

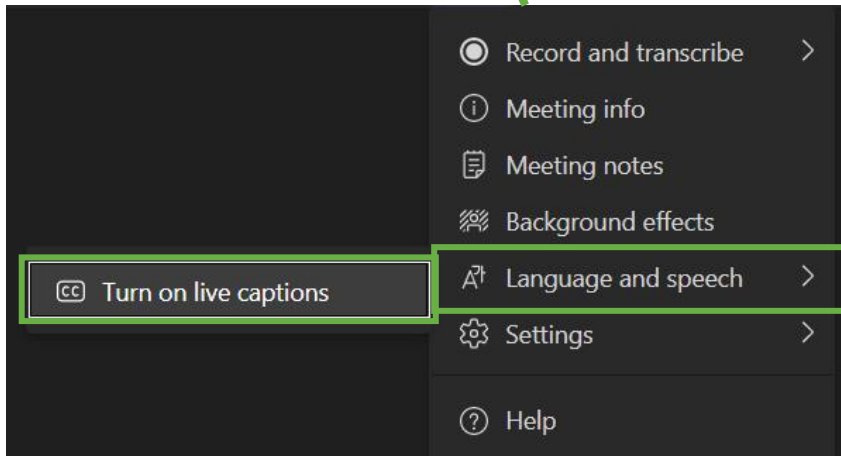
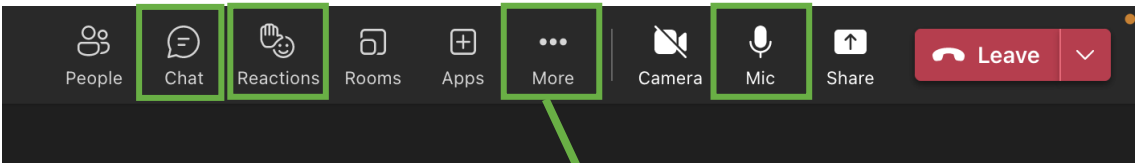
Housekeeping

This webinar is being recorded. Your presence at this meeting indicates you agree to be recorded. Shortly after the conclusion of the webinar, the recording and slide deck will be posted at nj.gov/dep/climatechange/resilience-action-plans.html.

All participants are muted during the presentation portion of the webinar. All participants will be able to un-mute themselves at the end of the presentation to ask questions or share feedback.

If you have a question or comment, you may:

- Write it in the chat at any time. We will read questions from the chat aloud at the end of the webinar.
- Use the "raise your hand" function at the end of the webinar. We'll take all verbal questions at the end of the presentation.
- Use the online form at nj.gov/dep/climatechange/resilience-action-plans.html at any time until March 17.



An aerial photograph of a city, likely New Brunswick, New Jersey, featuring a wide river with two bridges. The foreground shows a multi-lane highway with traffic. The middle ground is dominated by a large, arched stone bridge crossing the river. The background includes a dense urban area with various buildings and a large green park area. The overall scene is bright and clear, suggesting a sunny day.

Resilience Action Plans

Webinar | February 9, 2023

Presented by the NJ Interagency Council on Climate Resilience

Executive Order 89

New Jersey's flagship climate resilience policy

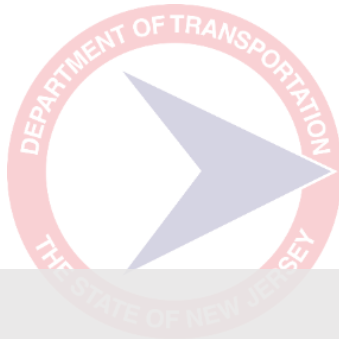
Nick Angarone

Vice-Chair, Interagency Council on Climate Resilience

NJ Chief Resilience Officer

EXECUTIVE ORDER 89:

Establishes resilience positions, offices, and councils



“An Interagency Council on Climate Resilience (the “Interagency Council”) is hereby established to coordinate the efforts of Executive Branch departments and agencies to develop and implement the Statewide Climate Change Resilience Strategy.”



EXECUTIVE ORDER 89:

Establishes resilience positions, offices, and councils

NJ TRANSIT
The Way To Go.



NJ EDA



An aerial photograph showing a dense forest of green trees on the right side, transitioning into a wetland area with yellowish-brown marshes and a winding blue river on the left side. The image is used as a background for the text.

EXECUTIVE ORDER 89:

Scientific Report on Climate Change

“...under the direction of the Chief Resilience Officer, [the program] shall **develop a Scientific Report on Climate Change** based on existing data and the best available science regarding the current and anticipated environmental effects of climate change in New Jersey.”

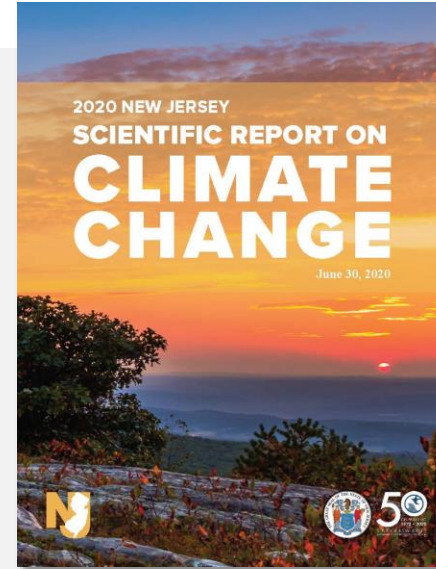
SCIENTIFIC REPORT

on Climate Change

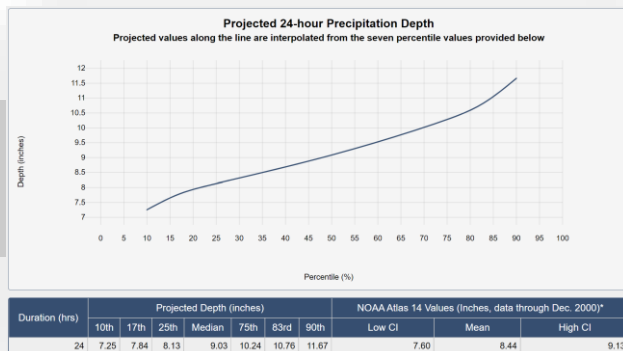
nj.gov/dep/climatechange/data.html

Overview

- Comprehensive effort to synthesize the latest and most reliable scientific information on the current and predicted future impacts of climate change.
- The report is one component of the State's comprehensive strategy to both reduce emissions of climate pollutants that fuel global warming, and proactively plan and prepare for the climate impacts that New Jersey cannot avoid.



Released June 30, 2020



Nov. 2021: Updated Atlas 14 data; Extreme Event Precipitation Projections & Projection Tool



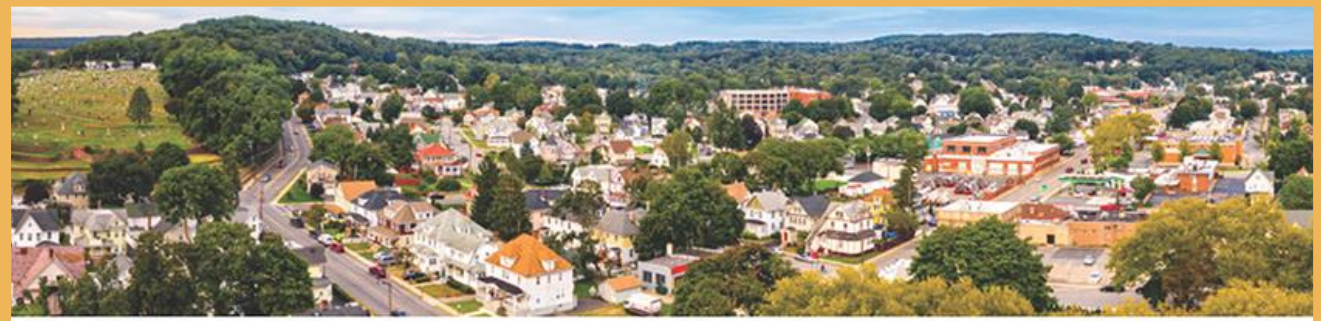
Sept. 2022: Climate Change Impacts on Human Health & Communities Addendum released



CLIMATE RESILIENCE

defined

The ability of social and ecological systems to absorb and adapt to shocks and stresses resulting from a changing climate, while becoming better positioned to respond in the future.

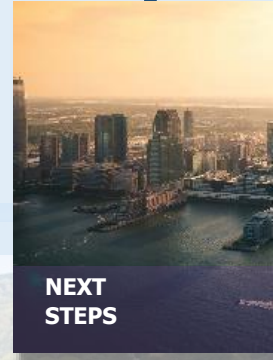
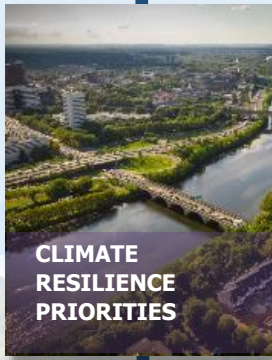
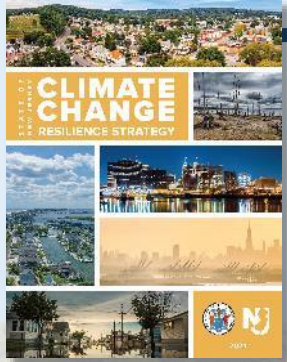


STATE OF
NEW JERSEY

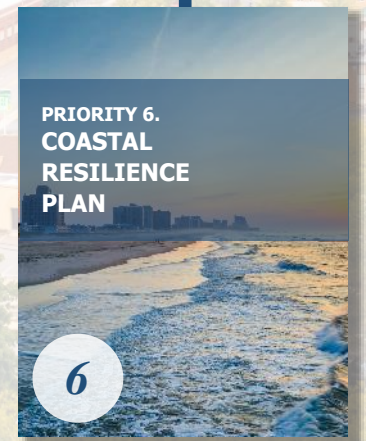
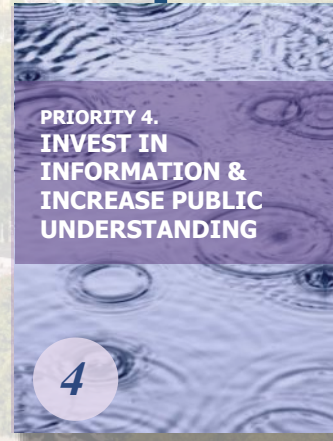
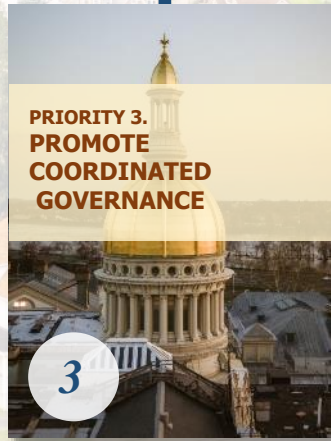
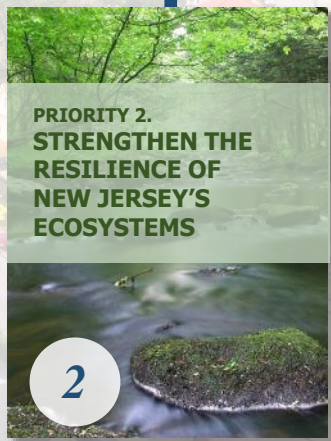
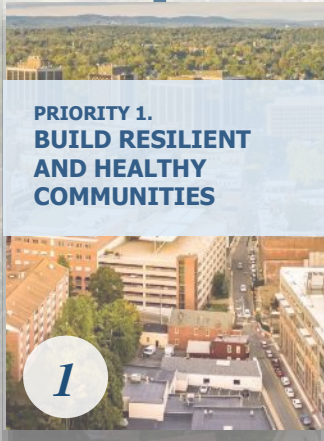
CLIMATE CHANGE

RESILIENCE STRATEGY





CLIMATE RESILIENCE PRIORITIES



Build Resilient and Healthy Communities



Strengthen the Resilience of New Jersey's Ecosystems



Promote Coordinated Governance



Invest in Information & Increase Public Understanding



Promote Climate-Informed Investments & Innovative Financing



Coastal Resilience Plan

<https://www.nj.gov/dep/climatechange/resilience-strategy.html>



Resilience Action Plans

Nathaly Agosto Filión
NJ Deputy Chief Resilience Officer

NEXT STEP:

Resilience Action Plans

Serving as the two-year update to the Climate Change Resilience Strategy

Resilience Action Plans will be statewide, detailing actions each agency will take to incorporate climate resilience into their policies, programs, and decision-making, consistent with the Strategy.

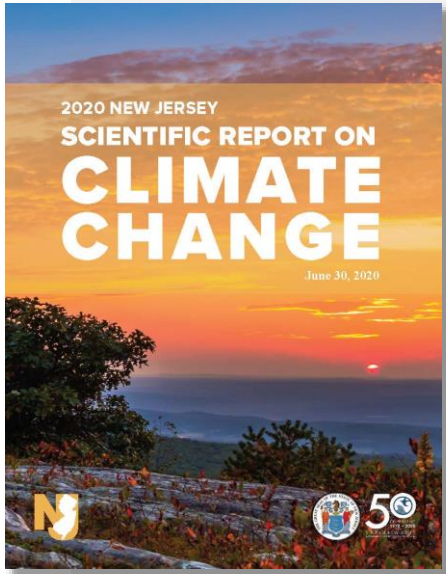
Each Resilience Action Plan will focus on a specific climate threat.

The first Plan will focus on extreme heat.

Agencies will work cooperatively to explore their respective work, identify gaps that exist, and coordinate action across State government to address those gaps.



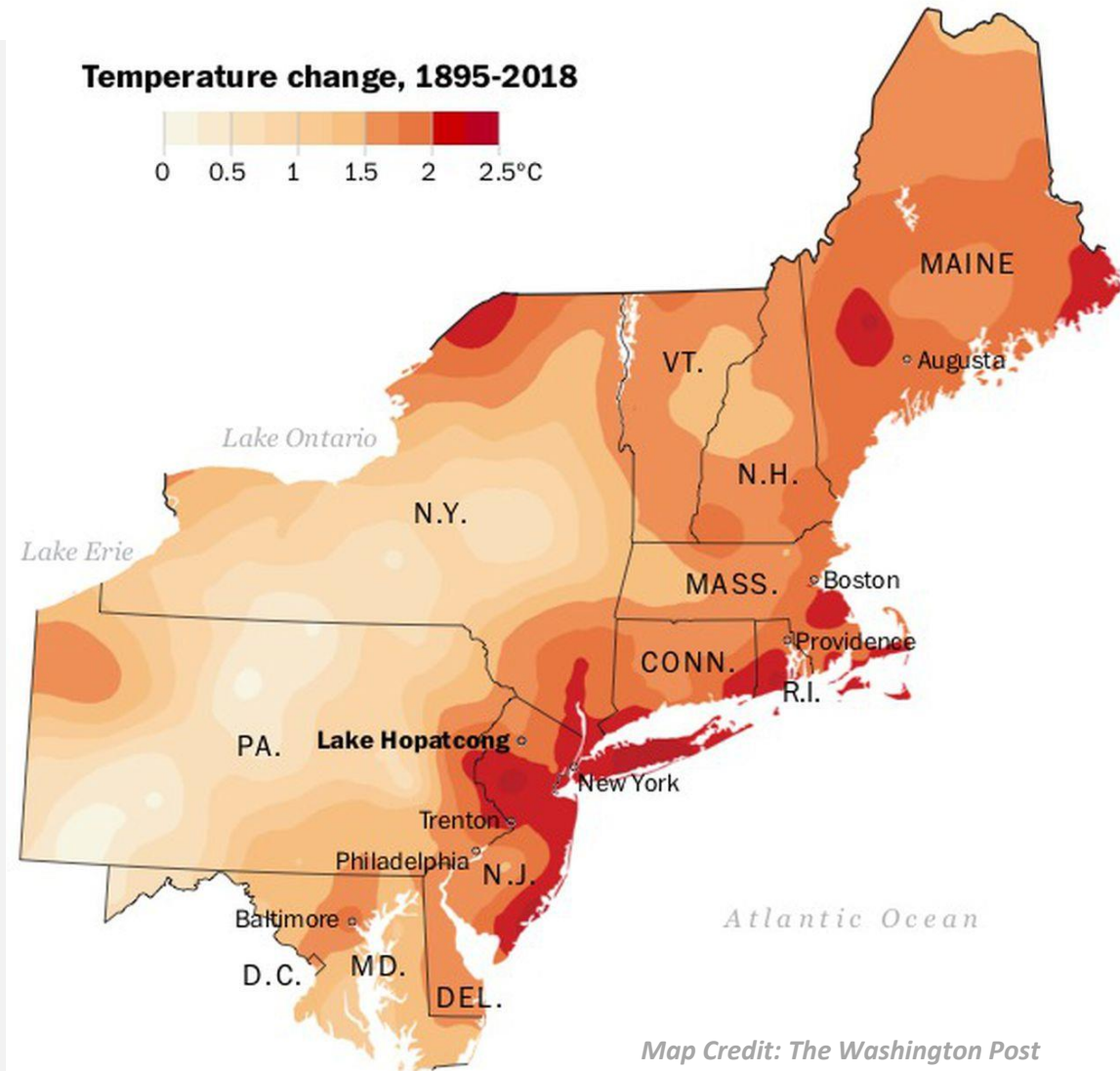
RESILIENCE ACTION PLANS

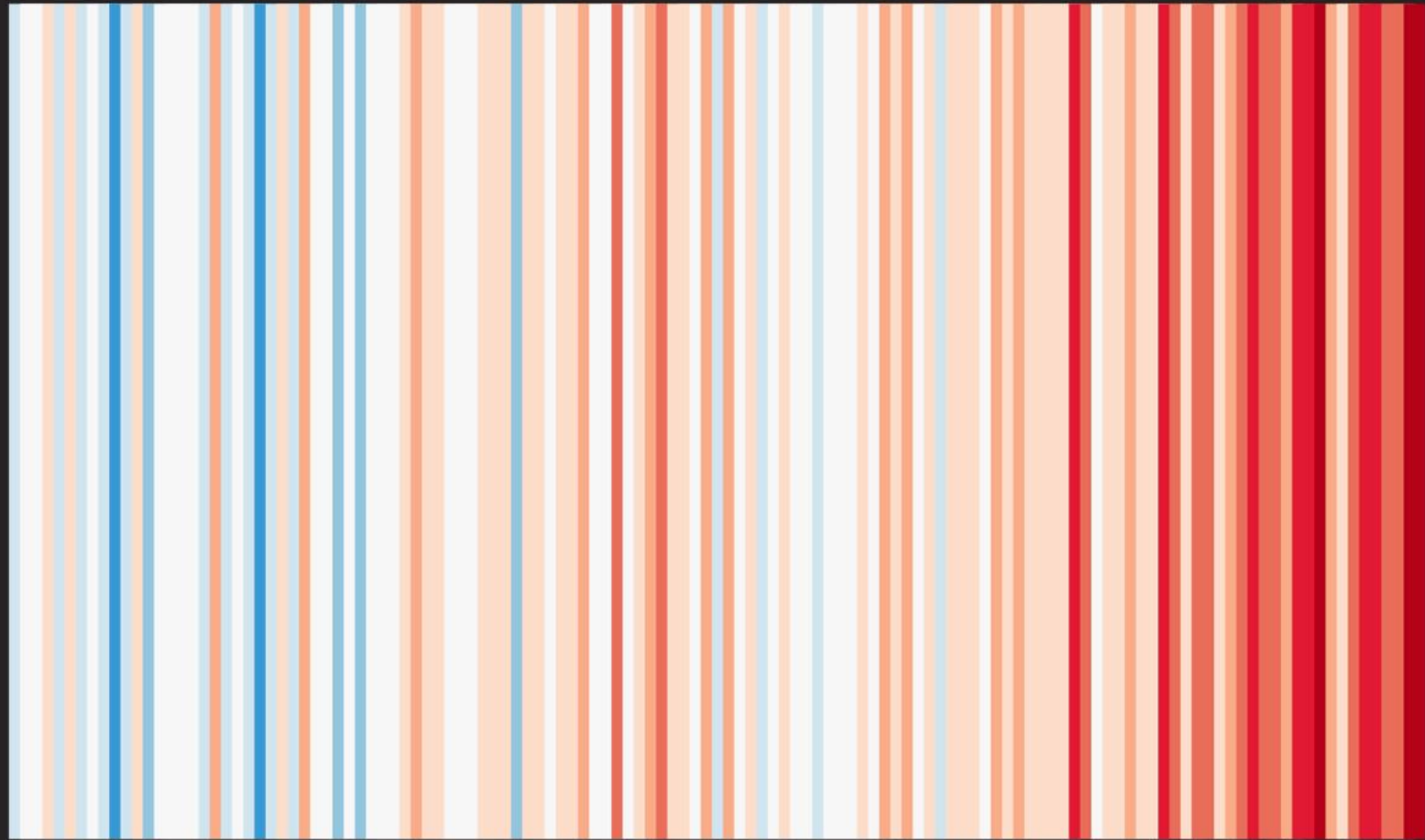


Why Extreme Heat Now?

- New Jersey is the 6th fastest warming state in the country.
- Summer temperatures in NJ in 2022 were the third hottest on record since 1895.
- High temperatures are associated with immediate and long-term health concerns, diminished air quality, and increased pressures on our food and water supply.

Of the ten hottest summers in NJ since 1895, all ten have occurred since 1999. Nine have occurred since 2005.





1895

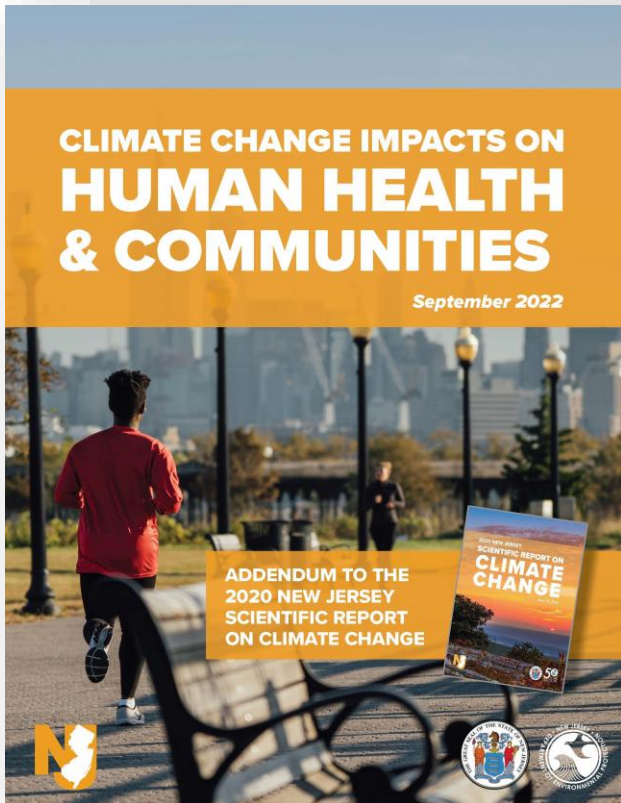
NEW JERSEY

2020

Based on Ed Hawkins "Warming Stripes".
Source: NOAA/NCEI Climate at a Glance

RESILIENCE ACTION PLANS

Extreme Heat & Public Health



- The body's innate ability to cool itself can be outmatched by extreme heat.
- Excessive heat acts as a **threat multiplier**, leading to increased heat-related illnesses and mortality
- Children, the elderly, individuals with chronic health conditions, and people who work outside are the most vulnerable to extreme heat.

Overburdened communities are subject to the most severe consequences of climate change.

- The combination of increased temperatures, precipitation, and humidity can lead to an increase in infectious disease spread.

In this decade, climate change could result in a 55% increase in summer heat-related mortality and more than a doubling in mortality by the 2050s.

Under a high emissions scenario; compared to the 1990s. Source: NJ Scientific Report on Climate Change, 2020



Extreme heat impacts *every* sector.

INFRASTRUCTURE

- High temperatures can damage roadways and rail tracks as well as reduce the efficiency of powerlines.
- Electricity demand spikes during periods of extreme heat strain the power grid.

FOOD SUPPLY

- Rising temperatures affect the activity and spread of agricultural pests and weeds.
- An earlier spring and more frequent heat waves can disrupt crop cycles and cause harm to crops and livestock alike.
- Warmer temperatures are shifting fish populations northward, disrupting commercial fishing operations.

WATER SUPPLY & QUALITY

- High temperatures and intense storms create ideal conditions for harmful algal blooms.
- Extreme heat and more frequent droughts can impact the availability of potable water.



RESILIENCE ACTION PLANS

Each Resilience Action Plan will be developed in consultation with an Advisory Group composed of topical experts and practitioners.

Advisory Groups will meet with the Council throughout the development of Action Plans to offer best practices, provide feedback on interim products, and review final drafts prior to release.

Extreme Heat Advisory Group

Kathy Dolan

Association of State & Territorial Health Offices

Beth Gibbons

Farallon Strategies, LLC

Paula Hammond

WSP USA

Dr. Evan Mallen

Georgia Tech University

Mark Rupp

Georgetown Climate Center
Georgetown University Law Center

Dr. Vivek Shandas

Portland State University
CAPA Strategies, LLC



RESILIENCE ACTION PLANS

Each Resilience Action Plan will follow the same format.

Agencies have received guidance to ensure that the level of detail is sufficient.

The intent is for the Resilience Action Plans to create a mechanism in which to track and update the State's progress on its stated resilience actions.

Format

- **Introduction**
 - Purpose
 - Discussion of foundational documents
 - Scientific Report on Climate Change
 - Climate Change Resilience Strategy
 - Plan development process
- **Topic Description**
 - Overview
 - Statewide impacts
- **State Actions**
 - Action description
 - Detailed information table

Guidance

- Agencies are responsible for identifying their own relevant actions.
- Plans should make clear what actions an agency will take and why.
- Certain considerations will span across all topics and actions, including:
 - Environmental justice and equity
 - Funding
 - Research needs
 - Coordination



RESILIENCE ACTION PLANS

Format

- **Introduction**
 - Purpose
 - Discussion of foundational documents
 - Scientific Report on Climate Change
 - Climate Change Resilience Strategy
 - Plan development process
- **Topic Description**
 - Overview
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- **State Actions**
 - Action description
 - Detailed information table

A brief narrative will provide context to the action:

- Whether this action is a new effort, builds on existing efforts, or is already underway
- What the action aims to address, including any co-benefits that may be incurred
- Anticipated challenges and needs

Action Title	Action Title
Action Type	Dropdown menu: Legislative/programmatic/funding/etc.
Lead Program	Agency, Agency Program Lead
Status/Progress	Dropdown menu: Conceptual/Planned/Implementation
Timeframe	Dropdown menu: Ongoing/Short-term/Mid-term/Long-term
Funding available	Dropdown menu: Yes/No
Connection to Strategy	Identify action from Strategy: Example Action 5.2.3
Relevant Agencies/Stakeholders	If applicable
Additional needs	Dropdown menu: Staffing, external partners, etc.



EXAMPLE: Study extreme heat impacts in overburdened communities.

Sample text: This is a new initiative inspired by recently passed legislation in New York (S.8431). Understanding which communities are disproportionately experiencing the impacts of extreme heat is a key first step to identify and prioritize opportunities to advance greening, urban design, and landscaping improvements to mitigate these effects. This action aligns with DEP’s climate justice imperative and can help accelerate existing efforts throughout the State related to pollution reduction and eliminating racial disparities in health outcomes. A lack of funding and staff capacity may limit the ability of key entities to advance recommendations outlined in the report. In the short-term, DEP will establish a report development advisory group in partnership with the Office of Environmental Justice and Environmental Justice Advisory Council and issue a Request For Proposals to procure expert authorship.

Action Title	Study extreme heat impacts in overburdened communities
Action Type	Research
Lead Program	DEP - Office of Climate Resilience, Office of Environmental Justice
Status/Progress	Planned
Timeframe	Short-term
Funding available	Likely
Connection to Strategy	Priorities 1 and 3
Relevant Agencies/Stakeholders	Environmental Justice Advisory Council
Additional needs	Staffing, external partners, expert advisors



What Do the Actions Address?



Vulnerable Populations

- Access to air conditioning
- Energy reliability/ability to pay
- Outdoor workers
- Health/air quality



Built Environment

- Urban Heat Island
- Transportation system disruption
- Energy reliability
- Water supply



Natural Systems

- Forestry and Greening
- Crops and agriculture
- Wildfire
- Other species, habitats, and ecosystems



WHAT WILL THE ACTIONS ACCOMPLISH?

Anticipated Outcomes

Increased education and awareness

Identification of vulnerable populations/infrastructure

Advanced scientific research/understanding

Retrofitted infrastructure (transportation and energy)

Improved coordination across agencies

Changes to state policy/standards to protect vulnerable populations

Green built environment and protection of existing tree canopy

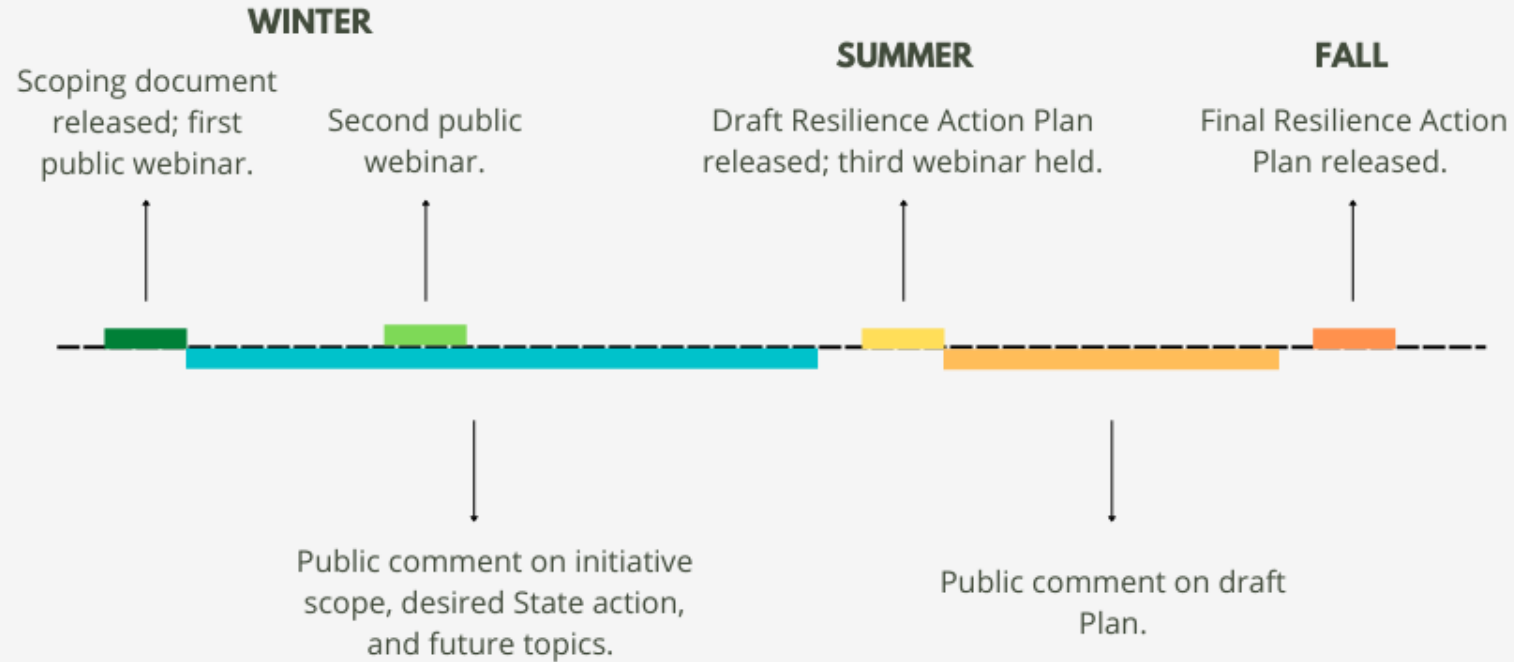
Increased capacity in local communities

Resources funneled to underserved communities

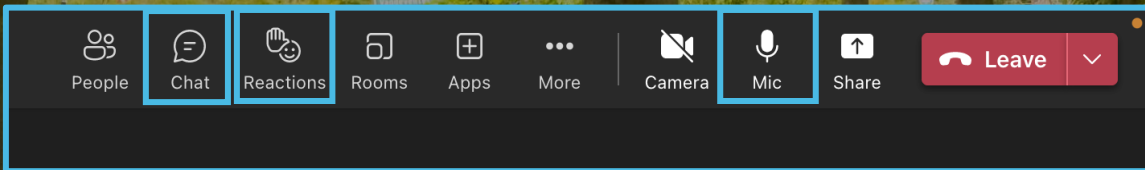


EXTREME HEAT RESILIENCE ACTION PLAN

2023 DEVELOPMENT TIMELINE & KEY MILESTONES



Questions?



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- Use the "raise your hand" function if you would like to provide verbal comment.
- Use the online form after this meeting at nj.gov/dep/climatechange/resilience-action-plans.html at any time until March 17.

Comments?

The State is seeking the public's feedback on the Scoping Document and development process for the Resilience Action Plans, as well as the public's priority actions for state agencies to take in building New Jersey's resilience to extreme heat.

Stakeholder Feedback Form

You may also submit additional comments to ResilientNJ@dep.nj.gov.

nj.gov/dep/climatechange/resilience-action-plans.html

Questions?

climateresilience@dep.nj.gov
609-292-9236

NJ Extreme Heat Resilience Action Plan

Section 2. Extreme Heat Resilience Action Plan

New Jersey's first Resilience Action Plan, to be released later this year, will focus on state agency efforts to address increasing extreme heat events resulting from climate change, such as those experienced during the summer of 2022.

For more information, please visit <https://nj.gov/dep/climatechange/resilience-action-plans.html>.

8. Please share any examples of how EXTREME HEAT has impacted your life, or that of your family, your community, and/or your workplace.

9. What are you most concerned about with regard to extreme heat? *Please rank your top 3 concerns (1 - highest concern, 2 - second highest concern, 3 - third highest concern). The remaining options can remain unrated.*

0 of 24 answered