#### ORDINANCE NO. 23-\_\_

AN ORDINANCE OF THE BOARD OF COUNTY **COMMISSIONERS OF WAKULLA, FLORIDA RELATED** TO COMMERCIAL DEVELOPMENT OF CONCERN AND PROTECTION OF THE FLORIDAN AOUIFER AND WAKULLA COUNTY'S SPRINGS AND THEIR CAVE SYSTEMS IN WAKULLA COUNTY; CREATING SECTION 6-38 OF THE WAKULLA COUNTY LAND CODE: PROVIDING DEVELOPMENT FOR SEVERABILITY, FOR CODIFICATION AND FOR AN EFFECTIVE DATE.

**WHEREAS,** the Legislature of the State of Florida has, in Chapter 125, Florida Statutes, conferred upon local governments the authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry; and

**WHEREAS**, the Wakulla County Board of County Commissioners (the "Board") finds that Wakulla Springs is a valuable cultural and natural resource and asset to Wakulla County and the State of Florida; and

WHEREAS, Wakulla Springs is a regionally significant natural resource and an Outstanding Florida Spring; and

WHEREAS, the Floridan aquifer is the source of drinking water for many Wakulla County residents; and

**WHEREAS**, the Board recognizes the vulnerability of Wakulla Springs and the entire Floridan Aquifer to contamination; and

WHEREAS, the Board acknowledges the extensive efforts made over several decades to map the underwater cave system of the Woodville Karst Plain through various dye-tracing and diving activities; and

WHEREAS, the Board further acknowledges the presence and vulnerability of many known and unknown underwater caves and other karst features throughout the County; and

WHEREAS, the Board finds it appropriate to adopt regulations that are consistent with and meet or exceed the goals, objectives, and policies established in the Wakulla County Comprehensive Plan 2040 (the "Comprehensive Plan"), related to the protection of natural resources and groundwater quality; and

WHEREAS, the Board acknowledges that the Wakulla County Comprehensive Plan requires Wakulla County to maintain maps of aquifer vulnerability, including the Wakulla County Aquifer Vulnerability Assessment (WCAVA), and utilize the vulnerability maps in project evaluations; and

**WHEREAS,** it is the Board's intent to be consistent with the Florida Administrative Code and Florida Statutes; and

**WHEREAS**, it is the Board's intent to be consistent with federal, state, and local government laws and regulations protecting wellheads, Outstanding Florida Springs, and aquifers;

2023.07.05\_Citizen Proposal re Ordinance on Protection of Floridan Aquifer Wakulla County's Springs and their Cave Systems

and

**WHEREAS,** the Board finds that it is in the best interest of the citizens of Wakulla County and the State of Florida to protect and preserve the water quality of Wakulla Springs, its connected underwater caves, and the entire Floridan Aquifer; and

WHEREAS, the Board finds that in order to protect and preserve the water quality of Wakulla Springs, its connected underwater caves, and the entire Floridan Aquifer, the Board must regulate commercial development that involves the use, treatment, storage, or disposal of hazardous substances, hazardous wastes, or petroleum products within the entire boundary of Wakulla County;

### NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF WAKULLA COUNTY, FLORIDA, AS FOLLOWS:

**SECTION 1. INCORPORATION OF RECITALS.** The above recitals are true and correct and are hereby incorporated by reference.

**SECTION 2. AMENDMENT OF SECTION 2-4 OF THE WAKULLA COUNTY LAND DEVELOPMENT CODE.** Section 2-4 of the Land Development Code, entitled "Definition of Terms," is hereby amended to include the following definitions:

Commercial Development of Concern: Any use of land within Wakulla County associated with the storage, sale, or distribution of goods or the performance of services that involves the use, treatment, storage, or disposal of regulated substances as defined herein.

Karst: A general term describing both landforms and processes related to the dissolution of soluble rock.

Karst Terrain: An area created from the dissolution of geologic materials by water characterized by distinctive landforms (such as springs, caves, sinkholes) and a unique hydrogeology that results in aquifers that are highly productive but extremely vulnerable to contamination.

Professional Engineer: A Professional Engineer licensed to practice in the State of Florida who performs the engineering functions described in this Code on behalf of the applicant.

Professional Geologist: A Professional Geologist licensed to practice in the State of Florida who performs the geologist functions described in this Code on behalf of the applicant.

Professional Land Surveyor: A Professional Land Surveyor licensed to practice in the State of Florida who performs the surveying functions described in this Code on behalf of the applicant.

Regulated Substances: Hazardous substances identified in 40 CFR 302 or its successor in function, regardless of whether said substances meet the noted reportable quantities noted therein; hazardous wastes as regulated under Chapter 62-730, F.A.C.; and petroleum products as regulated under Chapters 62-761 and 62-762 F.A.C..

Special Protection Areas: Buffer zones delineated around Vulnerable Features, or areas with subsurface conditions that could lead to surface collapse or the opening of new pathways for contamination of the aquifer, within which land uses are regulated to protect the quality of the groundwater resource.

2023.07.05\_Citizen Proposal re Ordinance on Protection of Floridan Aquifer Wakulla County's Springs and their Cave Systems

Vulnerable Features: Springs, spring runs, and underwater cave systems, as well as excavations and karst features, such as sinkholes and swallets, which have the potential to discharge directly to the aquifer.

SECTION 3. CREATION OF SECTION 6-38 OF THE WAKULLA COUNTY LAND DEVELOPMENT CODE. A new Section 6-38 of the Wakulla County Land Development Code, entitled "Wakulla County Springs and Aquifer Protection Regulations," is hereby created to read as follows:

#### Sec. 6-38. Wakulla County Springs and Aquifer Protection Regulations.

## (1) Applicability.

- (a) All applications for Comprehensive Plan text amendments, Comprehensive Plan map amendments, zoning changes, and site plan approvals for commercial development shall identify if any Regulated Substances will be used, sold, treated, stored, or disposed of onsite and, if so, shall adhere to the regulations described in this Section, as well as all applicable state and federal laws, rules, and regulations.
- (b) A Professional Geologist and/or Professional Engineer, as applicable, shall certify that the submitted information, the site characteristics, and the project documentation provide reasonable assurance of compliance with this Section.

#### (2) Geophysical Investigation Survey

- (a) A Geotechnical Assessment Report shall accompany all applications for site plan review for Commercial Development of Concern sites located within 1000 feet of the bank or rim of any readily identified Vulnerable Feature or the mapped centerline of an underwater cave as well as any existing closed depression relic karst features, rock outcroppings, active ground subsidence, or other karst features identified by site survey or other information such as LIDAR imagery.
- (b) All geotechnical work performed for the survey shall utilize tools and techniques that are best practice for geological surveys in known karst terrain to adequately perform the work. All field and survey work shall be certified by a Professional Geologist.
- (c) The report shall include the following:
  - 1. Geophysical Investigation Survey
  - 2. Geotechnical Assessment
- (d) Geophysical Investigation Survey
  - 1. The Geophysical Investigation Survey shall be conducted to provide a preliminary evaluation of the site to be developed and the area within 1000 feet of the site property boundary.
  - 2. The survey shall describe any Vulnerable Features that can be identified through visual inspection, available topographic and LIDAR data, local and state information on springs, a review of digital underwater cave maps available from the Florida Geological Survey, and other available geological and water resource information.

2023.07.05 Citizen Proposal re Ordinance on Protection of Floridan Aquifer Wakulla County's Springs and their Cave Systems

- 3. The survey results shall be used to identify "suspect areas" on the site to be developed that exhibit evidence of subsurface conditions that could lead to surface collapse or the opening of new pathways for contamination of the aquifer.
- (e) Geotechnical Assessment
  - 1. The Geotechnical Assessment shall determine the nature and thickness of subsurface materials, including depth to bedrock, groundwater level, presence of subsurface voids or cavities, depth and thickness of the intermediate confining unit as depicted in Figure 5 of the Wakulla County Aquifer Vulnerability Assessment (WCAVA), thickness of the Floridan aquifer overburden as depicted in Figure 6 of the WCAVA, and the presence of and depth to underwater cave systems as depicted on digital maps available from the Florida Geological Survey.
  - 2. At minimum one boring shall be taken on the site to be developed in each geologic unit present, as mapped by the Florida Geological Survey and U.S. Geological Survey and County records that reflect the geological features of that geological unit.
  - 3. Additional borings of at least 50 feet in depth shall be undertaken, in addition to the use of ground penetrating radar or other appropriate geotechnical techniques, to further analyze any "suspect areas" identified on the site during the Geophysical Investigation Survey that indicate the possible presence of subsurface conditions that could lead to surface collapse or the opening of new pathways for contamination of the aquifer.
  - 4. The assessment shall include
    - Site location
    - Description of subsurface conditions.
    - Stratification based on visual soil classification.
    - Computer-generated boring logs with field and laboratory data.
    - A karst feature inventory showing the footprint of each commercial structure and the locations of all Vulnerable Features within 1000 feet of the site.
    - The boundaries of any Special Protection Areas delineated per Section 6-38(4) of the Land Development Code.
    - The locations and characteristics of areas exhibiting evidence of subsurface conditions that could lead to surface collapse or the opening of new pathways for contamination of the aquifer.
  - 5. All geotechnical work performed shall utilize tools and techniques that are best practice for geological surveys in known karst terrain. Subsurface data may be acquired by various exploration methods including standard penetration test soil borings, electric piezocone penetration test soundings or test excavations with remote operated equipment.

2023.07.05 Citizen Proposal re Ordinance on Protection of Floridan Aquifer Wakulla County's Springs and their Cave Systems

- 6. The data listed herein shall be acquired under the direct supervision of a Professional Geologist or Professional Engineer who is experienced in conducting such studies with at least five (5) years of experience with karst geology/hydrology.
- 7. All material penetrated by borings shall be logged, characterized, and certified by a Professional Geologist.

## (3) Karst Management Plan

- (a) A Karst Management Plan shall be prepared for any Commercial Development of Concern for which the Geotechnical Assessment Report identifies one or more Vulnerable Features on site or within 1000 feet of the site property boundary or any areas on the site to be developed that exhibit evidence of subsurface conditions that could lead to surface collapse or the opening of new pathways for contamination of the aquifer.
- (b) The plan shall be certified by a Professional Geologist and shall be submitted with any application for site plan review.
- (c) The plan shall include:
  - 1. A map depicting the footprint of each commercial structure, the locations of all Vulnerable Features within 1000 feet of the site, and the finished topographic contours of the site at a maximum 2-foot contour interval, with spot elevations sufficient to determine low points or discernable edges.
  - 2. A protection strategy for Vulnerable Features located within 1000 feet of any structure on the site where Regulated Substances will be used, sold, treated, stored, or disposal of.
    - i. The strategy shall employ best management practices defined by state or federal agencies, professional organizations, and peer-reviewed research for the design and operation of the facility so as to minimize releases of any Regulated Substances onto or below the surface of the ground and to minimize impacts during construction.
    - ii. The strategy also shall employ best management practices to prevent Regulated Substances from reaching any Vulnerable Features by detecting and mitigating any release that may occur.
  - 3. Applicants shall seek review and comment on the proposed protection strategy from knowledgeable experts in county and state agencies, universities, and professional organizations. Concerns raised by county or state agencies shall be addressed in the strategy.
  - 4. Modifications shall be made to the protection strategy if new information is discovered during site preparation or construction about the presence or nature of Vulnerable Features or the presence of subsurface conditions that could lead to surface collapse or the opening of new pathways for contamination of the aquifer.

## (4) **Delineation of Special Protection Areas.**

Special Protection Areas (SPAs) shall be designated around Vulnerable Features as

defined herein or any areas of the site exhibiting evidence of subsurface conditions that could lead to surface collapse or the opening of new pathways for contamination of the aquifer. The Special Protection Area shall consist of a buffer of five hundred (500) feet measured from the rims of excavations, sinkholes, springs, spring runs, and swallets and from the centerlines of underwater cave systems as depicted on digital underwater cave maps available from the Florida Geological Survey.

### (5) **Prohibited uses within Special Protection Areas.**

The following uses are prohibited within Special Protection Areas:

- (a) Aboveground and underground tankage, treatment, storage, disposal, or transfer of regulated substances as defined herein and as regulated under Chapters 62-730, 761, and 762 F.A.C.
- (b) Underground and aboveground transmission pipelines for petroleum product as defined in Chapters 62-761 and 762 F.A.C.

### (6) Application Fee.

The Board of County Commissioners may adopt, by separate resolution, fees for review of an Environmental Management and Geotechnical Assessment Plan, a Geotechnical Assessment Report, Geophysical Investigation Survey and/or a Karst Management Plan by a Professional Geologist and/or Professional Engineer, as applicable, submitted pursuant to this Section, which shall be paid by the applicant at the time of filling of the application for site plan approval.

**SECTION 6. CODIFICATION IN THE CODE OF ORDINANCES.** It is the intention of the Board, and it is hereby ordained that the provisions of this Ordinance shall become and be made a part of the Wakulla County Code of Ordinances, and that the sections of this Ordinance may be renumbered to accomplish such intent.

**SECTION 7. SEVERABILITY.** Should any section or provision of this Ordinance or any portion thereof, or any paragraph, sentence or word be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the remainder hereof other than the part declared to be invalid.

**SECTION 8. EFFECTIVE DATE.** A certified copy of this Ordinance shall be filed with the Department of State within ten (10) days after its enactment by the Board and shall take effect as provided by law.

**PASSED AND ADOPTED** by the Board of County Commissioners of Wakulla County, Florida, this \_ day of \_\_\_\_\_\_, 2023.

# **BOARD OF COUNTY COMMISSIONERS OF** WAKULLA COUNTY, FLORIDA

By:

RALPH THOMAS, Chairman

ATTEST:

2023.07.05 Citizen Proposal re Ordinance on Protection of Floridan Aquifer Wakulla County's Springs and their Cave Systems

GREG JAMES, Ex Officio Clerk to the Board

APPROVED AS TO FORM:

HEATHER J. ENCINOSA, ESQ. County Attorney

