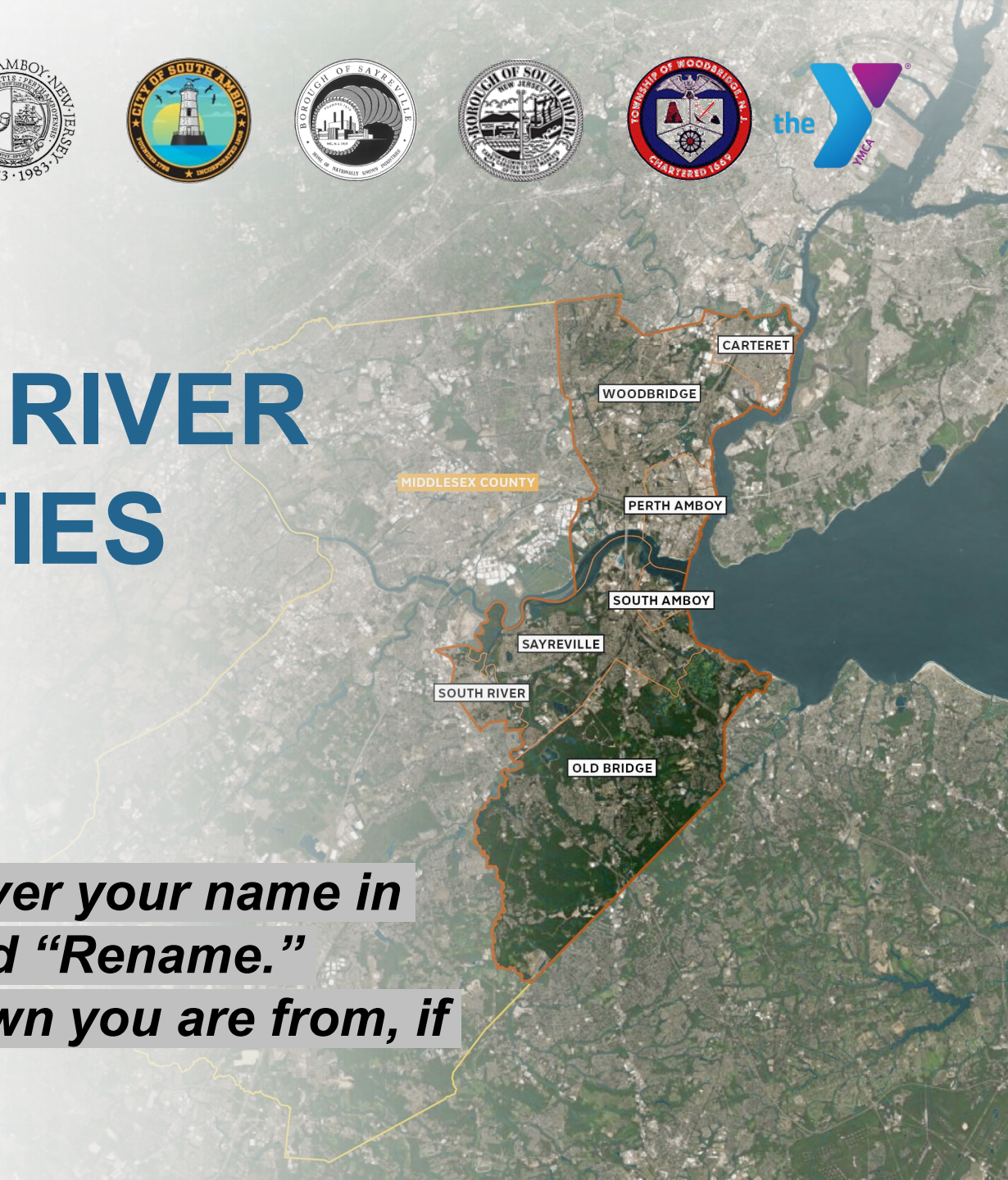


WELCOME TO THE RESILIENT RARITAN RIVER AND BAY COMMUNITIES COMMUNITY MEETING

Jan. 20th, 6 – 7:30 PM

Please update your name by hovering over your name in the participant window, click “More,” and “Rename.”

Provide your name and indicate what town you are from, if applicable.



How will today's meeting work?

1

Short presentation (30 min) –

Please stay on mute, respond to and ask questions in the chat

2

Q&A (5 min) –

Feel free to ask questions by raising your hand or in the chat

3

Breakout Discussions (55 min) –

Please engage actively through voice and chat

We will not reconvene as a group after the breakout groups.

We are live streaming the meeting and will post on YouTube and Facebook.

We will record all breakouts for use by the project team.

**What should the
Raritan River and Bay
region look like in
2070? What changes
do you want to see?**



If you are watching on Facebook Live and would like to join the Zoom meeting, you can join by going to <https://tinyurl.com/Jan-20th-2022> or by calling 646-558-8656.

Meeting ID: 815 7543 7475

What did we cover in October?

- What is the **Resilient Raritan River and Bay Project?**
- What are the **risks** facing the region?
- What do we mean when we say **resilience?**
- How will the plan help **the region become more resilient?**
- What have we heard from the **community** so far?
- How will we continue to **work with you?**

If you are watching on Facebook Live and would like to join the Zoom meeting, you can join by going to <https://tinyurl.com/Jan-20th-2022> or by calling 646-558-8656.

Meeting ID: 815 7543 7475

What we're here to share today:

- What more have we learned about flood risk?
- How is flood risk likely to change over time due to climate change?
- What are different ways to reduce flood risk over the next 50 years?
- What have we heard from you about your priorities and how are we using that feedback?
- How will we continue to work with you?

If you are watching on Facebook Live and would like to join the Zoom meeting, you can join by going to <https://tinyurl.com/Jan-20th-2022> or by calling 646-558-8656.

Meeting ID: 815 7543 7475

What we want to hear from you:



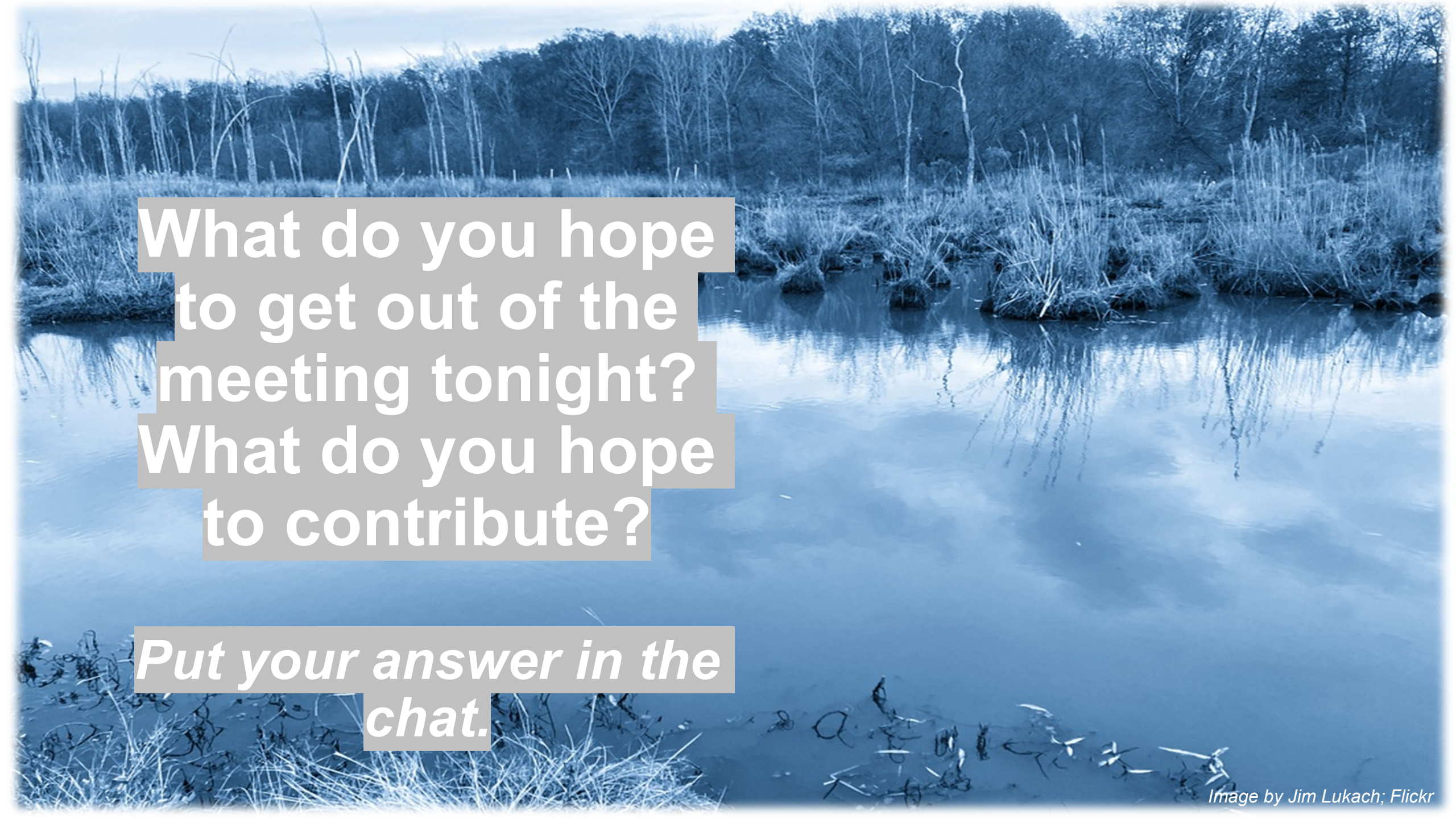
What areas and places at risk from flooding are you most concerned about?



What additional issues beyond flooding should we seek to address?



What types of actions do you want to see to reduce flood risks?



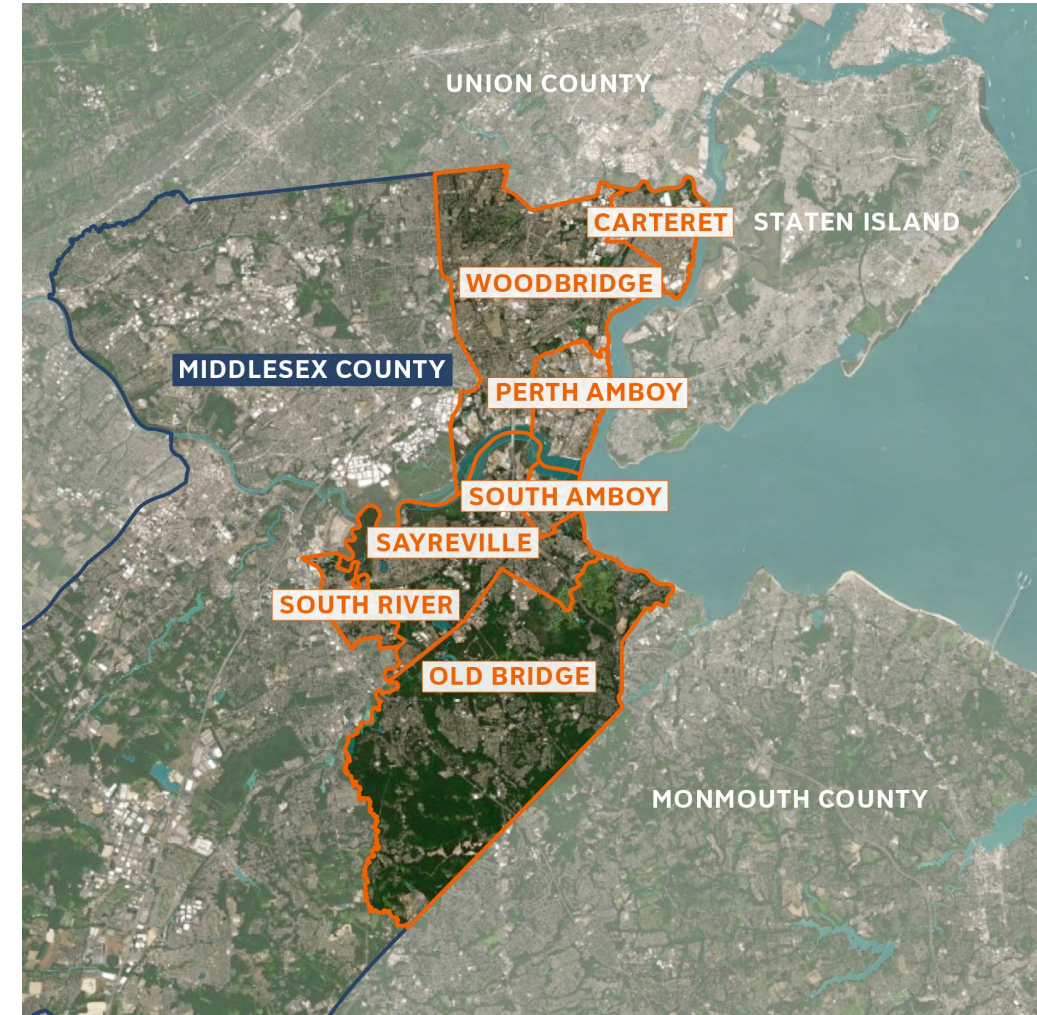
**What do you hope
to get out of the
meeting tonight?
What do you hope
to contribute?**

***Put your answer in the
chat.***

PROJECT TEAM

RESILIENT RARITAN RIVER AND BAY COMMUNITIES

- The Resilient NJ (RNJ) Program, administered through the New Jersey Department of Environmental Protection (**NJDEP**), includes initiatives in four regions of the state, including **Raritan River and Bay Communities**.
- **Resilient NJ – Raritan River and Bay Communities** is a partnership between **Middlesex County, Old Bridge, Woodbridge, Sayreville, South Amboy, South River, Carteret, Perth Amboy**, and the **YMCAs of Middlesex County**.



Resilient Raritan River and Bay Communities
Project Area

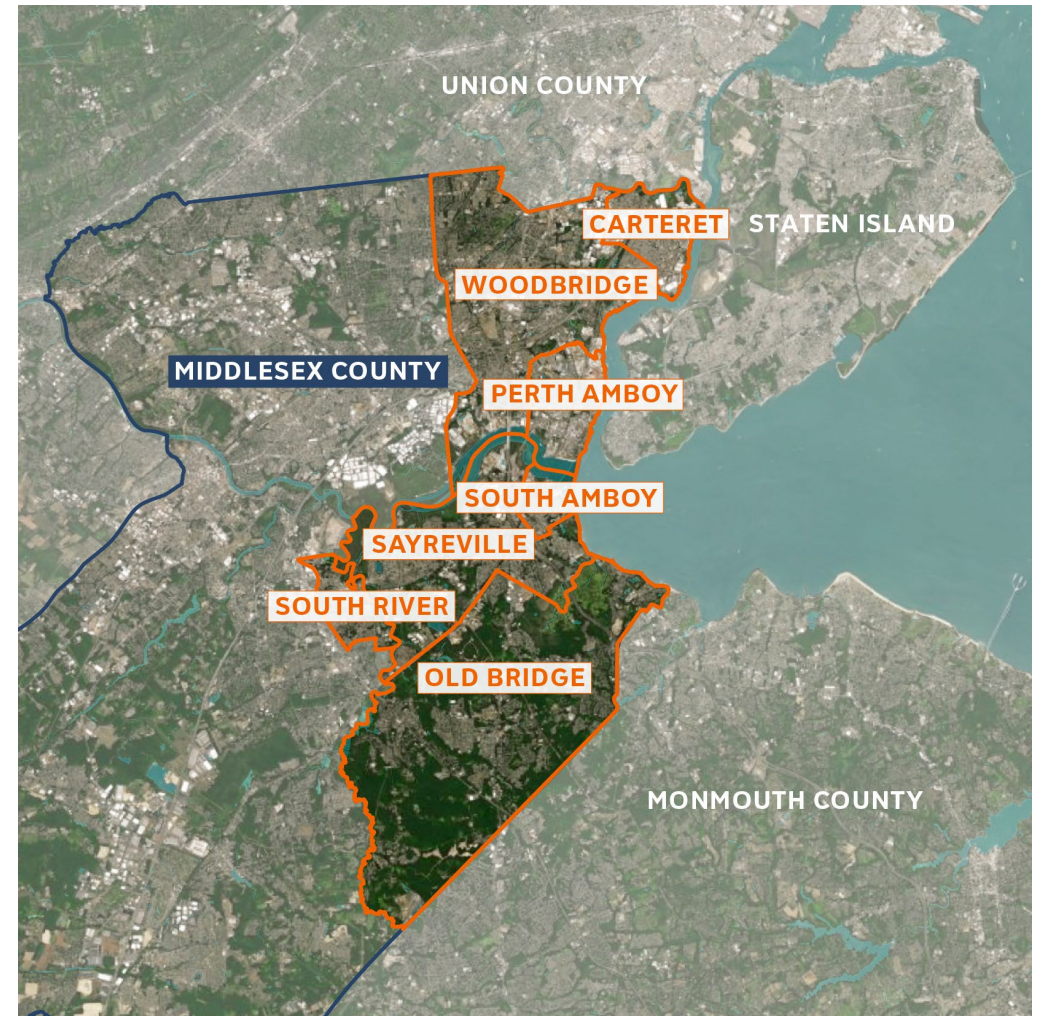
INTRODUCTIONS



PROJECT OVERVIEW

RARITAN RIVER AND BAY COMMUNITIES

- 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.



**Resilient Raritan River and Bay Communities
Project Area**

WHAT COULD THIS PLAN INCLUDE?

PROPOSED PHYSICAL PROJECTS

Examples:

“Nature-based solutions” like wetland restoration



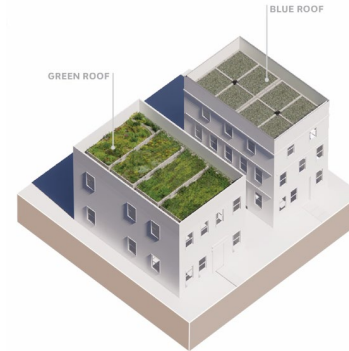
Flood protection of critical assets



RECOMMENDED CHANGES TO POLICIES, ORDINANCES, AND GOVERNANCE

Examples:

Incentives for green roofs



Higher standards for new development



OUTREACH, EDUCATION, AND CAPACITY BUILDING

Examples:

Public outreach and educational campaigns



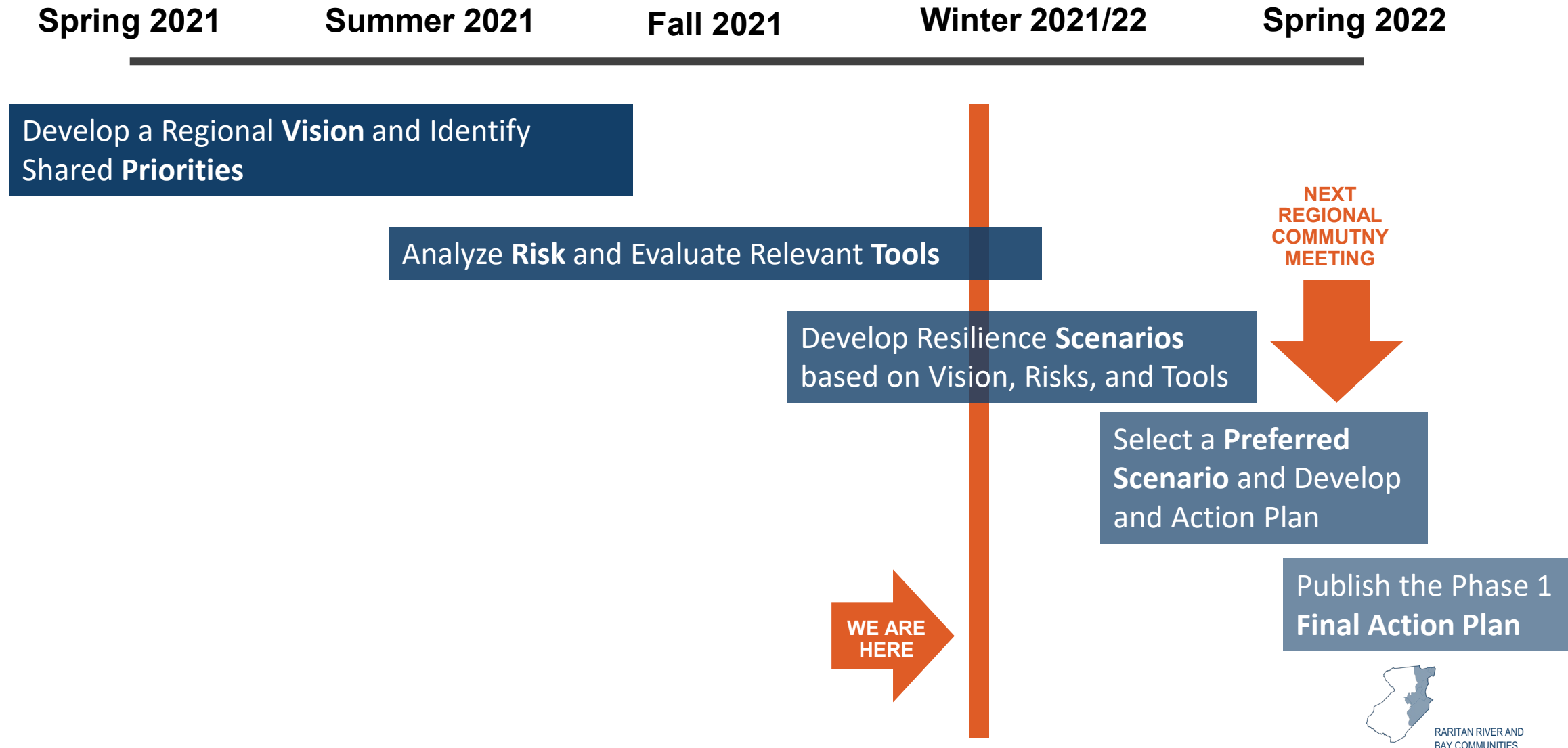
Guidance for homeowners on flood mitigation and insurance



HOW WE'LL GET THERE



PROJECT SCHEDULE



FLOODING IN RARITAN RIVER BAY COMMUNITIES



Rainfall Flooding

Lower lying areas, both along waterways and inland, can flood due to heavy rain events overwhelming drainage infrastructure. This is an issue across the region today.



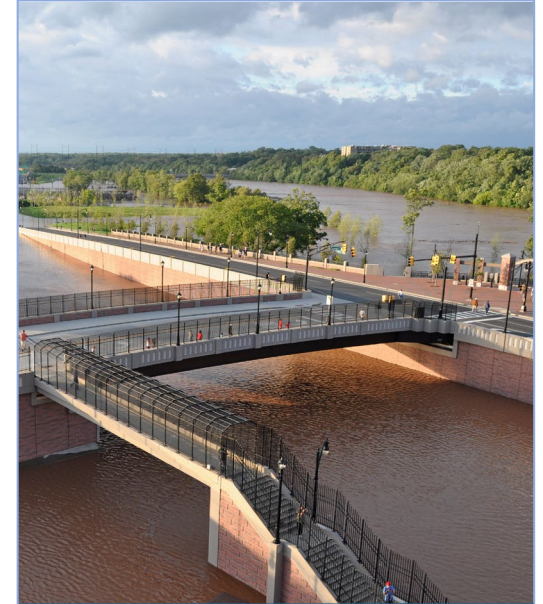
Tidal Flooding

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



Coastal Storms

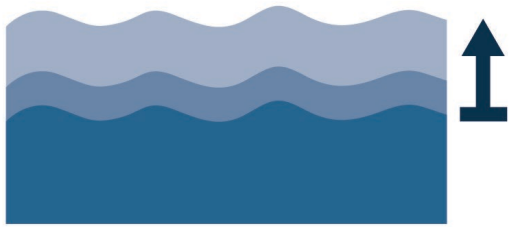
Coastal storms create flooding due to waves and storm surge—a rise in water levels due to storm pressure and winds—which can also lead to coastal erosion. Coastal storms can also bring high winds and heavy rains.



Riverine Flooding

This type of flooding occurs when rivers, streams, lakes, reservoirs, or canals overflow due to extreme rainfall or rapid snowmelt.

CLIMATE CHANGE WILL INCREASE FLOOD RISKS



SEA LEVEL RISE

Sea level rise will increase the height of tides, leading to more **tidal flooding** and increasing water levels during a **coastal storm**.



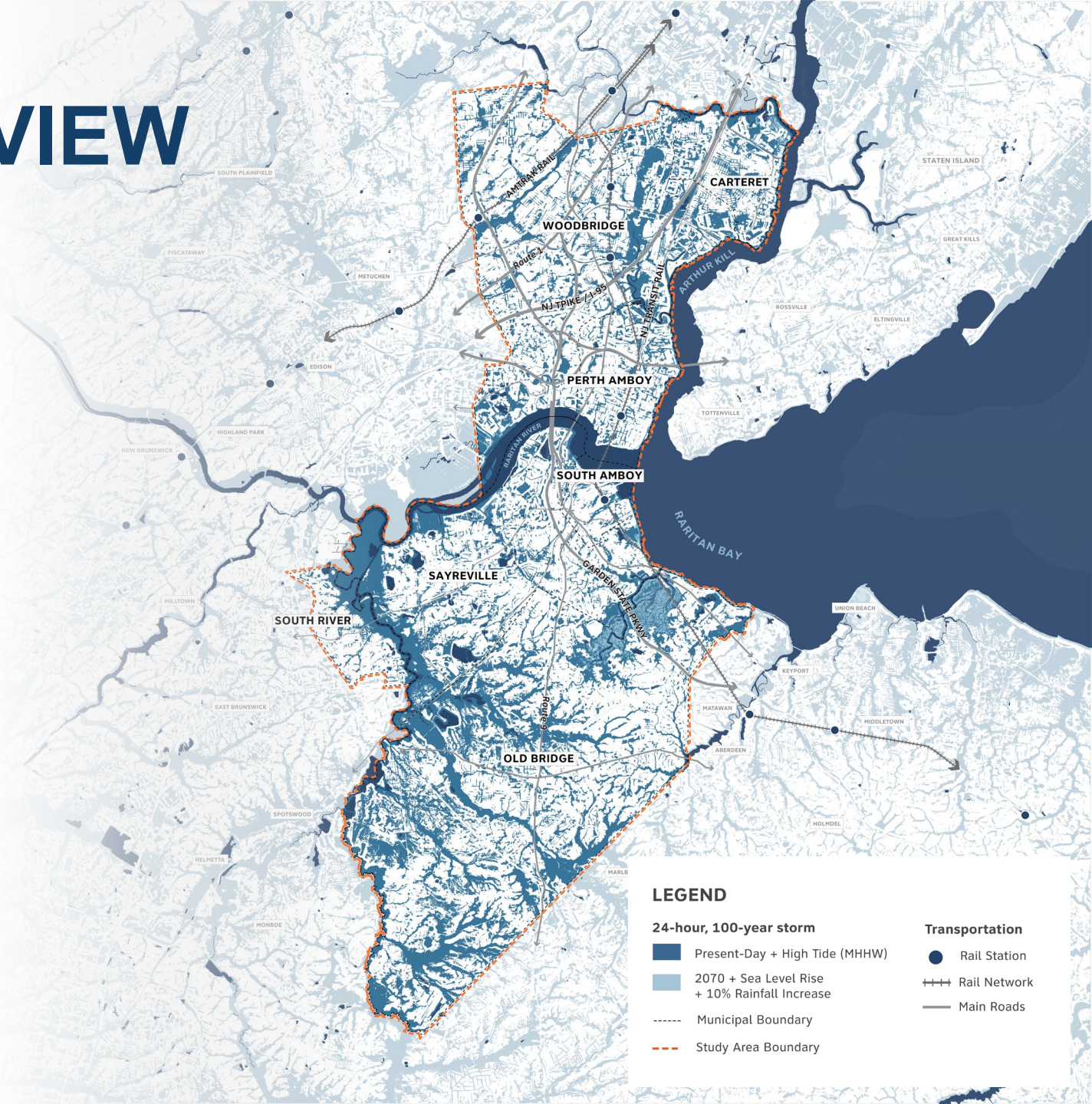
INCREASED PRECIPITATION

Increased rain and snow will lead to more flooding from rivers and in urban areas.

FLOOD RISK OVERVIEW

1% Annual Chance Rainfall Event

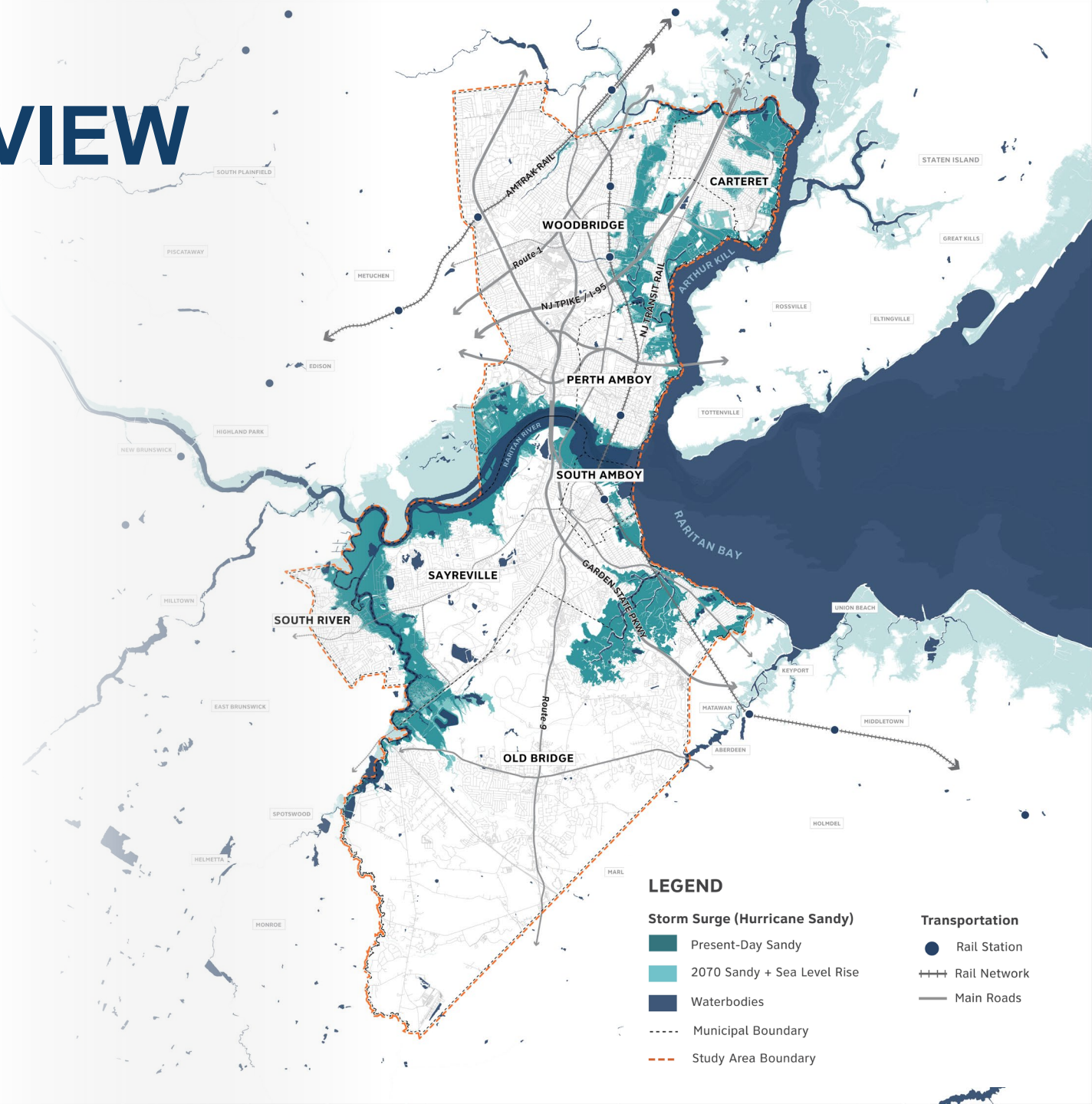
- During rainfall events, widespread flooding along major waterways and tributaries including Raritan River, South River, Woodbridge Creek and Cheesequake Creek
- Flooding extends further from waterways in lower-lying areas south of Raritan River (Cheesequake State Park, undeveloped land east of South River)



FLOOD RISK OVERVIEW

Sandy in 2070

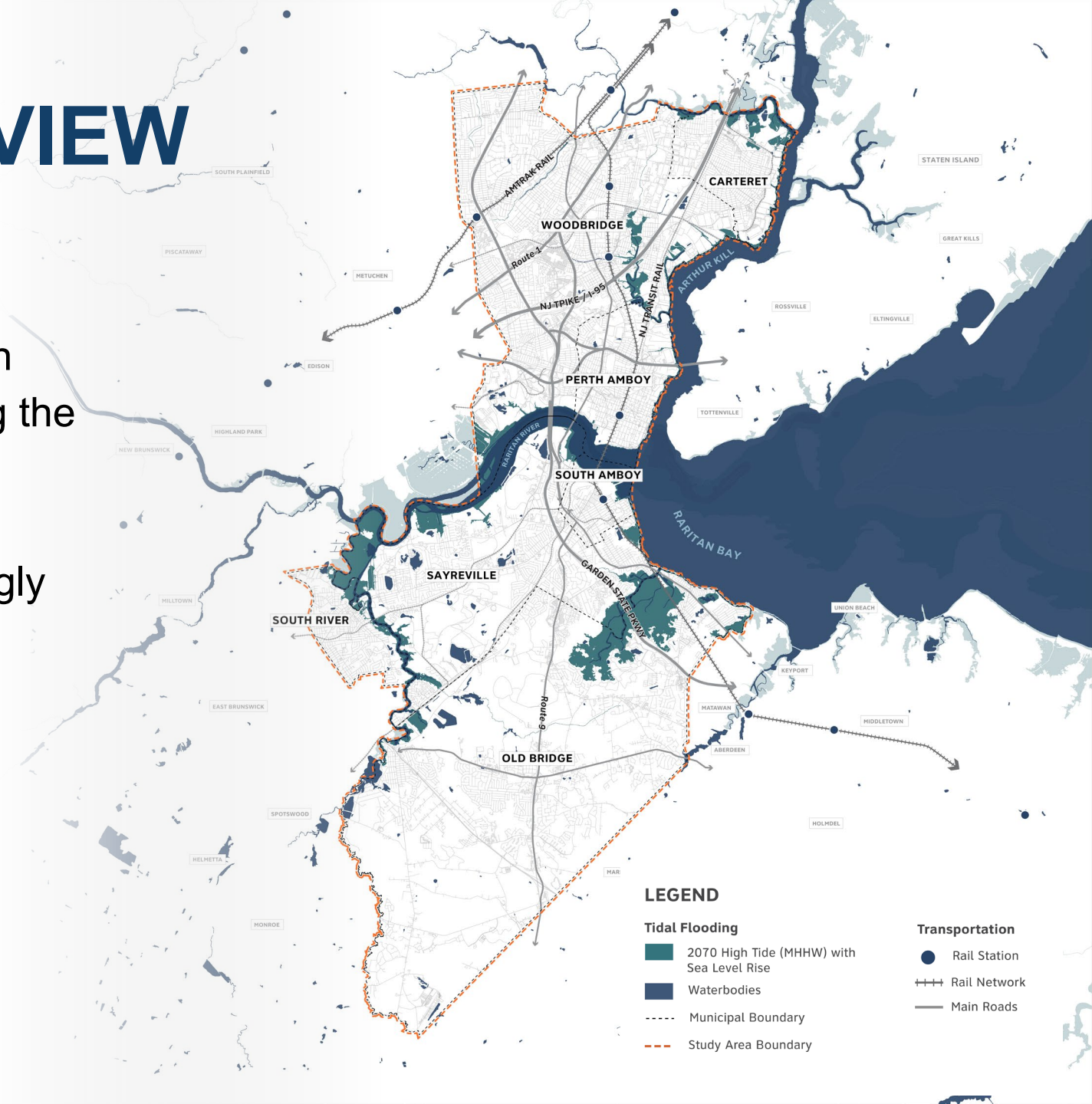
- Flooding along low-lying coasts on the Arthur Kill, Raritan Bay and River.
- Flooding along tidally-influenced waterways in Woodbridge and along South River.



FLOOD RISK OVERVIEW

Future High Tide

- Two feet of sea level rise won't cause significant flooding from daily high tide in most areas—some targeted areas along the coast.
- While flooding not severe, will increasingly be a nuisance and can interrupt daily activities.



WHAT IS A SCENARIO?

RESILIENT NJ PROGRAM

Scenarios allow stakeholders and decision-makers to understand the various pathways to enhancing resilience within the region over the next fifty years, given the challenges of climate change.



WHAT IS A SCENARIO?

RESILIENT NJ PROGRAM

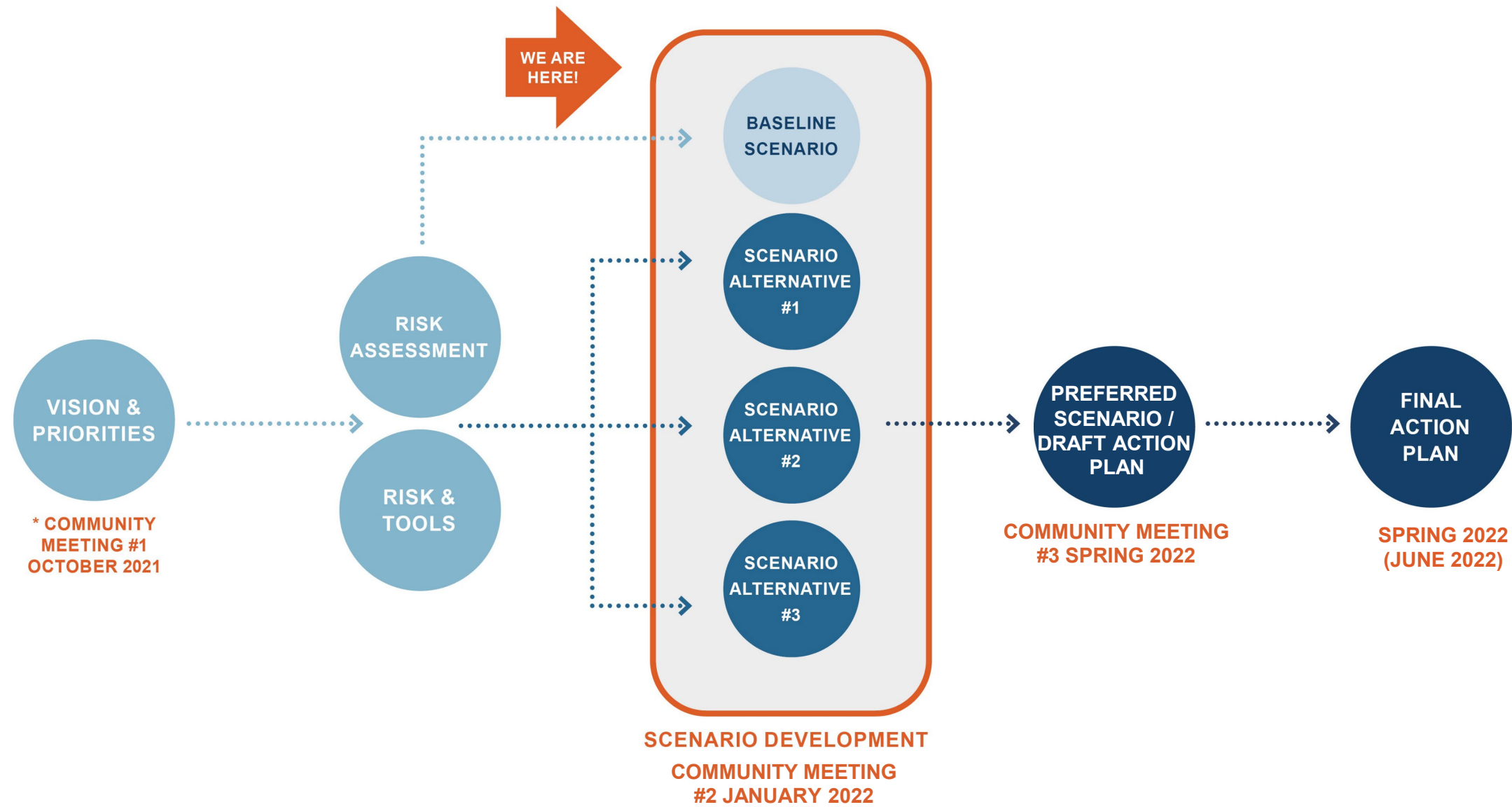
- We've developed **three distinct regional scenarios for 2070** that will be evaluated to identify a preferred scenario that will be the basis of the Action Plan.
- Each scenario has a **common theme** and will be comprised of a range of “**Keystone Actions**” to address flood risk.
- Each scenario will be **compared to existing conditions (baseline scenario)** to evaluate flood mitigation benefits.
- Each scenario will be assessed using the **evaluation criteria** to ensure consistency with the project's vision and objectives.

ALL SCENARIOS MUST ACHIEVE OUR VISION

WORKING VISION STATEMENT

"The mission of the Resilient NJ - Raritan River and Bay Communities is to create a **watershed-based plan** with a clear vision and roadmap for **flood risk reduction, resiliency, and environmental restoration** to help the multi-municipal region **survive and thrive**. Plan development will employ the best available data and inclusive engagement to **create social, environmental, and economic benefits and bring value to all** who will share in the region's future."

SCENARIO DEVELOPMENT PROCESS



REGIONAL SCENARIOS

SCENARIO THEMES FOR DISCUSSION

Scenario	Theme	Examples			
“Protecting Critical Assets and Economic Centers”	This scenario focuses on protection of critical infrastructure assets and developed areas.		Sayreville Pump Station Floodwall Protecting Critical Asset		NJ Transit Raritan River Bridge Project Adaptive Infrastructure Design
			Noe Street Park Use Of Open Space For Stormwater Management		Woodbridge Waterfront Park Brownfield to Greenfield project
“Transitioning to Smart Growth for a New Economy”	This scenario focuses on planning for new economic opportunities in conjunction with climate adaptation – protecting critical assets while directing growth to areas that are less vulnerable.		South Amboy Transit Village Initiative Transit-Oriented Development		Auckland Waterfront Adaptive Reuse of Industrial Shoreline

REGIONAL SCENARIOS

SCENARIO KEYSTONE ACTIONS FOR DISCUSSION

Scenario	Theme	Example Keystone Actions
“Protecting Critical Assets and Economic Centers”	This scenario focuses on protection of critical infrastructure assets and developed areas.	<ul style="list-style-type: none"> • Site-specific adaptation of critical utilities • Shoreline barrier strategies to protect substantially built-up waterfront areas • Guidelines for new development to integrate flood risk mitigation and stormwater management
“Restoring Natural Systems and Minimizing Exposure”	This scenario focuses on flood risk mitigation measures that have ecological benefits and planning for a transition to less vulnerable development.	<ul style="list-style-type: none"> • Tidal wetland and riparian zone restoration • Use of open space for stormwater management • Transition of highly vulnerable areas/brownfield sites to open space
“Transitioning to Smart Growth for a New Economy”	This scenario focuses on planning for new economic opportunities in conjunction with climate adaptation – protecting critical assets while directing growth to areas that are less vulnerable.	<ul style="list-style-type: none"> • Elements of the above • Transitioning industrial uses away from oil and gas • Strengthening developed areas outside of the floodplain • Enhancing resiliency of mobility systems

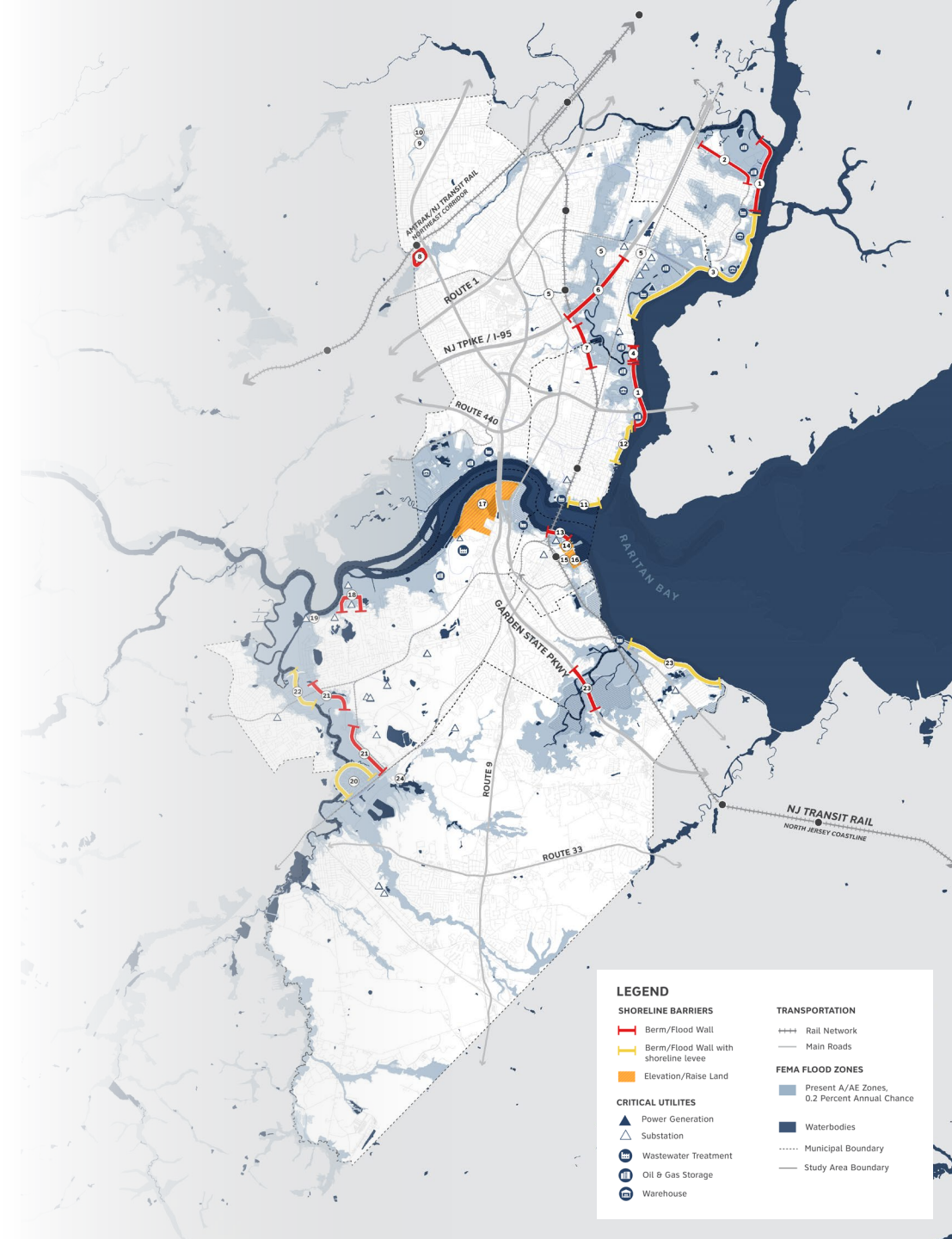
SCENARIO ALTERNATIVE

PROTECTING CRITICAL ASSETS & ECONOMIC CENTERS

This scenario focuses on protection of critical infrastructure assets and developed areas.

KEYSTONE ACTIONS

- Site-specific adaptation of critical utilities
- Shoreline barrier strategies to protect substantially built-up waterfront areas
- Guidelines for new development to integrate flood risk mitigation and stormwater management



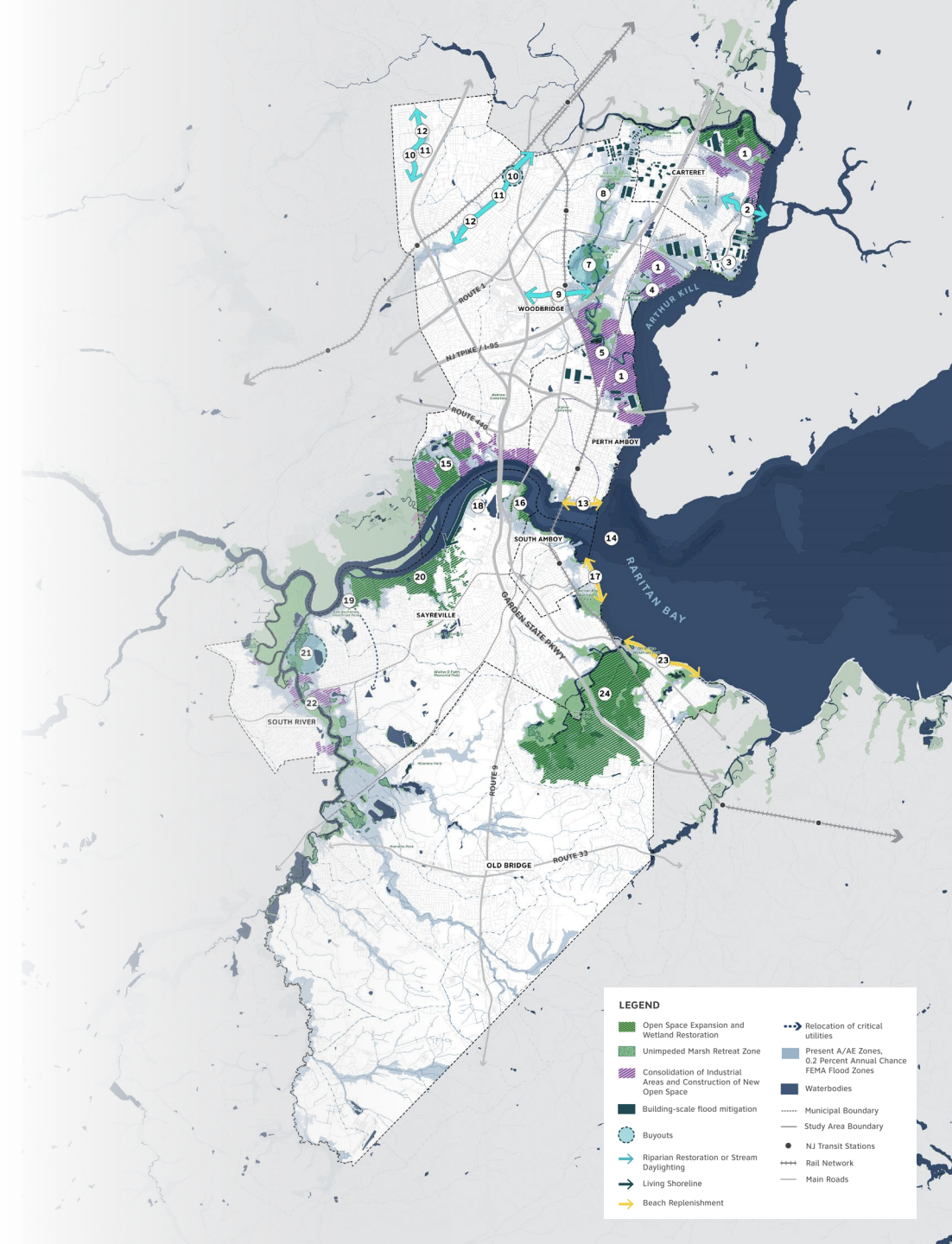
SCENARIO ALTERNATIVE

RESTORING NATURAL SYSTEMS AND MINIMIZING EXPOSURE

This scenario focuses on flood risk mitigation measures that have ecological benefits and planning for a transition to less vulnerable development.

KEYSTONE ACTIONS

- Tidal wetland and riparian zone restoration
- Use of open space for stormwater management
- Transition of highly vulnerable brownfield sites and industrial areas to open space



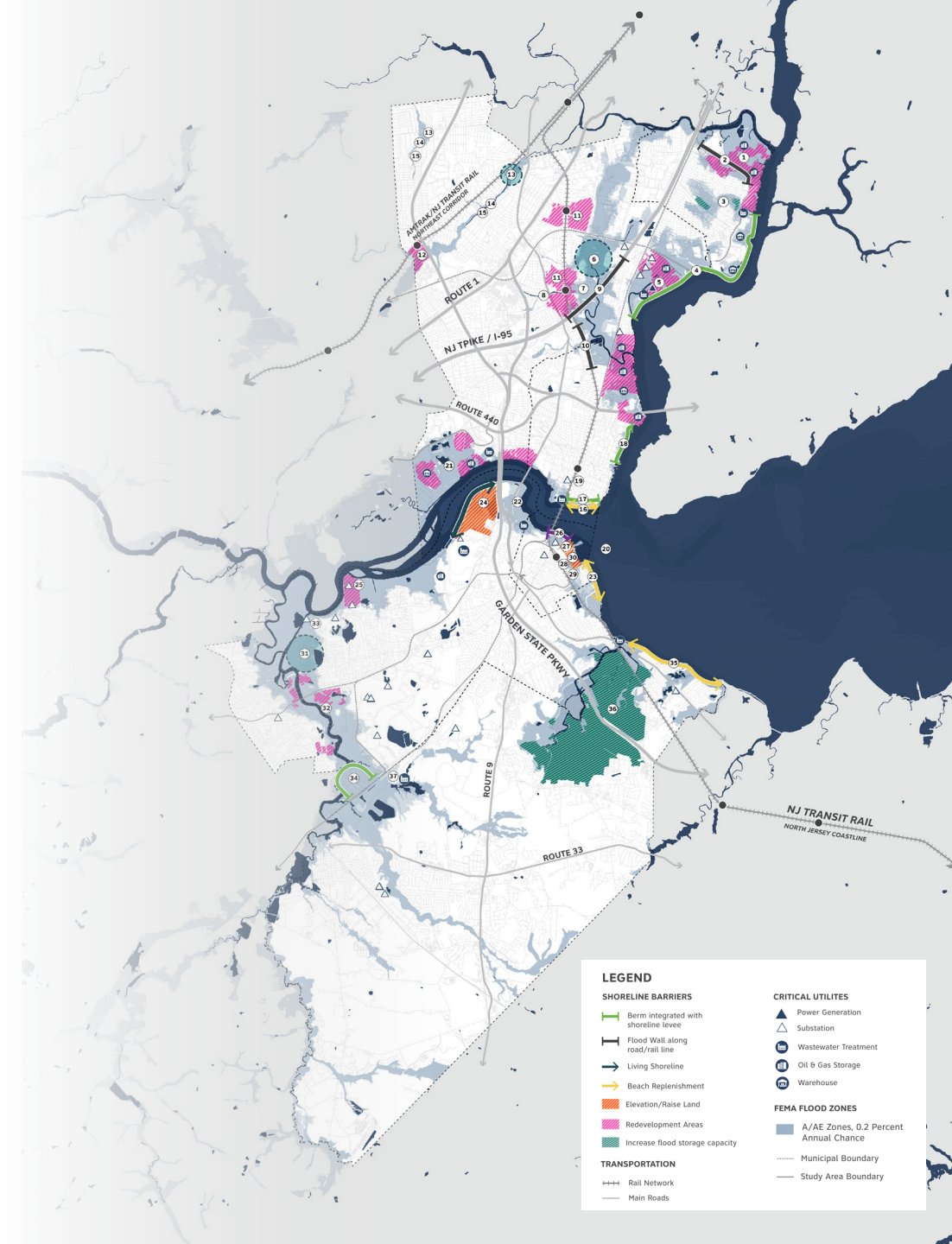
SCENARIO ALTERNATIVE

TRANSITIONING TO SMART GROWTH FOR A NEW ECONOMY

This scenario focuses on planning for new economic opportunities in conjunction with climate adaptation – protecting critical assets while directing growth to areas that are less vulnerable.

KEYSTONE ACTIONS

- Transitioning industrial uses away from oil and gas
- Strengthening developed areas outside of the floodplain
- Enhancing resiliency of mobility systems



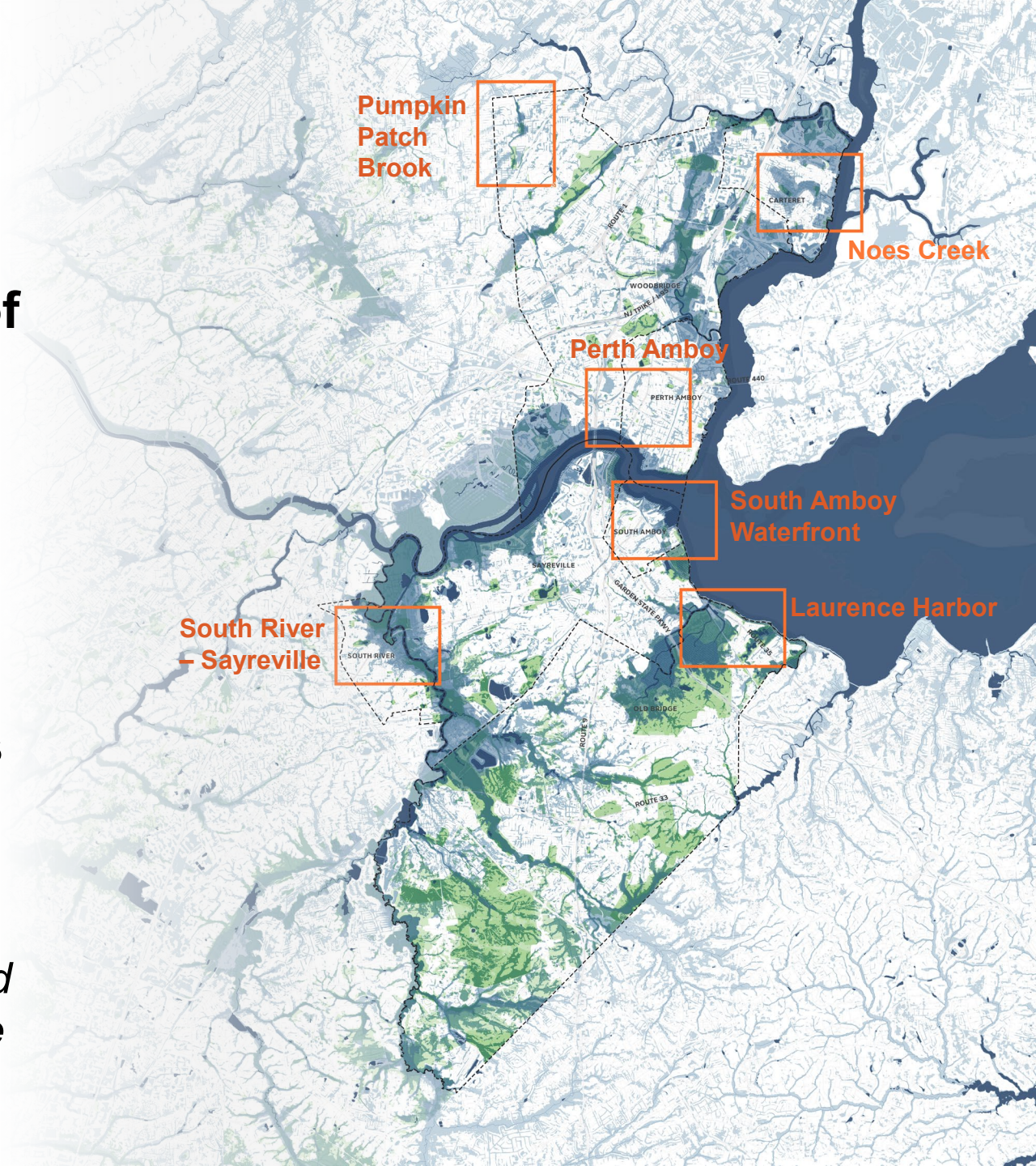
Q & A

BREAK-OUT GROUPS

WHAT WE'LL COVER

1. Key takeaways from our analysis of flood risk
2. What we've heard so far in our outreach about key concerns and priorities for the future
3. Zoom in to specific neighborhoods for more detailed discussion of flood risks and the three scenarios

Sites are representative areas based on flood risk and cover range of conditions around the region



BREAK-OUT GROUPS

DISCUSSION TOPICS

**What
places at
risk
concern
you the
most?**

**What
additional
issues should
we seek to
address?**

**What types of
flood risk
mitigation
projects are
most
desirable?**

**What changes
do you want to
see in this
region in 2070?**

BREAK-OUT GROUPS

Groupings



**Region
(w/ ASL
translation)**



**Región
(en español)**



**Woodbridge
& Carteret**



**Perth Amboy
& South
Amboy**



**Sayreville,
South River,
& Old Bridge**

ENGAGEMENT OPPORTUNITIES

1. Visit our website for more information and updates
www.resilient.nj.gov/rrbc
2. Sign up for [Resilient NJ emails](#)
3. Keep an eye out for upcoming meetings and other engagement opportunities
4. Follow us on social media
[@resilientrrbc](#)

