# RESILIENTNEWJERSEY

RARITAN RIVER & BAY COMMUNITIES

## PROJECT OVERVIEW

### What Is Resilient NJ?

The Resilient New Jersey Raritan River and Bay Communities program aims to develop a roadmap to address flooding in the municipalities of Carteret, Old Bridge, Perth Amboy, South Amboy, Sayreville, South River, and Woodbridge. This joint effort between the municipalities, the New Jersey Department of Environmental Protection (NJDEP), YMCA, and Middlesex County provides an opportunity for the area to address flood-related hazards at a regional scale, to become more resilient, and to improve the quality of life for its more than 300,000 residents. In addition to the Raritan River and Bay Communities program, communities are partnering with NJDEP to lead similar projects in three other areas: Northeastern NJ, Long Beach Island, and Atlantic County Coastal Region.

### PROCESS & OUTCOMES

This effort will develop a regional resilience action plan to address flood-related hazards. This plan will be completed in Spring 2022. The diagram below summarizes how the regional resilience action plan will be developed.

DEVELOP A REGIONAL VISION AND IDENTIFY SHARED PRIORITIES

What changes do you want to see for yourself and future generations?

ANALYZE FLOOD RISK

Where / how do you currently experience flooding?

IDENTIFY TOOLS TO ADDRESS RISKS AND REFINE BASED ON EVALUATION CRITERIA experience flooding?

What types of flood protection approaches or strategies would you like to see implemented in your community?

DEVELOP
RESILIENCE
SCENARIOS
BASED ON
VISION, RISKS,
AND TOOLS

REFINE THE
PREFERRED
SCENARIO
BASED ON
STAKEHOLDER
FEEDBACK

DEVELOP
ACTION
PLAN

### **GOALS**

The project is focused on developing a regional resilience action plan to address flood-related hazards. Input from the people who live, work, and play in the region will be critical to the success of the program. The project goals have been developed based on what we have heard from people so far. We welcome your continued input to refine these goals!



Build on ongoing resilience planning by addressing gaps and opportunities within the region.



Ensure representation and participation from socially vulnerable populations to address their needs and risks.



Develop innovative and implementable solutions that increase resilience in both the short- and long-term.



Enhance the value and integrity of ecological, recreational, and economic resources in the region.



Ensure collaboration among a wide variety of stakeholders.



# HOW TO GET INVOLVED

ATTEND PUBLIC MEETINGS
Visit resilientnewjersey.com
& sign up for our emails.

DOWNLOAD THE IRYS APP available in Android & iOS



on social media





SHARE YOUR THOUGHTS THROUGH OUR SURVEY

LEAVE A VOICEMAIL on our project hotline at 732-661-3808

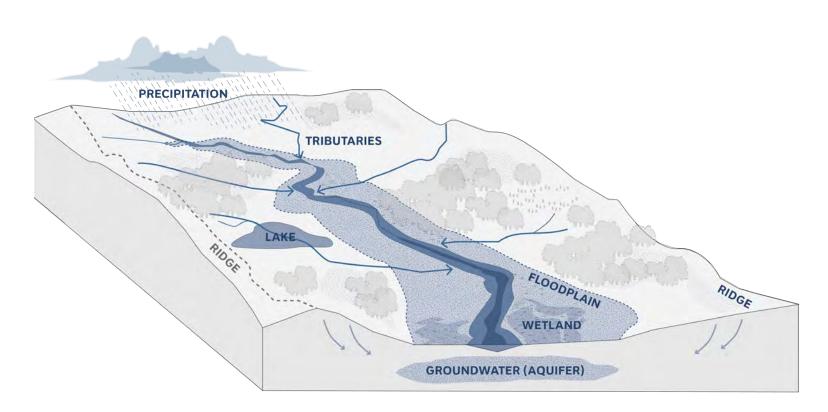
# RESILIENT NEW JERSEY

RARITAN RIVER & BAY COMMUNITIES

## FOCUS AREAS

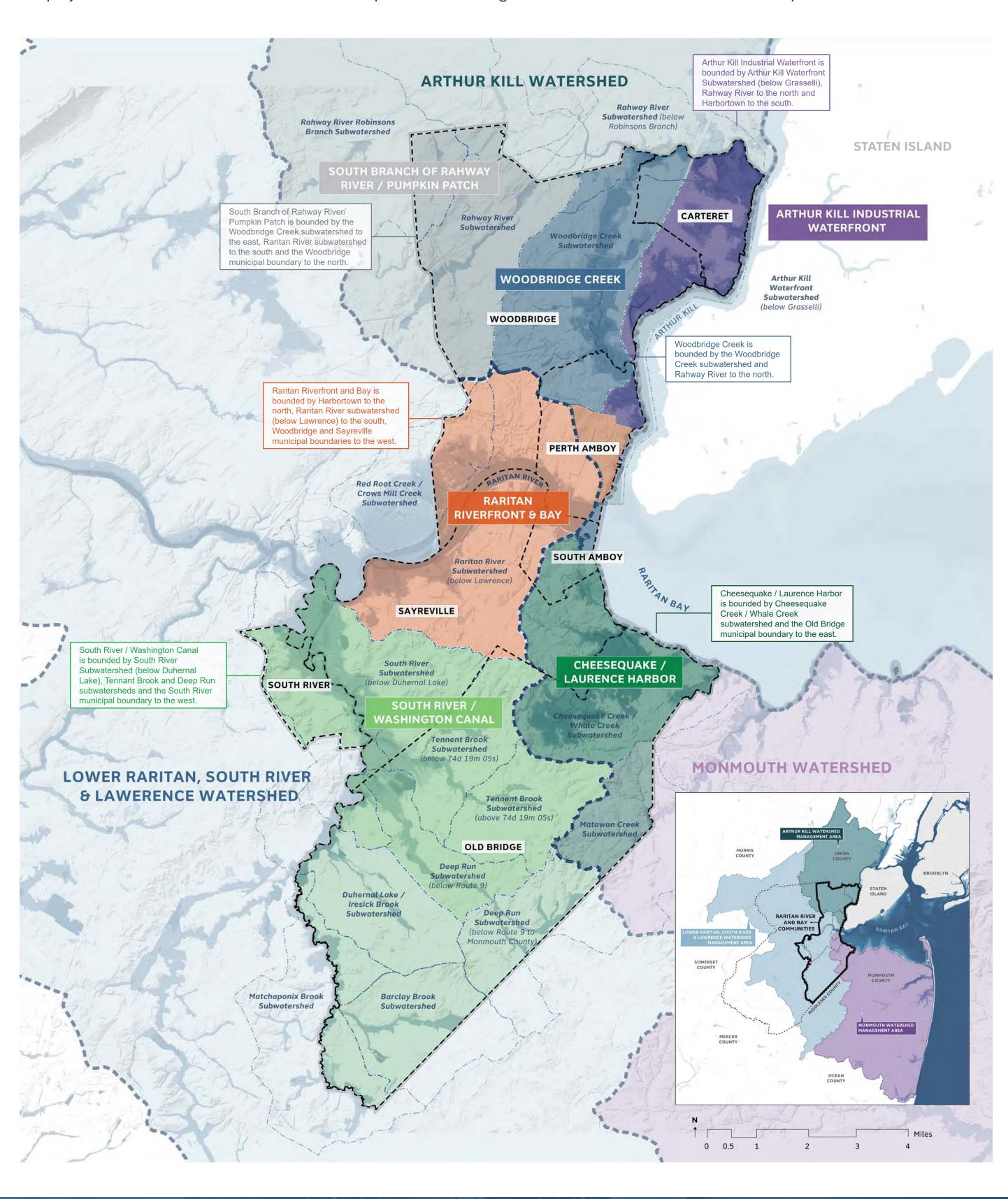
### What is a Watershed?

A watershed can most easily be thought of as an area within which, wherever water falls, it will all eventually flow to the same place. Watersheds can cross municipal and state boundaries, which can present a challenge when planning for flooding and risk reduction. Water doesn't obey our municipal boundaries. The actions in one municipality can affect flood risk in another.



### **FOCUS AREAS**

FOCUS AREAS AND SUB-WATERSHEDS IN RARITAN RIVER AND BAY COMMUNITIES. A watershed-based approach to planning will lead to more effective outcomes in reducing flood risk. The Raritan River and Bay Communities study area is divided into six focus areas based on local sub-watersheds and land uses. Though feedback for this project will primarily be collected at the municipal level, the project team will use the focus areas to develop resilience strategies that adress flood risks across municipal boundaries.



### **FLOOD RISK TYPES**



New Jersey Coast - Aerial views of damage caused by Hurricane Sandy to the New Jersey coast - US Air Force photo archive

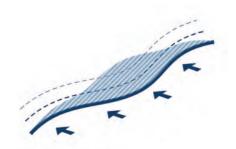
### **COASTAL STORM FLOODING**



Coastal storms create flooding due to surge—a rise in water levels due to storm pressure and waves—which can also lead to coastal erosion.

Ocean City, NJ - Sunny day flooding in Ocean City during evening high tide on June 12, 2018. Photo courtesy of Suzanne Leary Hornick.

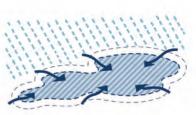
### **TIDAL FLOODING**



Low-lying coastal areas flood when water levels rise above ground elevation due to high tides.

An aerial view of flooded streets are seen in Helmetta of New Jersey, United States on August 22, 2021 as Tropical Storm Henri hit east coast. (Photo by Tayfun Coskun/Anadolu Agency)

### **RAINFALL FLOODING**

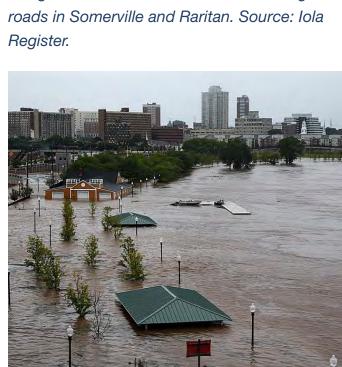


Lower lying areas, both along waterways and inland, can flood due to heavy rain events overwhelming drainage infrastructure.

### **RIVERINE FLOODING**



Raritan, NJ - Hurricane Ida - Remnants of Hurricane Ida created widespread flooding along areas of Route 206 and surrounding roads in Somerville and Raritan. Source: Iola Register.



New Brunswick, NJ - Hurricane Irene led to joint flooding along Raritan River. Source: AP



Occurs when rivers, streams, lakes, reservoirs, or canals overflow due to extreme rainfall or rapid snowmelt.

### **JOINT FLOODING**



Combination of riverine and coastal flooding along tidally influenced rivers.

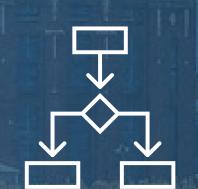
### WHAT WE WANT TO HEAR FROM YOU



What are the critical places and spaces in your community?



How have you been impacted by flooding?



What factors are most important when making decisions to reduce flood risk?



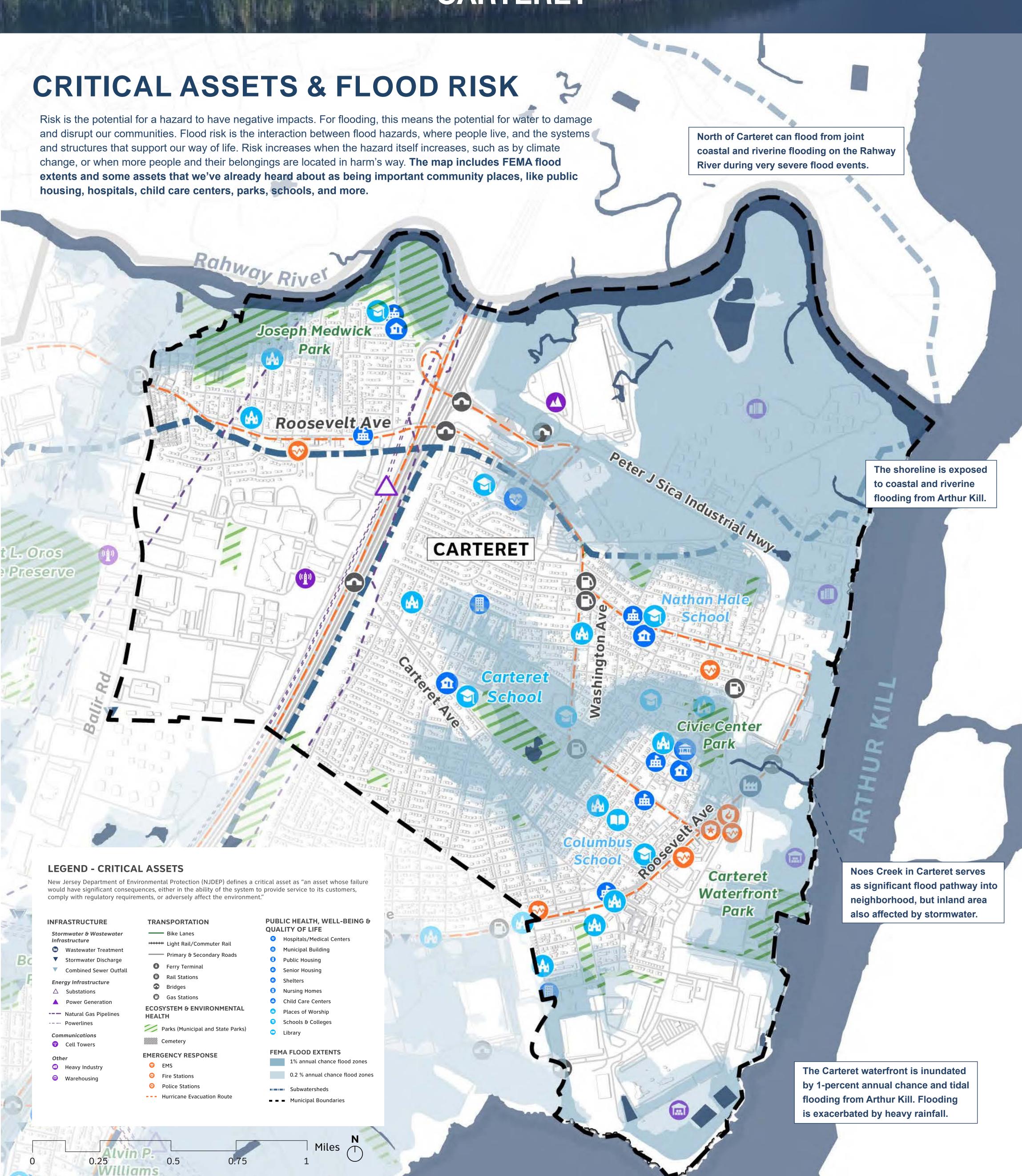
What do you want to see in your community?

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# RESILIENT NEW JERSEY

CRITICAL ASSETS & FLOOD RISK

CARTERET



# WHAT WE WANT TO HEAR FROM YOU



What other types of critical places and spaces are in your community?

Jemorial Park



Why are these places/ spaces important to you and your community?



Have any of these places flooded in the past?



Share Your Thoughts
With Use Through
Our Survey

# RESILIENT NEW JERSEY

RESILIENCE STRATEGIES

### CARTERET

### RESILIENCE STRATEGIES

Resilience is the ability of communities and systems to withstand and recover from extreme damaging conditions, including weather and other shocks or stresses. Building resilience will require a range of actions by individuals, communities, and governments. Three general approaches to creating more resilient communities are shown below. There are a variety of different strategies within each of these categories; physical interventions (e.g. flood defense systems or green infrastructure), changes to policy or regulations (e.g. building codes or zoning), or new operations or emergency response strategies (e.g. early warning systems or storm drain maintenance).\* Ultimately, a mix of these approaches will be needed, in addition to governance tools, outreach, and capacity building.

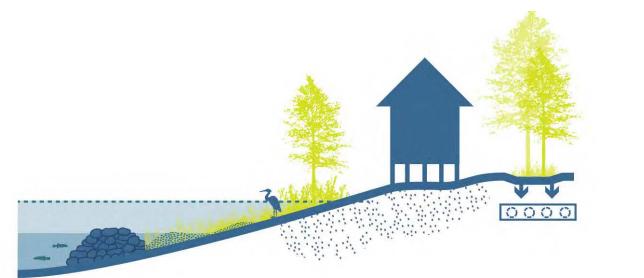
**PROTECT ASSETS** 

**FROM WATER** 

Reduce flood hazards through water management infrastructure or policy and building practices that work to either keep water out or reduce the force of flood waters.

LIVE WITH THE WATER

MOVE ASSETS AWAY FROM WATER



Reduce the impacts of flooding by improving the ability of communities and the built environment to withstand flooding. This may include education and changes in community and personal behavior, policy, or through adapting buildings, infrastructure, or other assets.

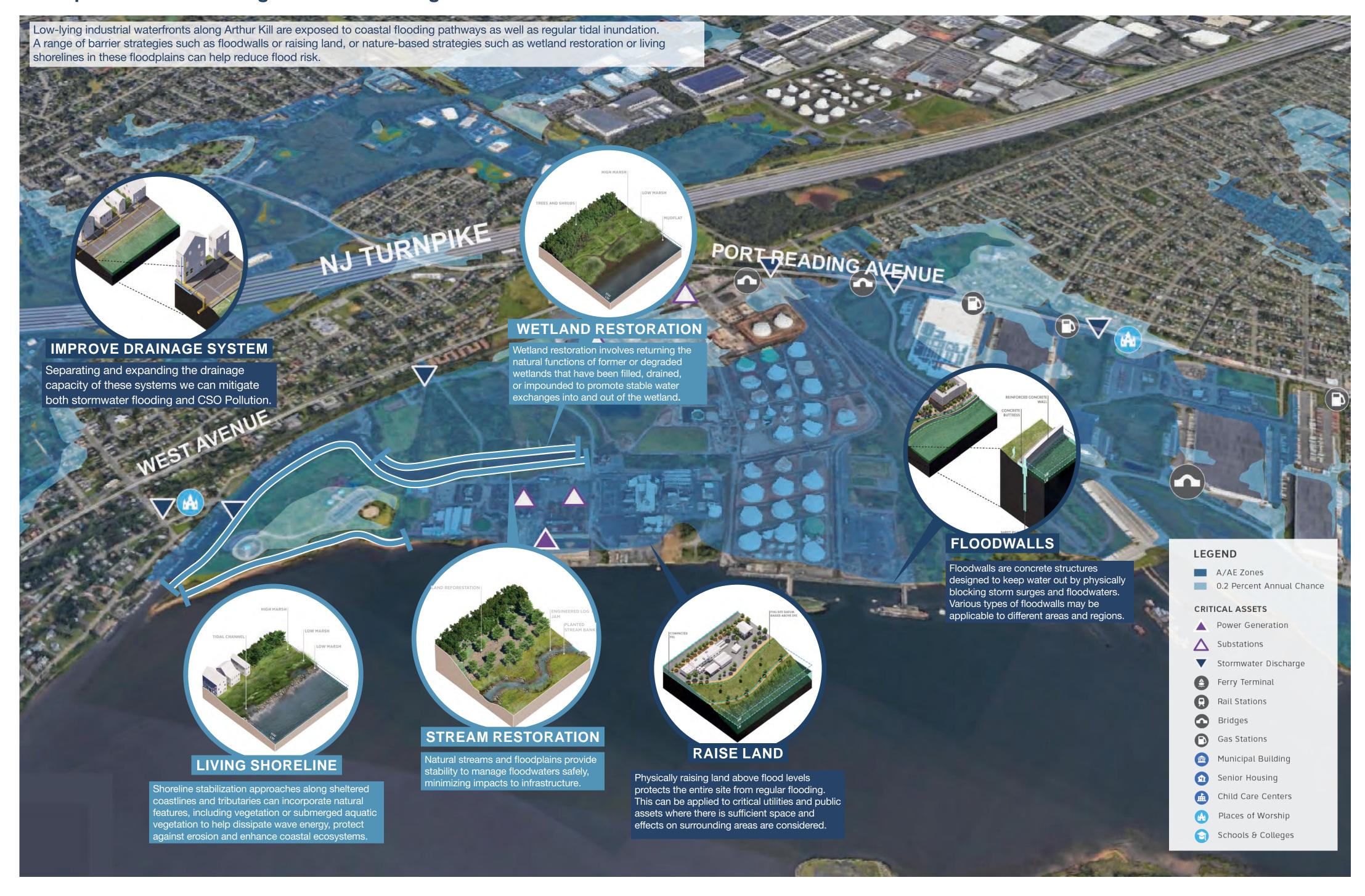


Reduce exposure to flood risk by managing growth or investment in areas exposed to flood hazards and moving highly at-risk communities or assets.

\*For a comprehensive list of potential resilience strategies, please see the "Resilience Toolkit" booklet.

### **APPLYING RESILIENCE STRATEGIES**

**Example: Possible Strategies for Inland Neighborhood Creeks Possible** 



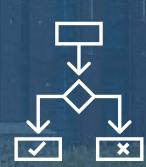
## WHAT WE WANT TO HEAR FROM YOU



What do you want to see in your community?



Are there specific resilience strategies you want to learn more about?



Are there any strategies that might work for your community?

Are there any strategies that would NOT work for your community?



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Our Survey