# State Agency Actions to Increase Resilience to Extreme Heat Due to Climate Change



Climate change is humanity's single greatest long-term threat. In New Jersey, the effects are already visible — our environment, economy, communities and infrastructure are all at risk. While the state remains committed to reducing emissions, New Jersey is past the point of avoiding all climate change impacts and needs to enact measures to adapt.

New Jersey has taken many steps to improve decision-making to reduce risk, including the establishment of the <u>Interagency Council on Climate Resilience</u> (Interagency Council, or IAC) and the initial <u>Statewide Climate Change Resilience Strategy</u>. The Interagency Council was established to develop short- and long-term action plans that will promote the long-term mitigation, adaptation and resilience of New Jersey's economy, communities, infrastructure and natural resources. Beginning this year, the Interagency Council has been collaborating on the development of its first <u>Resilience Action Plan</u>, focused on extreme heat, which will identify new, existing and expanded policy, programmatic and regulatory actions to address this climate impact.

Based on the research summarized in the New Jersey Scientific Report on Climate Change (2020) and the Human Health & Communities addendum (2022), New Jersey's warming is outpacing that of our fellow states, and even global averages. Summer temperatures in New Jersey in 2022 were the third hottest on record since 1895. The Human Health & Communities addendum to the Scientific Report has given us a greater understanding of how extreme heat will directly and indirectly affect the health of New Jerseyans. Extreme heat, often called "the silent killer," is one of the deadliest impacts New Jersey is already facing. According to the Centers for Disease Control and Prevention, approximately 1,220 people in the United States are killed by extreme heat every year. This figure is expected to rise if there is no intervention because extreme heat is a threat multiplier, exacerbating existing vulnerabilities. Children, the elderly, individuals with chronic health conditions and people who work outside are most vulnerable to extreme heat and the health impacts associated with it.

To be clear, extreme heat impacts go beyond human health, affecting everything — the air we breathe, the food we eat, the water we drink, the roads we drive on. This underscores the Interagency Council's efforts to develop a statewide Extreme Heat Resilience Action Plan, just the third document of its kind in the nation. We need action across every sector — and every agency working together on this issue — to build the state's resilience to extreme heat and its interrelated climate impacts.

Throughout the first half of 2023, the Interagency Council sought to identify actions that will build New Jersey's resilience to extreme heat in a variety of ways, while ensuring that resources flow to the people who need them most. The state has leveraged the knowledge and know-how of an advisory group including subject matter experts with experience in climate resilience, and with representation across a broad variety of interests and sectors. State agencies have also sought stakeholder and public feedback, including conducting targeted outreach to stakeholders in specific groups of hard-hit constituencies, such as the elderly, those in need of residential cooling assistance programs and outdoor workers, among others.

The actions identified in the forthcoming Extreme Heat Resilience Action Plan, expected in the spring of 2024, will serve as an ever-evolving example of how New

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Jersey state agencies and departments will implement the vision laid out in the Resilience Strategy. Actions under consideration may include changes to and/or new policy, procedures, programs, authorities, legislation, permitting requirements, funding criteria, capital programs and projects, data and research initiatives, and regulation.

### **Building Resilience to Extreme Heat**

#### **Increase Understanding of How Extreme Heat Impacts New Jerseyans**

Launch Heat Hub | Department of Environmental Protection (DEP) | Underway Heat Hub NJ is a centralized digital resource designed to increase the public's general knowledge and promote available resources about extreme heat and its health risks, particularly to the most vulnerable populations and communities to ensure they understand how to assess and treat heat illnesses, and improve their resilience to extreme heat events. Heat Hub NJ will be a "one-stop shop" at a state level, providing information and resources across state agencies related to heat and heat resilience, including heat fact sheets from the NJ Department of Health (NJDOH), a cooling center locator from the NJ Office of Emergency Management (NJOEM), NJ 211, Urban Heat Island mapping and heat vulnerability assessment mechanisms from DEP. Heat Hub NJ is a "living" resource, with frequent updates and the ability to promote future heat-related actions, as well as gathering input from the public on heat-related initiatives.

### Launch Extreme Heat, Cool Communications Outreach Campaign | IAC | Short-term

The Interagency Council will coordinate implementation of a comprehensive Statewide Extreme Heat Outreach Campaign with relevant state agencies and local officials, and institute metrics for determining communication effectiveness, with a focus on heat-impacted stakeholders.

Promote Heat Illness Prevention Worker Safety Guidelines | NJDOH | Underway Public Employees Occupational Safety and Health (PEOSH), at the NJDOH, promotes heat illness prevention resources produced by the U.S. Occupational Safety and Health Administration (OSHA). These resources include guidelines for both indoor and outdoor workers.

# **Ensure Coordinated Emergency Response and Extreme Heat Preparedness**

#### Get the 411 on New Jersey Cooling Centers | NJOEM | Underway

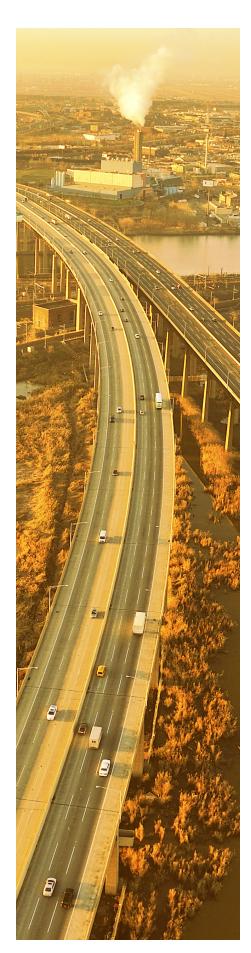
DEP, State Police, county OEMs and NJ 211 are coordinating the development of a centralized, searchable, map-based visualization of available cooling centers. This one-stop statewide cooling center tracker will be hosted on Heat Hub NJ. State agencies will continue enhance this tool to provide additional information for the public.

#### **Expand and Support Hazard Mitigation Planning** | NJOEM | Underway

Integrate climate change into multijurisdictional, multihazard mitigation planning, and increase education and awareness around anticipated impacts in New Jersey, including extreme heat. New Jersey is already planning for extreme heat and other hazards with an ongoing update of the <a href="State Hazard Mitigation Plan">State Hazard Mitigation Plan</a> and local, regular updates of local plans, led by NJOEM. The state will continue to support this planning by increasing public awareness of natural hazards and their impacts, and working to improve data about extreme heat impacts, including the economic effects.



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**Update Energy Demand Forecasts** | *NJ Board of Public Utilities (NJBPU)* | *Underway* Work with utilities, the regional transmission organization (PJM Interconnection LLC) and other stakeholders to examine how extreme heat and cold impact energy generation and distribution, and evaluate actions and upgrades needed to meet increasing demand, ensure reliability and encourage conservation. NJBPU uses this information to update demand forecasts in order to examine what happens with customer load during extreme temperature events and to assess whether supplies of energy are sufficient.

#### Assess Grid Reliability in Extreme Heat Events | NJBPU | Underway

Work with utilities to review Infrastructure Investment Program filings that assess grid impacts and identify where system upgrades may be needed to adapt to the impacts of extreme heat.

#### **Build Community Resilience & Protect Public Health**

### Expand Surveillance and Analysis of Heat-related Illness Data and Information | NJDOH | Underway

Continue to expand surveillance, analysis, visualization and publication of heat-related illness data, information and resources. New Jersey Environmental Public Health Tracking (EPHT) created the New Jersey State Health Assessment Data indicator, titled "Hospitalization and Emergency Department Visits for Heat-Related Illnesses," which is updated annually. EPHT regularly updates its <a href="Climate Change webpage">Climate Change webpage</a>, which includes sections on the importance of climate change, actions individuals can take to protect themselves in extreme heat and heat-related health surveillance data and resources.

#### **Expand and Enhance DEP's Resilient NJ Program** | *DEP* | *Underway*

DEP is expanding the <u>Resilient NJ</u> program into a comprehensive climate resilience program for local governments that includes planning for increasing heat. The Resilient NJ program supports local government efforts to understand and plan for the impacts of climate change with grants, guidance and the <u>Local Planning for Climate Change Toolkit</u>.

#### Launch an Urban Heat Island Health Mitigation Effort | DEP | Underway

DEP will study impacts of disproportionate heat conditions in overburdened communities, and provide technical support to urban community responses to urban heat islands (UHIs). As part of this program, low-cost air quality monitors, with built-in temperature and humidity sensors, will be deployed in selected municipalities with UHIs.

#### **Improve Bus Shelter Design** | *NJ TRANSIT* | *Underway*

Design and develop a new bus shelter that improves protection against extreme heat by incorporating natural ventilation, specialized building materials and solar-powered lighting. Additionally, NJ TRANSIT will investigate adding bus shelters in areas with limited protection from the sun.

#### **Implement Whole House Initiative** | *NJBPU* | *Underway*

"Whole House" refers to a holistic approach to healthy housing that incorporates and coordinates remediation of health and safety hazards, along with energy efficiency improvements. The <a href="Whole House initiative">Whole House initiative</a> focuses on low- to moderate-income residents and could potentially make significant contributions toward making homes safer and more energy efficient, including in urban areas.

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**Ensure Efficient and Cool New Affordable Housing** | *NJ Department of Community Affairs (DCA)* | *Underway* 

The Affordable Housing Trust Fund, the HOME Housing Production Investment Program and the National Housing Trust Fund set certain standards to ensure that new affordable housing can be efficiently cooled during extreme heat events, and that new affordable housing is constructed with efficiency in mind, lessening the strain on the power grid during extreme heat events and reducing the financial cost of cooling family living space.

#### **Conduct Study on Air Conditioning Access** | *DEP* | *Short-Term*

Analyze lack of access to air conditioning throughout New Jersey to inform relevant potential grant programs. Use best available information to encourage residents to choose electric cooling options, such as heat pumps.

## **Support Urban Cooling through Community Energy Planning Grants** | *NJBPU* | *Underway*

In partnership with Sustainable Jersey, BPU is working with municipalities to create <u>Community Energy Plans</u> that align with greater state goals outlined in New Jersey's <u>Energy Master Plan</u>. Urban Cooling Initiative strategies can be added to community energy plans and focus on cooling downtown areas, rooftop gardens on high-rise buildings, etc. A pilot program can fund on-the-ground implementation and testing of UHI mitigation strategies in a discrete location. Continue offering the re-designed <u>Community Energy Plan Grant Program</u>.

#### Increase and Maintain Urban Tree Canopy | DEP | Underway

Expand DEP's <u>Urban Community Forestry Program</u> with dedicated staff working to increase and maintain tree canopies in urban areas, while focusing on combating heat island effects and prioritizing overburdened communities. Continue to promote enhanced tree beds and create planting space in urban areas.

### **Continue Implementation of the Natural Climate Solutions Grant Program** | *DEP* | *Underway*

The <u>Natural Climate Solutions Grant</u> program funds on-the-ground implementation of projects that create, restore, enhance and maintain New Jersey's natural carbon sinks, including urban street tree plantings. Earlier this year, <u>DEP provided \$24.3</u> <u>million</u> in grants to communities and plans to offer a second round in 2024.

#### **Protect Drinking Water Sources from HAB Impacts** | *DEP* | *Underway*

Cyanotoxins are caused by <u>harmful algal blooms</u> (HABs). The <u>Drinking Water Quality Institute</u> (DWQI) is evaluating a recommendation for a drinking water standard for cyanotoxins. Once the recommendation is finalized, DEP will evaluate rulemaking to develop a feasible regulation.





### **Contact the Interagency Council**

Public involvement is an essential component of ensuring the statewide Extreme Heat Resilience Action Plan reflects the needs and wants of New Jerseyans. As such, the Interagency Council is soliciting the public's feedback on extreme heat priorities and concerns anytime via email to <a href="mailto:climateresilience@dep.nj.gov">climateresilience@dep.nj.gov</a> and/or through completion of a survey, which will remain open until March 31, 2024. For additional information, including webinar recordings and relevant documents, please visit <a href="mailto:bit.ly/resilienceactionplans">bit.ly/resilienceactionplans</a>.

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