



Department of
Environmental
Conservation

Climate Justice Working Group Meeting

August 20, 2024

Meeting Procedures

- Meeting rooms will be muted to reduce noise
- Working Group members should raise their hand to indicate they would like to speak
- Please state your name before speaking for recording purposes
- Remote participants should be on video with name visible

Agenda



Agenda

1. Presentation of Community Air Monitoring Results
2. Presentation on Extreme Heat Action Plan
3. Next Steps



Department of
Environmental
Conservation

Community Air Monitoring Initiative Results

Story Maps – Phase 1 Report

Presentation to the Climate Justice Working Group
August 20, 2024

Agenda

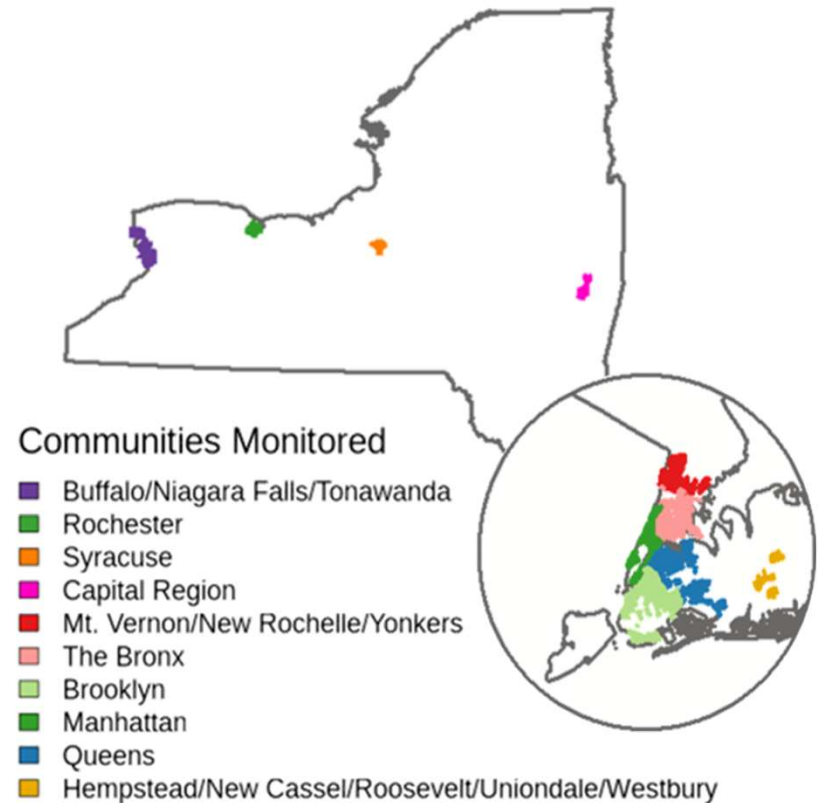
- Climate Act's Community Air Monitoring Initiative
- Mobile monitoring
- Overall Findings
 - Story Maps Demo
- Next Steps: Developing Air Pollution Reduction Strategies in Partnership



Climate Leadership & Community Protection Act

Climate Act requires

- Air monitoring and air pollution reduction strategies in at least four disadvantaged communities; DEC conducted monitoring in 10 DACs
- At least 35% of clean energy benefits go to disadvantaged communities
- Prioritize reduction of greenhouse gas and co-pollutants in DACs



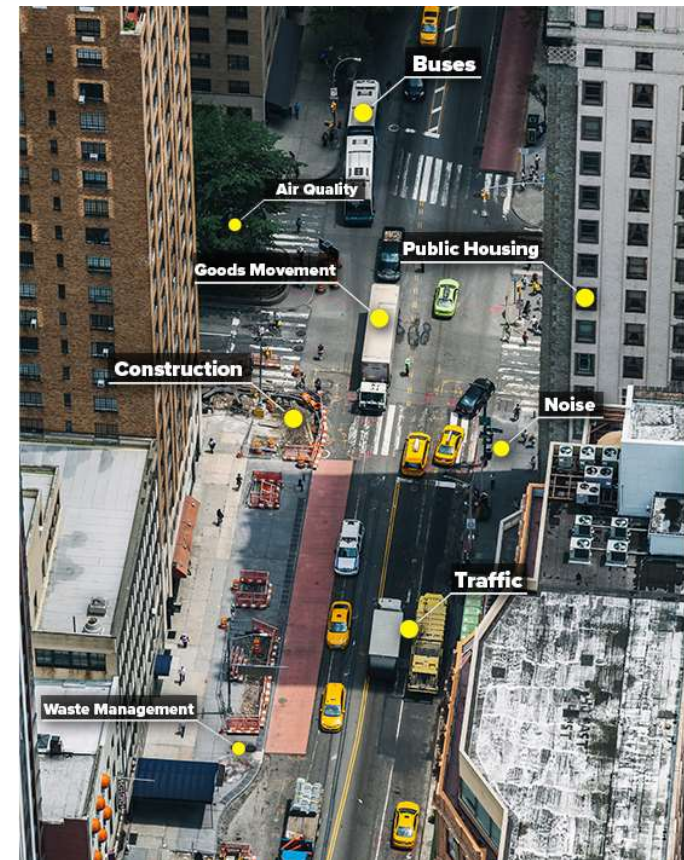
Purpose of the Community Air Monitoring Initiative

Identify

- High air pollution burdens
- Local sources contributing to air pollution

In partnership with CJWG, other state and local agencies, and communities:

- Develop and advance strategies to reduce air pollution and exposure
- Assess existing measures
- Identify and collaborate with responsible entities

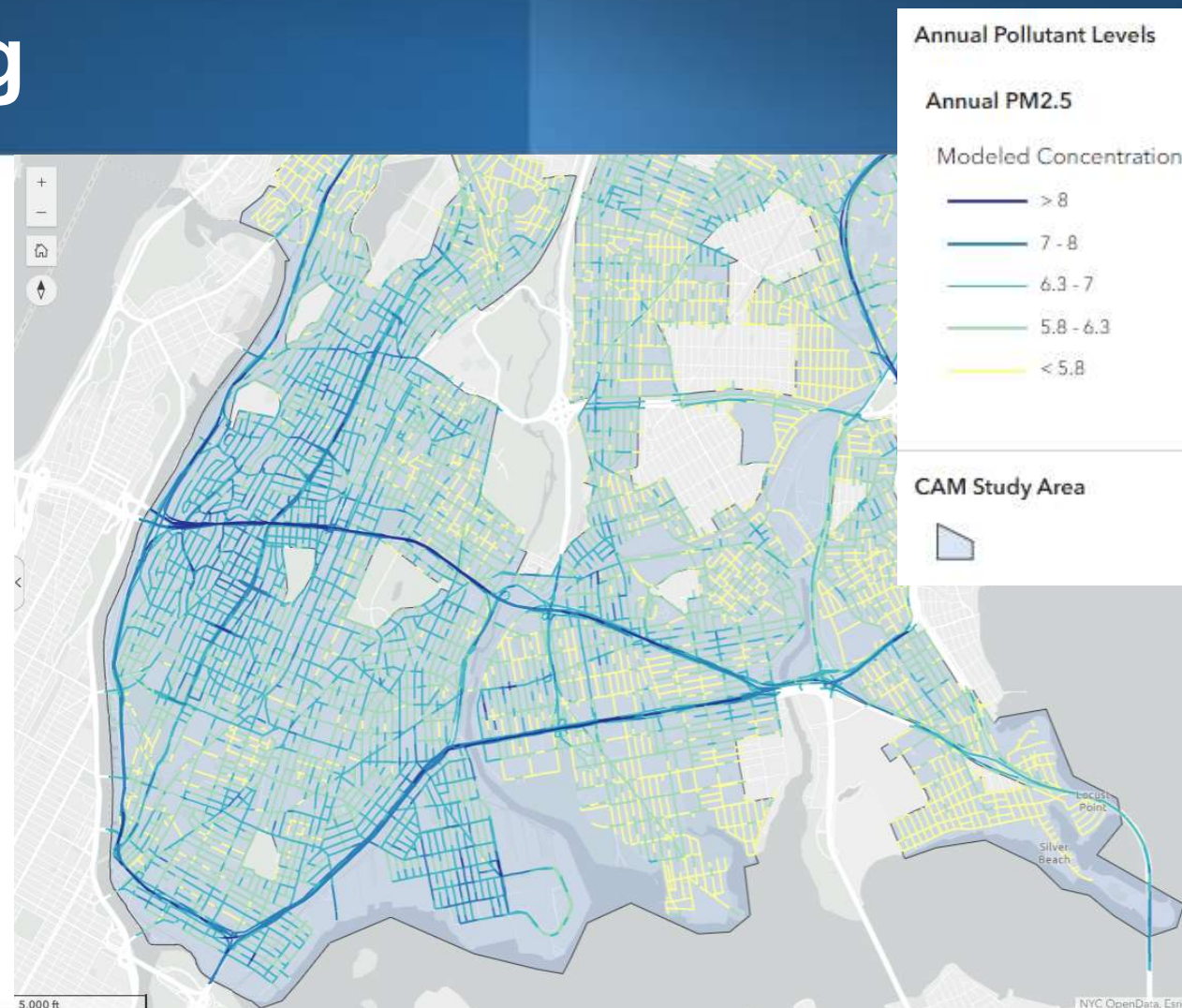


Mobile Monitoring Statewide Community Air Monitoring Initiative



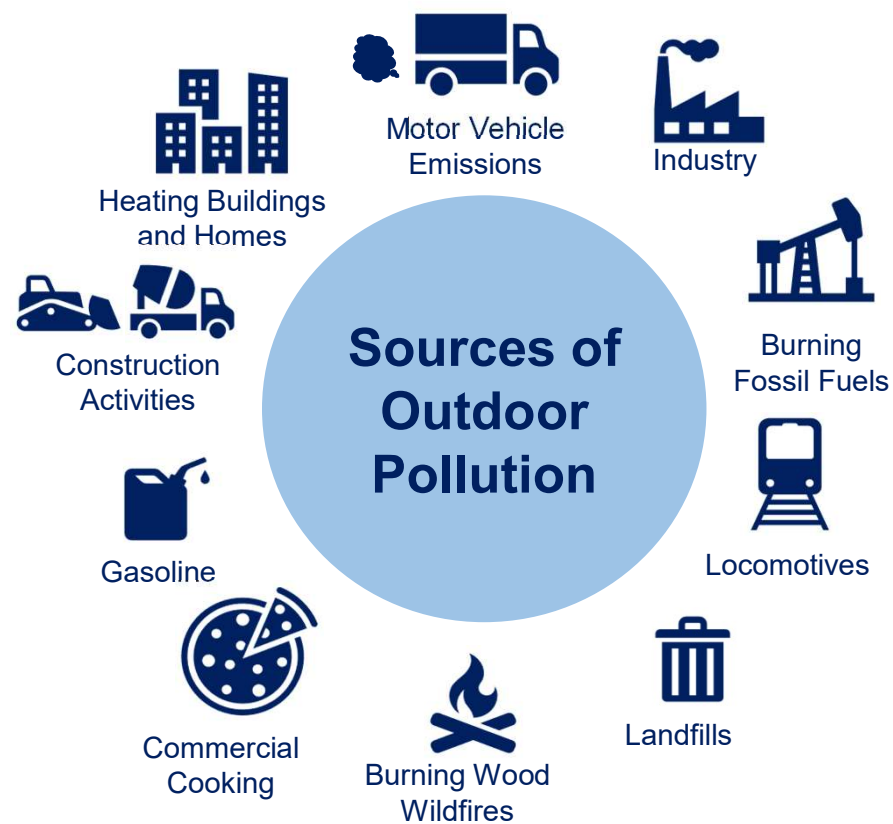
Mobile Monitoring

- Vehicle-mounted sensors collected data every second
- Drove at least 20 times on each road segment at different
 - Times of day
 - Days of the week
 - Seasons of the year
- Produced modeled annual pollutant levels



Sources & Targeted Pollutants

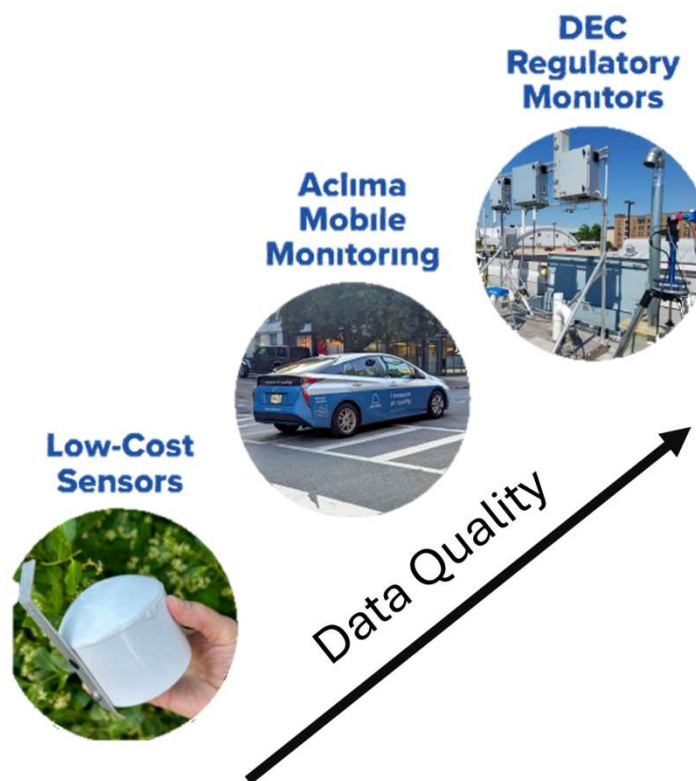
- Fine particulate matter (PM_{2.5})
- Black carbon
- Nitrogen oxides
- Volatile organic compounds
- Methane
- Ethane



- Ozone
- Carbon Monoxide
- Carbon Dioxide

Clarification of Use of Monitoring Results

- DEC will use results as a screening tool for local sources
- Monitoring results are not:
 - Regulatory monitoring
 - Estimates of exposure or health risk



Overall Findings

Statewide Community Air Monitoring Initiative



Mobile Monitoring Results

DEC provides maps of Aclima's modeled **annual** pollutant levels

DEC has evaluated **one-second data** to:

- Identify areas with repeatedly higher air pollution levels
- Provide more context to identify sources and develop air pollution and exposure reduction strategies



Overall Findings

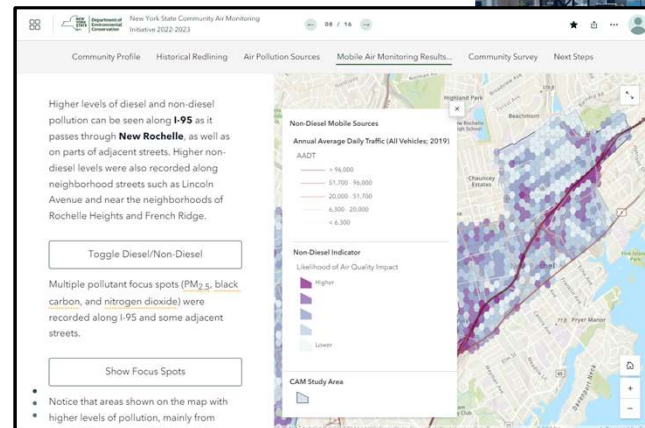
In general, higher pollution levels were found:

- Along and near roads with high traffic, traffic congestion, bus and diesel truck traffic
- Near construction
- Areas with busy commercial retail activity and warehouses
- Close to waste transfer stations, landfills and trucks hauling waste
- Areas adjacent to rail yards and ports
- Near scrap metal processors, vehicle dismantlers, autobody repair shops, asphalt plants and petroleum storage facilities



Examples of Community Findings

- Each community has specific results in its story map
- Many roadways, important source categories, and neighborhoods of interest have been identified
- Our reported findings are not exhaustive



Next Steps

Phase 1: Fall 2024: DEC Community Story Maps

- Community summaries and results as interactive websites
- In-person community information sessions and presentations in all 10 communities

Phase 2: Summer 2025: DEC Communities Report

- Community air quality priorities
- Community-driven strategies

Final Deliverable: Air Pollution Reduction Strategies Report

- Developed in consultation with the Climate Justice Working Group



DEC Community Story Maps

Story map

- Digital story that integrates maps, text, and multimedia to inform and engage the user in an interactive environment to explore data
- Can be viewed and used with a smartphone, tablet, or computer

Explore Story Maps

Check out the Story Maps:



Community Engagement

- DEC's Office of Environmental Justice – Capacity Building and Community Air Monitoring Grants
- Community Advisory Committees
 - Support community involvement to identify concerns and develop emission reduction strategies
- State Agency collaboration with communities
 - Form interagency workgroup to help develop and implement strategies
- Challenges
 - Community participation and data accessibility



CLCPA Community Air Monitoring Initiative



Help Inform

CLCPA Program Goals

Local Air Monitoring Results and Community Input

- **prioritize air pollution areas of concern** near sensitive receptor locations (schools, daycares, nursing homes, public housing)
- **identify potential sources** contributing to higher air pollution levels
- **formulate community guided recommendations** for mitigation strategies to improve air quality

Investments in Disadvantaged Communities

- **Benefits and programs to improve inequities and reduce burdens** in Disadvantaged Communities
- **Address intersecting issues** and strengthen mitigation strategies
- **Effective Governance** including
 - State, City, Local
 - State Interagency Workgroup

Questions

Statewide Community Air Monitoring Initiative

Main Project Page:



RESOURCES

- For more information and details on in-person meetings:
<https://dec.ny.gov/environmental-protection/air-quality/community-air-quality/2022-23-statewide-community-air-monitoring-initiative>
- For air monitoring or study questions, contact CLCPA.CAM@dec.ny.gov or 518-402-8402.
- For questions related to the Office of Environmental Justice grant program, contact justice@dec.ny.gov or 518-402-8556.





Extreme Heat Action Planning

Extreme Heat Action Plan

Presentation to the Climate Justice Working Group

August 20, 2024

Extreme Heat In New York State

Extreme Heat in NYS – Summary Report



Extreme Heat
Action Planning

EXTREME HEAT IN NEW YORK STATE SUMMARY OF IMPACTS AND VULNERABILITIES

Kathy Hochul, Governor | Sean Mahar, Interim Commissioner, DEC |
Doreen Harris, CEO and President, NYSERDA



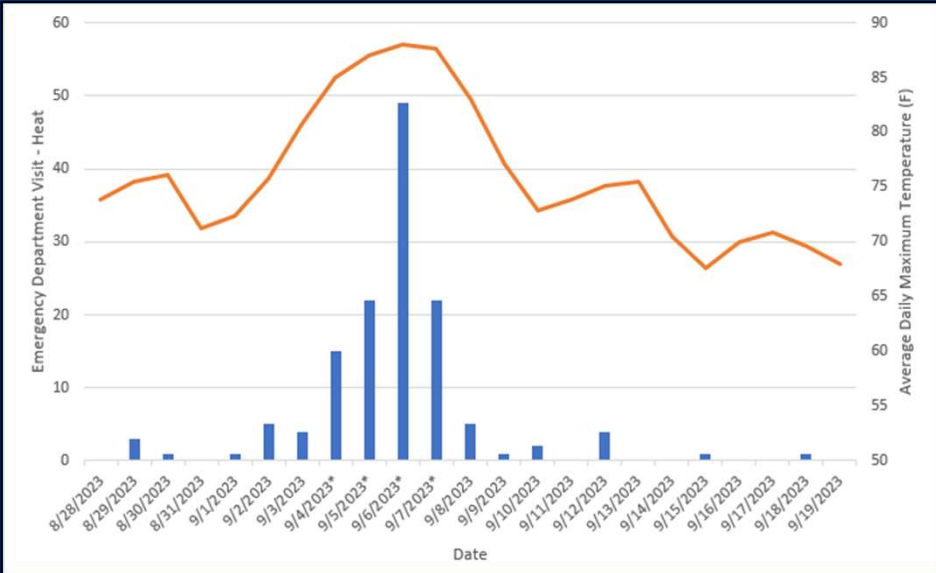
- Summarizes key climate change projections related to extreme heat.
- Summarizes impacts and vulnerabilities.
- Identifies vulnerable and exposed communities.



Extreme Heat
Action Planning

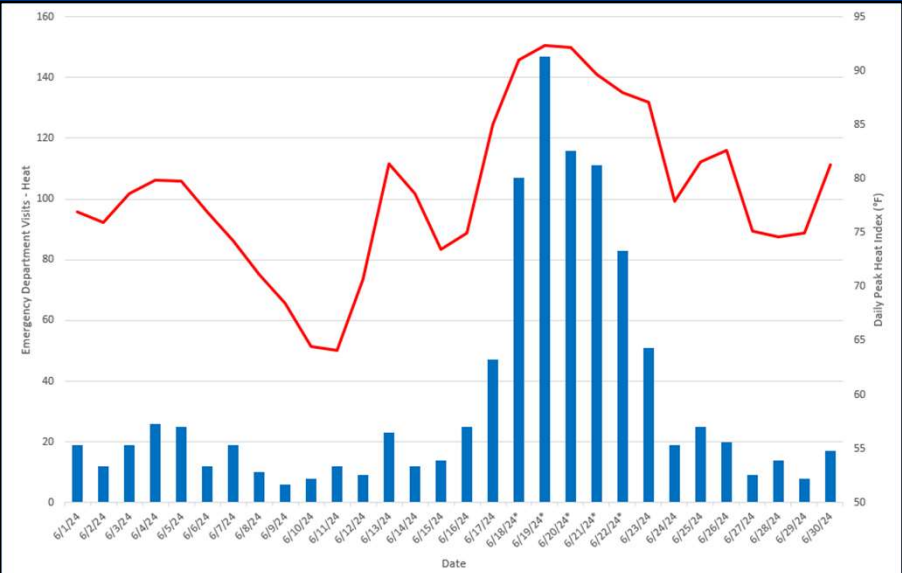
Heat and Health

September 2023



ED Visit Count - Heat Average Daily Max Temperature

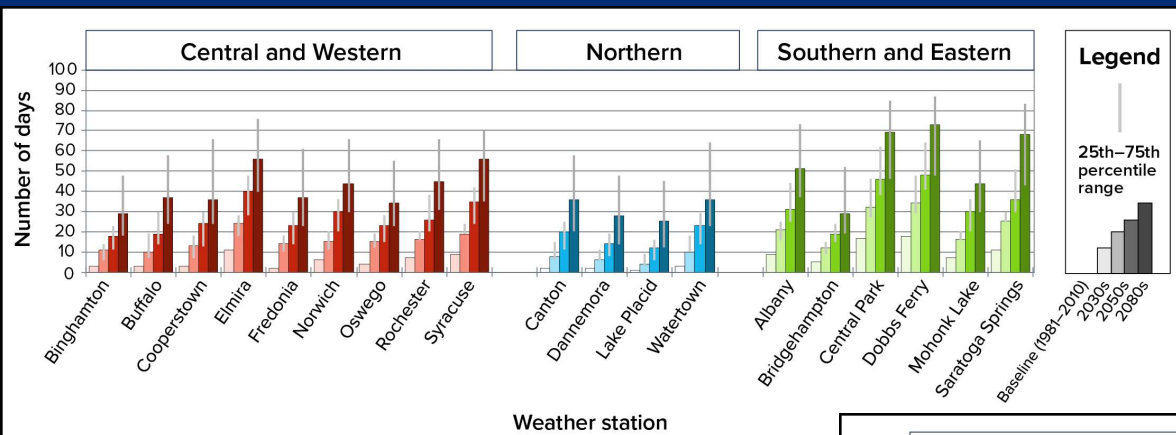
June 2024



ED Visit Count - Heat Heat Index

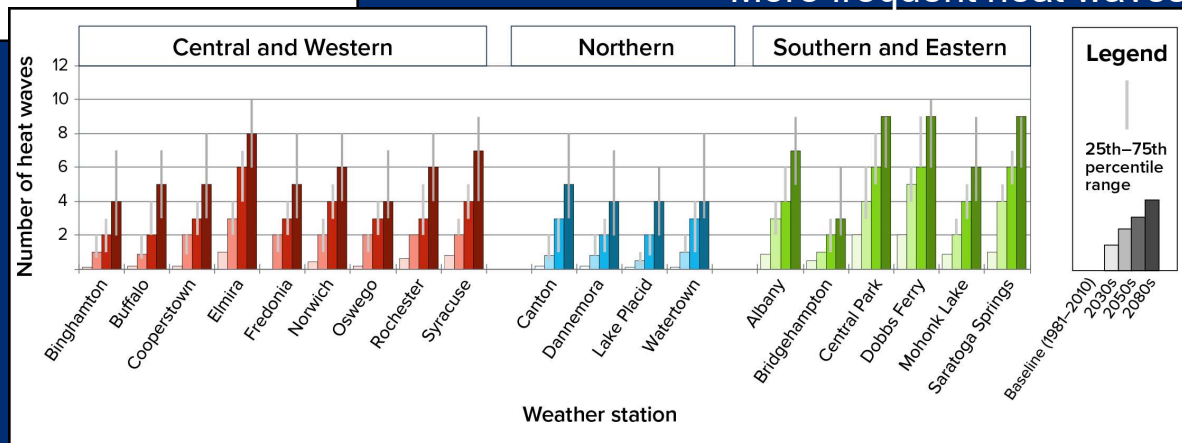


Projections of Extreme Heat



More days over 90 degrees

More frequent heat waves



Example Impacts of Extreme Heat



Longer / More Frequent Heat Waves

- Heat stroke or death (two harmful health effects of extreme heat) affect more people. Vulnerable groups such as children, the elderly, those who work outside, and disadvantaged communities are particularly at risk for experiencing harmful impacts of extreme heat.



Increased Demand for Electricity

- Increased use of air conditioners strains the electric grid and leads to brownouts and/or blackouts.
- This increase in electricity usage leads to the release of more greenhouse gases (GHGs), driving the cycle of climate change.



Dangers in Rural Areas

- Small medical facilities are overwhelmed as more people suffer from heat-related illnesses.
- Many professions take place outdoors, increasing the likelihood people will be exposed to extreme heat; in indoor jobs, many facilities in rural areas do not have adequate access to air conditioning.



Dangers in Urban Areas

- Heat waves and extreme heat days are exacerbated by urban heat island (UHI) effect, keeping urban areas hotter for longer (especially at night) as pavement absorbs heat and releases it slowly.
- Extreme heat leads to stagnant air, which increases the concentration of dangerous particulates like ozone and leading to poor air quality.



Alterations to Plant and Animal Species

- Tree and plant species shift further northward toward their preferred growing climate, forcing the agriculture sector to identify new crops in a changed climate.
- Pests, like ticks and mosquitos, will live longer with there are fewer freeze events each winter.

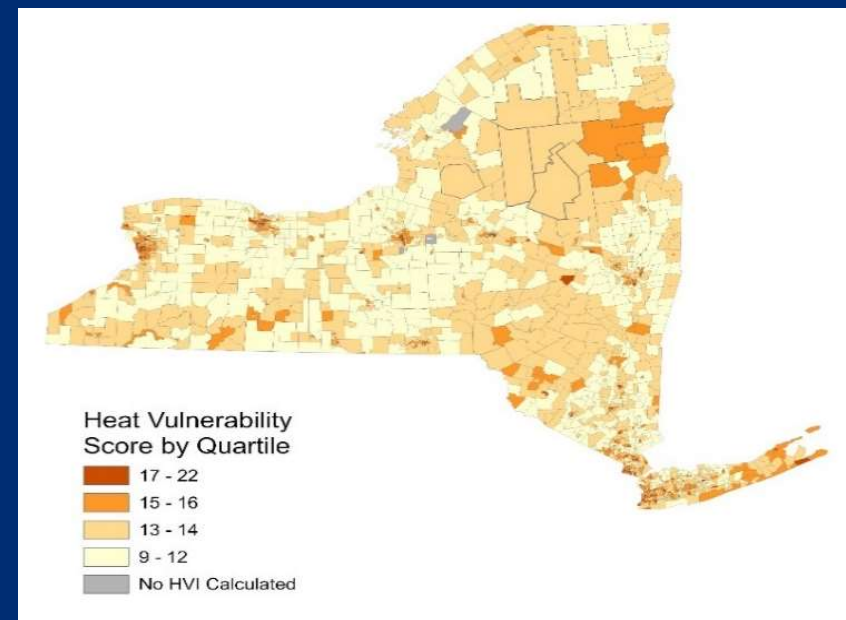
Heat Vulnerability Index

https://www.health.ny.gov/environmental/weather/vulnerability_index/

Identifies census tracts with larger proportions of people who have characteristics that may make them vulnerable to heat.

Intended to be helpful in discussions about where to focus extreme heat adaptations or communications.

To be used in combination with local knowledge!



- For NYC HVI go to <https://a816-dohbsp.nyc.gov/IndicatorPublic/data-features/hvi/>



Extreme Heat
Action Planning

Extreme Heat

<https://www.health.ny.gov/environmental/emergency/weather/hot/>

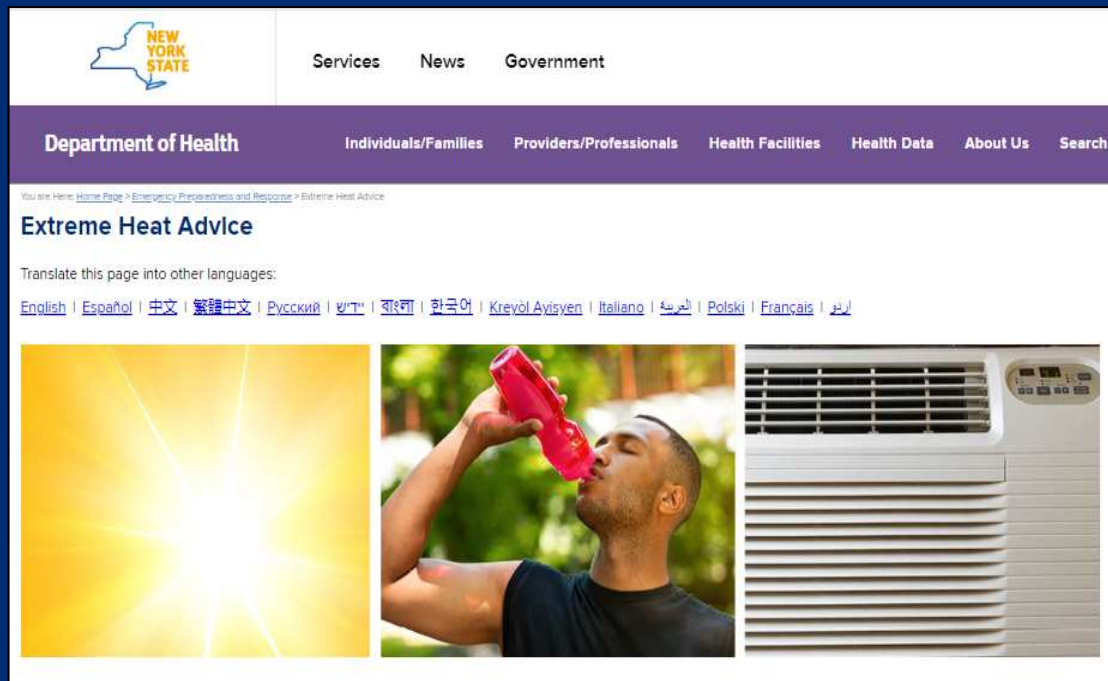
Assists in recognizing heat-related illness

Links to resources for accessing a cool space

Actions to reduce heat health risks

Information for at-risk groups

Link to CDC *HeatRisk* tool



The screenshot shows the New York State Department of Health website. At the top left is the New York State logo. To its right are navigation links for 'Services', 'News', and 'Government'. Below this is a purple navigation bar with 'Department of Health' and several menu items: 'Individuals/Families', 'Providers/Professionals', 'Health Facilities', 'Health Data', 'About Us', and 'Search'. The main content area is titled 'Extreme Heat Advice' and includes a translation option: 'Translate this page into other languages:' followed by links for English, Español, 中文, 繁體中文, Русский, বাংলা, 한국어, Kreyòl Ayisyen, Italiano, العربية, Polski, Français, and اردو. Below the text are three images: a bright sun, a man drinking from a red water bottle, and a white air conditioning unit.



**Extreme Heat
Action Planning**

CDC HeatRisk

<https://ephtracking.cdc.gov/Applications/HeatRisk/>

Rapid access to information about heat health risks and air quality where you live

Actions you can take to protect health

Guidance for healthcare professionals

CDC
U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

HeatRisk

Home

Hot days can affect anyone. If you are pregnant, are a child or teen with asthma, or have a heart condition or other chronic health conditions, heat can make your health worse.

Enter your zip code below to get the *HeatRisk* for this week and actions you can take to keep you and your family safe.

Get Your Local *HeatRisk*

Daily HeatRisk
Monday, July 1

HeatRisk Map
This map shows HeatRisk across the United States for Monday, July 1, 2024. Select a date from the dropdown menu to view daily HeatRisk across the United States for the week ahead.

You can view more local HeatRisk data on the Environmental Public Health Tracking Program's [Data Explorer](#).

HeatRisk is an experimental product and is not supported 24/7. Changes may occur without advance notice.

Source: [NOAA/NWS](#)

POWERED BY TRACKING

UHI Mapping

Detailed presentation to CJWG – October 2023

- SUNY-ESF team selected: Dr. Theodore Endreny, PI
- Focus on mapping potential exposure, eventually combined with disadvantaged community maps, HVI, other measures
- To include ability to map emergent areas of extreme heat, considering land-use change, climate change, and other drivers
- Will provide for mapping of potential exposures across entire state

EXTREME HEAT ACTION PLAN

Extreme Heat Action Planning

2022 STATE OF THE STATE DIRECTIVE:

DEC and NYSERDA to develop an **Extreme Heat Action Plan** to address impacts in

- disadvantaged communities;
- areas of employment; and
- recreational zones across the state.



WHOLE-OF-GOVERNMENT EFFORT, INVOLVING

28 State agencies & authorities

COLLABORATIVE PLANNING PROCESS IN PARTNERSHIP WITH

community-based organizations

local government officials

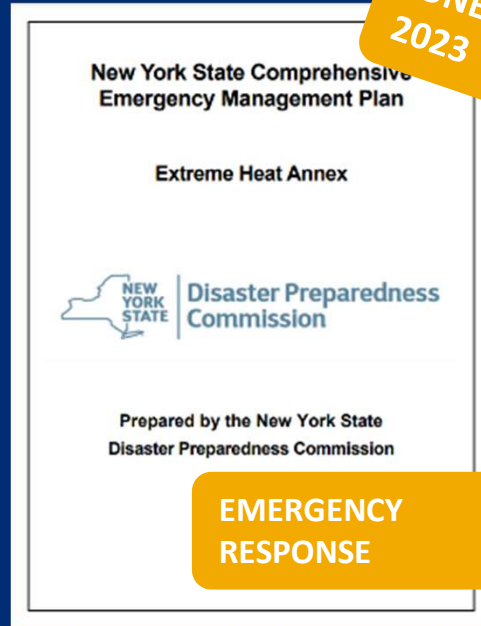
experts and other stakeholders



Extreme Heat
Action Planning



INTERIM REPORT WITH IMMEDIATE ACTIONS



EMERGENCY RESPONSE



EXTREME HEAT ADAPTATION PLAN

Extreme Heat Action Plan



Extreme Heat
Action Planning

EXTREME HEAT ACTION PLAN ADAPTATION AGENDA FOR 2024–2030

Kathy Hochul, Governor | Sean Mahar, Interim Commissioner, DEC |
Doreen Harris, CEO and President, NYSERDA



Putting Adaptation into Action

- Missions, goals, and principles
- 49 strategies in four action tracks
- Short- and mid-range goals
- Implementation and evaluation

SUMMARY REPORT

EXTREME HEAT IN NEW YORK STATE

- Summarizes impacts and vulnerabilities
- Identifies vulnerable and exposed communities



Extreme Heat
Action Planning

EXTREME HEAT IN NEW YORK STATE SUMMARY OF IMPACTS AND VULNERABILITIES

Kathy Hochul, Governor | Sean Mahar, Interim Commissioner, DEC |
Doreen Harris, CEO and President, NYSERDA



EHAP Mission

The Extreme Heat Action Plan aims to

- **equitably reduce** the impacts of extreme heat;
- **help local communities adapt** to extreme heat in a changing climate; and
- **support local capacity** to act.

Go to page 34

TABLE OF CONTENTS

MESSAGE FROM THE GOVERNOR	5
ACKNOWLEDGMENTS.....	6
ABBREVIATIONS, INITIALISMS, AND ACRONYMS	7
I. INTRODUCTION	10
II. EHAP ACTIONS AT A GLANCE	12
III. EXTREME HEAT IN A CHANGING CLIMATE	16
IV. MISSION, GOALS, AND PRINCIPLES	20
V. PLAN DEVELOPMENT	24
The Extreme Heat Action Plan Work Group.....	24
Collaborative Community Planning	25
External Advisory Panels	26
Development Approach and Participation Opportunities.....	27
VI. EXISTING EXTREME HEAT RESPONSE.....	28
Building a Sustainable and Resilient New York State	28
Advancing Climate Adaptation	29
Responding to Heat Emergencies.....	30
VII. EXTREME HEAT ADAPTATION ACTIONS.....	33
Action Track 1: Build Capacity for Adaptation Planning and Implementation	34
Action Track 2: Preparedness, Communication, and Workers' Safety	48
Action Track 3: Built Environment, Infrastructure, and Managed Spaces	60
Action Track 4: Ecosystem-based Adaptation	82
VIII. IMPLEMENTATION AND EVALUATION	93
IX. NEXT STEPS	99
APPENDIX I – Definitions	102
APPENDIX II – Members of the CAP and SAP.....	105
APPENDIX III – Extreme Heat Planning Tools.....	106
APPENDIX IV – Key Programs Supporting Local Extreme Heat Adaptation	108
REFERENCES	111

EHAP Timeline

Planning Forums



Phase 1: Goal
Setting
Nov – Dec 2022



Phase 2: Assess
Impacts and
Vulnerabilities
Jan – Mar 2023



Phase 3:
Develop
Adaptation
Actions
Mar – June 2023



Phase 4: Refine
Adaptation
Actions
July – Aug 2023



Phase 5: Draft
EHAP
Sept – Oct 2023



Phase 6: Review
and Routing
Nov 2023 – May
2024



Phase 7:
Release of the
EHAP
June 2024

- **Collaborative Planning Forums:** 211 unique participants including representatives of 45 community-based organizations and 30 members of municipalities participated in forums to develop the EHAP.



Extreme Heat
Action Planning

EHAP Timeline



- **Regional Community Workshops Participants:** 180 people attended 7 in-person workshops across NYS, held to hear extreme heat challenges.



EHAP Timeline



- **Community Advisory Panel (CAP):** 20 NYS community-based environmental justice and advocacy organizations provided input and review to develop the EHAP.
- **Scientific Advisory Panel (SAP):** Convened by SUNY, a panel of 11 academic experts provided feedback on the EHAP.

Action Track Overview

49 actions are represented in the following 4 action tracks.

TRACK 1	TRACK 2	TRACK 3	TRACK 4
ADAPTATION PLANNING AND IMPLEMENTATION	PREPAREDNESS, COMMUNICATION, AND WORKERS' SAFETY	BUILT ENVIRONMENT, INFRASTRUCTURE, AND MANAGED SPACES	ECOSYSTEM-BASED ADAPTATION
Build Capacity for Adaptation Planning and Implementation	Coordinate Preparedness and Pre-event Communication	Support Resilient Built Environments	Prioritize Ecosystem-based Adaptation and Green Infrastructure Solutions
Promote Research, Development, and Innovation	Protect Workers' Health and Safety	Advance Adaptation in Educational, Institutional, and Congregate Settings	
		Develop Resilient and Equitable Infrastructure	



**Extreme Heat
Action Planning**

Highlighted Actions: T1.05

Action Track 1

Adaptation Planning and Implementation

Action Track 2

Preparedness, Communication, and Workers' Safety

Action Track 3

Built Environment, Infrastructure, and Managed Spaces

Action Track 4

Ecosystem-Based Adaptation

Build Capacity for Adaptation Planning and Implementation

Promote Research, Development, and Innovation

Action T1.05

Deepen climate resilience and extreme heat adaptation collaborations with frontline CBOs, prioritizing schools and youth leaders and youth organizations.

Leading Agency
DEC



**Extreme Heat
Action Planning**

Highlighted Actions: T1.07

Action Track 1

Adaptation Planning and Implementation

Action Track 2

Preparedness, Communication, and Workers' Safety

Action Track 3

Built Environment, Infrastructure, and Managed Spaces

Action Track 4

Ecosystem-Based Adaptation

Build Capacity for Adaptation Planning and Implementation

Promote Research, Development, and Innovation

Action T1.07

Evaluate the existing HVI and explore opportunities to use HVI factors to improve program and resource targeting.

Leading Agency

DOH

Supporting

DEC



**Extreme Heat
Action Planning**

Highlighted Actions: T2.03

Action Track 1
Adaptation Planning and Implementation

Action Track 2
Preparedness, Communication, and Workers' Safety

Action Track 3
Built Environment, Infrastructure, and Managed Spaces

Action Track 4
Ecosystem-Based Adaptation

Coordinate Preparedness and Pre-event Communication

Protect Workers' Health and Safety

Action T2.03

Expand access to safe swimming and address equity gaps with recreational opportunities for communities facing extreme heat.

Leading Agency

OPRHP

Supporting

DOH, DOS, DASNY



**Extreme Heat
Action Planning**

Highlighted Actions: T2.10

Action Track 1
Adaptation Planning and
Implementation

Action Track 2
Preparedness, Communication,
and Workers' Safety

Action Track 3
Built Environment, Infrastructure,
and Managed Spaces

Action Track 4
Ecosystem-Based Adaptation

Coordinate
Preparedness and
Pre-event
Communication

**Protect Workers'
Health and Safety**

Action T2.10

Protect workers' heat health through engagement with local partners in focused outreach activities, leveraging existing touchpoints to provide services and protections, including know-your-rights information.

Leading Agency

DOL

Supporting

DOH



**Extreme Heat
Action Planning**

Highlighted Actions: T3.01

Action Track 1
Adaptation Planning and Implementation

Action Track 2
Preparedness, Communication, and Workers' Safety

Action Track 3
Built Environment, Infrastructure, and Managed Spaces

Action Track 4
Ecosystem-Based Adaptation

Support Resilient Built Environments

Advance Adaptation in Educational, Institutional, and Congregate Settings

Develop Resilient and Equitable Infrastructure

Action T3.01

Expand immediate access to affordable cooling through additional funding for cooling equipment, expanding reimbursement under medical insurance, and continued advocacy.

Leading Agency

OTDA

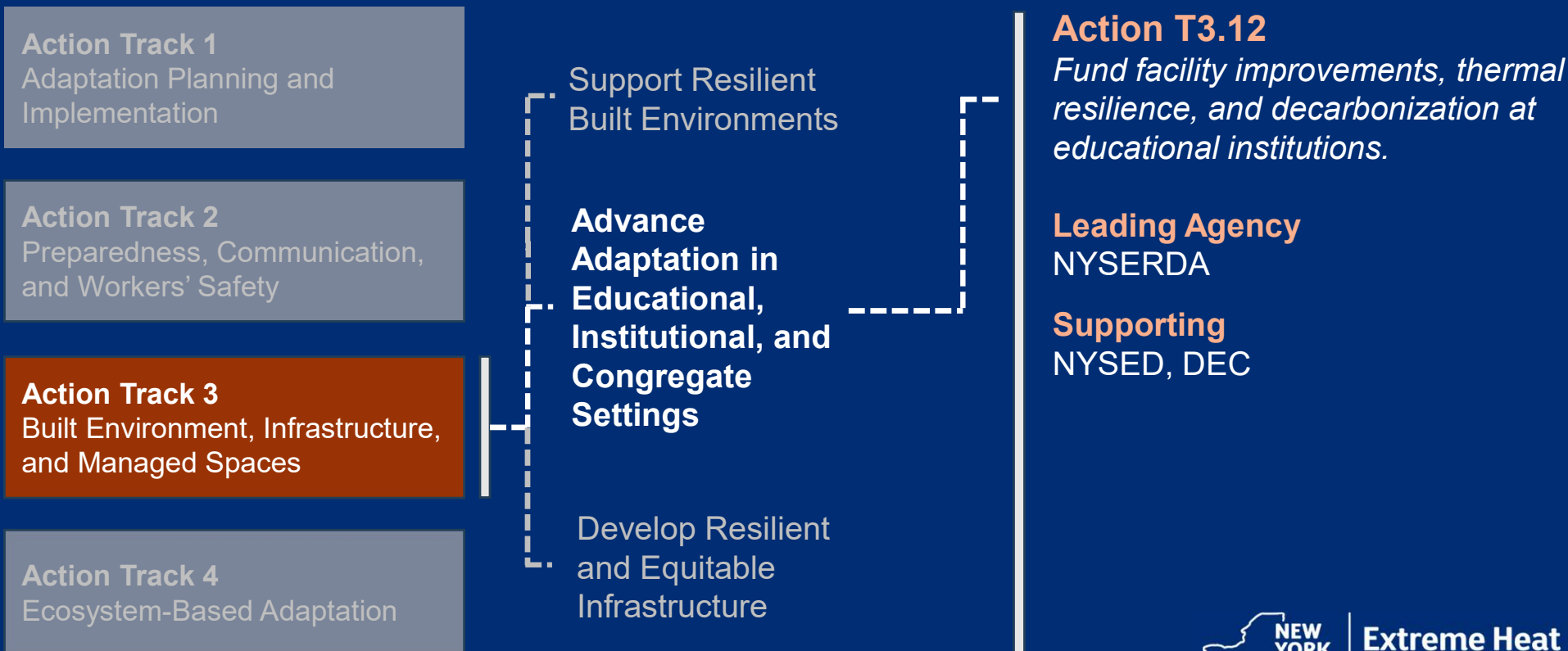
Supporting

DOH



**Extreme Heat
Action Planning**

Highlighted Actions: T3.12



Highlighted Actions: T3.20

Action Track 1

Adaptation Planning and Implementation

Action Track 2

Preparedness, Communication, and Workers' Safety

Action Track 3

Built Environment, Infrastructure, and Managed Spaces

Action Track 4

Ecosystem-Based Adaptation

Support Resilient Built Environments

Advance Adaptation in Educational, Institutional, and Congregate Settings

Develop Resilient and Equitable Infrastructure

Action T3.20

Accelerate the transition of internal combustion bus and agency fleets to electric propulsion to reduce heat and ozone exposure along bus routes.

Leading Agency

MTA

Supporting

DEC, DOT, NYPA, NYSERDA



**Extreme Heat
Action Planning**

Highlighted Actions: T4.06

Action Track 1
Adaptation Planning and Implementation

Action Track 2
Preparedness, Communication, and Workers' Safety

Action Track 3
Built Environment, Infrastructure, and Managed Spaces

Action Track 4
Ecosystem-Based Adaptation

Prioritize Ecosystem-based Adaptation and Green Infrastructure Solutions

Action T4.06

Fund and train arborists, foresters, youth conservation corps, and other conservation staff who will plan, install, and maintain green infrastructure and ecosystem-based adaptation to reduce extreme heat impacts.

Leading Agency

DEC

Supporting

AGM, DOCCS, DOS, DOL, OCFS, OPRHP



**Extreme Heat
Action Planning**

EHAP Implementation

- Through the EHAPWG, **DEC and NYSERDA** are working with lead and support agencies to implement EHAP actions.
- The EHAPWG will monitor and evaluate the implementation of the plan and its specific actions to ensure outcomes are met.
- **Pre-summer readiness resources** will be made available yearly to share implementation progress and support extreme heat adaptation.



Provide Feedback & Inform Implementation

EHAP Implementation



The State invites **continued public input to** help inform implementation and future updates.

UHI Mapping Project

- Will seek feedback and input to help guide the project and enhance deliverables.
- Will engage with CJWG members as we define engagement opportunities.
- Any initial feedback about themes of interest are welcome.



NEW YORK STATE | Extreme Heat Action Planning

Feedback Form

- A request for feedback form regarding the Disadvantaged Communities Criteria was posted on the OEJ, DEC, and Climate Act Websites on July 10, 2024
- The feedback collection period will close today August 20, 2024 at 5pm
- <https://forms.office.com/g/6e3EUJJvSx>

Thank You

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Next Steps





Thank You!