



# EXTREME HEAT PREPAREDNESS

Addressing our Era's Extraordinary Challenge + Opportunity for a Better Quality of Life

# The Urban Heat Island Effect (UHIE)

- How do we build cities?
- Temperature
- Health impacts
- How can we better protect communities?
- Do you see it in your community?

## The Urban Heat Island Effect

Urban areas are much hotter than surrounding areas and will continue to become hotter, leading to worse health for residents.

### Los Angeles UHI Effect

Roofs and pavements can be 50-90°F hotter than the air & 40% of LA is covered by asphalt.

Lack of trees and green spaces 21% of LA is covered by trees, well below the national average.

Urban Heat Island Effect: LA air temperatures up to 19°F hotter in urban areas LA has the highest urban heat island effect in CA.

### Los Angeles Climate Change Situation

Temperatures in the LA region will rise 3.5-5°F over the next 20-40 years from climate change

Extreme heat days double, and even triple, in some parts of the city 95°F

### What are the risks from extreme heat?

Increased urban air temperatures from both Urban Heat Island Effect and Climate Change mean more:

- City smog
- Wildfires
- Poor air quality
- Respiratory illness
- Heart-related illness
- Hospital visits

### The Opportunity

There are many opportunities to combat extreme heat, including:

- Using cool construction materials**  
Cool Roofs and cool paving reflect instead of absorb heat, which can lower surface air temperatures 10-20°F.  
→ 14% of LA County land is dedicated to parking.
- Increasing urban tree canopy and green spaces**  
Plants' natural air conditioning system can reduce peak summer temperatures by 2-9°F.  
→ Heat from hot air can be absorbed by leaves during the process of photosynthesis.
- Increasing shade structures will protect Angelenos from extreme heat**  
Shade structures can lower surface temperatures by 25-40°F.  
→ 78% of bus stops in LA don't have shade.
- New funding sources**  
Greenhouse Gas Reduction Funds and SB1 money provides an opportunity to make infrastructural investments that support both climate change mitigation and adaptation.

**We can create a cooler, greener, more mobile Los Angeles, making it easier and safer to live!**

Let's #KeepLACool

Climate Resolve  
climateresolve.org

# The Urban Heat Island Effect

Urban areas are much hotter than surrounding areas and will continue to become hotter, leading to worse health for residents.

## Los Angeles UHI Effect



## Los Angeles Climate Change Situation



## What are the risks from extreme heat?

Increased urban air temperatures from both Urban Heat Island Effect and Climate Change mean more:

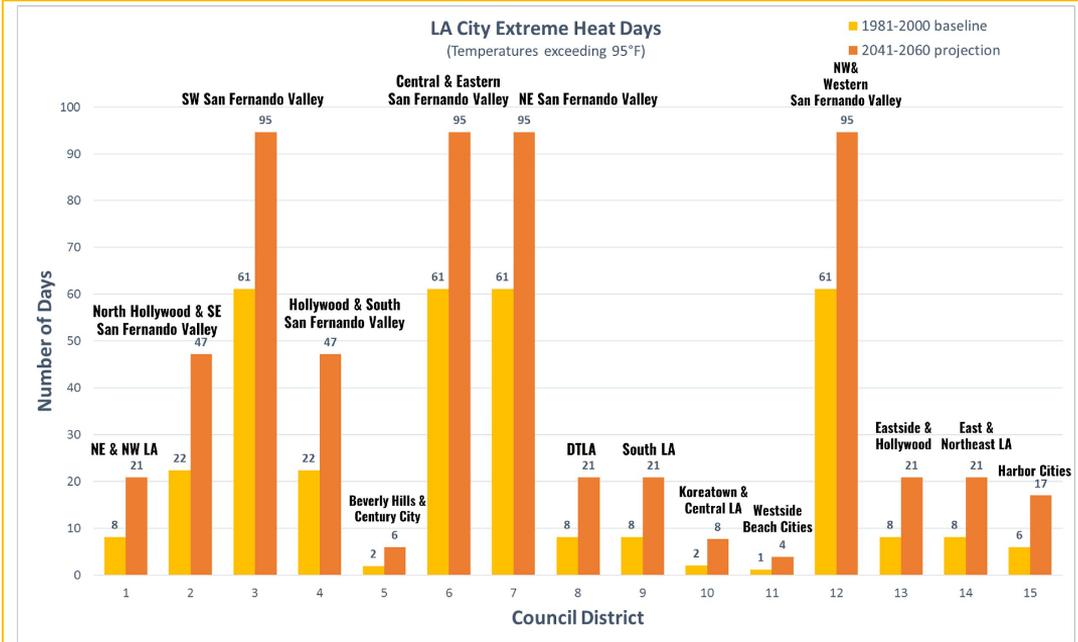


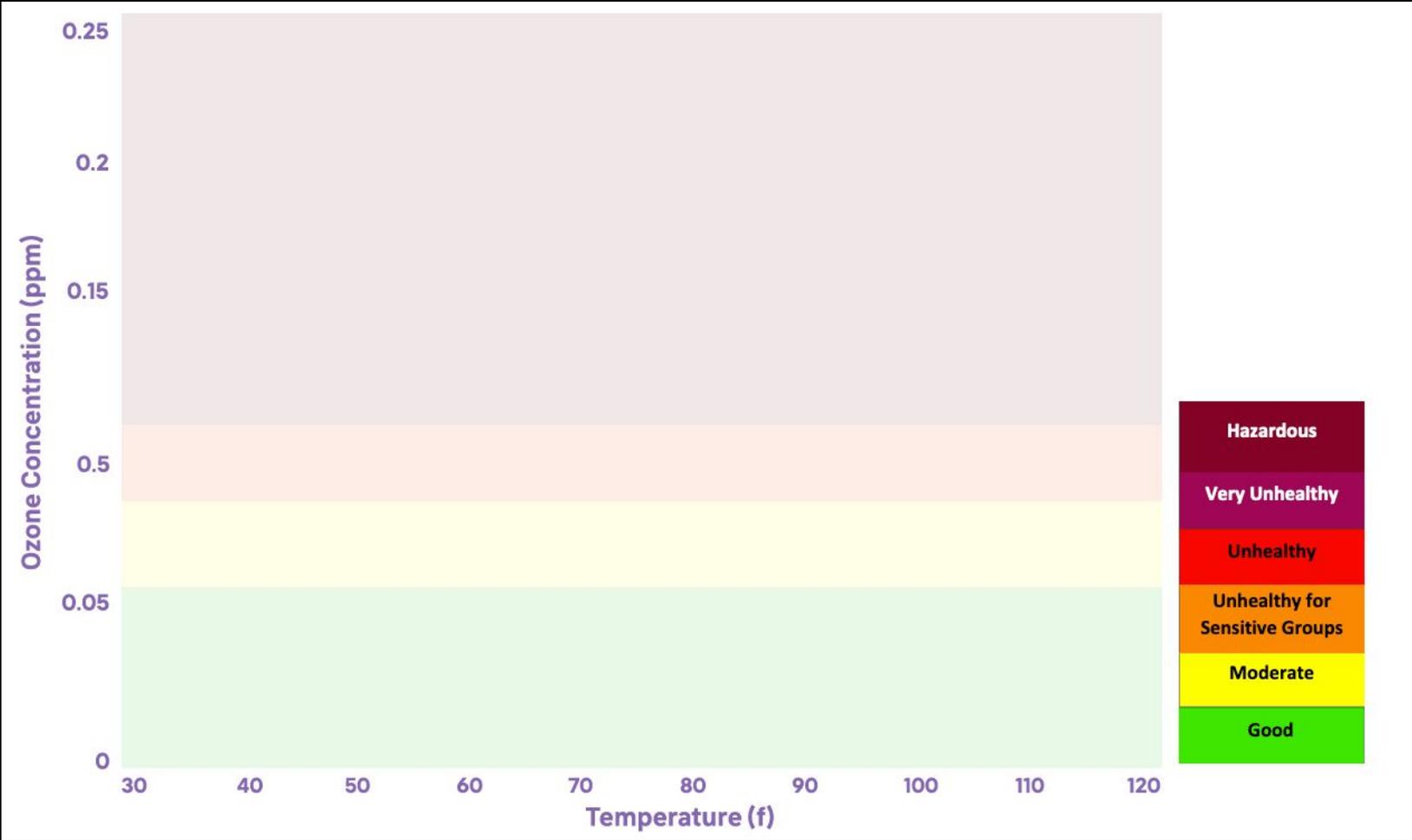
## The Opportunity

There are many opportunities to combat extreme heat, including:



# LA Temperature, 2041-2060





# Extreme Heat & Heat Waves Impacts on Public Health

Our bodies can't cool  
down, rest, or recover so  
that means we're more  
susceptible to heat  
related illness



## Heat and Health

- Heat is the leading health-related cause of death and illness
- Hard to adjust to heat
- Strategies to avoid the heat
  - Cooling centers
  - Finding shade
  - Preparing for the heat



# Cooling Centers Near You

- Libraries: [lapl.org/branches](https://www.lapl.org/branches)
- Rec center: [laparks.org/reccenter](https://www.laparks.org/reccenter)
- Senior center: [laparks.org/scc](https://www.laparks.org/scc)
- Swimming pool: [laparks.org/aquatics](https://www.laparks.org/aquatics)
- County centers: [lacounty.gov/heat/](https://www.lacounty.gov/heat/)
- Beat the Heat: [emergency.lacity.org/heat](https://www.emergency.lacity.org/heat)

Loose fitting clothing and light colors can help you beat the heat!



## Staying Safe

- Wear heat appropriate clothes
- Use sunscreen
- Check-up on friends, neighbors, and family
- Stay Hydrated
- Take frequent breaks if you work outside

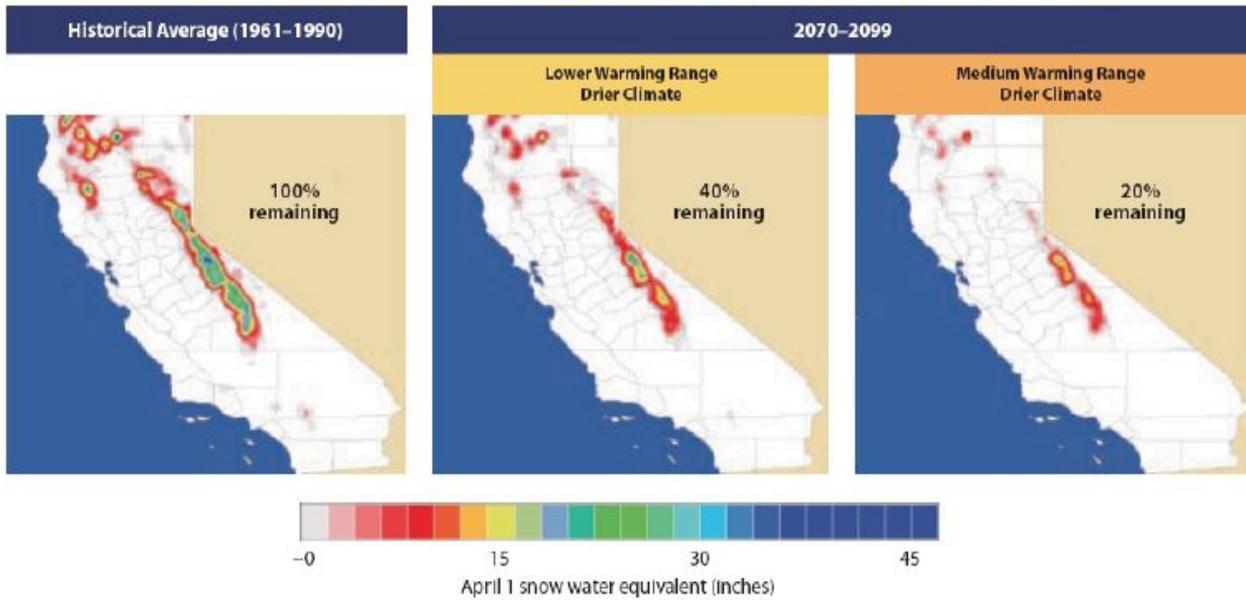
# Extreme heat will also affect...

- Air quality
- Food supply
- Energy demand and supply
- Wildfires
- Roads and rails
- Property values
- Water evaporation:  
vegetation, habitat, water  
supply



# Decreasing California Snowpack

*Snow pack acts as a natural reservoir for summer and fall water supply.  
Its capacity is projected to decrease significantly in a warmer climate.*



Now here are the solutions...



# Benefits of increasing the urban tree canopy

- Sequester carbon
- Cleaner local air quality
- Heat reduction benefits
- Provides shade to pedestrians
- Improves attention and stress regulation
- Improved mental well being

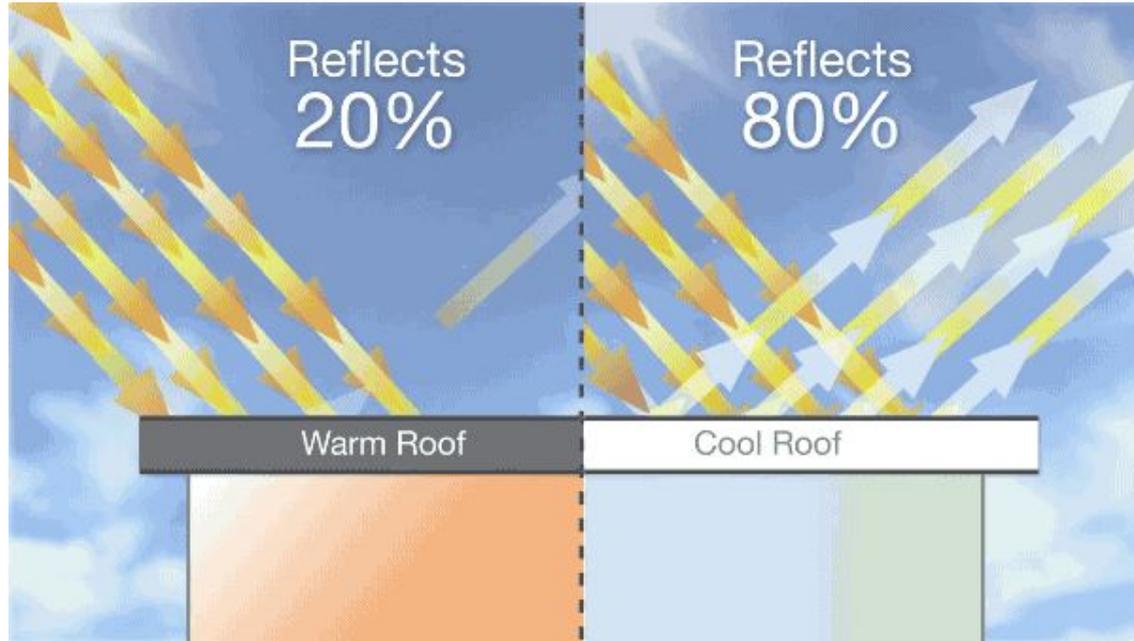




# Cool Roof Ordinance

Climate Resolve won the policy to ensure that every new and refurbished rooftop in the City of Los Angeles is a cool roof.

# Why Cool Roofs?



# Air Conditioning Optimization Program



- Call toll free (833) 280-8100 and request a referral
- Must be residential/commercial customer with active account
- AC at least one year old
- Service includes filter change, outdoor coil cleaning, system diagnostic test, refrigerant charge adjustment
- May qualify for Smart thermostat

# Free Water Conservation Items



- Visit Customer Service Center
- For residential customers
- Call 1-800-544-4498 & press “5” (Multifamily owners)
- Save up to 900 gallons a year for each faucet aerator
- Save up to 5300 gallons of water per year for each showerhead
- Average person uses 80-100 gallons of water per day

# Efficient Product Marketplace

## LADWP Marketplace

Search all major retailers at once and find energy efficient products.

Search by type, brand, model... [Search](#)

 Televisions  Thermostats  Refrigerators  Air Conditioners [Explore More Categories](#)

- Must be LADWP residential customer
- Must have an active electric account
- Find efficient appliances
- Process rebates
- Save money
- **Marketplace.ladwp.com**

# THANK YOU!

Gabriel Varela | [gvarela@climateresolve.org](mailto:gvarela@climateresolve.org)

213-634-3790 x107 | [climateresolve.org](http://climateresolve.org)

