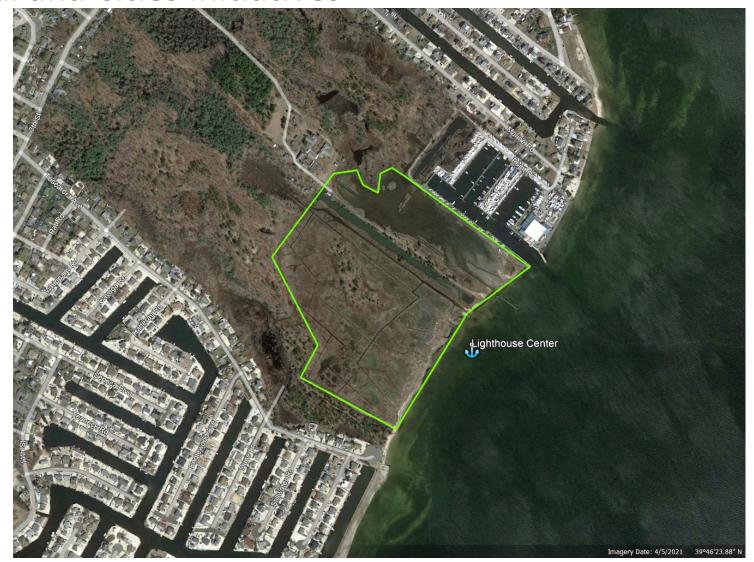


# Helping NJ Communities Adapt to Climate Change Multiple benefits of Nature Based Solutions

#### **Coastal and Cities Initiatives**

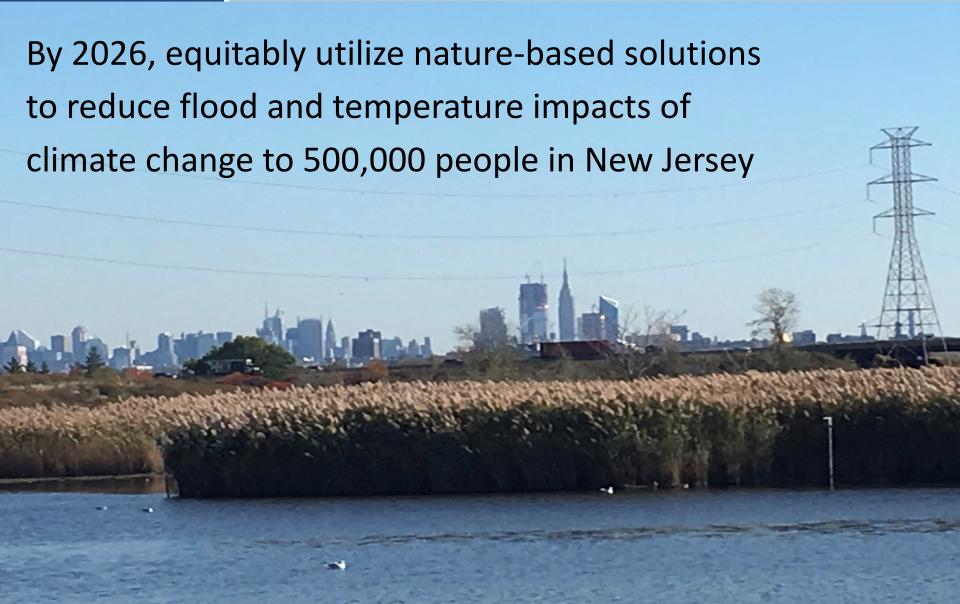




increased sequestration or reduced 3Gt CO2e/yr emissions of greenhouse gas **CLIMATE** who are most vulnerable to an increased risk of 100M people flooding, fire or drought benefitting from nature to adapt to climate change healthy ocean regions that are **OCEANS** 4B hectares important for biodiversity and carbon **FRESHWATER** healthy river systems that are 1M km important for biodiversity and carbon River Systems **FRESHWATER** healthy lakes and wetlands that are 30M hectares important for biodiversity and carbon Lakes & Wetlands healthy lands that are important **LANDS** 650M hectares for biodiversity and carbon who are benefitting from healthy ocean regions, **PEOPLE** 45M people freshwater systems and lands that are important for biodiversity and carbon



## NJ Strategic Plan 5-year Goals



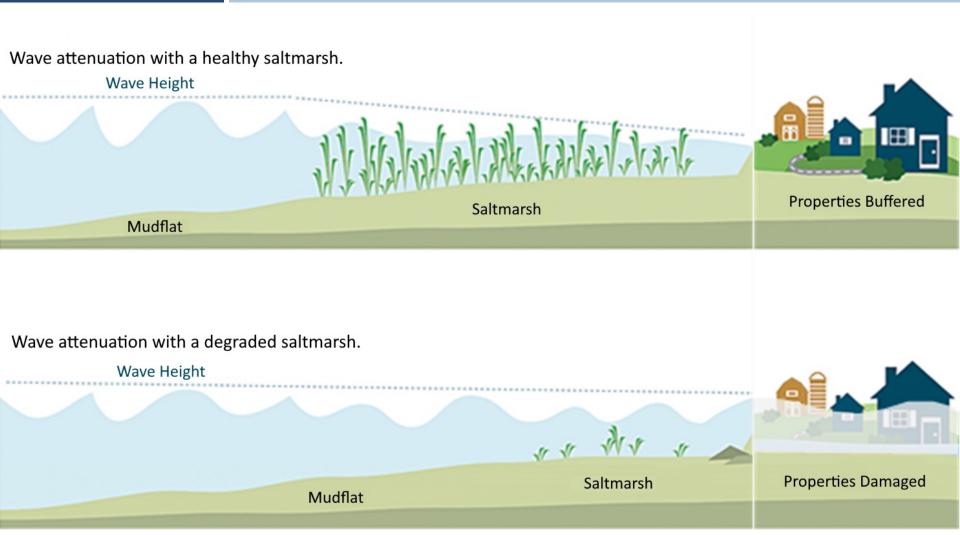


#### Resilient Coast Initiative





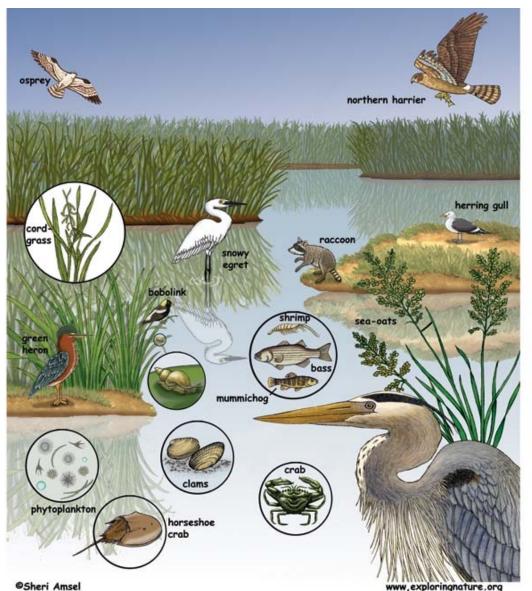
### Resilient Coast Initiative



Source: ESRI ArcNews, "GIS Helps Integrate Coastal Hazard Risk and Sea Level Rise." 2014



### **Resilient Coast Initiative**







#### **Cities and Climate Change**

Cities are most affected by climate change:

- extreme heat
- drought
- under/overabundance of water

New Jersey's major cities are situated on rivers or the coastline, putting them at risk from rising sea levels and storms.

Low-income and marginalized people are the most vulnerable to climate risk.





Nature-based solutions in cities have the potential to address climate change and other objectives:

- Green infrastructure Water Quality,
   CSO abatement
- Increased tree canopy Heat Island,
   Public Health
- Access to parks and open space –
   Public Health
- Revised land use ordinances
- Mobility and alternative transportation – pedestrian friendly





#### Newark

- NJ's largest city
- •One of the worst cities in U.S. for heat island effect
- •Less than 14% of Newark covered by leaf canopy
- •City losing more than 1,000 trees a year
- Newark has 17 combined sewer overflows.

#### **Actions Planned for FY23:**

- •Newark Project Greenprint Phase II
- Newark Tree Planting
- •Implementation of Newark360
- •15 Minute City Pilot



# Newark Greenprint



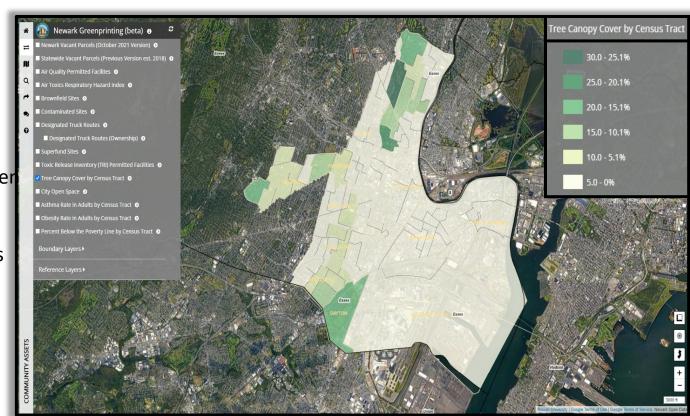
#### Project priorities: Air Quality, Urban Heat, Flooding

Partners: City of Newark,
Rowan University,
Environmental

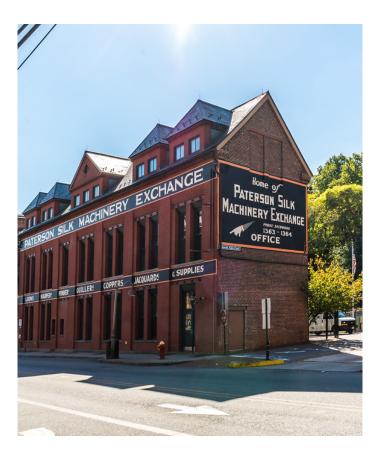
Commission, Newark Green

Team, and Newark

Community Food Systems







#### **Paterson**

- New Jersey's third-largest city
- •More than 11% sits in flood-prone areas adjacent to the Passaic River
- Paterson has more than 20 combined sewer overflows
- Localized flooding mingles with combined sewer overflow backfills

#### **Actions Planned for FY23:**

- Paterson Fair Street Green Street
- Paterson Adopt-A-Catch basin Program
- Partner with Montclair State Univ. on Green Innovation Center
- Partner with Passaic Habitat on Clinton Street Park