2024	
Applicant: Polk County	Case Planner: Erik Peterson, AICP

Request:	An LDC text amendment to amend Chapter 5, Section 502 Table 5.3, Density and Dimensional Regulations for Green Swamp Area of Critical State Concern, to increase the density transferred out of wetlands in the A/RRX district from one (1) unit per 20 acres to one (1) unit per 10 acres; amending Section 506 Rural Special Protection Area to specify the measurement of density in The Agricultural/Residential Rural (A/RRX) and Conservation Core (COREX) Future Land Use Map designations, address wetland density transfer, and correct the vesting date in the Green Swamp Area of Critical State Concern; providing for severability; and providing for an effective date.
Location:	n/a
Property Owner:	n/a
Parcel Size (Number):	n/a
Development Area:	n/a
Nearest Municipality:	n/a
DRC Recommendation:	Approval
Planning Commission Vote:	Approval 4:3

The changes to Chapter 5, Section 502, Table 5.3., Density and Dimensional Regulations for Green Swamp Area of Critical State Concern are:

- Strike the separate column for A/RRX Wetlands to have one set of standards in the A/RRX to remove the separate density allotment for transfer out of the wetlands to upland areas.
- Strike reference to revision history at the end of the table (scrivener’s error).

The changes to Chapter 5, Section 506, Rural Special Protection Area are:

- Calibrate measurement of the 10-acre minimum relative to the size of the Section if the Section is less than 640 acres in size.
- Calibrate measurement of the 20-acre minimum relative to the size of the Section if the Section is less than 640 acres in size.
- Density calculation also includes area to the centerline of local and collector roads.
- Change Section 506.G from “Additional Density and Dimensional Requirements” to “Wetland Density Transfer” and eliminate separate calculation for wetland density transfer in A/RRX to make it consistent with the district density.

Summary:

Part A of this amendment, proposed in tandem with LDCPAL-2023-12, improves implementation and increases consistency by measuring density/lot size in the Green Swamp in a manner consistent with the method used in the rest of the County. Density measurement is proposed to be calculated relative to the size of the Section which for A/RRX is 1/64 the size of the Section and COREX to 1/32 the size of the Section. The geographical Section is supposed to be 640 acres. In many parts of the Green Swamp, they are slightly less than 640 acres. Several are in the range between 630 and less than 640 acres. Some are as low as 610-620 acres. Surveys based on these smaller sections may find what was intended to be 10 acres to be slightly less in the range of 9.8 acres. Simerly, in the COREX what was assumed to be a 20-acre property may be in the ballpark of 19.7-19.9 acres. This amendment will enable a prescribed option for administratively correcting what is often perceived to be a rounding error.

Part B of this amendment provides a better level of equity by removing the one unit per twenty-acre wetland density transfer penalty on A/RRX properties by reducing it to ten acres with a minimum of five (5) acres of uplands per lot. Wetland transfer is the same as the base density in all other categories. This renders the A/RRX district consistent with other districts in the Green Swamp and in line with how wetland transfer is measured throughout the rest of the County. Staff Recommends approval of LDCT-2024-13 for both Part A and Part B, finding the amendment is consistent with the Comprehensive Plan and Land Development Code, respectively. The request is separated into two separate ordinances to give the Board the option to approve one and not the other.

Data and Analysis Summary

Staff surveyed Comprehensive Plans of the counties that have portions of their jurisdiction within the Green Swamp Area of Critical State Concern and the cities in Polk County that have annexed into the Critical Area. A summary of density requirements and method of calculation are displayed in Table 1 within this report. Staff has reviewed generalized wetland geographic data and property ownership to gauge the net potential effect of the proposed policy amendments. From the analysis, staff found these highlights:

- There is a significant disparity between Green Swamp regulations in Polk and Lake County than in the other three of the five Green Swamp counties (Sumter, Hernando, and Pasco). There are strict limitations on densities in Polk and Lake but barely a mention in the Comprehensive Plans of other counties.
- The proposed changes in measuring lot size could have the maximum effect of enabling 153 additional properties (**6% increase**) in the COREX district and 1,142 additional properties (**13% increase**) in the A/RRX district.
- Approximately 41% of the properties in the A/RRX district are estimated to be wetlands. The change in wetland transfer in the A/RRX district by approximately 260 potential additional units transferred to uplands. These lots are included in the 1,142 additional lots estimated above.

Findings of Fact

1. *The request is a Land Development Code text amendment to amend Chapter 5, Section 502 Table 5.3, Density and Dimensional Regulations for Green Swamp Area of Critical State Concern, to increase the density transferred out of wetlands in the A/RRX district from one (1) unit per 20 acres to one (1) unit per 10 acres; amending Section 506 Rural Special Protection Area to specify the measurement of density in The Agricultural/Residential Rural (A/RRX) and Conservation Core (COREX) Future Land Use Map designations, address wetland density transfer, and correct the vesting date in the Green Swamp Area of Critical State Concern.*
2. *This amendment only applies to properties located in the Rural Special Protection Area (Rural SPA) the Green Swamp Area of Critical State Concern (ACSC).*
3. *LDC Chapter 5, Section 506, provides specific density and dimensional regulations for A/RRX and COREX districts.*
4. *Policy 2.119-A3 subsection F, Density Computations states:*
 - a. *“Polk County shall use gross densities when determining residential densities. Gross density is determined by dividing the total number of dwelling units on the site by the total area of the residential site, exclusive of water bodies. The area for computing gross density shall include all public and institutional land uses (e.g. internal streets, sewer plants, schools, parks, etc.) located within the site, as well as one-half of the right-of-way area for perimeter "local" streets, and one-fourth of the right-of-way area for perimeter local street intersections, for those areas not already owned by the public. In the Rural Development Area (RDA) and Suburban Development Area (SDA), outside of the Green Swamp Area of Critical State of Concern, one unit per five-acre (1 du/5ac) density may also be measured to the centerline of collector roads.”*
5. *On March 1, 1994, Polk County Ordinance 94-21, known as the Green Swamp Critical Area Resource Management Plan (CARMP) became effective.*
6. *Policy 2.132-D8, Development Criteria establishes A/RRX residential density equates to one dwelling unit per ten acres (1 DU/10 AC) for uplands and one dwelling unit per twenty (1 DU/20 AC) for uplands from March 1, 1994, to present.*
7. *On December 3, 1996, Polk County Ordinance 94-21, known as the Green Swamp Critical Area Resource Management Plan (CARMP) POLICY 2.122-D4 is amended to establish a density of one dwelling unit per twenty acres (1 DU/20 AC) in the Conservation Core (COREX) Future Land Use Map designation.*
8. *From the adoption of the Comprehensive Plan in April of 1991 to March of 1994, the minimum acreage for subdivision in the Rural Development Area (RDA) of the Green Swamp was five (5) acres. Prior to the plan adoption, most of the area which became the RDA was minimum of one (1) dwelling unit per acre.*
9. *Chapter 7, Section 705.E right of way dedication is needed on substandard road at a width of 40 feet from the centerline of two (2) lane collector roads constructed with a Rural Section (no curb) and 30 feet from the centerline of two (2) lane collector roads constructed with a Village Section (depressed curb) and an Urban Section (curb and gutter).*

10. *Planning staff has reviewed the Comprehensive Plans of the counties that have portions of their jurisdiction within the Green Swamp Area of Critical State Concern and the cities in Polk County that have annexed into the Critical Area. See Table 1 for details.*

Development Review Committee Recommendation:

The Land Development Division, based on the information provided with the proposed text amendment application, finds that the proposed text change request is **CONSISTENT** with the Polk County Land Development Code and the Polk County Comprehensive Plan. Staff recommends **APPROVAL** of LDCT-2024-13.

Planning Commission: *at an advertised public hearing on June 5, 2024, the Planning Commission voted 4:3 for APPROVAL of LDCT-2024-13 as one consolidated ordinance.*

Analysis:

There is often more error in the calculation of land size among larger properties. For this reason, County staff devised a way for greater flexibility in the size measurement for large lots without sacrificing the intent of lower development densities. This method was previously adopted by the Board and has been implemented successfully since approval of Ordinance 2023-62&63 (LDCPAL-2023-3&LDCT-2023-5) on October 23rd of last year. That amendment demonstrated that a 5-acre lot measured from the centerline of the road versus a 5-acre lot measured from the right-of-way was indiscernible at both ground level and from a growth management perspective. It provides more equity when subdividing along a public road of substandard right-of-way width and it no longer penalizes a landowner for voluntary dedication of right-of-way to the public.

This amendment to the density calculation of a property also accounts for the size variance of a Section of land within a Township and Range. While it is often assumed that a Section of land is 640 acres, such is rarely the case (see Exhibit 2). More often than not, a Section of land will be less than 640 acres especially on lands where it is difficult to traverse such as a swamp. If land were subdivided by simple apportionment of the of the Section by taking $\frac{1}{4}$ of $\frac{1}{4}$ of $\frac{1}{4}$ of the Section in the A/RRX or $\frac{1}{2}$ of $\frac{1}{4}$ of $\frac{1}{4}$ a Section in the COREX and the section was not 640 acres, the resulting lot would be substandard in size (less than 10 acres in A/RRX or less than 20 acres in the COREX). By defining the acreage as $\frac{1}{64}$ th of the Section in the A/RRX and $\frac{1}{32}$ nd of the Section in the COREX, rudimentary lot measurement is accounted for in a smaller Sections.

The calculation of the worst-case potential impact relied on the Property Appraiser’s Database, GIS, and simple math. Mathematically, it is assumed that the methods of measurement proposed will not result in more than an acre discrepancy. All the properties above 19 acres in the A/RRX district were queried and their acreage was divided by 9 to reach a total potential number of new sub-10-acre parcels. The result was the 712 eligible properties could subdivide to create 1,142 new lots. This is the absolute possible effect of both the measurement changes to lot and wetland density calculation. It did not account for access, government ownership, will of the owner to subdivide.

To estimate the maximum potential impact of just the wetland changes, some assumptions must be made because there is not a finite number of acreage in the A/RRX that is determined to be wetlands in the Green Swamp. Estimated wetland coverage contained in the GIS system is approximately 41% (see Exhibit 3). Applying this ratio to the potential new lots, the potential difference equates to 260 of the 1,142 lots. If the wetlands were to remain at 1 du/20 acres transferred out, 882 new lots would be the maximum. Given the number of properties currently

eligible for subdividing in the A/RRX, this change amounts to a maximum potential increase of just under 13%.

In the COREX district the wetland density calculation changes are negligible because the minimum density is the same. Out of the 225 eligible properties, the new method of measurement based on the size of the Section and measuring to the centerline could result in an additional 153 lots. This is just under a 6% increase in the current potential for these properties.

The rural SPA consists of approximately 172,192 acres. The maximum impact of a total of 1,295 new lots in the Rural Special Protection Area (Rural SPA) of the Green Swamp that this amendment could potentially bring is muted by the fact that much of the area within it is government owned, inaccessible, or under mining for a significant duration. Therefore, this amendment will most likely have minimal effect on the actual number of properties developed. However, this amendment will help a few landowners who have properties on the cusp of being eligible for one more buildable lot. Whereas worst case estimates are only a small fraction of the total, the reality is a much smaller ratio. Staff finds the impact is insignificant to the overall protection of the Green Swamp's purpose which is the protection of the Floridan Aquifer's most fragile surface interface.

Who does it help?

It helps some property owners in the Green Swamp.

Who does it hurt?

This proposed amendment doesn't appear to pose any negligible harm to anyone. It will in no way result in a substantial increase in development. The maximum potential assumes a nearly impractical amount of additional residential properties and yet it results in less than a 13% increase in the A/RRX and less than 6% increase in the COREX. This will in no way result in any further environmental harm or a rise in traffic or other public service demands.

What is the cost?

This costs nothing for the landowner, consumer, or general public.

History

The state of Florida began to recognize the hydrologic and environmental need to keep development under control between Orlando and Tampa, so in 1974, the state designated approximately 322,000 acres of Florida as an "Area of Critical State Concern." This area included the Green Swamp. The Green Swamp Area of Critical State Concern was formally established by the Florida Legislature on July 1, 1979, because of the location in a regionally significant high recharge area of the Floridan Aquifer system. It was deemed that the preservation of it would protect coastal communities from saltwater intrusion. The legislature found that the portion of the Green Swamp in Polk County makes up the headwaters or portions of the headwaters of six major river systems in the state, which are the Alafia, Hillsborough, Kissimmee, Ocklawaha, Peace, and Withlacoochee Rivers. In addition, due to the area's unique topography and geology which receives no other water inputs other than rainfall, the area is essential in maintaining the potentiometric head of the Floridan Aquifer system that directly influences the aquifer's productivity for water supply.

Polk County adopted Ordinance 74-14, which became effective on October 1, 1974. It required a minimum lot size of 10 acres if the homes could not be connected to a central sanitary sewer system. The minimum size without central sanitary sewer was reduced to 40,000 square feet under Ordinance 75-11 effective on July 20, 1975. It has been the minimum requirement ever since. When the Comprehensive Plan was adopted in 1991, the minimum lot size in A/RR went to five (5) acres.

In 1994, the Critical Area Resource Management Plan was adopted which increased the A/RR minimum to 10 acres in the Green Swamp and established the Conservation Core with a minimum 20 acres.

Limits of the Proposed Ordinance

This amendment applies to only the Agricultural/Residential Rural (A/RRX) and Conservation Core (COREX) of the Green Swamp due to their considerably low-density restrictions. It is also limited to properties that can be created with direct frontage on a public road.

Comparisons to other Jurisdictions:

The Green Swamp Area of Critical State Concern covers portions of five counties and within Polk County it now includes five cities (see Exhibit 4). Only Polk and Lake Counties have Comprehensive Plan portions dedicated to managing growth within the Critical Area. Lakeland, Polk City and Lake Alfred have portions of their Comprehensive Plans dedicated to the Green Swamp too. Haines City has Land Development regulations for the Green Swamp, but the comprehensive plan is unavailable. Table 1, to follow, summarizes the density requirements of each jurisdiction.

Table 1

Jurisdiction <i>(code citation)</i>	Rural Land Use Categories	Density for Wetlands	How is density measured?
Lake County <i>Policies I-1.2.4, I-4.2.4&5</i>	Rural 1du/5ac Rural/Conservation 1du/10ac Core/Conservation 1du/20ac	1du/20ac Transferred to uplands	Net Density: Area within the parcel boundary less right-of-way and wetlands which are measured differently.
Sumter County <i>Policies 1.2.1, 1.3.4</i>	No Green Swamp Policies Agriculture 1 du/10 ac outside Urban Development Area (UDA)	Same as uplands except that density transfer cannot exceed 50% of upland density.	“all land under common ownership proposed for development and shall be used to calculate densities and intensities”
Hernando County <i>Objective 1.04C</i>	No Green Swamp Policies Rural Category 1 du/10 ac Parcels <40 acres may subdivide as low as 2.5 ac up to 4 total units	Same as uplands	Not defined
Pasco County <i>Policies 1.2.3, 8.1.4&5</i>	“Pasco County shall ensure that development in proximity to the Green Swamp provides adequate transitional use/buffering to minimize negative impacts.”	Same as uplands	Not defined
City of Lakeland <i>Policies FLU-1.14F, FLU-1.14H, FLU-1.14N</i>	Agriculture Very Low Density (ARL) 1 du/10ac Conservation (C) 1 du/20ac	1du/20ac Transferred to uplands	“average number of dwelling units per unit of area (acre, square mile, etc.) on either a gross or net density basis.”
City of Lake Alfred <i>Policy 2.1.4</i>	1du/10ac in Green Swamp unless water & sewer is extended.	Not addressed	“residential units allowed per unit of land”
City of Auburndale <i>Policies 11.4&6</i>	Agriculture Residential (AR) 1 du/5ac	1du/20ac transferred to uplands	“The average density over an area or parcel remains constant, but internal variations are allowed.”
Polk City	Conservation (CONX)	Not addressed	Gross density

Table 1

Jurisdiction <i>(code citation)</i>	Rural Land Use Categories	Density for Wetlands	How is density measured?
<i>Policy 4.4.i</i> Policies 9.1-8	1du/20ac		
Haines City <i>Comprehensive Plan Not Available to Public</i>	n/a	1du/20ac Transferred to uplands in LDR	“The number of dwelling units permitted on an acre or acres of land.” – LDR Definition

Lake County, city of Auburndale, city of Lakeland, and Haines City (through their LDRs) do not allow development in Green Swamp wetlands and recognize only a density transfer of 1 dwelling per 20 acres to uplands similar to Polk County. Lake County has three rural categories in the Green Swamp (5-, 10-, and 20-acre increments). Along with Polk, Lake County, Auburndale, Lakeland, and Haines City separate wetland calculations. Neither Lake Alfred nor Polk City address wetland density transfers in the Green Swamp and measure density in terms of gross acreage.

Whether the jurisdictions measure gross density with or without wetlands, none specifically addressed what was included in density measurement or gave relief for disparity in the size of the Section. Two deferred to their land development regulations, but they were also vague to how variations in right-of-way or Section size factored into the measurement. For most it was gross density and finite to the area under fee simple ownership.

Consistency with the Comprehensive Plan and Land Development Code

Many policies within the Comprehensive Plan are reviewed for consistency with an application. The most relevant policies for the proposed request are included in this section. The policy is first stated and then an analysis of how the request is provided to state that it may or may not be consistent with the Comprehensive Plan. How the request is **consistent** with the Comprehensive Plan is listed below:

Table 2: Consistency with the Comprehensive Plan

Policy	Consistency
Policy 2.119-A3: Development Criteria- f. DENSITY COMPUTATIONS: Polk County shall use gross densities when determining residential densities. Gross density is determined by dividing the total number of dwelling units on the site by the total area of the residential site, exclusive of water bodies. The area for computing gross density shall include all public and institutional land uses (e.g. internal streets, sewer plants, schools, parks, etc.) located within the site, as well as one-half of the right-of-way area for perimeter "local" streets, and one-fourth of the right-of-way area for perimeter local street intersections, for those areas not already owned by the public. In the Rural Development Area (RDA) and Suburban Development Area (SDA), outside of the Green Swamp Area of Critical State of Concern, one unit per five-acre (1 du/5ac) density may also be measured to the centerline of collector roads.	This policy addresses density calculations for large properties within the Green Swamp Area of Critical State of Concern.
SECTION 2.108 - RURAL-DEVELOPMENT AREAS (RDA) - POLICY 2.108-A1: DESCRIPTION - Rural-Development Areas (RDA) shall be all unincorporated areas within the County that are not located within a Transit Supportive Development Area, Urban-Growth Area, Suburban-Development Area, or Utility-Enclave	This amendment will not intensify an area where Services are limited and mostly found in the rural centers and clustered developments. It modifies the way in which large properties are measured.

Policy	Consistency
Area. Development in these areas is characterized by large open areas, agricultural use, with scattered development and rural centers. Services are limited and mostly found in the rural centers and clustered developments.	

Consistency with the Florida Statutes

In Chapter 373, Water Resources of the Florida Statutes, the Legislature recognizes the Green Swamp’s importance in maintaining the quality and quantity of Florida’s water supply and water resources for the public and the environment. In Section 373.462, they make these findings:

- It is a regionally significant high recharge area of the Floridan Aquifer system, and it helps protect coastal communities from saltwater intrusion.
- Polk County’s portion of the Green Swamp is the headwaters or portions of the headwaters of six major river systems in the state, which are the Alafia, Hillsborough, Kissimmee, Ocklawaha, Peace, and Withlacoochee Rivers.
- The Green Swamp and the surrounding areas are economically, environmentally, and socially defined by some of the most important and vulnerable water resources in the state.

The proposed amendment will result in an incremental and insignificant increase in the proliferation of development in the Green Swamp. Staff finds that it will not conflict with the State’s vision and goals for the area. The smallest residential properties that this amendment could possibly create in the Critical Area will be at least 10 acres. All rules for wetland and floodplain protection will remain intact.

Comments from Other Agencies: None

Exhibits:

- Exhibit 1 – Section Calculation Example
- Exhibit 2 – Example of a Section Under 640 Acres
- Exhibit 3 – Green Swamp Wetland Study Map
- Exhibit 4 – Green Swamp Boundary

Under separate attachment-

- Draft Ordinances with Proposed Text