DISCOVER 200 1824 – 2024 ALACHUA COUNTY BICENTENNIAL

# Alachua County Concerns with Tara April Special Exception

## January 13, 2026

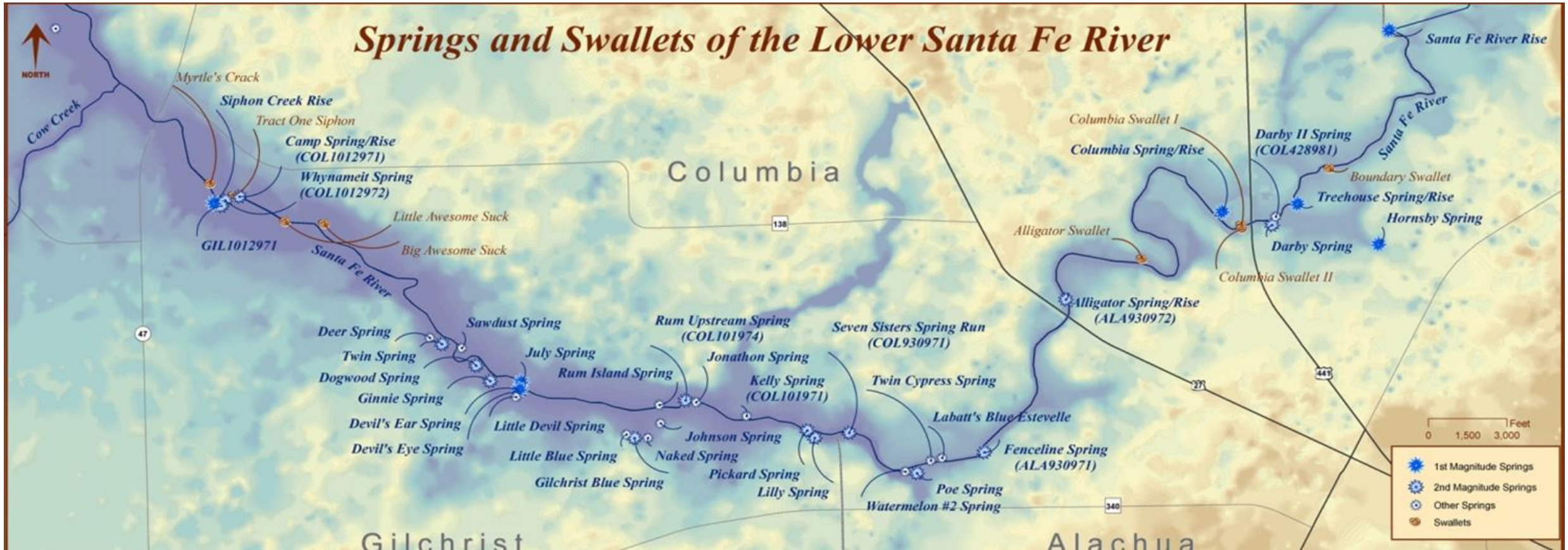
## Planning and Zoning Board

# Alachua County Recommends Denial

- Applicant has not met burden to show it won't harm water quality, impact significant geologic features, or injure neighboring properties and property values.
- This is a very unique area with data showing high vulnerability to sinkholes.
- Without additional data collection, it is impossible to minimize environmental impacts.

# Santa Fe River and Springs

## A 2013 study attributed $84 million (in recreation alone) to the Santa Fe Springs.



# Mill Creek Sink Cave

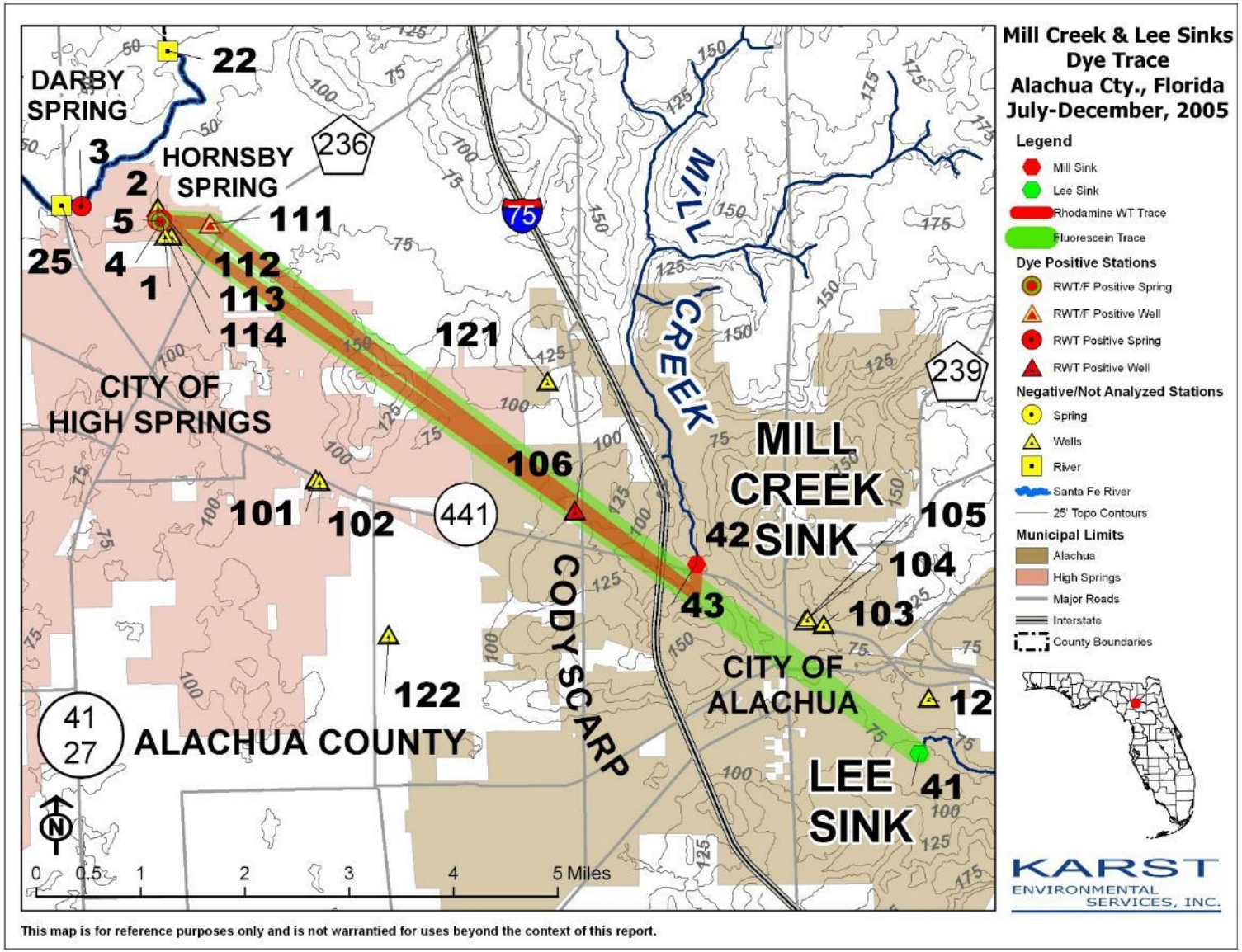
Hundreds of feet of mapped cave, several large rooms, and complex system of conduits.

*Image from Wes Skiles "Waters Journey (Karst Productions)"*

# Mill Creek Sink Dye Trace

- **2005 study hydrologically linked Mill Creek Sink to Hornsby Spring and Santa Fe Hills drinking water system.**
  - **Dye was deployed at the sink and detected 6 miles away at Hornsby Springs within 12 days.**
    - **For comparison, areas outside of conduit-flow have travel times between 100 - 1,000 years.**
  - **Detections reported at Santa Fe Hills Well (1.27 miles away) and Darby Spring (6 miles).**
  - **Dye was detected as late as 154 days later at Hornsby Spring.**

# Mill Creek Sink Dye Trace




**MILL CREEK and LEE SINKS**
**DYE TRACE**
**ALACHUA COUNTY, FLORIDA**
**JULY-DECEMBER, 2005**

Prepared for:
**Alachua County Environmental Protection Department**
201 SE 2nd Avenue, Suite 201
Gainesville, FL 32601

Prepared by:
**Peter L. Butt, Stephen Boyes, P.G. and Thomas L. Morris**

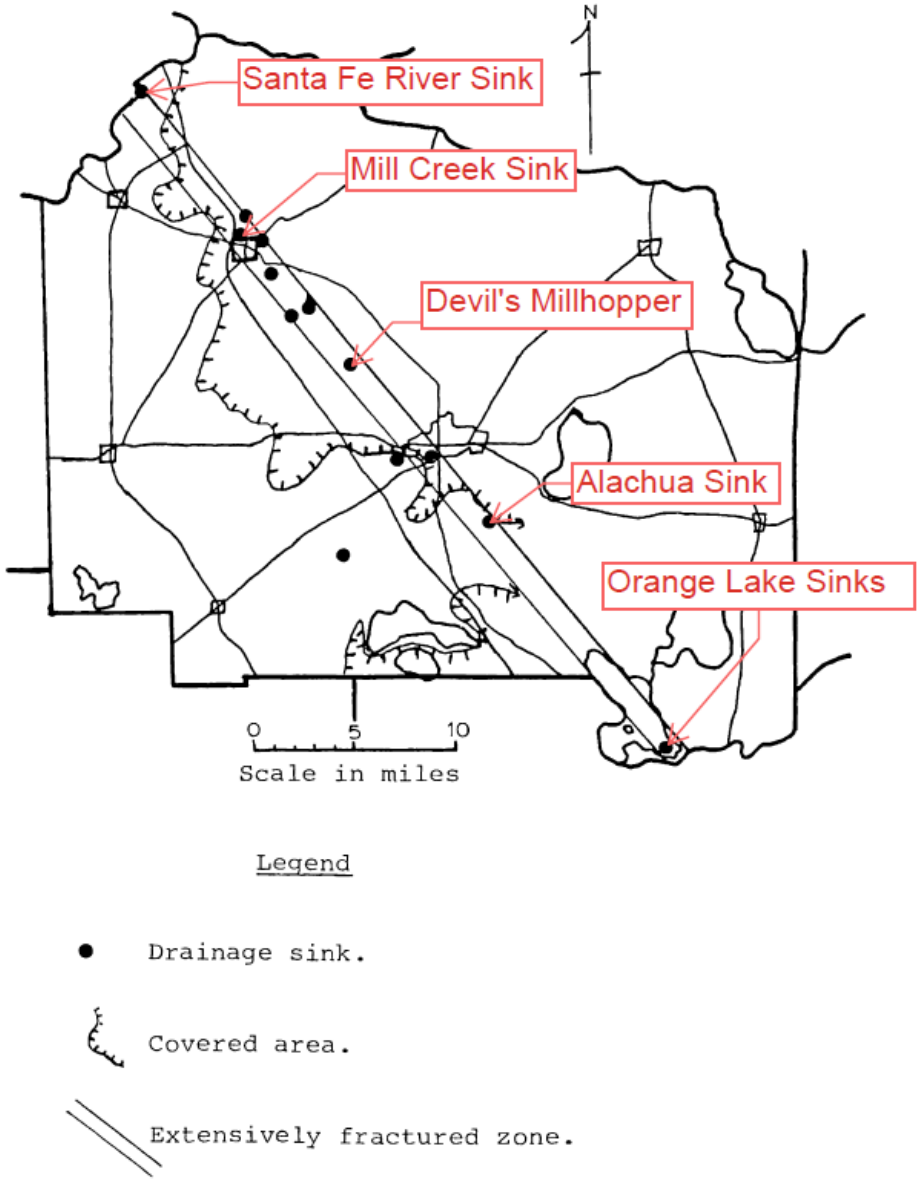
**Karst Environmental Services, Inc.**
5779 NE County Road 340,
High Springs, FL 32643

**June 7, 2006**

# Unique Site Characteristics

**The 1977 Bureau of Geology's *The Geology of the Western Part of Alachua County, Florida*, delineates what is known as the cross-county fracture zone.**

**"This linear trend of solution features is considered to be a direct result of an extensively fractured zone both in the Crystal River and the Hawthorne Formations."**



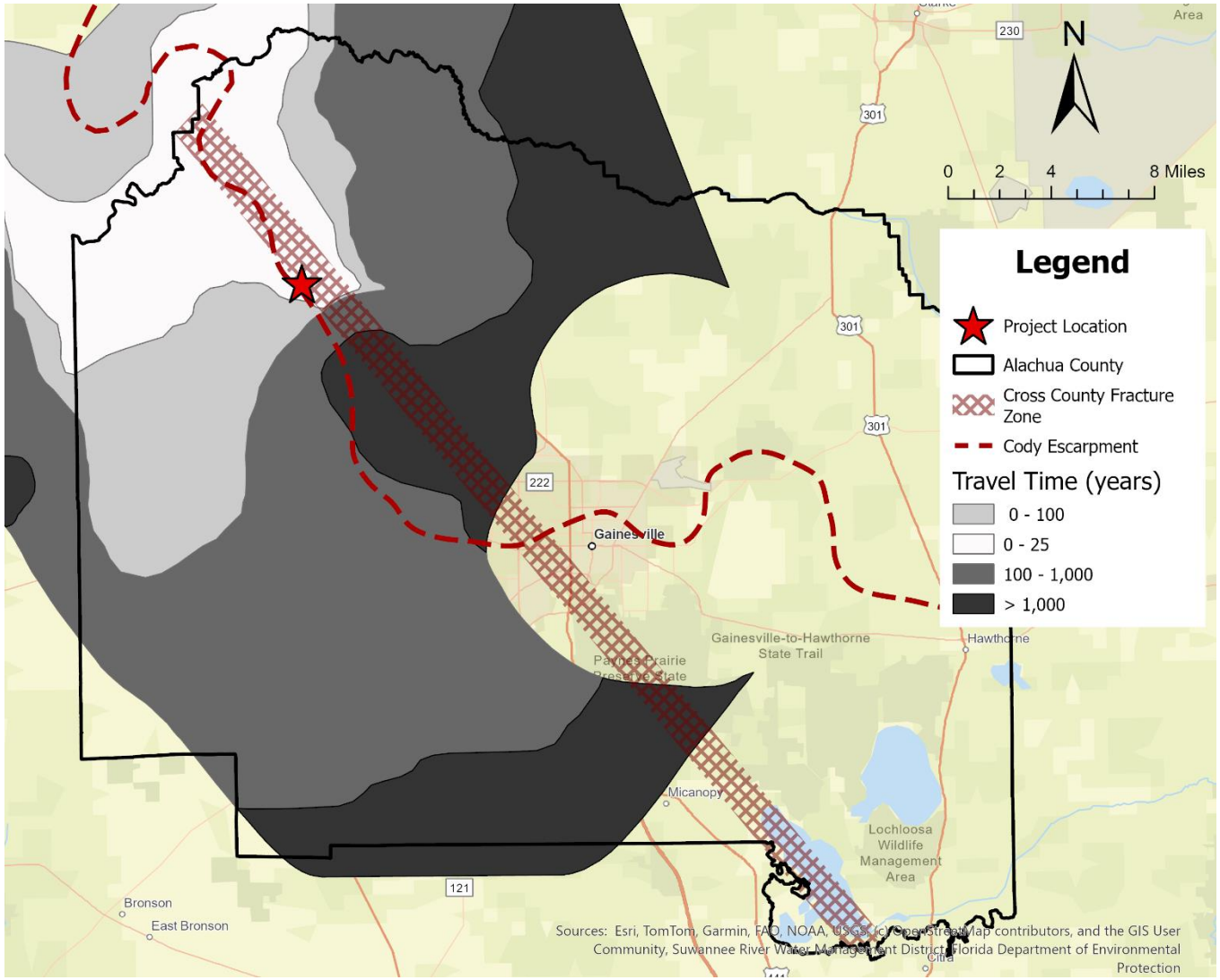
# Unique Site Characteristics

## Cody Escarpment/ Cody Scarp

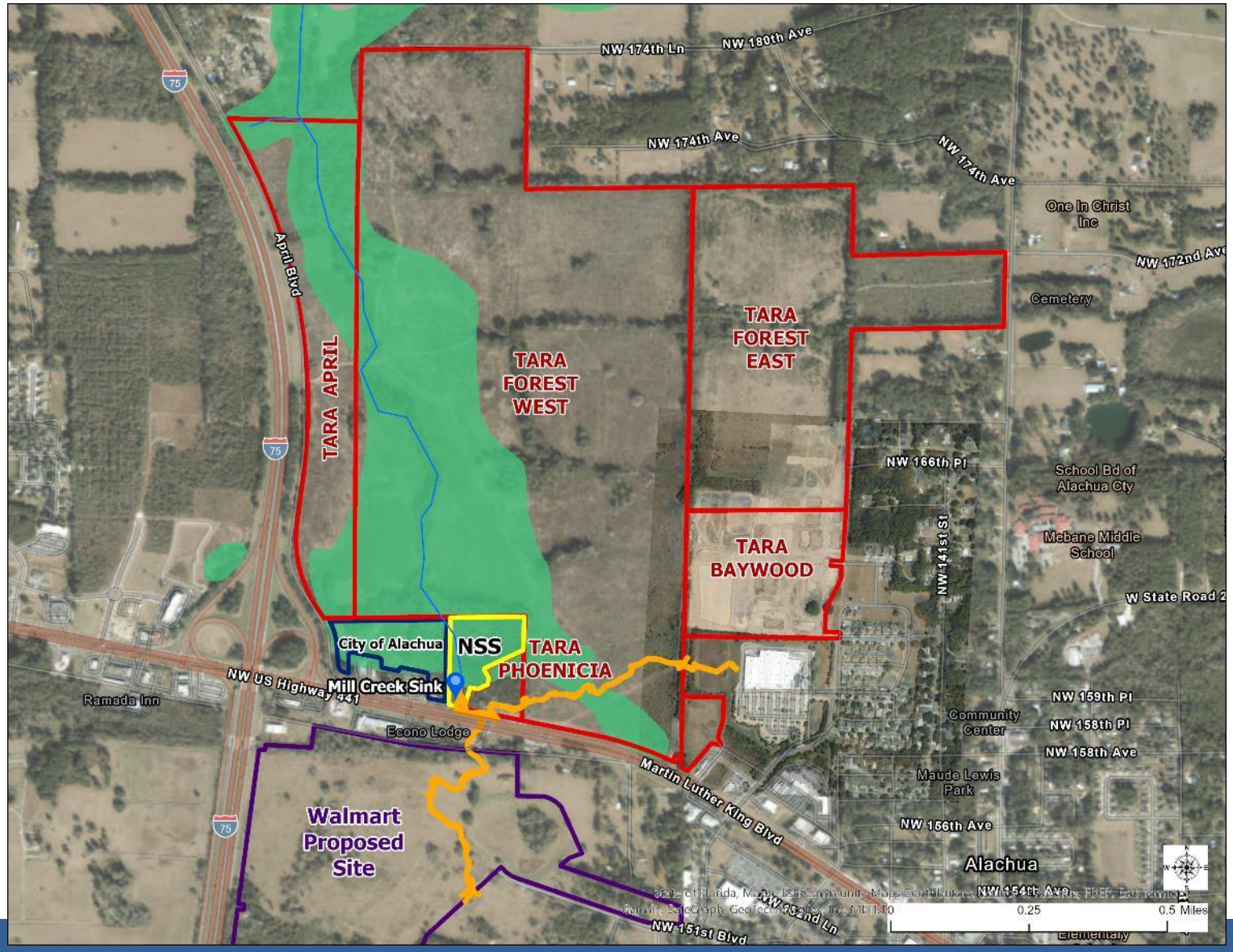
- Ancient shoreline, erosional edge of Hawthorne Group
- Transition zone of variable width

"represents a location of intense recharge of surface water to the Floridan aquifer system via sinking streams and sinkholes (expressed at the surface), and in certain areas controls the water chemistry in and dissolution of the aquifer."

(Upchurch and Lawrence, 1984)



# Proposed Tara Developments



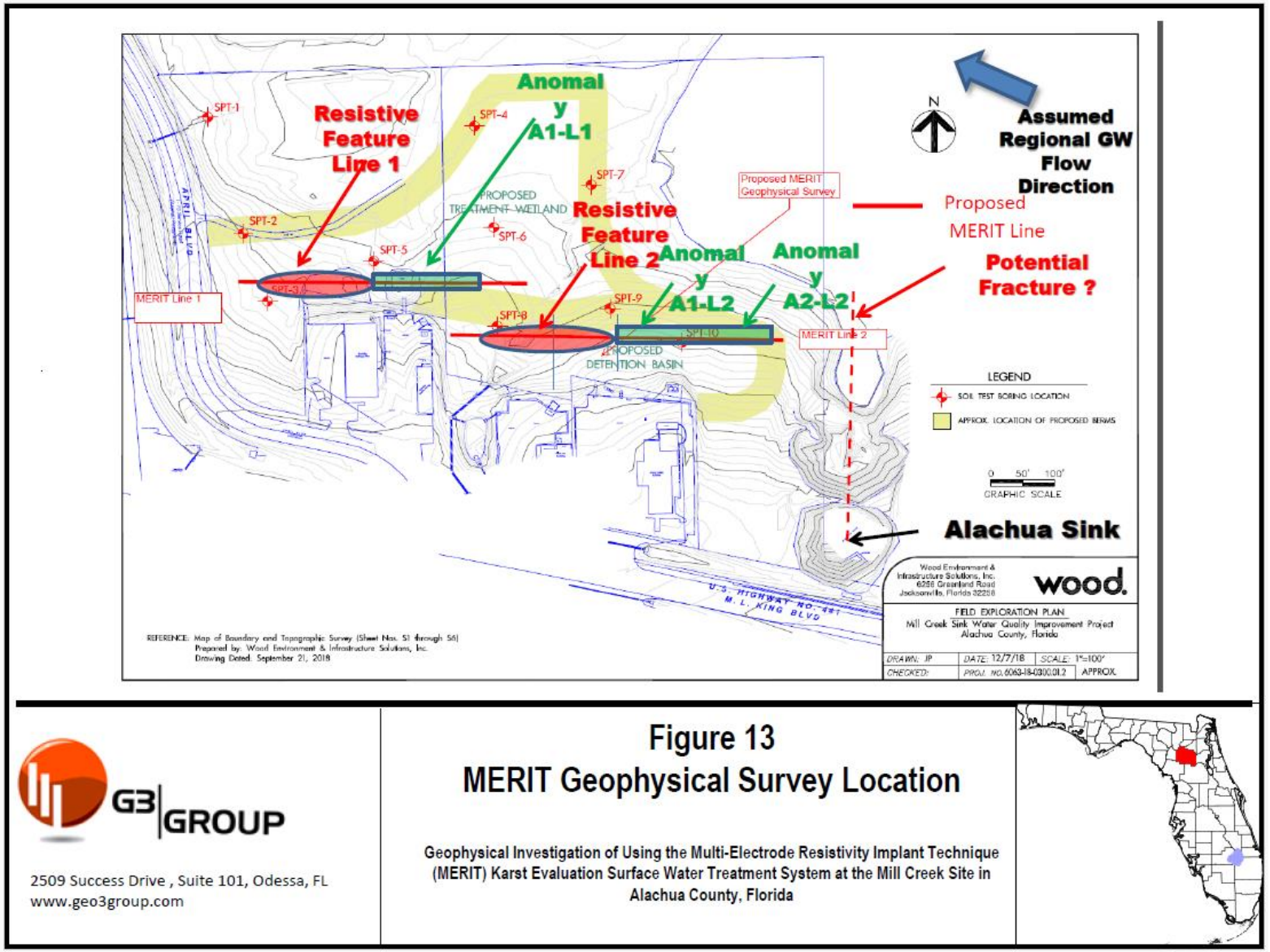

- Mill Creek Sink
- Mill Creek
- 2016 Mill Creek Sink Cave System
- Mill Creek Sink Nature Preserve (NSS)
- Tara Subdivisions
- City of Alachua
- Walmart Proposed Site
- Flood Hazard Area

# Mill Creek Sink Water Quality Improvement Project

**$2M project implemented by the City of Alachua funded by SRWMD and FDEP (Phase I of Mill Creek Sink Project grant)**

# Mill Creek Sink Water Quality Improvement Project

**G3 Performed Geophysical Investigation using Multi-Electrode Resistivity Implant Technique (MERIT)**




G3 GROUP

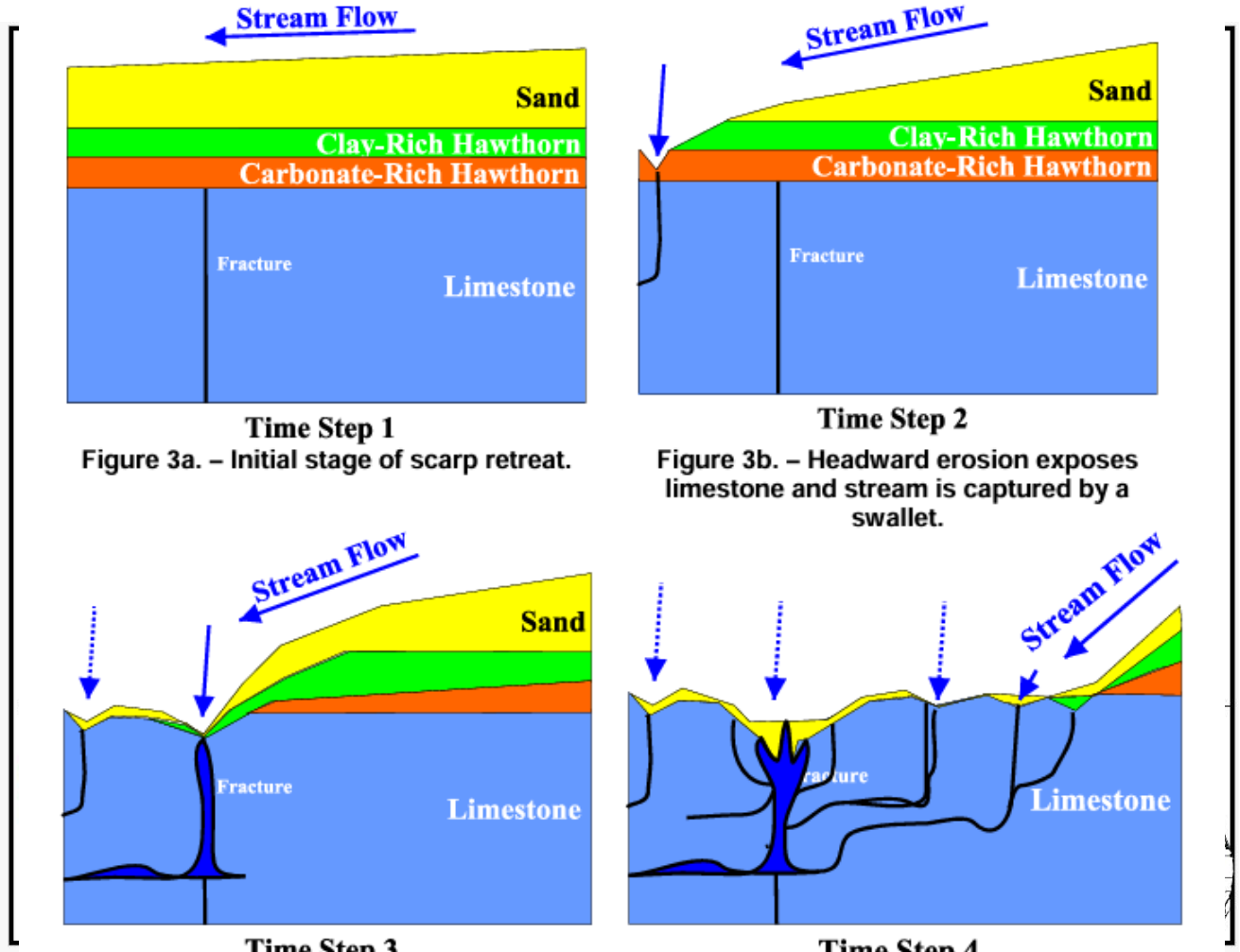
2509 Success Drive , Suite 101, Odessa, FL
www.geo3group.com

**Figure 13**
**MERIT Geophysical Survey Location**

Geophysical Investigation of Using the Multi-Electrode Resistivity Implant Technique (MERIT) Karst Evaluation Surface Water Treatment System at the Mill Creek Site in Alachua County, Florida

# Mill Creek Sink Water Quality Improvement Project

- **Anomaly A1-L1 may be former swallet or relic stream channel and potential deep facture zone**
- **Anomalies A1-L2 & A2-L2 may be a potential fracture zone**

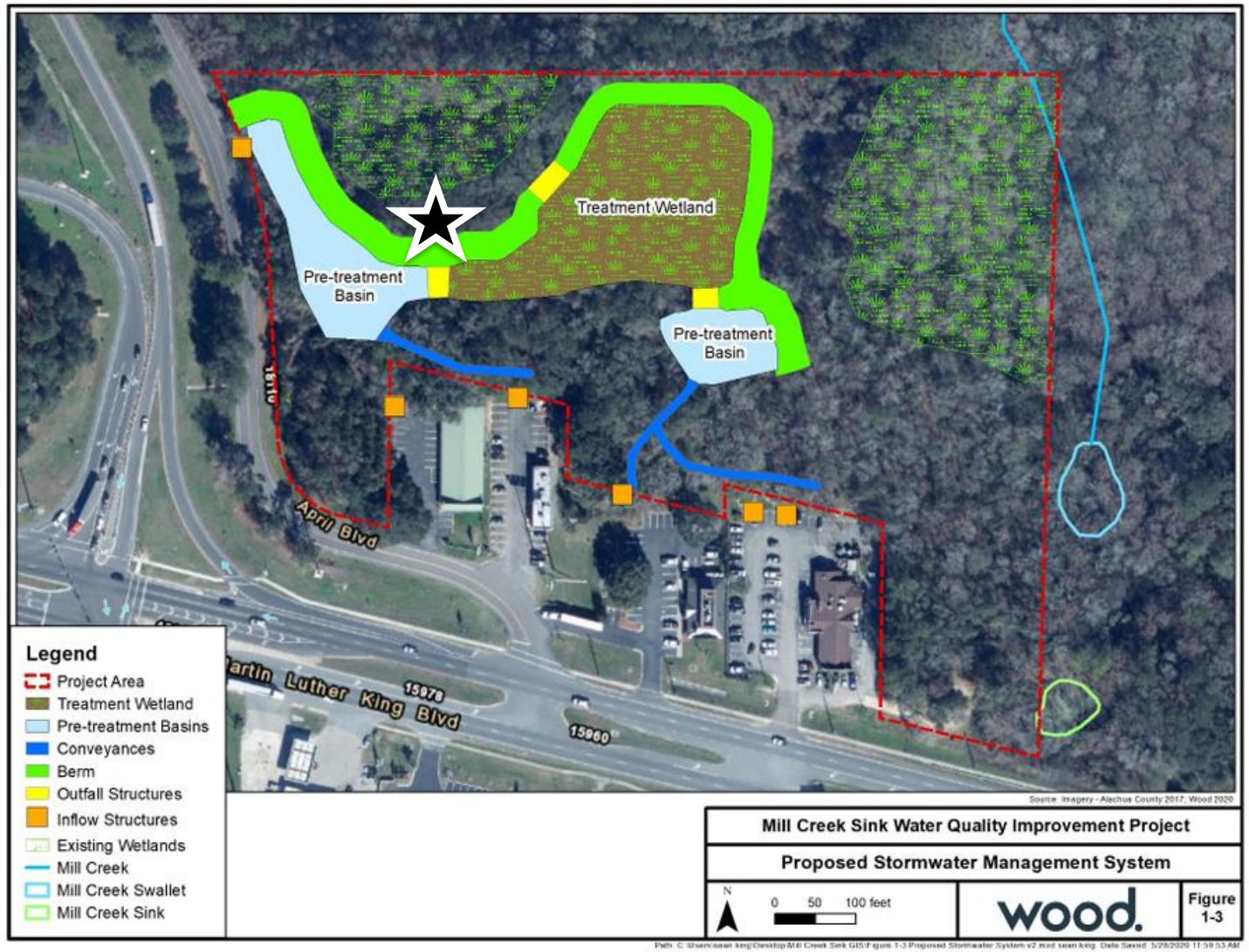



Data Source: Upchurch 2007

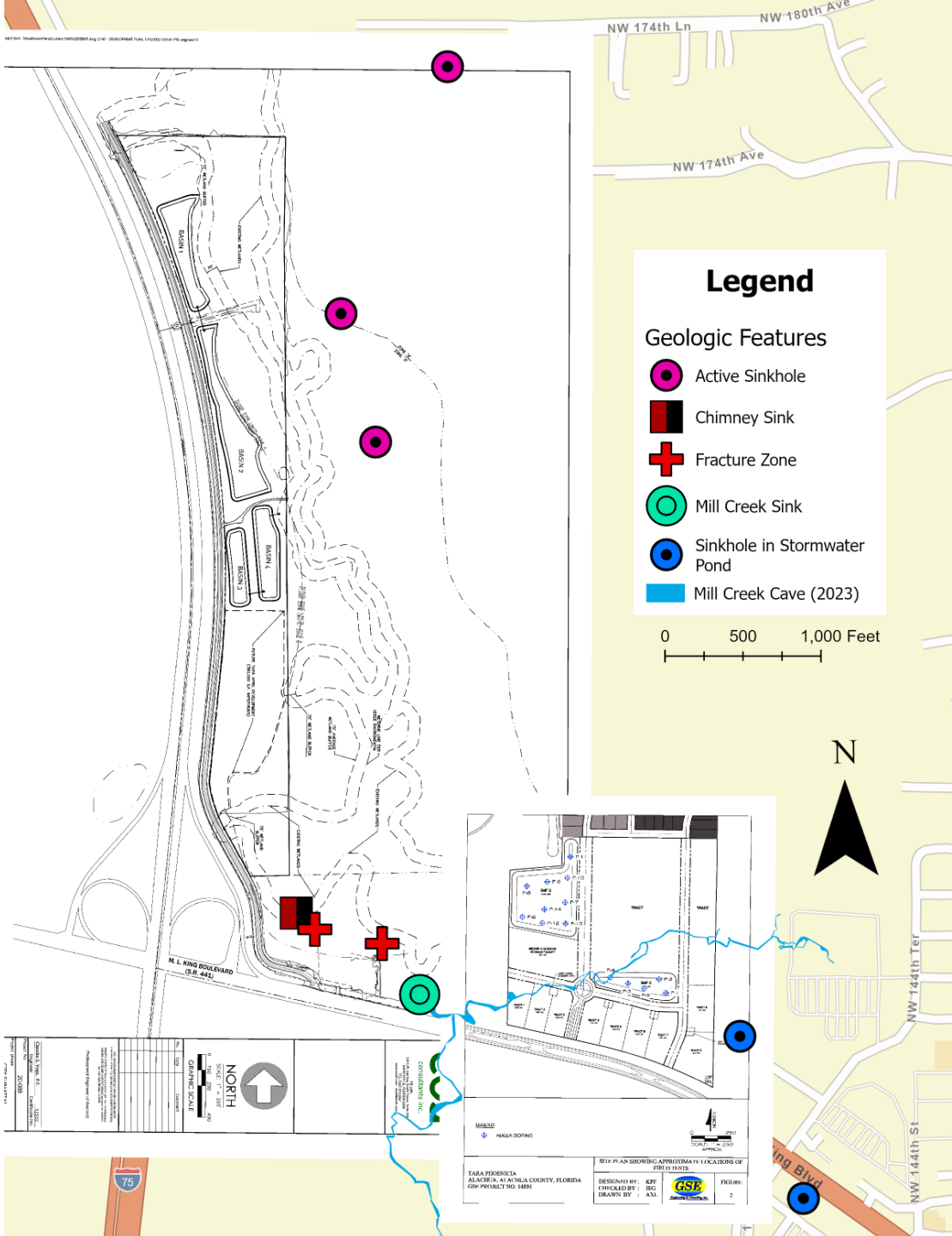
# Mill Creek Sink Water Quality Improvement Project

**As a result of these studies, facility was redesigned and moved as far north as possible to minimize the potential effects that it could have on adjacent properties**

**On June 4, 2021 a chimney sinkhole opened up onsite during construction**



# Unique site conditions and active geologic features warrant additional studies!



# All Special Exception Standards must be met

- It is the applicant's burden to demonstrate that they have met these criteria, and they must meet them all to warrant an approval.
- 2.4.4(D)(4) *Design minimizes environmental impact. The proposed special exception minimizes environmental impacts and does not cause deterioration of light, water and air resources, wildlife habitat, stormwater management, scenic resources, and other natural resources*.

# Design does not address/acknowledge environmental impact

- Insufficient onsite information has been gathered to say that design minimizes environmental impact

Karst-Sensitive Features

Karst sensitive areas include geologic features, such as fissures, sinkholes, underground streams, and caverns, and are generally the result of irregular limestone formations.

**Evaluation & Findings:** The subject property is located within an area designated by the Suwannee River Water Management District (SRWMD) High Aquifer Recharge Map (HARP) as an area with a moderately high aquifer recharge potential. The applicant provided no site-specific geologic or hydrogeologic field data concerning the karst nature of the subject property to the City. Further data will be required at the time an infrastructure plan is considered by the City for this parcel, should the special exception be approved.

**From City of Alachua Staff Report**

# Alachua County Recommends Denial

- **For the protection of existing and proposed infrastructure, existing and future residents, our water resources, and County assets.**

- **Based on the following City Comprehensive Plan Policies and Land Development Regulations**

# City of Alachua Code Requirements for Special Exception

- **Sec 2.4.4(D) *Special exception standards.* A special exception permit shall be approved only upon a finding the applicant demonstrates all the following standards are met:**
- **(4) *Design minimizes environmental impact.* The proposed special exception minimizes environmental impacts and does not cause significant deterioration of light, water and air resources, wildlife habitat, stormwater management, scenic resources, and other natural resources.**

# City of Alachua Applicable Policies

- **Obj. 1.7 of COSE *Geological Resources*. The City shall identify, protect and conserve significant geological resources and their natural functions.**
- **Policy 1.7.e: The City shall utilize regulatory and stewardship techniques to ensure that stormwater, wastewater and landscaping practices do not negatively impact the structural integrity, hydrology, biodiversity and other natural functions of significant geologic resources.**

# City of Alachua Applicable Policies

- **Objective 1.12: Water Resources. The City shall protect and conserve the quantity and quality of water resources, not only for the benefit of residents of the City, but for all in North Florida who depend on the Floridian Aquifer for drinking water, and for the benefit of all connected springs, streams, and rivers which may be impacted by the City's land use and development practices.**
- **Policy 1.12.a: The City shall recognize the interconnectivity of surface and ground water systems and shall work to minimize degradation of water resources, which extend beyond the City limits.**

# Alachua County Recommends Denial

- Applicant has the burden to show that the application complies with Land Development Regulations (LDRs) (Sec., 2.3, City LDR).

- City and parties do not have burden to show that standards are met (Sec., 2.3.1(B), City LDR).

- Applicant must show:
  - parcel is suitable for use (**Sec. 2.4.4(A), City LDR**)
  - Application does not deteriorate water quality (**COSE Policy 1.12 Comprehensive Plan**)

# Alachua County Recommends Denial

- **Alachua County believes that applicant has not met its burden because the project:**
  - **Is not appropriate for proposed use as required by Sec 2.4.4(A), City LDR**
  - **Is not designed to minimize environmental impacts as required by Sec 2.4.4(D)(4), City LDR**
  - **Is not protective of geologic features as required by COSE Policy 1.7.e**
  - **Has the potential to injure neighboring land/property values, required by Sec 2.4.4(D)(6), LDR**