Pinelands Climate Committee

UPDATE ON NEW JERSEY'S INTERAGENCY COUNCIL ON CLIMATE RESILIENCE: PINELANDS COMMISSION'S RESILIENCE ACTION PLAN FOR EXTREME HEAT

February 15, 2023

Pinelands Commission

An independent state agency charged with preserving, protecting, and enhancing the natural and cultural resources of the federally designated Pinelands National Reserve while encouraging compatible economic and other human activities consistent with that purpose. The Commission has regulatory jurisdiction over the 938,000-acre Pinelands Area, which was established by the State legislature through the Pinelands Protection Act in 1979 and includes portions of 7 counties and all or portions of 53 municipalities in southern New Jersey. All development in the Pinelands Area and all county and municipal master plans and ordinances must be consistent with the Pinelands Comprehensive Management Plan, which sets forth detailed land use and environmental standards, including those related to wetlands, vegetation, forestry, water quality, stormwater management and fire management.

Programs · Science programs · Pinelands Climate Committee · Land Use and Planning · Transfer of Development Rights (Pinelands Development Credit Program) · Permanent Land Protection · Long-Term Environmental and Economic Monitoring

Pinelands Commission Resilience Action Plan

- To be developed in consultation with an Advisory Group formed by the IAC and composed of subject matter experts and practitioners
- The Advisory Groups will meet with the IAC, including Commission staff, during the development of the RAPs to offer best practices and provide feedback on interim documents. The Advisory Groups will also review the final draft RAPs prior to release.

Extreme Heat Resilience Action Plan

March 31, 2023 – Agencies to share draft Action Lists of Extreme Heat RACs - (current agency actions & proposed ideas)

April 11, 2023 – IAC will identify which agency will lead on specific RAC topics

May 2023 – Agencies to share list of current actions and proposed ideas with Expert Advisory Groups

Summer 2023 – Draft Resilience Action Plan Released by IAC

Fall 2023 – Final Extreme Heat Resilience Action Plan Released by IAC

Additional topics will be addressed in subsequent annual releases

Health Impacts

·Heat-related mortality

• Heat stress, heat stroke to at-risk outdoor workforce (agricultural, construction, military, etc.)

 Increased infectious disease – Lyme Disease, West Nile Virus, Ragweed pollen

• Air quality- respiratory illness - Ground-level Ozone-Climate Penalty, vulnerable asthma sufferers

 \cdot HAB toxin exposures respiratory illness, foodborne illness, skin irritation and neurologic symptoms

Infrastructure Impacts

• Pavement, bridge, and rail material stress

• Reduced efficiency of electric generating stations, solar voltaic efficiency declines, power lines failures, transformer failures, refrigeration unit failures

 Dams - failure due to extreme precipitation resulting from warmer atmosphere holding more water, leading to extreme rainfall events

Agricultural Impacts

- · Reduced crop yields
- \cdot Invasive insects
- · Plant pathogens
- \cdot Irrigation demands

Forest Impacts

- · Forest composition
- ·Wildfire
- \cdot Invasive insects
- · Geographic species range

Species and Landscape Impacts

·Loss of native species

·Geographic species migration

· Habitat transition

Water Resource Impacts

·Water supply stress

• Surface water quality impairments (microbiological)

Public webinar on IAC's Climate Resilience Action Plan development is scheduled for March 2, 2023 from 6:00 – 7:00 pm

Extreme Heat Advisory Group has been identified –six individuals affiliated with :

- Georgetown Climate Centers Adaptation Program
- Farallon Strategies
- Toulan School of Urban Studies and Planning Portland State University
- Association of State and Territorial Health Officials
- Georgia Tech Urban Climate Lab / Urban Climate Consulting
- WSP Global Environmental Consulting

Discussion and Questions