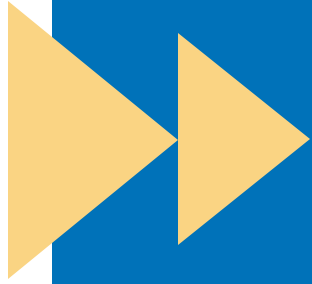




north shore community development coalition



City of Salem

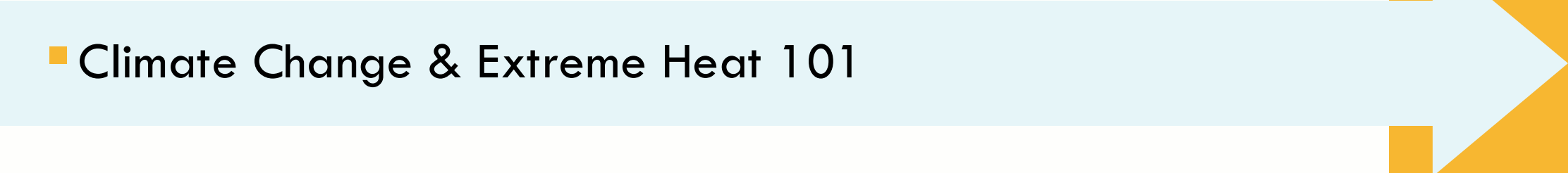


Heat & Health





Agenda

- 
- Climate Change & Extreme Heat 101
 - Heat & Public Health
 - Heat Strategies
 - Visioning Activity

Causes of Climate Change



Scientists agree that the burning of oil, coal, and gas (fossil fuels) for energy releases gases that trap heat, making the Earth warmer.

Sources include:



Transportation



Electricity Generation



Industry



Agriculture



Commercial



Residential

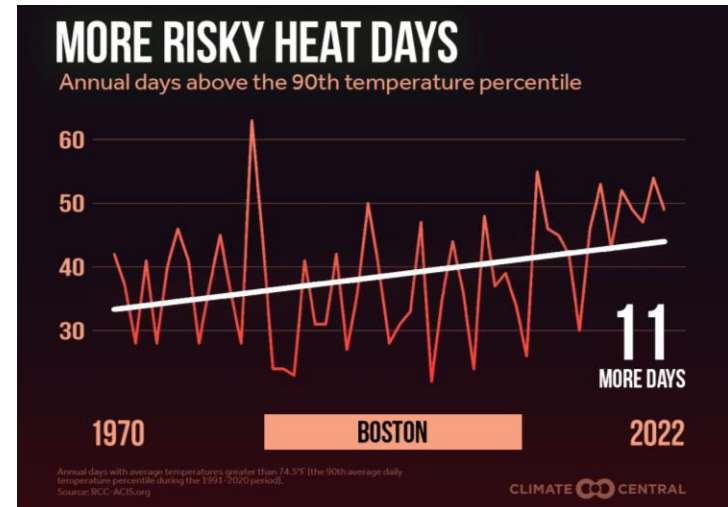
Effects of Climate Change: **WARMER**

Compared to **historic trends**, Metro Boston is experiencing:

- 1.3°F warmer summers
- 2.3°F warmer winters
- 11 more “risky heat days” per year

The future holds:

- More frequent, severe, and longer-lasting heat waves



What is extreme heat?

Extreme heat is a prolonged period of very hot weather, which may include high humidity.

In Massachusetts, a “heat wave” is defined as a period of 3+ consecutive days above 90 °F

Extreme heat becomes more dangerous the longer it lasts



Heat index is a measure of how heat feels

Heat index combines air temperature and relative humidity to represent the “feels like” temperature.



National Weather Service Heat Index Chart



Temperature (°F)

	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure and/or Strenuous Activity

Caution
 Extreme Caution
 Danger
 Extreme Danger

Let's practice!

Temperature (°F)

	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
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90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Relative Humidity (%)

AccuWeather Cambridge, MA 91°F
Search

JUNE 2

Afternoon 6/2

92°

RealFeel® Sun 98°

RealFeel Shade® 90°

Mostly cloudy and warm with a couple of thunderstorms

Wind	E 9 mph	Precipitation	0.41 in
Wind Gusts	15 mph	Rain	0.41 in
Humidity	45%	Cloud Cover	84%
Dew Point	61°	Visibility	8 mi
Probability of Precipitation	88%		

EVENING →

DAY & NIGHT →

Why do we care about heat?

Impacts of Extreme Heat:



- **Health**
 - Heat related illnesses, more mosquitos & ticks, longer allergy season, mental health impacts, worse air pollution
- **More need for AC**
 - Higher energy bills, increased risk of power outage

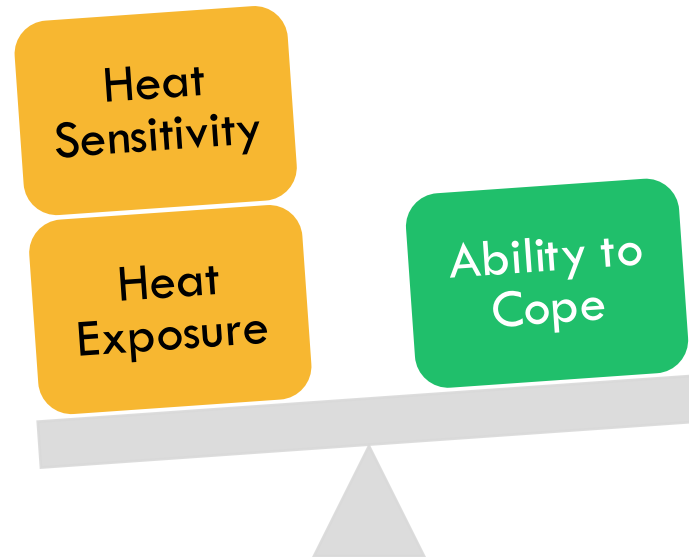
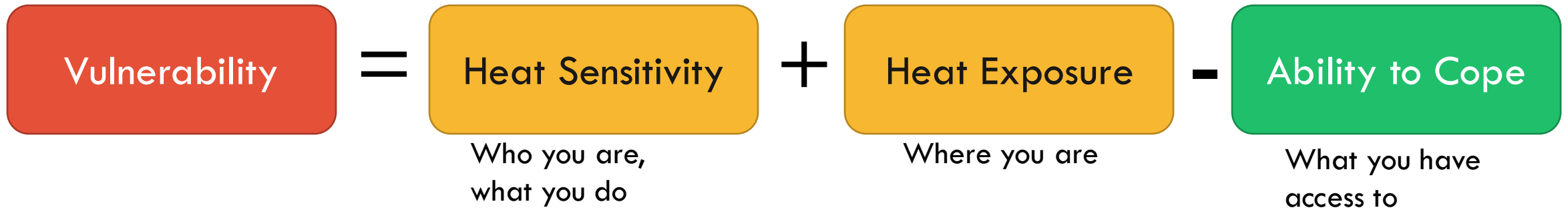
Why do we care about heat?

Impacts of Extreme Heat:



- **Damage to infrastructure**
 - Damaged roads/buildings, train derailments
- **Drought**
 - Water shortage, crop damage, financial damages

Heat Vulnerability





Some people are more sensitive to heat

Older Adults
(65+)

Infants & Young
Children

People with
Disabilities or
Limited Mobility

People with
Chronic Illnesses

Pregnant
Women

People who Live
Alone or Are
Bedridden

People
Experiencing
Homelessness

People without
AC

People who
Work or Train
Outdoors

People on
Certain
Medications

Low-income
Households

Wearing
inappropriate
clothing (heavy,
dark clothing)

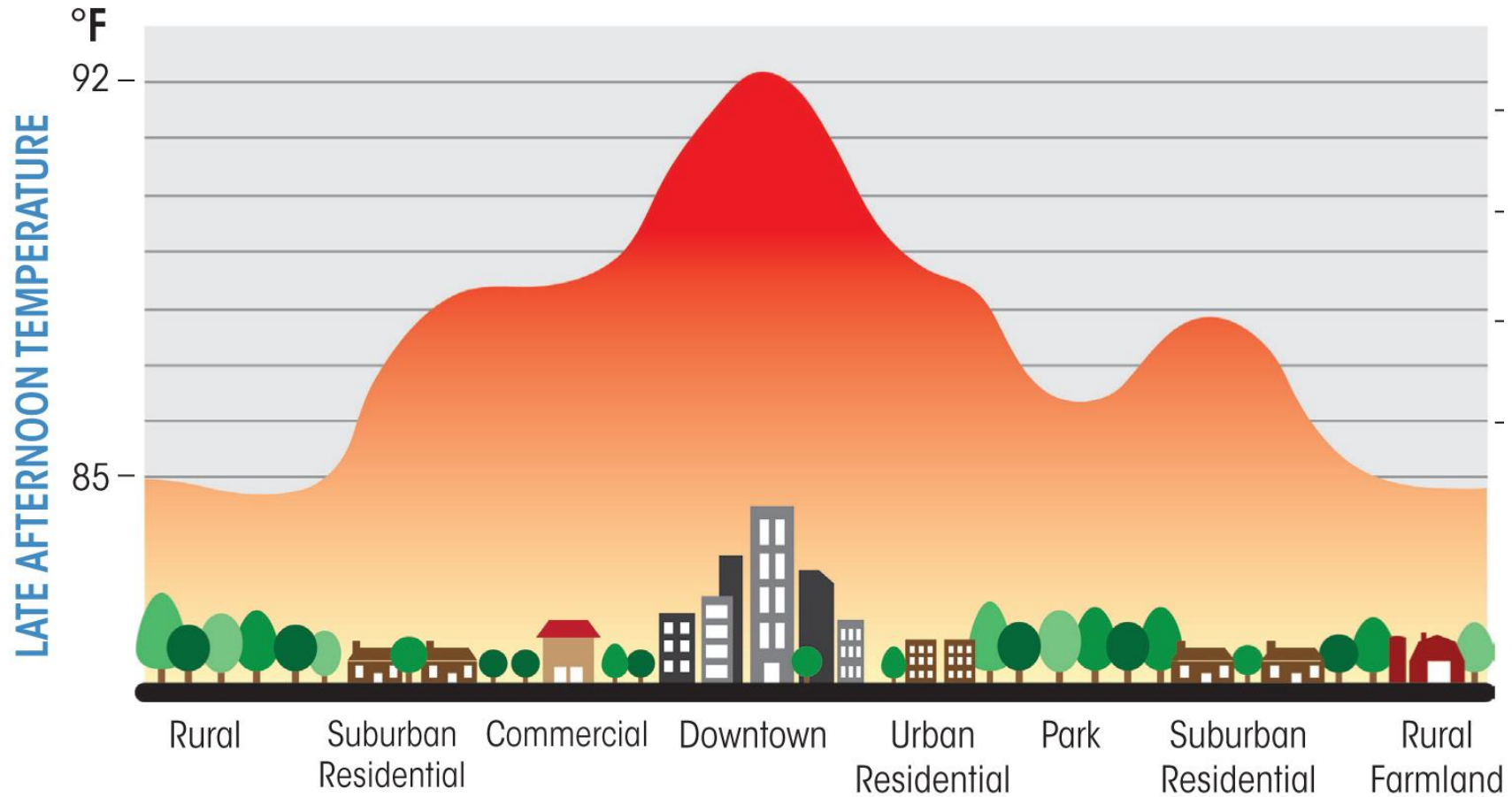
Consuming alcohol

Exercising
outdoors

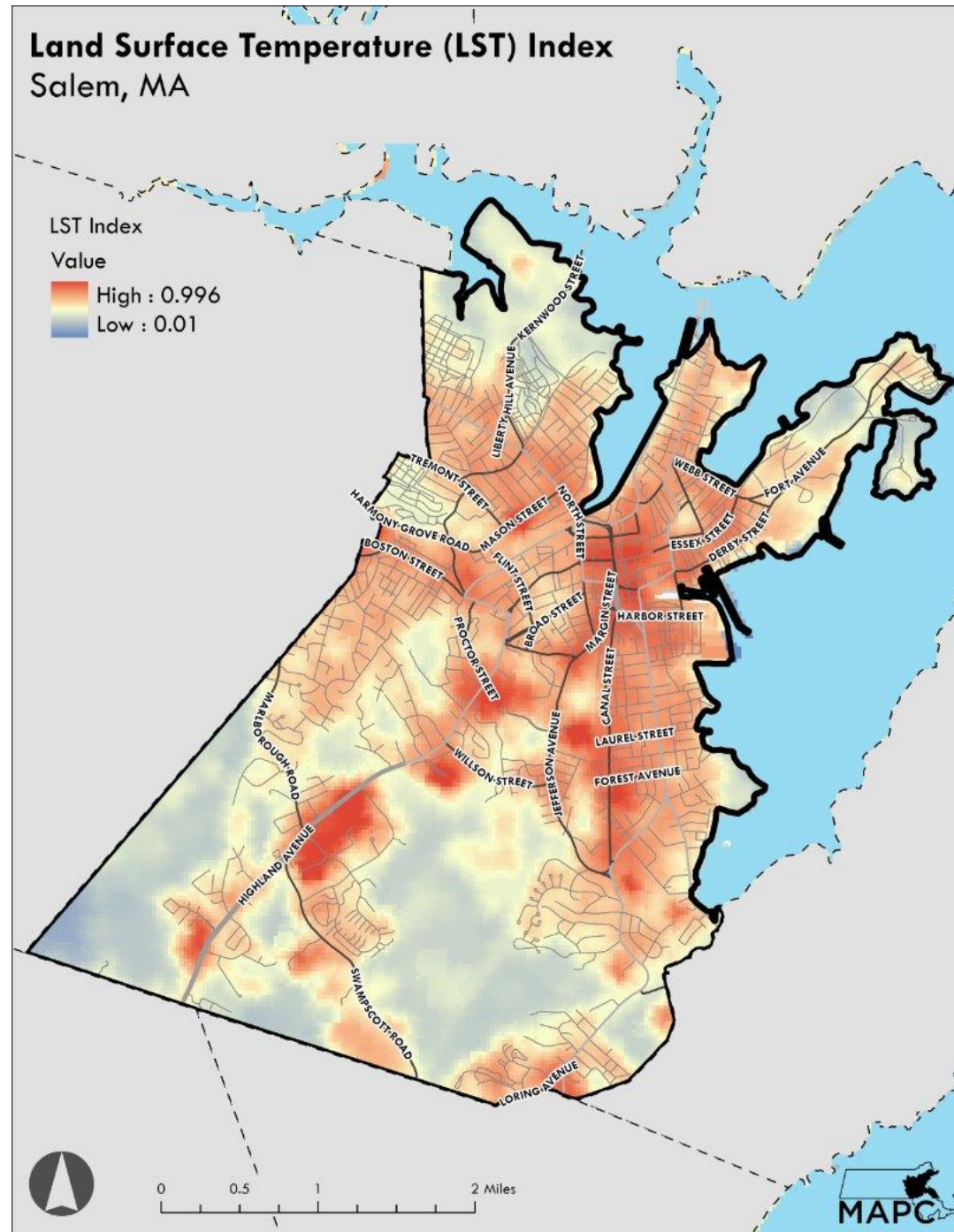
Eating hot, heavy
meals

Not staying
hydrated

Some areas are more exposed to heat




In Salem





Agenda

- Climate Change & Extreme Heat 101
 - Heat & Public Health
 - Heat Strategies
 - Visioning Activity
- 

Heat Illnesses

SIGNS

Heat Rash	Red, itchy skin; small bumps or blisters
Heat Cramp	Muscle pains or spasms in stomach, arms, or legs
Heat Exhaustion	Heavy sweating, paleness, muscle cramps, weakness, headache, nausea, vomiting, fainting, weak pulse
Heat Stroke	Extremely high body temperature (<math><104</math>), hot skin with or without sweat, strong rapid pulse, dizziness, confusion, unconsciousness



Heat Illnesses

SIGNS

WHAT TO DO


Heat Rash	Red, itchy skin; small bumps or blisters	<ul style="list-style-type: none">• Gently dry off skin• Put cold compress on skin• Seek medical help if symptoms don't improve
Heat Cramp	Muscle pains or spasms in stomach, arms, or legs	<ul style="list-style-type: none">• Stop physical activity and move to a cooler air-conditioned place• Drink water• Seek medical attention if cramps last longer than 1 hour
Heat Exhaustion	Heavy sweating, paleness, muscle cramps, weakness, headache, nausea, vomiting, fainting, weak pulse	<ul style="list-style-type: none">• Move to a cooler area, out of sun• Loosen clothing• Drink cool water• Seek medical help if symptoms do not improve
Heat Stroke	Extremely high body temperature (>104), hot skin with or without sweat, strong rapid pulse, dizziness, confusion, unconsciousness	<ul style="list-style-type: none">• Call 911 immediately (delay can be fatal)• Move individual to cooler, air-conditioned place• Loosen clothing• Cool body with fan, ice, or mister• Do not give person anything to drink



Can be fatal



Agenda

- Climate Change & Extreme Heat 101
 - Heat & Public Health
 - Heat Strategies
 - Debrief & Closing
- 

Beat the Heat

 **AVOID**  **SPOT**  **TREAT** 

Stay indoors when the temperature is very high.
If you must go outside, dress properly and take breaks often.



Drink plenty of water.



Find air-conditioned places to cool off.



Check on friends and neighbors at high risk for heat-related illness.



NEVER leave kids or pets in a vehicle.

Prevent heat-related illness.

Learn how: [cdc.gov/disasters/extremeheat](https://www.cdc.gov/disasters/extremeheat)



OS992175-A



Beat the Heat

/////// TIPS FOR STAYING COOL /////

STAY HYDRATED

Drink plenty of water and avoid caffeinated or alcoholic beverages.

REST IN COOL SPACES

Take breaks in shaded or air conditioned spaces. Avoid strenuous outdoor activity.

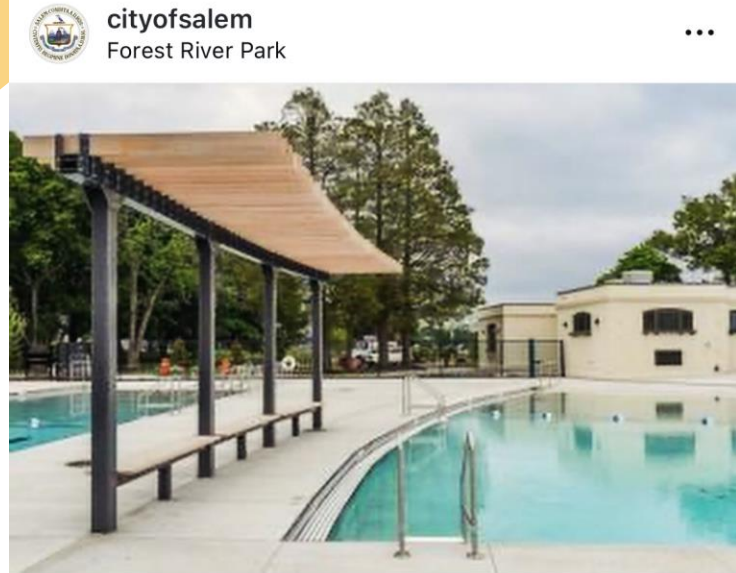
CHECK ON NEIGHBORS

Check in on elderly neighbors, children, and pets regularly during periods of extreme heat.

USE FANS PROPERLY

Do NOT use fans when indoor temperature is $>95^{\circ}\text{F}$ as this can inhibit sweating (i.e. temperature regulation).

What's Salem doing about heat?



82 28

cityofsalem SPECIAL POOL HOURS ADDED TOMORROW DUE TO HIGH TEMPERATURES:

Due to extreme heat this week, the City of Salem and the Salem YMCA announce that the Forest River Pool will be open from 3:00-6:00pm TOMORROW, Wednesday, June 19th. These special hours are being added a few days early, before the pool opens officially for the season and will be limited to SALEM RESIDENTS ONLY. Capacity is limited and entry will be available on a first-come, first-served basis.

June 18, 2024



32 7

cityofsalem COOLING CENTER INFO:

Due to anticipated high temperatures, the Mayor Jean Levesque Community Life Center (401 Bridge Street, Salem) will be open at the following times as an air conditioned cooling center. All are welcome to stop by to cool off.

- *Tuesday, June 18 8:00am-8:00pm
- *Wednesday, June 19 8:00am-8:00pm
- *Thursday, June 20 8:00am-8:00pm



179 109

cityofsalem FIRE TRUCK COOLING EVENT (EDIT: PLEASE NOTE LOCATION CHANGE - THIS WILL BE AT FOREST RIVER PARK):

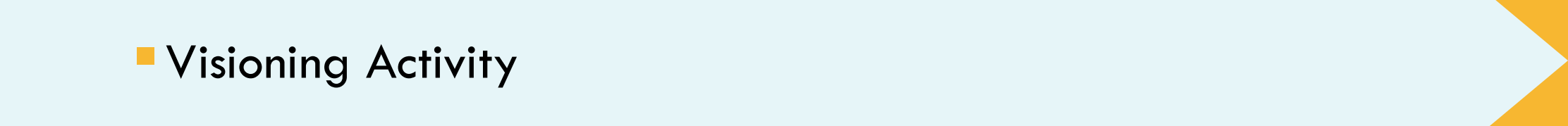
Due to the high anticipated temperatures for this week, the Salem Fire Department will be at Forest River Park tomorrow (Wednesday, June 19) at 1:00pm to turn on the fire hoses and spray down any kids and families who want to cool down! All are welcome.

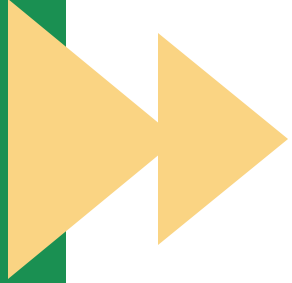
June 18, 2024

Most importantly, we want to hear from you! Do you have any ideas?



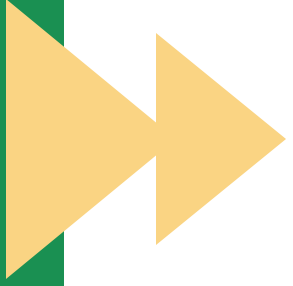
Agenda

- Climate Change & Extreme Heat 101
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- 



Visioning Activity

If your day-to-day life was ‘cool’, what would it look like? What would you have at home or around the city, to help you stay cool?



Thank You!



Icebreaker & Workshop Questions

- How does extreme heat impact you?
- What do you do to stay cool?
- What are the biggest challenges for you to stay cool during times of extreme heat?
- Think about the hottest day of the summer last year – what did you do?