

Materials will be available at: www.eesi.org/061725heat
Post about the briefing: #eesitalk @eesionline

Beating the Heat: A 2025 Heat Policy Agenda

About EESI



- Nonpartisan Educational Resources for Policymakers
 - A bipartisan Congressional caucus founded EESI in 1984 to provide nonpartisan information on environmental, energy, and climate policies
- Direct Assistance for Equitable and Inclusive Financing Program

 In addition to a full portfolio of federal policy work, EESI provides direct assistance to utilities to develop "on-bill financing" programs
- Commitment to Diversity, Equity, Inclusion, and Justice

 We recognize that systemic barriers impede fair environmental energy and

We recognize that systemic barriers impede fair environmental, energy, and climate policies and limit the full participation of Black, Indigenous, people of color, and legacy and frontline communities in decision-making

- Sustainable Solutions
 - Our mission is to advance science-based solutions for climate change, energy, and environmental challenges in order to achieve our vision of a sustainable, resilient, and equitable world

Policymaker Education





Briefings and Webcasts

Live, in-person and online public briefings, archived recordings, and written summaries





Bi-weekly newsletter with everything policymakers and concerned citizens need to know, including a legislation and hearings tracker



Fact Sheets and Issue Briefs

Timely, objective coverage of environmental, clean energy, and climate change topics



Social Media (@EESIonline)

Active engagement on Bluesky, Facebook, LinkedIn, X, and YouTube









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What did you think of the briefing?

Please take 2 minutes to let us know at: www.eesi.org/survey

Materials will be available at: www.eesi.org/061725heat

Post about the briefing: #eesitalk @eesionline



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About FAS

FAS is a nonpartisan, nonprofit organization based in Washington, D.C. that views policymakers as key to improving societal outcomes.

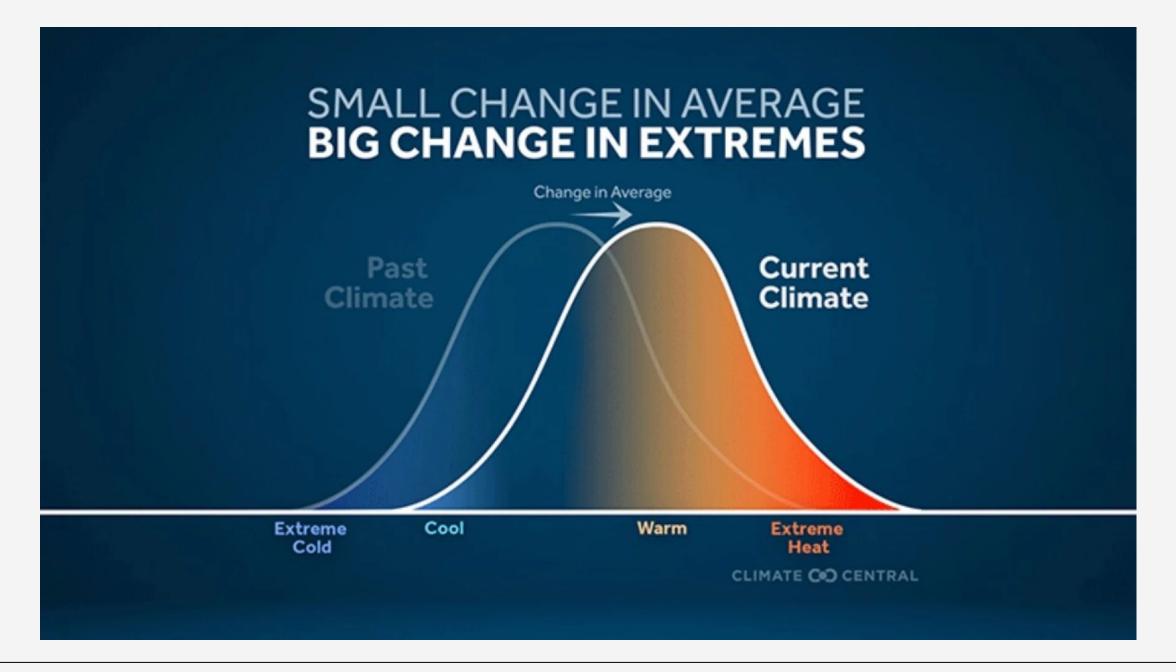
FAS was founded in November of 1945 by a group of scientists and engineers that emerged from the Manhattan Project, Oak Ridge, and Los Alamos. The group's goal was to agitate for the international control of atomic energy and its devotion to peaceful uses, public promotion of science, and the freedom and integrity of scientists and scientific research.

FAS has more recently expand to tackle other domain areas as well, including Climate and Environment, Emerging Tech, Government Capacity, and Clean Energy, alongside Global Risk.

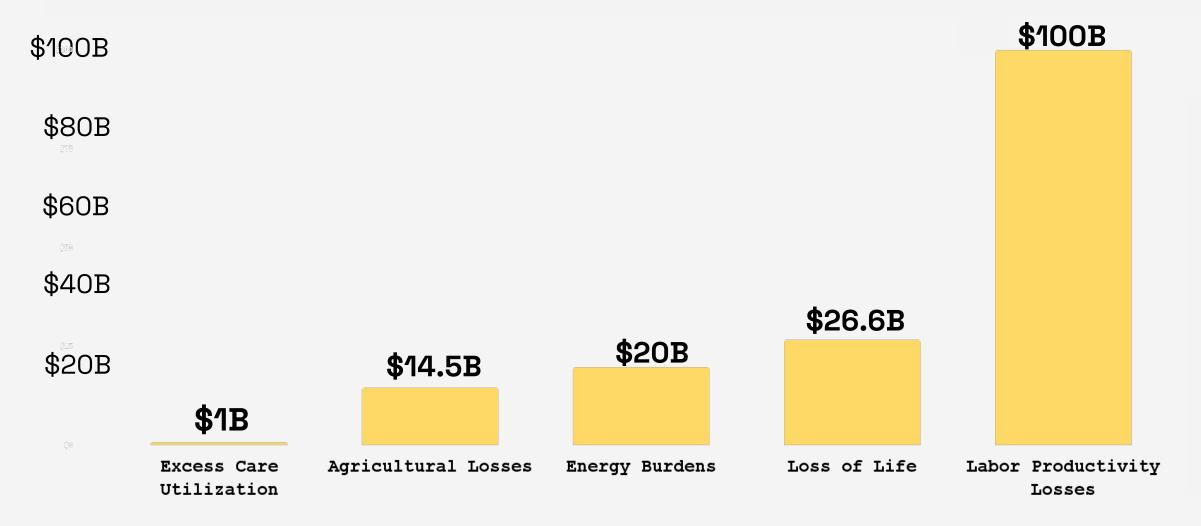
We believe that science, technology, and innovation have the vast potential to generate societal good when harnessed appropriately.



Why Do We Focus on Extreme Heat?



Costs of Heat Every Year +\$162 Billion



First Alert through Monday due to extreme heat in metro Phoenix

Extreme Heat Warning issued for Southern Nevada, Arizona, and California this Father's Day

TC the cool down

Meteorologists warn of dangerous conditions across US this summer: 'We will hear a lot about extremes'

Hot weather and high demand to pressure US power grid this summer, FERC says

Extreme heat threat increasing for the East Coast next week

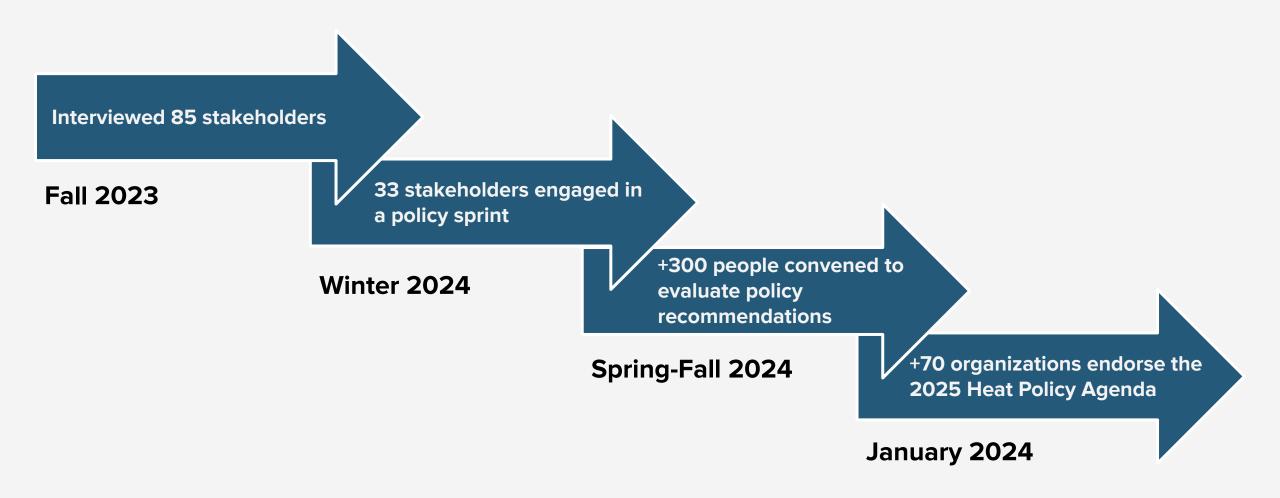


Extreme heat watches issues for Mondays as temps reach 110+

National Weather Service issues Alaska's first-ever heat advisory

The first ever heat advisory has been issued in the state of Alaska

The 2025 Heat Policy Agenda



The Federation of American Scientists 2025 Heat Policy Agenda Was Developed in Partnership with 300+ Collaborators and Supported by 70+ Organizations

2025 Heat Policy Agenda | List of Signatories

| Alliance of Nurses for a Healthy Environment | Center for Invasive Species Prevention | Food Tank | Moms Clean Air Force | New America Future of Land and Housing Program | The New Buildings Institute |
|--|--|---|--|---|---|
| American Federation of State, County, and Municipal Employees | Children's Environmental Health Network | Green Roofs for Healthy Cities | National Center for Healthy Housing | Next100 | The Passive House Network |
| American Forests | Climate Mayors | Grid Alternatives | National Coalition for the Homeless | Organizing Resilience | Toxic Free NC |
| American Lung Association | Climate Power | Groundwork USA | National Consumer Law Center | Physicians for Social Responsibility | Trust for Public Land |
| Arizona State University's Knowledge Exchange for Resilience | Climate Resilience Center | ICLEI – Local Governments for Sustainability | National Council on Occupational Safety and Health | Rebuild by Design | Undaunted K12 |
| Association of Farmworker Opportunity Programs | Climate Resolve | Institute for Market Transformation | National Employment Law Project | Smart Growth America | Union of Concerned Scientists |
| Association of State and Territorial Health Officials | Dade County Street Response | King County, Washington | National Energy Assistance Directors Association | Smart Home America | Urban Sustainability Directors Network |
| California ReLeaf | Earth Ethics, Inc. | Korey Stringer Institute | National Partnership for Women & Families | Smart Surfaces Coalition | We Act for Environmental Justice |
| Center for American Progress | Elevate | La Isla Network | National Recreation and Parks Association | Southeast Sustainability Directors Network | WeCount! |
| Center for Biological Diversity | Energy Equity Project | League of Conservation Voters | National Young Farmers Coalition | Ten Across Resilience Network | Women with Broken Heals |
| Center for Energy Poverty and Climate | Federation of American Scientists | MetroLab Network | Natural Resources Defense Council | The CLEO Institute | Yale Center on Climate Change and Health |

Examples of Progress

• In Congress:

- Recommendations from the Heat Policy Agenda have already found their way into multiple introduced bills
- The new Congressional Caucus on Extreme Heat presents an avenue for bipartisan progress

At the State Level:

- FAS regularly convenes a group of officials leading on heat policy for their states to exchange best practices and collaborate on emerging heat initiatives. This group currently includes representatives from AZ, CA, CO, NM, MA, MI, MD, MN, NC, NJ, NY, OR, PA, and WA, and is growing.
- FAS is advising a new Extreme Heat Cohort of mayors FAS together on heat challenges.

Core Recommendations of the Heat Policy Agenda

- 1. Establish a clear, sustained federal governance structure for extreme heat.
- 2. Amend the Stafford Act to explicitly define extreme heat as a "major disaster" and expand the definition of damages to include non-infrastructure impacts.
- 3. Direct the Secretary of Health and Human Services to declare a Public Health Emergency in the event of exceptional, life-threatening heat waves, and fully fund critical HHS emergency-response programs and healthcare infrastructure.
- 4. Direct the Federal Emergency Management Agency to include heat preparedness as a core component of national heat preparedness capabilities
- 5. Finalize a strong rule to prevent heat injury and illness in the workplace
- 6. Retain and expand home energy rebates, tax credits, LIHEAP, and the Weatherization Assistance Program, to enable deep retrofits that cut the costs of cooling for all Americans and prepare homes against threats like power outages.
- 7. Transform the built and landscaped environment through strategic investments in urban forestry, transportation systems and infrastructure, and power infrastructure.

Contact the Federation of American Scientists Extreme Heat Team

- Grace Wickerson, Senior Manager, Climate and Health: qwickerson@fas.org
- Autumn Burton, Senior Associate, Climate, Health, and Environment: aburton@fas.org
- Dr. Hannah Safford, Associate Director, Climate and Environment: hsafford@fas.org

Thank you.

EESI & FAS
BEATING THE HEAT
CONGRESSIONAL
BRIEFING
JUNE 17, 2025

City of Phoenix Heat Response & Mitigation Initiatives



HEAT GOVERNANCE & PLANNING



"...participants...were uncertain of how heat preparedness and response aligns with their current responsibilities. Some emergency management professionals even perceived that heat was outside of their scope of work."

BAMS 2019

HEAT GOVERNANCE & PLANNING

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JANUARY 2017 BERISHA ET AL.

Assessing Adaptation Strategies for Extreme Heat: A Public Health Evaluation of Cooling Centers in Maricopa County, Arizona®

VJOLLCA BERISHA,^a DAVID HONDULA,^b MATTHEW ROACH,^c JESSICA R. WHITE,^a BENITA MCKINNEY,^a DARCIE BENTZ,^d AHMED MOHAMED,^a JOSHUA UEBELHERR,^c AND KATE GOODIN^a

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^b Center for Policy Informatics, and School of Geographical Sciences and Urban Planning,
Arizona State University, Tempe, Arizona

^c Office of Environmental Health, Arizona Department of Health Services, Phoenix, Arizona ^d Public Health Associate Program, Centers for Disease Control and Prevention, Atlanta, Georgia ^c Center for Policy Informatics, Arizona State University, Tempe, Arizona

(Manuscript received 22 March 2016, in final form 23 September 2016)

ABSTRACT

Preventing heat-associated morbidity and mortality is a public health priority in Maricopa County, Arizona (United States). The objective of this project was to evaluate Maricopa County cooling centers and gain insight into their capacity to provide relief for the public during extreme heat events. During the summer of 2014, 53 cooling centers were evaluated to assess facility and visitor characteristics. Maricopa County staff collected data by directly observing daily operations and by surveying managers and visitors. The cooling centers in Maricopa County were often housed within community, senior, or religious centers, which offered various services for at least 1500 individuals daily. Many visitors were unemployed and/or homeless. Many learned about a cooling center by word of mouth or by having seen the cooling center's location. The cooling centers provide a valuable service and reach some of the region's most vulnerable populations. This project is among the first to systematically evaluate cooling centers from a public health perspective and provides helpful insight to community leaders who are implementing or improving their own network of cooling

2014 evaluation:

"Cooling center use might be improved if signs were present or more visible to attract potential visitors."



HEAT GOVERNANCE & PLANNING



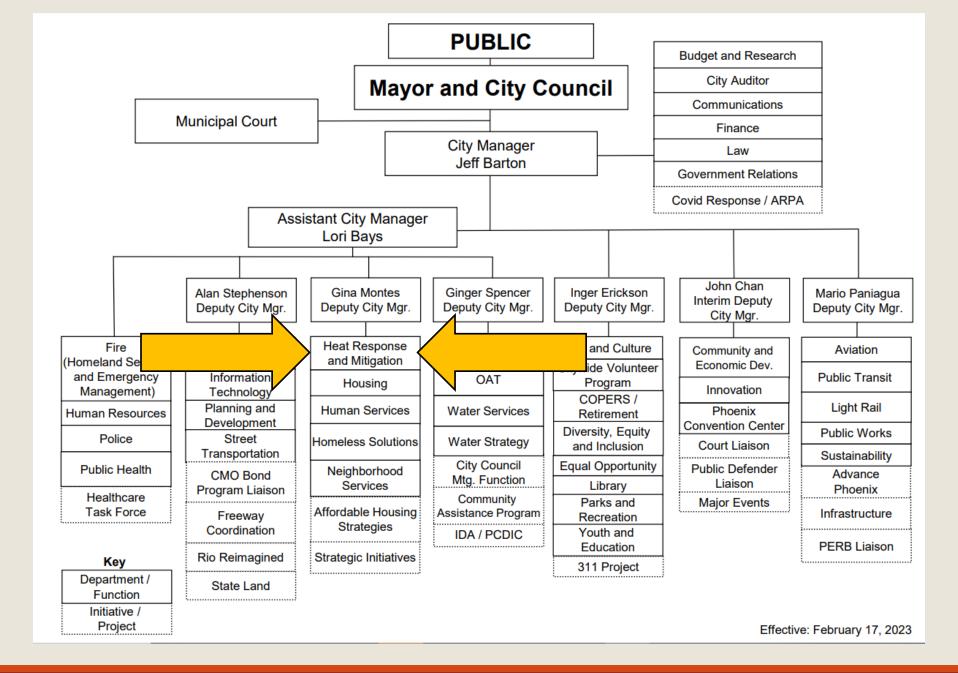
2022 action:

Phoenix Heat Office creates and distributes signage for municipal sites and community partners

HEAT-RELATED DEATHS - MARICOPA COUNTY, AZ







CITY OF PHOENIX HEAT RESPONSE PLAN



First Responders



Public Cool Space



Public Drinking Water



Cool and Safe Homes



Cool and Safe Mobility & Recreation



Heat Safety for Workers



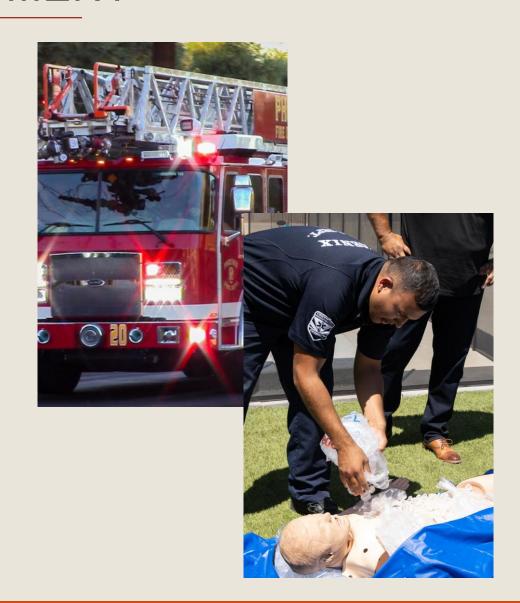
Community Engagement & Outreach



Collaborate Across Departments

COLD WATER IMMERSION TREATMENT

- Severe heat illness protocol deployed by Phoenix Fire Department
- Deployed 311 times in 2024
- Less acute and more stable cases upon arrival to emergency room
- Improve short- and long-term outcomes upon discharge
- Sharing with local and national partners



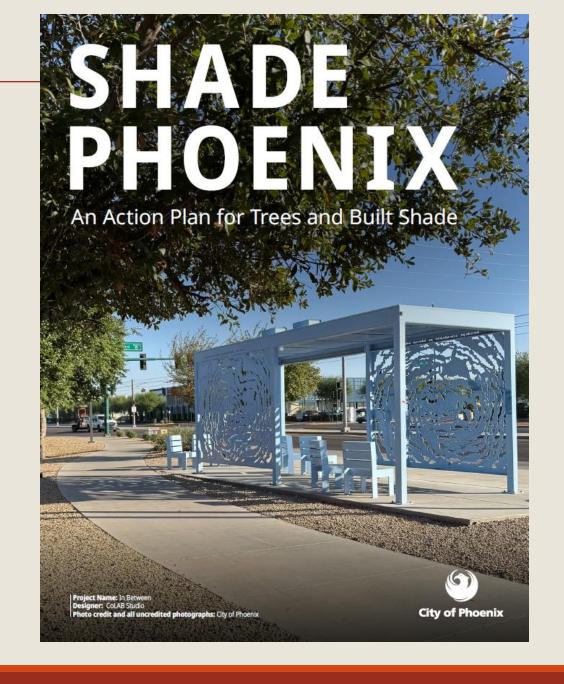
24/7 AND EXTENDED HOUR HEAT RELIEF SITES

- Selected library branch locations (ext. hours) and former café space (24/7)
- Comprehensive staffing model with health services, navigation, security
- 35,000+ visits, 5,000+ unique visitors
- 900+ residents connected to services
- Reductions in heat illnesses and deaths

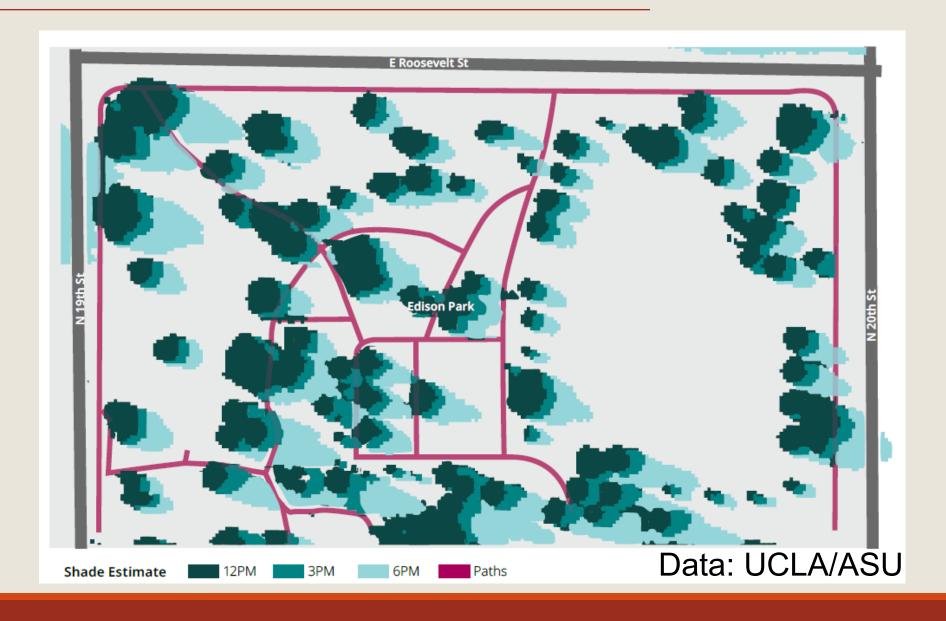


SHADE PHOENIX PLAN

- First comprehensive tree and shade plan update in ~15 years
- Prioritizes public health, local context, and innovation
- \$60M in funding from local, federal, and philanthropic sources
- Input from 30 city departments,
 2,000+ residents, local+natl orgs.



SHADE PLAN DATA RESOURCES - SHADE MAP



SHADE PLAN PROGRAMS

Community Canopy

- ARPA + IRA Urban and Community Forestry
- Professional planting, maintenance resources



SHADE PLAN PROGRAMS

¡Sombra!

- Bloomberg Public Art Challenge
- Temporary artist-led shade structures in public spaces



EESI & FAS
BEATING THE HEAT
CONGRESSIONAL
BRIEFING
JUNE 17, 2025

City of Phoenix Heat Response & Mitigation Initiatives





Addressing Extreme Heat in New York State

Beating the Heat - June 17, 2025

Leo Matteo Bachinger, PhD

<u>leo.bachinger@dec.ny.gov</u>

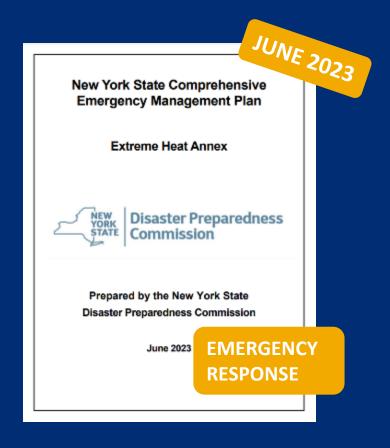
New York State Department of Environmental Conservation

ON.NY.GOV/EXTREMEHEAT













JUNE 2023 **New York State Comprehensive Emergency Management Plan** Extreme Heat Annex **Disaster Preparedness** YORK Commission Prepared by the New York State Disaster Preparedness Commission **EMERGENCY RESPONSE**

- Led by NYS Division of Homeland Security and Emergency Services
- Released June 2023, annually updated
- Emergency response based on existing resources and capabilities



- Released in July 2024
- ➤ To enhance longer-term community preparedness, resilience and adaptation
- Develops new resources and capacities through 49 specific, state-led actions with short and midrange goals





Action Track Overview

49 actions are represented in the following 4 action tracks.

TRACK 1

ADAPTATION
PLANNING AND
IMPLEMENTATION

Build Capacity for Adaptation Planning and Implementation

> Promote Research, Development, and Innovation

TRACK 2

PREPAREDNESS, COMMUNICATION, AND WORKERS' SAFETY

Coordinate Preparedness and Pre-event Communication

Protect Workers' Health and Safety

TRACK 3

BUILT ENVIRONMENT, INFRASTRUCTURE, AND MANAGED SPACES

Support Resilient Built Environments

Advance Adaptation in Educational, Institutional, and Congregate Settings

Develop Resilient and Equitable Infrastructure

TRACK 4

ECOSYSTEM-BASED ADAPTATION

Prioritize Ecosystembased Adaptation and Green Infrastructure Solutions

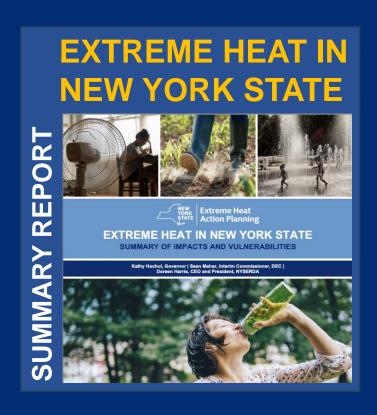


Coordinated Action Across State Agencies

| EHAPWG Members | |
|--|---|
| Department of Environmental Conservation (DEC) Co-Chair | New York State Energy Research and Development Authority (NYSERDA) Co-Chair |
| Department of Agriculture and Markets (AGM) | Metropolitan Transportation Authority (MTA) |
| Department of Corrections and Community Supervision (DOCCS) | New York Power Authority (NYPA) |
| Department of Health (DOH) | Office for the Aging (OFA) |
| Department of Labor (DOL) | Office for People with Developmental Disabilities (OPWDD) |
| Department of Public Service (DPS) | Office of Children and Family Services (OCFS) |
| Department of State (DOS) | Office of General Services (OGS) |
| Department of Transportation (DOT) | Office of Parks, Recreation and Historic Preservation (OPRHP) |
| Division of Homeland Security and Emergency Services (DHSES) | Office of Mental Health (OMH) |
| Education Department (NYSED) | Office of Temporary and Disability Assistance (OTDA) |
| Environmental Facilities Corporation (EFC) | State University of New York University at Buffalo (SUNY-UB) |
| Empire State Development (ESD) | Thruway Authority (Thruway) |
| Division of Homes and Community Renewal (HCR) | ~ YORK LAUGHIE HEAL |



Extreme Heat in New York State



HEAT IS IMPACTING URBAN AND RURAL COMMUNITIES

In New York State, heat-health outcome are similar in urban and rural communities.

ACCESS TO COOLING IS A MAJOR CHALLENGE

A lack of access to affordable cooling at home is a major cause of heat exposure.

HEAT AFFECTS STUDENTS

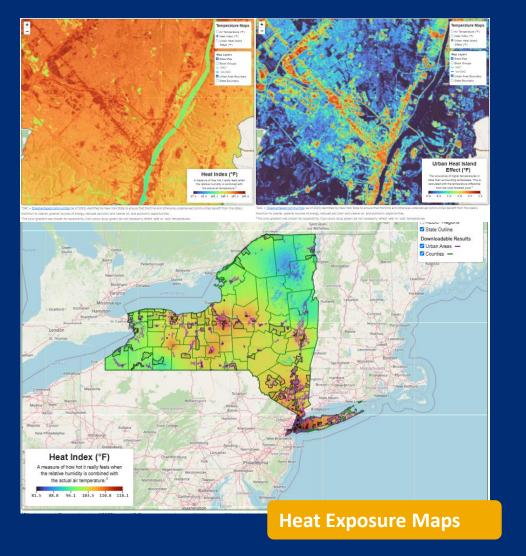
Extreme heat, in combination with adverse air quality, is increasingly impacting children at schools.

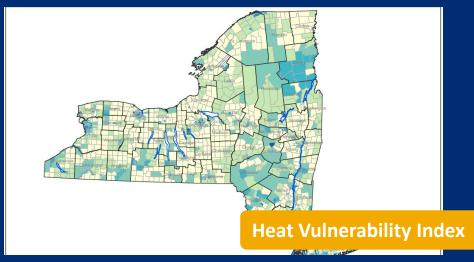
HEAT IS IMPACTING WORKERS

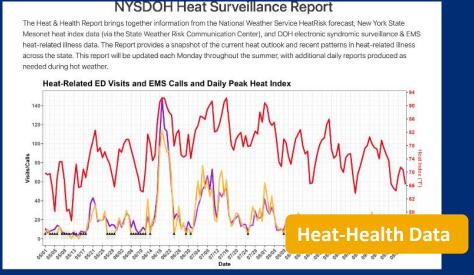
Both indoor and outdoor workers are at risk outdoor.



Mapping Exposure, Understanding Impacts







Heat Health Dashboard

New York State Heat Risk and Illness Dashboard

Extreme heat is the leading cause of weather-related deaths in the U.S and New York State. View outdoor weather heat conditions and heat-related illness in New York State excluding New York City. Data are available May 1 - September 30 during hot weather.

The New York State Heat Risk and Illness Dashboard uses data from the National Weather Service, and the New York State Mesonet Early Warning Weather Detection System (via the New York State Weather Risk Communication Center), and the New York State Department of Health.

State Dashboard

Go to County Dashboard

meat KISK POTECAST, NEW YORK State

Updated 6/5/2025

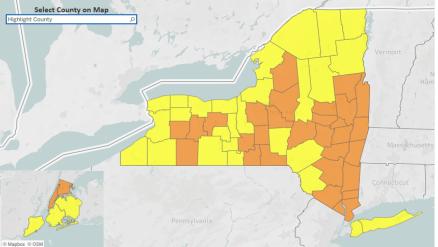
Heat-related illness can be dangerous. Heat stroke, heat stress, dehydration, and dizziness increase with temperature. Your age, overall health, activity level, and access to air conditioning also can put you at higher risk of getting sick from heat.

This map shows the risk of getting sick from heat. It considers temperature and humidity, duration of heat, and people's underlying health. Select a date from the dropdown menu and plan ahead to adjust your activities when it's hot.

6/5/2025

Hover over a county for more information. Click on a county to see the county dashboard.

| Risk of Heat- Related Illness | Who is at risk and what to do? |
|----------------------------------|--|
| Little to no risk 0 | Minimal elevated risk. Learn more about what to do when it gets hot. |
| Minor 1 | People extremely sensitive to heat, such as older adults with underlying heath conditions, should take breaks and drink plenty of fluids. |
| Moderate 2 | People sensitive to heat and healthy individuals working or playing outdoors should take more frequent breaks and drink plenty of fluids. |
| Major 3 | Everyone can be affected and should take breaks and drink plenty of fluids. People sensitive to heat should adjust activities. |
| Extreme 4 | Dangerous for everyone. Everyone should adjust activities, monitor health symptoms, and spend more time in air conditioning |



People sensitive to heat should adjust activities.

Extreme 4 Dangerous for everyone. Everyone should adjust activities, monitor health symptoms, and spend more time in air conditioning.

Note: Visit NWS HeatRisk for the most recent forecast

Pennsylvania

Heat-related Emergency Department Visits (14-day Moving Average) . New York State excluding NYC Cumulative Heat-related Emergency Department Visits, New York State excluding NYC * Selected year cumulative average visits (purple) similar or less then than previous year cumulative average visits (gray): There is less he-Percent of Cumulative County Days with Heat Index of 85°F or Greater, New York State excluding NYC

Cool & Healthy Schools



Clean Green Schools Initiative (PON 4924)

Due Date: 07/27/2022 (Round 1); **06/06/2024** (Round 2); **12/30/2025** (Round 3)

Description

opportunities.

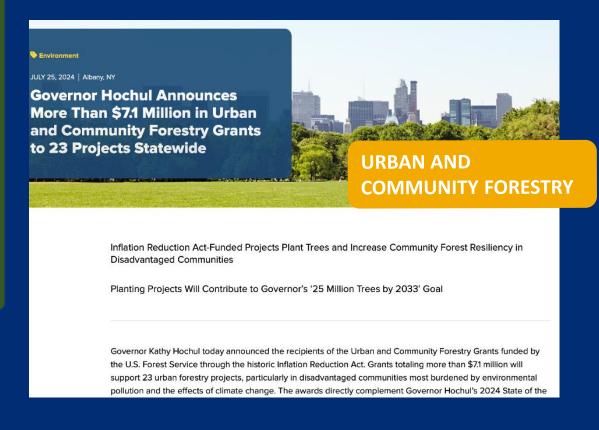
The P-12 Schools: Clean Green Schools Initiative is available to help public schools that traditionally lack resources to invest in infrastructure improvements become healthier, more productive learning environments. This Program aims to improve the environmental sustainability of those schools by reducing school energy loads, decarbonizing their building portfolio, improving indoor air quality (IAQ),

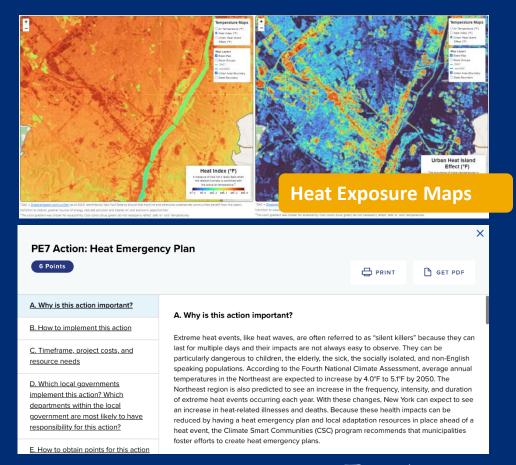
NYSERDA Clean Green Schools

New Law Ensures Safe and Comfortable Learning Environments by Setting a Maximum Temperature for New York School Classrooms



Creating Cool Corridors







Thank You

Leo Matteo Bachinger

NYS Department of Environmental Conservation

Leo.Bachinger@dec.ny.gov

CONTACT EHAP: extreme-heat@dec.ny.gov

Scan to learn more



ON.NY.GOV/EXTREMEHEAT





A Call to Action

Heat Safety in Agriculture







Pasa is a nonprofit that supports sustainable farms and equitable food systems through farmer-driven education, research and community.

We're based in Pennsylvania and increasingly engaging with farmers and partners across the Mid-Atlantic, Northern Appalachia and the Northeast.

Protecting Farmworkers



- Climate change continues to raise temperatures.
- Heat related injuries and deaths continue to climb.
- Heat injuries and climate change are inextricably intertwined.

The Human Cost

- Farmworkers are 20x more likely to die of heat-related illnesses.
- Lack of plans and communication can be fatal.
- These deaths are preventable.

Climate and Economic Impacts



\$55.4 billion projected annual loss in worker earnings.



Person-days per Year with a Heat Index above 100°F

- 0-10,000
- 10,001-100,000
- 100,001-1,000,000
- 1,000,001-10,000,000
- 10,000,001-60,000,000

Note: Data are for midcentury and assume no action to reduce global emissions.



Farm Responses - Weavers Way



- Adjusted schedules, reduced field hours.
- Shade structures, electrolytes, hydration.
- Safety committee created.

Farm Responses - New Morning Farm



- Daily EMS reminders.
- Team leader for heat safety.

Policy Gaps & State Efforts

- Only 5 states have enforceable heat standards.
- Florida banned local heat protections.
- Federal OSHA protections still pending.



What a Federal Standard Could Do



- Mandate rest, shade, water, training.
- Create clarity and consistency.
- End the patchwork system.

Protecting People Strengthens Agriculture

Protecting workers:

- Boosts productivity.
- Reduces turnover and medical costs.
- Creates a level playing field for ethical farms.



Protecting Livestock & Crops Strengthens Agriculture As Well

- Reduced milk yields and lower grain and produce production.
- Pollination (required for nearly all of plant agriculture) is out of sync.
- Near dire need for publicly funded research.

Animals need shade too!



 Adding trees to pasture (silvopasture) for shade reduces heat stress and increased feed conversion - We need a farm bill!!!

A Call to Action...



- Heat deaths are preventable.
- Simple solutions: water, rest, shade, education in a worker's first language.
- Stand with Pasa to ensure no one dies feeding us.

Programs/Resources: Live Links

Certification: <u>Fair Food Program</u>
Reports: <u>Union for Concerned</u>
<u>Scientists</u>, <u>Environmental Defence</u>
<u>Fund and La Isla Network</u>, <u>US Dept</u>
of Agriculture

Technology: AIHA Heat Stress App

Legislation: Seeds and Breeds for the Future Act

Extension: Signs of Heat Illness

Webinars: Heat Prevention Listening Session





Questions?

pasafarming.org
/pasafarming
policy@pasafarming.org



SMUD: Extreme Heat Planning and Approach



Lawrence Luong
SMUD Federal Affairs Manager

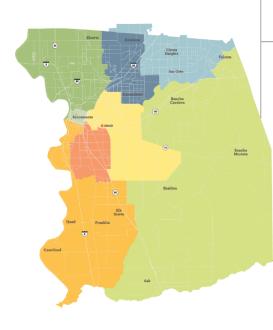




About SMUD

SMUD is your community-owned, not-for-profit electric service.

6th largest community-owned in the U.S.



75+ Years

Est. 1946

2023 Power mix

78%*
carbon-free



The most ambitious goal of any large utility in the United States ~645,000 Customers

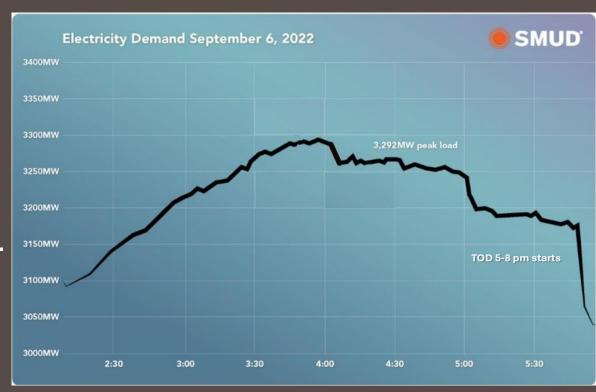
~2,300 Employees



SMUD's rates are among the lowest in California,

Extreme Heat Events Planning & Approach

- Annual review/revision of Capacity/Energy Shortage Contingency Plan
 - Outlines SMUD's energy shortage response processes.
- Annual Heat Event Tabletop exercise and Summer Briefing
 - Tests energy shortage process/procedure.
 - Tests rotating outage process/procedure.
 - Includes basic heat preparedness training and briefings from local partners (National Weather Service, Fire & Emergency Services, Local Emergency Management, etc.).
 - After-Action Report and Improvement Plan created following the exercise.





Community Project Spotlight

La Familia Counseling Center's Opportunity Center

- First climate resiliency center in Sacramento!
- Leveraging several federal and state grants including an
- Environmental and Climate Justice Community Change Grant from the EPA
- Services will include:
 - Fully-equipped career center
 - Computer lab
 - Parenting classes and support
 - Health and mental health resources
 - Employment services
 - Collaborative spaces for community partners
- Will also serve as a cooling center during extreme heat events
- SMUD will incentivize building and kitchen electrification, solar and storage, EV charging, and infrastructure.





School-Hosted Community Resiliency Center



A shelter for community members when the grid is down during extreme weather events/emergencies Combines community solar and community resilience



- Front-of-the meter solar
- Behind-the-meter energy storage
- Electric school buses with V2B capability



Free shade tree program



- Since 1990, SMUD, in partnership with the Sacramento Tree Foundation (Sac Tree), has planted more than 630,000 shade trees in the Sacramento area.
- Trees and other plants have a natural cooling effect, making vegetation a simple and effective way to reduce heat islands.
- The Sacramento Shade program expanded both the number and types of trees offered; up to 10 free trees per customer and over 30 varieties to choose from.



Wildfire Mitigation Plan



SMUD's priority is delivering safe, reliable, sustainable, and economical electric service.



Minimize the probability that SMUD's transmission and distribution system may be the origin or contributing source for the ignition of a wildfire.



Implement a Wildfire Mitigation Plan that embraces safety, prevention, mitigation, and recovery as a central priority for SMUD.



Implement a Wildfire Mitigation Plan that is consistent with state law and objectives.



Thank you.

Lawrence.Luong@SMUD.ORG

