

# **Ocean Pines Sinkhole**

#### August 23, 2017



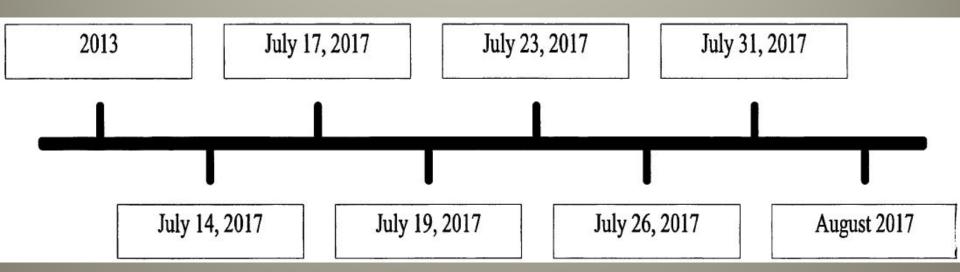


### Agenda

- Introductions
- Timeline
- USF Data Findings
- What's Next...



#### TIMELINE





## Timeline

- At 0721 Communications Center was notified of sinkhole
- AT 0736 Fire Rescue arrives at 21825 Ocean Pines Drive, Land O' Lakes to conduct assessment
  - https://youtu.be/SlrMw8OPGv8
- Following agencies were notified to respond: PFR, PSO, PEM, PIO (County and Sheriff), R&B, ARC, Duke Energy, Spectrum, FDEM, DOH
- 100 homes were without power until 1500
- 11 homes evacuated (voluntary)
- Perimeter of 200'-300' initially established
- 4 traffic checkpoints established

- 7 homes impacted by sinkhole (5 tagged unsafe and 2 destroyed)
  - Residents from 4 homes allowed re-entry
- Sinkhole is now 225' in diameter and est. 50' deep
- State geologist contacted for technical assistance
- Three traffic checkpoints removed, only one road closure in effect, Ocean Pines Drive
- Emergency Management collected 20 water samples
- SWS was utilized for initial water testing Full spectrum analysis
- USF contacted for technical assistance

#### 7/15-17/17

7/14/17

### Timeline cont.

- Water depth of sinkhole decreased 5'
- No significant sinkhole expansion since first 24 hour period
- Approximately 10' of lawn and sand fell into the hole increasing the outermost edges to 235'. (Not an indication of sinkhole growing)
- 2 homes on Canal Street advised of potential voluntary evacuation (precautionary)
- Survey crews marked the County Easement location
- Environmental Lab tested 20 water samples for E.coli
- Duke Energy installed new power poles
- 135,000 cubic yards of material estimated to be needed to fill sinkhole
- DOH and DEP conduct additional water samples
- Contracted crew commence core drilling and radar work
- Inclement weather hindered cleanup process throughout the weekend

#### 7/18-19/17

#### 7/20-23/17

### Timeline cont.

#### 7/24-26/17

7/27-31/17

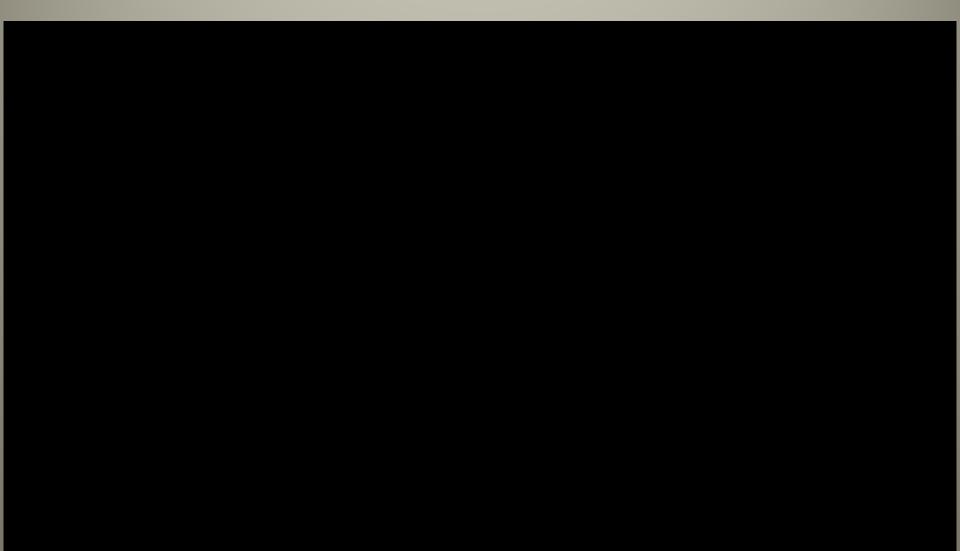
- Core drilling and radar work to test road stability continued
  Rain caused some erosion at the edges of the sinkhole
  75% of debris in sinkhole was household contents
- Contractor finished testing structural integrity of road and County easements leading up to sinkhole
- Water testing continued, Environmental Lab tested 17 wells, 3 tested positive for Coliform bacteria
  - USF School of Geosciences allowed to study sinkhole for research project

### Timeline cont.

- CERES Environmental Services arrived on scene with heavy equipment
- Perimeter was moved another 100' back from the sinkhole
- Used small barges to remove floating debris
- Pumped water from sinkhole as a stabilization methodology
- Demolition of remainder of structure at 21825 commenced
- Emergency fill of additional area under homes located at 21835 and 21845
- A total of 13,644 cubic yards of uncrushed lime rock was used
- Water quality testing will continue
- USF data collection will continue

#### 8/1-13/17

#### Sinkhole Video



## Challenges

- Media management
- Lack of standards
- Political influences
- Access
- Funding sources \$\$\$\$
- Public expectations ???







Then And Now



#### **USF DATA FINDINGS**

LORI COLLINS, PH.D. RESEARCH ASSOCIATE PROFESSOR, DIRECTOR DIGITAL HERITAGE & HUMANITIES COLLECTIONS USF LIBRARIES

# **Questions**?

