

Business Focus Group Meeting - Resilient NJ

MEETING MINUTES

DATE: April 28, 2022
TO: All Meeting Attendees
FROM: The Consultant Team
SUBJECT: Resilient NJ-Atlantic County Coastal Communities (ACCR)-Utilities Focus Group Meeting II

A meeting was held April 7, 2022 at 10 AM with the Utilities Focus Group Members to discuss the Resilient NJ Project. The meeting was held via Microsoft Teams. The following were in attendance:

Name	Organization
Rick Dovey	Atlantic County Utility Authority
Thomas Smith	Comcast
Kenneth Mosca	Atlantic City Electric
Vincent Monaco	New Jersey American
Jonathan Carey	WSP
Jaclyn Flor	ENGenuity Infrastructure
Amanda Schermond	ENGenuity Infrastructure

The following was discussed at the meeting:

1. Jaclyn Flor, ENGenuity, started the meeting with introductions of the Consultant team and meeting participants.
2. Jaclyn Flor then went over the agenda, including the meeting objectives, introductions, Overview of what we heard, feedback on preferred scenario and next steps.
3. Jaclyn Flor explained that the primary objective of the meeting was to get feedback on the following key questions: 1. Based on the feedback provided to date on the Vision for the future of the Region and the Critical Assets that need to be protected, which projects should be advanced into a Preferred Suite of Projects, 2. Which projects would you like to see advanced into the Implementation Phase of this plan? Under the Implementation Phase we can advance projects through their respective planning phases such as concept design, planning studies, grant applications, capacity building, etc., 3. Are there any projects that are critical to the Region that are missing that you would like to see added?
4. Jaclyn Flor explained that the Atlantic County Region won the Innovation Award and that as a result additional funding is available for implementation.

5. Jaclyn Flor gave an overview of the Resilient NJ Project including the project goals and the engagement plan. Jaclyn explained how the scenarios were developed by looking at the vision of the project along with the region's assets.
6. Jaclyn Flor described that the key challenges in the region that were identified were shoreline protection, stormwater management, access and transportation, power and communications, equitable economic development, public facilities, and vulnerable populations.
7. Jaclyn Flor then went over the Scenarios including the Living Bay Master Plan and the Absecon Bay Keepers.
8. Jaclyn went on to the next Scenarios, which were Translate All Emergency Preparedness Materials, Evaluate and Improve Preparedness Actions for SVPS, Action Plan for Housing, Power and Communications, Installation of Solar Panels, and Community Microgrid Systems Study. Kenneth Mosca, Atlantic City Electric, added that he and his wife started Autism Foundation. His wife is very active conducting seminars and training with 1st responders. Jaclyn replied that advanced key level training program on both County level as well as Municipal level. Jaclyn went on to describe the Bayside Shoreline Protection Scenario and explained it would rely on the USACE Back Bay Study. Jonathan Carey, WSP, added that Municipality should not rely on Army Core Projects and act on their own to enhance their Bay Side protection. Jaclyn then went on to describe the Bayshore Continuous Shoreline Protection Study, Absecon Bay Blue/Green Way, Beach Nourishment, and Offshore Breakwaters Study.
9. Jaclyn went on to describe the Living Streets Feasibility Study and Pilot Program, Living Streets, Stormwater Management Parks, Equitable Economic Development, Rezone Gardner's Basin and Delta Basin, Black Horse Pike Strategic Growth Corridor, Redevelopment Study and Vision Plan for Lower Risk Areas, and Bader Field Coordinated Dredge-Site Raising Compact Scenarios.
10. Jaclyn Flor also reviewed that some of the feedback so far has been to implement a home elevation program, wetland restoration, expanding community solar, additional pump station locations, development of resiliency and wind institute, Stormwater Utilities, resiliency improvements for the ACMUA treatment plan, elevating roadways, blue economy expansion and to expand transit evacuation options.
11. Jaclyn Flor then asked for any additional feedback from the meeting participants. Rick Dovey, ACUA, explained that the bridge at ACUA that impacts the access to the wastewater treatment plan and Comcast has a hub at that same location. Rick Dovey said that if there was a microgrid from their site they could supplement the surrounding ACUA communities, but because of regulatory reasons ACUA can't do it and he thinks that would be a strong idea. Rick Dovey liked the Baykeepers project and liked the blue way green way and the ACUA was interested in being a Board Member or partner in Baykeepers. The Utilities group thought that South Jersey Gas is a vulnerability and analysis of their critical facility vulnerabilities and its affect on axillary power to keep water transmission lines and sewer lift stations viable. The Utilities group felt that many critical utilities are reliant on natural gas and that if natural gas fails in emergencies that in addition to fires that it has a huge impact on all utilities working Transmission vulnerabilities across the Bay for clean water is a vulnerability that should be reviewed with the project looking at the Water Treatment Plant. Rick Dovey felt that NJ Transit and freight service and passenger service is clearly impacted by climate change and a project reviewing those vulnerabilities.

Where the expressway ends is a flooding area that should be included in the projects. Kenneth Mosca said that ACE is part of the working group for microgrids and would want to be included in conversations for policy changes. Kenneth Mosca wants the ACCR to consider Battery Storage Project in ACCR. ACE just built a battery storage substation in Beach Haven (its 1 Meg). The Utilities group supported raising roadways, however felt it was very important to consider the utilities in the road and utilities under road are not designed to take heavy traffic load. Jaclyn mentioned that as South Jersey Natural Gas is critical utility group and needs to be include during implantation phase. Rick Dovey also added that getting Deisel Fuel is problematic during emergency and would prefer micro-grid and back-up battery power in the future. Rick Dovey mentioned about education and training facility project at ACUA might be good fit in the Resilient NJ project.

Action Items:

1. Public Meeting first week of May for last feedback on projects
2. Consultant Team to meet with DEP to discuss which projects are moving forward.
3. Action Plan will be mid-summer.



ATLANTIC COUNTY COASTAL REGION

VENTNOR, MARGATE, LONGPORT, ATLANTIC CITY, BRIGANTINE, PLEASANTVILLE, NORTHFIELD

Focus Group Meeting

4.7.22



Agenda

- I. Meeting Objectives
- II. Introductions
- III. Overview of What We Heard
- IV. Feedback on Preferred Scenario
- V. Next Steps



Meeting Objectives

Today, we are seeking answers to these key questions:

- *Based on the feedback provided to date on the Vision for the future of the Region and the Critical Assets that need to be protected, which projects should be advanced into a Preferred Suite of Projects?*
- *Which projects would you like to see advanced to into the Implementation Phase of this plan? Under the Implementation Phase we can advance projects through their respective planning phases such as concept design, planning studies, grant applications, capacity building, etc.*
- *Are there any projects that are critical to the Region that are missing that you would like to see added?*

Introductions



We are here!

Community & Stakeholder Engagement

Asset Collection & Risk Assessment

Resilience & Adaptation Scenarios

Regional Resilience & Adaptation Plan

Implementation



American Red Cross

PrepareNJ

Overview

Resilient NJ Project

Goal: locally-driven action plan.

- a) Stakeholder involvement throughout project
- b) Ensure local needs and visions are collaboratively developed
- c) Ensure actions are best-fit to unique characteristics of neighborhoods
- d) Achieve coherent strategy across region and broader Resilient NJ program

ENGAGEMENT PLAN



**Steering
Committee (SC)**



**Technical
Advisory
Committee (TAC)**



**Community
Advisory
Committee (CAC)**



You are in a Focus Group

Focus Groups (FG)



The Region is proud of its social fabric, diverse economy, and ecological assets

- A World Class Destination
- A Place People come to Gather
 - Conventions
 - Competitions & Pageants
 - Research & Innovation
 - Collaboration
- Critical to South Jersey's economy
 - Service Industry
 - Transportation
 - Energy
 - Healthcare
 - Marine
 - Education
- Values Large employers and Small Businesses

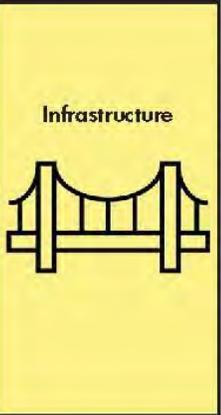
The Region is proud of its social fabric, diverse economy, and ecological assets

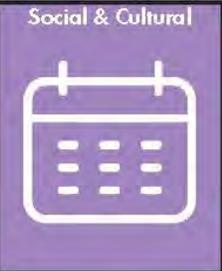
- **Connections with Nature**
- **Rich in ecological resources**
 - Marshlands
 - Parks
 - Beaches
 - Waterways
- **Characterized by its Diversity**
 - People
 - Destinations
 - Landscapes
 - Activities
 - Modes of Transportation
- **Innovation in Green Technologies**

A resilience ecosystem. ACCR has increasingly integrated systems.

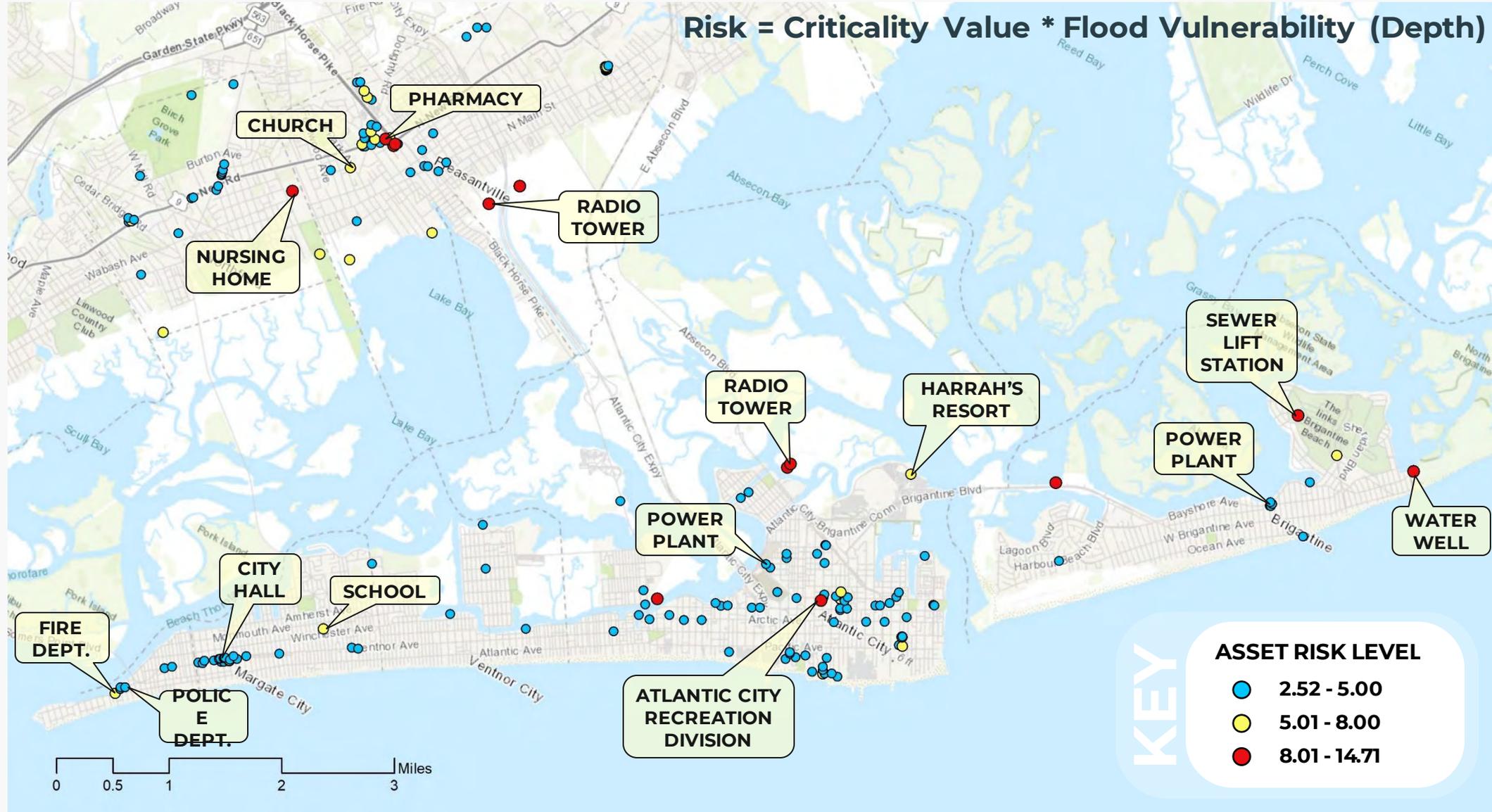
Asset Categories

Categories of Asset Types

 <p>Government Services</p>	City Halls	Municipal Buildings
	Court Houses	Police Departments
	Fire Departments	Post Offices/Delivery
	Department of Public Works	Office of Emergency Management
 <p>Infrastructure</p>	Bridges	Power Plants
	Bike Share Stations	Prisons
	Brownfields	Rail
	Bus Stops & Routes	Recycling Centers
	Contaminated Sites	Roads
	Culverts	Superfund Sites
	Drainage Systems	Trails and Paths
	Evacuations Routes	Utilities/Cell & Internet
	Flood Control Structures	Water Towers
	 <p>Economic</p>	Banks/Financial
Business Districts		Industrial Structures
Commercial Structures		Large Employers
 <p>Natural</p>		Beaches
	Ecosystems	Parks

 <p>Health</p>	Animal Shelter	Hospitals
	Assisted Living Facilities	Mental Health Facilities
	Dentist Offices	Nursing Homes
	Doctors' Offices	Drug Treatment Services
	Farmer's Markets	Recreation Centers
	Food Assistance	Urgent Care Facilities
 <p>Social & Cultural</p>	Art Studios	Libraries
	Boardwalks	Marinas
	Festivals	Parades
	Community Centers	Places of Worship
	Shuttle Services	Schools
	Fairs	Social Networks
 <p>Housing</p>	Apartments	Shelters
	Single Family Homes	Townhouses/Rowhomes
	Duplexes	Trailer Parks
	Multiplexes	Repetitive Loss (RL) and Severe Repetitive Loss (SRL) Properties
	Identification of Buildings with NFIP Policies	

Critical Assets at Risk

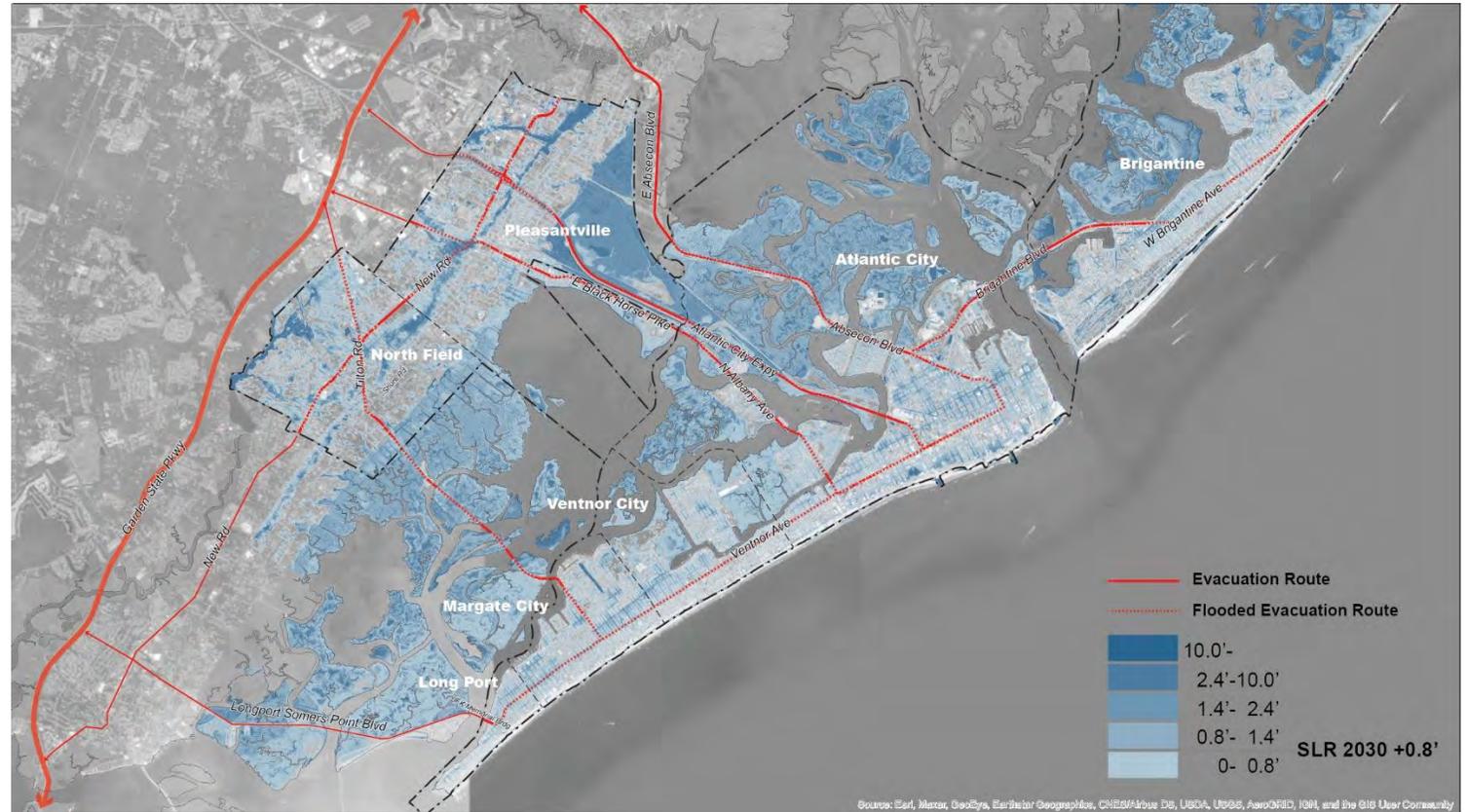
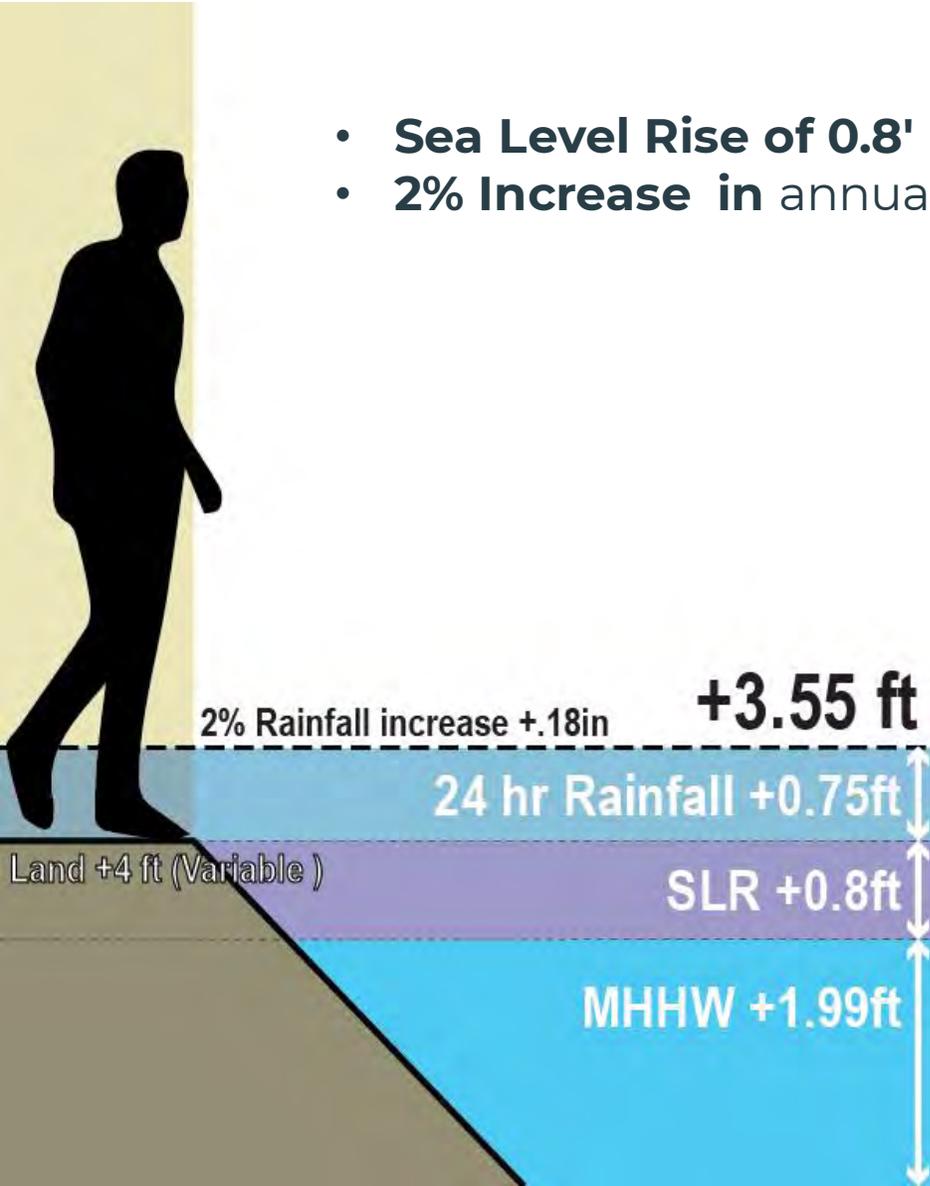


PROTECTED

1% / 24-HOUR RAINSTORM: 2030

The amount of **rain** that will accumulate in a **24-hour** period for a **storm** with a **1-in-100** (or **1%**) chance of occurring in 2030

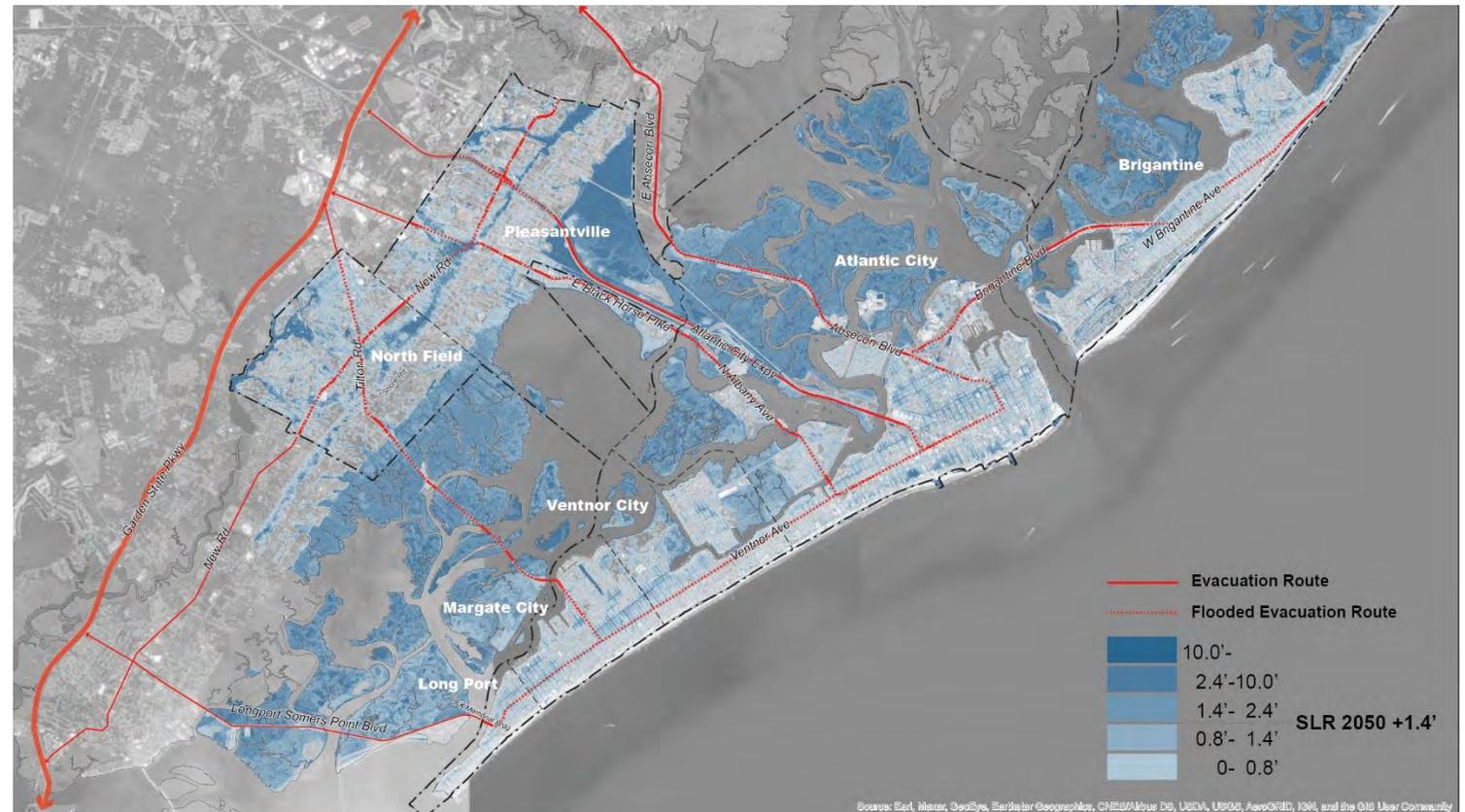
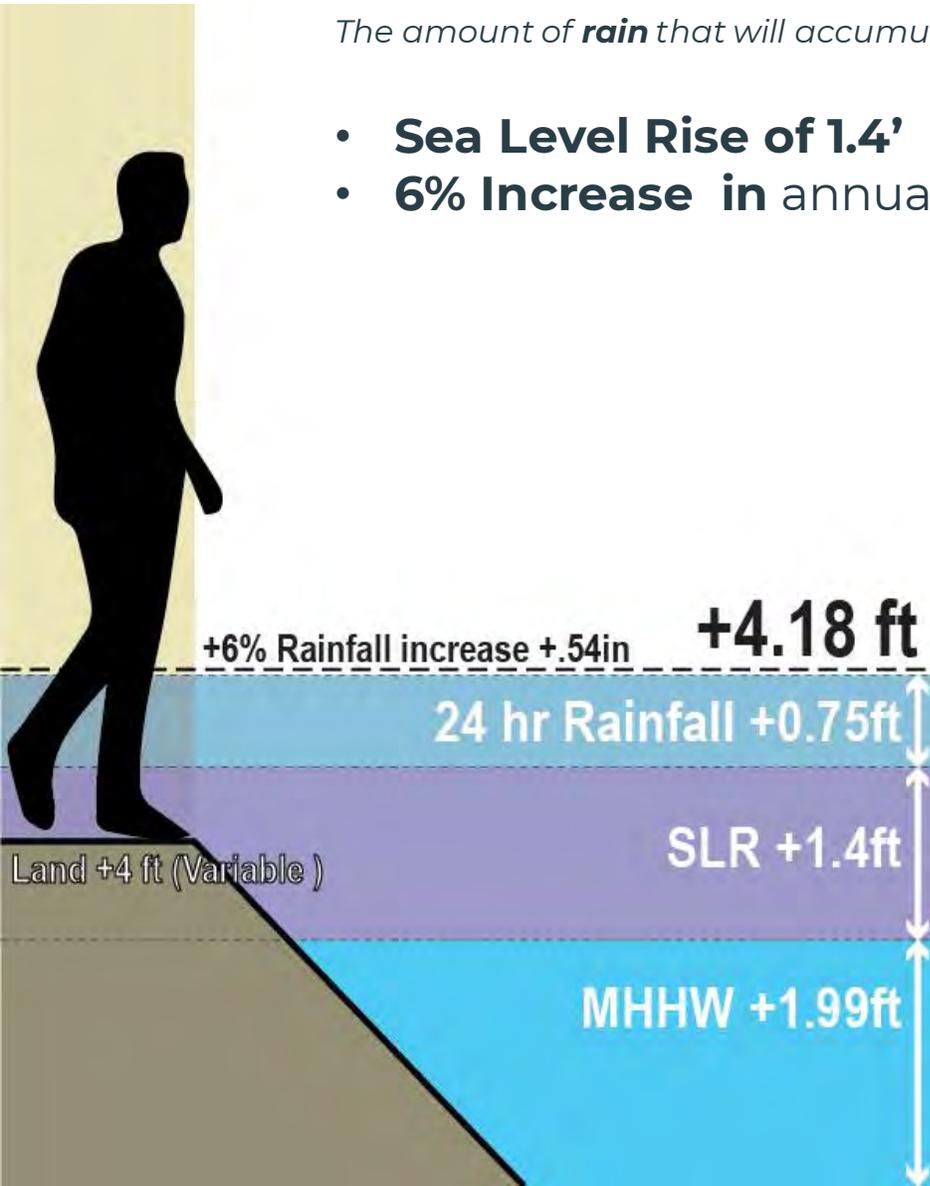
- **Sea Level Rise of 0.8'**
- **2% Increase** in annual precipitation



1% / 24-HOUR RAINSTORM: 2050

The amount of **rain** that will accumulate in a **24-hour** period for a **storm** with a **1-in-100** (or **1%**) chance of occurring in 2050

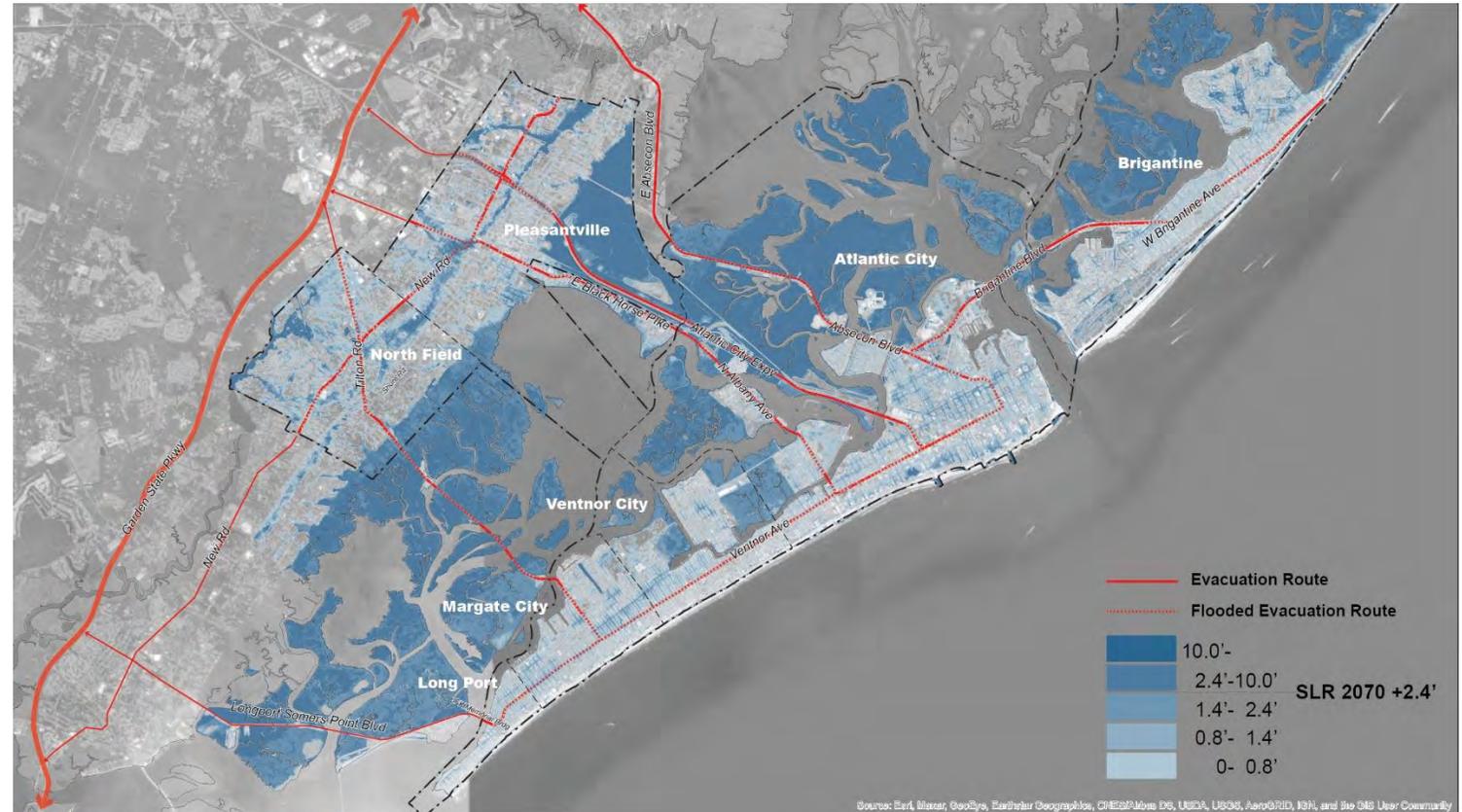
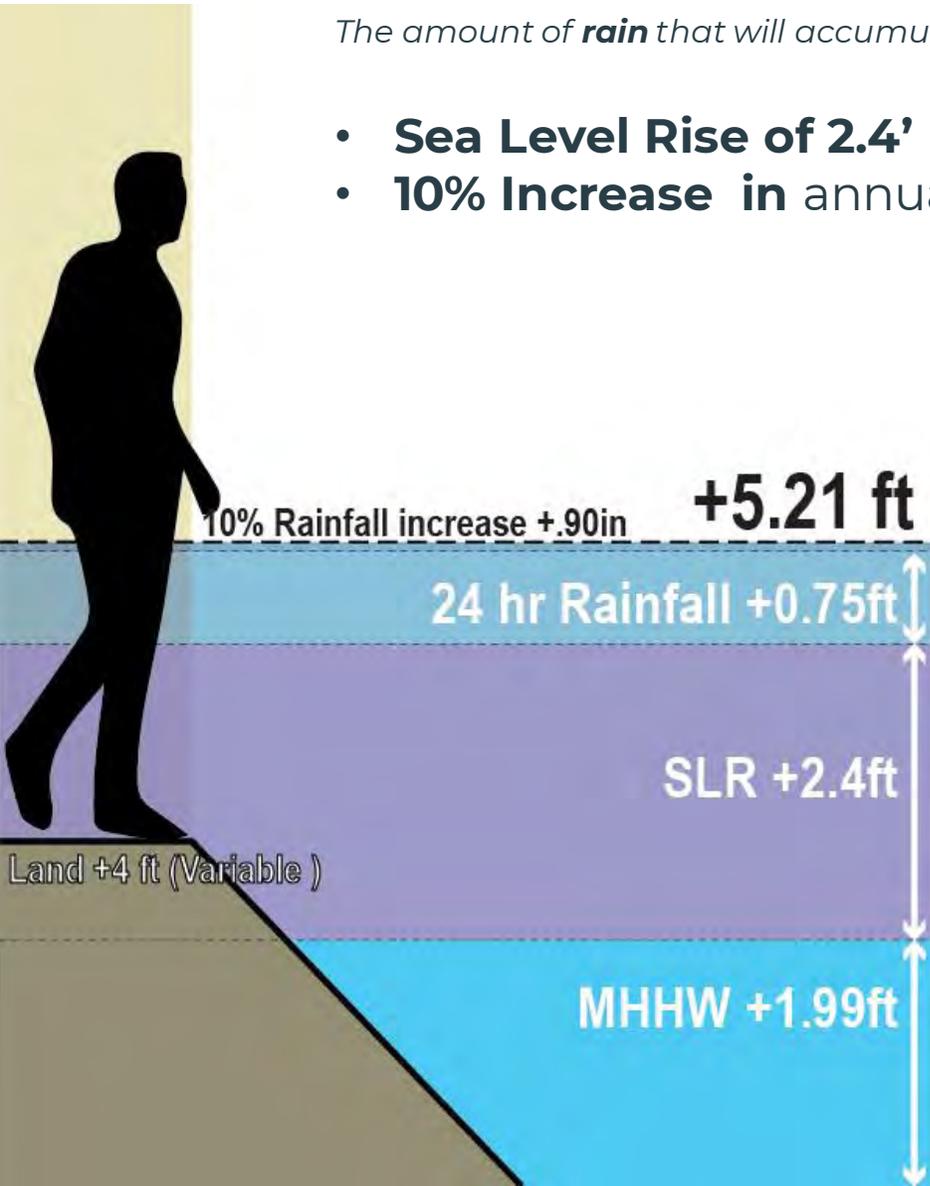
- **Sea Level Rise of 1.4'**
- **6% Increase** in annual precipitation



1% / 24-HOUR RAINSTORM: 2070

The amount of **rain** that will accumulate in a **24-hour** period for a **storm** with a **1-in-100** (or **1%**) chance of occurring in 2070

- **Sea Level Rise of 2.4'**
- **10% Increase** in annual precipitation



Source: Earl Blanton, GeoByte, Earthstar Geographics, CH2M/Hill, USGS, USGS, AeroGRID, IGH, and the GIS User Community

SCENARIOS ARE BASED ON THE TEAM'S UNDERSTANDING OF THE REGION'S:

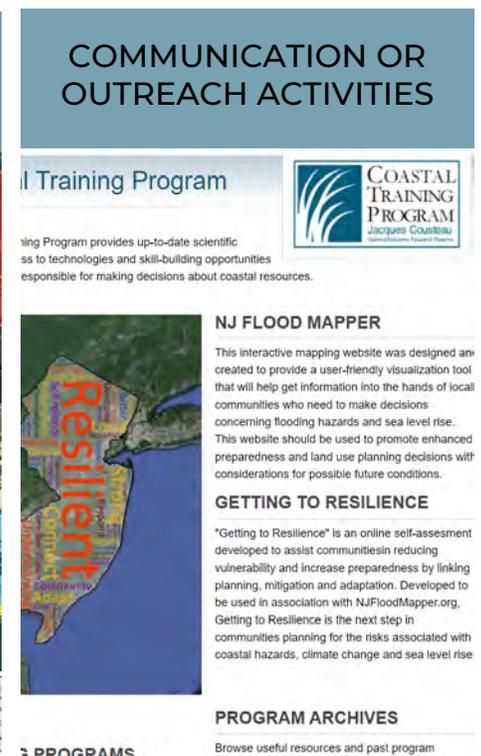
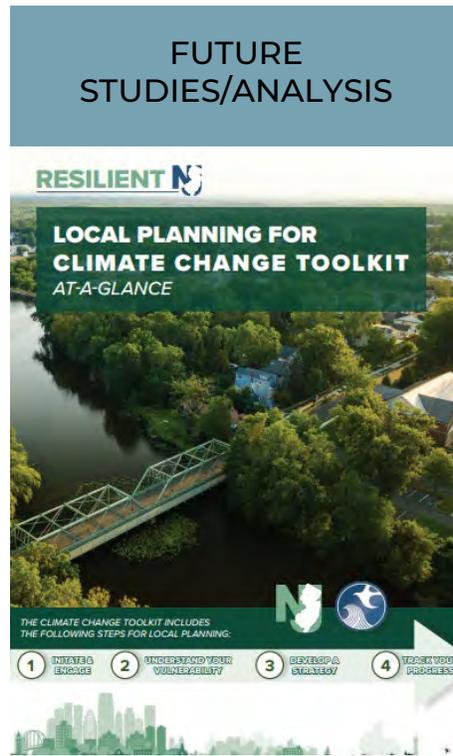
- **Vision** – *What do we value, and how can we see the region evolving to meet the challenges of the future?*
- **Assets** – *What do we want to protect?*
- **Risk and Vulnerability** – *Which areas are at risk?*

RESILIENCE AND ADAPTATION SCENARIOS

What is a Resilience and Adaptation Scenario?

A suite of actions that will work collectively to increase resiliency over time.

What actions should be included?



Key Challenges to Address

SHORELINE
PROTECTION



STORMWATER
MANAGEMENT



ACCESS &
TRANSPORTATION



POWER &
COMMUNICATIONS



EQUITABLE
ECONOMIC
DEVELOPMENT



PUBLIC FACILITIES



VULNERABLE
POPULATIONS



Resilient **PREFERRED SCENARIO**




COMMUNITY MICROGRID SYSTEM STUDY



ECONOMIC DEVELOPMENT



CONTINUOUS SHORELINE PROTECTION STUDY



CONTINUOUS SHORELINE PROTECTION STUDY



PROTECT THE NORTH END OF BRIGANTINE AND EXTEND TERMINAL GROIN



LIVING STREET FEASIBILITY STUDY AND PILOT PROGRAM



REINFORCED DUNES

BEACH NOURISHMENT

STORM WATER MANAGEMENT PARKS

OFFSHORE BREAKWATERS STUDY

REDEVELOPMENT STUDY AND VISION PLAN FOR LOWER RISK AREAS

Common / Regional Actions

ABSECON BAY LIVING BAY MASTER PLAN

TRANSLATE ALL EMERGENCY PREPAREDNESS MATERIALS

ABSECON BAY KEEPERS

EVALUATE AND IMPROVE PREPAREDNESS ACTIONS FOR SVPS

ACTION PLAN FOR HOUSING

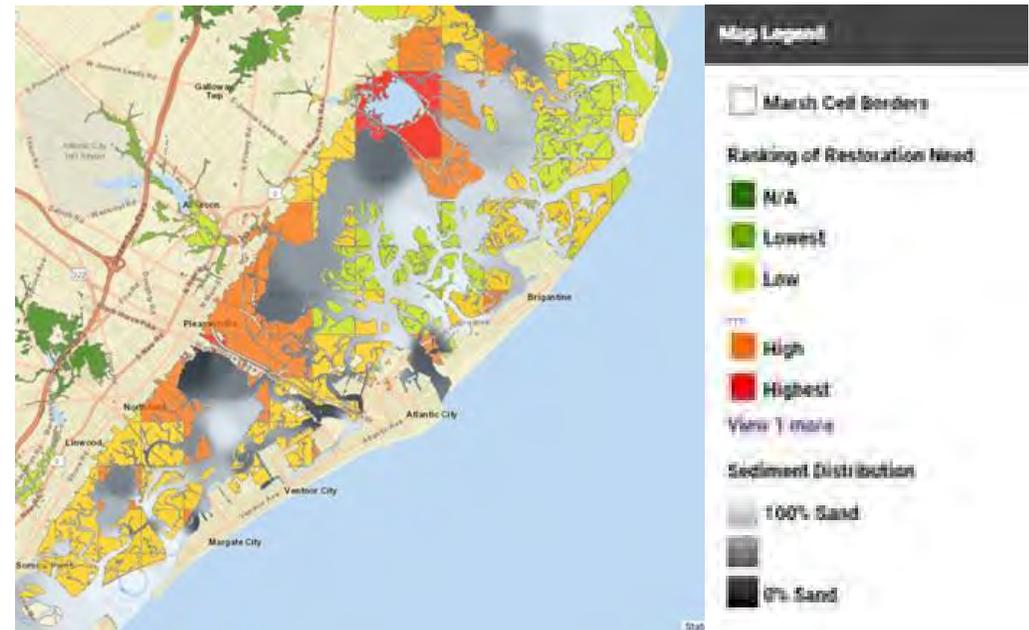
Living Bay Master Plan

Challenges

- Prolonged inundation, erosion and loss due to sea level rise in Back Bay Marshes will weaken protection of the surrounding communities and infrastructure from damage due to storm surge.
- Long term maintenance of the back bay tidal marshes requires **coordinated and securely funded intervention**.
- Implementing coastal resiliency **projects within the region will likely face delays due to a backlog** of applications

Goals

- Provide a framework to establish condition monitoring,
- Prioritize actions to restore habitats through thin-layer sand deposition in targeted locations and living shoreline improvements and coordinated use of resources (dredge sand) and funding.
- Create a means to streamline permit reviews resiliency projects, establish broader or more flexible limits for General Permits and expand use of In-Lieu-Fee mitigation option.
- Public Education to recognize the importance and value of back bay tidal wetlands in protecting the region from storm surge



THE ABSECON BAY KEEPERS

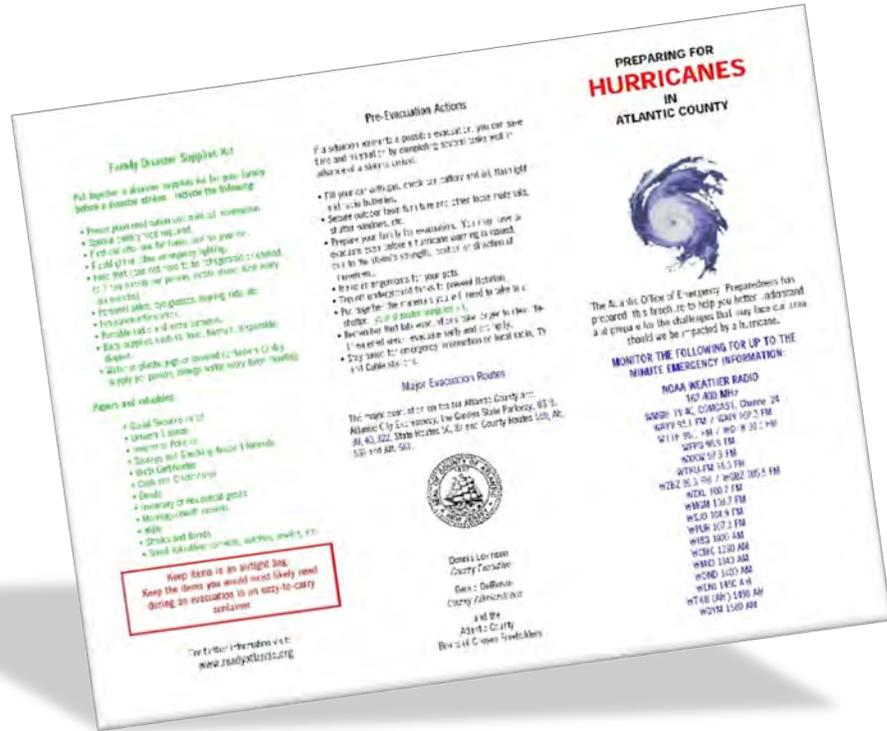
Establish a new non-profit organization: the Absecon Bay Keepers

Absecon Bay Keepers will be a non-profit organization focused on stewardship of Absecon Bay, and working on behalf of the people and wildlife that depend on Bay through environmental action, advocacy, education.



- **Carry out the mission through a combination of:**
 - formal and nonformal environmental education programs designed to raise awareness of the residents and visitors to the region.
 - Work to protect, preserve and restore the various fish and wildlife habitats that exist within the watershed.
- **Act as steward for Absecon Bay by:**
 - Promoting responsible, sustainable development.
 - Working with local, county and state planners to ensure that land-use planning decisions reflect up-to-date science.
 - Provide a resource to assist local, state and federal agencies to identify threats to the resiliency of the Bay and the abutting communities;
 - Promoting comprehensive planning to guide the future of Absecon Bay

TRANSLATE ALL EMERGENCY PREPAREDNESS MATERIALS



Languages other than English spoken at home, by census tract

Data Source: 2010 ACS, Janet Lau, Cartographer



Translate all Emergency Preparedness Materials into the multiple languages to reach all of the region's communities.

EVALUATE AND IMPROVE PREPAREDNESS ACTIONS FOR SVPS

- **Shelters**

- Designated shelter for people w/ disabilities; children w/ special needs
- Power outlets for medical devices & accessible bathrooms
- Program focused on single parents
- Support services for residents w/ pets
- Food services to accommodate allergies/special diets

- **Evacuation**

- Evacuation vehicles to accommodate people with medical issues or medical devices
- Evacuation personnel training/planning (e.g., movement of medical equipment, people w/ disabilities, older adults in high-rise buildings)

- **Outreach and Education**

- Consistent region-wide evacuation plan information (social media and non-digital channels)
- Training on how to digitize documents/storage of essential documents for evacuation
- Monthly information sessions about resources and programs available for disaster preparation and assistance (e.g., access to food, medicine, medical devices, blankets etc.)

- **Social Services and Wellness**

- Ensure social services (e.g., homeless shelters) are more accessible throughout the region
- Organize special teams to help community members access social service programs and mental health assistance during response/recovery phases.



**American
Red Cross**



**BOYS & GIRLS CLUBS
OF AMERICA**

ACTION PLAN FOR HOUSING

Adaptation Action Plan for Atlantic City & Pleasantville Housing Authority Communities and the Region's Senior Centers

Continuity of Service

- Elevate Electrical and Mechanical Equipment
- Solar Trellises on all surface parking lots
- Solar Panels on all rooftops
- Battery to provide off-grid capacity at night
- Porous paving and green infrastructure planting to aid in stormwater management

Flood Mitigation

- Reprogram Ground Level

Long Term Strategies

Strategic Planning for potential redevelopment of the most vulnerable communities



Rooftop Solar



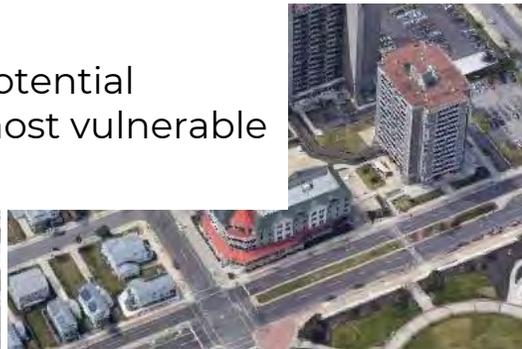
Solar Trellises



Relocated Mechanical Equipment



Altman Towers



Whittington Senior Living



Walter Buzby



Stanley Village



Charles P Jefferies

POWER AND COMMUNICATIONS

- 1 Harden all above grade utility poles, and bury utilities where possible
- 2 Install new generators at firehouses and other public buildings



INSTALLATION OF SOLAR PANELS

- Require installation of solar panels for all renovation and new construction projects above a specified dollar amount to increase energy resiliency during power outages
- Adopt Incentive Program to encourage installation of solar trellises at surface parking lots and batteries at all buildings to encourage bi-directional charging for electric vehicles



Rooftop Solar



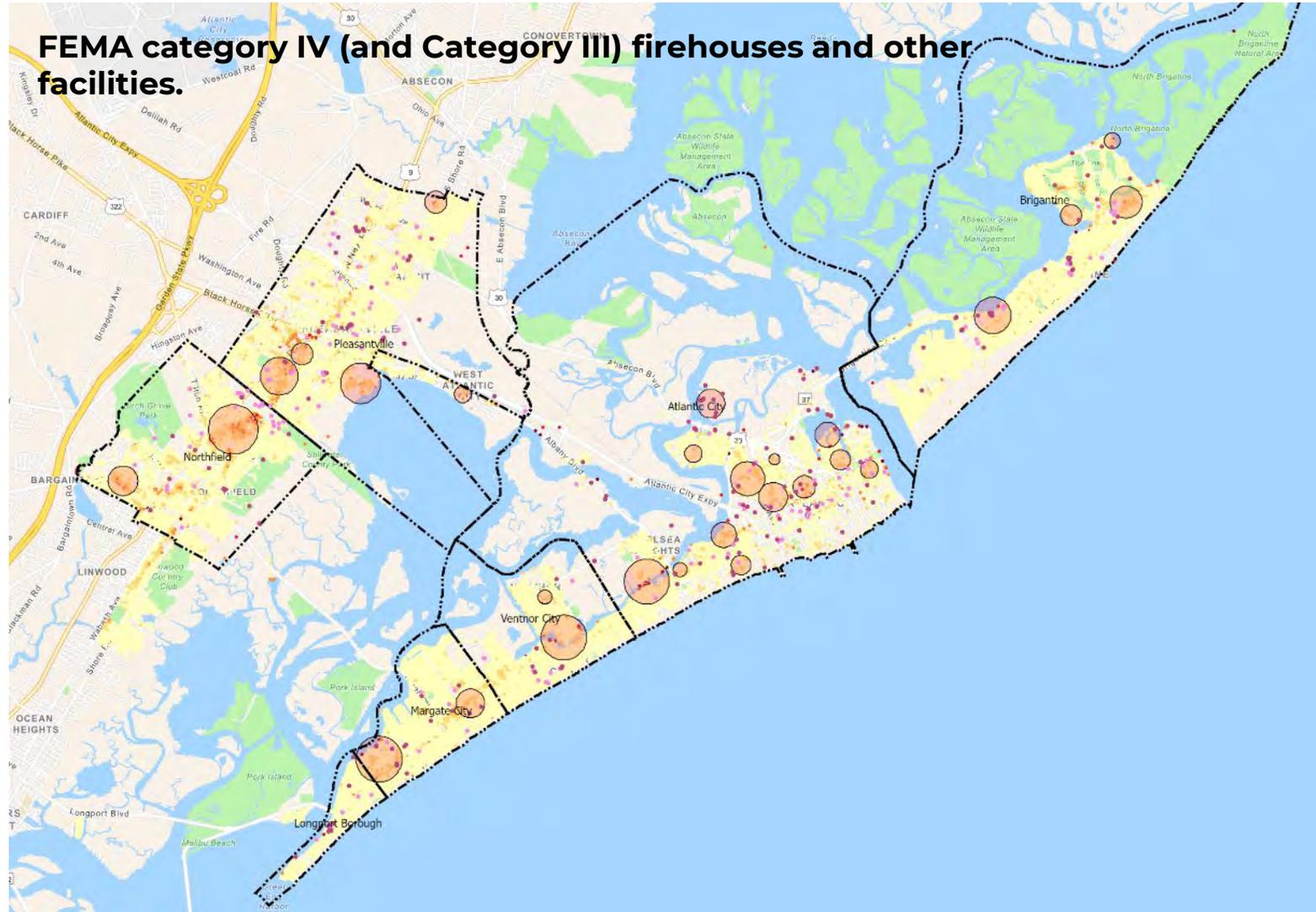
Solar Trellises



Single Housing - Rooftop Solar

COMMUNITY MICROGRID SYSTEMS STUDY

- The microgrid clusters would be associated with facilities that are “Critical Assets at Risk of Flooding” (24hr/1%)
- Microgrids *can be centered around schools, public facilities, casinos /hotels or other major sites* that can provide emergency services / support.
- Coordinate with Atlantic City Electric (ACE) for access/logistics.



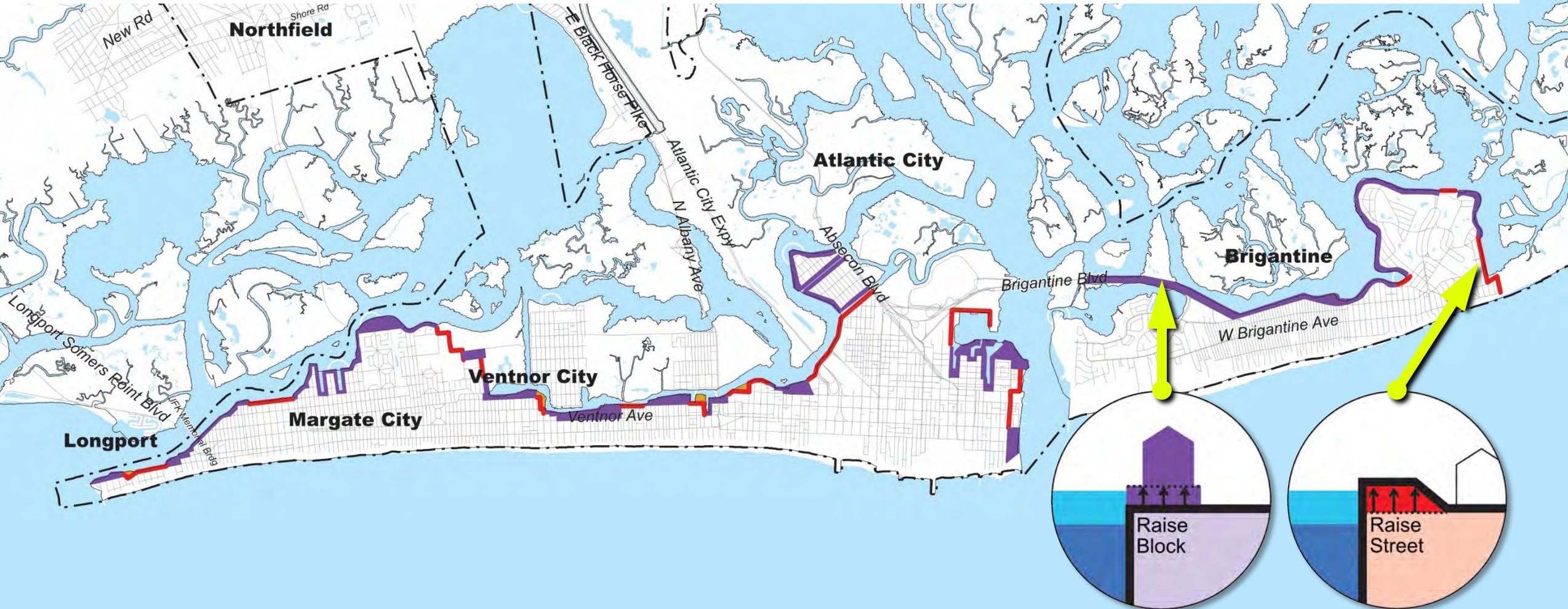
BAYSIDE SHORELINE PROTECTION

- 1 Rely on the plan proposed in the **USACE Back Bay Plan, Great Egg Harbor Inlet SSB** to protect bayside from storm surge events
- 2 Install sheet pile dune core
- 3 Reinforce dunes
- 4 New bulkhead



BAYSHORE CONTINUOUS SHORELINE PROTECTION STUDY

- Plan to look at a combination of raising sections of streets along the bayside and incentivizing development of key properties with bayside frontage to achieve enhanced shoreline protection measures to form a continuous bayside flood protection system.



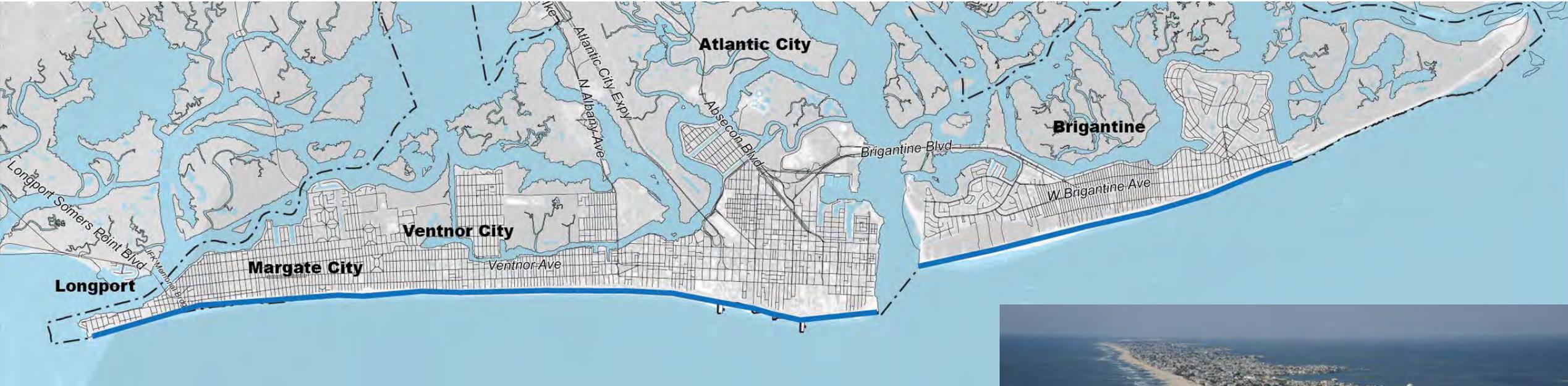
ABSECON BAY BLUE/GREEN WAY

Network of interconnected kayak/canoe trail (Blue way) connecting the Atlantic County bays developed in conjunction with new recreational trail (Green way) along the Blackhorse Pike and roads paralleling the shoreline.



BEACH NOURISHMENT

- Continue beach nourishment program, with gradual elevation increase to address increased height of surge over time



OFFSHORE BREAKWATERS STUDY



Brigantine Beach

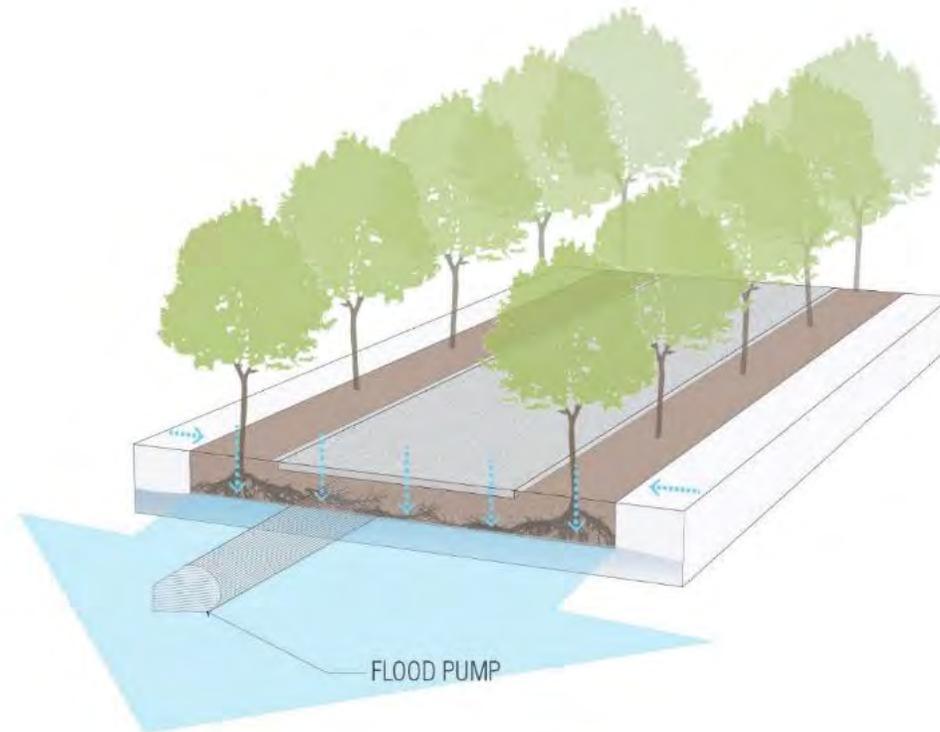
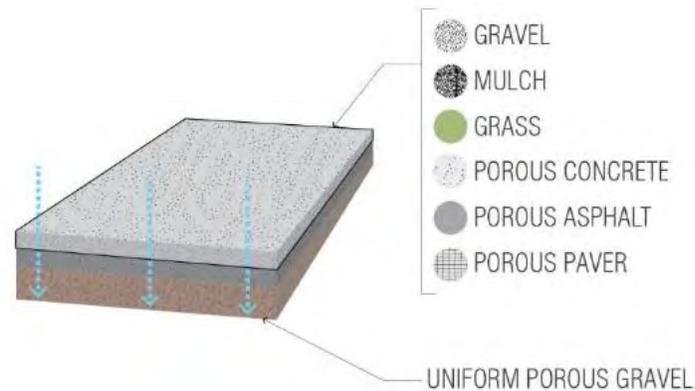


Small-scale Breakwaters

LIVING STREETS FEASIBILITY STUDY AND PILOT PROGRAM

- **Living Streets** Upgrade existing streets for subsurface conveyance without pipes. Networked Green Infrastructure offer groundwater reduction through evapotranspiration and structural soils.
- Use the roadway infrastructure to function as a performative network to **mitigate downstream flash flood risks and facilitate infiltration:**

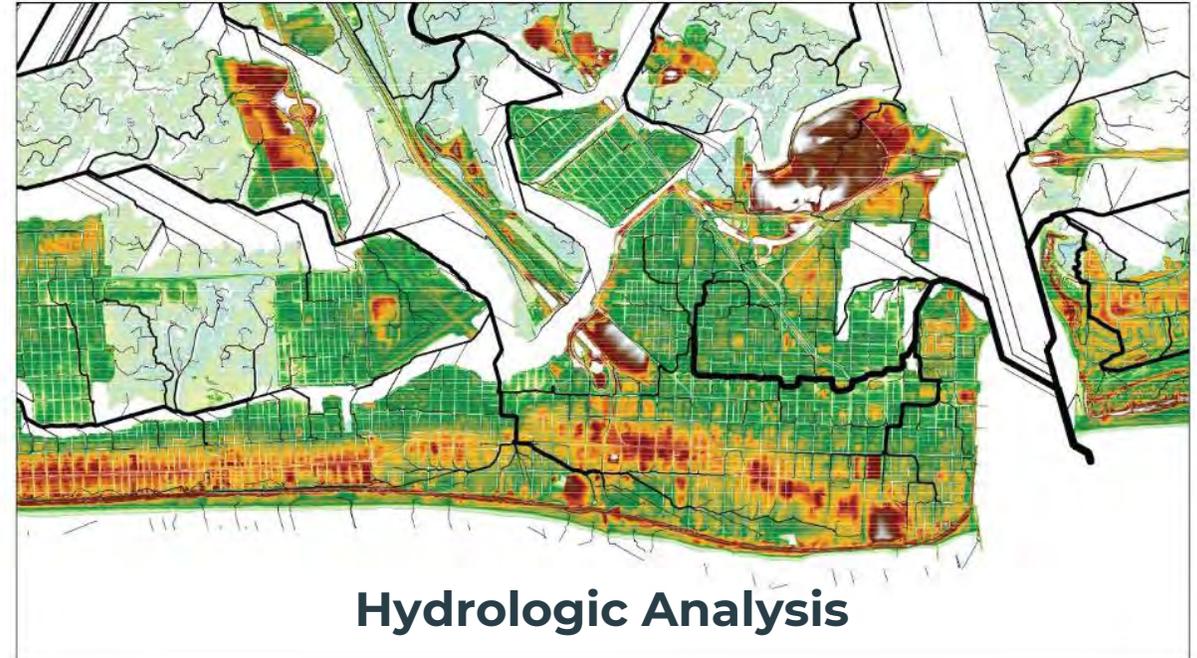
Green streets allow infiltration.



Blue streets convey water flow

LIVING STREETS

- Upgrade existing streets as for subsurface conveyance without pipes
- Networked Green Infrastructure for groundwater reduction through



1. Start with Hydrologic analysis of the existing topography informs the location for the implementation of street adaptations.
- 2. Collect, store, and slow water** using the depth of the public right of way.

STORM WATER MANAGEMENT PARKS

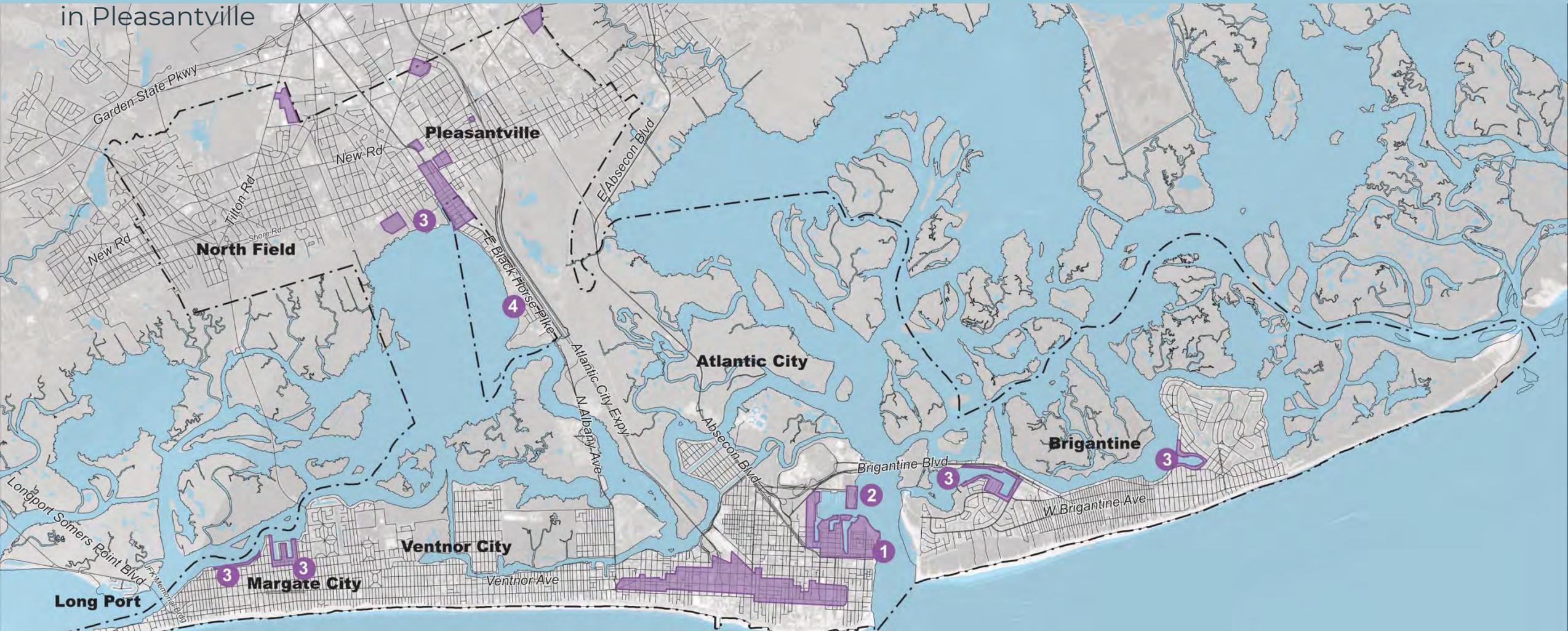
- Create new 'storm water management parks' on city-controlled land. Link pump stations' effluent to new wetland parks



Conovers Creek

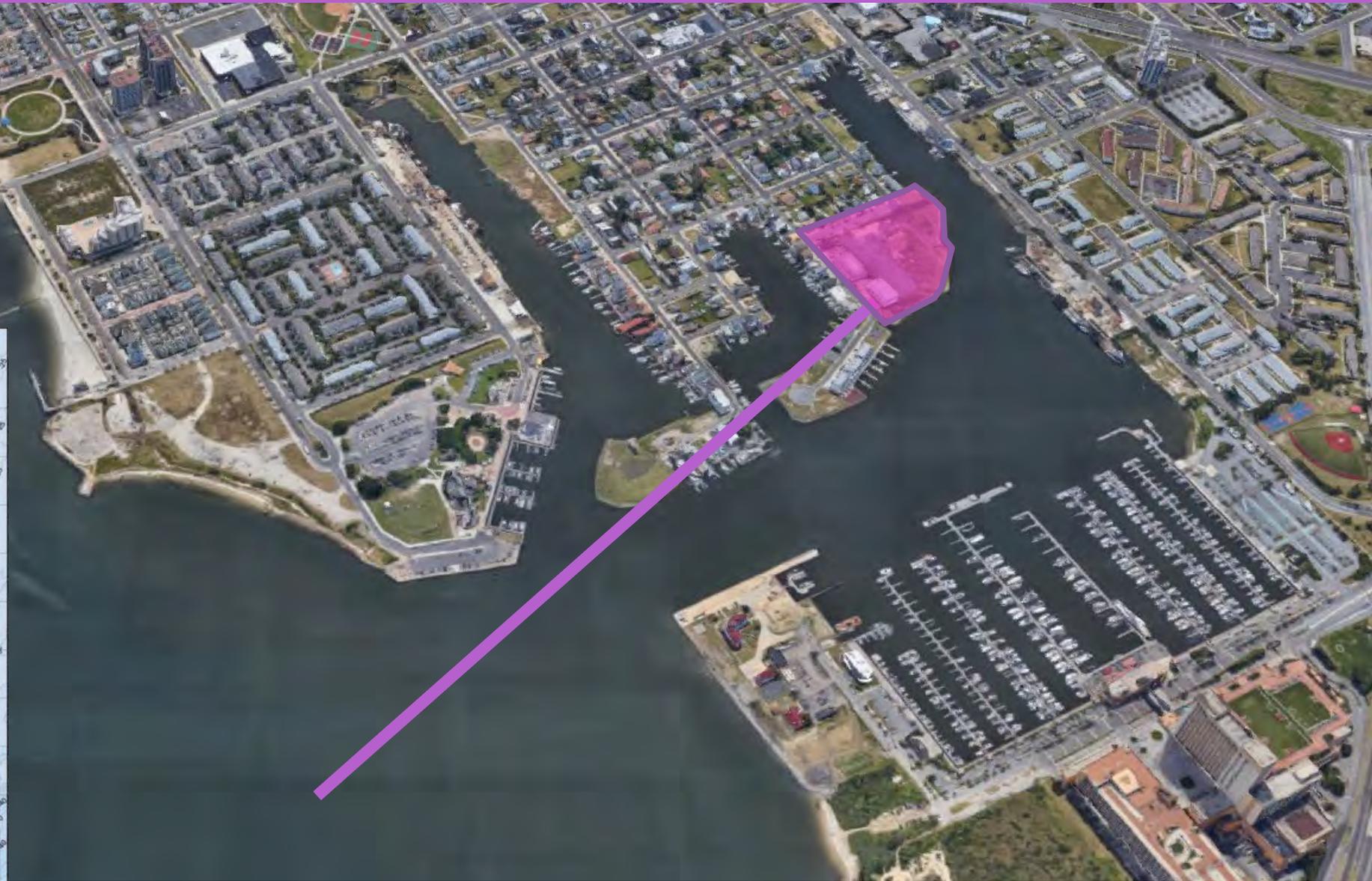
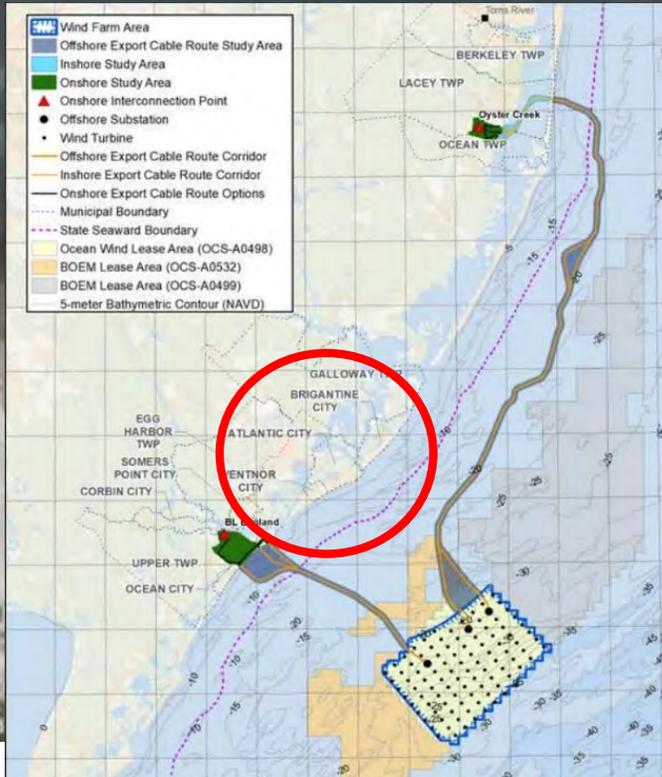
EQUITABLE ECONOMIC DEVELOPMENT

- 1 Rezone all parcels adjacent to Basin and marina for Industrial / Blue Economy related land uses
- 2 Decommission U.S. Coast Guard Station Atlantic City and redevelop for Blue Economy land use
- 3 Waterfront Special District / Development Corridor
- 4 Leverage Black Horse Pike Road raising project to create new boulevard as corridor for economic development in Pleasantville



REZONE GARDNERS BASIN AND DELTA BASIN

Rezone area around Gardners Basin and Delta Basin to allow for Industrial / Blue Economy related land uses



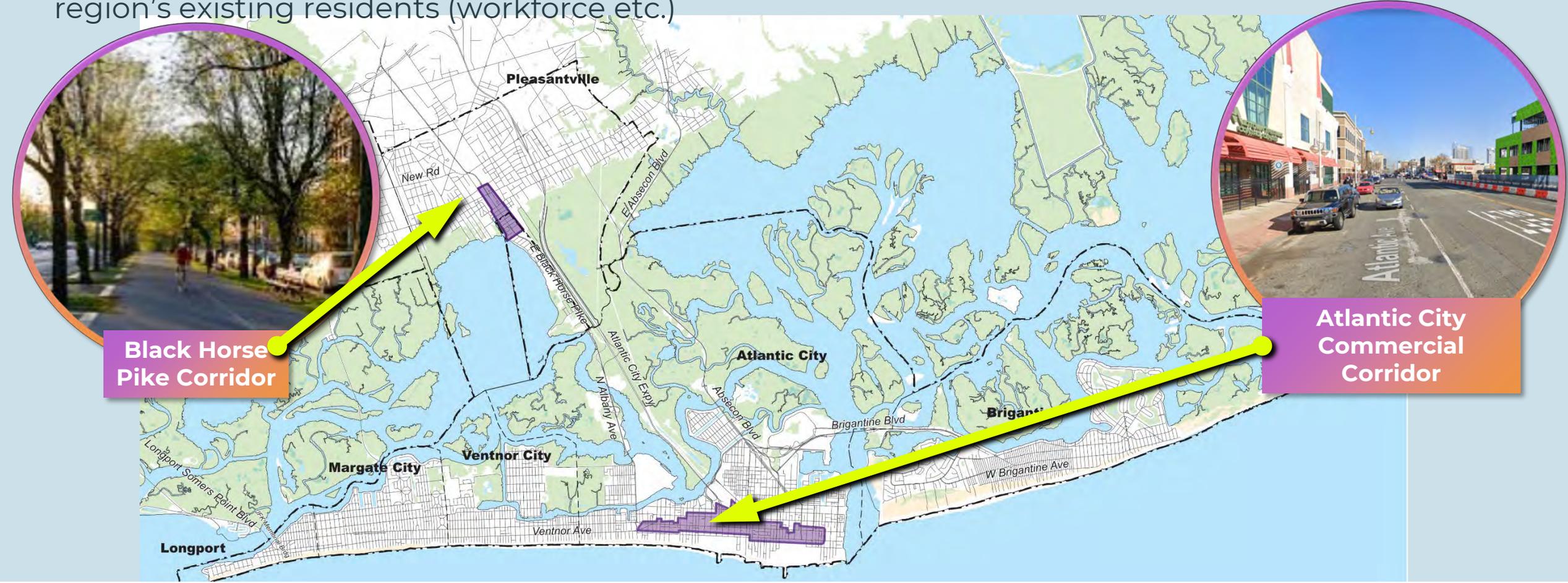
BLACK HORSE PIKE STRATEGIC GROWTH CORRIDOR

- Leverage *Black Horse Pike Road raising project* (Route 40 Atlantic County Drainage Project) to create new boulevard as corridor for economic development in Pleasantville



REDEVELOPMENT STUDY AND VISION PLAN FOR LOWER RISK AREAS

- 1 Upzone areas in less vulnerable ('High and Dry') areas with access to housing and jobs to
 - 2 incentivize increased development
- Study potential for increased density to accommodate more affordable housing options for the region's existing residents (workforce etc.)



Black Horse Pike Corridor

Atlantic City Commercial Corridor

BADER FIELD COORDINATED DREDGE-SITE RAISING COMPACT

- Coordinated program to dredge spoils from all ongoing and future dredging projects in the region to raise the Bader Field site.
- This will provide important synergies between local projects to improve storm water capacity and maintain navigational channels, and this ongoing economic development initiative.
- Redevelopment of Bader Field is of regional importance in providing a new potential engine of growth and jobs as well as a location for those displaced over time by the impact of climate change.



Feedback

- ❖ Home Elevation Program/Policy Changes
- ❖ Wetland Restoration – incorporate short-term actions
- ❖ Expand Community Solar on Municipal Owned Land
- ❖ New Pump Station Locations
- ❖ Development of a Resiliency and WIND Institute
- ❖ Multi-Jurisdictional Natural Hazard Mitigation Plan Atlantic County – short-term projects that set the stage for Resilient NJ
- ❖ Stormwater Utilities – source of funding
- ❖ Resiliency improvements for the ACMUA water treatment plant in Pleasantville and the ACUA sewer plant in Atlantic City
- ❖ Elevating roadways in specific locations
- ❖ Blue Economy expansion in Atlantic City (NJEDA is funding an effort to remove barriers of development for several sites)
- ❖ Expand transit evacuation options

IV. Feedback on Preferred Scenario

V. Next Steps

Thank you!