

Local Climate Change Adaptation Planning: Model CCRHVA Pilot Projects

Piloting New Jersey's Model Climate Change-Related Hazard Vulnerability
Assessment across Evesham Township, Egg Harbor City, and Woodbine Borough

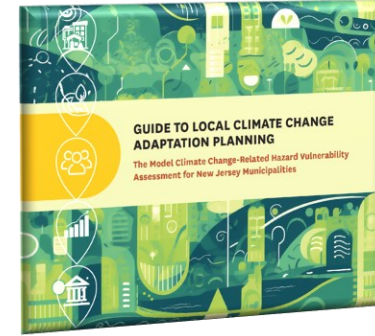
FUNDING PROGRAM

NJDEP Resilient NJ

FOUNDATIONAL GUIDE

Guide to Local Climate Change Adaptation Planning: The Model Climate Change-Related Hazard Vulnerability Assessment for New Jersey Municipalities

MLUL Mandate & Technical Support



<https://bit.ly/CCRHVAGuide>

NJ Municipal Land Use Law

Mandatory Requirement: CCRHVA required for Master Plan Land Use Elements.

Hazard Projections: Must utilize latest NJDEP climate science and hazard data.

Towards Implementation: Requires buildout analysis, policy statement on consistency / integration, and strategies for reducing vulnerabilities.

Sustainable Jersey Technical Assistance

ARPA / NJDEP Resilient NJ Funding: No-cost technical assistance provided to 8 pilot towns.

Direct Planning Support: Professional GIS analysis, community engagement, and project oversight.

Action Pathway: Connects CCRHVA to Sustainable Jersey certification.

Model CCRHVA 5-Systems Approach



Built System

Critical facilities, roads, MS4 infrastructure, and housing.



Natural System

Tree canopy, surface waters, aquifers, floodplains, and habitats.



Social System

Socially vulnerable populations, heat stress, and support networks.



Economic System

Business continuity, redevelopment zones, and tax base stability.



Governance

Local codes, Master Plans, and emergency response capacity.

Six-Phase Technical Assistance Path

PHASE 1–2

Gearing Up

Designated local lead and cataloged master plan documents.

PHASE 3

Engagement

Formed cross-department teams and conducted community surveys.

PHASE 4

Hazards Analysis

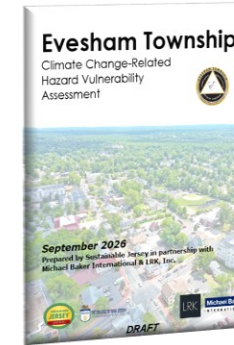
Mapped climate hazard exposure against sensitivity and assessed local capacity.

PHASE 5–6

Action & Readiness

Crafted climate adaptation strategies and Master Plan integration.

Evesham Township: Suburban Resilience



BURLINGTON COUNTY

Identified Hazards

Inland Stormwater Flooding: Intense rain events causing localized drainage surcharges. Major expansion of projected floodplains.

Low Tree Canopy & High Impervious Surface: Extreme heat and stormwater runoff.

Dam & Wildfire Exposure: 19 dams mapped alongside Pinelands fire risk.

Adapt Current Practices

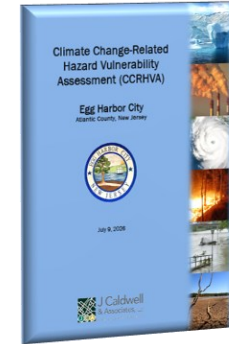
Low-Intensity Development

Natural Resource Protection

Community Preparedness

PILOT CASE STUDY 2

Egg Harbor City: Urban Core & Equity



ATLANTIC COUNTY

Social Vulnerability

Designated OBC with high concentration of older housing stock, renters, and heat island exposure.

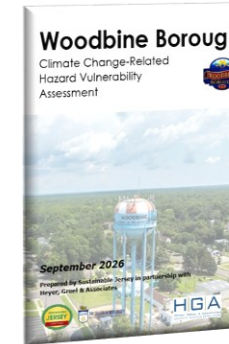
Lived Context Data

Survey input for flood locations and resident concerns.

Economic Focus

Aligning downtown redevelopment with stormwater and shade improvements.

Woodbine Borough: Rural Pinelands Core



CAPE MAY COUNTY

100%

Private Well Water Dependency
Reliance on Septic Systems

Water Quality & Infrastructure Protection

Mapped private well locations and wellhead protection areas against MS4 stormwater infrastructure and NJDEP TMDL datasets to safeguard groundwater quality.



Wildfire & Ecosystem Integration

Assessed Pinelands forest interface vulnerabilities and habitat conservation priorities.



Storm Surge & Public Health

Assessed exposure to coastal hazards, extreme heat, and vector-borne diseases.

One Framework, Tailored Local Stories

Suburban Context

Evesham addressed dual climate hazard profiles of urban heat island with pluvial flooding and sensitive ecosystem with substantially expanding wildfire risk and flood area exposure.



Urban Core Context

Egg Harbor City centered extreme heat and wildfire exposure, social support networks, and climate-ready downtown design.



Rural Pinelands Context

Woodbine focused on aquifer protection, wells and wastewater systems, future development potential, and community wildfire readiness.



Translating CCRHVA into Municipal Action



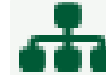
Land Use Ordinances

Adopt enhanced development standards for site plans, minor developments, and green infrastructure.



Climate Readiness Star Program

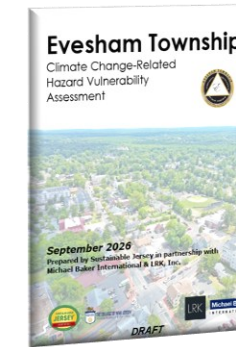
Fulfill requirements for Sustainable Jersey's Star in Climate Readiness.



Master Plan Updates

Formally adopt CCRHVA into Land Use Plan Elements and align capital improvement plans.

Evesham Strategy Categories



Dam Management

Enhance dam monitoring and management using climate change and hydrological data.

Sustaining Ecosystem Services

Protect water quality, species habitat, biodiversity, riparian areas, and floodplains in flux.

Balancing Wildfire Risk Reduction and Environmental Resources

Promote wildfire education programs and fuel reduction that supports Pinelands ecosystem.

Stormwater Management & Impervious Cover Reduction

Identify priority MS4 outfalls and drainage basins for capacity improvements and green infrastructure integration.

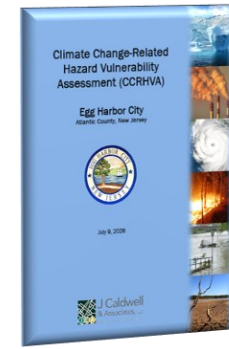
Reducing Social Vulnerability

Implement urban heat island infrastructure improvements, climate change informed affordable housing planning, and incorporation of vulnerable populations data.

Education & Outreach

Establish targeted information campaigns for flooding, heat, and wildfire exposure and mitigation.

Egg Harbor City Strategy Categories



ATLANTIC COUNTY

Social Support Systems

Expand community outreach networks and establish neighborhood resilience hubs for extreme heat and storm events.

Redevelopment Alignment

Require sustainable design, green infrastructure, and heat mitigation in all new downtown redevelopment agreements.

Urban Tree Canopy Expansion

Implement a targeted street tree planting program focused on identified heat island corridors and vulnerable blocks.

Housing Quality

Connect older housing stock and renters to energy efficiency and weatherization assistance programs.

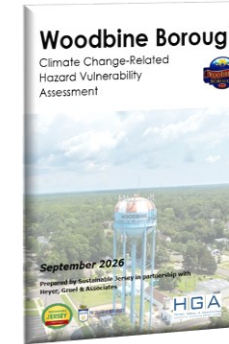
Groundwater Recharge & Water Quality

Manage pollutant sites and runoff in stormwater and reduce impervious surfaces.

Wildfire and Forest Edge Management

Establish forest-adjacent defensible space and management protocols informed by climate change data and promoting ecosystem services.

Woodbine Strategy Categories



CAPE MAY COUNTY

Public Health & Education

Maintain a tree planting and inspection program to reduce urban heat islands and extreme storm hazards, assess population needs for support and resources during climate hazard events, and engage socially vulnerable populations.

Reinforce Critical Facilities

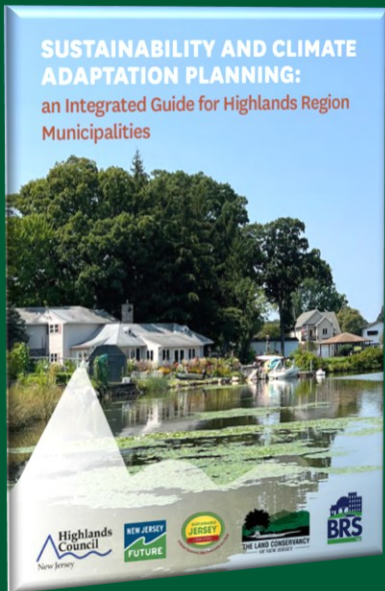
Capital improvement planning for shelter facilities, backup power sources, and stormwater system improvements.

Strengthen Wildfire Prevention and Preparedness

Develop defensible space guidelines for the wildland-urban interface, institute wildfire preparedness training for volunteer fire department, and enhance localized evacuation routing.

Natural Resource Protection & Habitat Corridors

Establish an Environmental Commission and adopt habitat protection overlay zones.



SUSTAINABLE JERSEY CLIMATE READINESS

Building Climate-Ready Communities

Access technical assistance resources, model templates, and guidance documents online.

Visit: sustainablejersey.com | Contact: rohrbact@tcnj.edu