



# Asheville's Tree Protection Task Force

Presented by Steve Rasmussen

# Tree Protection Task Force: Volunteers working to restore our urban tree canopy

🌿 The TPTF is organized by the City's Urban Forest Commission and the nonprofit Asheville GreenWorks





# Why we care

☞ Irresponsible clearing of trees by developers & governments is worsening local climate change and endangering our health



# Benefits of Urban Trees

Research has linked the presence of urban trees to...



**PROTECTING BIODIVERSITY**  
including habitat for migrating  
birds and pollinators



**REDUCING OBESITY LEVELS**  
by increasing physical activity  
including walking and cycling



**REDUCING RATES**  
of cardiac disease, strokes, and  
asthma due to improved air quality



**MANAGING STORMWATER,**  
keeping pollutants out of waterways,  
and reducing urban flooding



**COOLING** city streets by 2-4° F,  
reducing deaths from heat and  
cutting energy use



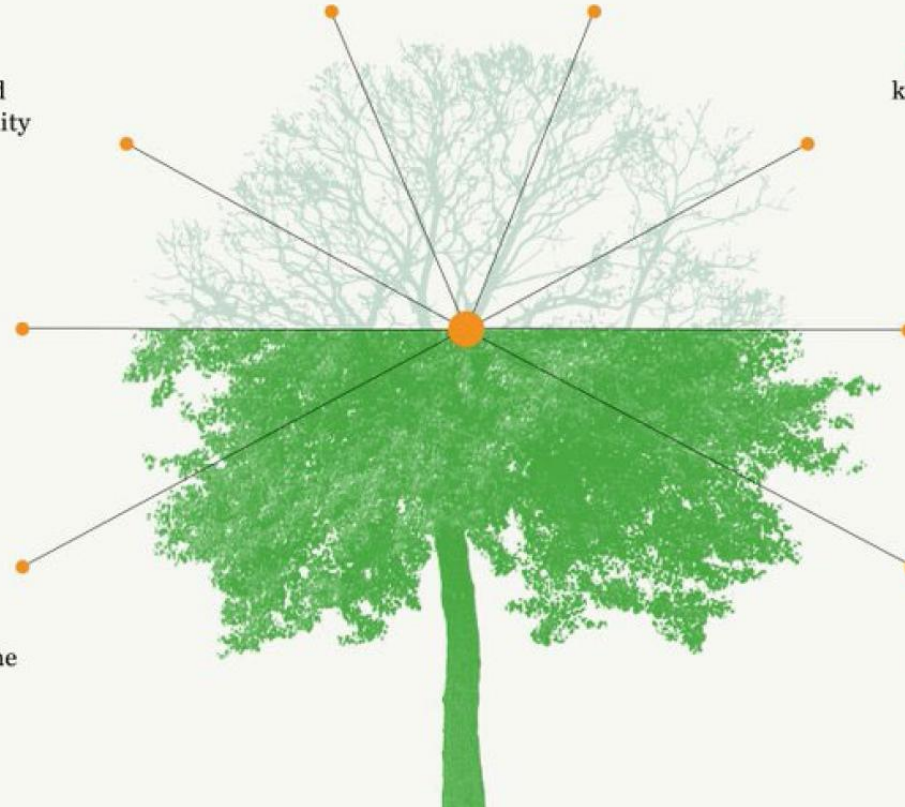
**INCREASING**  
neighborhood property values



**FILTERING** up to a third of fine  
particle pollutants within  
300 yards of a tree

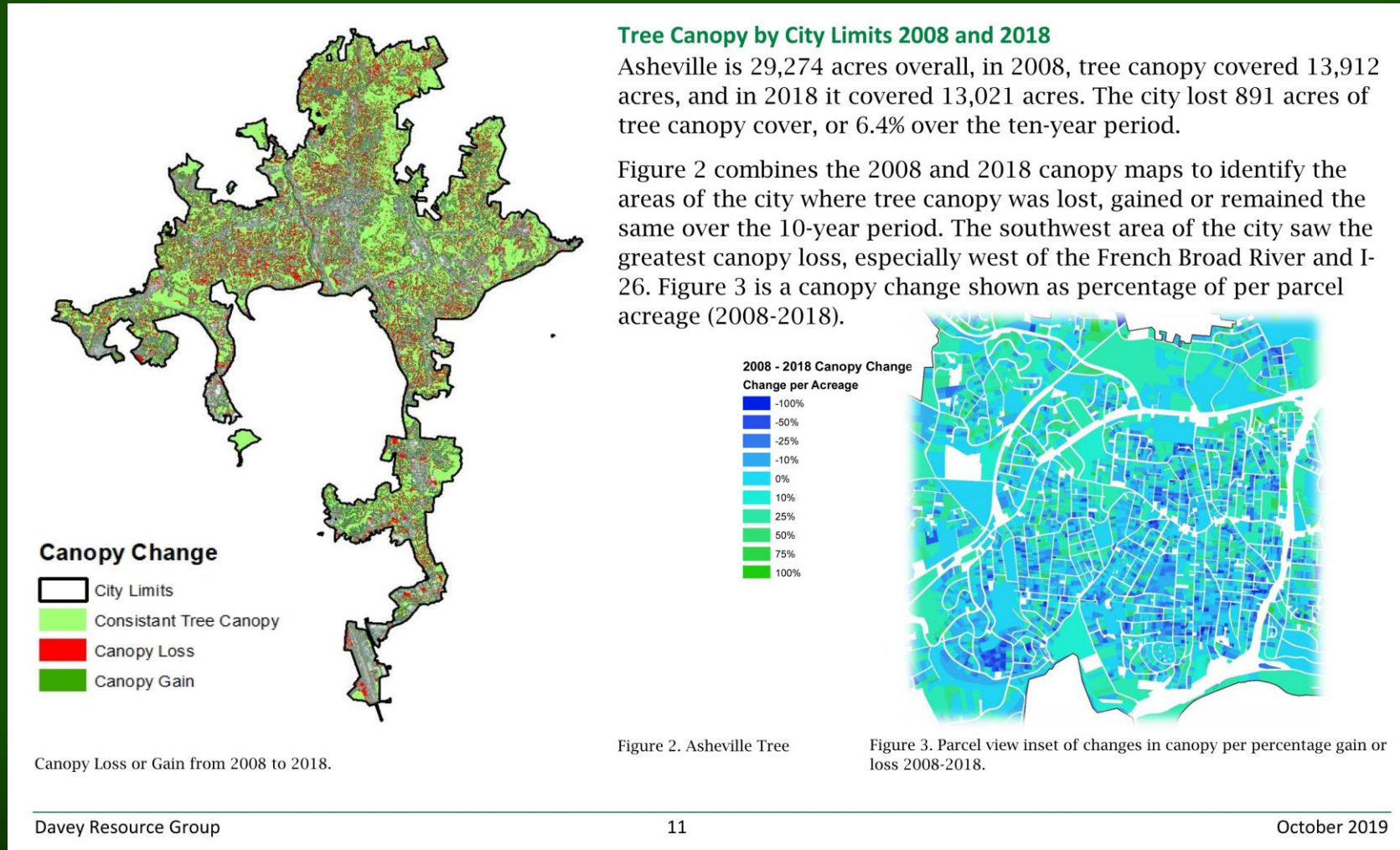


**REDUCING STRESS** by helping  
interrupt thought patterns that  
lead to anxiety and depression





# Asheville is rapidly losing its tree canopy, city's recent Urban Tree Canopy Study finds

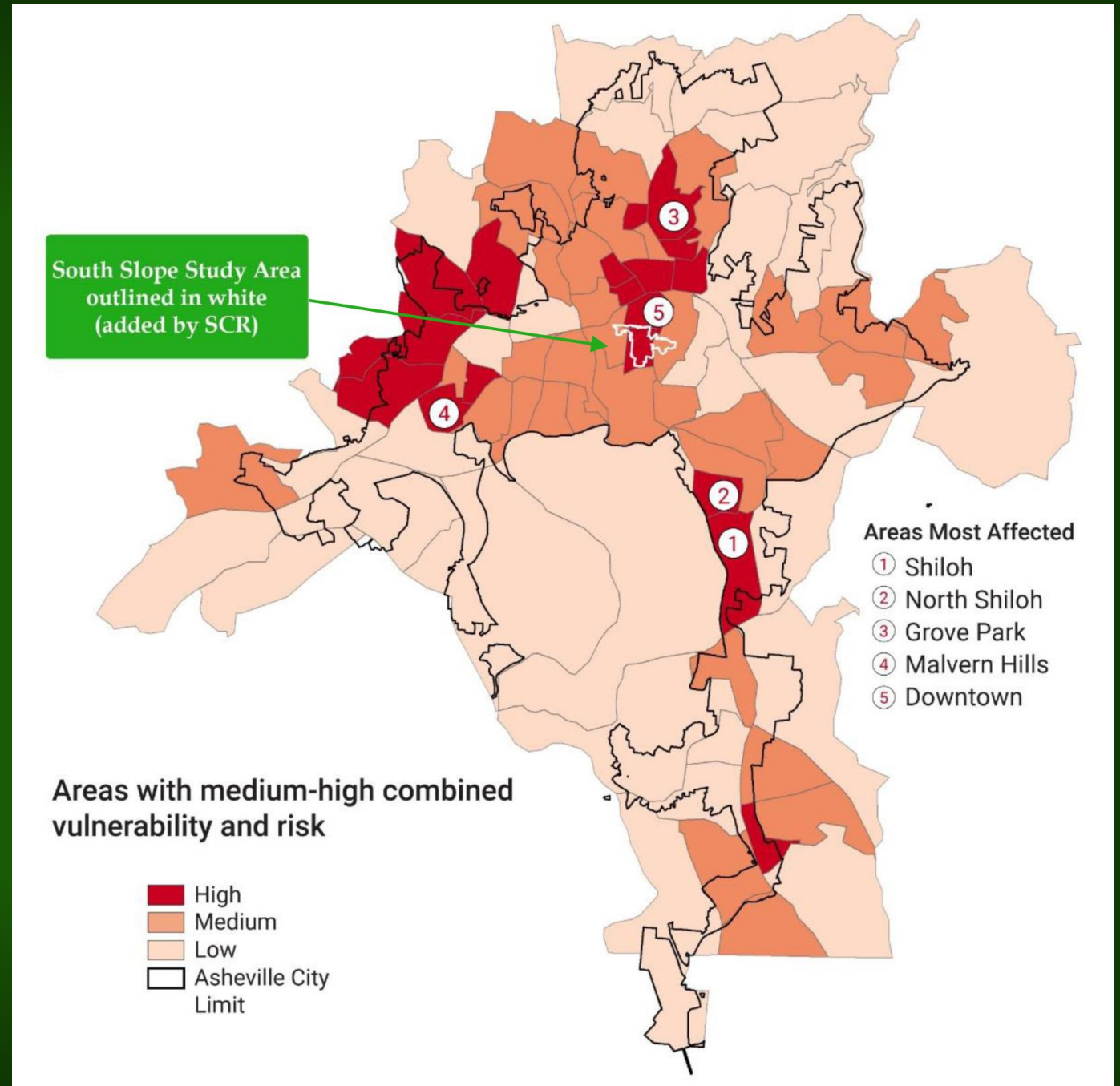


# Dangerous effects in Asheville of losing our urban tree canopy:

- ☞ Increased flooding due to stormwater runoff
  - One 2-ft.-wide oak tree intercepts 3000 gallons/year of stormwater
- ☞ Destructive landslides due to erosion
  - Tree roots stabilize soil, but Asheville regulates tree-cutting only on high-elevation steep slopes
- ☞ More air pollution, deaths due to urban heat-island effect
  - Tree shade cools roofs, roads, & parking lots, lessening air-conditioning demand, smog formation, abnormal weather, & heat mortality

# Stormwater and the Collier Ave. Woods

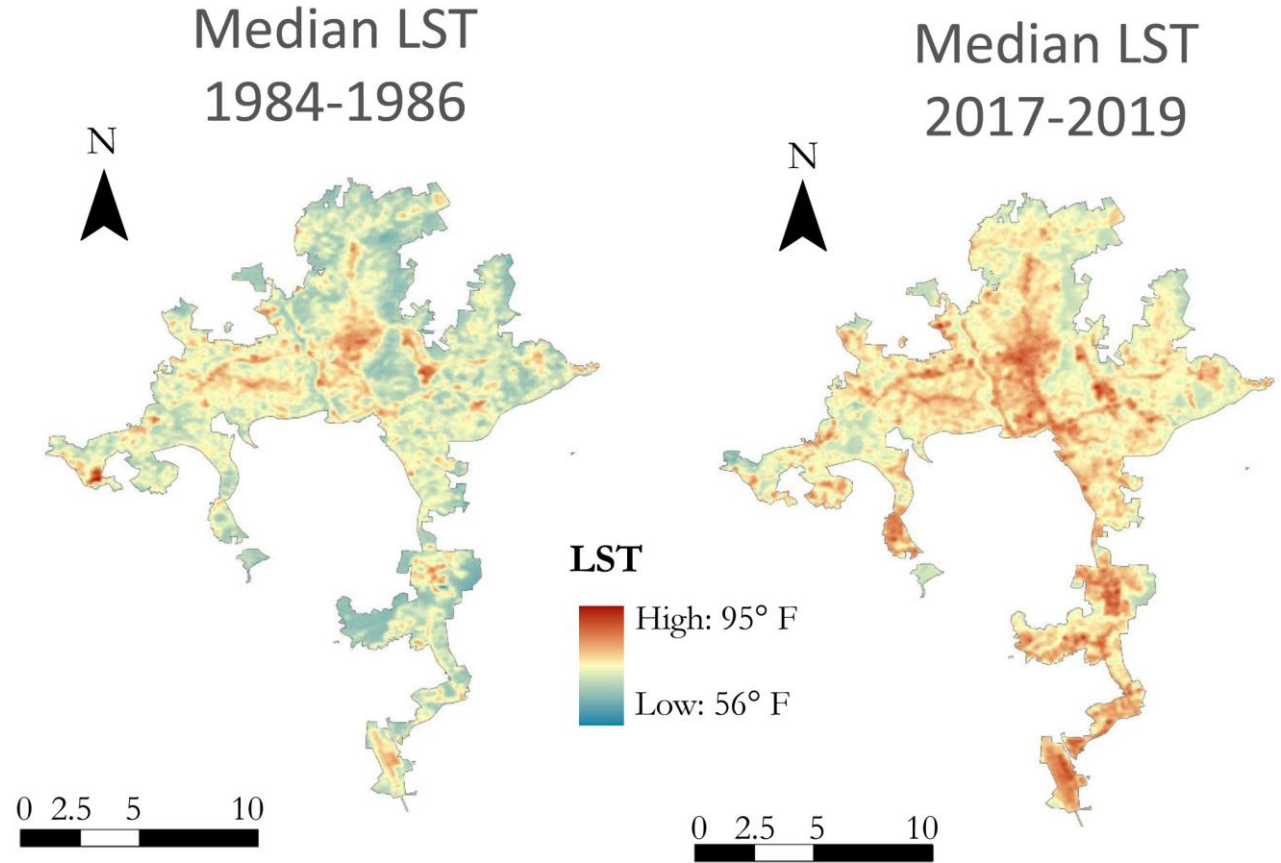
🌿 Last forest in South Slope – slated for apt. project – intercepts 55,000 gals/year in high flood-risk area ID'd in city's Comp Plan. (Ravenscroft Reserve Initiative would save it.)



# NASA DEVELOP report on our urban heat- island rise

🌀 Satellite imagery shows up to 31° F increase in some neighborhoods. Found direct correlation with tree-canopy loss.

## Land Surface Temperature in Asheville

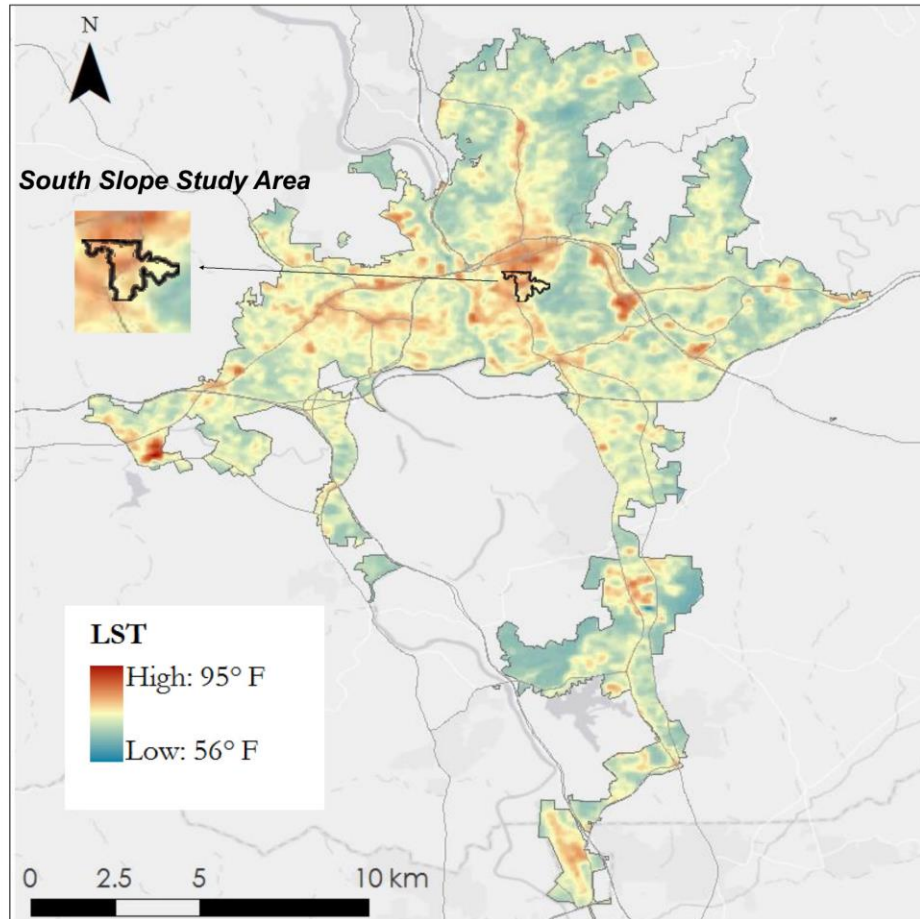


Maps show median Landsat-derived daytime Land Surface Temperature for warm months (May through September) for 1984-1986 and 2016-2019

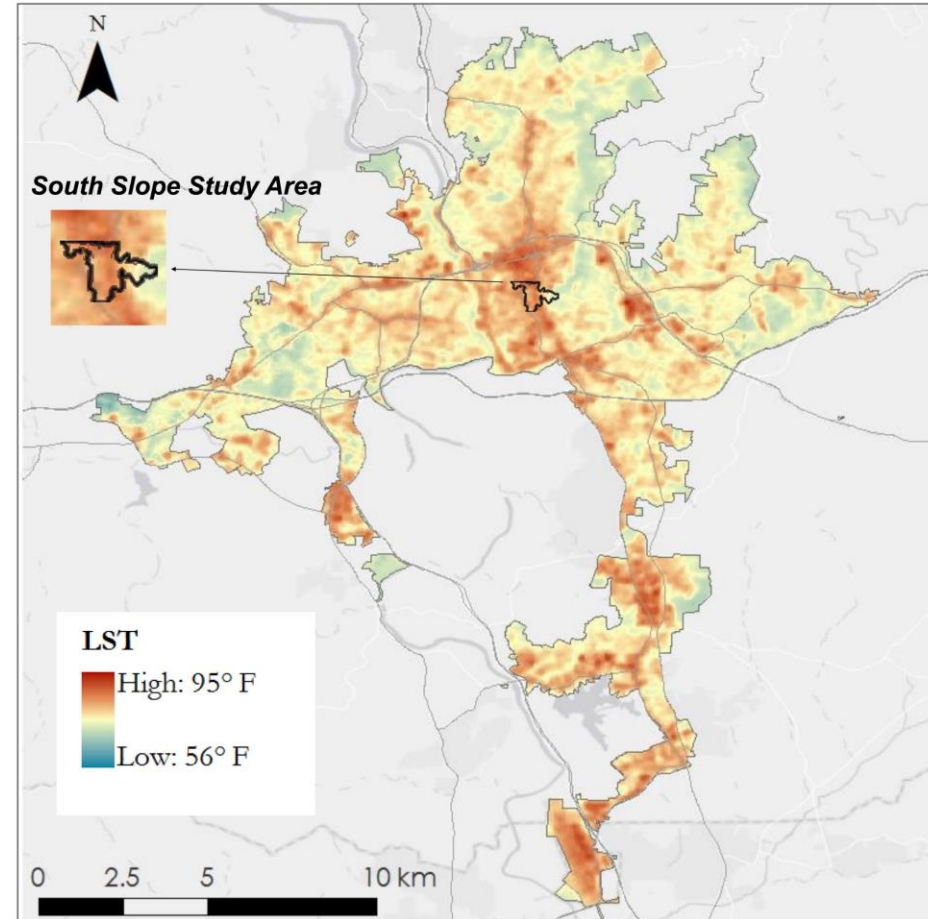


# South Slope on NASA heat maps

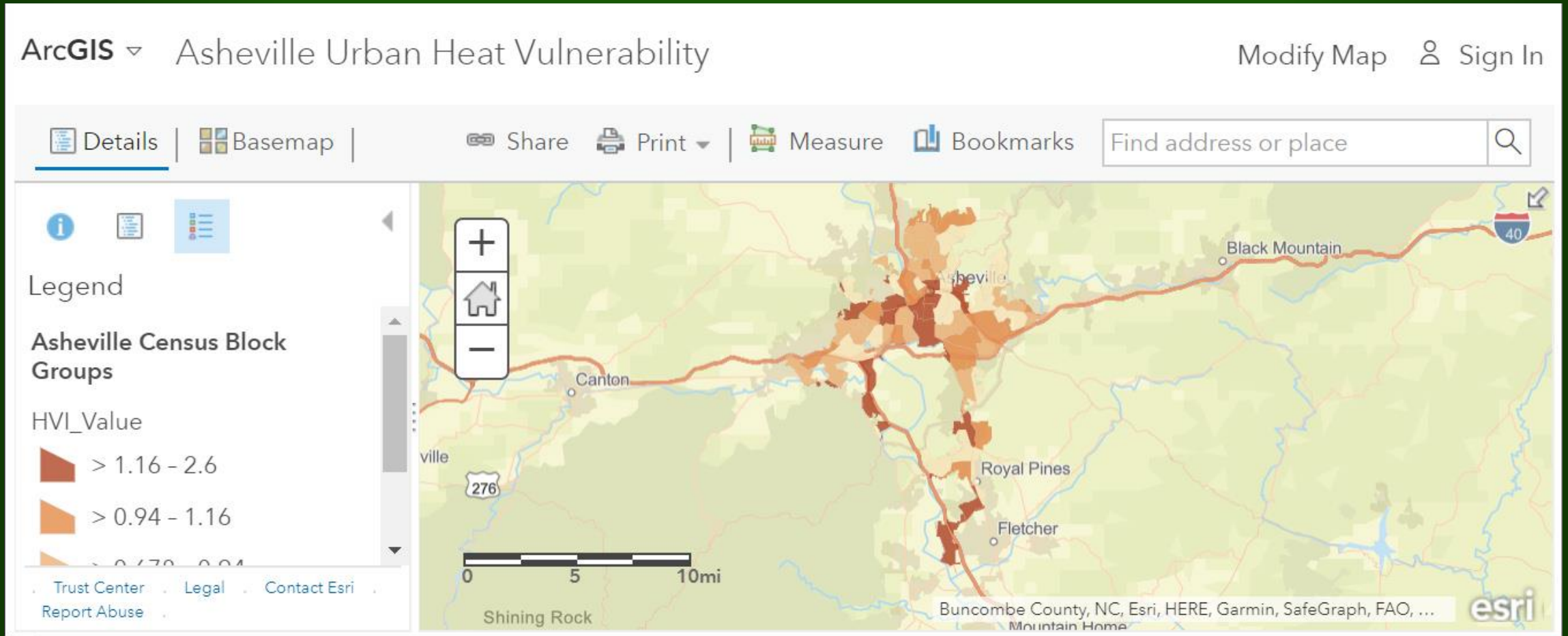
Median Daytime Land Surface  
Temperatures 1984-1986



Median Daytime Land Surface  
Temperatures 2017-2019

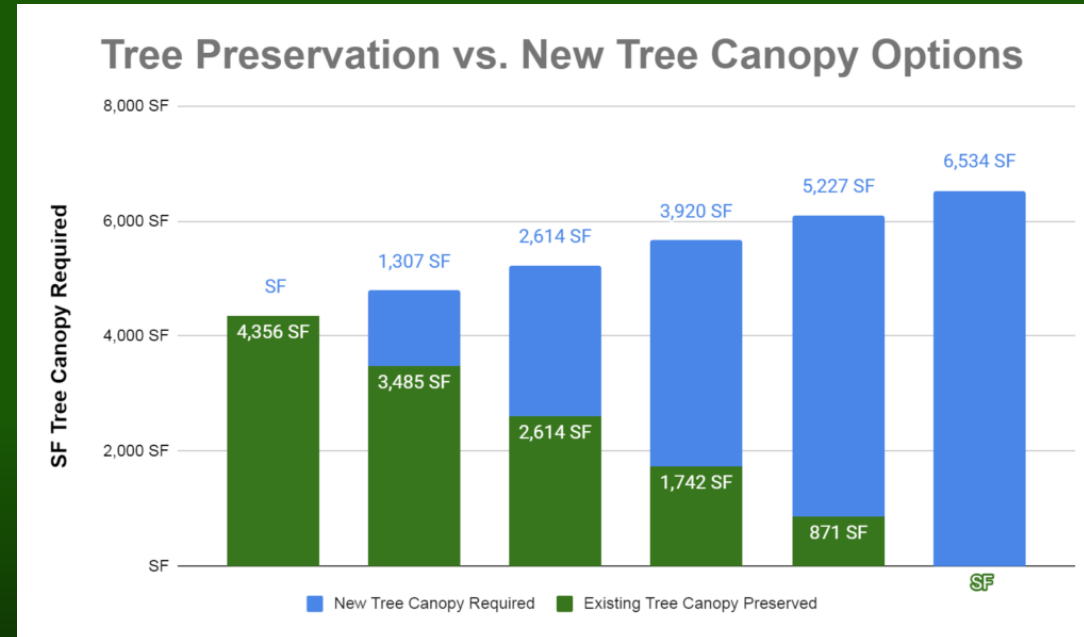


# Find your heat risk on the Asheville Urban Heat Vulnerability Mapper, <http://arcg.is/0SiDzH>



# What we're doing


- Working with us, city planners have drafted a new “**Tree Canopy Protection Ordinance**” – public input coming soon
  - 2019 state anti-tree bill accidentally revealed city's authority to do so!





- 🌿 Greenworks has begun planting **800 native trees per year**
  - 🍏 But saplings cost \$200 each, and can't replace benefits of mature trees



 We're educating Asheville residents and leaders about our urban tree canopy through:

- the member-led Facebook group **Asheville/Buncombe County Trees**, now up to nearly 800 members
- presentations at **TPTF meetings** on subjects such as controlling invasive ivy; trees & birds; how tree shade synergizes with solar power to cut fossil-fuel consumption; and many more
- lobbying City Council and grantmaking organizations to fund an **Urban Forester** position and an **Urban Forest Master Plan**
- events such as the very popular "**Climate Change and Asheville's Urban Forest Symposium**" last fall

# What you can do

- 🌿 Attend TPTF meetings, usually 2<sup>nd</sup> Tuesdays at noon, currently via Zoom (to join email list, contact Dawn Chávez at [dawn@ashevillegreenworks.org](mailto:dawn@ashevillegreenworks.org))
- 🌿 Join Asheville/Buncombe County Trees Facebook Group at <https://www.facebook.com/groups/ashevilletrees/>
- 🌿 Learn the ecological and financial value of your own trees at <https://mytree.itreetools.org>



## Donate to:

- Ravenscroft Reserve Initiative (contact Heath Towson, [htowson@gk-cpa.com](mailto:htowson@gk-cpa.com), for details)
- Asheville Greenworks, [www.ashevillegreenworks.org](http://www.ashevillegreenworks.org)
- Coven Oldenwilde (Lady Passion's and my nonprofit), [www.oldenwilde.org](http://www.oldenwilde.org)

## For more information:

- “Save Asheville’s Tree Canopy”, with links to this presentation and the city reports, groups, symposium videos, etc. described in it: [www.oldenwilde.org/ashevilletreecanopy](http://www.oldenwilde.org/ashevilletreecanopy)
- Contact me at [stevencrasmussen@gmail.com](mailto:stevencrasmussen@gmail.com)