Pinelands Management Area Boundary Assessment for Climate Risks

PINELANDS CLIMATE COMMITTEE APRIL 19, 2023

FY 2023 CLIMATE COMMITTEE PRIORITIES

- Amendments to CMP solar energy facility standards
- Analysis of Pinelands Management Area boundaries to identify areas within Regional Growth Areas, Pinelands Towns and Pinelands Villages that are vulnerable to climate change

GIS-based analysis:

Risks, Uses, T&E

Flood Hazards Wildfire Hazards

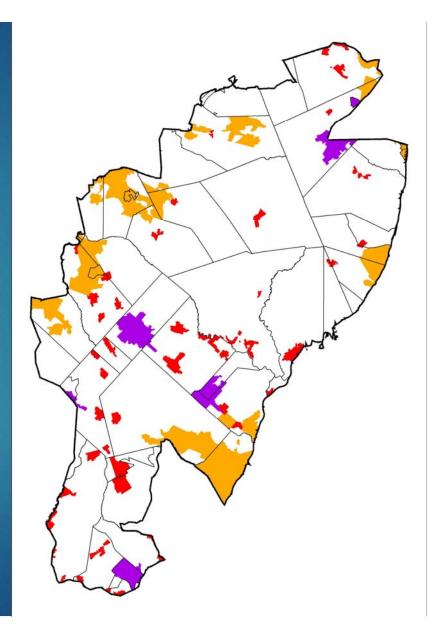
Threatened & Endangered Species

Preserved Land Existing Land
Use/Land
Cover

Municipal Zoning

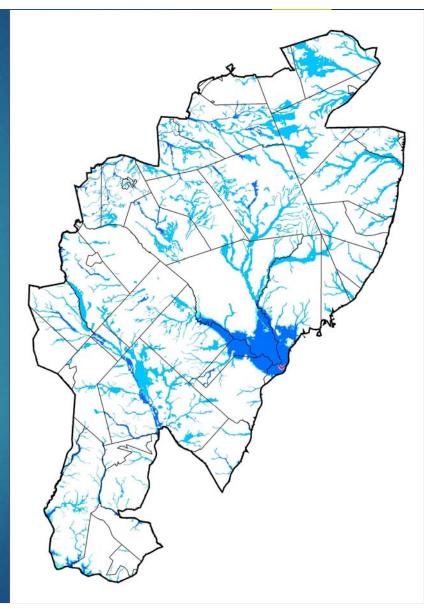
Growth-Oriented Management Areas

- 24 municipalities with Regional Growth Areas (orange)
- 7 Pinelands Towns (purple)
- 47 Pinelands Villages (red)



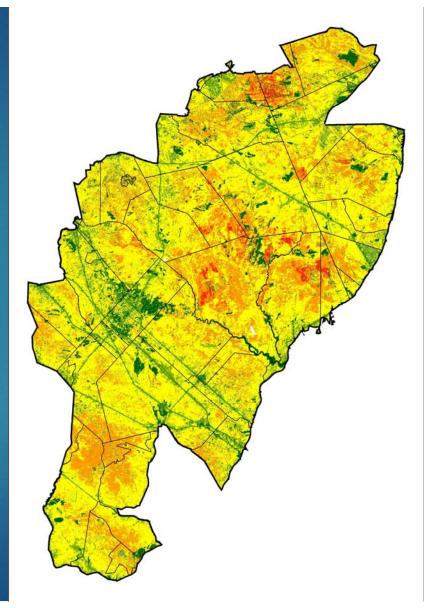
Flood Hazard Layers

- Source: NJ Flood Mapper/Rutgers University
- Composite FIRM Data 2020 (shown)
 - Combination of effective and preliminary mapping data from 2020
 - Produced by FEMA for Flood Insurance Rate Maps (FIRMs)
 - National standard for quantifying current flood hazards
- Mean Higher High Water
 - Inundated coastal areas under future sea level rise scenarios
 - Inundation in hydrologically disconnected low-lying areas
 - The 5-foot SLR scenario mapping



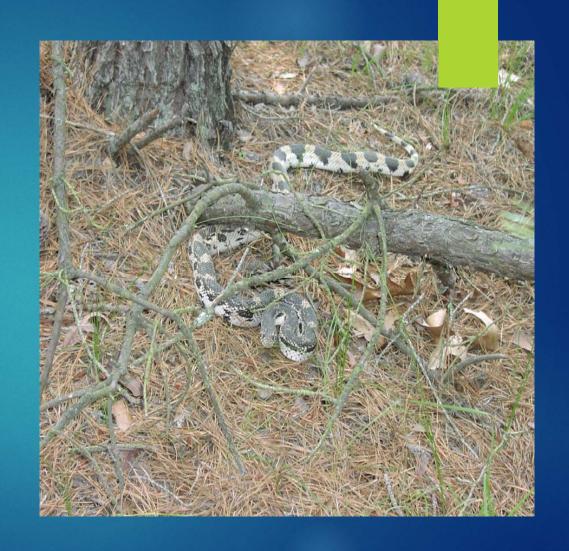
Wildfire hazard layer

- Source: NASA/NJPC
- Fire Risk Assessment Map
 - Determines wildfire risk based on several factors, including vegetative cover and remoteness/ease of access
 - Five categories of risk:
 - Extremely Low (dark green)
 - Low (light green)
 - Moderate (yellow)
 - High (orange)
 - Extremely High (red)
 - Evaluation focused on "High" and "Extremely High" areas



Threatened & Endangered Species

- ► Sources: NJDEP, NJPC
 - ▶ NJDEP's Endangered and Nongame Species Program
 - ► Commission Staff Records
- ▶ Ranges
- ▶ Migration



Additional factors -Use



Preserved Land

PCF Acquisitions
PDC Severances
Farmland Preservation
Open Space
502 & 20 Target Areas for land protection



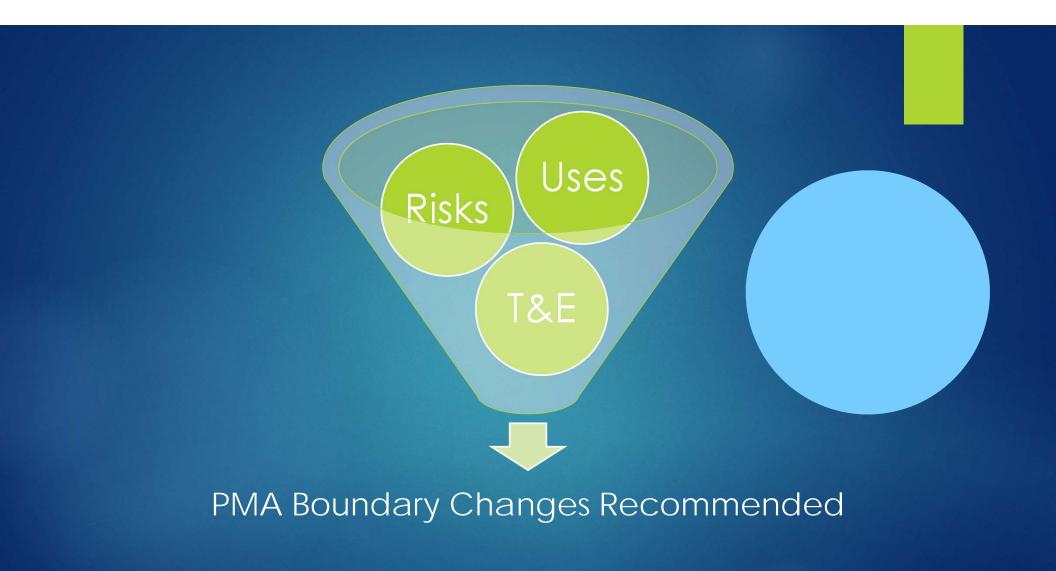
Land Use/Land Cover Data

Vacant vs. Developed Wetland vs. Upland



Zoning

Types of Development Redevelopment Areas Adjacent Management Areas



Potential Actions

- Amendments to the Pinelands Land Capability Map
 - Redesignation of management areas from growth-oriented to conservation-oriented
- Municipal rezonings or reductions in permitted development intensities
- New or amended CMP environmental standards
- Targeted land acquisition/preservation
 - Pinelands Conservation Fund
 - ▶ Green Acres
 - ▶ Non-Profits

Next Steps

- Complete identification and analysis of areas potentially impacted – May 2023
- Climate Committee discussion of staff findings and recommendations – July 2023
- Permanent Land Protection Round priorities
- P&I Committee review of potential CMP amendments for PMA boundaries

questions & comments?

