



Vulnerability Assessment Consultant

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ERIN L. DEADY, P.A.

CUMMINS | CEDERBERG
Costal and Marine Engineering

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Tetra Tech Team Overview



Subconsultants Legend

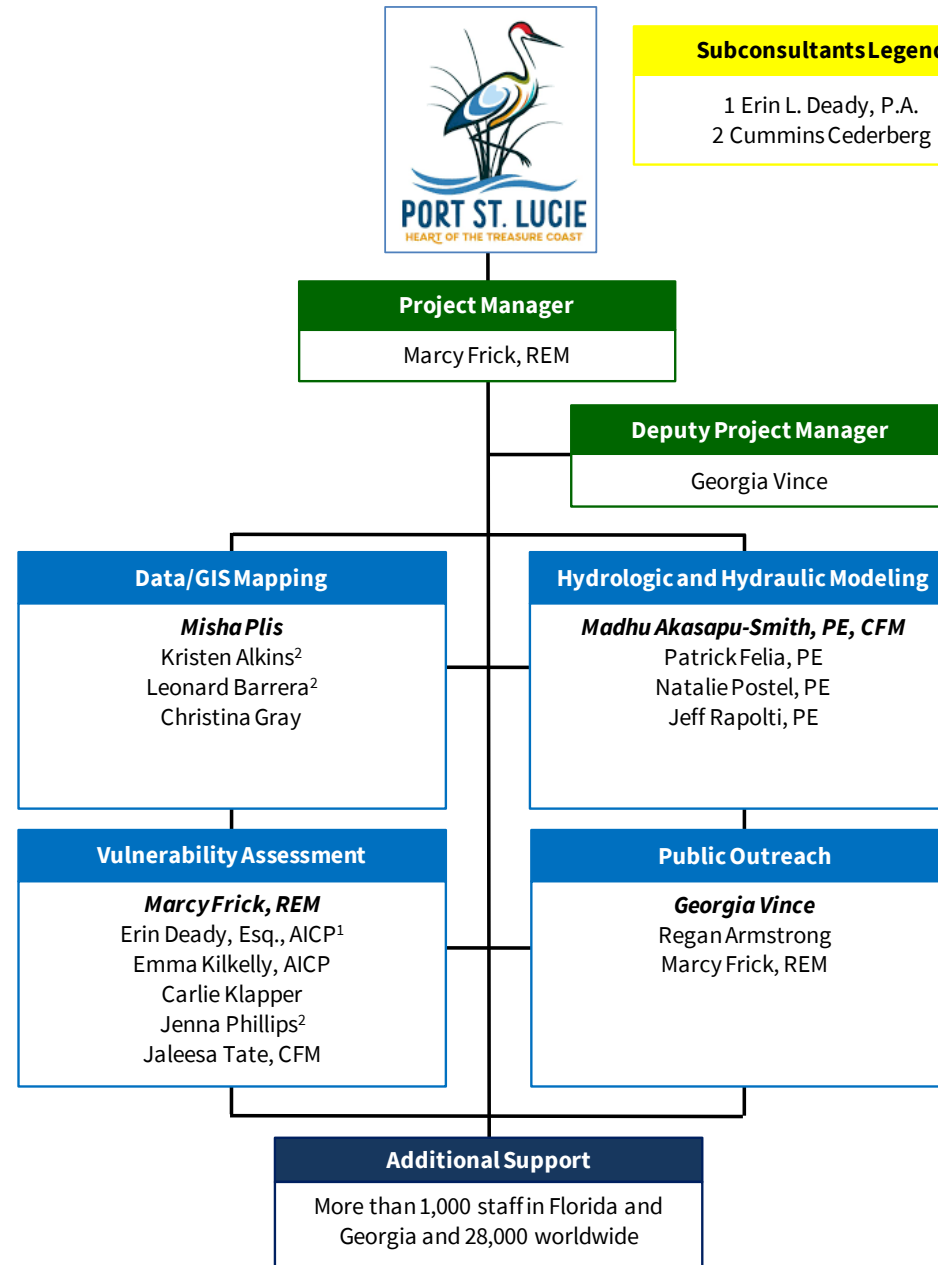
1 Erin L. Deady, P.A.
2 Cummins Cederberg



The Tetra Tech Team

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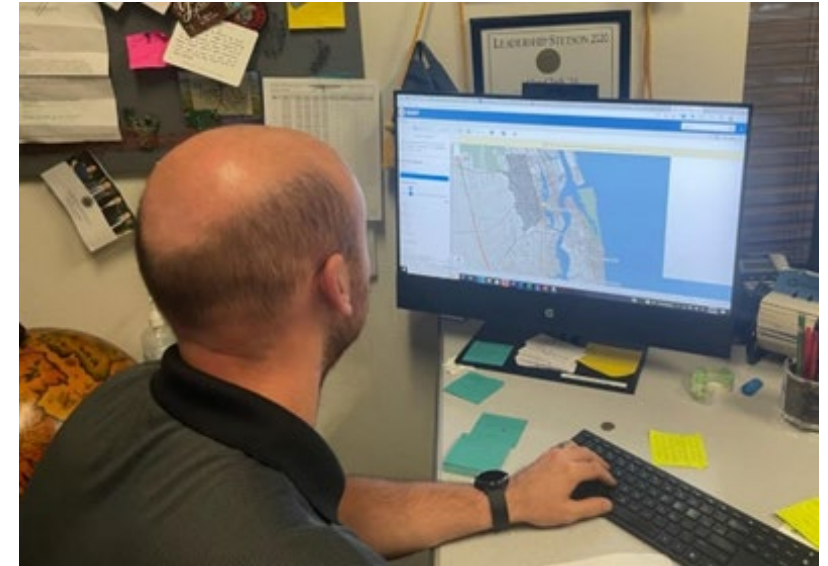
Q1. Can you share examples of past projects or case studies demonstrating your expertise that separate you from others?

- St. Lucie County Vulnerability Assessment (VA), Regional Resilience Plan, and Stormwater Master Plan
 - Gathered much of the City’s data needed for the VA project
- Palm Beach County
 - Evaluated stressors other than flooding
- Cities of Hollywood and Key West
 - Completed VAs successfully
- Partners have worked on VAs throughout the state
 - Erin L. Deady, P.A. completed City of West Palm Beach VA in 2024

Stormwater	Roads, Bridges, Transit, and Evacuation Routes
NPDES Stormwater Facilities	Sidewalks
Stormwater Basin	Bridges
Stormwater Detention	Curbs
Stormwater Culvert	Driveways
Stormwater Weir Structure	Radio, Microwave, and Broadcast
Stormwater Manhole	AM Transmission Towers
Stormwater Inlet	FM Transmission Towers
Stormwater Discharge Points	Land Mobile Broadcast Transmission Towers
Stormwater Control Structures	Cellular Towers
Stormwater Liner	Microwave Service Towers
Stencils	Supporting Assessment Data
Drainage Right-of-Way	Zoning
Project Information	Future Land Use
Stormwater Master Plan	Planned Development Projects
Natural, Cultural, and Historical Resources	Building Footprints
Open Spaces	Geomorphological Features
Land Use Land Cover	Land Cover/Land Use

Q2. Describe a scenario where you conducted research or studies to address a gap in background information.

- QA/QC of GIS data
 - In some cases, GIS datasets lacked proper attribute data or contained inaccuracies
 - For City of Hollywood, used Google Earth to identify actual location for assets
- Field work to gather additional data
 - Digitized paper files and conducted surveys to fill gaps for St. Lucie County
 - Collected structure elevations in the Keys
- Publicly available data sources to fill in gaps
 - Used to augment datasets for all VAs



Q3. Describe your experience with DEP based grants and their specific requirements.

- Under the Resilient Florida Program, successfully written applications and managed/administered grants for numerous municipalities
 - Adopted in 2021 and statutory changes every year since
 - Evolving as more work products come into DEP and they identify what “compliance” with Section 380.093(3), F.S., entails
 - Conduct calls with grant managers to coordinate on questions before submittals, as necessary
- Success in obtaining funding for projects under a variety of DEP funding programs



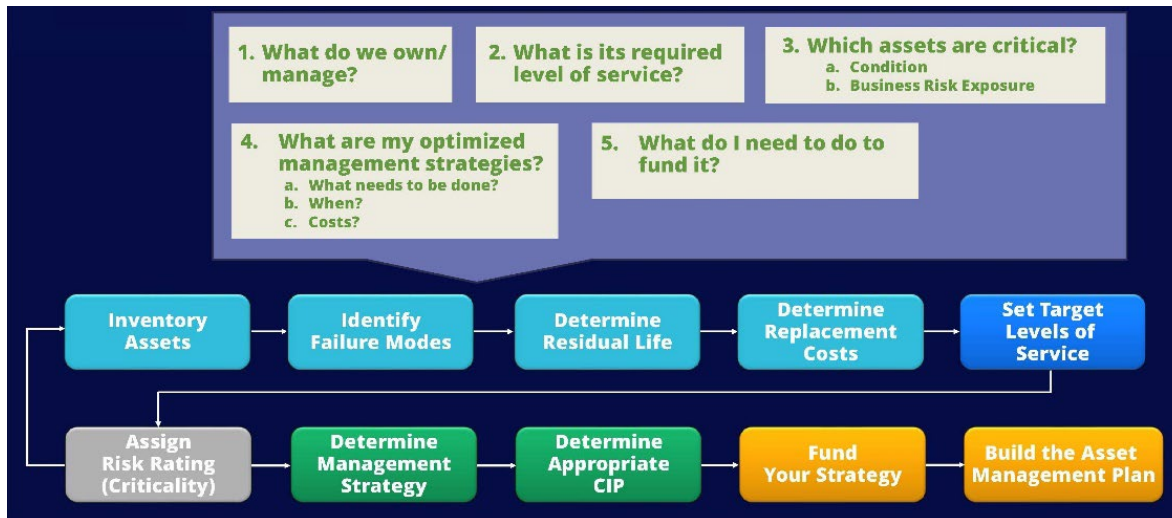
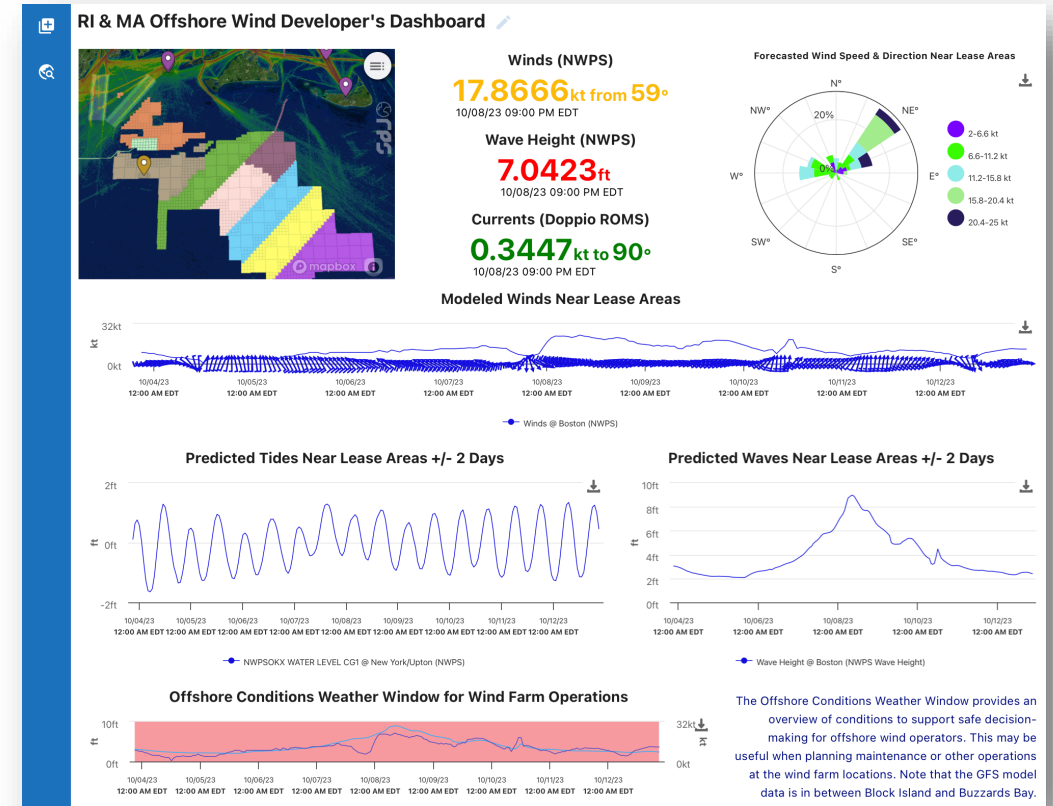
Q4. Describe your experience assessing common environmental concerns beyond climate change vulnerability.

- Palm Beach County VA evaluated other threats
 - Extreme heat, drought, wildfires, coastal erosion
- Assessments for watershed management and water quality improvements
 - St. Lucie County water quality assessment
 - Comprehensive Everglades Restoration Plan (CERP) projects
- Shoreline assessments and protection
 - Seagrass, benthic, mangroves
 - Fort Pierce storm protection islands
- Watershed management plans for Community Rating System (CRS)
- Local mitigation strategy (LMS)



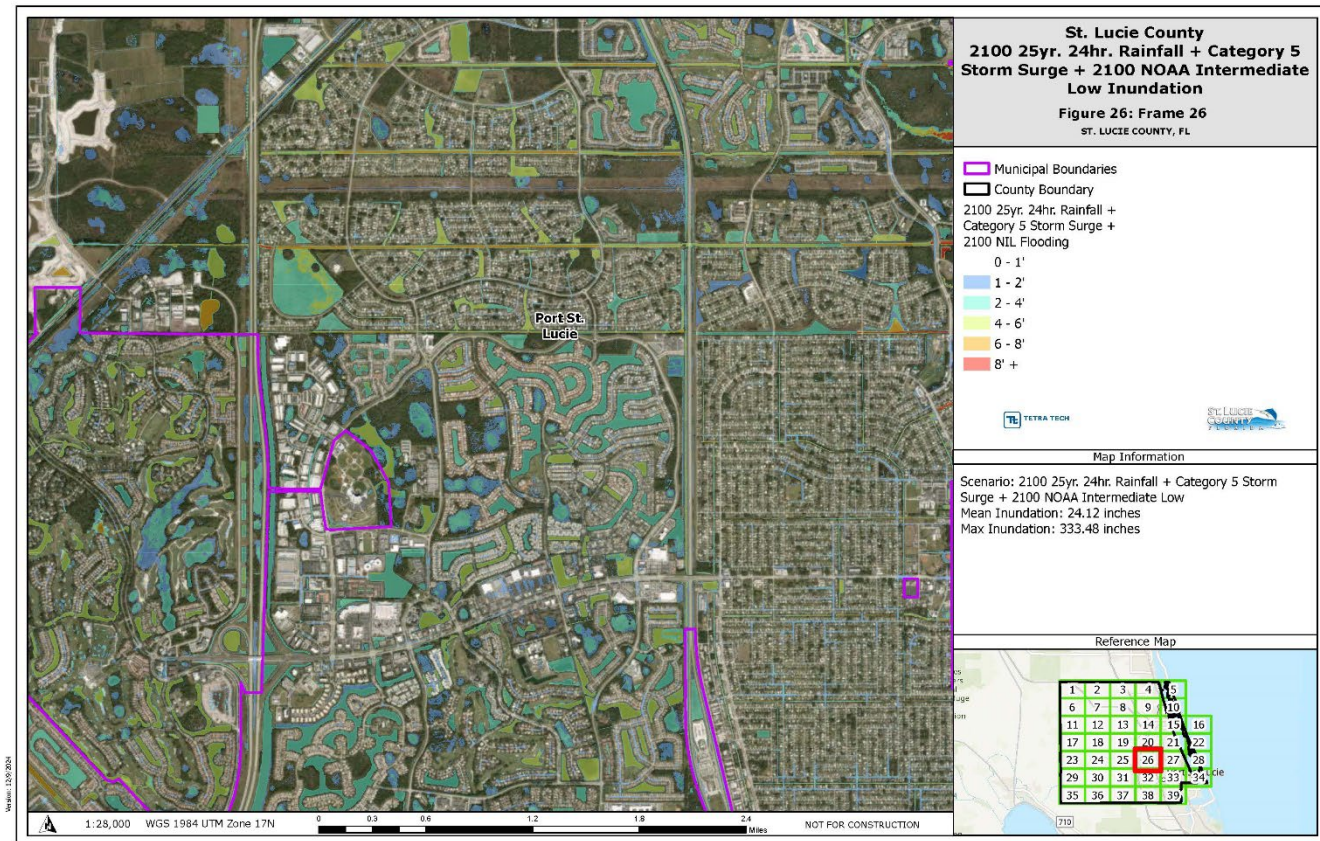
Q5. What state-of-the-art equipment or software would you use as a vulnerability consultant to conduct an assessment?

- ArcGIS Pro
- Hydrologic and hydraulic modeling tools
- In-house survey team
- Asset management software
- Dashboards



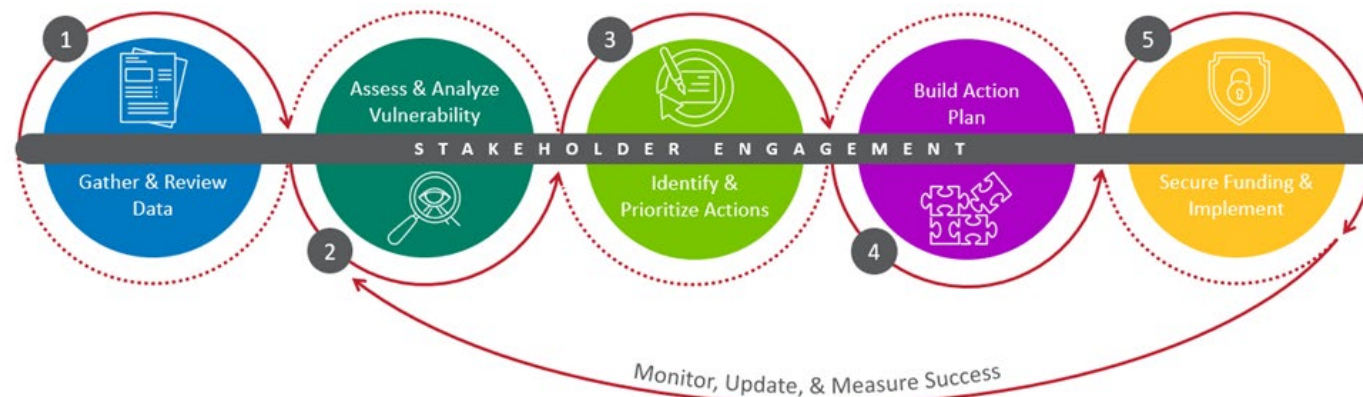
Q6. Can you share an instance where you failed, but that failure led you to think differently and ultimately made your team better?

- VA work products have evolved in terms of the look and output representation
 - Maps, tables, summaries, and representation of risks required in VAs
- Products that were acceptable last year are no longer due to new interpretations of law and policy as well as staff transition
- Interpretation of compliance with modeling scenarios
- Use the latest version of DEP Vulnerability Assessment Compliance Checklist as guide



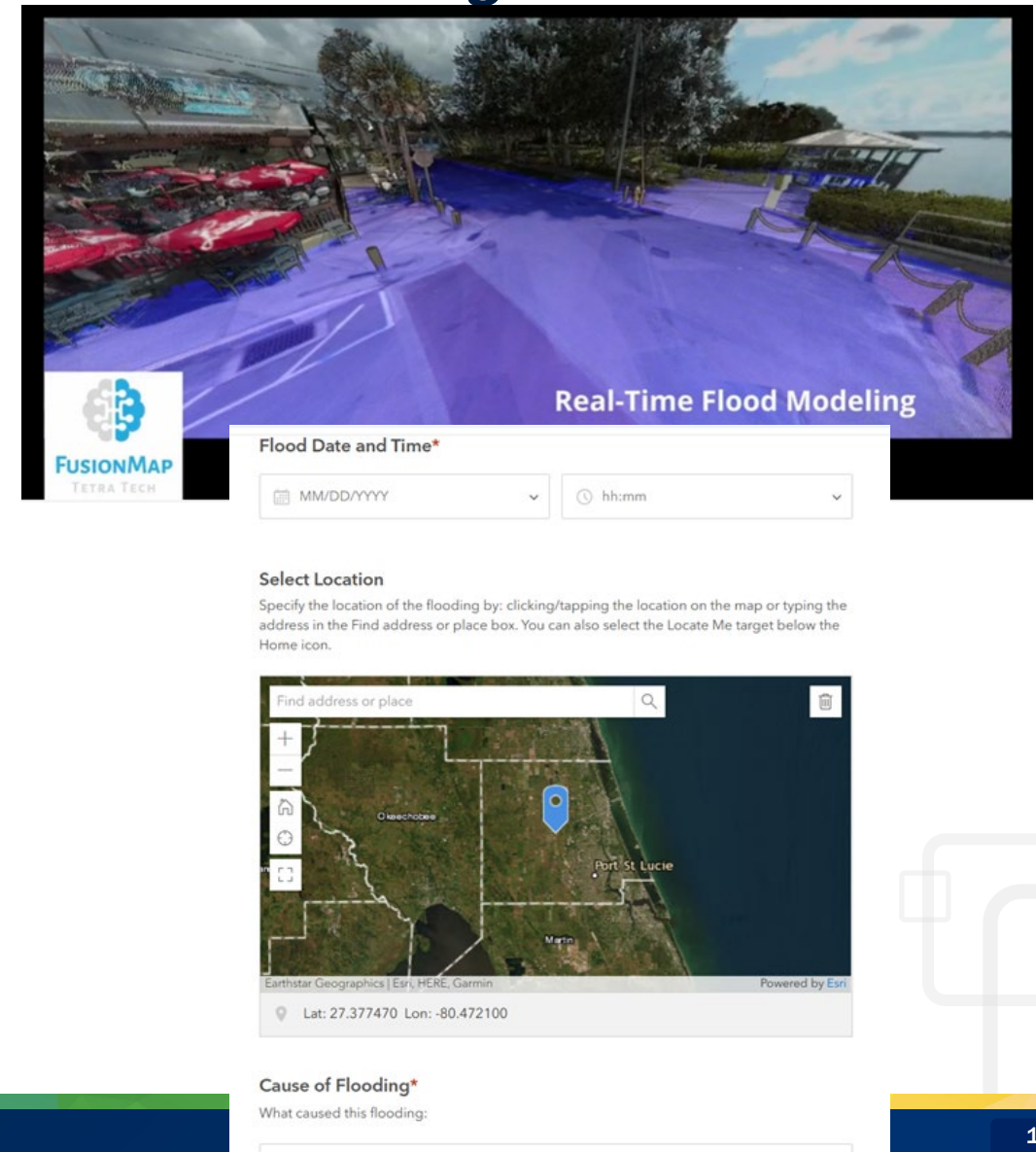
Q7. How does your team differentiate itself from competitors when bidding for a vulnerability assessment job?

- Use a holistic approach that considers socioeconomic concerns, integrates nature-based solutions, and builds capacity and capability to ensure programmatic success
- Experience in vulnerability, adaptation, and resiliency planning
 - Including policy, planning, legal, communications, funding, grant support, and outreach
- Partners provide unique experience:
 - Erin L. Deady P.A. reviews comprehensive plans and codes and provides jurisdiction-specific implementation strategy based on existing policy structure
 - Erin L. Deady P.A. grant funding support through Resilient Florida exceeds \$250 million
 - Cummins Cederberg recently completed the largest VA in Florida



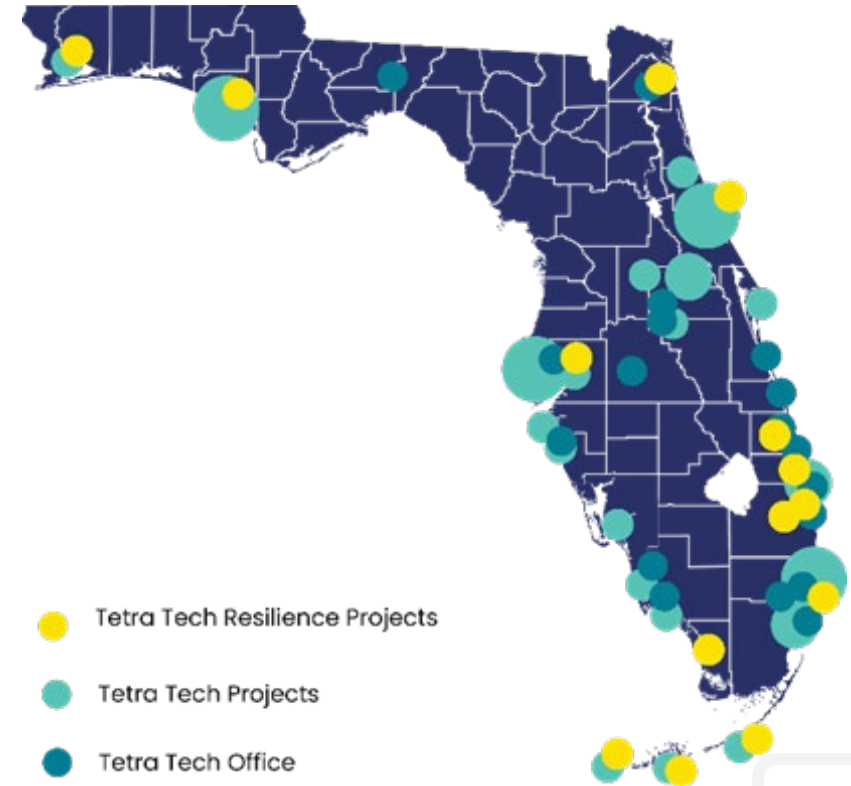
Q8. How do you effectively communicate complex findings and recommendations to individuals with less technical backgrounds?

- Personal experience being affected by flooding
- Graphics to help with results visualization
 - 3-D images of future flood risk and how it affects day-to-day lives
 - Story boards
 - Interactive dashboards
 - StoryMaps
- Opportunities for input
 - Dots on a map at meetings
 - Online surveys



Why the Tetra Tech Team?

- Save City resources by building on the information gathered for the St. Lucie County VA, Regional Resilience Plan, and Stormwater Master Plan
- Provide lessons learned from our extensive and unique experience working on similar projects under the Resilient Florida Program
- History of working collaboratively and successfully with local governments to design resilience programs and develop actionable measures to achieve long-term resilience
- Skilled in a variety of analytical tools to provide an actionable plan while meeting the state's Section 380.093, F.S. requirements





Questions?