

Roles For Local Public Health Departments In Climate And Health

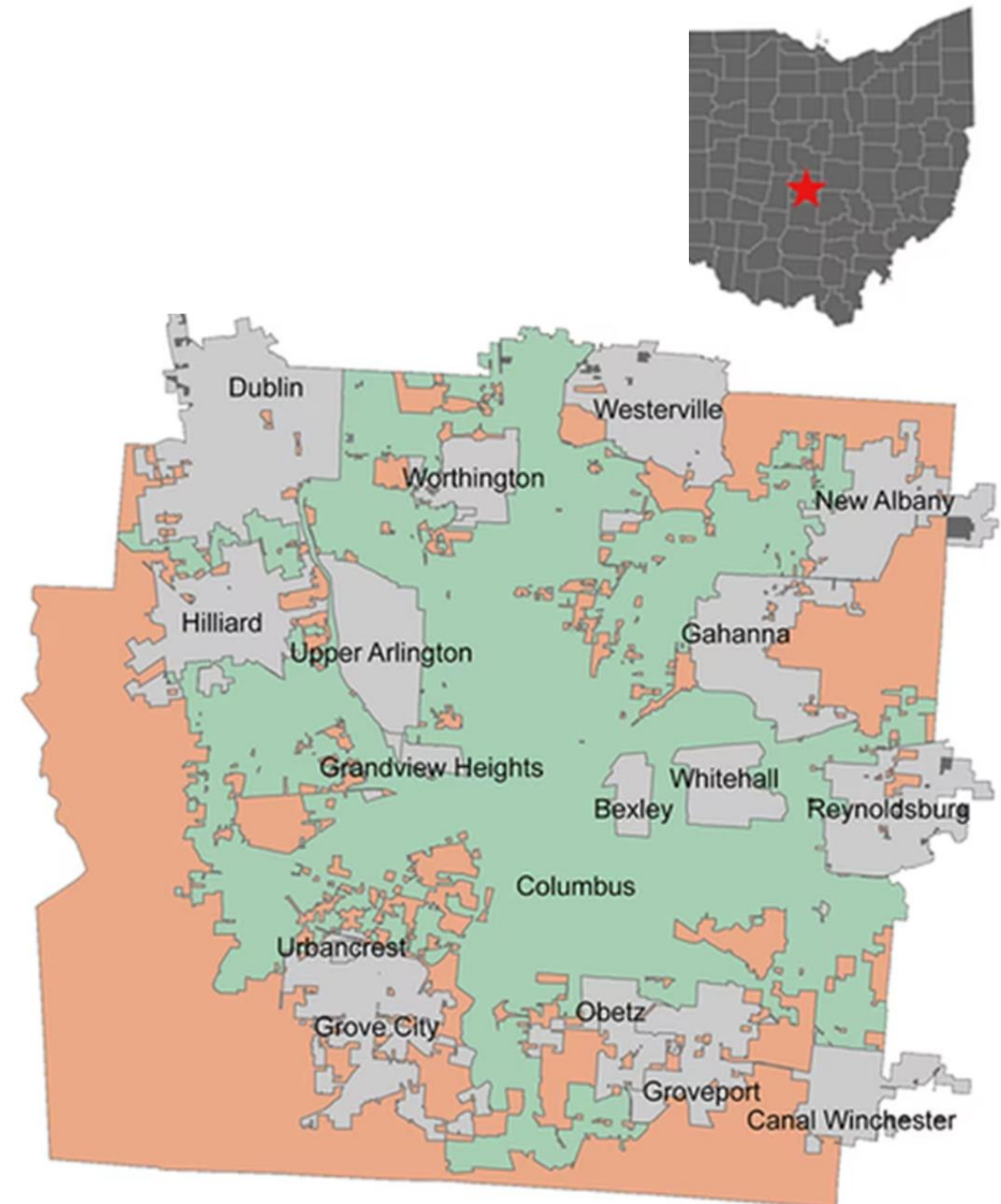
Franklin County
Public Health

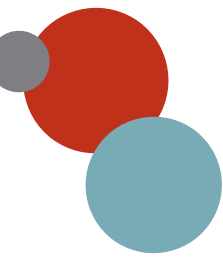


Introduction



- Franklin County is the most populous and fastest growing county in Ohio.
- Franklin County Public Health (FCPH) serves all cities, townships, and villages except Columbus and Worthington.
- FCPH created the Sustainability Section within the Environmental Health Division to focus programs related to sustainability and climate change in 2019.





Environmental Justice

- **Environmental justice** means the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other Federal activities that affect human health and the environment so that people:
- are fully protected from disproportionate and adverse human health and environmental effects (including risks) and hazards, including those related to climate change, the cumulative impacts of environmental and other burdens, and the legacy of racism or other structural or systemic barriers; and
- have equitable access to a healthy, sustainable, and resilient environment in which to live, play, work, learn, grow, worship, and engage in cultural and subsistence practices.
 - US EPA

Impacts of Climate Change on Ohio

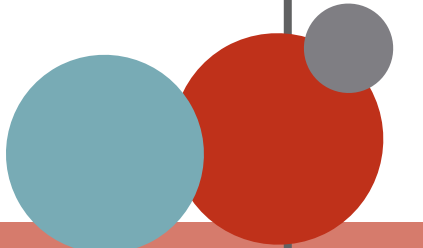


AEP Ohio @AEPOhio · Jun 14, 2022
Replying to @AEPOhio
in this extreme heat.

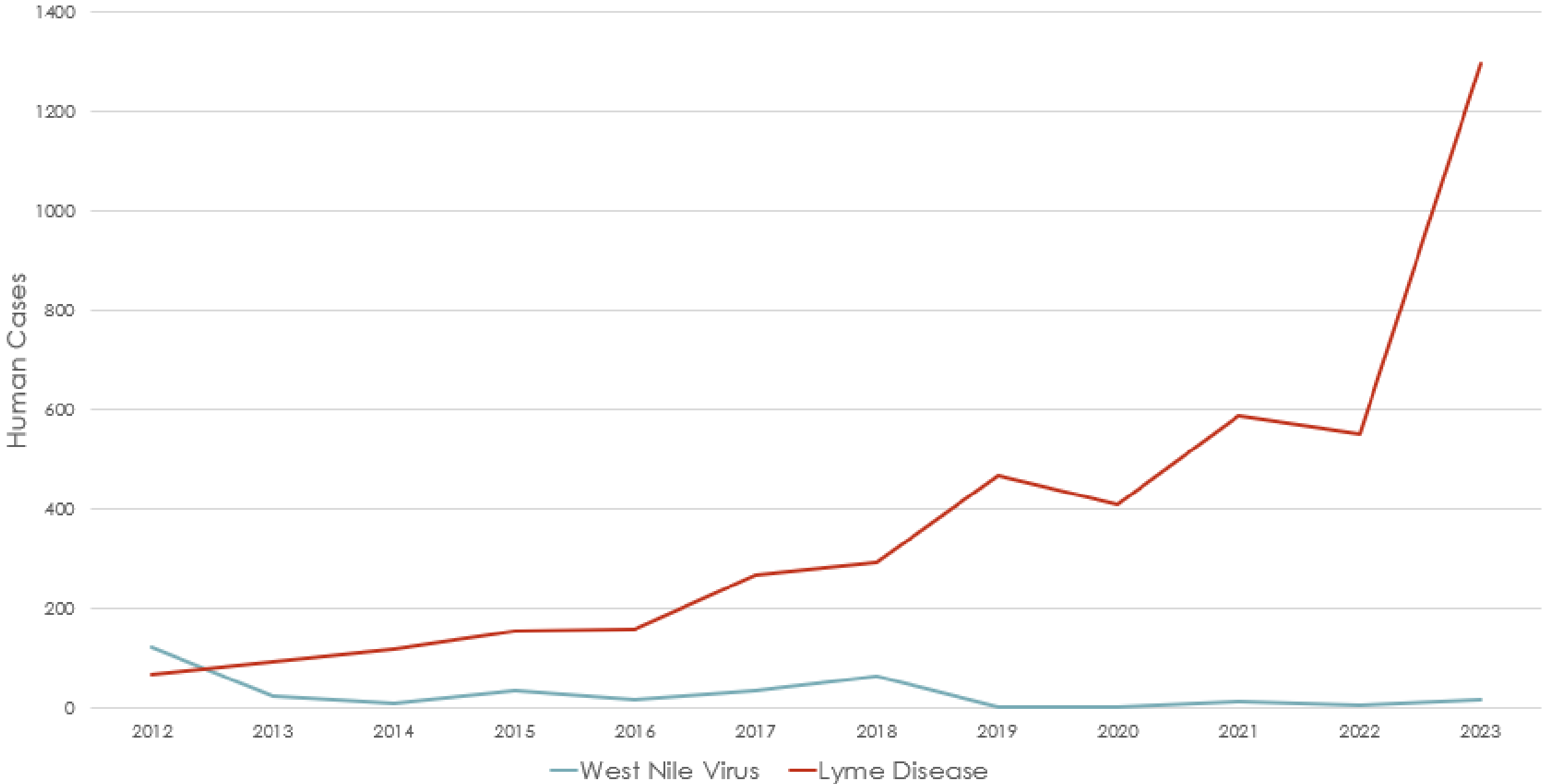
Our electrical system was impacted by the severe storms last night, which knocked out some of our large transmission lines. Combined with impacts from the heat today, some of the remaining lines were overloaded and we have been forced to take customers

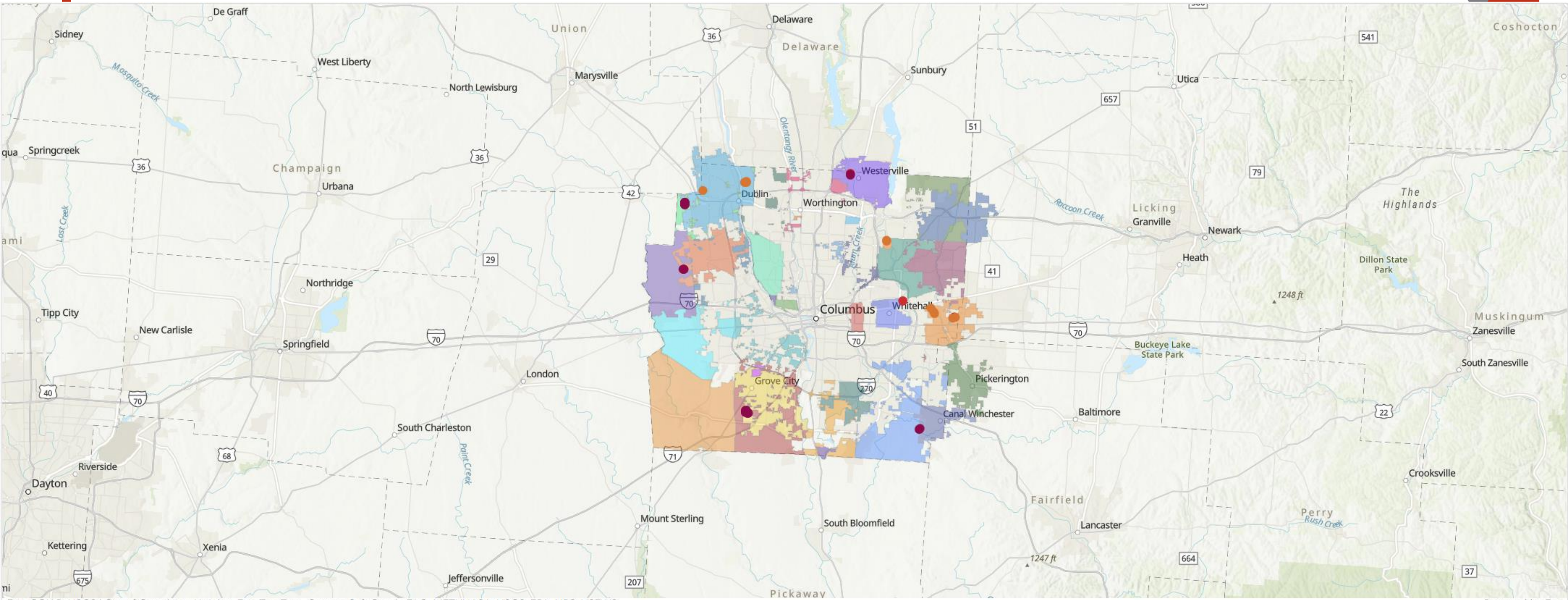
AEP Ohio @AEPOhio

offline throughout this afternoon and this evening to protect the system. Those outages occurred in the general areas marked by red circles on this map. The yellow circle is another area that could potentially be affected.



Vector-borne Diseases in Ohio

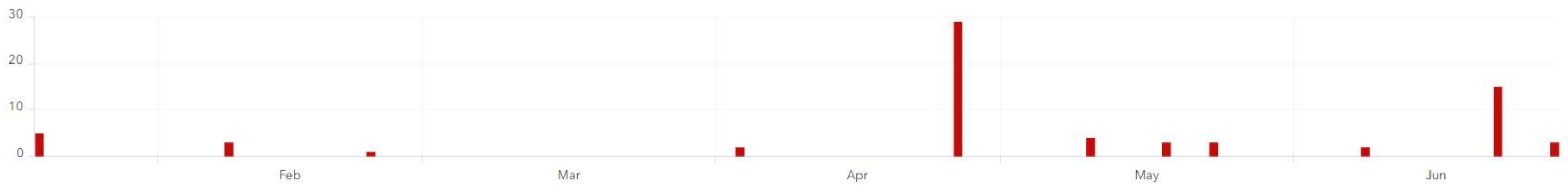


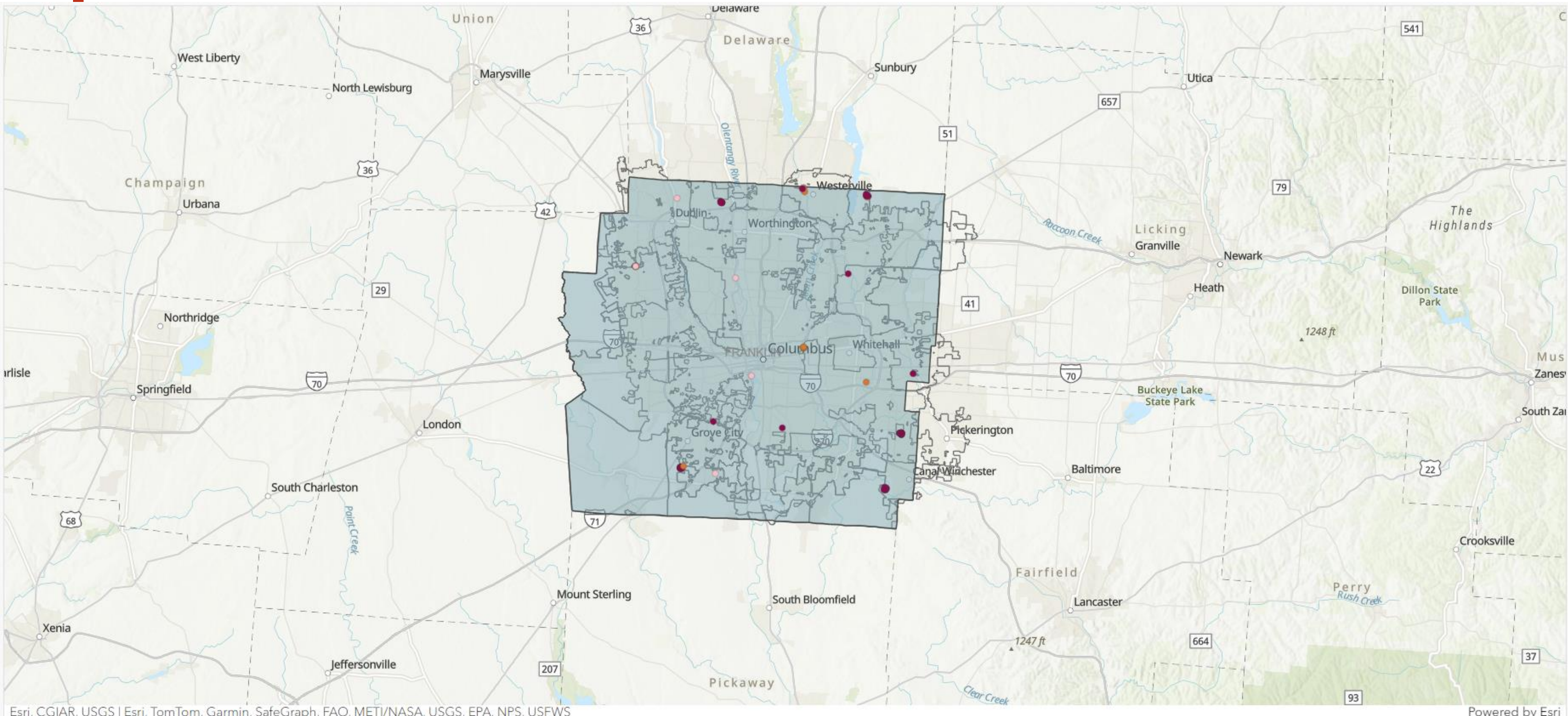


Esri, CGIAR, USGS | City of Grandview Heights, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS

Powered by Esri

70
Total Ticks Collected

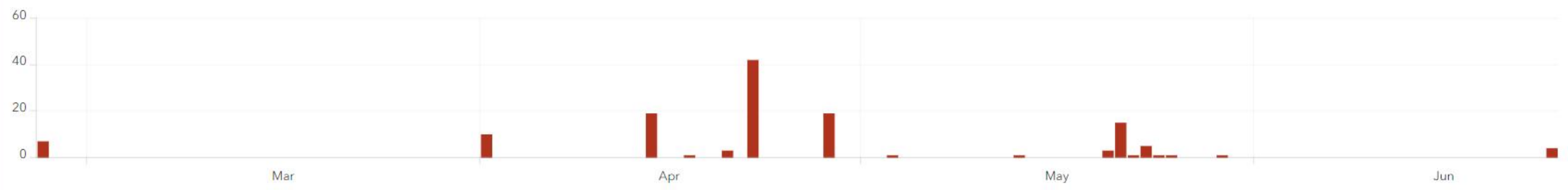




Tick Surveillance 2024 - Tick Picked 2024

- American Dog Tick
- Blacklegged Tick
- Rabbit Tick
- Lone Star Tick
- Gulf Coast Tick

134
Total Ticks Collected



Extreme Heat and Air Quality Issues

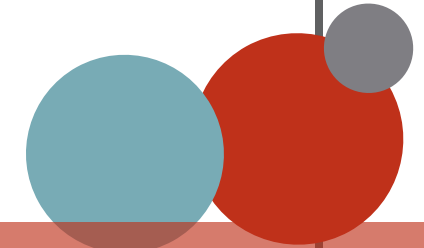
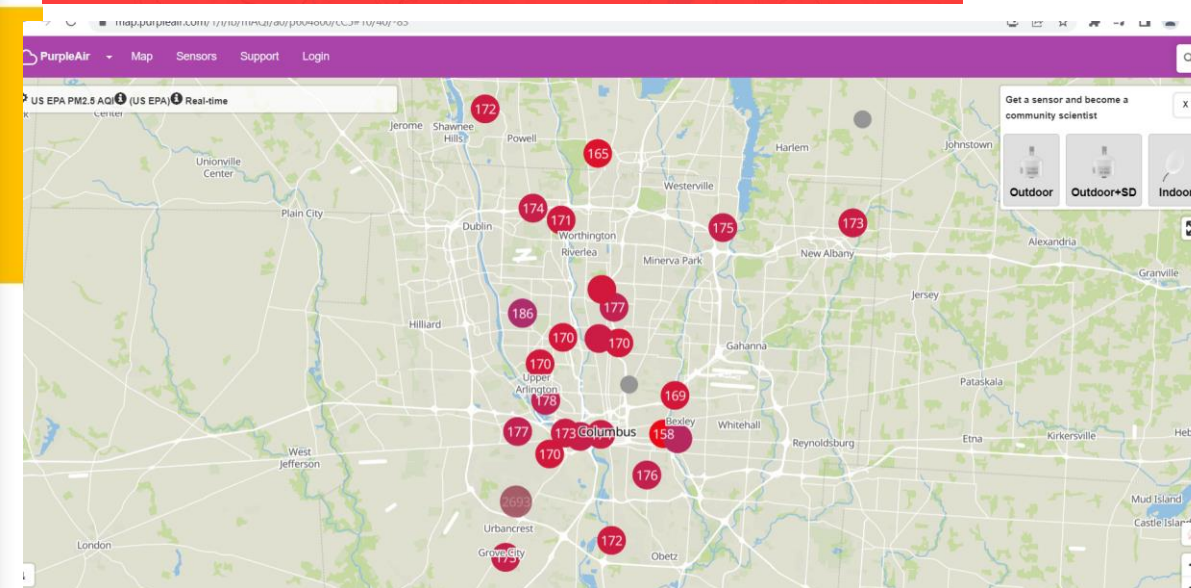
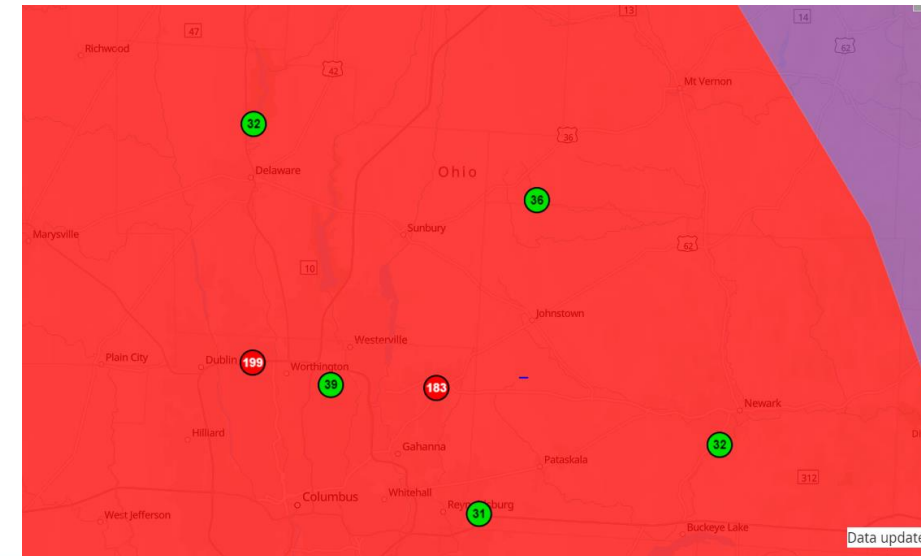
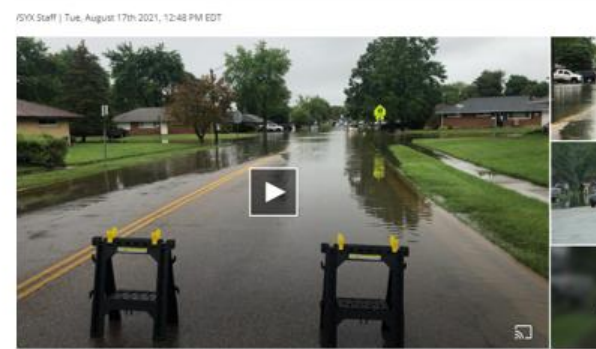
EMERGENCY FORCED OUTAGES

Areas affected included:
 Columbus, Columbus Burwood, some unincorporated and unaffiliated, Eastern Gahanna, Galena, German Village, Great City Market, Hangerman Village, Linden, Merion Village, Upper Arlington, Westerville, Worthington

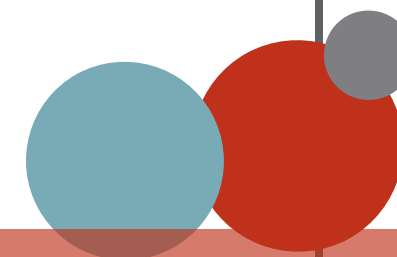
- Lead reduction for the first outage started around 2 p.m. on Tuesday, 8/14.**
 Total customers impacted: Approximately 100,000 residential and business customers
- Lead reduction for the second outage started around 7 a.m. on Tuesday, 8/14.**
 Total customers impacted: Approximately 40,000 residential and business customers
- Lead reduction for the third outage started around 10 a.m. on Wednesday, 8/15.**
 Total customers impacted: Approximately 10,000 residential and business customers



neighborhoods east of Columbus flood after heavy rains

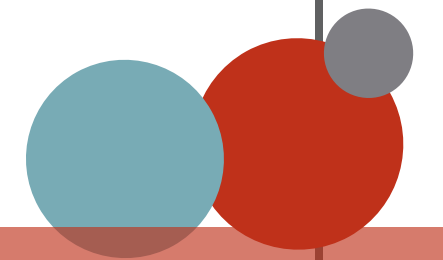


Initiatives, projects and programs



Where can public health play a role in climate change adaptation and mitigation?

- Air Quality
- Green Spaces
- Equitable and energy saving transportation
- Local food education and access
- Waste reduction
- Preparedness
 - Extreme weather, flooding, heat
- Resilient communities
- Heat safety
- Vector issues



Waste reduction, composting and recycling



Lawn Mower Exchange

Protect the environment - and your health - by trading in your old, polluting gas-powered mower for a new battery-powered machine!

Saturday, April 20, 2024
9 a.m.-Noon

Lowe's Home Improvement
2345 Silver Dr., Columbus

Only \$199!*
for a new mower
when you trade-in
your old, working
gas mower
*Plus tax

You must register to be eligible.
The first 75 Columbus or Franklin County residents to register online are eligible to exchange a working gas mower for the new battery-powered Kobalt mower at a cost of only \$199 (plus tax) on April 20 only. Exchanged mowers will be collected and recycled free of charge.

Register online at
bit.ly/CbusMow24.



Kobalt Gen4 20-inch Cordless Electric Mower

- 40V battery
- 3-in-1 mulching/bagging/side discharge
- Telescopic folding handle
- Easy to use height adjustment
- Battery, charger and bag included
- 5-year limited warranty

Model #KPM 1040A-03



For more information, contact Ryan Young at 614-645-6153. Supply limited to 75 mowers. Customers must be Columbus or Franklin County residents and provide proof of address in the form of a driver's license or other identification. A working, gas mower must be exchanged at the time of purchase. Limit of 1 mower per household. No substitutions. Discount cannot be combined with other limited offers. City of Columbus and Franklin County employees are not eligible.

FOOD RECOVERY HIERARCHY

In the hierarchy below, options are provided for how to deal with excess food. The methods that are higher up on the hierarchy are the more effective uses of resources and provide the greatest benefit to businesses, communities and the environment.

- 1. PREVENTION:** Reducing the amount of food that goes to waste.
- 2. RESCUE:** Capturing food before it becomes waste to feed people.
- 3. RECYCLING:** Diverting food waste by feeding animals, composting, anaerobic digestion, etc.
- 4. LANDFILL:** Sanitary and safe disposal.



Wasting food also wastes all the water, energy and other resources used to produce, process, ship and store it.



Wasting **1 POUND OF BEEF** wastes as much water as letting your **SHOWER RUN FOR 6 HOURS.**



FIND AN ORGANIZATION TO ACCEPT YOUR DONATED FOOD

Central Ohio is home to several **food donation organizations** who can support your program by transporting food to nearby hunger relief organizations. Find a partner who best fits your needs as well as additional guidance on setting up a safe and efficient food donation program at www.cofwi.org.

Central Ohio Food Waste Initiative
This resource is made possible by the Solid Waste Authority of Central Ohio (SWACO) and more than 60 partner organizations and experts from across Franklin County who comprise the Central Ohio Food Waste Initiative. Together, this collection of public and private partners are working to recapture food waste to serve as a resource for our communities.

www.cofwi.org
foodwaste@swaco.org



www.swaco.org



www.publichealth.columbus.gov
Local Food Systems Strategies - 614-645-0867



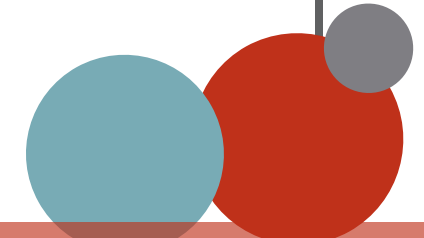
www.myfcph.org
food@franklincountyohio.gov
614-525-7462

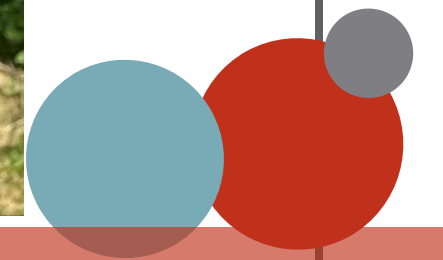


SAVE MORE THAN FOOD
MAKE A DIFFERENCE

WASTED FOOD = WASTED RESOURCES

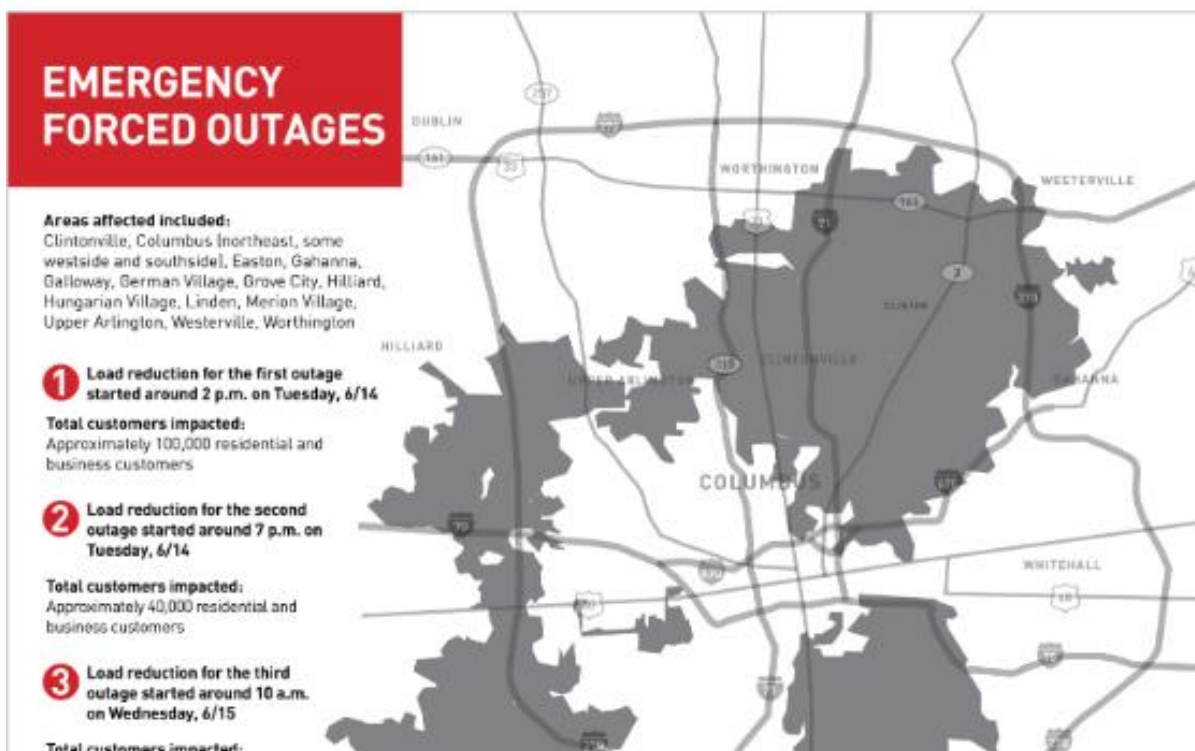
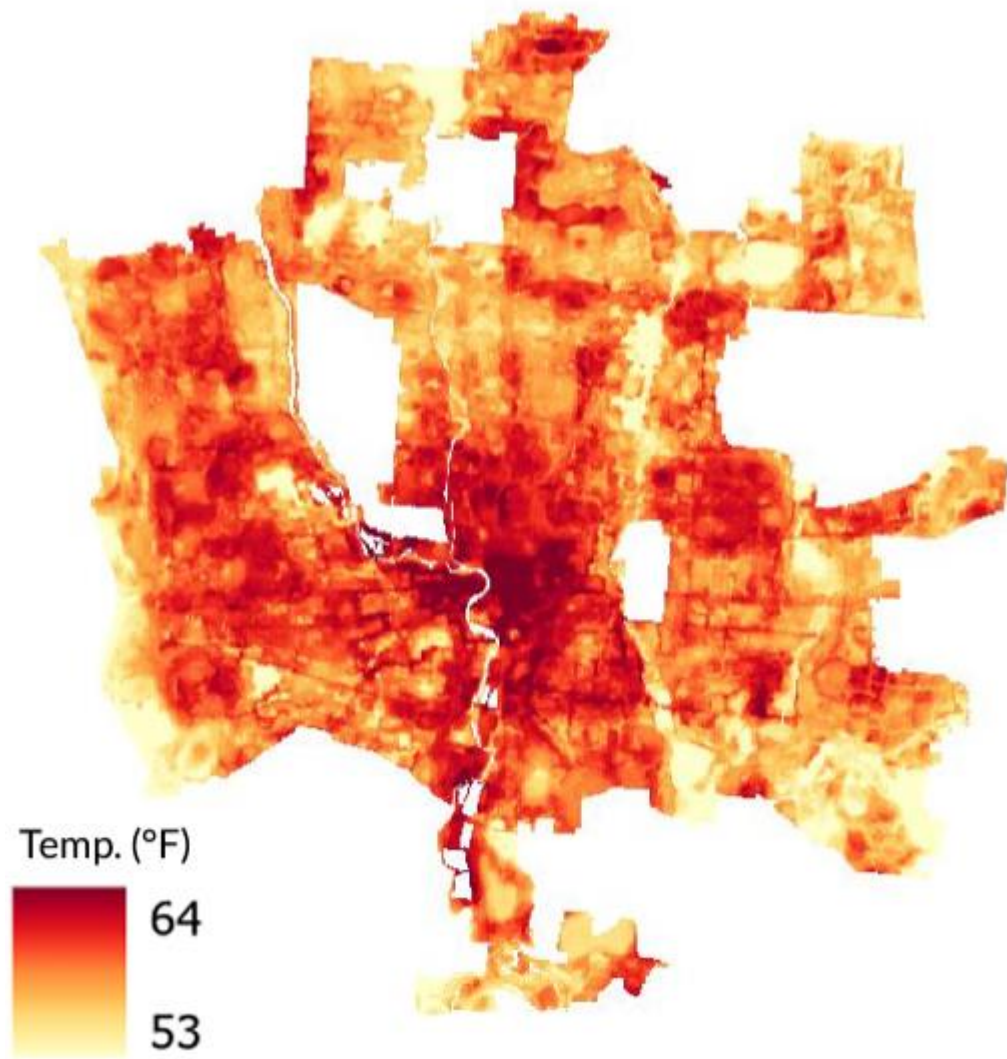
FOOD DONATION GUIDELINES FOR LICENSED FOOD FACILITIES





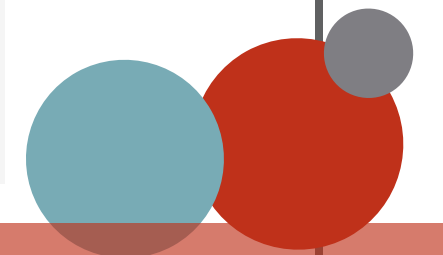
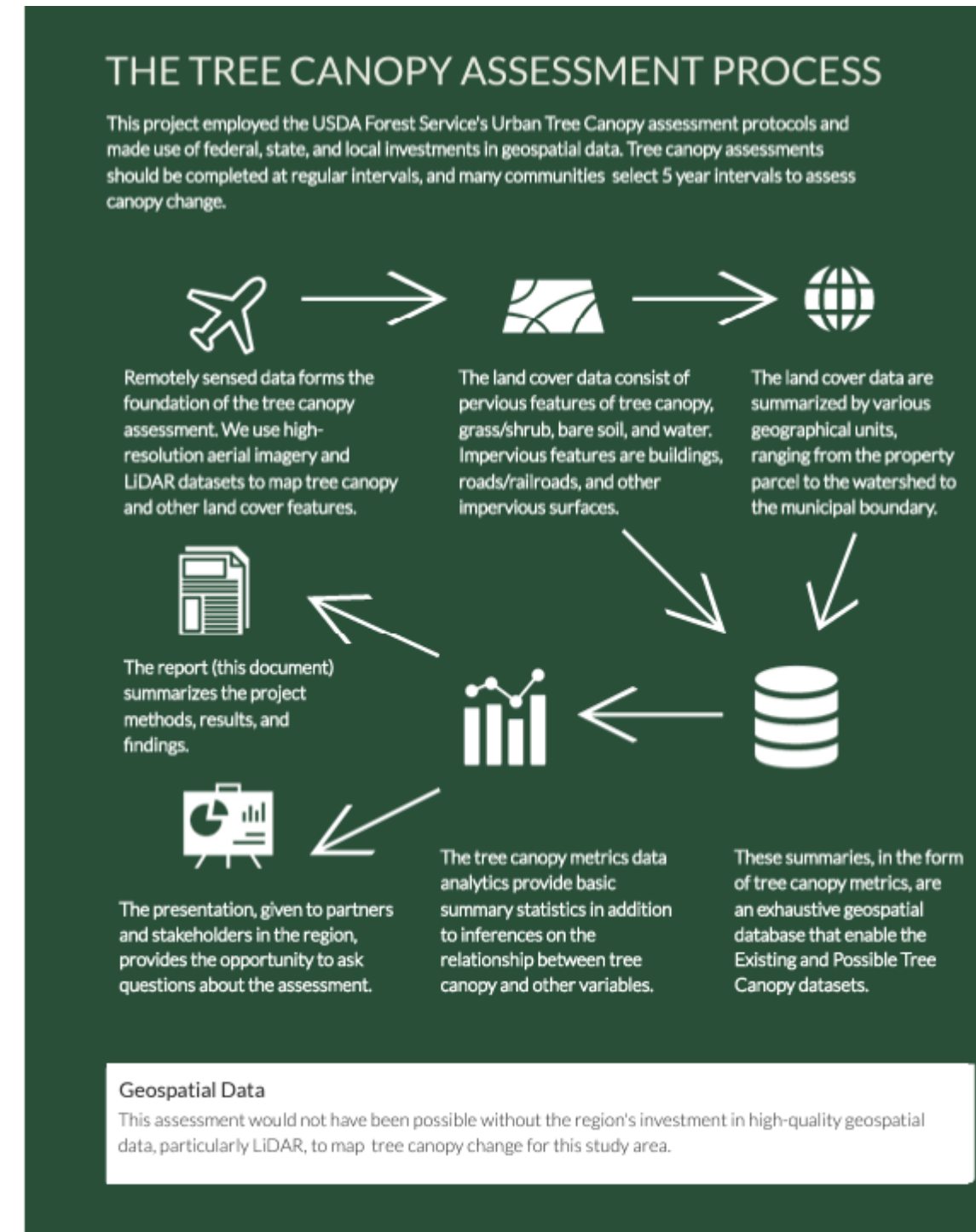
Heat and resiliency

Morning (AM) Temperature



Urban Tree Canopy Mapping Study

- Entered into contract with the City in 2022
- Reviewed proposals and selected consultant
- Determined the requested data
- Shared initial 2015 study with consultants
 - Only Columbus Data
- Consultants began the study itself
 - This took through the end of 2023
- Multiple months of review and agreement on needs and data
- Public and finalized March 2024*



What are the results?

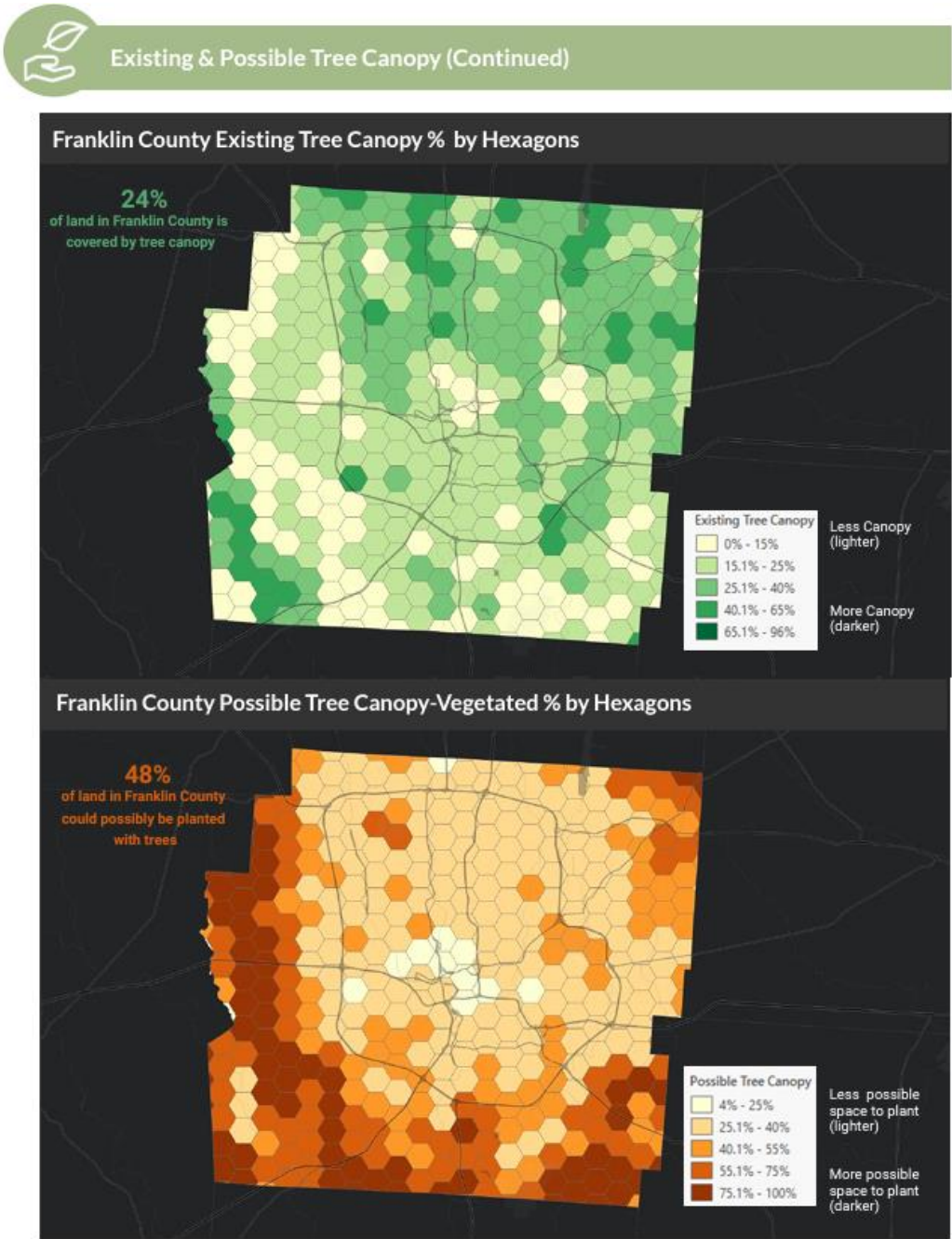
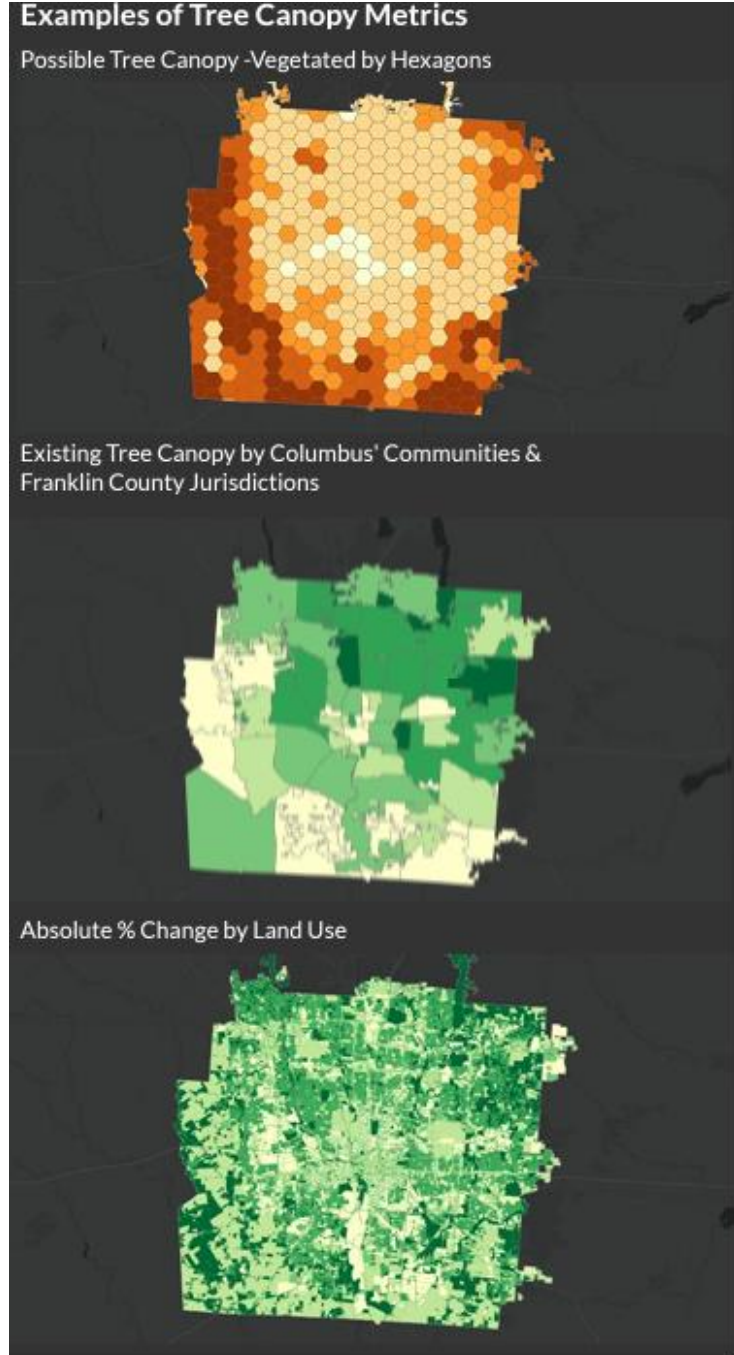
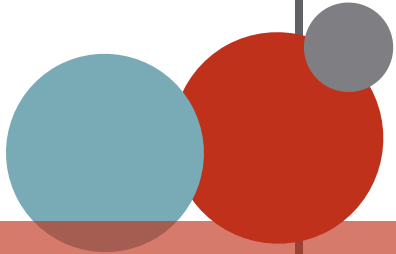
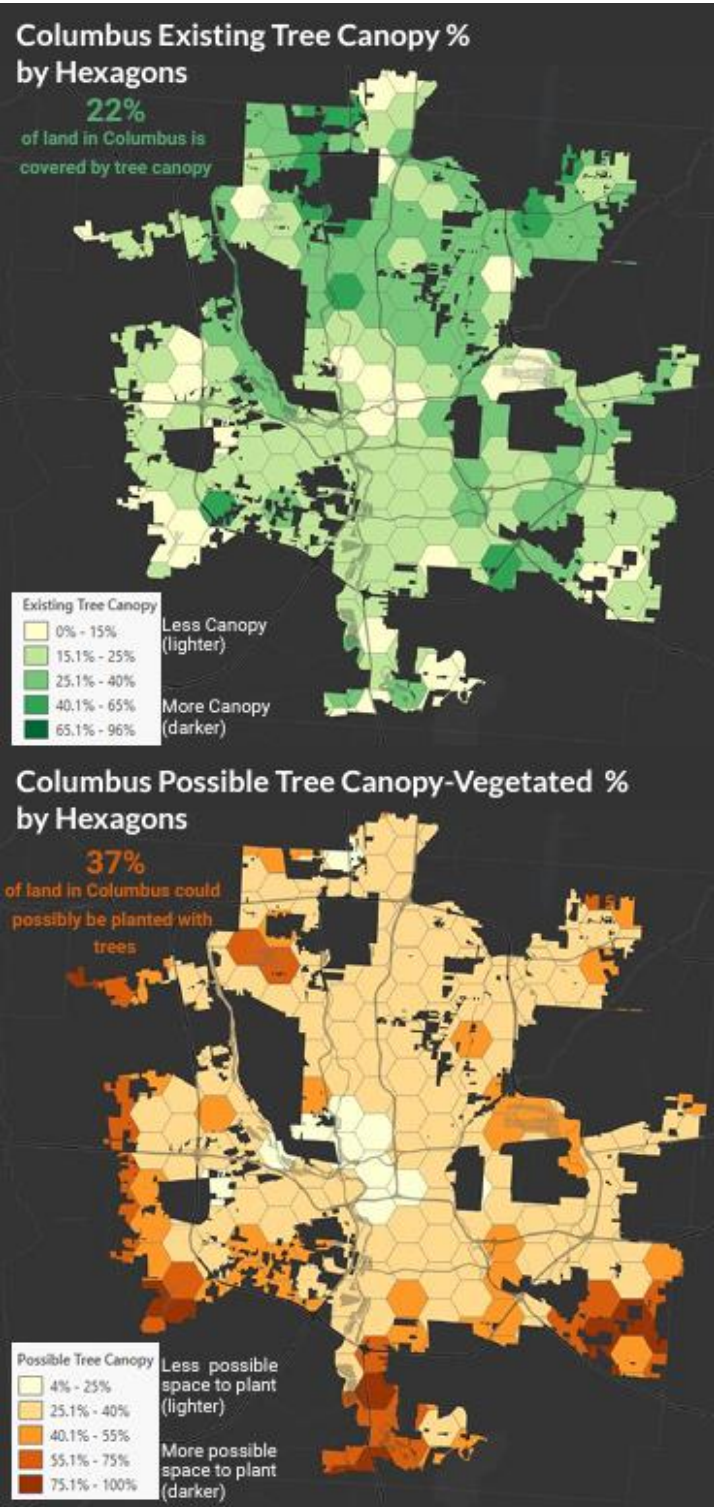
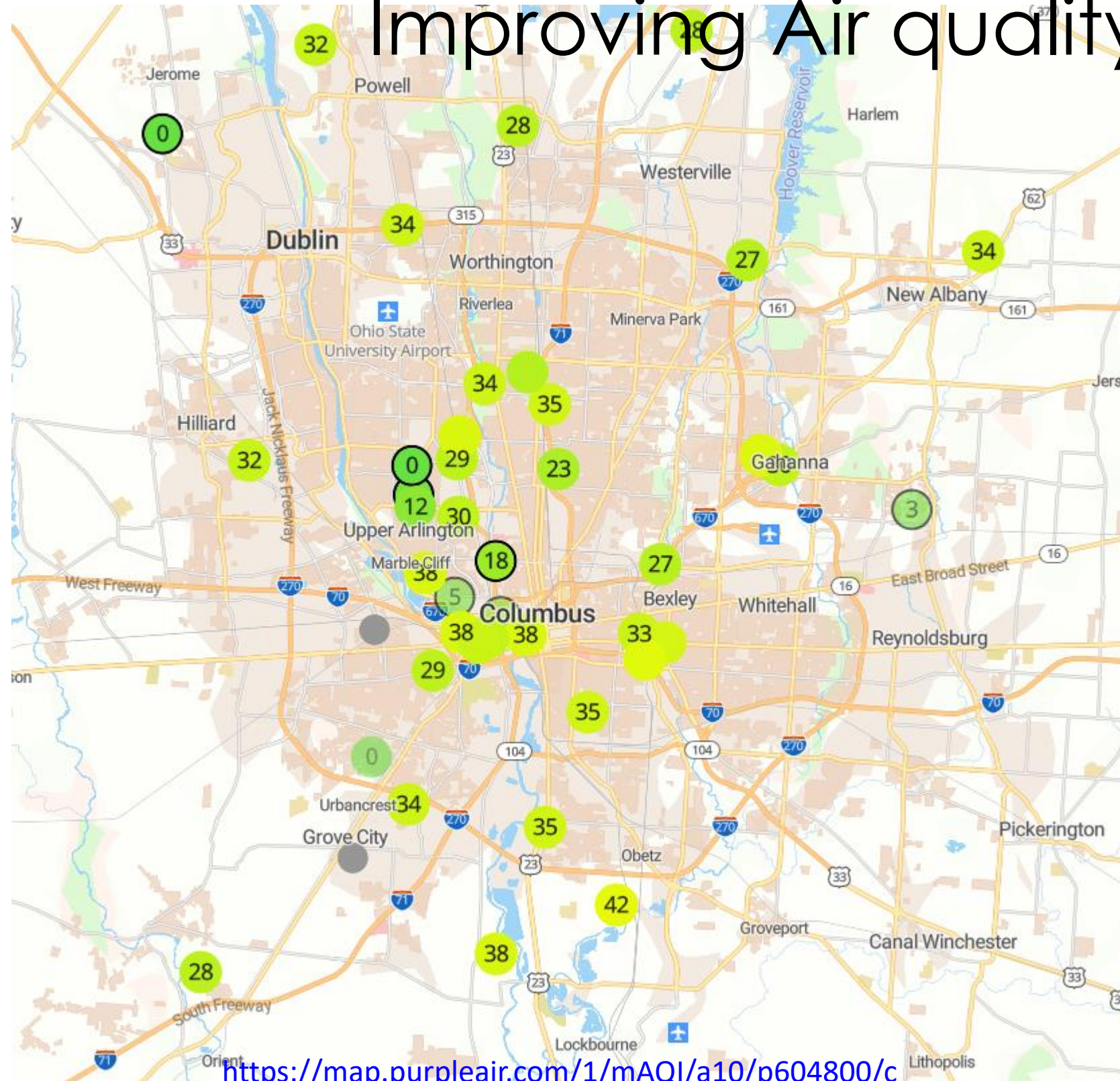


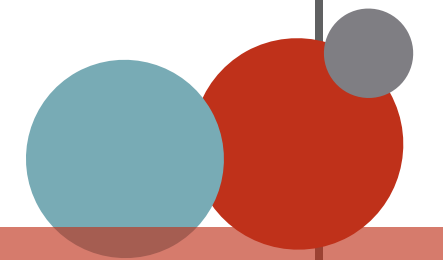
Figure 8: Franklin County existing tree canopy (top) and possible tree canopy-vegetated (bottom) tree canopy percentages summarized by 1,000-acre hexagons and 2021 land cover conditions.

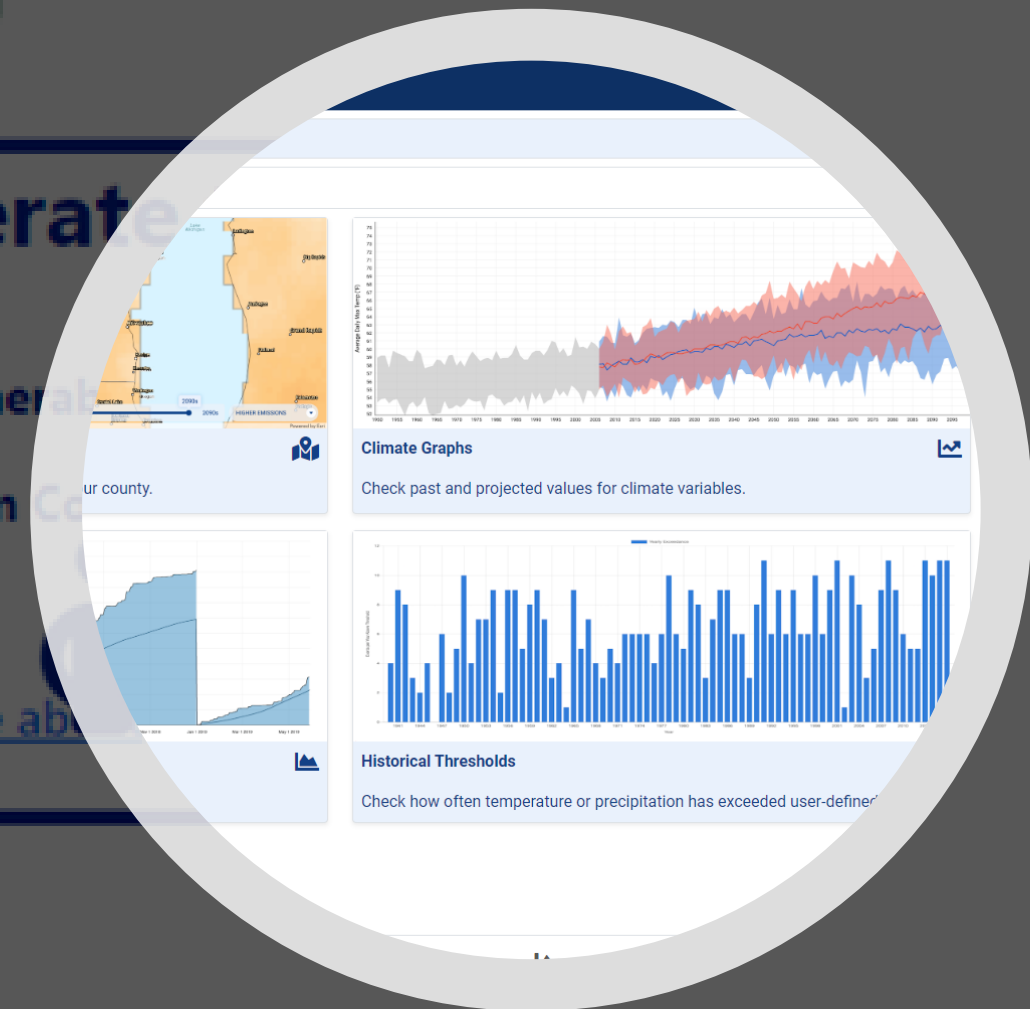
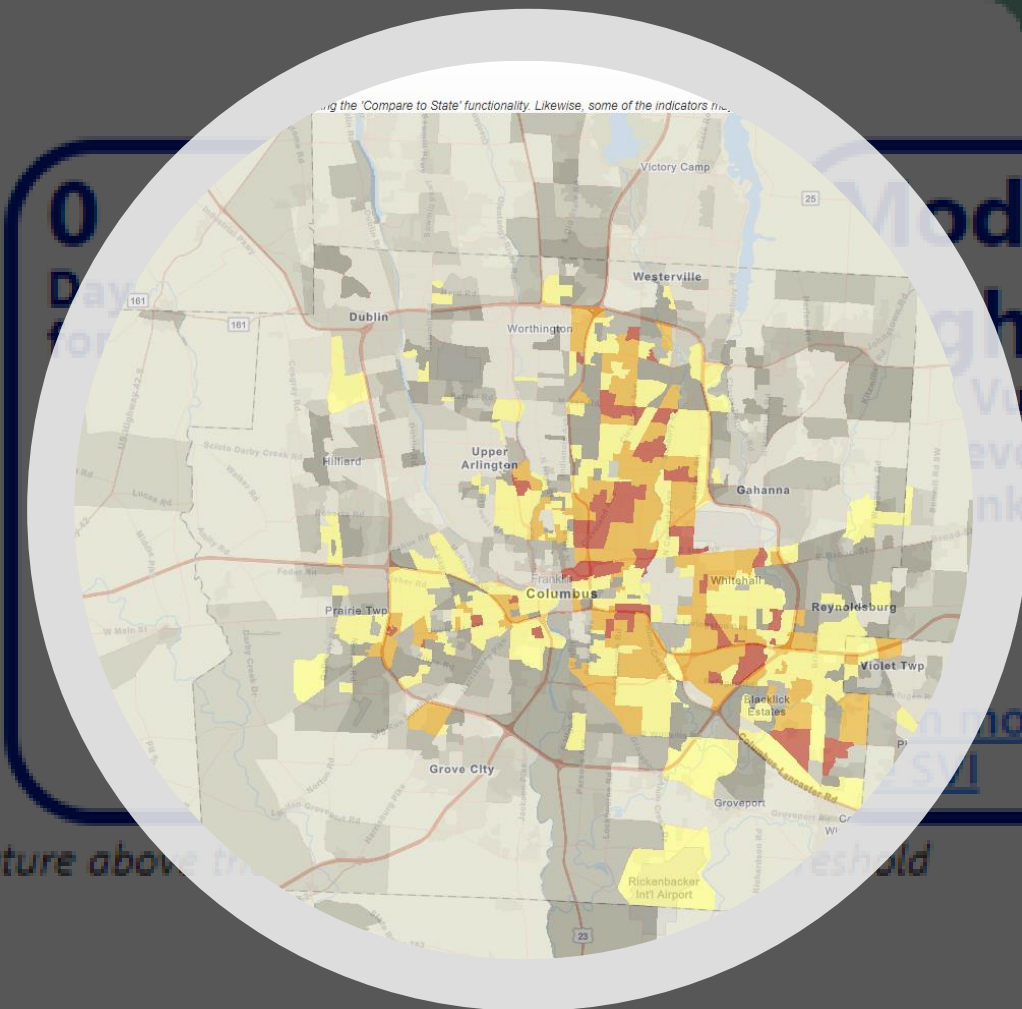
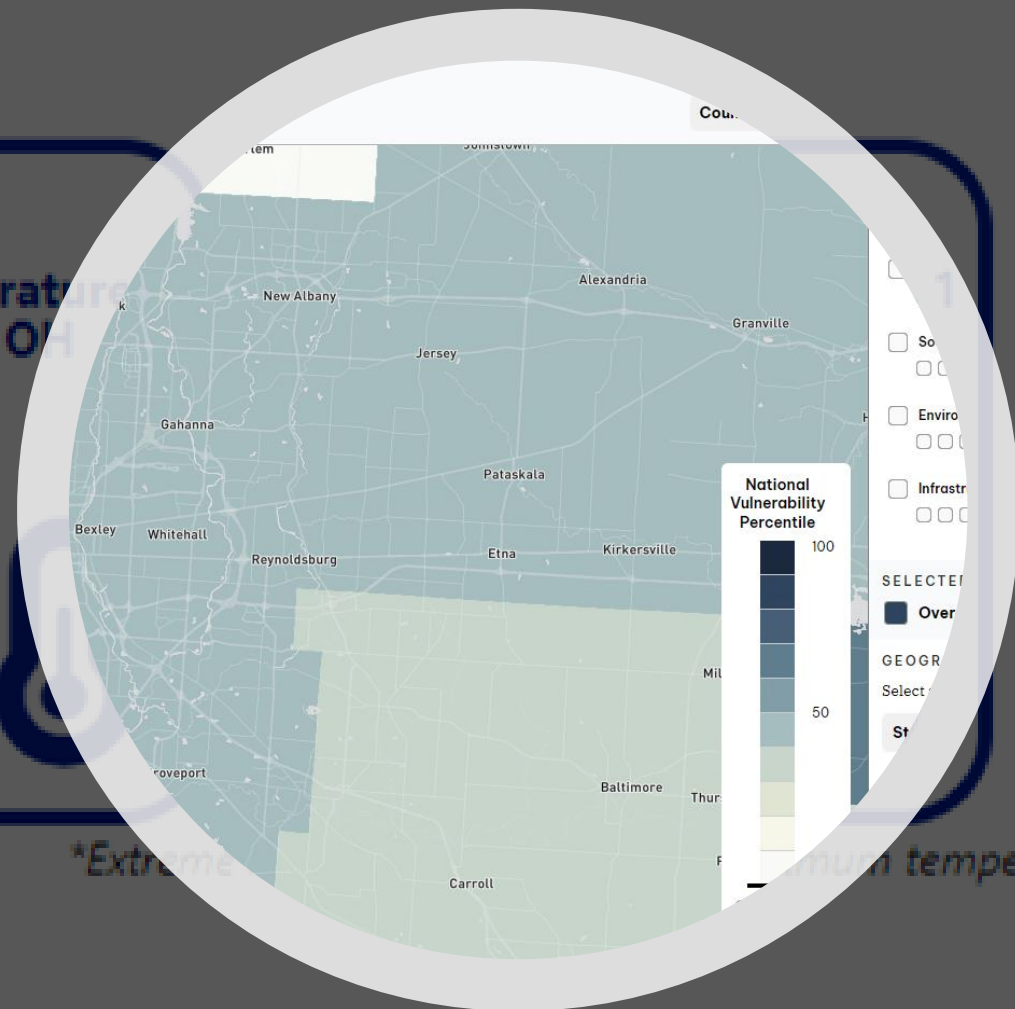
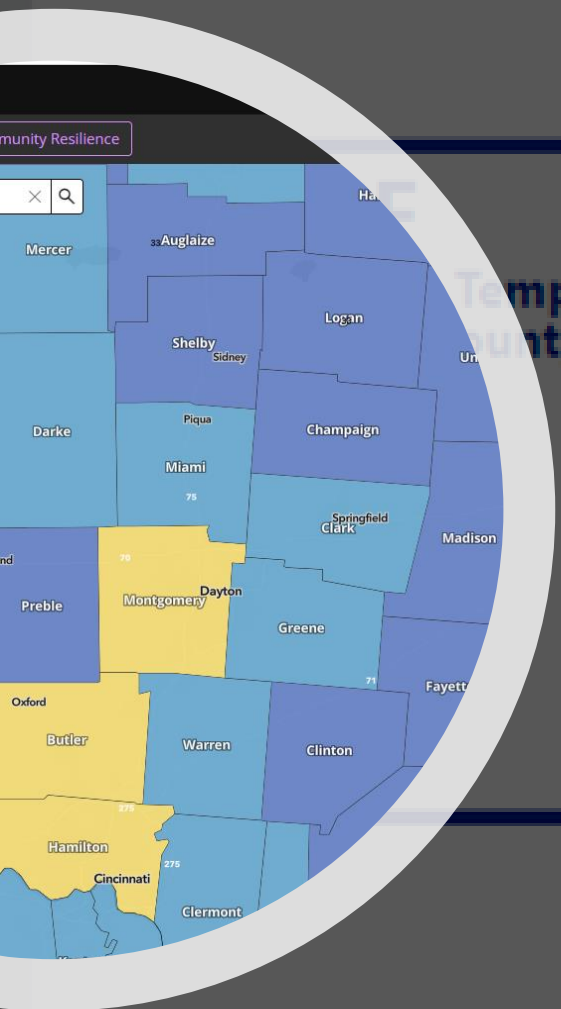


Improving Air quality among our residents



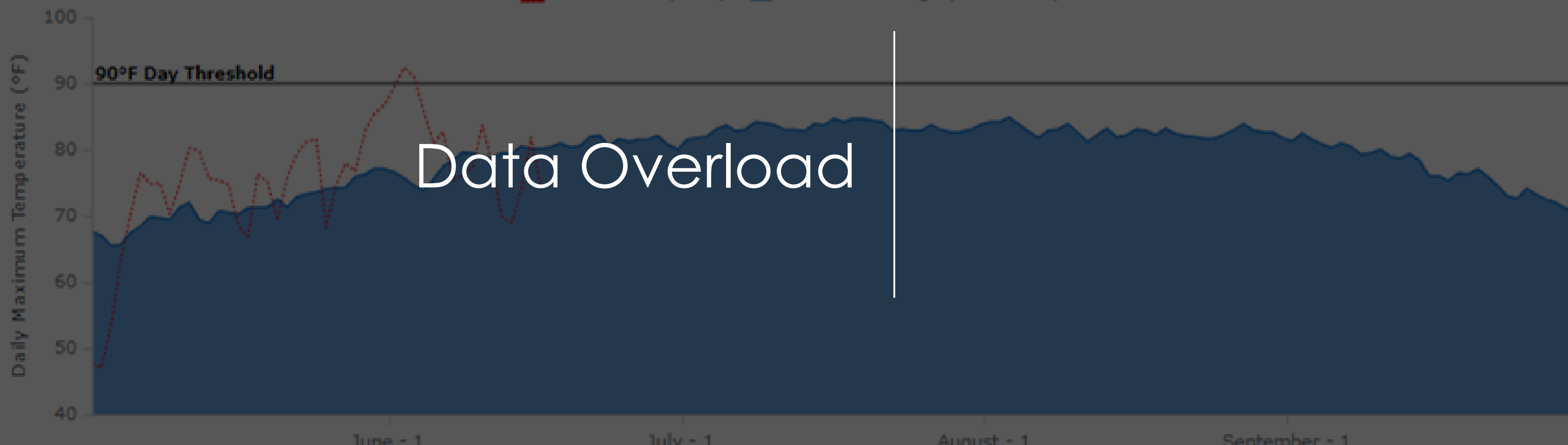
<https://map.purpleair.com/1/mAQI/a10/p604800/c0#10.09/39.9795/-82.992> (9/18/24 at 3:13 pm)





Daily Maximum Temperature for Current Season Compared to Historical Average

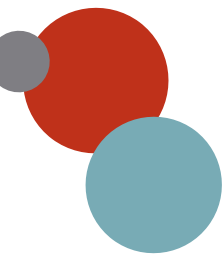
■ Current YTD (2023) ■ Historical Average (1979-2020)



Data is Key

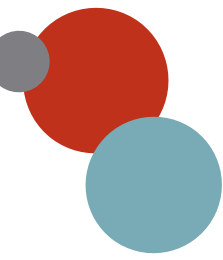


Climate & Health



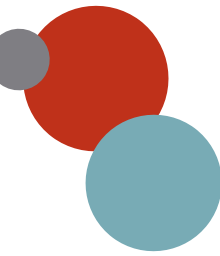
- Climate change has emerged as a multidimensional public health issue putting local governments and health agencies at the frontline of mitigation and adaptation efforts.
- The National Association of County and City Health Officials surveyed local health departments in the US and found:
 - Most local health departments do not feel ready to address the current or future health effects of climate change.
 - More than half did not believe their communities or local elected officials were knowledgeable about the health effects of climate change.
 - Funding and lack of trained/dedicated staff were key barriers to climate change efforts at local health departments.

Climate & Health Surveillance

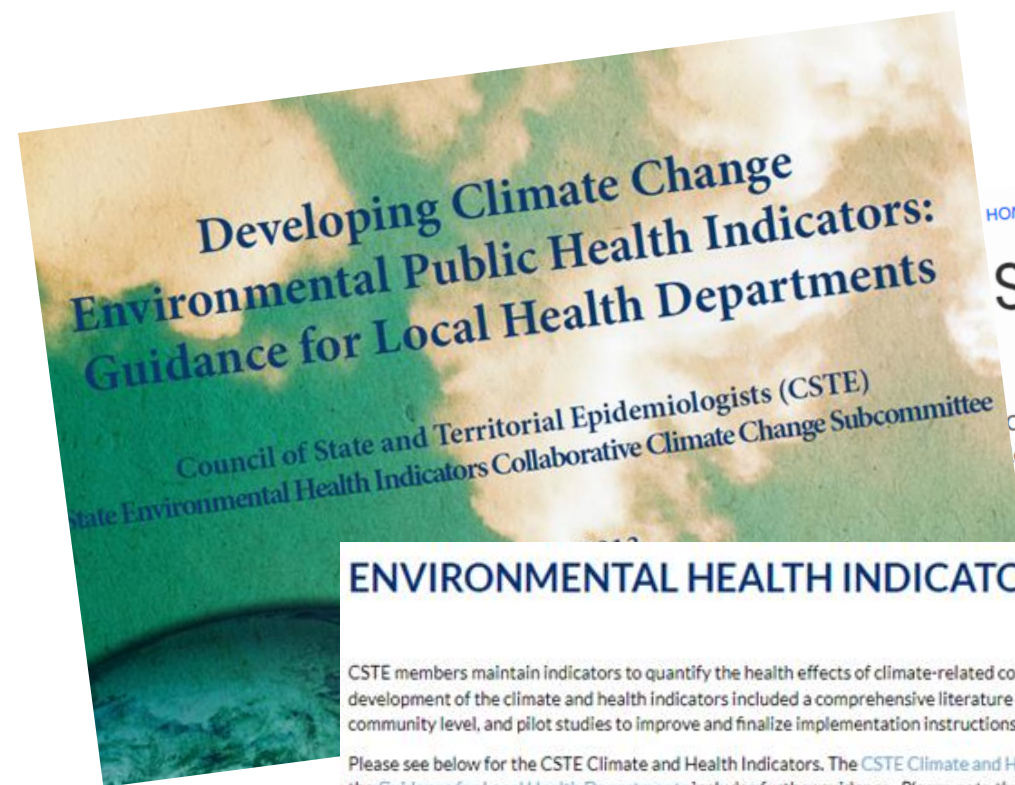


- Public health surveillance is fundamental to effective public health practice and has long been widely implemented for topics like infectious disease and vital statistics.
- Not typically applied to climate change, but there is a growing need for climate & health surveillance, especially at the local level.
- Climate & health surveillance enables a more effective climate & health program and makes it easier to integrate climate & health into other efforts.
- We developed a set of local indicators for climate & health surveillance. We then created interactive dashboards and a webpage for providing climate & health information

Activities



1. Reviewed previously developed indicator lists, frameworks and climate assessments.



HOME / PUBLIC HEALTH - SEATTLE & KING COUNTY / DATA AND REPORTS

Seasonal allergy data dashboard

Climate change impacts weather conditions that affect the release of pollen and pollutants into the air, which can lead to more seasonal allergy symptoms. Seasonal allergies disproportionately impact certain groups, including people who work outside, who are unhoused, or who have underlying health conditions.



ENVIRONMENTAL HEALTH INDICATORS: CLIMATE CHANGE

CSTE members maintain indicators to quantify the health effects of climate-related conditions for the purpose of surveillance and public health action. The original development of the climate and health indicators included a comprehensive literature review, identification of longitudinal data sets that were applicable at the state and community level, and pilot studies to improve and finalize implementation instructions. In 2018, CSTE reviewed and updated the Climate and Health Indicators.

Please see below for the CSTE Climate and Health Indicators. The [CSTE Climate and Health Indicators Template](#) will assist users in organizing and recording related data, and the [Guidance for Local Health Departments](#) includes further guidance. *Please note that these indicators were last reviewed in 2018 and may not reflect the most current data available.*

For more information about the Climate and Health Indicators Subcommittee and its activities, please contact [Margaret Thelen](#). [Click here](#) to view other Environmental Health/Occupational Health/Injury activities.



CSTE CLIMATE AND HEALTH INDICATORS

Environmental Indicators
Greenhouse Gas Emissions

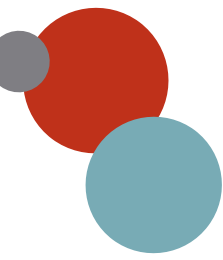
Environmental Public Health Indicators

Centers for Disease Control and Prevention
National Center for Environmental Health
Division of Environmental Hazards and Health Effects
Atlanta, Georgia

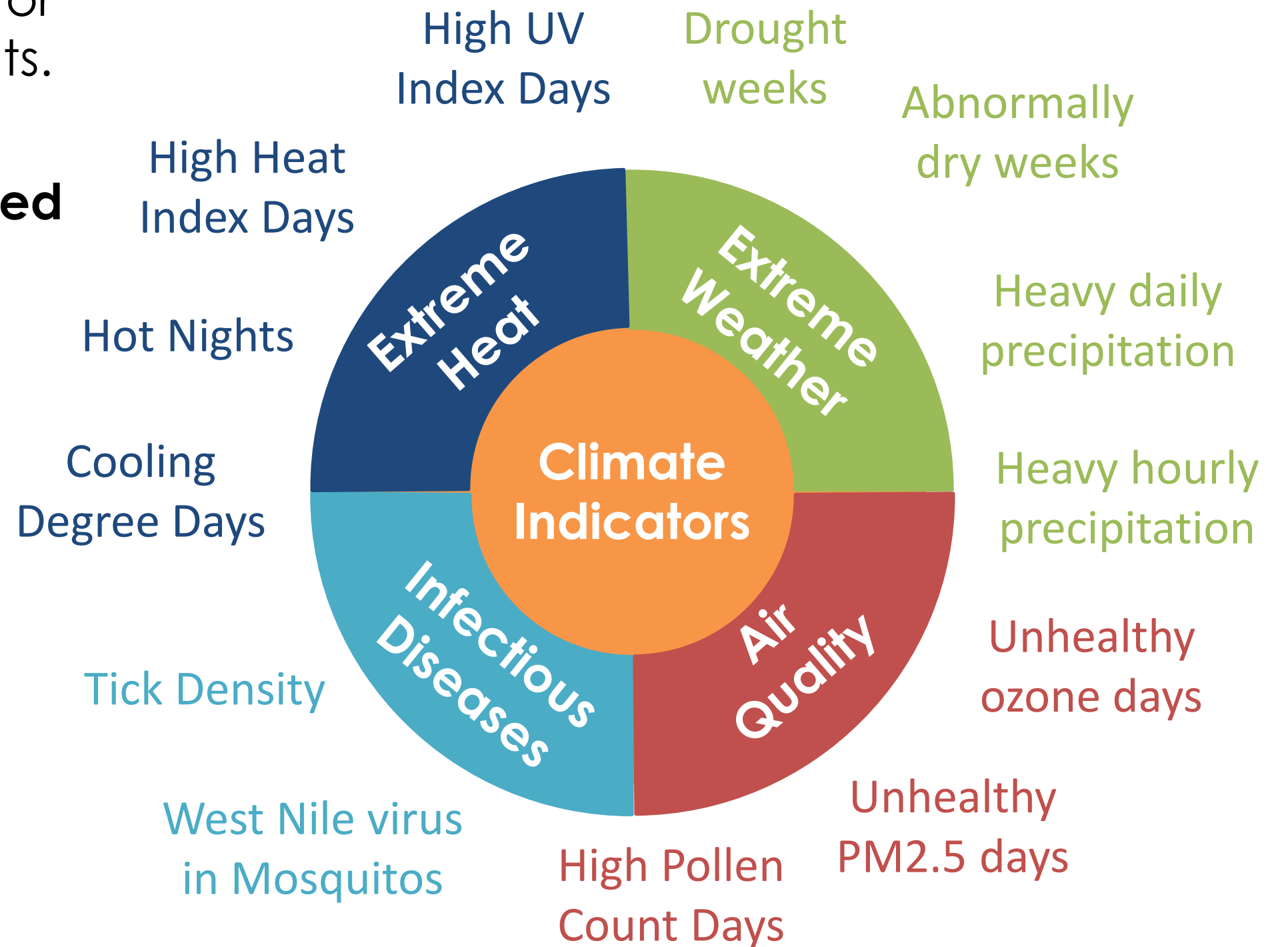
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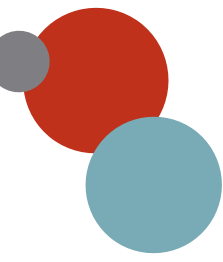


Activities



1. Reviewed previously developed indicator lists, frameworks and climate assessments.
- 2. Developed initial indicator list that aligned with local climate change impacts.**





Activities

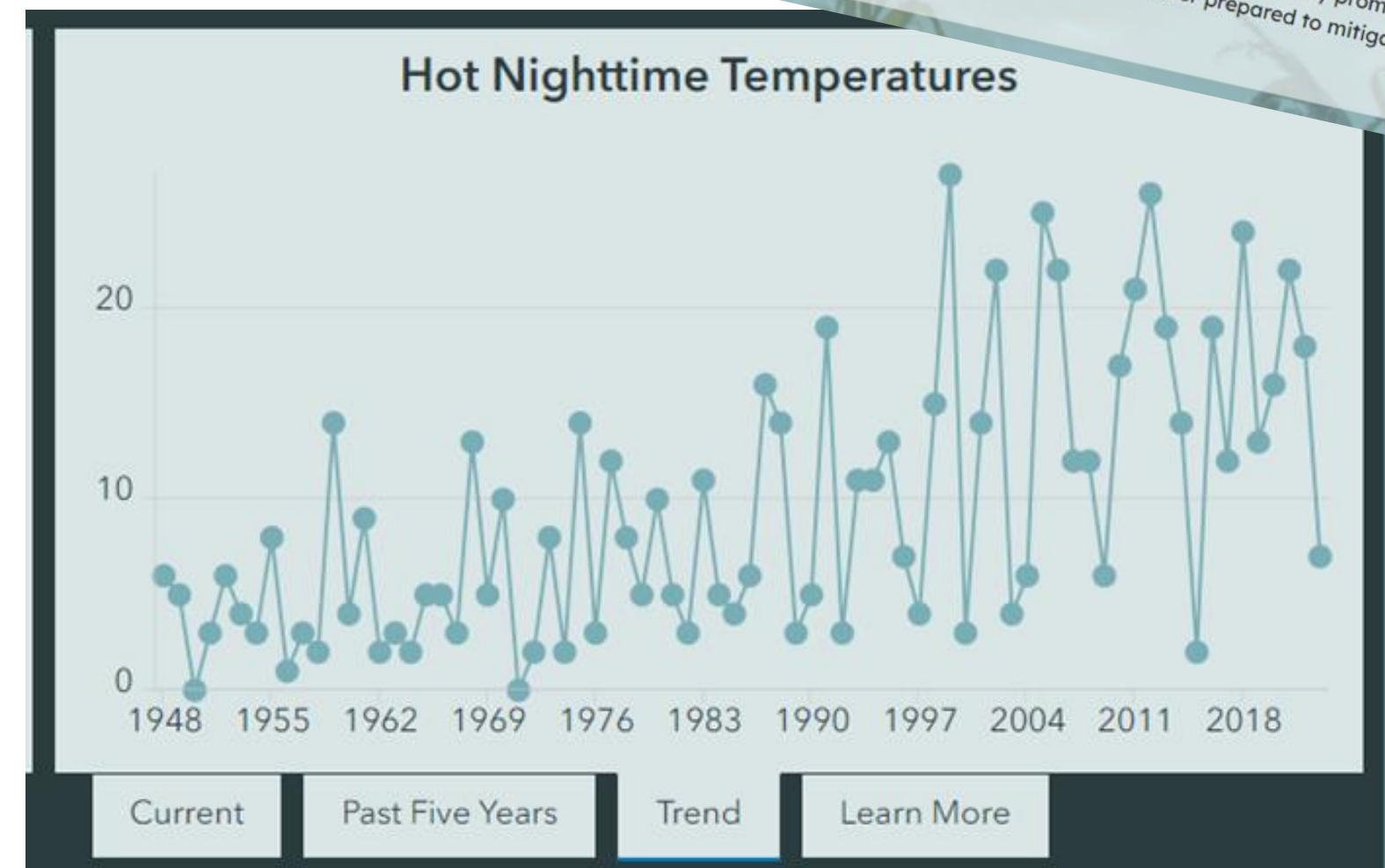
1. Reviewed previously developed indicator lists, frameworks and climate assessments.
2. Developed initial indicator list that aligned with local climate change impacts.
3. **Collaborated with partners to revise and further develop indicators.**

State Climate Office of Ohio

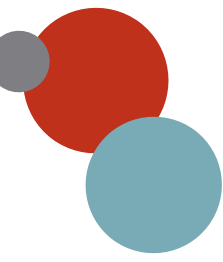


Activities

1. Reviewed previously developed indicator lists, frameworks and climate assessments.
2. Developed initial indicator list that aligned with local climate change impacts.
3. Collaborated with partners to revise and further develop indicators.
4. **Created climate & health dashboards and webpage.**

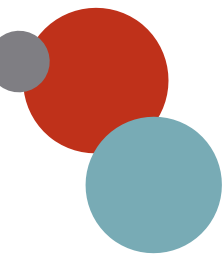


Successes

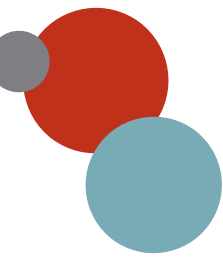


- [Climate & Health webpage](#) launched in early July 2024.
- Collaboration with partner organizations, State Climate Office of Ohio (SCOO).
 - SCOO is a partnership between the Department of Geography and the Byrd Polar and Climate Research Center (BPCRC) at The Ohio State University.
 - Focused on climate information, education, and research.

Challenges

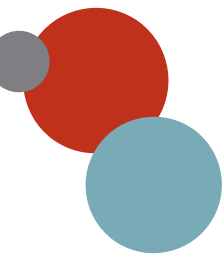


- Initial challenges obtaining sustainable access to data for some indicators.
 - Emergency department visits & hospitalizations, UV index and pollen counts.
- Defining certain climate-related indicators:
 - How much is a lot of rain in one hour?
 - How hot is a hot night?



Next Steps

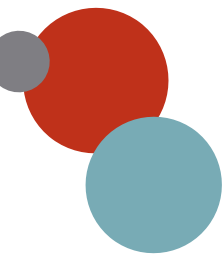
- Remeasure these indicators on a yearly basis.
- Continue to review, further develop, and add to the indicator list.
- Integrate these indicators into other efforts at FCPH.
 - [EH addendum to the Community Health Improvement Plan](#)
- Identify additional opportunities to build on this work.



Conclusions

- Climate change is a global problem with local impacts, putting local health departments at the frontline for mitigation and adaptation efforts.
- Local health departments can get involved with climate & health work in many ways.
 - Review similar projects and adapt what you can to your jurisdiction. There's a good chance someone somewhere else is already working on something similar.
 - Collaborate with local organizations already working in the climate & health space.

Sources of Funding & TA



- NACCHO Climate Change Demonstration Grant
- State Climate Office of Ohio
- National Network of Public Health Law
- EPA Enhanced Neighborhood Air Quality Monitoring
- NOAA
- SWACO

Thank you!

Alexander Evans, Epidemiologist

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Jennie McAdams, Sustainability Supervisor

JennieMcAdams@franklincountyohio.gov

Franklin County
Public Health

