## **Tutorial:**

# Rapid Property Assessment & Coastal Exposure or Rapid PACE

www.beachsamp.org/relatedprojects/pace/















## Rapid PACE

### What is it?

- provides property-specific information about exposure to coastal hazards
- provides a comprehensive overview, enabling proactive decision making

### Who is it for?

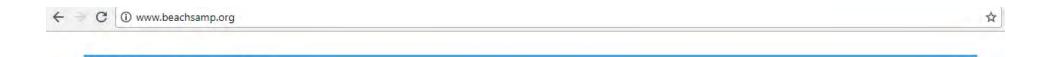
- municipal officials can request a summary report for a specific site
- the public can compile their own site-specific reports using the same information used to compile reports for municipal officials

### What are some examples of the information available?

- sea level rise
- storm surge
- erosion
- marsh migration areas

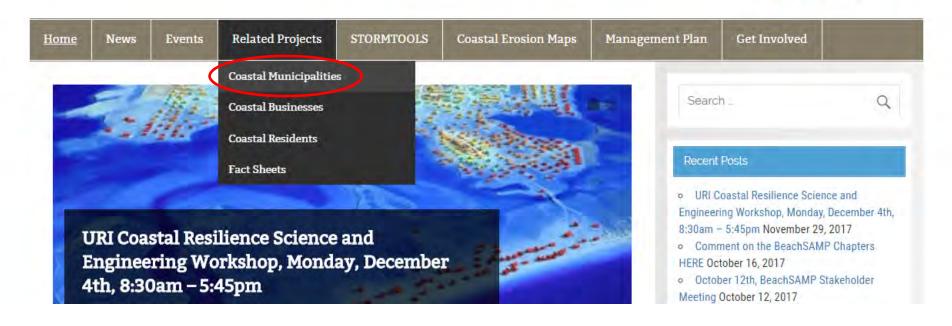
- coastal water type
- jurisdiction (CRMC vs. DEM)
- location within various special management areas

Accessing Rapid PACE



RI Shoreline Change Special Area Management Plan





1. Go to www.beachsamp.org

About

**Project Partners** 

Contact Us

2. Open the Related Projects tab, then click Coastal Municipalities

## **Coastal Municipalities**

### **Resources to Inform Adaptation Planning & Actions**

Sea Level Affecting Marsh Migration (SLAMM)



Statewide maps illustrating how salt marshes may migrate as sea level changes.

View the maps here.

View the final report here.

#### Rapid Property Assessment and Coastal Exposure (Rapid PACE)



More frequent severe storms and sea level rise due to climate change require proactive responses from local decision makers. **Rapid Property Assessment and Coastal Exposure (Rapid PACE)** is a <u>free</u> screening tool available to municipal officials that provides a property-specific summary of exposure to coastal hazards typically within 48-hours of a request.

The report compiles <u>existing</u> information, some of which can assist in regulatory decisions while others support planning initiatives. The information helps municipal officials make informed decisions and safer, more resilient communities.

 Scroll down, then click <u>Rapid Property Assessment and Coastal Exposure</u> (<u>Rapid PACE</u>)

## RI Shoreline Change Special Area Management Plan



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STORMTOOLS

Coastal Erosion Maps

Management Plan

Get Involved

## Rapid PACE

## Rapid Property Assessment and Coastal Exposure (Rapid PACE)

Preparedness and Decision Making for Coastal Residents in Rhode Island and Connecticut

### **Interactive Maps**



More frequent intense storms and increasing sea levels require proactive planning and action for our communities to become more resilient. The Rapid Property Assessment and Coastal Exposure (Rapid PACE) mapping tool helps municipal officials and property owners view areas exposed to storms, erosion, and sea level rise; evacuation zones, salt marsh migration areas and areas of coastal and wetland jurisdiction are also mapped. Municipal officials can request a free screening for a property. Rapid PACE for the general public hosts an interactive map, an easy-to-use tool for identifying coastal flooding risk and possible impacts on your property and your community. The Rapid PACE uses existing, publicly available sources of data that can be summarized for your property.

### **Data Sources**

Sample Report

Municipal officials may request a Rapid PACE Assessment for a site-specific property to inform planning initiatives or regulatory decisions, and enhance efforts that support safer, more resilient communities.

- Click Mapping Tool to view interactive, online maps
- Click **Summarized for Your Property** for a sample Rapid PACE report
- Click **Publicly Available Sources of Data** for a list of Rapid PACE's data sources

#### Slide 6

text will change when Sarah's edits are made. Also, I think that we should reorder, and put click mapping tool first. This can be useful for public and for munis, who can have a report done for them or they can do it themselves

Pam Rubinoff, 1/17/2018

## Sample Rapid PACE Report

#### TABLE OF CONTENTS

A	BOUT THIS REPORT
RE	PORT INFORMATION
SI	TE INFORMATION
	Site Location
	CRMC Jurisdiction
	CRMC Special Area Management Plan (SAMP)
	CRMC Water Type
	DEM Critical Resource Management Area (CRA)
	Coastal Freshwater Wetlands Jurisdiction
E	RISTING RISKS
	Erosion
	FEMA Flood Zones
	U.S. Fish & Wildlife Service Coastal Barrier Resource System (CBRS)
	Storm Surge 100 Year Storm w/ no Sea Level Rise
	Hurricane Evacuation
FL	JTURE RISKS
	Sea Level Rise and Storm Surge
	Wetland Migration
C	OMMUNITY RISK
	Vulnerable Roads and Bridges
DI	EFINITIONS
RE	ESOURCES

### **RapidPACE**

#### **EXISTING RISKS**

#### Erosion

CRMC <u>Shoreline Erosion maps</u> show shoreline rates of change that are applied to the CRMC's regulatory program to establish construction setbacks from coastal features.

Shoreline erosion has not seriously impacted the site since record keeping began in 1939.

#### **FEMA Flood Zones**

The Rhode Island Floodplain Mapping Tool (RIEMA) is an online mapping resource that shows the regulatory flood zones developed for the FEMA National Flood Insurance Program and the RI State Building Code. This tool provides users with current flood risk for residences, businesses, or other structures statewide. While the tool is not intended for legal, engineering, or surveying purposes, it does provide users with an approximate FEMA flood zone determination relative to the flood hazard areas delineated on FEMA's FIRMs. The FEMA FIRM designations will determine construction requirements for new or substantially improved structures. See your local building official for more information.

The property lies within the VE18 FEMA flood zone. VE flood zones are described as "Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30 year mortgage." (CRMC RI Coastal Property Guide)



## Rapid PACE Data Sources Available

## Provides links to:

- RIGIS RI Geographical Information **Systems**
- CRMC
- RIDEM
- RIEMA
- etc

- Data and information for Evacuation Areas available from RIEMA
  - http://www.riema.ri.gov/resources/citizens/prepare/evacuation.php
- Data available for download from RIGIS
  - o http://www.rigis.org/data/evacAreas

#### STORMTOOLS storm surge and sea level rise (1% Chance Annual Flood; 1% Flood + 7ft

- Sea level rise data and information available from STORMTOOLS
  - o http://www.beachsamp.org/stormtools/
- http://www.beachsamp.org/stormtools/stormtools-interactive-maps/
- Downloadable data available from RIGIS
- http://www.rigis.org/data/stormtools http://www.rigis.org/data/stormtools#do
- Sea level rise curves available from US Army C
- o http://corpsclimate.us/ccaceslcurves.cfm

#### Sea Level Affecting Marsh Migration (SLAMM) 1ft:

- SLAMM information available from CRMC
- o http://www.crmc.ri.gov/maps/maps\_slan Downloadable data available from RIGIS
- o http://www.rigis.org/data/SLAMM

- Downloadable data available from RIGIS
- o http://www.rigis.org/datasets/coastal-bar - Coastal Barrier online mapping tool available for
  - o https://www.fws.gov/cbra/maps/Mapper

Ranid PACE was developed by the URI Coastal Resor Grant, in collaboration with the <u>University of Con</u>
Network (EDEN), which works on community prepare
Smith-Lever Special Needs Competitive Grants Progran Agriculture at the U.S. Department of Agriculture.

For more information, please visit the Rapid PACE we Island Coastal Resources Center (ccondit@uri.edu) wi





#### Special Area Management Plan (SAMP)

- Data obtained from the Rhode Island Coastal Resources Management Council (CRMC) Special Area Management Plan (SAMP) website
  - o http://www.crmc.ri.gov/samps.html

- Coastal Water type data obtained from CRMC
  - o http://www.crmc.ri.gov/maps/maps wateruse.html

#### Critical Resource Area (CRA)

- Critical Resource Area data used for onsite wastewater treatment systems obtained from the Rhode Island Department of Environmental Management (RIDEM)
  - http://www.dem.ri.gov/programs/water/owts/
- o http://www.dem.ri.gov/programs/water/owts/regulations-reports/crabndry.php - Data is also viewable online

- Wetland data and information obtained from RIDEM
  - o http://www.crmc.ri.gov/maps.html
- . Data available for download from RIGIS
  - http://www.rigis.org/data/cstlWetPres o http://www.rigis.org/data/NWI

- Shoreline Change data and information obtained from CRMC. Online maps available for
- http://www.crmc.ri.gov/maps/maps\_shorechange.html
- · Online map viewer available
  - http://www.beachsamp.org/coastal-erosion-maps.
  - o Shoreline Change from 1939-2014 online map

- Flood zone data and information obtained from the Federal Emergency Management Agency (FEMA) and the Rhode Island Emergency Management Agency (RIEMA). Online flood zone mapper viewable at:
- http://www.riema.ri.gov/resources/citizens/mitigation/mapping.php Additional information is available at the FEMA Map Service Center
  - o https://msc.fema.gov/portal

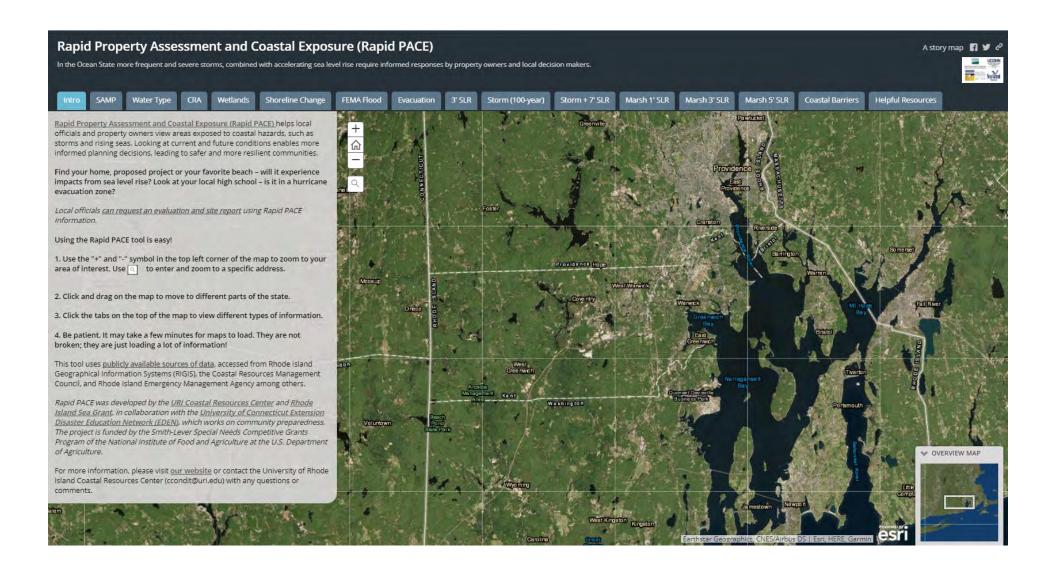








## **Interactive Maps**



### Rapid Property Assessment and Coastal Exposure (Rapid PACE)

n the Ocean State more frequent and severe storms, combined with accelerating sea level rise require informed responses by property owners and local decision makers.

### Use tabs to view different data

Intro SAMP Water Type CRA Wetlands

Welcome to Rapid PACE!

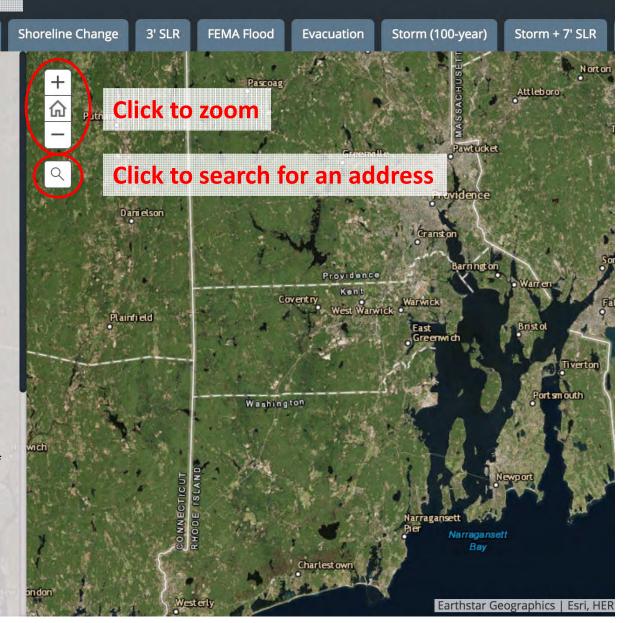
Rapid Property Assessment and Coastal Exposure (Rapid PACE) helps local officials and property owners view areas exposed to coastal hazards. Looking at current and future conditions enables more informed planning decisions, leading to safer and more resilient communities.

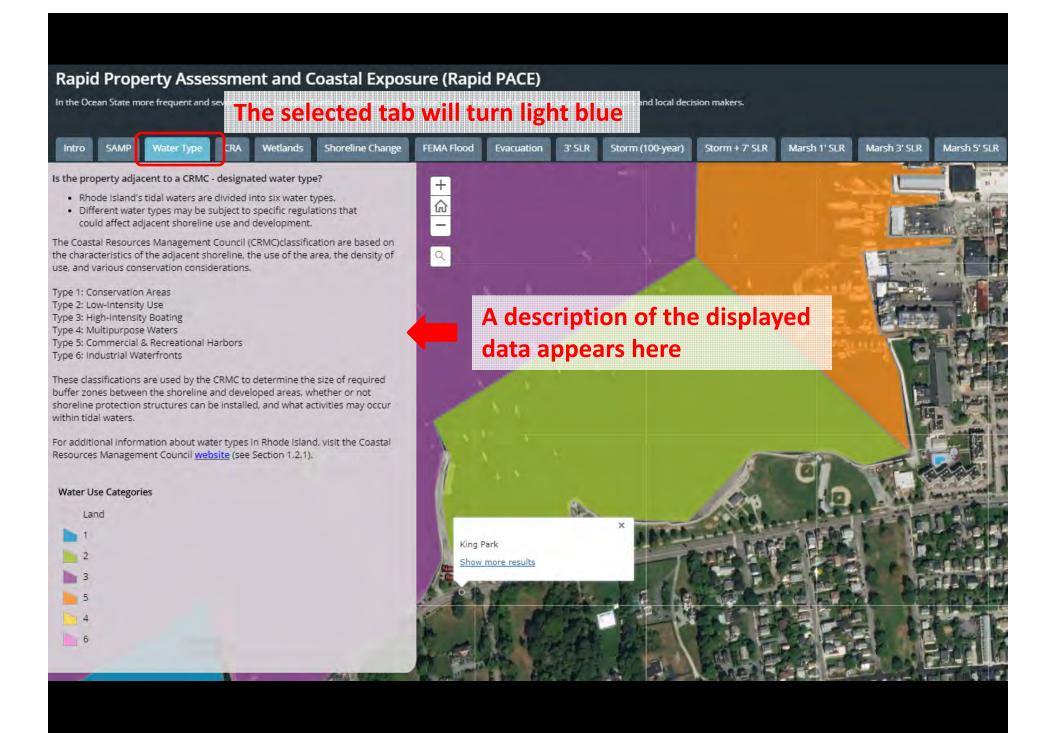
Find your property or your favorite beach – will it experience impacts from sea level rise? Look at a local school – is it in a hurricane evacuation zone? The Rapid PACE tool will help you become more informed and aware of the risks and impacts your home and community may experience.

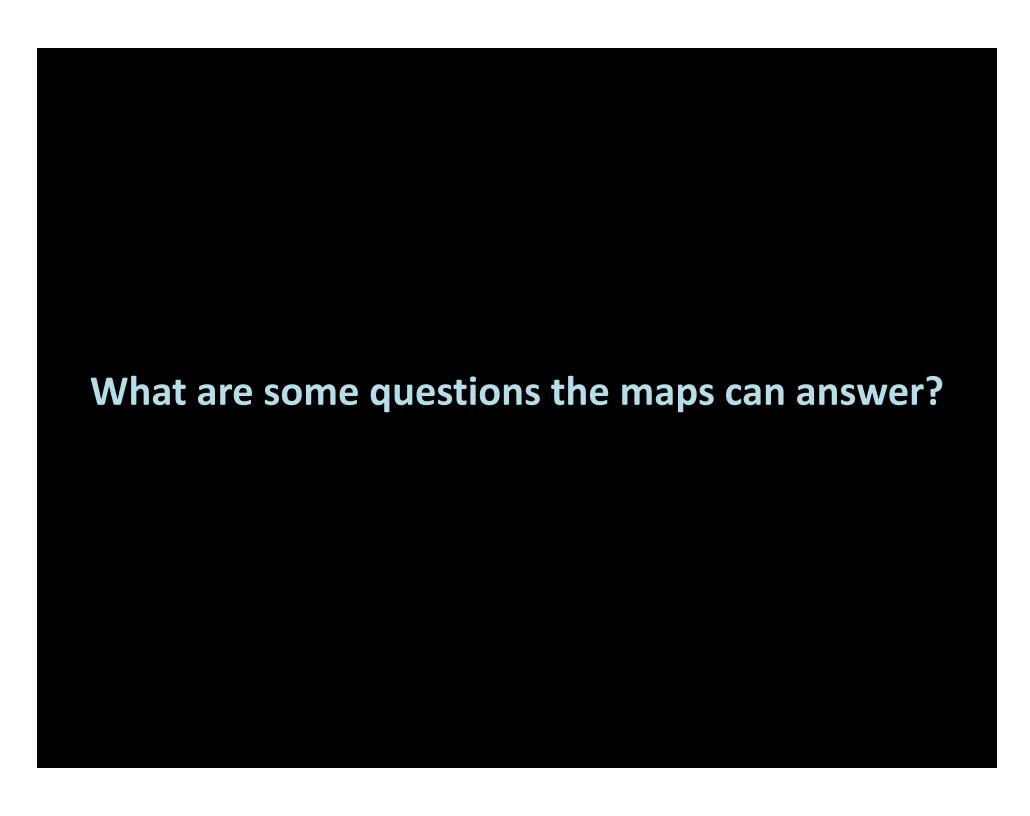
Local officials <u>can request a site report</u> using this information.

Using the Rapid PACE tool is easy!

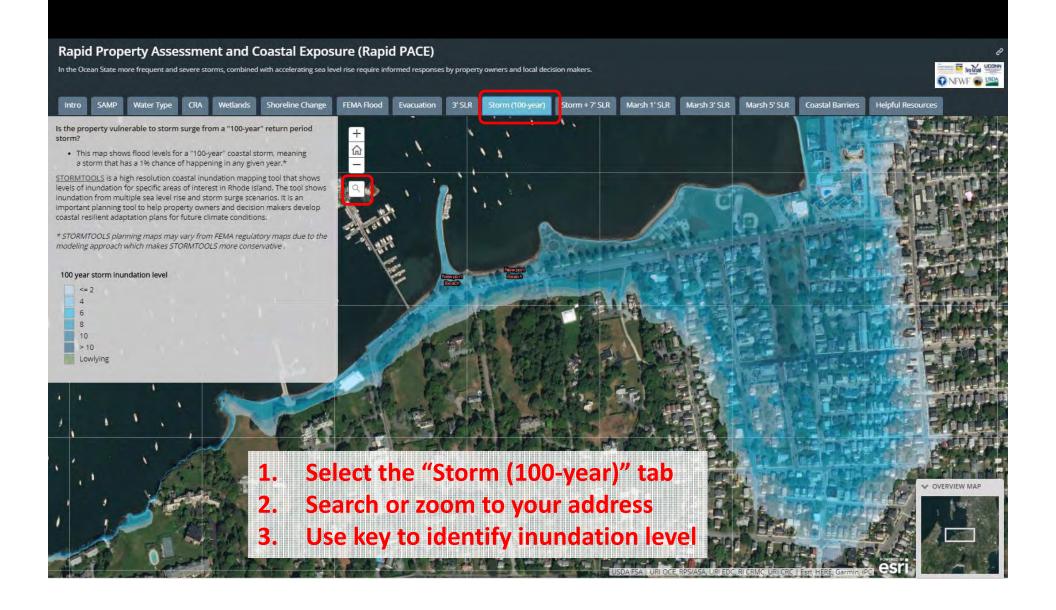
- 1. Use the "+" and "-" symbol in the top left corner of the map to zoom to your area of interest. Use the magnifying glass to enter and zoom to a specific address.
- 2. Click and drag on the map to move to different parts of the state.
- 3. Click the tabs on the top of the map to view different types of information.
- 4. Be patient. It may take a few minutes for maps to load. They are not broken; they are just loading a lot of information!



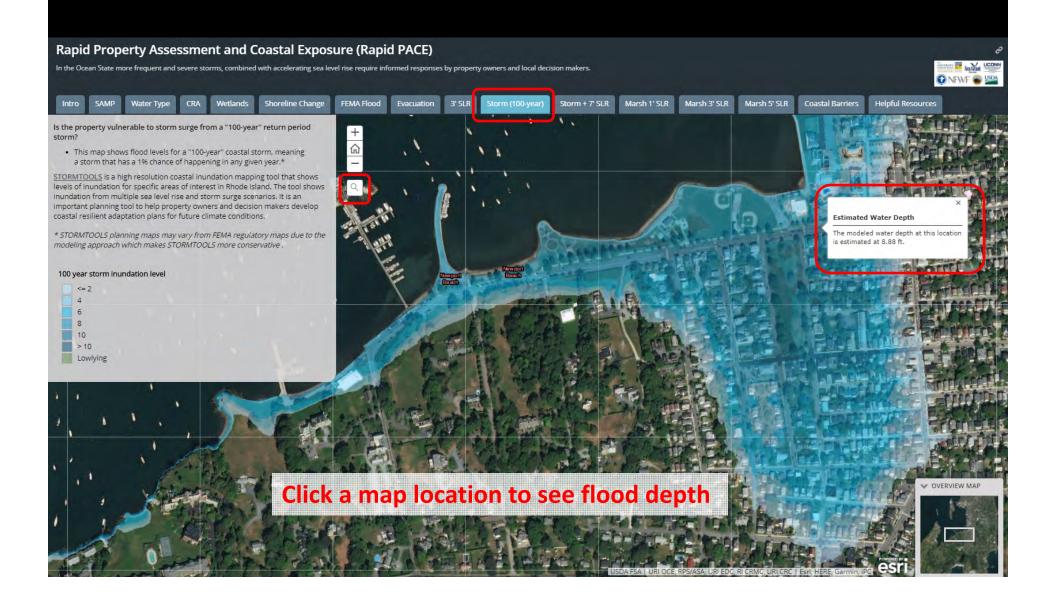




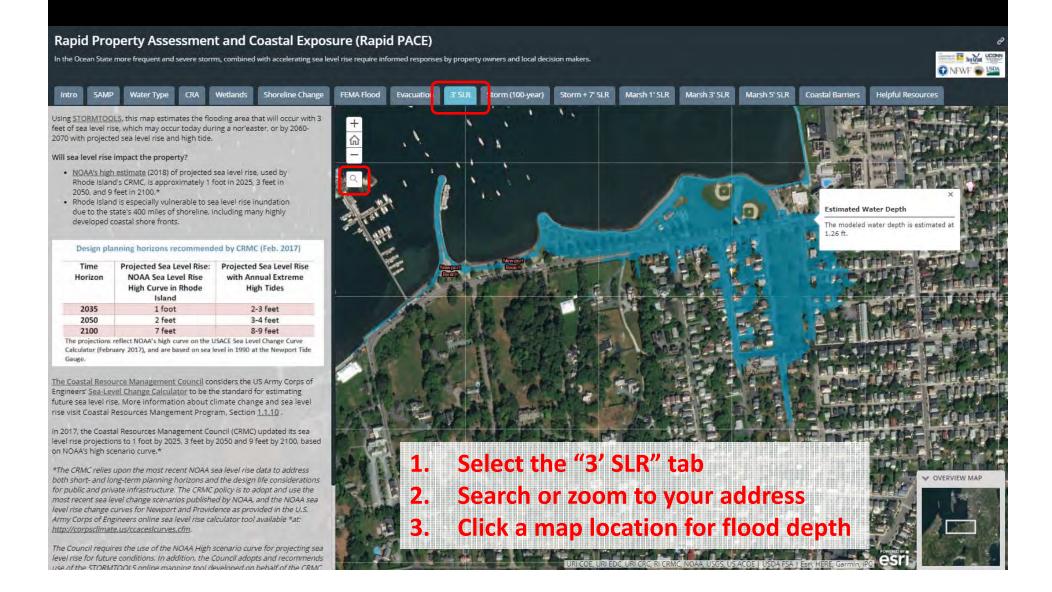
# Will King Park, Newport, RI flood during a 100-year storm?



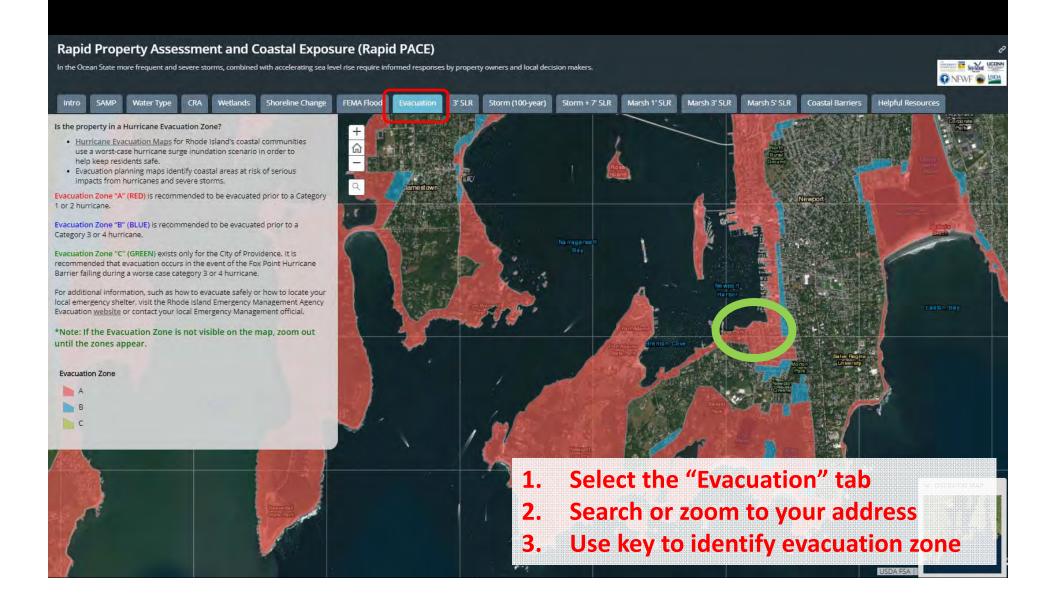
# How **DEEP** will flooding be at **King Park, Newport, RI** during a 100-year storm?



# Will King Park, Newport, RI flood at 3 feet of sea level rise?



# Do I need to evacuate during a hurricane at King Park, Newport, RI?



## For more information on **Rapid PACE**, contact:

Teresa Crean, AICP tcrean@uri.edu

Pam Rubinoff, CFM rubinoff@uri.edu

Coastal Resources Center, University of Rhode Island

www.beachsamp.org/relatedprojects/pace/







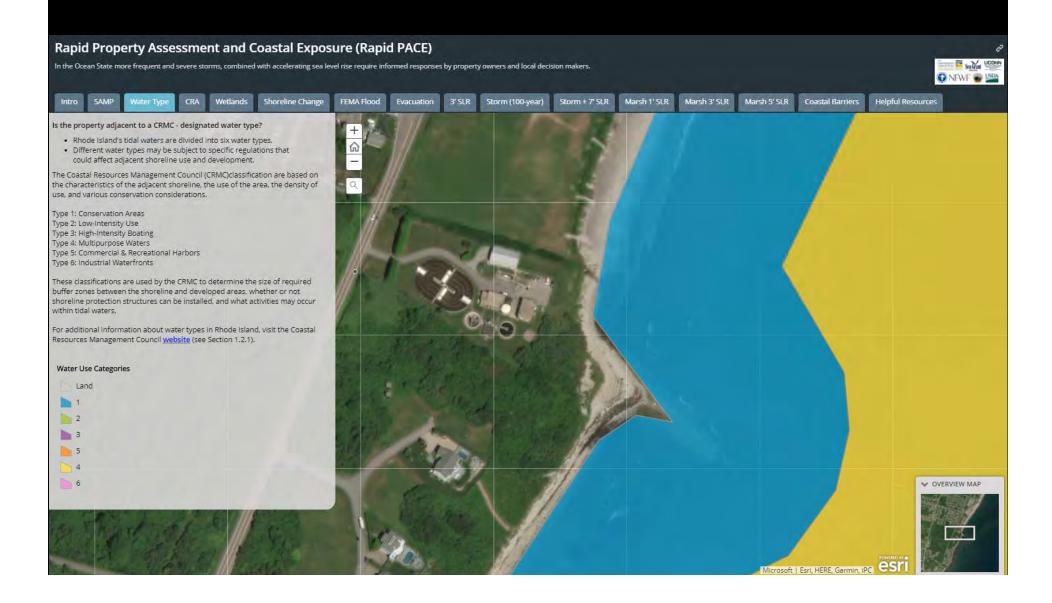




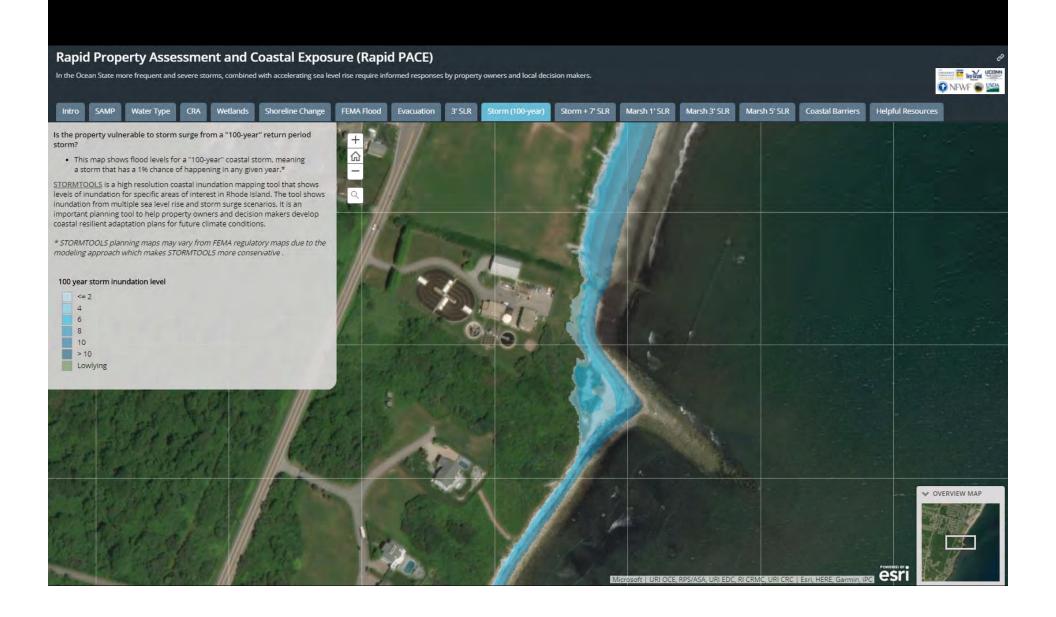




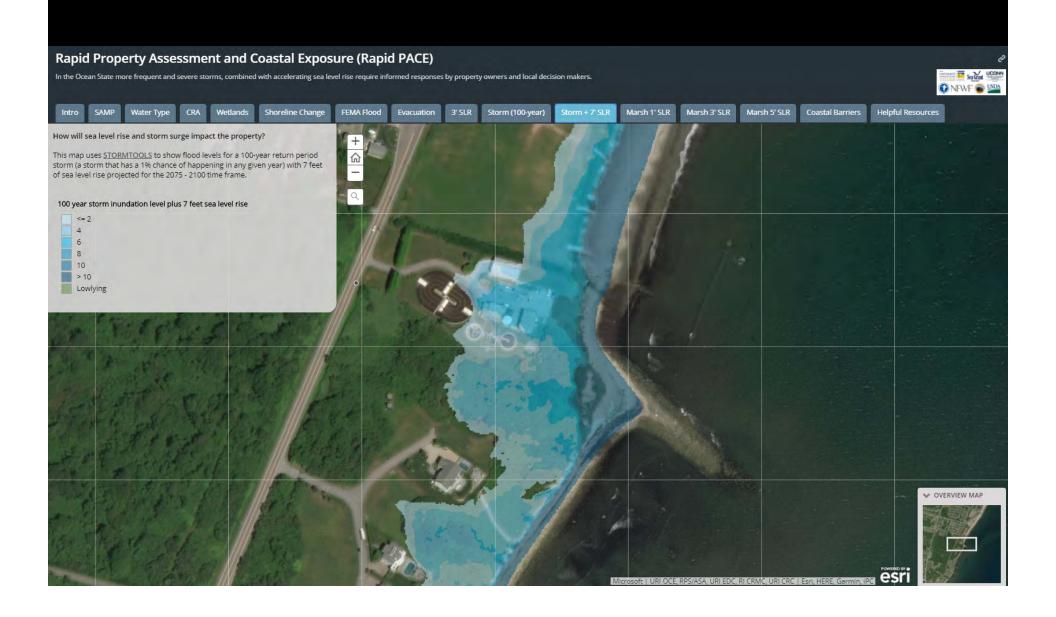
# Scarborough Wastewater Treatment Facility (WWTF) 990 Ocean Road, Narragansett, RI



# Will **Scarborough WWTF** flood during a **100-year storm**?



# Will <u>Scarborough WWTF</u> flood during a **100-year storm PLUS 7-ft sea level rise**?



# How **DEEP** will flooding be at **Scarborough WWTF** during a **100-year storm PLUS 7-ft sea level rise**?

