



# RESILIENT HAMPTON

## Rhode Island Flood Mitigation Association

April 30, 2019

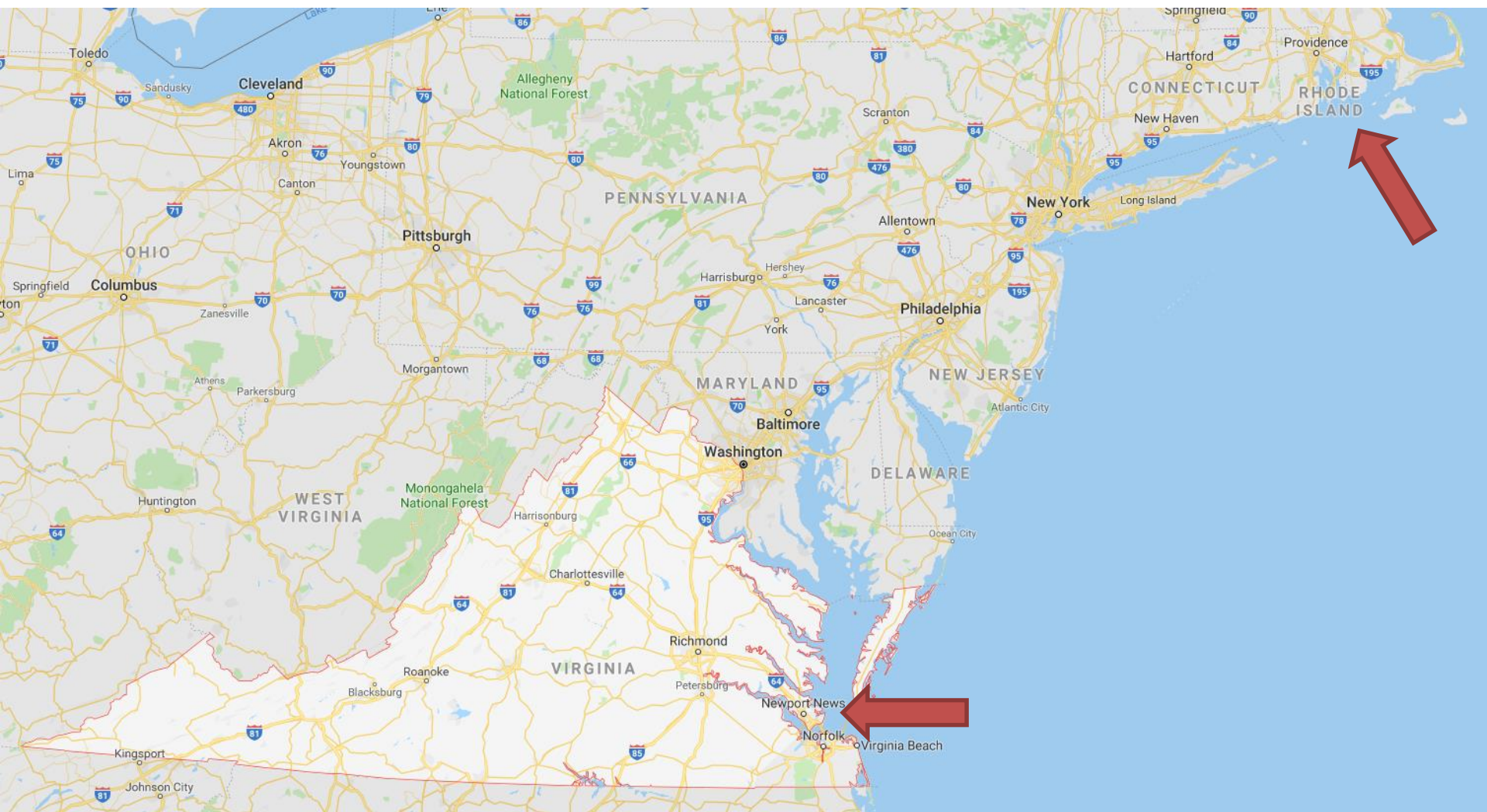
**Lucy Stoll**

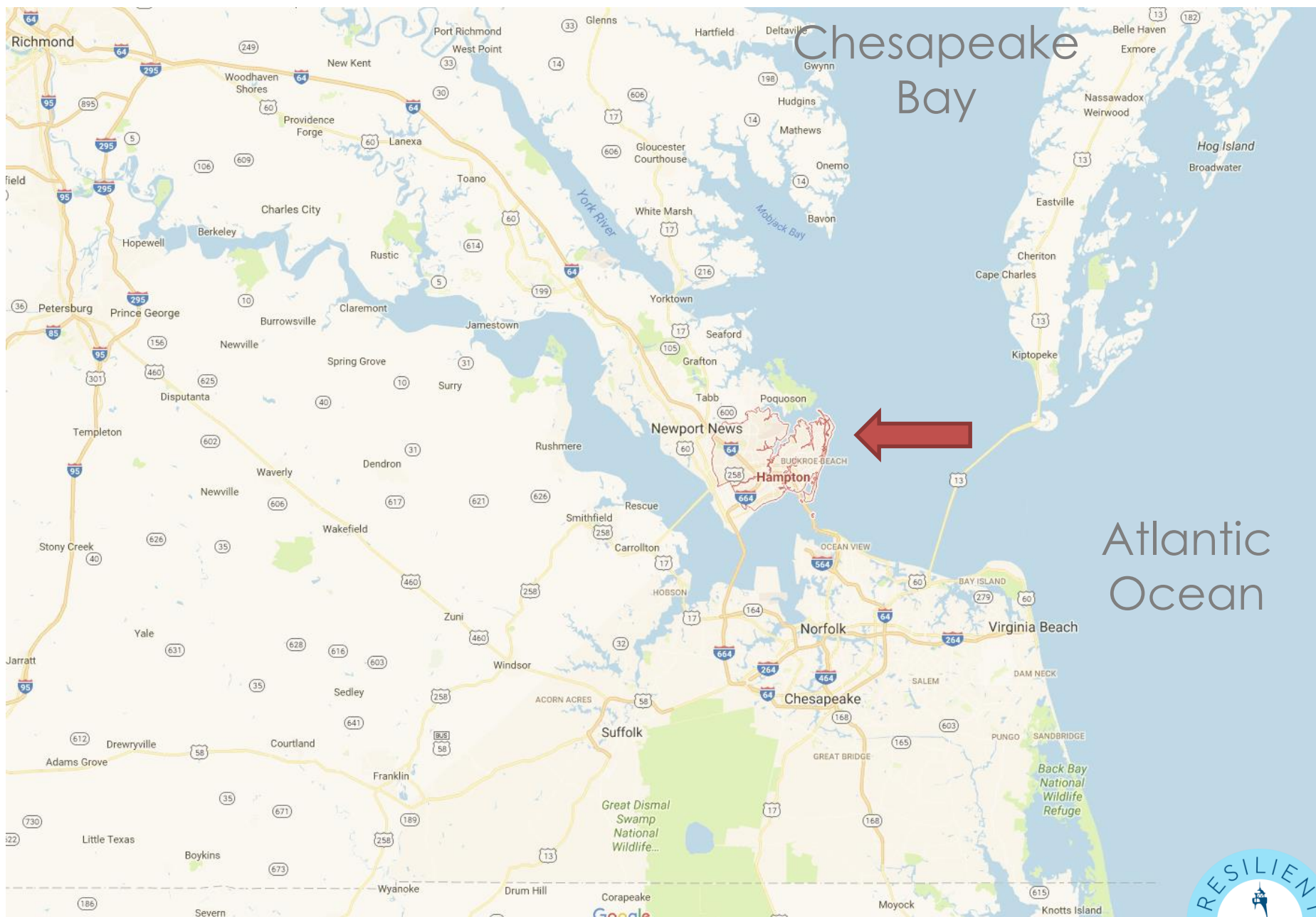
Senior City Planner

**David Imburgia**

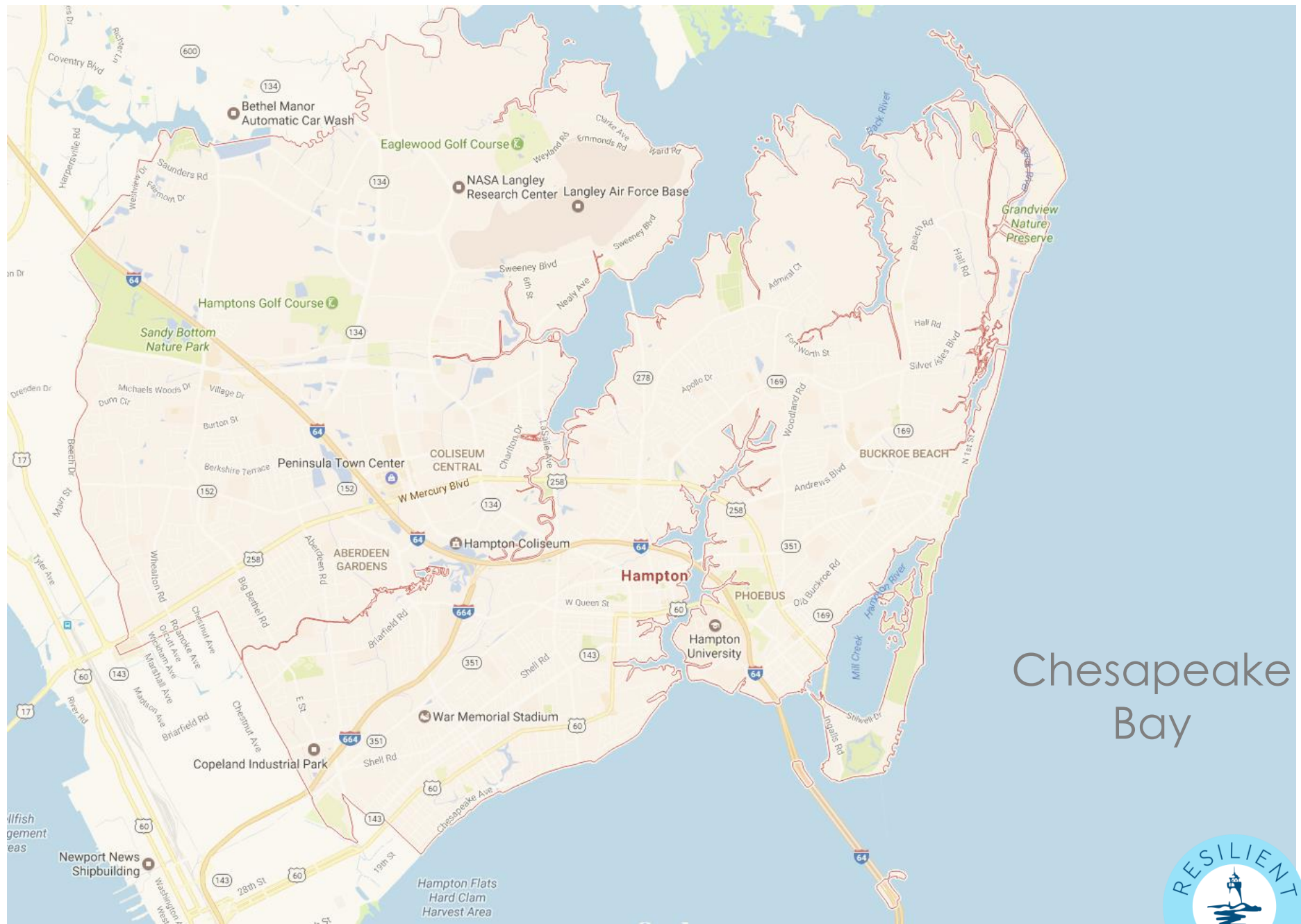
Environmental &  
Sustainability Manager

**City of Hampton, Virginia**









Chesapeake  
Bay













# Dutch Dialogues



2015 CHARRETTE EVENT

“LIVING WITH WATER”  
THEME

HAMPTON COMMITTED  
TO CONTINUE EFFORT









**CULTURE & HERITAGE**

**INNOVATION**

**PROPERTY VALUES**

**PARKS & OPEN SPACE**

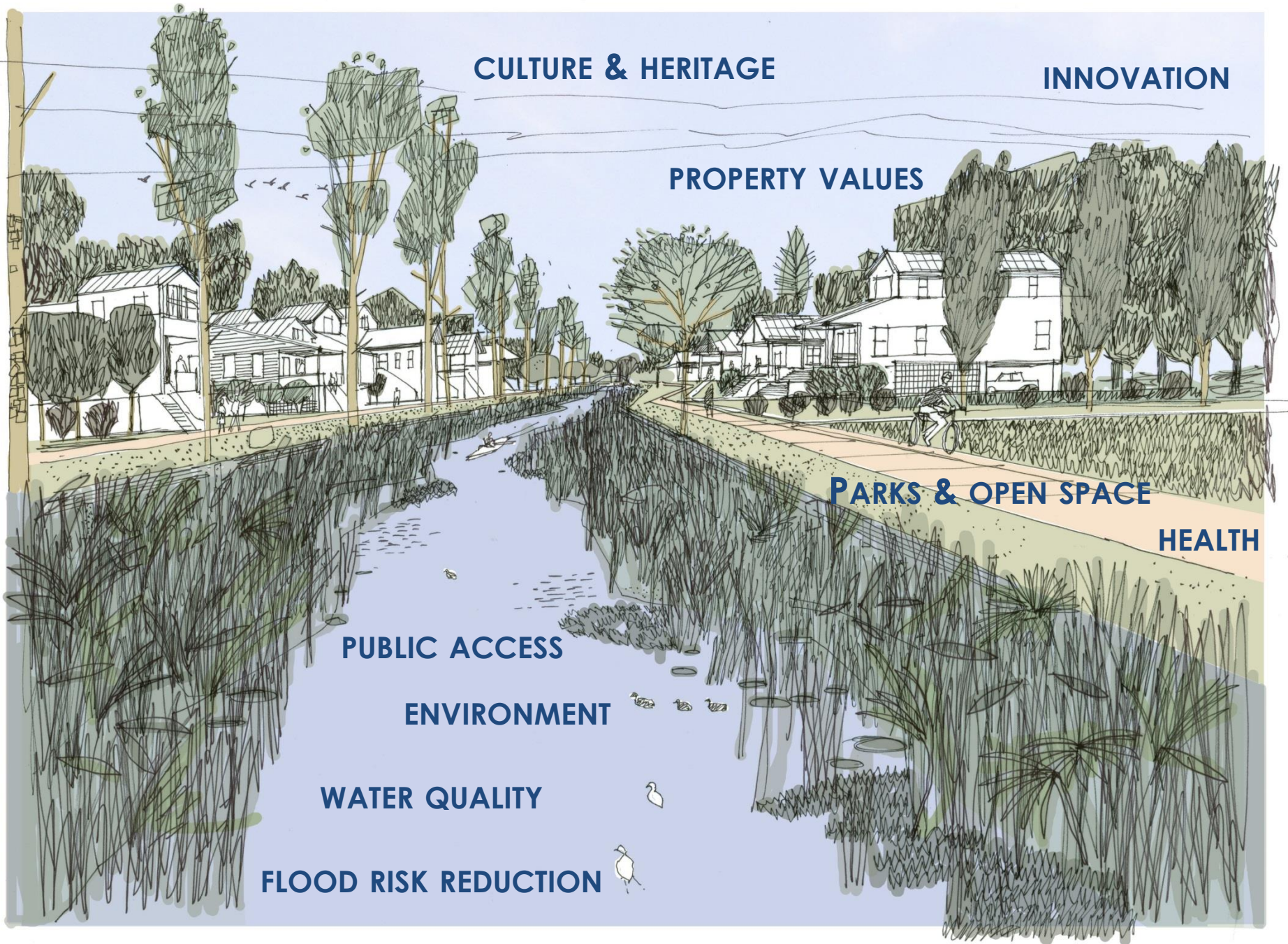
**HEALTH**

**PUBLIC ACCESS**

**ENVIRONMENT**

**WATER QUALITY**

**FLOOD RISK REDUCTION**





IT'S ABOUT A CATALYST







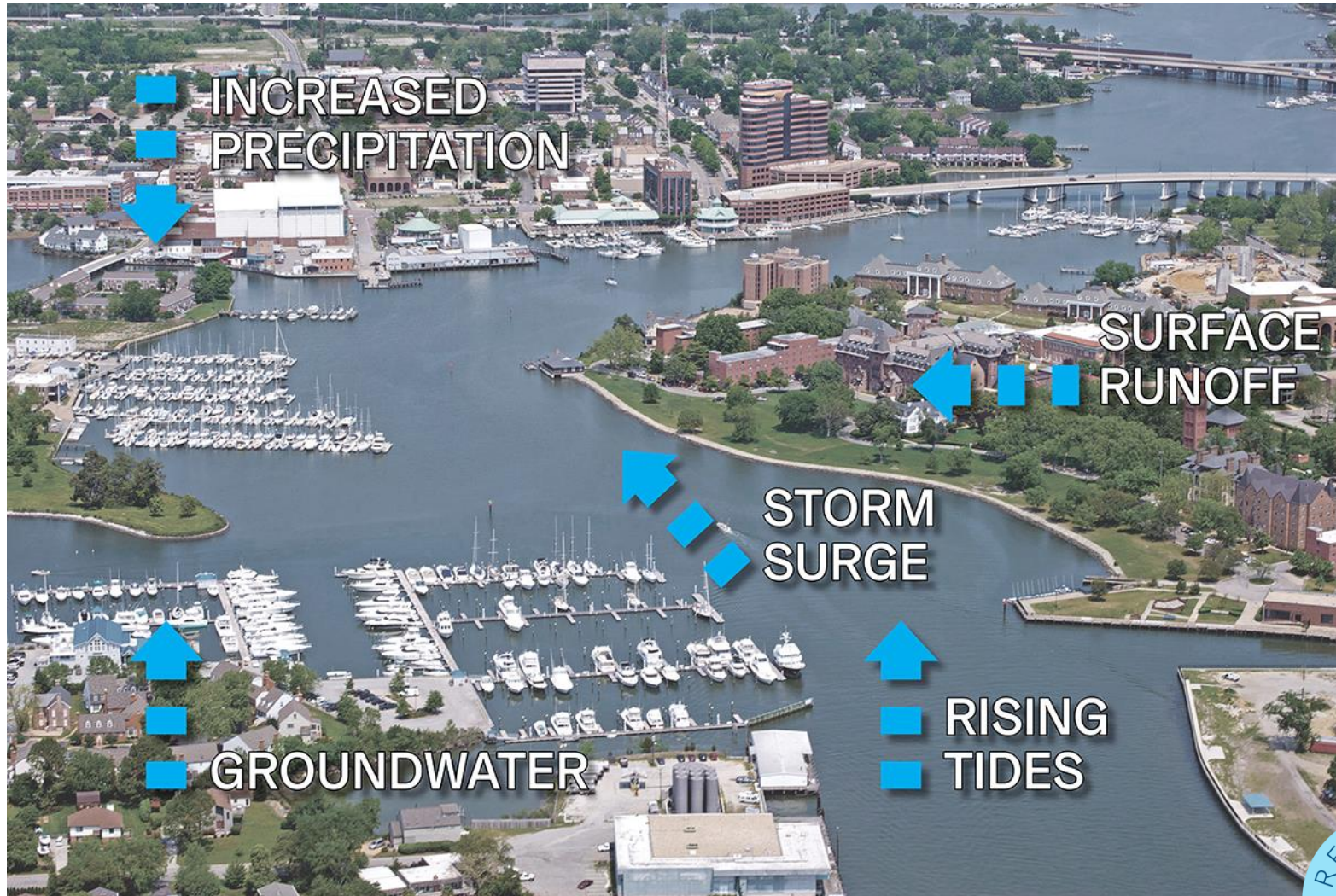
# Resilience is

The **bolstering** of a community's inherent **strengths** to alleviate chronic stresses and **enable recovery** from extreme events and shocks in ways that makes the community **even stronger** than before.

Aim to be resilient...before the storm!

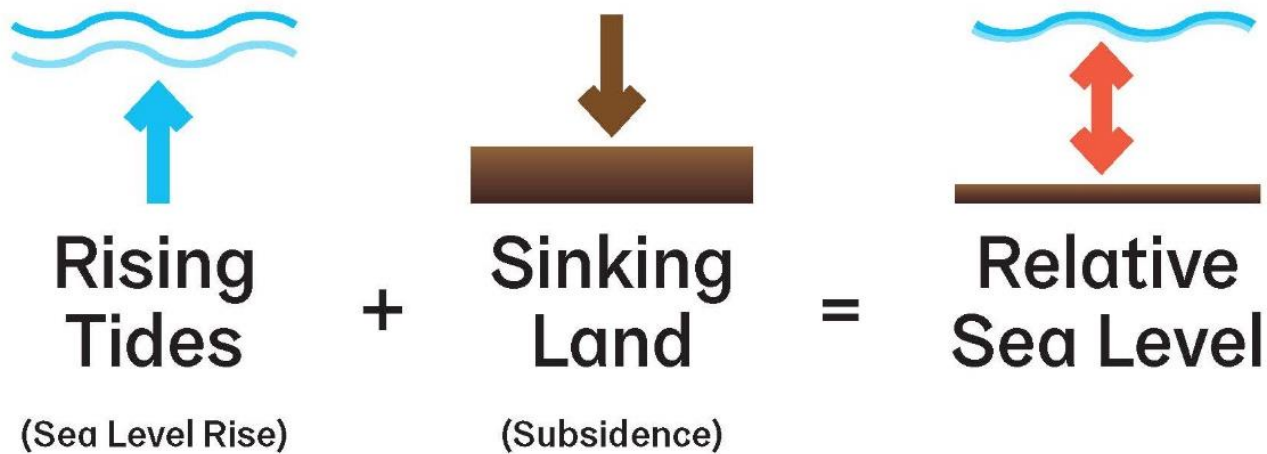


# Forces of Water





# Relative Sea Level Rise



# Approach



Guiding  
principles

Goals

Values

*Versus just  
engineering*





# Place-based analysis

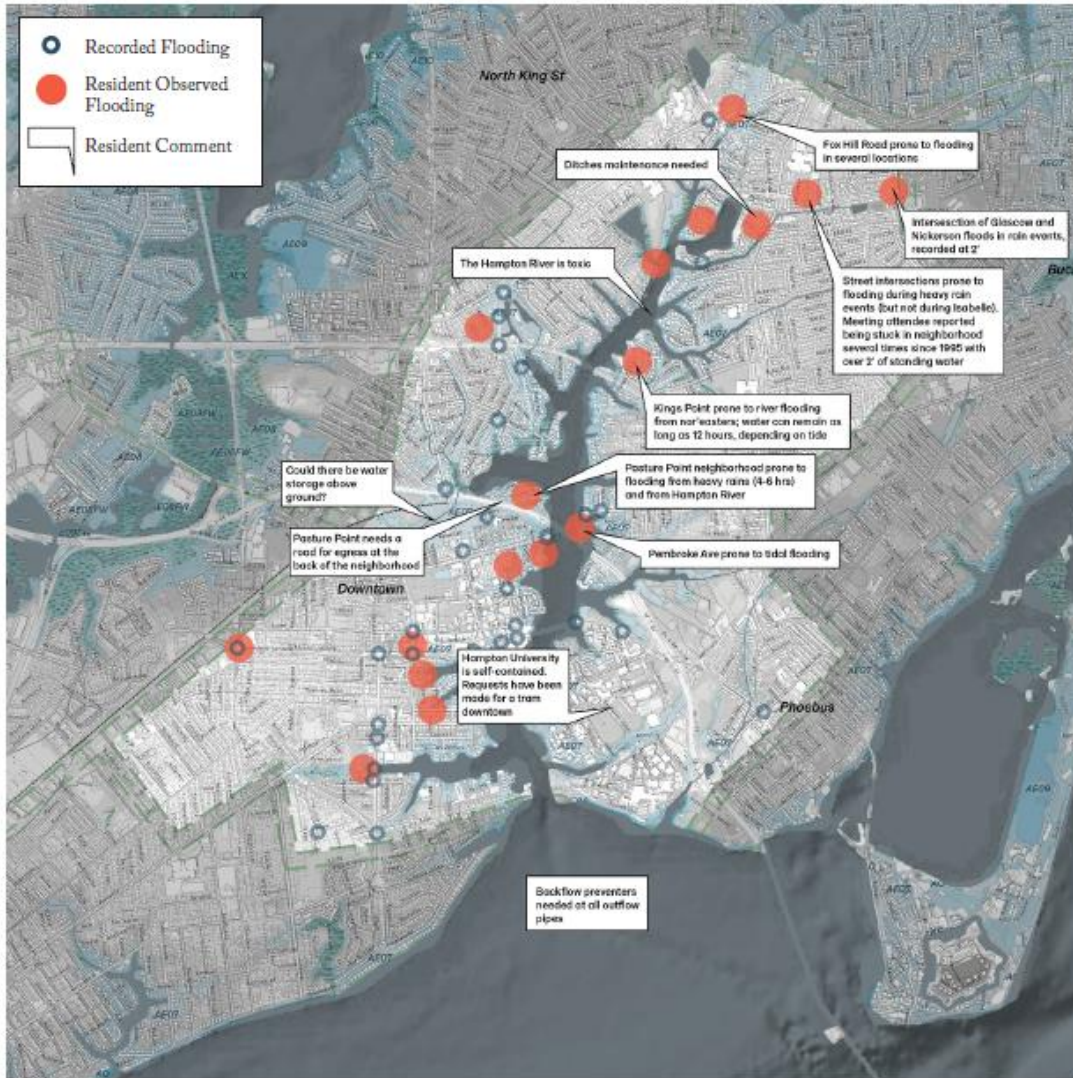


IT'S ABOUT PLACE





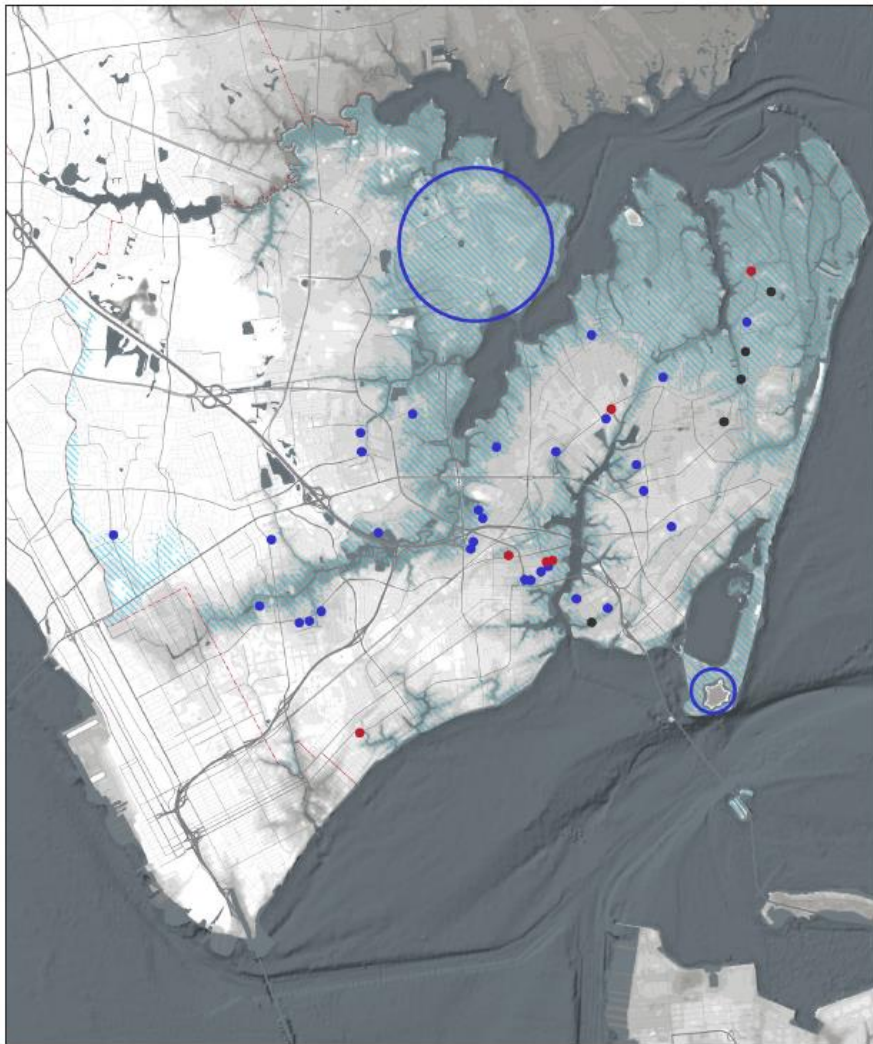
# Community Engagement



# IT'S ABOUT EXPERIENCES



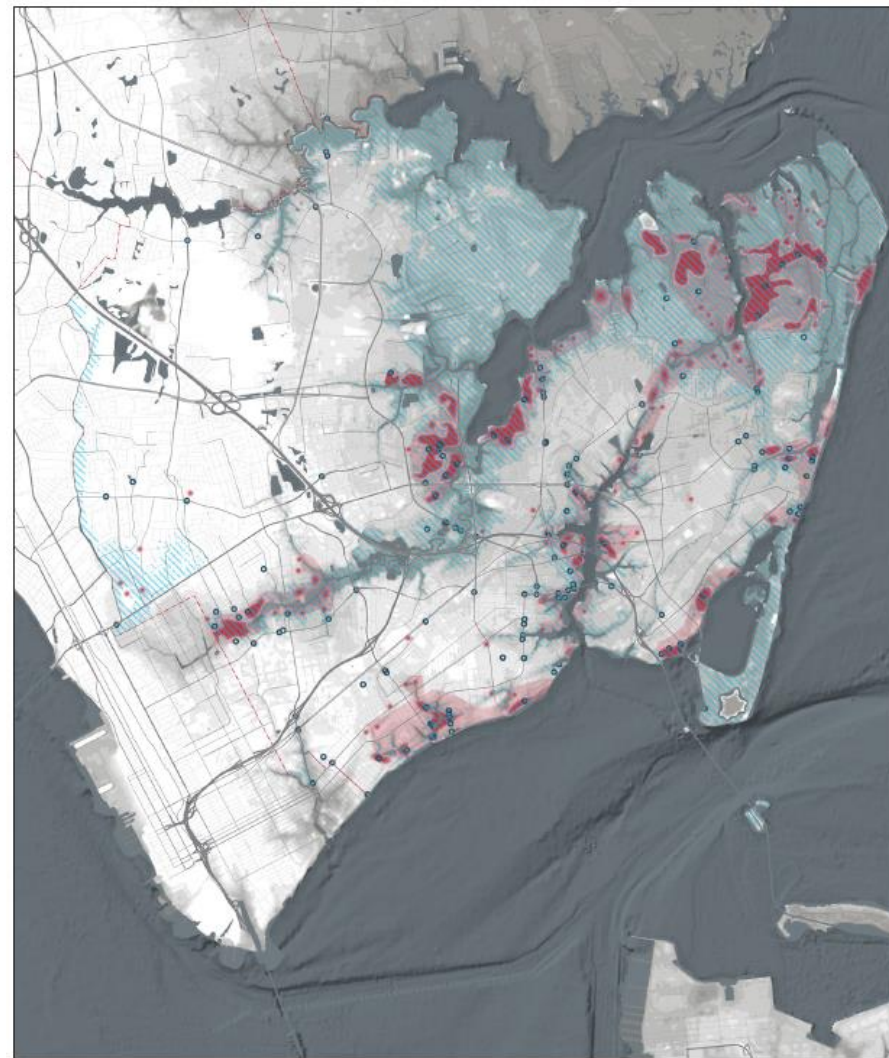




### Utilities and Critical Infrastructure at Risk

A significant amount of critical infrastructure is currently located in areas at risk for flooding. This map shows those assets which are located in the 100-year floodplain. Several public safety facilities, such as fire and police stations, are vulnerable. Similarly, a wide range of institutions, from schools to municipal offices to community centers and health clinics, are also at risk. Not shown on the map are assets, such as pumping stations, which must be located in at-risk places.

- Public Safety
- Infrastructure/Utilities
- Institution/Education/Social
- 100-Year Floodplain



### Repetitive Loss

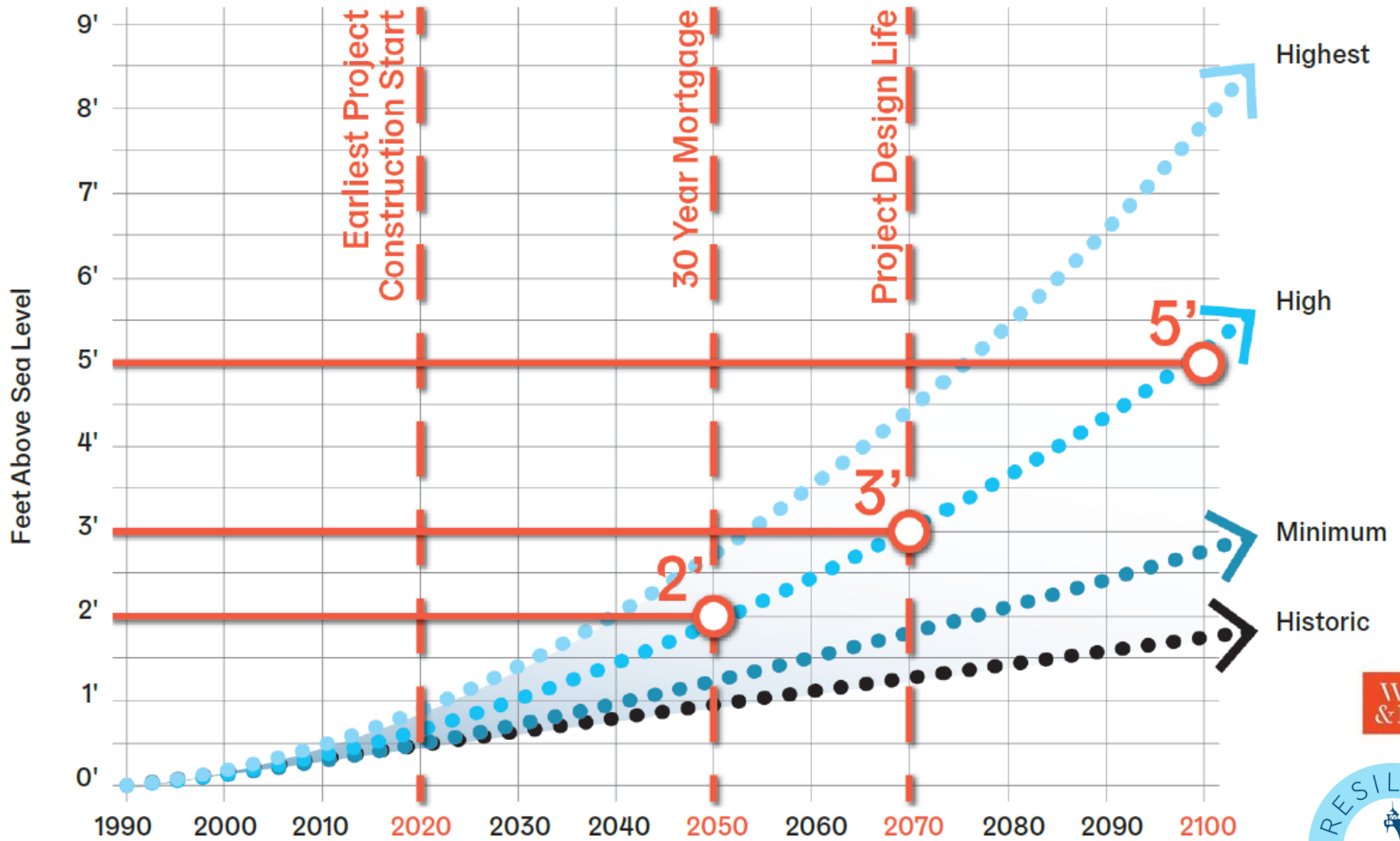
Areas of repetitive loss are those which have been inundated several times and received damage, which may have been covered by flood insurance. These areas should be addressed within a resilience citywide strategy. As shown on the map above, areas of repetitive loss frequently correspond with areas of recorded street flooding.

- Repetitive Loss Cluster
- Repetitive Loss Zone
- Recorded Flooding
- 100-Year Floodplain
- Existing Buildings

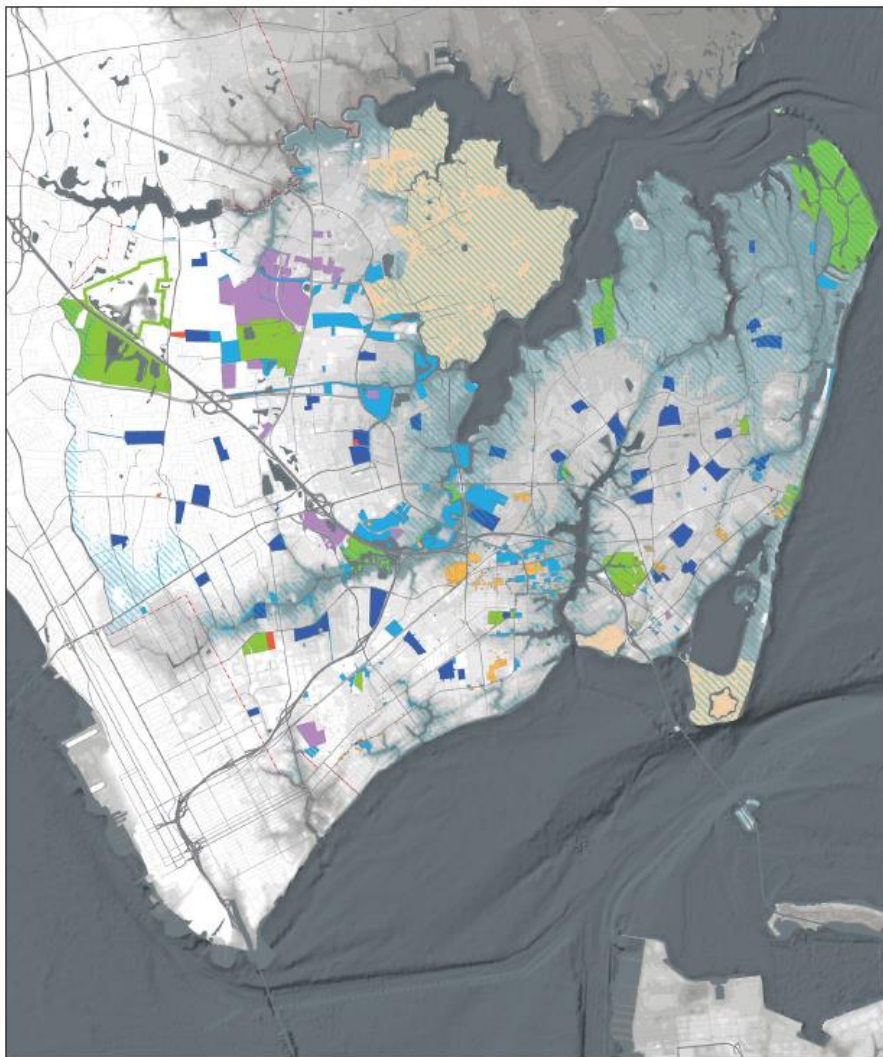
# What's at risk?



# Life of Investment



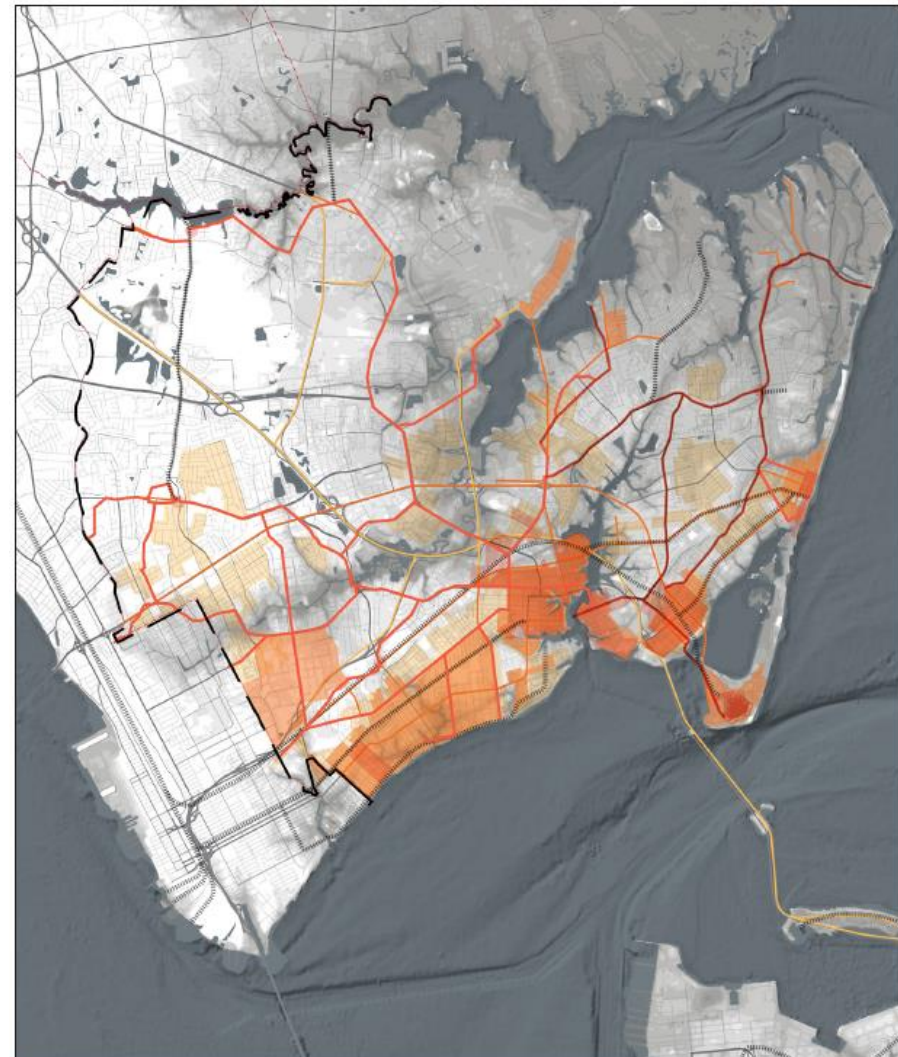




### Public Property

Publicly owned properties — municipal, state, and federal government — provide an opportunity for resilient development. These sites can be used to demonstrate smart practices in different conditions: adaptation for low lying properties, and stormwater storage for upland sites.

- Fire Stations
- Hampton Redevelopment Housing Authority
- U.S. Federal Government
- Parks / Open Space
- City of Hampton
- Hampton School Board
- Economic Development Authority
- Pump Stations
- 100-Year Floodplain



### Historic Corridors and Development Patterns

Many of Hampton's historic corridors still function as transportation arteries today. This map illustrates the development pattern of the city over time, moving first along the coast, then inland and north from the harbor.

- 1860 Roads
- 1907 Roads
- 1944 Roads
- 1965 Roads
- 1860 Development
- 1907 Development
- 1944 Development
- 1965 Development

# What are our assets?



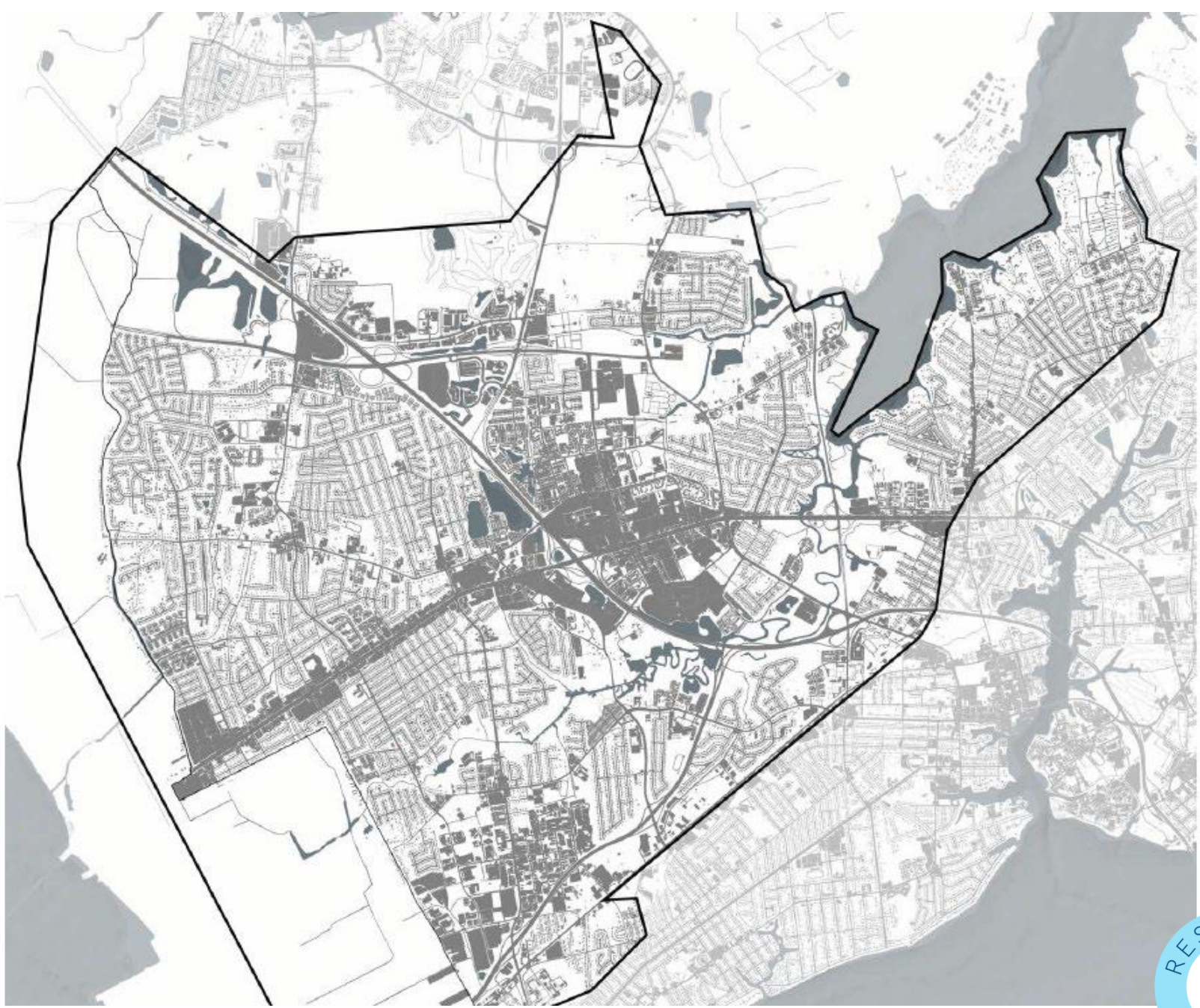
# WHY HAMPTON?





WHY \_\_\_\_\_?





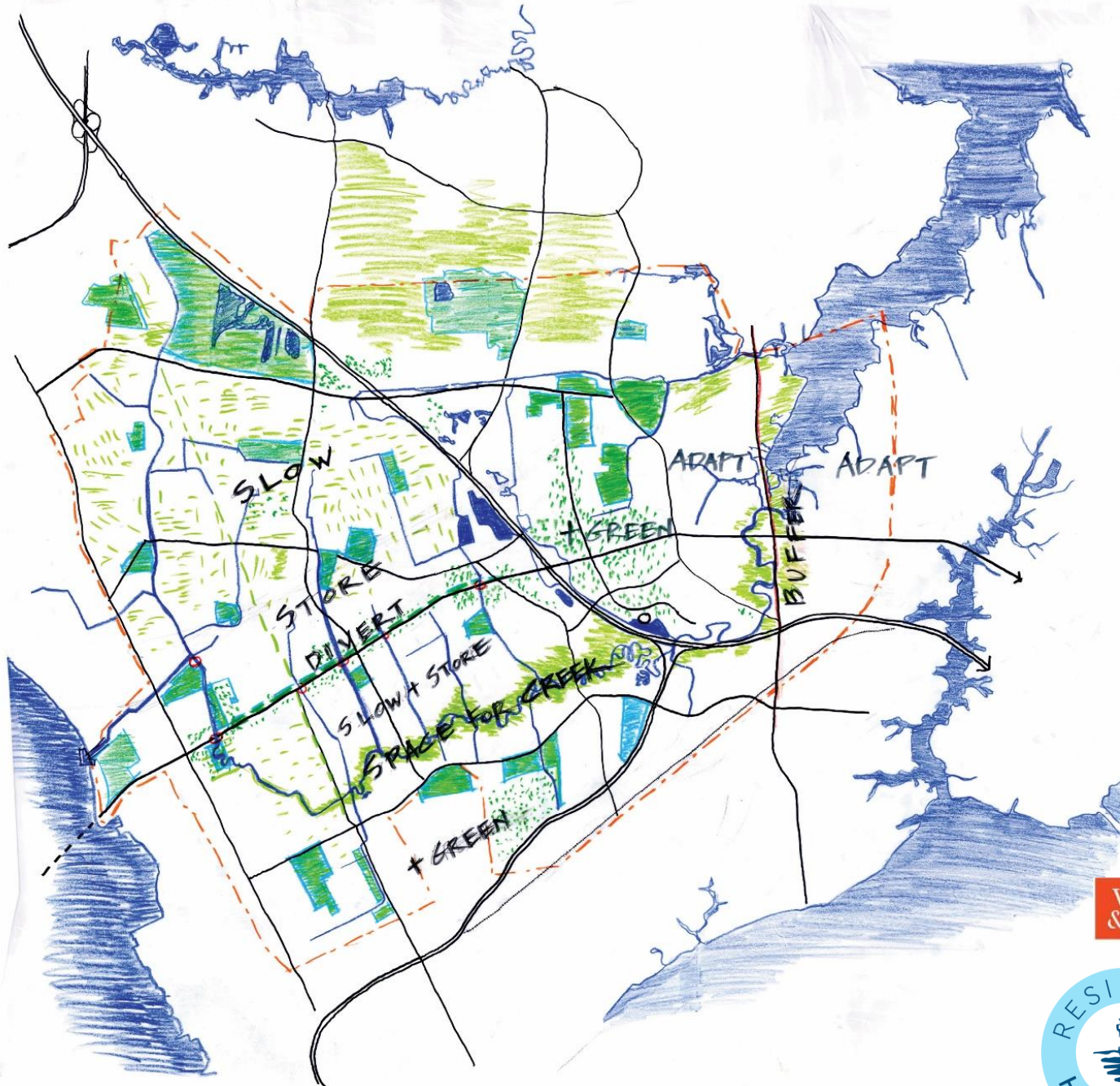


SLOW

STORE

REDIRECT

ADAPT

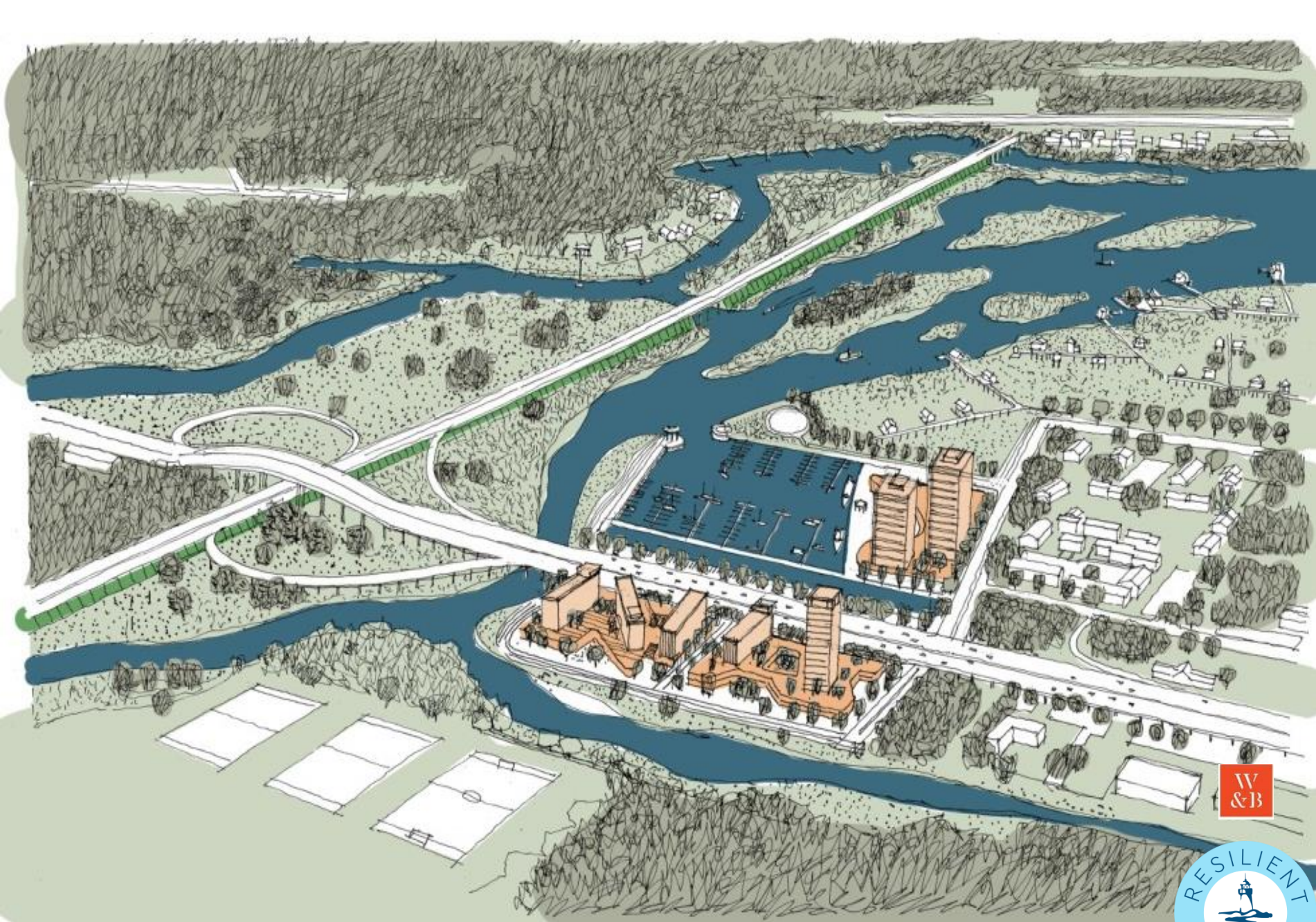




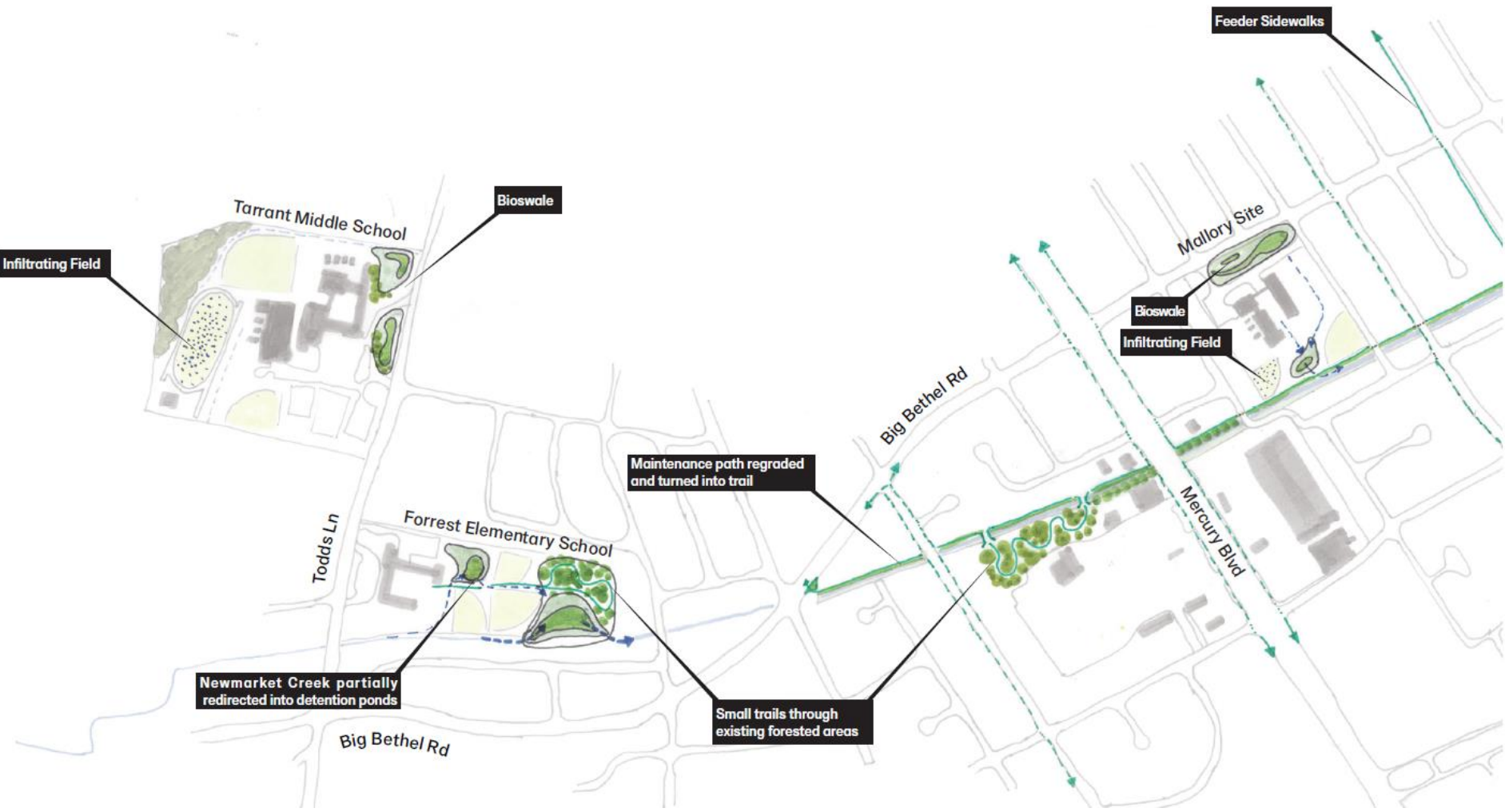










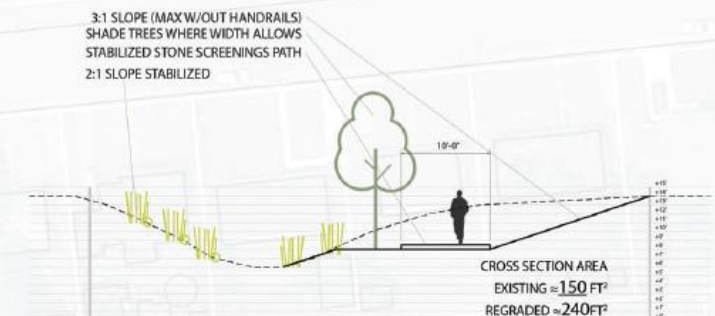
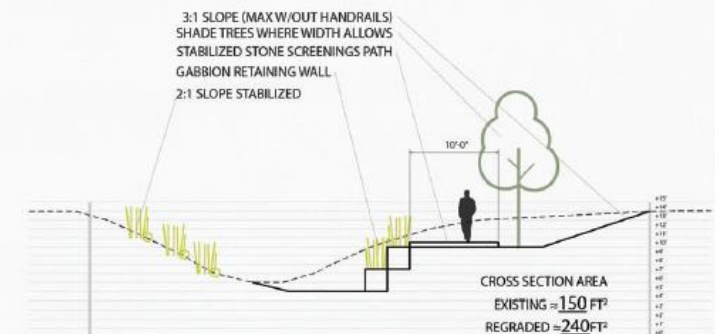
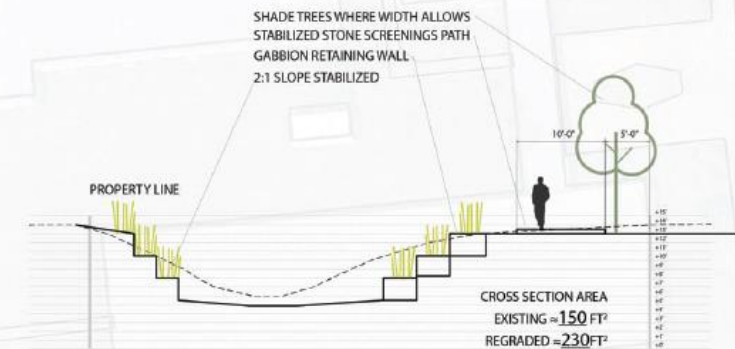




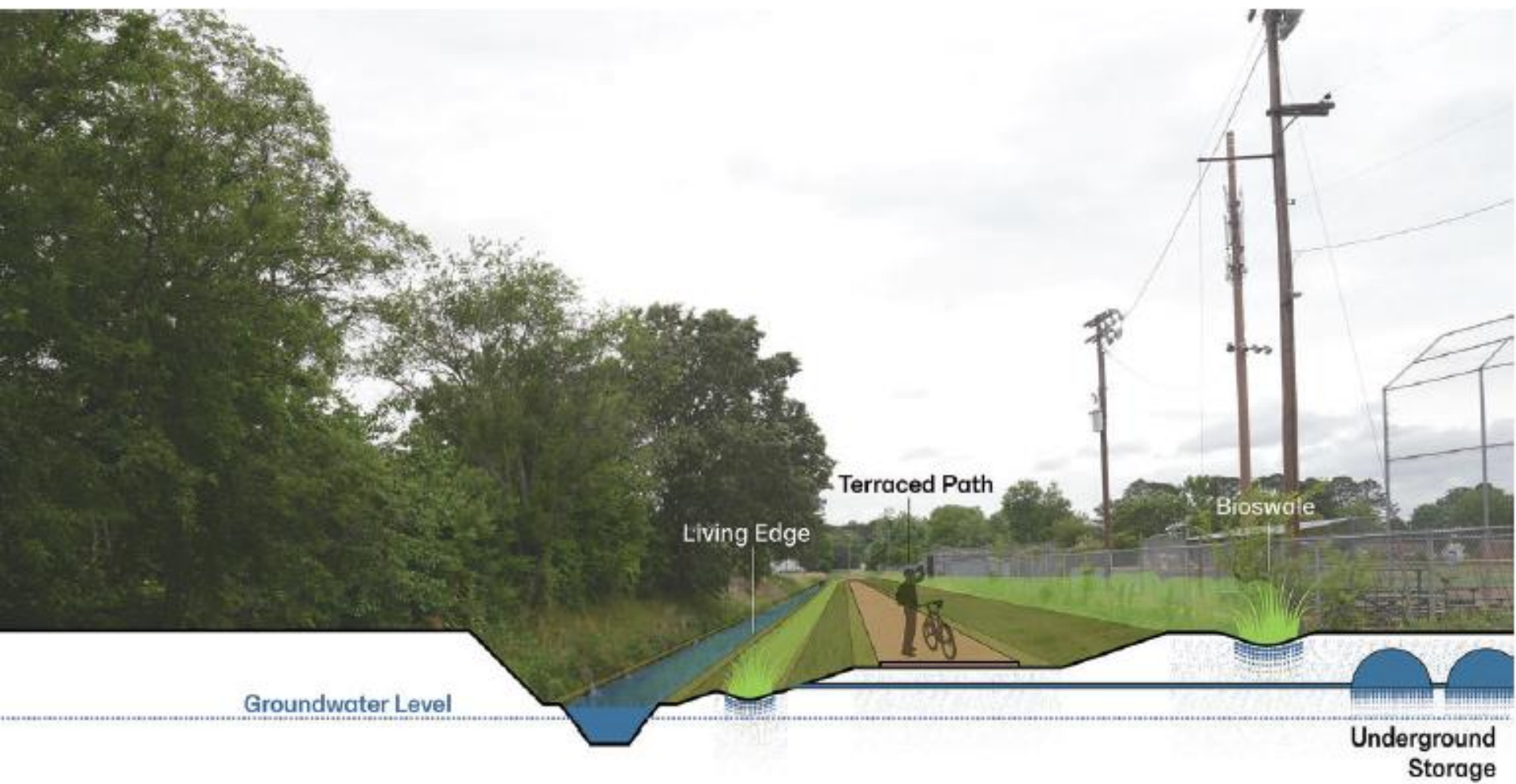


IT'S ABOUT SCALE









Groundwater Level

Terraced Path

Living Edge

Bioswale

Underground  
Storage





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Senior City Planner

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