

City of Ocala Vulnerability Assessment

Task 9: Public Presentation

August 19, 2025

Agreement No. 24PLN40

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Project Introduction

This project has been collaboratively funded by the City of Ocala and the Florida Department of Environmental Protection's Resilient Florida Grant Program.

Project Objective

To conduct a Vulnerability Assessment compliant with s. 380.093, F.S. identifying risks associated with flooding events in the City of Ocala.



What is a Vulnerability Assessment?

Definition: A Vulnerability Assessment is a study conducted at the City or County level to evaluate the impact of flooding on critical assets.

Purpose

- To identify risks associated with flooding due to rainfall
- To identify vulnerable property or infrastructure
- To prioritize high-risk focus areas
- To devise resilience-based strategies to target risks
 - Adaptation Plan

What is Included?

- Inventory of City-Owned Critical Assets
 - Examples: Roadways, Utilities, City Buildings, Parks, and More.
- A Planning-level Flood Risk Analysis
 - Terrain-based floodplain modeling to generate rainfall.



Why is this Important?

- Vulnerability Assessments are required per F.S. 380.093
- City received FDEP grant funding to complete
- Results of the Assessment are used to apply for State funding through the Resilient Florida Grant Program
- Supports long-term planning efforts and emergency preparedness
- Builds a stronger, more resilient community



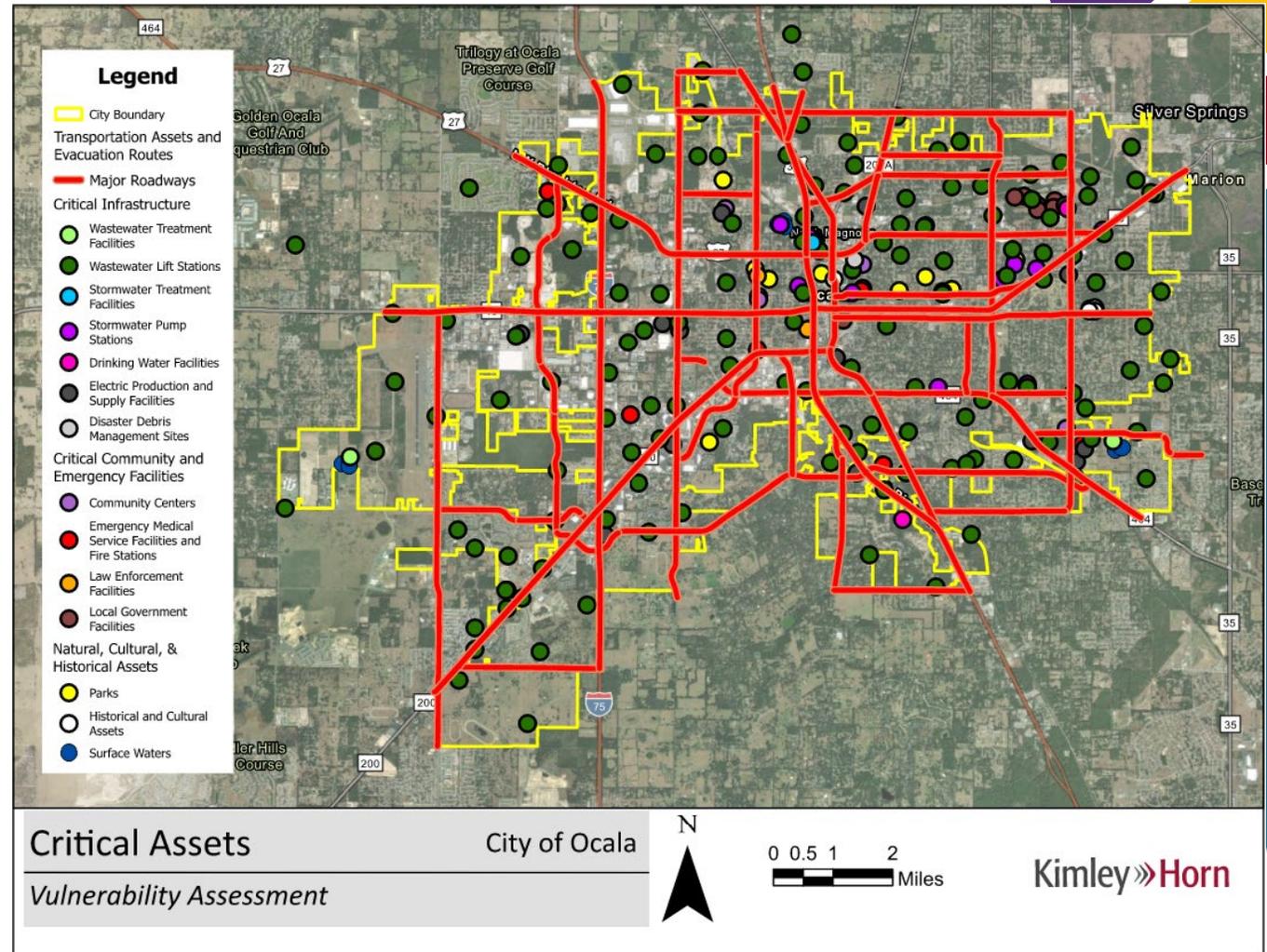
Project Schedule

Task #	Task Title
1	Identify Vulnerability Assessment Data Standards
2	Kickoff Meeting
3	Public Outreach Meeting
4	Acquire Background Data
5	Exposure Analysis
6	Sensitivity Analysis
7	Identify Focus Areas
8	Final Vulnerability Assessment Report, Maps and Tables
9	Public Presentation
10	Adaptation Plan

Data Collection

Data Required:

- Topographic Data
- Flood Scenario Data
 - Rainfall
- Inventory of City-Owned Assets
 - Transportation Assets and Evacuation Routes
 - Critical Infrastructure
 - Critical Community and Emergency Facilities
 - Natural, Cultural, and Historical Resources



Scenario Number	Scenario	Source
Rainfall		
1	100-Year/24 Hour	NOAA Atlas 14
2	500-Year/24 Hour	NOAA Atlas 14
3	Future 100-Year, 2050 Low	NOAA Atlas 14 & FIU CF's
4	Future 100-Year, 2050 High	NOAA Atlas 14 & FIU CF's
5	Future 100-Year, 2080 Low	NOAA Atlas 14 & FIU CF's
6	Future 100-Year, 2080 High	NOAA Atlas 14 & FIU CF's

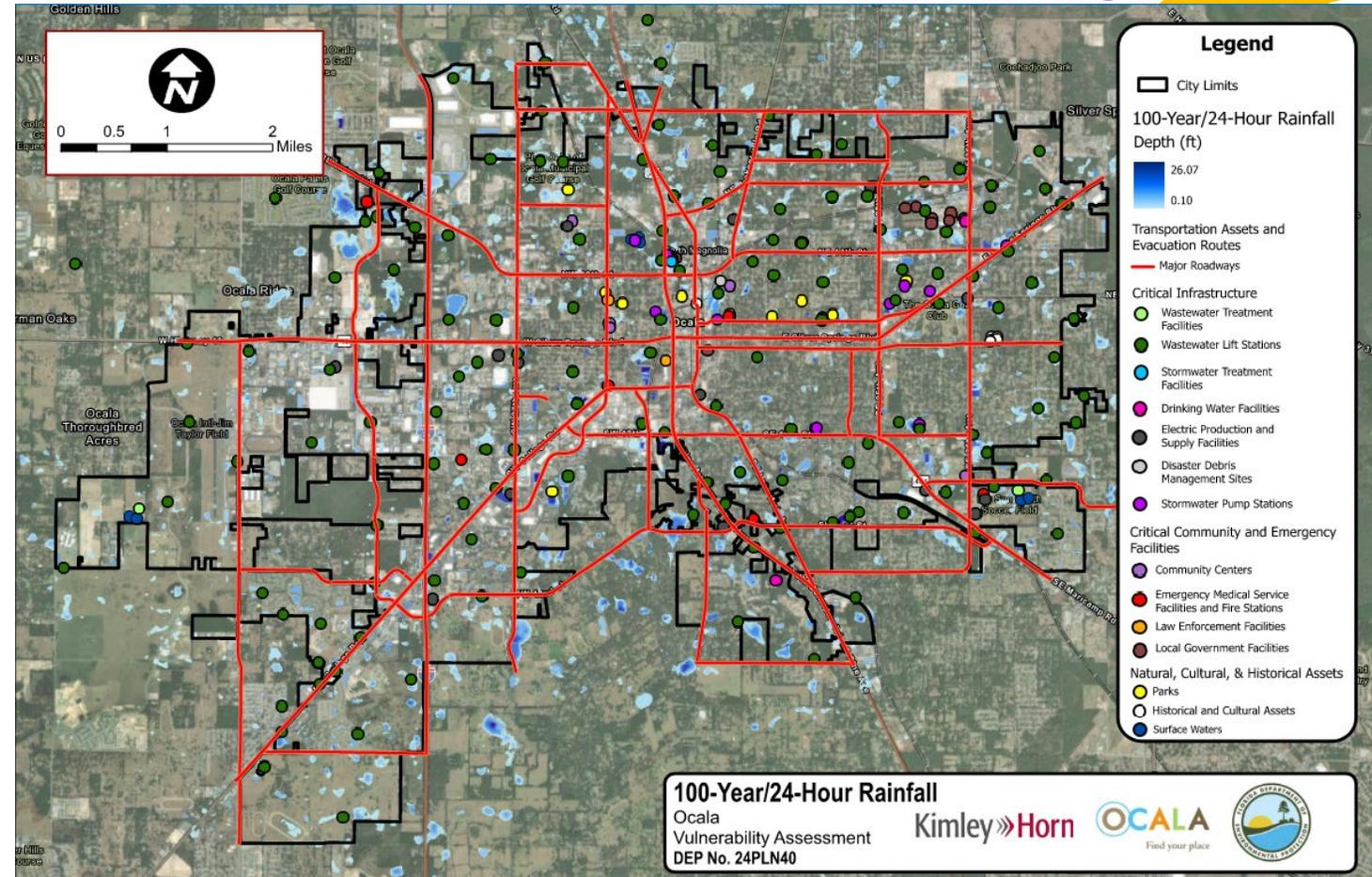
Flood Scenarios

Exposure Analysis

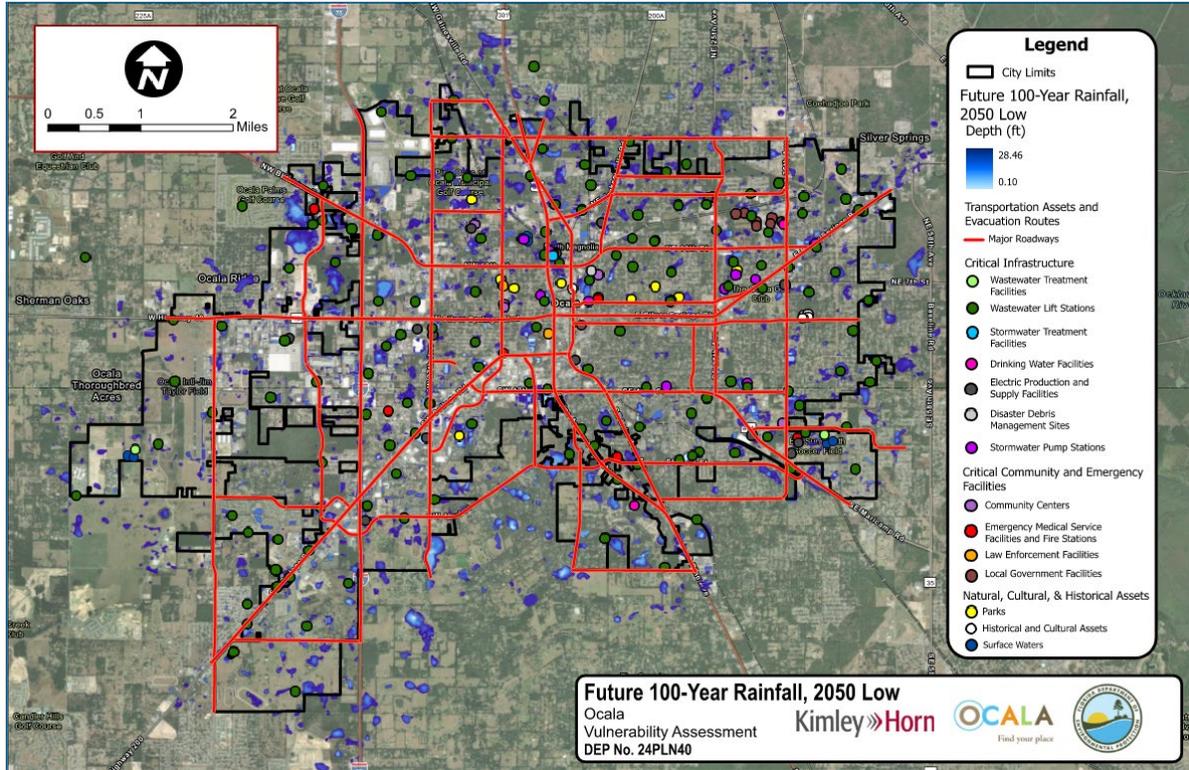
Objective:

To identify water depth for flood scenarios including:

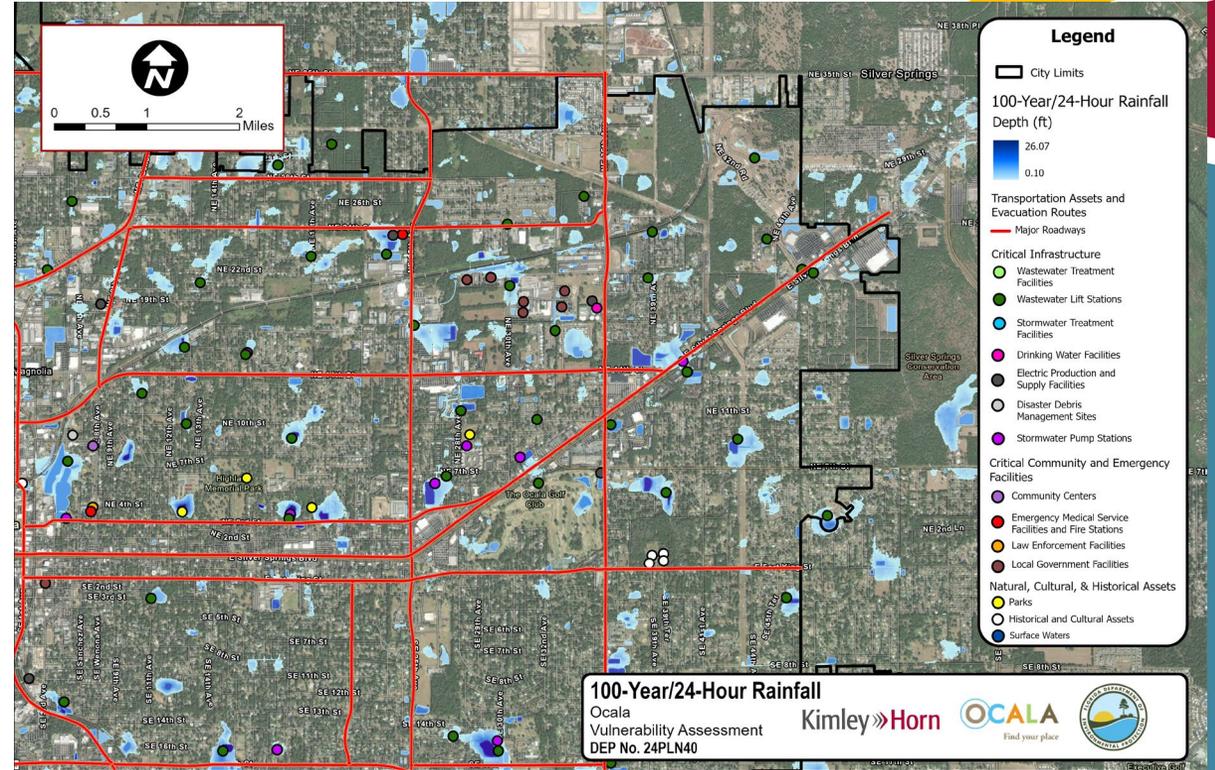
- Rainfall-Induced Flooding



100-Year Rainfall



Future 100-Year Storm Surge



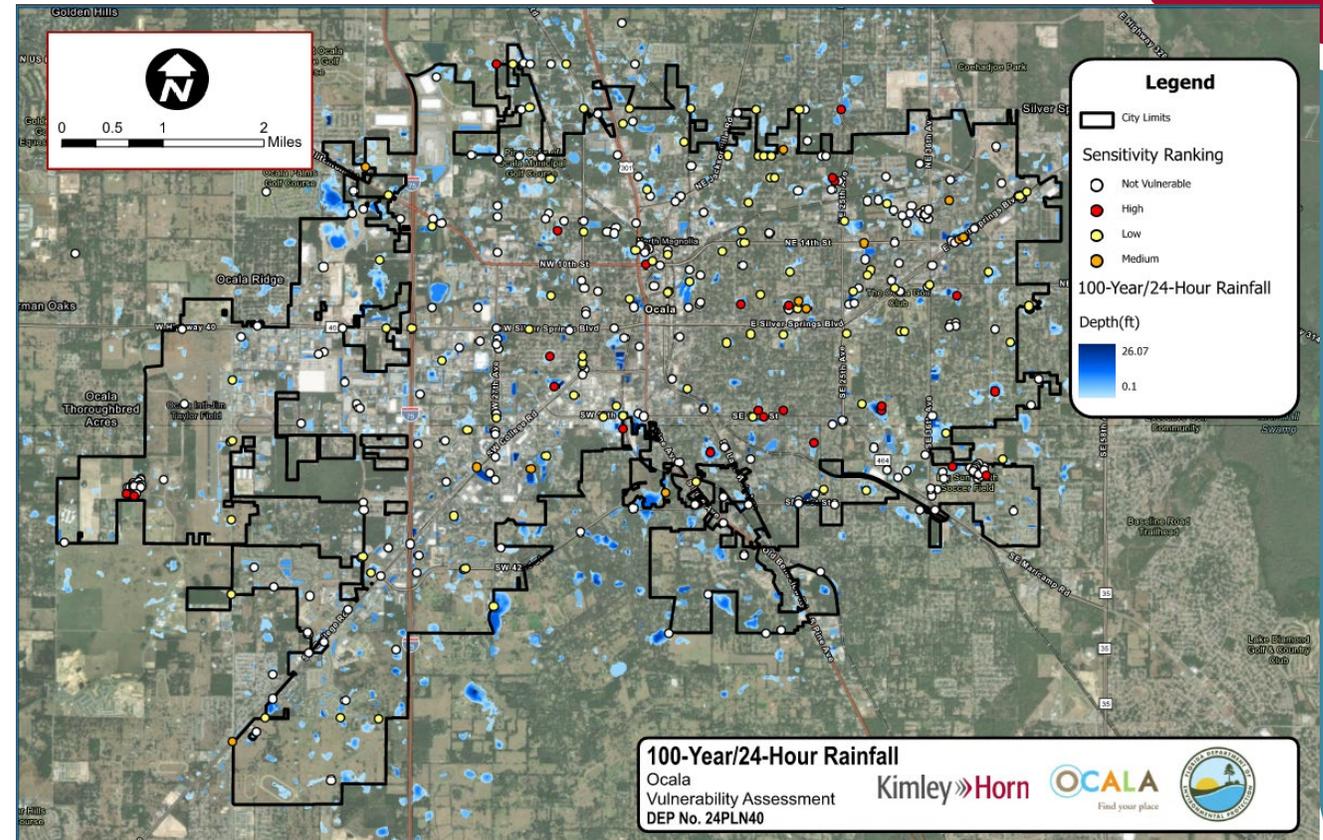
100-Year Storm Surge – Zoomed in

Sensitivity Analysis

Objective:

To measure the impact of flooding on assets and evaluate the flood severity on each asset class for flood scenarios including:

- Rainfall-Induced Flooding



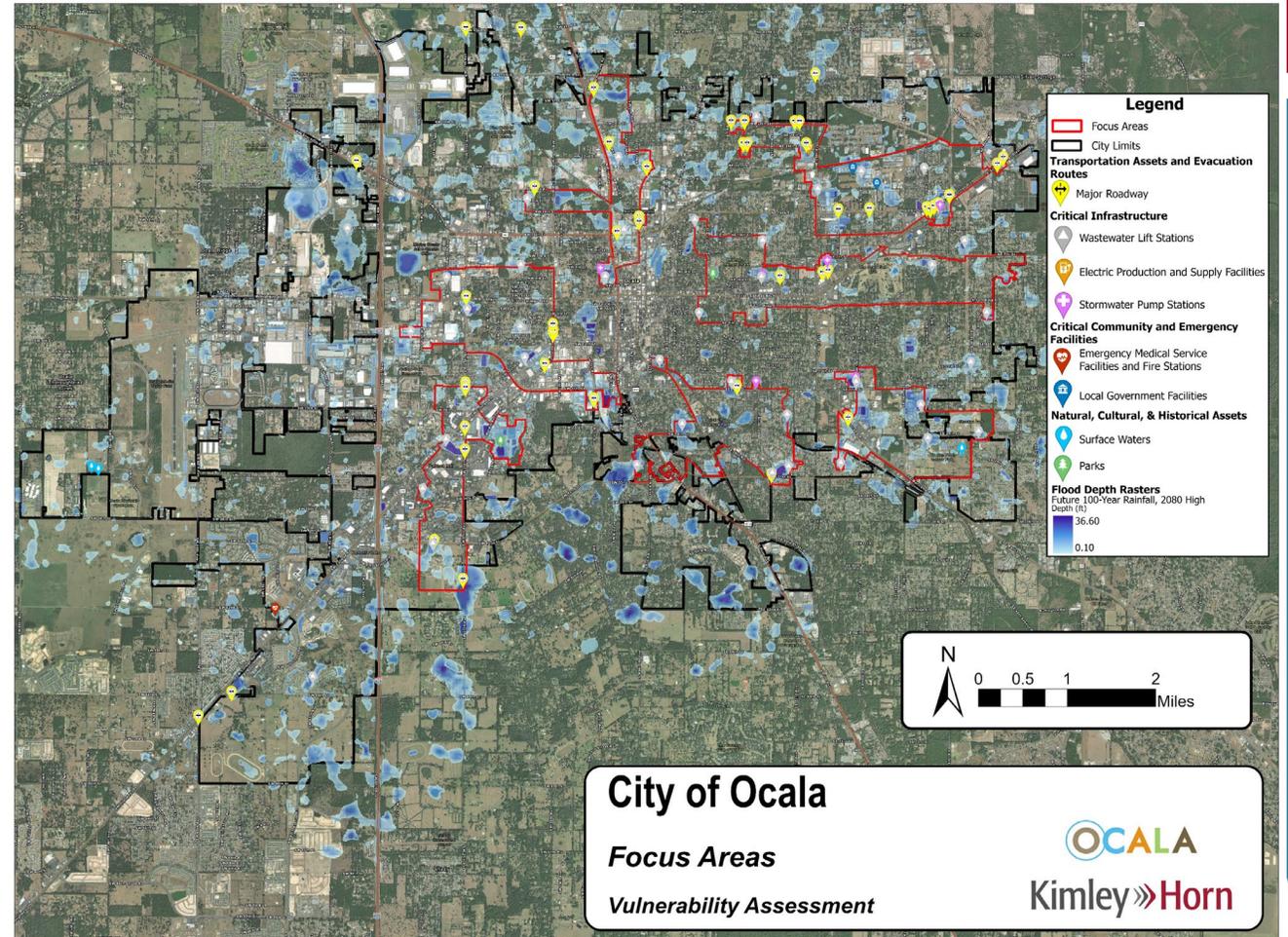
Identify Focus Areas

Objective:

Identify highly vulnerable focus areas within the City which can benefit from future adaptation strategies.

Methodology:

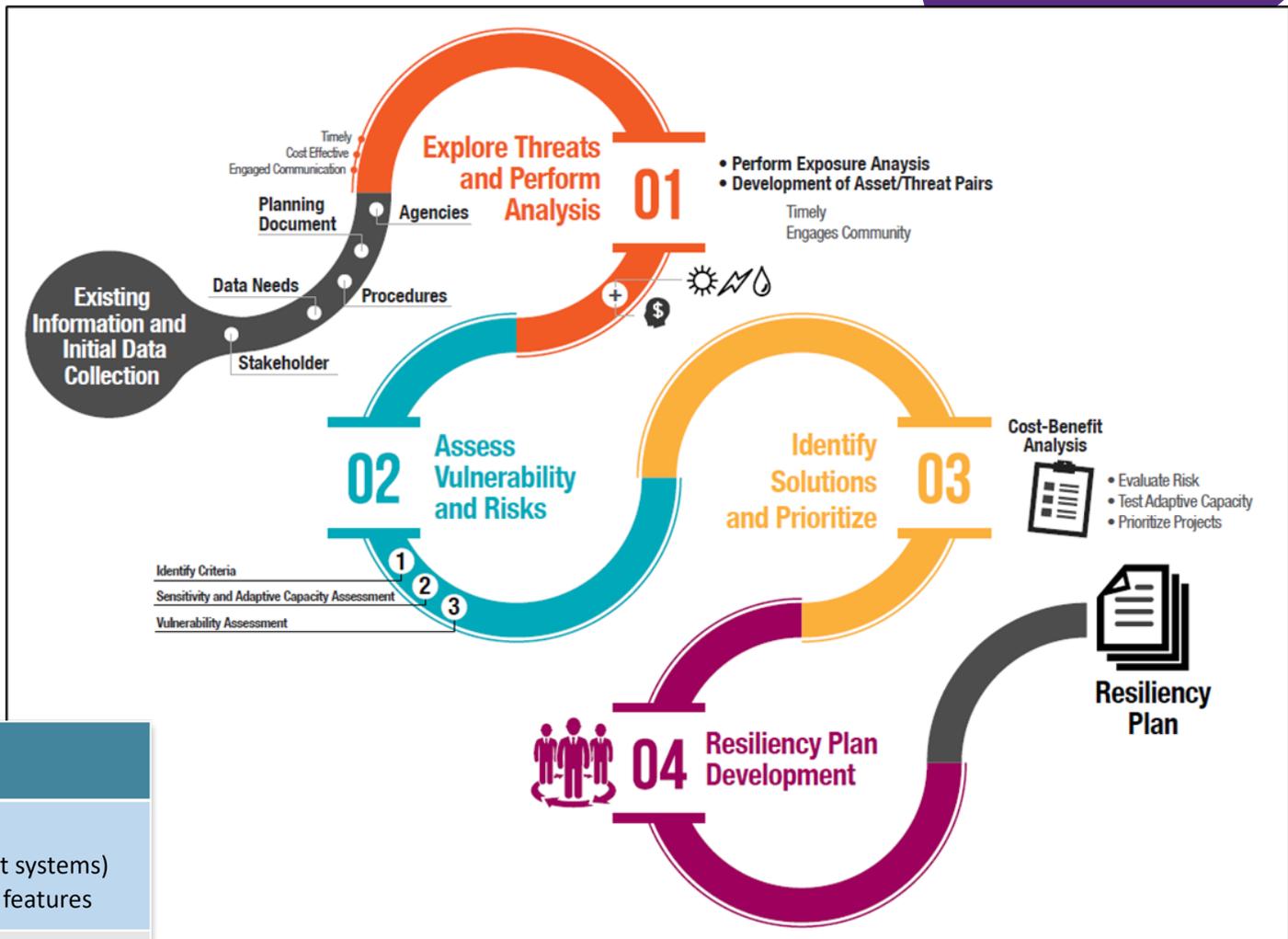
- Exposure/Sensitivity Analysis Results
- City and Resident Input



Adaptation Plan

Objective:

To devise adaptation interventions and/or strategies to increase resiliency.



Intervention	Example
Blue, Gray and Green Infrastructure	Blue <ul style="list-style-type: none"> Regional stormwater facilities (credit systems) Integrated passive parks with water features
	Gray <ul style="list-style-type: none"> Hardening or raising of infrastructure Adding storage/capacity Diverting flows
	Green <ul style="list-style-type: none"> Living shorelines Bioswales, upflow filters, filter marshes Landscaping – green roofs, canopy coverage

Next Steps

- Finalize the Vulnerability Assessment
 - Submit Final Vulnerability Assessment Report, Maps, and Tables
- Complete the Adaptation Plan
- Submit for FDEP Resilient Florida Grant Funding
- Begin implementation of resilience projects



Thank you!

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