# **Board of County Commissioners Agenda Request**

Date of Meeting: July 17, 2023

Date Submitted: July 5, 2023

To: Honorable Chairman and Members of the Board

From: Commissioner Chuck Hess, District 5

Subject: Request Board Reconsideration of Direction Given to Staff on May 1, 2023,

Pertaining to the Proposed Ordinance Regarding Wakulla Springs Protection Regulations and instead, Approve to Schedule and Advertise Public Hearings and Workshops to Consider Adopting the Revised Proposed Ordinance that Implements Additional Protections for Commercial Development that uses, handles, produces, stores, and/or disposes of regulated substances. In the alternative, Request Board Direction and Approval to Submit the Citizen Proposal to DEP for the Input of Agency Expertise to Ensure Protection of

Wakulla Springs and the Floridan Aquifer

#### **Statement of Issue:**

This agenda item requests Board reconsideration of direction given to staff on May 1, 2023, pertaining to the proposed Ordinance regarding Wakulla Springs Protection Regulations and instead, approve to schedule and advertise public hearings and workshops to consider adopting the revised proposed Ordinance (Attachment #1) that implements additional protections for commercial development that uses, handles, produces, stores, and/or disposes of regulated substances. In the alternative, this agenda item requests Board direction and approval to submit the citizen proposal to DEP for the input of agency expertise to ensure protection of Wakulla Springs and the Floridan Aquifer.

#### **Background:**

On July 5, 1994, the Board of County Commissioners adopted Ordinance No. 94-28 enacting the Wakulla Spring Special Planning Area (WSSPA). This ordinance created the initial boundaries of the WSSPA which was created to protect water quality of Wakulla Springs and its contributing water bodies. Included in this ordinance is a list of 128 substances which are regulated in the WSSPA and registration is required with the County. Essentially, existing commercial industries are expected to self-report, operating on the honor system. Primarily, the ordinance is intended to regulate the use, handling, production, storage, and disposal of regulated substances to protect surface and groundwater from contamination.

The ordinance further indicates that an applicant "shall provide sufficient information" to document the use, storage, or disposal of regulated substances, but fails to provide details of what "sufficient information" is to ensure protection of ground and surface water.

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Exemptions are also included in Ordinance No. 94-28. Generally, exemptions include emergency management related uses, transit uses, agricultural uses, residential and office uses. Most notable of these exemptions includes a "special exemption" which may be granted by the Planning Department. An applicant may present competent substantial evidence that special or unusual circumstances and adequate technology exists to isolate the facility or proposed activity from soil, surface, or ground water pollution. Details are not currently provided in the ordinance related to the eligibility of such circumstances or indicating what constitutes adequate technology.

Finally, Ordinance No. 94-28 provides for discharge reporting, inspection, and monitoring of onsite storage facilities, requires secondary containment, compliance with various State requirements and enforcement procedures. Very minimal guidance is provided in the current ordinance related to these standards.

Over several decades, many efforts have been made to identify and study aquifer vulnerability, connect underground cave systems, and study the impacts of water quality. Numerous studies conducted by both the Florida Department of Environmental Protection and the Northwest Florida Water Management District outline the effects of nitrate loading on the groundwater and Wakulla Springs. Additionally, years have been spent by the Woodville Karst Plain Project conducting underwater cave exploration and mapping as well as dye-tracing to document the connective flow of underground conduits. As a result of these endeavors, the Board of County Commissioners approved to expand the WSSPA boundaries to encompass a much larger area of the County in 2008. The decision to expand the WSSPA boundary was made following a Board Workshop on February 4, 2008, and Public Hearing on April 21, 2008.

Additionally, multiple amendments to the Comprehensive Plan have been made to incorporate policy regulations as they relate to the WSSPA. Many of these policies provide regulatory standards for performance based septic tanks (both within and outside of the WSSPA), the use of the Florida Yards Neighborhoods standards for the use of landscaping and fertilizers, limitations for increase in density requests and requirement for centralized sewer, and protection measures (including buffers) for karst features and potable water well-heads. Further outlined by the Comprehensive Plan are requirements for site analysis to identify karst features, conduct geophysical analysis, and complete comparative nitrate loading studies, when applicable. These regulatory standards aid in the overall reduction of nitrogen loading on both ground and surface waters.

#### Southwest Georgia Oil Company Application

On or about October 15, 2021, Southwest Georgia Oil Company applied to Planning and Community Development for a Comprehensive Land Map Amendment to the Future Land Use Map.

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According to the application, Southwest Georgia Oil Company seeks to construct a 16-pump gas station and car wash, with a convenience store and restaurant. Technical review of the application was completed on November 10, 2021. The application and requisite Environmental Study indicated that the parcel had no karst features.

On February 14, 2022, the request was reviewed by the Planning Commission. A motion was made to recommend denial of the request, which died for a lack of a second. Another motion was made to approve the request and after the second, the motion failed 1-5. The next motion was made to recommend staff invite a hydrologist or expert to discuss the cave system in relation to Wakulla Springs and the subject parcel before the item was brought to the County Commission. The motion passed 6-0.

On February 15, 2022, County Administrator David Edwards submitted an Agenda Request to the Board, seeking to have the Board:

- (1) Conduct the Public Hearing and vote to adopt the proposed Comprehensive Plan Map Amendment, amending the Future Land Use Map Designation from Agriculture land use to Rural 2 land use, based upon the recommendation of Staff and the findings of fact and conclusions of law made by the Board and any evidence submitted at the Hearing; or
- (2) Conduct the Public Hearing and vote to deny the proposed Comprehensive Plan Map Amendment, retaining the existing Agriculture land use designation based upon the findings of fact and conclusions of law made by the Board and any evidence submitted at the Hearing; or,
- (3) permit staff to invite a hydrologist or expert to discuss the cave system in relation to Wakulla Springs and this property.

# **Board Direction to Draft Ordinance**

At the February 22, 2022, meeting, the Board provided staff with direction to begin revising the Wakulla Springs Protection Ordinance to address underground cave features as it relates to commercial development. On April 27, 2022, Wakulla County staff held a meeting to discuss the feasibility of adopting new ordinance language, or modifying existing karst feature analysis requirements, that is supported with enforceable, sound practices which identify additional risk to human health and/or the environment associated with commercial development within aquifer vulnerability zones. Staff determined that there was a need to establish comprehensive, impartial policies for commercial development in areas with groundwater vulnerability. It was discussed that the County should also establish areas of high vulnerability based on designations allowing for

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commercial development, and that the County would evaluate available methodologies for protection, based on publicly available scientific data, and review available processes including new ordinances, karst feature analysis requirements, and/or springs protection areas.

On June 9, 2022, County Administrator David Edwards presented an Agenda Request to the Board which requested Board acceptance of an update and requested staff direction regarding cave systems, aquifer vulnerability and commercial uses. During the discussion at the June 20, 2022, BOCC meeting, staff outlined concerns related to the development of regulatory setbacks from cave systems on the mistaken basis that the data is proprietary, not certifiable, and no licensing requirements exist for collection of this data. Based on this misunderstanding, staff recommended development of an ordinance related to best management practices for sites utilizing hazardous substances. Additionally, staff recommended the Board authorize staff to work with a geological and hydrological consultant familiar with how to protect groundwater from hazardous material to develop standards. This direction was approved by a 5-0 vote of the Board.

On September 17, 2022, The Friends of Wakulla Springs State Park urged the Wakulla BOCC to invite scientists to be included on the BOCC agenda in October and/or November 2022 for the purpose of allowing the scientists to provide a presentation relating to the Woodville Karst Plain. The three scientists who agreed to attend were Dr. Chris Werner (Hydrogeologist; Science Director, WKPP); Dr. George Veni (Former Director of the National Cave and Karst Research Institute, Carlsbad, New Mexico); and Harley Means (FDEP Florida Geological Survey (FGS) Representative and State Geologist). The three scientists are renowned experts in their respective fields relating to cave and karst systems. They each expressed interest in the project, and each agreed to provide a short presentation with summary bullet points. The offer to provide expert assistance to the County taxpayers was declined by the County Administrator and the BOCC.

#### Terracon's Proposed Ordinance

Following Board direction, staff engaged with Terracon to prepare an ordinance to accomplish the directive of the Board. Ultimately, the proposed ordinance was drafted to apply to all commercial development that uses, produces, or stores regulated substances, as defined, within the WSSPA. Regulated substances include hazardous substances, hazardous waste and/or petroleum products. Compliance with the provisions of the proposed ordinance was required to be demonstrated through the site plan review process and certified by a professional geologist or professional engineer prior to approval for construction. Requirements for constructing a facility which would use, produce, or store regulated substances within the WSSPA would be required to adhere with specific requirements including a Geotechnical Assessment of the site; Geophysical Investigation Survey; Karst Management Plan; Geotechnical Assessment Report outlining on-site findings; Stormwater

Management System Design Plan; Storage Tank Design Criteria Requirements; and Record Keeping standards.

On April 12, 2023, staff opened an initial 10-day public comment period seeking feedback regarding the proposed ordinance. Staff received numerous public comments which expressed opposition to the proposed ordinance on grounds including the absence of setbacks or buffers from caves and sensitive karst features, preemption concerns, the failure of staff to include stakeholder group input in drafting the ordinance, and limited opportunity for public comment. As a result of the comments received from the public, staff modified language in the draft ordinance following the initial comment period. Modifications included acknowledgement of the various vulnerability studies, dyetracing, and cave mapping endeavors. Additionally, adjustments were made to required certification of site-specific data by a professional geologist and/or professional engineer, as applicable, requiring certain certification criteria for individuals performing all required monthly inspections, and revised the timeframe for reporting to the County, from annually, to monthly. Further, a requirement was added to identify known, mapped underground karst systems accepted by the Florida Geological Survey. Finally, provisions for enforcement of the ordinance were also included.

On April 25, 2023, County Administrator David Edwards submitted an Agenda Request seeking direction from the Board regarding any revisions, additions, or deletions the Board wanted to make to the proposed ordinance and seeking approval to schedule and advertise the proposed ordinance for presentation to the Planning Commission and Board for final approval.

At the May 1, 2023, meeting, the Board discussed the ordinance prepared by Terracon as well as recommendations received from the public in writing prior to the meeting and verbally at the meeting. Despite overwhelming public opposition, the Board decided with a 4-1 vote to proceed with the proposed new regulations. The new regulations contained no setbacks for fuel tanks over a cave and would permit the construction of a gas station over Chips Hole Cave. As justification, the County Administrator claimed that the County could not implement setbacks because cave maps are not certifiable. Citizens pointed out that FDOT, FDEP, NW Florida Water Management, FSU and other entities use the same maps of underground caves for regulatory practices, and that Chips Hole Cave is a cave that is well mapped and documented. Citizens also pointed out that if the County enacted setbacks, construction of a gas station over Chips Hole Cave would be prohibited.

Commissioner Hess asked about what would happen if a collapse over the cave happened, swallowing a fuel tank. One of the Terracon officials reassured commissioners by telling them that "catastrophic failure was not a particular concern in this particular area." Later an irate citizen quoted the Terracon official and asked, "if putting fuel tanks over a cave leading to Wakulla Springs doesn't

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reach the level of concern for catastrophic failure, what does?" Commissioner Hess then suggested a public workshop to consider input from The Friends of Wakulla Springs, Wakulla Springs Alliance, and Clean Water Wakulla. He could not get a second and the motion failed. Commissioners Messersmith, Kemp, Nichols and Thomas then voted in favor of moving the new regulations forward, as they were written, allowing a gas station over a cave leading to Wakulla Springs with zero setbacks.

#### Commissioner Ralph Thomas' Proposed Ordinance

On May 8, 2023, in response to public comment, Commissioner Ralph Thomas submitted an Agenda Request seeking "Board Reconsideration of Direction Given to Staff on May 1, 2023 Pertaining to the Proposed Ordinance Regarding Wakulla Springs Protection Regulations and instead, Approve to Schedule and Advertise Public Hearings to Consider Adopting the attached revised Proposed Ordinance that Implements Additional Protections Countywide instead of limiting protections to only the Wakulla Springs Special Planning Area." Commissioner Thomas noted that, "While the proposed ordinance does a good job implementing additional safeguards that will further protect Wakulla Springs and groundwater in the Wakulla Springs Basin, I submit that it does not do enough to protect all groundwater within the entire boundary of Wakulla County." Commissioner Thomas proposed that protections should not be limited to the Wakulla Springs Special Planning Area. He presented a revised draft ordinance that proposed to expand the recommendations from Terracon to the entire boundary of Wakulla County. No other changes were included in the proposed ordinance.

At the May 15, 2023, meeting of the BOCC, County Administrator David Edwards stated that he has attempted to contact FDEP for assistance with the proposed ordinance for approximately 18 months but has received no response. Edwards did not disclose any contact person he attempted to reach, nor did he address whether he attempted to reach the specific contact persons at DEP which were suggested to him by Terracon, the County's own consultant.

The BOCC was presented with evidence rebutting the County Administrator's assertion that development of regulatory setbacks from cave systems was not possible because "the data is proprietary, not certifiable, and no licensing requirements exist for collection of this data." Specifically, Dr. Christopher Werner (WKPP Science Director) and Casey McKinlay (WKPP Project Director) provided a statement which included the following language:

The Woodville Karst Plain Project (WKPP) has been intimately involved in underwater cave exploration, surveying, and mapping since the mid-1980's within Wakulla County, Florida. The WKPP is a tax-exempt, non-profit organization under section 501(c)(3) of the Internal Revenue Code. Our survey and mapping techniques

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have been established based on standards from the National Speleological Society (NSS), of which the WKPP has been an affiliated project since November 26, 1990. Our surveys and maps are based on strict adherence to NSS guidelines for cave surveys recognized by the United States Geological Survey. WKPP research, surveys and maps are recognized and utilized by State of Florida agencies including the Florida Geological Survey, the Florida Department of Environmental Protection, the Northwest Florida Water Management District, and the Florida Department of Transportation. In addition, WKPP surveys and maps are recognized and used by Federal agencies including the Department of Agriculture and Consumer Services - National Forest Service, the US Fish & Wildlife Services - National Wildlife Management Areas and the US Department of the Interior - United States Geological Survey.

The WKPP survey and map data is not proprietary. It is provided as a volunteer effort, free of charge to the Florida Department of Environmental Protection (FDEP) and Florida Geological Survey. The data incorporates rigorous quality control and quality assurance required for Geographic Information System standard files. The data collection, mapping, plotting, quality control and quality assurance processes follow the NSS guidelines. Any County or Municipality can download the underwater cave map data directly and without charge from the official FDEP GIS server, given that they have a licensed GIS software program.

The WKPP and its contacts within the National Speleological Survey, Florida Geological Survey, and the United States Geological Survey, unequivocally state that there is no certification process for any underground cave survey data or maps. All cave surveys and maps are required to follow the strict NSS guidelines and processes for inclusion in USGS, FGS and FDEP Geographic Information Systems. Any suggestion that underwater cave survey data needs to be 'certified' before it can be recognized is false. Underwater cave data, as well as other geotechnical data, should be considered as part of a larger professional geological survey when significant investment is a factor for decision makers.

#### Community Forum and Workshop

Due to overwhelming community support for stringent Springs and Aquifer protections, the Wakulla Springs Alliance, Clean Water Wakulla, and the Friends of Wakulla Springs sponsored a Community Forum to give the entire community an opportunity to shape a shared vision for economic vitality and groundwater protection in Wakulla County, and to develop recommendations

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for improving a draft Springs Protection Ordinance amendment primarily focused on the use and storage of regulated substances. The goals were to better protect the springs, aquifer and everyone's drinking water, to minimize the risk of economic disasters from spills and allow suitable commercial development. The Community Forum was held at the Wakulla Environmental Institute, 170 Preservation Way, in Crawfordville on June 14, 2023.

At the BOCC meeting on June 1, 2023, there was concern that State preemption law would prevent Wakulla County from adopting more stringent standards. A participant shared his discussion with DEP in which the Agency confirmed that the County can include certain protections which are more stringent than the State's if the item is not preempted. The DEP official confirmed that DEP can review a draft ordinance and give comments, but only at the request of Wakulla County officials. The County also has the option to develop a pollution control program which can be designed and overseen by the State for a 2-year period, after which the County can adopt stricter regulations than current state regulations. DEP confirmed that with respect to storage tanks, preemption applies to storage tank design, and not to location because setbacks for caves and sensitive karst features are considered land use subjects. DEP supports setbacks, and its regulations include a 500-foot setback for public water wellheads.

The participants reviewed initial key questions. Everyone had an opportunity to comment on the questions and for experts to respond. After discussing key questions, the group formulated recommendations, and ultimately, voted on those recommendations. The group voted that the regulatory boundaries for the Springs Protection ordinance should apply to the whole County with special focus on the most vulnerable areas, and that the regulations apply to both karst features (sinkholes, swallets, etc.) and caves. The majority voted to allow aboveground storage tanks only, that the regulations should be included in a permitting ordinance, and that the County should develop a 2-year pollution control program to enhance design and reporting requirements. Finally, the participants agreed to create a workgroup to draft an ordinance containing the recommended inclusions.

The Citizens Workgroup consists of 60 participants with a wide expanse of specialized knowledge. Over the course of two weeks, the subject matter experts worked together to finalize a draft ordinance that encompasses the concerns voiced at the Citizens Forum, and that complies with the requirements of State and federal law. The Citizens Proposal is a robust draft ordinance pertaining to Commercial Developments with Regulated Substances in Wakulla County. The Citizens Group requested that the matter be presented to the BOCC with a request to Approve to Schedule and Advertise Public Hearings and Workshops to Consider Adopting the attached Revised Proposed Ordinance that Implements Additional Protections for Commercial Development that uses, handles,

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produces, stores, and/or disposes of regulated substances, or, in the alternative, Request Board Direction and Approval to Submit the Citizen Proposal to DEP for the Input of Agency Expertise to Ensure Protection of Wakulla Springs and the Floridan Aquifer.

#### **Analysis:**

This agenda item requests Board reconsideration of direction given to staff on May 1, 2023, pertaining to the proposed Ordinance regarding Wakulla Springs Protection Regulations and instead, approve to schedule and advertise public hearings and workshops to consider adopting the attached revised proposed Ordinance (Attachment #1) that implements additional protections for commercial development that uses, handles, produces, stores, and/or disposes of regulated substances. In the alternative, this agenda item requests Board direction and approval to submit the citizen proposal to DEP for the input of agency expertise to ensure protection of Wakulla Springs and the Floridan Aquifer.

# **Options:**

- 1. Approve to Schedule and Advertise Public Hearings and Workshops to Consider Adopting the Revised Proposed Ordinance Pertaining to the Wakulla Springs Protection Regulations.
- 2. Do Not Approve to Schedule and Advertise Public Hearings and Workshops to Consider Adopting the Revised Proposed Ordinance Pertaining to the Wakulla Springs Protection Regulations.
- 3. Approve Staff to Submit the Proposed Revised Ordinance Pertaining to the Wakulla Springs Protection Regulations to FDEP for Expertise Input.
- 4. Do Not Approve Staff to Submit the Proposed Revised Ordinance Pertaining to the Wakulla Springs Protection Regulations to FDEP for Expertise Input
- 5. Board Direction.

#### **Recommendation:**

Option #1

#### Attachment(s):

1. Proposed Revised Ordinance

#### **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 AQUIFER AND WAKULLA COUNTY'S SPRINGS AND THEIR CAVE SYSTEMS IN WAKULLA COUNTY; CREATING SECTION 6-38 OF THE WAKULLA COUNTY LAND DEVELOPMENT CODE; PROVIDING 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; and

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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.

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.
  - 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.
- 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

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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

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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 Florida, this _ day of	by the Board of County Commissioners of Wakulla County,, 2023.
	BOARD OF COUNTY COMMISSIONERS OF WAKULLA COUNTY, FLORIDA
ATTEST:	By:RALPH THOMAS, Chairman
GREG JAMES, Ex Officio Clerk to the Board	APPROVED AS TO FORM:

HEATHER J. ENCINOSA, ESQ. County Attorney

