

Collins Cove to Willows Resilience Study

Workshop #1

November 29, 2022



WELCOME AND INTRODUCTION

Agenda

- Purpose of Workshop
- Overview of Collins Cove to Willows Resilience Study
- Stakeholder Engagement
- Tonight's Goal/Activities



**15 feet of salt marsh can absorb
50% of incoming wave energy!**

WORKSHOP PURPOSE - Sharing and Learning



This rain garden at Winter Island can receive over 30,000 gallons of water from a 1-inch rainstorm.

The average yearly rainfall for Salem is 47 inches.

This rain garden will remove pollutants from over a million gallons per year that would have ended up in the ocean!



WHY THIS PROJECT - CITY

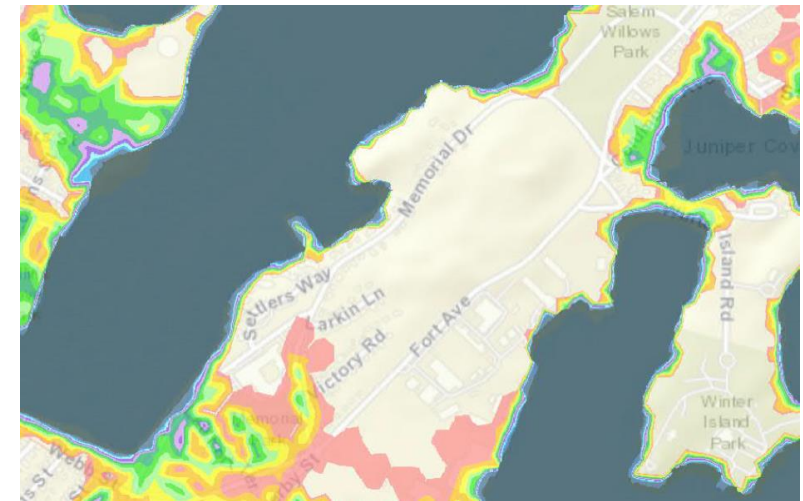
Area vulnerable to

- Sea level rise
- Storm surge
- Extreme precipitation

Mapping – now and future

- FEMA National Flood Hazard Mapping
- Massachusetts Coast Flood Risk Model (MC-FRM)

This project is being funded in large part by a **Municipal Vulnerability Preparedness (MVP) program Action Grant** through the MA Executive Office of Energy and Environmental Affairs.



PROJECT OBJECTIVES - CITY

- Assess flooding vulnerability and risk - now and future
- Find opportunities on city property for resilient measures
- Develop an emergency response and evacuation plan
- Create an implementation plan to increase resilience



SCOPE OF WORK

- **Task 1: Project Kick-off, Management, and Reporting**
- **Task 2: Public Involvement and Community Engagement**
 - Three stakeholder engagement workshops
 - Online and print outreach material
 - Personal stories data gathering
 - Website and StoryMap
 - Community Liaisons

Salem, MA > Collins Cove to Willows Resilience Study



Collins Cove to Willows Resilience Study

The project **goal** is to conduct a resilience study for the Collins Cove to Willows area of Salem, with an emphasis on assessing vulnerability and risk of the study area to coastal and inland flooding. The study focuses on city-owned property including roadway/right-of-way infrastructure, linear parks/bike paths, Collins Cove Park, Collins Cove Beach, Memorial Park, Salem Willows Park, and Winter Island Park.

The project **objectives** include:

- Review and apply coastal flooding projections;

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SCOPE OF WORK

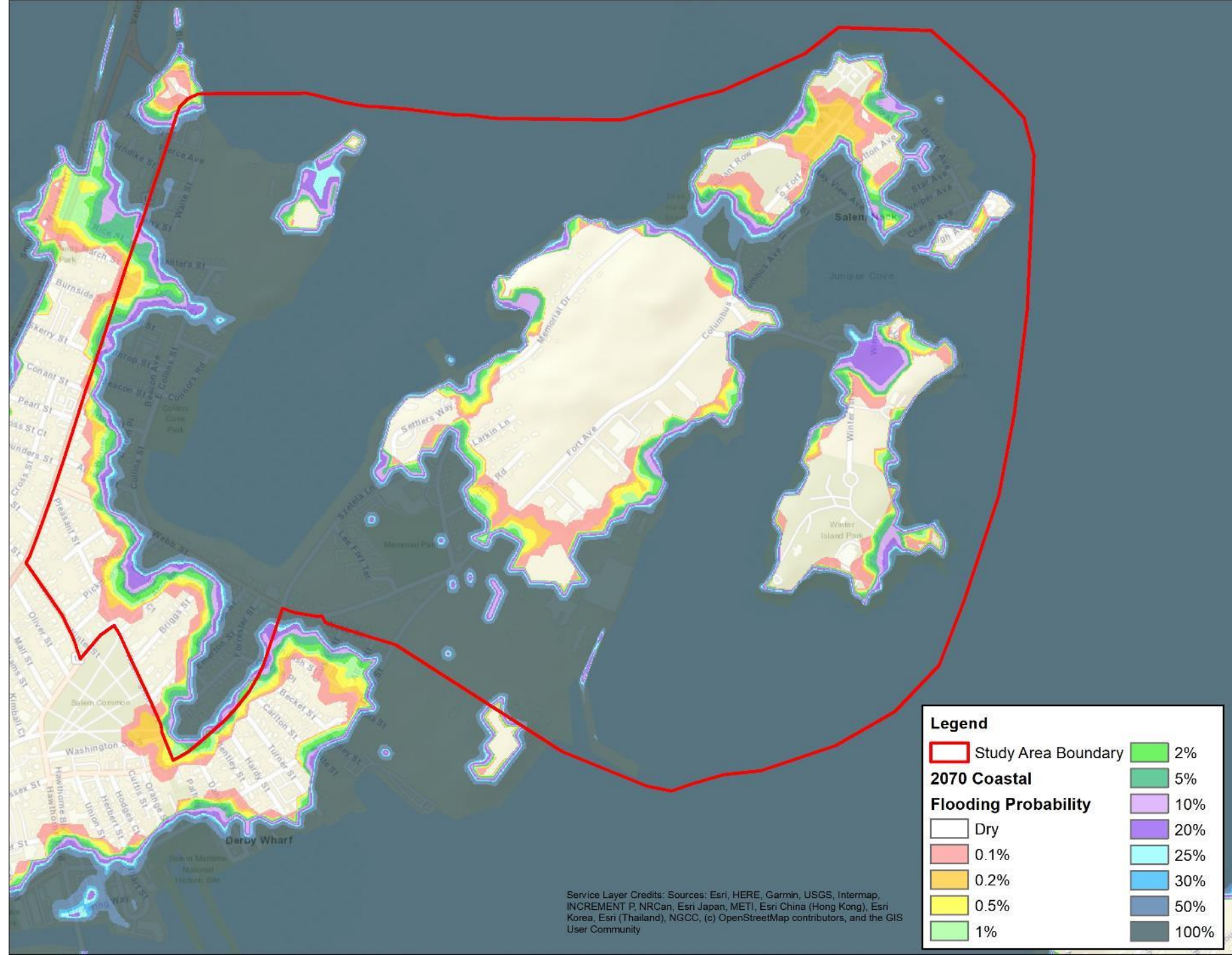
- **Task 3: Assess Current and Future Vulnerabilities and Risks to Coastal and Inland Flooding**
 - Review past studies and reports
 - Confirm ownership of coastal properties
 - Map critical facilities and infrastructure
 - Create model of stormwater system
 - Utilize results from the Massachusetts Coast Flood Risk Model (MC-FRM)



Stormwater model created using PCSWMM software

SCOPE OF WORK

Progression of the risk of coastal flooding based on MC-FRM results (Present Day – 2070)



SCOPE OF WORK

- **Task 4: Identification and Assessment of Resilience Options to Reduce Risks**
 - Mix of structural, non-structural, and nature-based adaptation measures
 - Assess feasibility of options
 - Develop a toolkit of resilience options for coastal parks
- **Task 5: Collins Cove to Willows Resilience Study Report**
 - Summarize findings
 - Implementation plan



SCHEDULE

Task	September	October	November	December	January	February	March	April	May	June
Task 1: Project Kick-off, Management, and Reporting										
Sub-task 1.1 Kick-off Meeting with Town, EEA, and Consultant										
Sub-task 1.2 Monthly Progress Reports FY23										
Sub-task 1.3 Project Case Study										
Task 2: Public Involvement and Community Engagement										
Sub-task 2.1 Workshop #1										
Sub-task 2.2 Workshop #2										
Sub-task 2.3 Workshop #3										
Sub-task 2.4 Online and Print Outreach Material										
Sub-task 2.5 Personal Stories Data Gathering										
Sub-task 2.6 Collins Cove to Willows Resilience Study Website and StoryMap										
Sub-task 2.7 Community Liaisons										
Task 3: Assess Current and Future Vulnerabilities and Risks to Coastal and Inland Flooding										
Sub-task 3.1 Draft Vulnerability Assessment and Modeling Results Memo										
Sub-task 3.2 Final Vulnerability Assessment and Modeling Results Memo										
Task 4: Identification and Assessment of Resilience Options to Reduce Risks										
Sub-task 4.1 Draft Resilience Options Memo										
Sub-task 4.2 Final Resilience Options Memo										
Sub-task 4.3 Resilient Coastal Parks Toolkit										
Sub-task 4.4 Resilient Coastal Parks Toolkit										
Task 5: Collins Cove to Willows Resilience Study Report										
Sub-task 5.1 Draft Collins Cove to Willows Resilience Study Report										
Sub-task 5.2 Final Collins Cove to Willows Resilience Study Report										

STAKEHOLDER ENGAGEMENT – gathering input from you and others

- 3 public meetings – tonight, a virtual winter meeting, and one in the spring
- Neighborhood Associations
- Stakeholder data gathering interviews
- Walk and Talks of the different areas in the study area
- “Pop-Up” events

To promote equitable outcomes for this climate resiliency project,

SSCW is hiring someone who can represent the neighborhoods’ EJ Populations and Climate Vulnerable Populations. The Community Liaison is a paid part-time position to help expand public involvement and community engagement in a culturally competent and meaningful way.

Tonight's STAKEHOLDER ENGAGEMENT

Collect feedback on current vulnerabilities, risks, and ideas for solutions

- Each table has a different neighborhood map: *Bridge St./E. Collins St., Webb St./Common, Szetela Lane, Willows, & Winter Island*
- Please move from table to table to contribute your observations and knowledge
 - Put a numbered sticker on the map where you've observed flooding
 - Explain what you've observed on an **Orange or Pink** index card. Include the sticker number and any details: date, depth of water, coastal vs rain, etc.
 - Share general **Concerns and/or Solutions on the Green** index cards

THANK YOU FOR YOUR PARTICIPATION!

Remember to share
comments & photos on:

[publicinput.com/Collins
Cove2Willows](https://publicinput.com/CollinsCove2Willows)

