

RESILIENT MYSTIC

KICKOFF MEETING



September 6, 2022

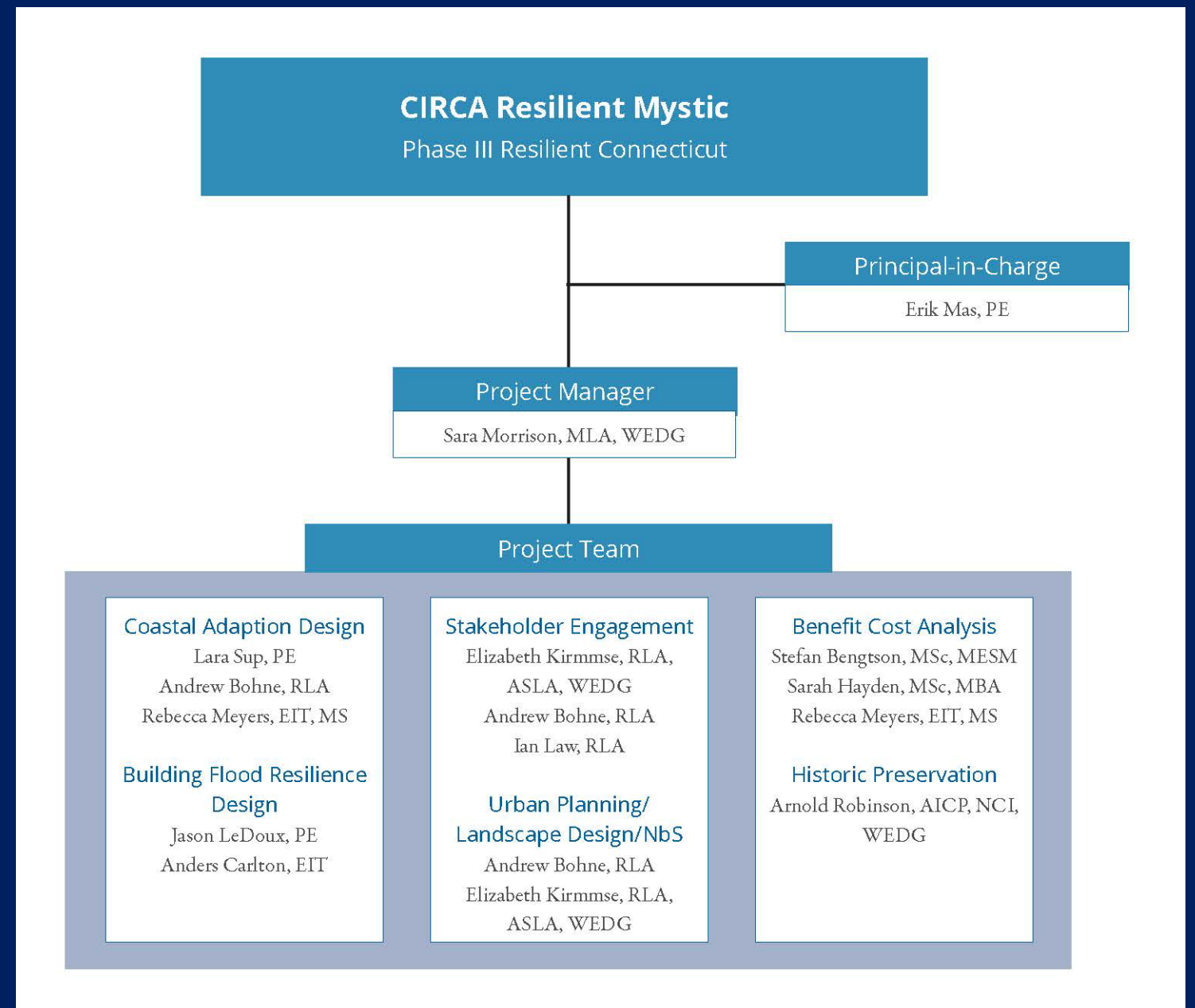
MEETING AGENDA

- Introductions
- Project Goals
- Mystic Flooding & Extreme Heat
- Design Approach
- Scope, Deliverables, & Schedule
- Public Meetings & Engagement
- Information & Data Requests
- Questions and Discussion

INTRODUCTIONS

- CIRCA
- Town of Stonington
- Fuss & O'Neill

RESILIENT MYSTIC



PROJECT GOALS

RESILIENT MYSTIC



- Assess + develop recommended strategies and implementable project concepts to mitigate flood and heat risks
- Work collaboratively with stakeholders in Mystic to select strategies and projects
- Develop scientifically-informed conceptual designs and implementation plan
- Position projects for implementation using identified federal and state resilience funding

BUILDING ON PHASE II

RESILIENT MYSTIC

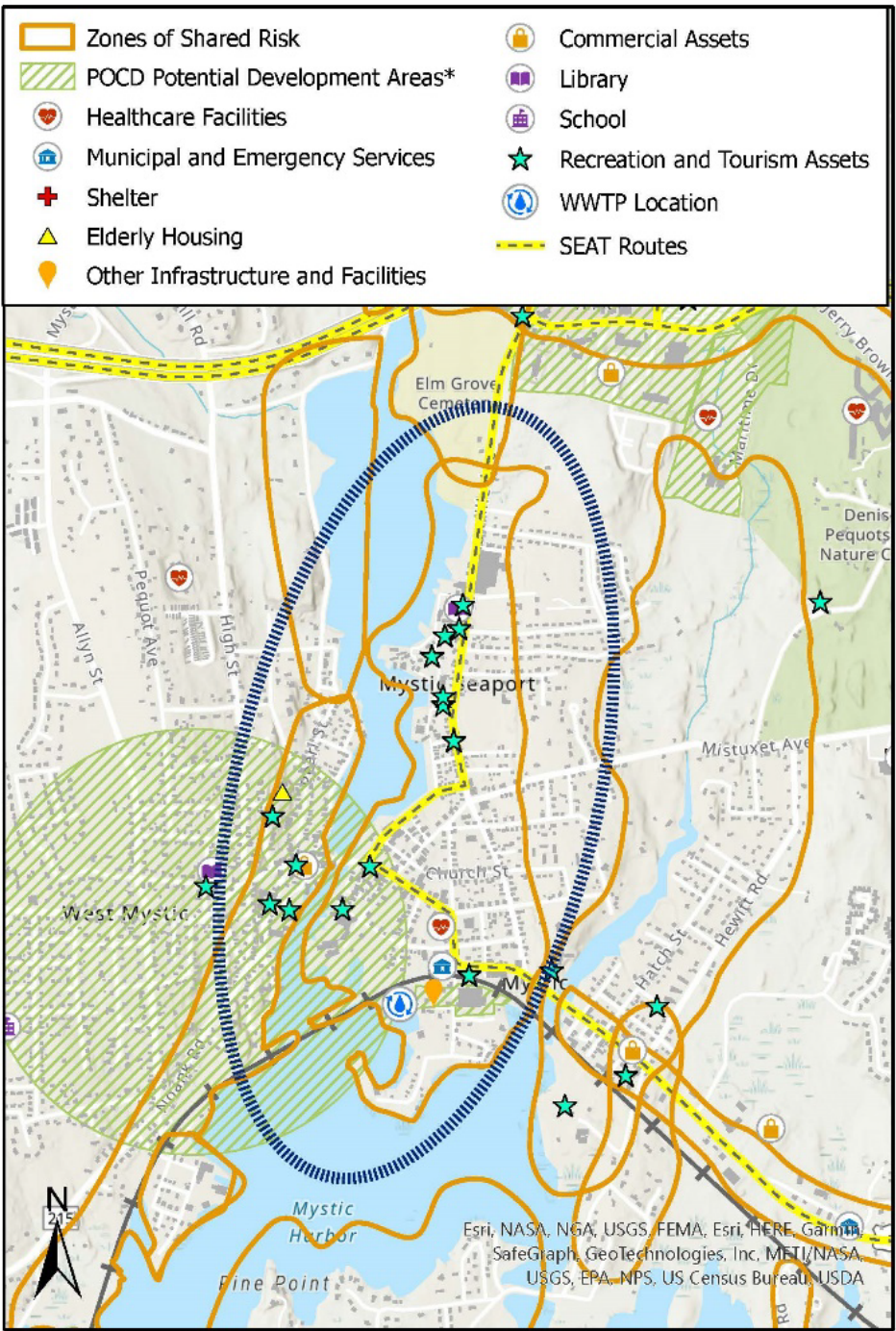
Resilient Connecticut 2.0 Phase II

Regional Adaptation/Resilience Opportunity Areas

Name: Mystic

Location: Stonington

Consideration	Characteristics of Area				
Flood Vulnerability	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Heat Vulnerability	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Social Vulnerability	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
<p>The Mystic section of Stonington experiences coastal flood inundation from king tides and storm surges. Over time, flooding is expected to increase in frequency and duration. Inundation has impacted and/or isolated private and public properties, transportation infrastructure, transit lines, critical facilities such as the Mystic Fire Company, historic and cultural resources, and major economic assets such as Mystic Seaport Museum. Inherent challenges include the fact that historic structures may be impossible to elevate, the geometry of the road network may complicate elevations of individual road surfaces, and critical facilities such as the Mystic Fire Company and the wastewater treatment plant could become isolated in a flood. Meanwhile, new developments are elevated or floodproofed, making them relatively resilient without addressing isolation risks. Extreme heat management is a concern in Mystic. The cooling centers for the Town of Stonington are in the high school and police station, several miles from Mystic. If cooling centers are needed during a flood event, roads may be impassable and people may not be able to reach them. Options for extreme heat management in Mystic may be limited, and the community may wish to consider methods of reducing the causes of heating as well as methods of providing respite from heat.</p>					
<div><div>Mystic Seaport Museum</div><div>Mystic Seaport Museum Library</div><div>Mystic Museum of Art</div></div> <div><div>Mystic Velo</div><div>Mystic Amtrak Station</div><div>Water Pollution Control Facility</div></div> <div><div>Academy Point Senior Living</div><div>Mystic Fire Department</div><div>Apple Rehab</div></div>					

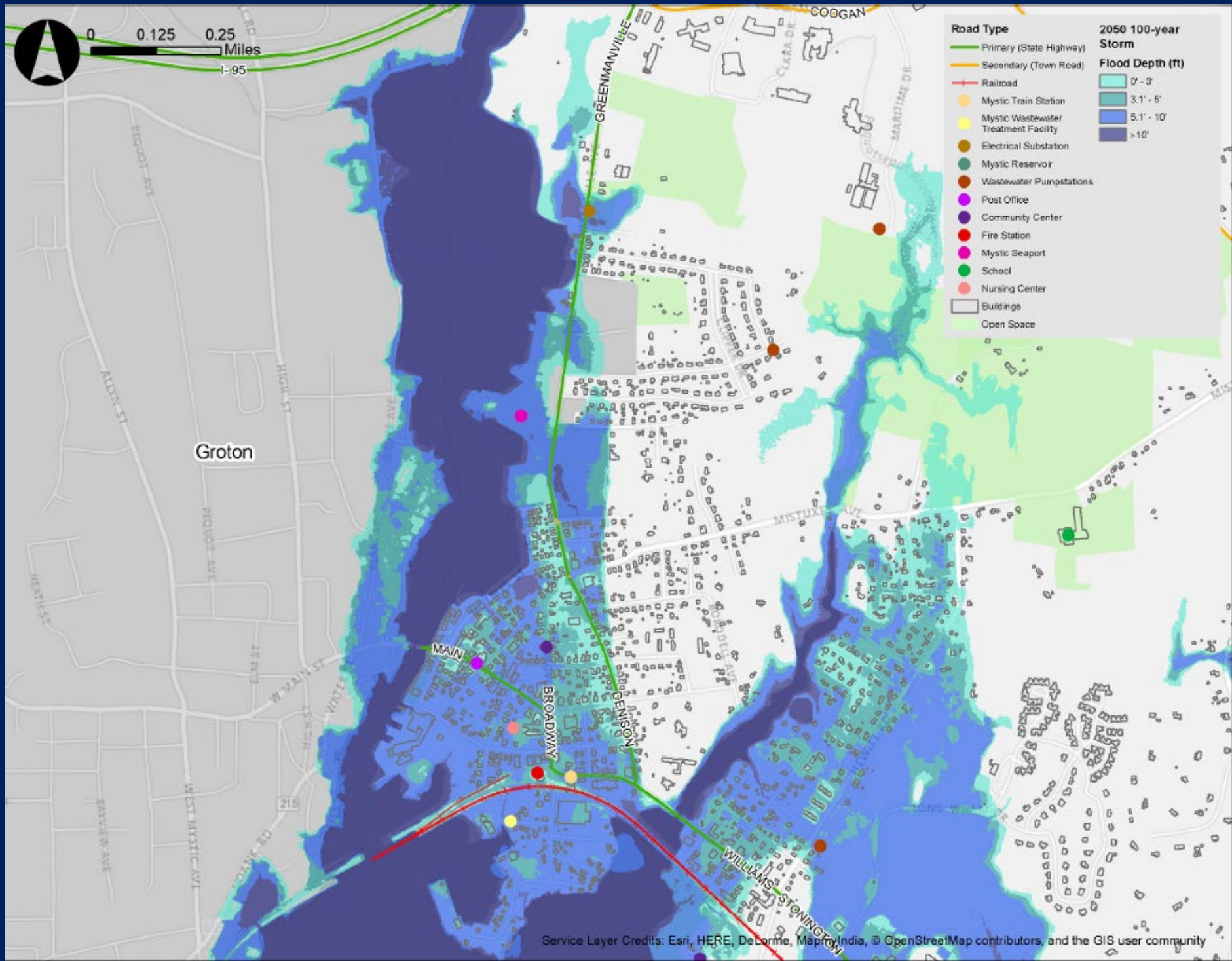


*Areas identified in POCDs as supporting development, redevelopment, or other types of economic activity

- Developing the identified Resilience Opportunity Area (ROAR): ROARs were located at the intersection of climate induced flooding and heat risks with vulnerable populations and key regional assets.
- Extreme heat is a concern and will be considered, but main priority will be to address flood risks
- Primary Objectives:
 - Determine how to relocate or protect historic resources
 - Develop long-term plans to protect several types of critical facilities & passenger rail station
 - Enhance connections from critical facilities to the greater Stonington community

MYSTIC CLIMATE RISKS

RESILIENT MYSTIC



* SOURCE: TOWN OF STONINGTON'S COASTAL RESILIENCE PLAN (2017)

Climate Change Summary Sheet for Town of Stonington

What are the Town's Top Climate Change Concerns?

Flooding:

Most of Mystic has high coastal flood risk, affecting numerous historic and cultural resources that are difficult to make resilient, as well as complicating redevelopment pressures. The Town also shares Ledyard's concerns about Lantern Hill Road risks along Whitford Brook.

Extreme Heat:

Like other communities, Stonington wishes to maintain access to its cooling centers for vulnerable populations such as the elderly.

Others:

The town relies on three sewage treatment plants, which is unique among Connecticut communities; all three face coastal flood risks. Additionally, the Mason's Island Causeway is a unique transportation challenge

Which Hazard Mitigation and Climate Adaptation Actions Will Address Climate Change Concerns?

Flooding:

Numerous actions are listed in the annex document for addressing flood and erosion challenges in the Mystic area including the boat house, Mystic Seaport facilities and parking lots, and Holmes Street. All are considered important. Actions are also included for Lantern Hill Road.

Extreme Heat:

Ensure that the cooling centers (Police Station and High School) are accessible from transit lines or alternate transportation options.

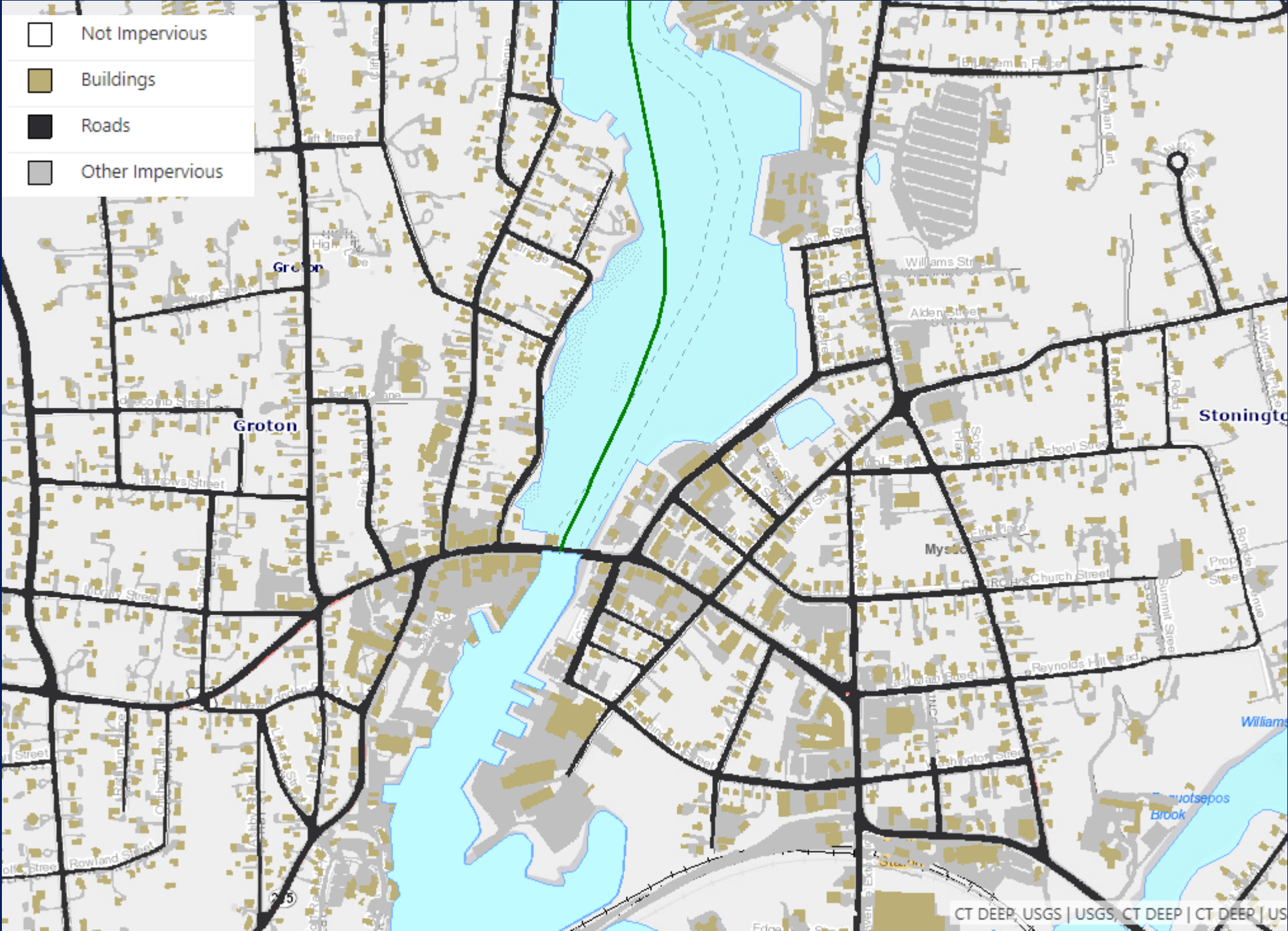
Others:

Determine appropriate methods of floodproofing the WPCFs (WWTPs) and sewer pumping stations; and develop a design for elevating the Mason's Island causeway.

* SOURCE: SCCOG HAZARD MITIGATION AND CLIMATE ADAPTATION PLAN (2023)

MYSTIC EXTREME HEAT

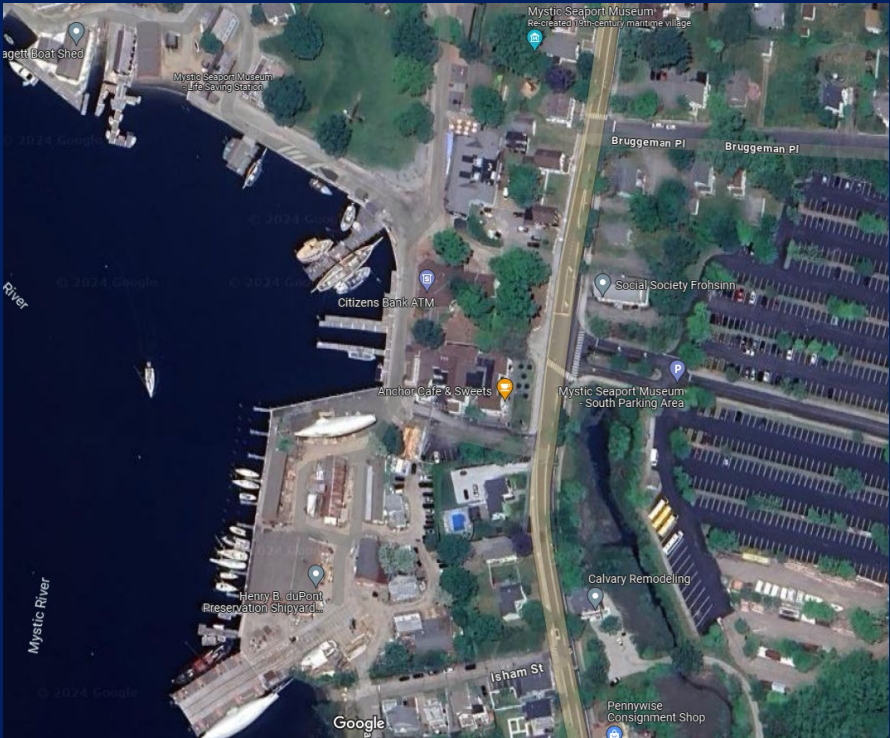
RESILIENT MYSTIC



* SOURCE: CTECO

HEAT

- Areas of high impervious cover
- Strategies to mitigate the impacts of extreme heat and heat islands within Mystic while enhancing quality of life



DESIGN APPROACH

- Make the Stakeholders + Community Central to Create the Vision
- Understand, Distill, and Communicate Relative Risks
- Address Critical Transportation and Resilience Corridors
- Prioritize Critical Facilities
- Integrate Green Stormwater Infrastructure + Nature-Based Solutions When Possible

RESILIENT MYSTIC

- Plan for the Future with Sensitivity to the Past
- Develop BCA Benefits Early
- Develop Implementable Alternatives Based on Risk and Cost
- Select Final Plan that Prioritizes Implementable Actions

SCOPE & DELIVERABLES

RESILIENT MYSTIC

Resilient Mystic Scope / Schedule													
		2024										2025	
Task	Scope	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
1	Project Management												
	Develop project schedule												
	Project management meetings (1 per month/12m)												
2	Stakeholder Engagment												
	Project kick-off with CIRCA and Town of Stonington												
	Advisory Committee (AC) formation												
	Advisory Committee meetings (3 virtual)												
	Final Public /AC Presentation (Virtual)												
	Website/ Social Media Content												
	Project information/fact sheets (3 English/Spanish)												
	Pre-Workshop Roadshow (3 events / 2 hours each)												
	Public Engagment memo												
3	Current and Future Conditions Analysis												
	Review Previous Tools and Plans												
	CIRCA Modeling Update												
	Base map development in GIS												
	Flood Mapping Coordination Kickoff Meeting												
	Existing Conditions – Flood Mapping												
	Future Conditions – Flood Mapping												
	Resilient Corridor Development Internal Workshop & Eval Matrix												
	Summary Memo												

SCOPE & DELIVERABLES

RESILIENT MYSTIC

Resilient Mystic Scope / Schedule													
		2024										2025	
Task	Scope	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
4	Adaptation Options and Conceptual Designs 3-day Workshop)												
	Prep (modeling,mapping, presentations, etc)												
	Day 1 - Walkshop												
	Day 2 - Internal workshop + pin-up												
	Day 3 - Internal workshop + presentation												
	Finalize workshop package												
5	Benefit / Cost Analysis												
	Develop Cost opinions												
	Develop Benefit/Cost Analysis												
	Summary Memo												
6	Final Report												
	Develop draft report/Executive Summary												
	Incorporate comments from client												

**Change is hard. Robust public process is key.
Positioning the community + stakeholders to drive the project.**

Establish Citizen + Technical Advisory Committee (CTAC)

- Town of Stonington Municipal Departments – identify representatives
- Town of Stonington Boards + Committees – identify representatives
- Mystic Seaport Museum
- Town of Groton Planning Department
- Alliance for the Mystic River Watershed
- TNC representative for Southeastern Connecticut
- SECCOG

Requested Commitment:

Meeting #1: (virtual) Evaluate + discuss existing / future climate conditions analysis + impacts of flooding

Meeting #2: (virtual) Establish + review goals/priorities & discuss trade-offs / compromises. Select priority focus areas based feedback + scoring rubric

Meeting #3: (in-person) Participation in focus group discussion at the Multi-day Visioning / Community Planning Workshop and Design Charrette

Meeting #4: (virtual) Report out of Final Plan – This meeting will also be open to the public.

Additional Considerations?

- Denison Pequotsepos Nature Center
- Avalonia Land Trust
- Old Mystic History Center
- Mystic River Historical Society
- Greater Mystic Chamber of Commerce
- Mashantucket Pequot Tribal Nation
- Eastern Pequot Nation representative
- Additional Stakeholders?

STAKEHOLDER ENGAGEMENT

RESILIENT MYSTIC

Change is hard. Robust public process is key.
Positioning the community + stakeholders to drive the project.

Pre-Workshop Roadshow – Meet the public where they are

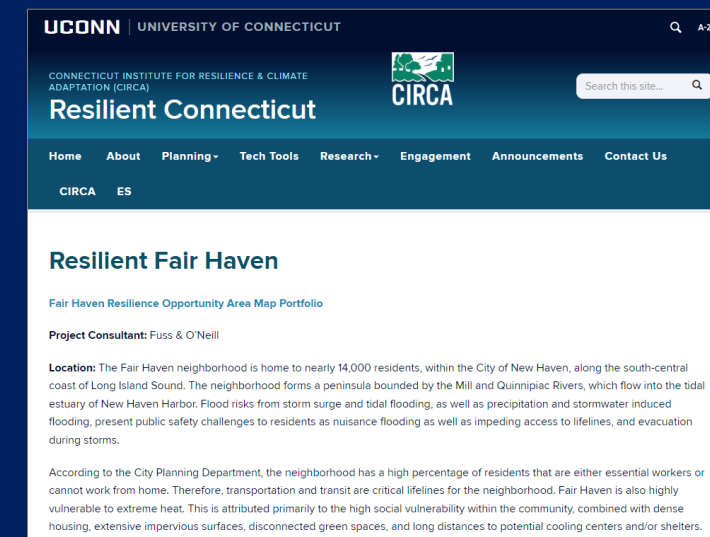
- Upon completion of Task 3: Current + Future Conditions Analysis
- Upon completion of CTAC meetings #1 + #2
- Attend three (3) local events (July / August timeframe)

Objectives of Roadshow

- Build momentum and spread the word about the project within the community with community members who may be difficult to reach otherwise
- Share information from the Current and Future Conditions Analysis
- Spark interest and investment in the project with the goal of increasing attendance to the Multi-day Visioning / Community Planning Workshop and Design Charrette



Project Flyers / Materials



CIRCA Project Website



Project team at Community Events

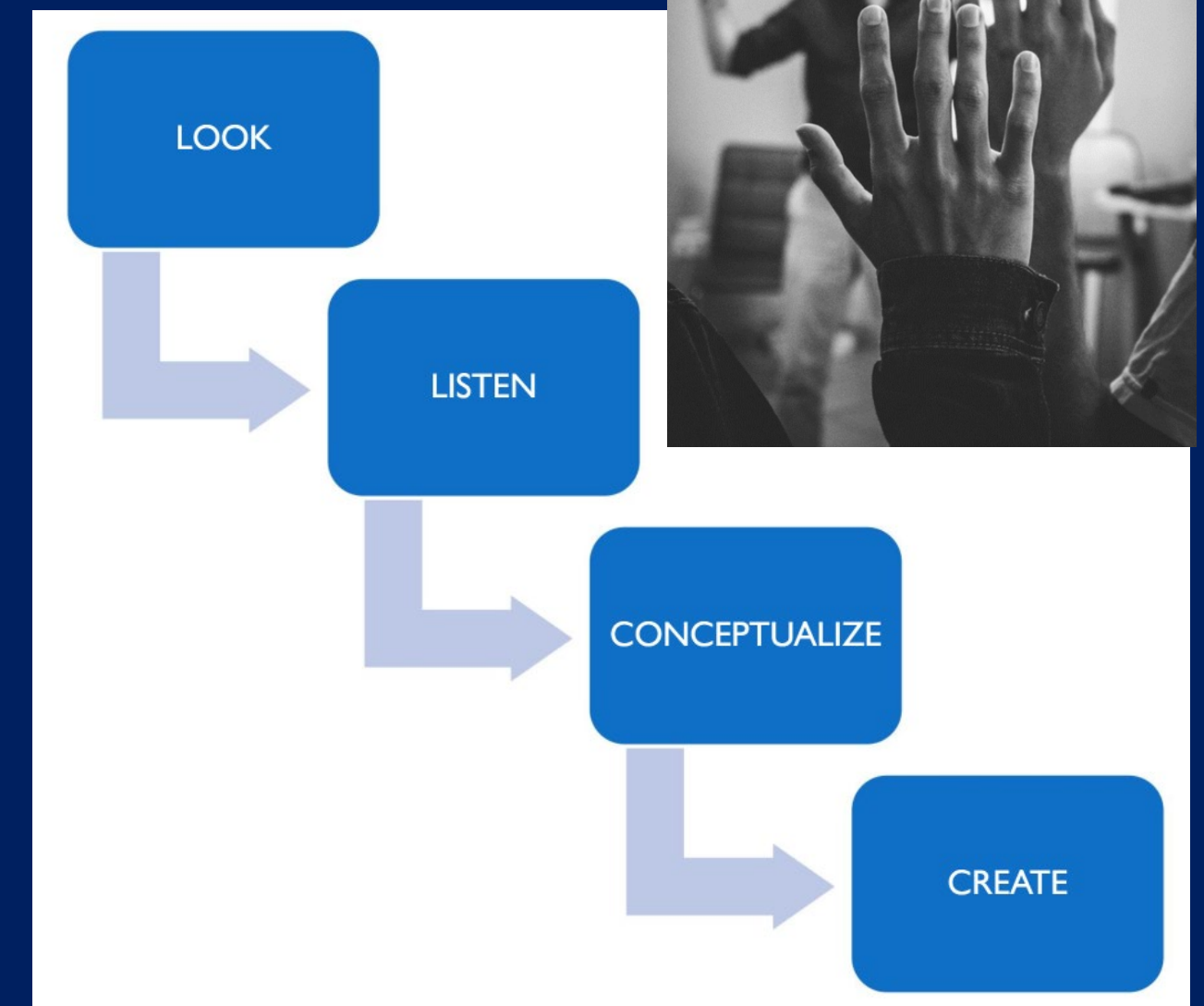
STAKEHOLDER ENGAGEMENT

3-Day Visioning / Community Planning Workshop and Design Charrette

Why this approach?

- We believe that public engagement is the critical element to building a plan that is accepted by stakeholders and political leaders and can actually be implemented
- Members of the community are invited to co-create the conceptual visions to improve resilience in Mystic
- The purpose of the visioning workshop and charrette is to help visualize and discuss concepts for key flood resilience projects and establish tangible benefits to make informed decisions about the future
- Condensed, intensive workshop format, we are frequently able to condense months of back-and-forth decision making into a few days to arrive at consensus on a path forward that responds to everyone's needs and goals

RESILIENT MYSTIC



WORKSHOP FOCUS + FORMAT

Focus Areas:

- Adaptation Options for Flood Mitigation
- Future Flood-Related Opportunities for Buildings
- Resilient Corridors

Format:

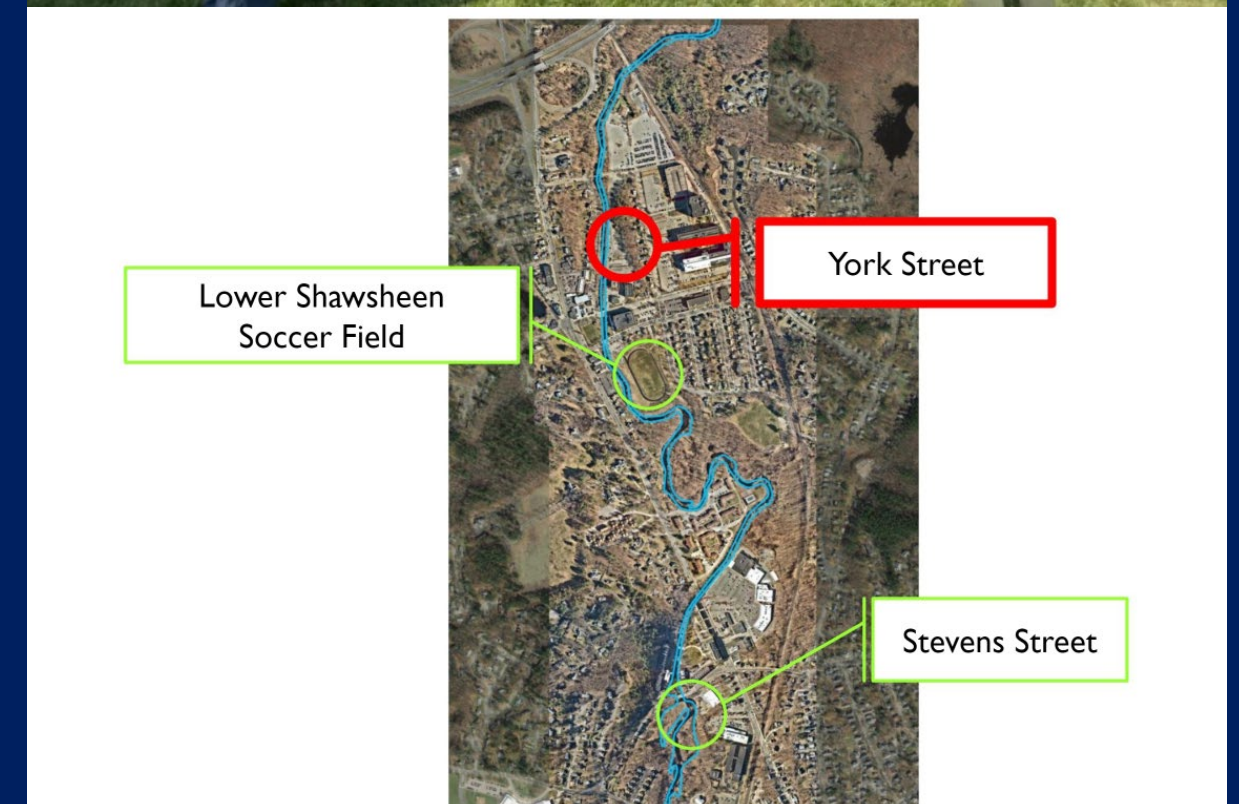
- Two, 2-hour public meetings/open house opportunities for the overall community to participate
- The Advisory Committee and other key stakeholders will have ample opportunities to interact with the design team
- “Walkshop” through priority areas
- Internal Design team working sessions
- Topical small group meetings

Precise flow of events will be finalized together.

RESILIENT MYSTIC

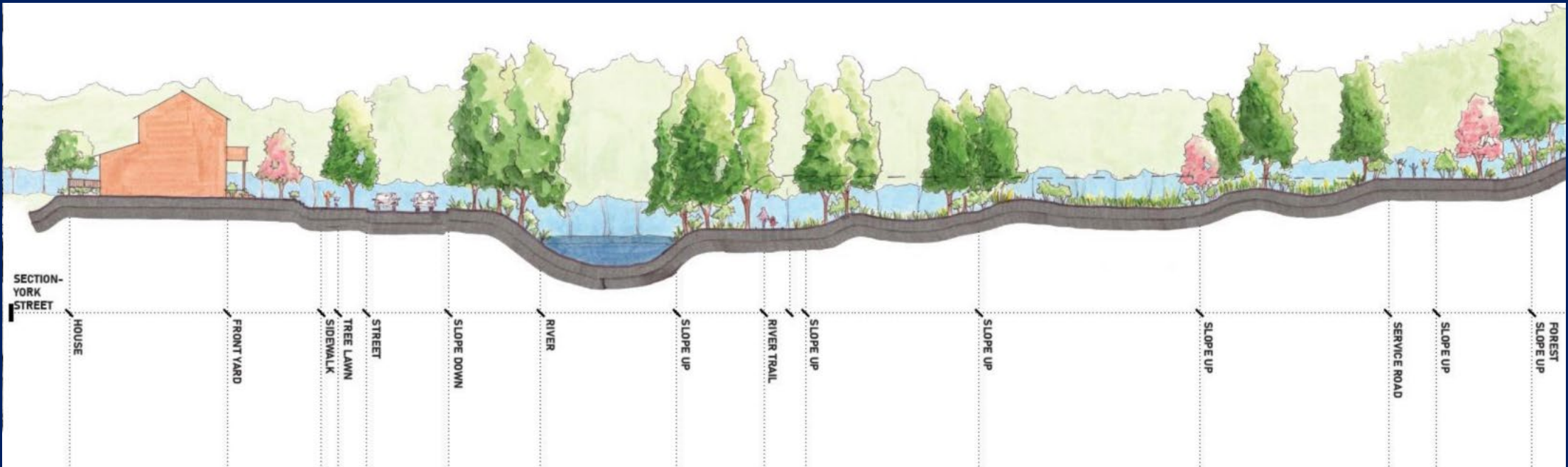
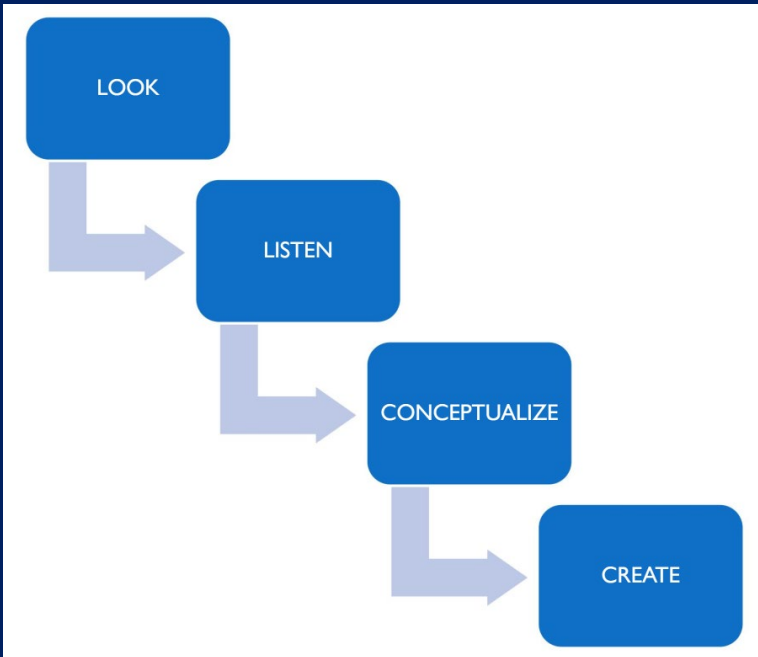


Stakeholder Walkshop



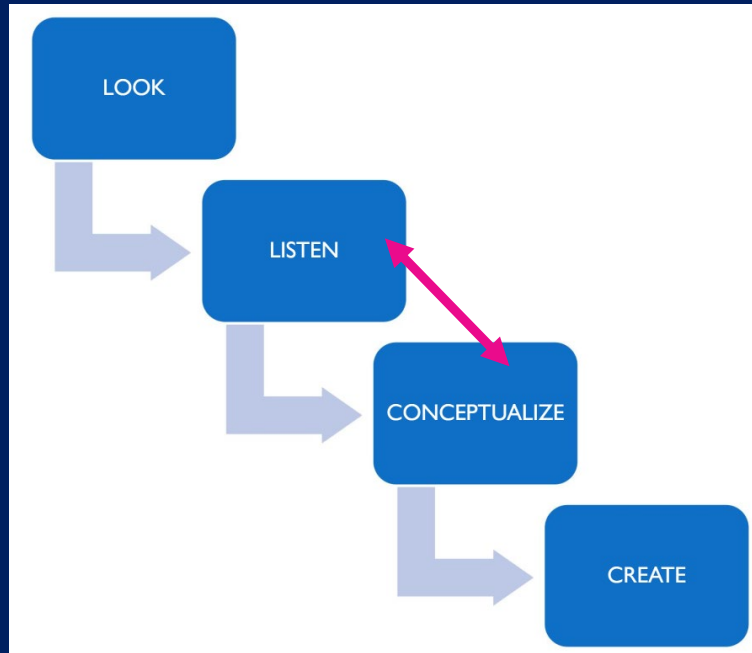
WORKSHOP PROCESS + PRODUCT

RESILIENT MYSTIC



WORKSHOP PROCESS + PRODUCT

RESILIENT MYSTIC



ARE WE MISSING ANYTHING?

RESILIENT MYSTIC

PRIORITY PLANS FOR REVIEW + INCLUSION

- CIRCA CCVI Viewers + Data
- The Town of Stonington's Coastal Resilience Plan, 2017 (ARUP, WHG, MoxieCivic)
- Southeastern Connecticut Regional Hazard Mitigation Plan, 2017, (DELTA, SECCOG)
- Resiliency Planning Study for Historic & Cultural Resources, 2017 (SHPO, SECCOG, Town of Stonington)
- Inland Interventions for Coastal Resilience in Mystic, CT, 2019 (Conway School)
- Shoreline Interventions for Coastal Resilience in Mystic, CT, 2019 (Conway School)
- Brown University Student Projects for the Mystic Seaport Museum, 2019 (Brown)
- Historic Preservation and Resilience Planning in Connecticut, 2019 (Goodwin; Milone & MacBroom)
- Preparing Mystic Seaport for Rising Waters, 2020 (Coast Guard Academy)
- Mystic Seaport Museum's Strategic Facility Plan, 2021 (Kent & Frost)
- Southeastern Connecticut Hazard Mitigation and Climate Adaptation Plan, 2022 (Resilient Land & Water; SECCOG)
- Downtown Mystic Resiliency Plan, (GZA)
- Mystic River Watershed Plan, currently being developed, (Alliance for the Mystic River Watershed)

ADDITIONAL DOCUMENTS FOR REVIEW

- Town of Stonington Hazard Mitigation Plan Update Annex
- Town of Stonington Plan of Conservation and Development
- Climate Emergency Declaration by the Town of Stonington Climate Change Task Force
- Resolution No. 21-3 Relating to a Climate Emergency
- Resolution of Commitment to Address Climate Change, Resiliency and Sustainability as a Central Management Principle for All Actions of the Town Government of Stonington

INFORMATION & DATA REQUESTS

RESILIENT MYSTIC

- Town GIS Data
 - Parcels/CAMA Data
 - Storm Drainage System
 - Other Utility Mapping
 - Land Use
 - Sanitary System Layers
- Flooding Documentation
 - Problem Areas, Flood Elevations, High Water Marks, Photos (Sandy, 2021 Storms, recent rainfall/coastal events, others)
- CIRCA Coastal Flood Modeling
 - Updated Modeling Report
 - Extracted flood elevation data for analysis points

What else should we know?

- Active and/or Near-Term projects?
- Past efforts – Critical Lessons Learned?

RESILIENT MYSTIC

QUESTIONS?

