RVAgreen 2050 | Climate Equity Action Plan 2030

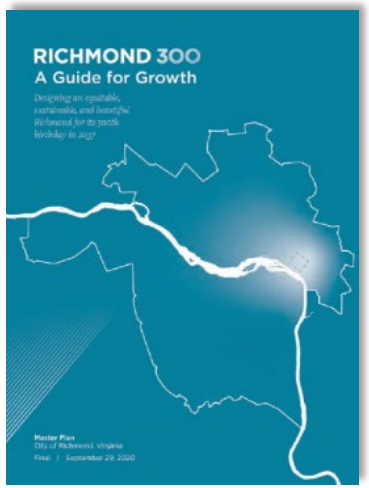
Presented by Laura Thomas
Director of Sustainability

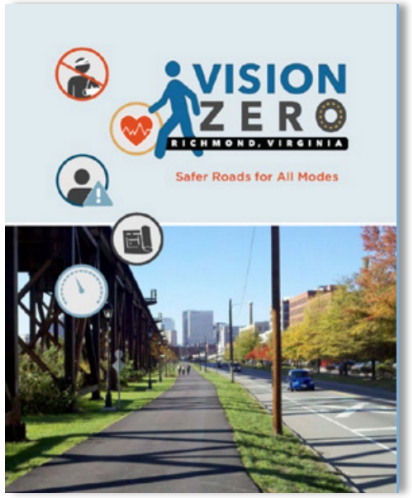
OFFICE OF SUSTAINABILITY

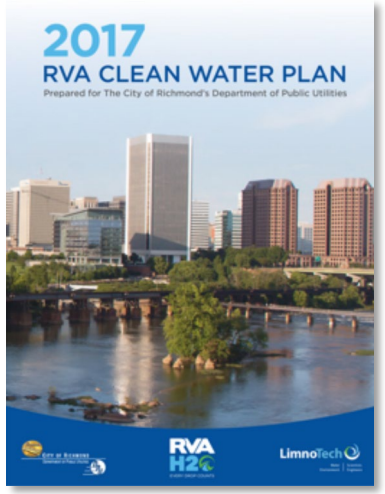
City of Richmond RVAgreen 2050

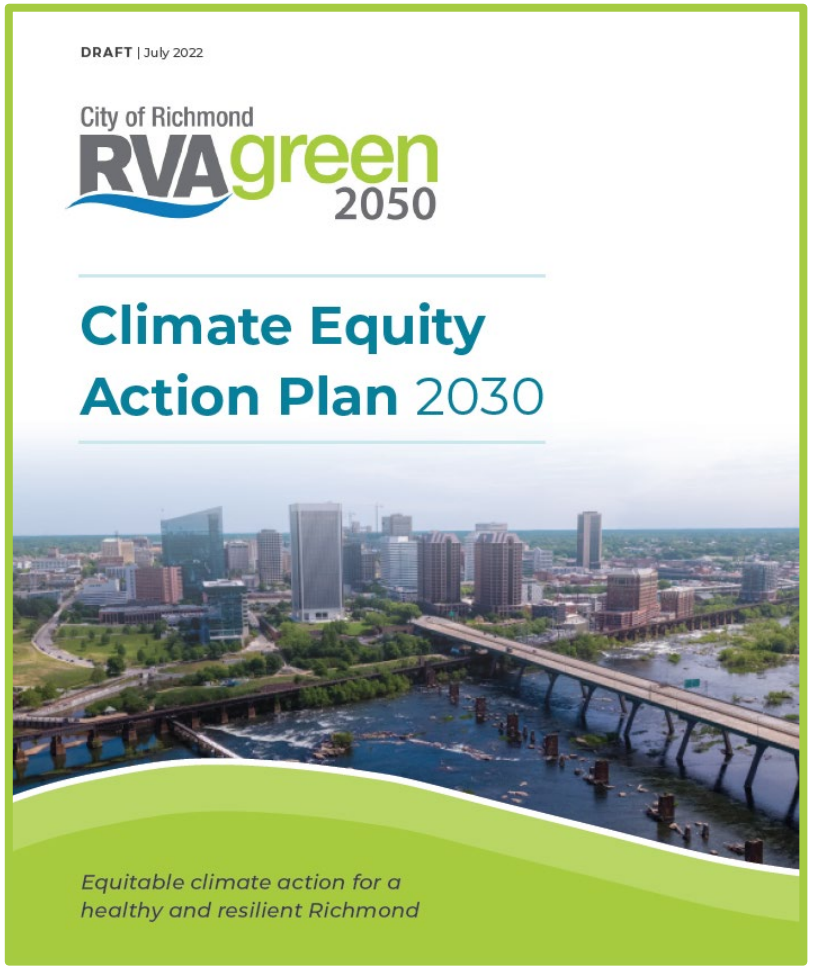
Vision Alignment

- **Resolution No. 2020- R024**
- **Resolution No. 2021- R049**
- **Richmond Equity Agenda**

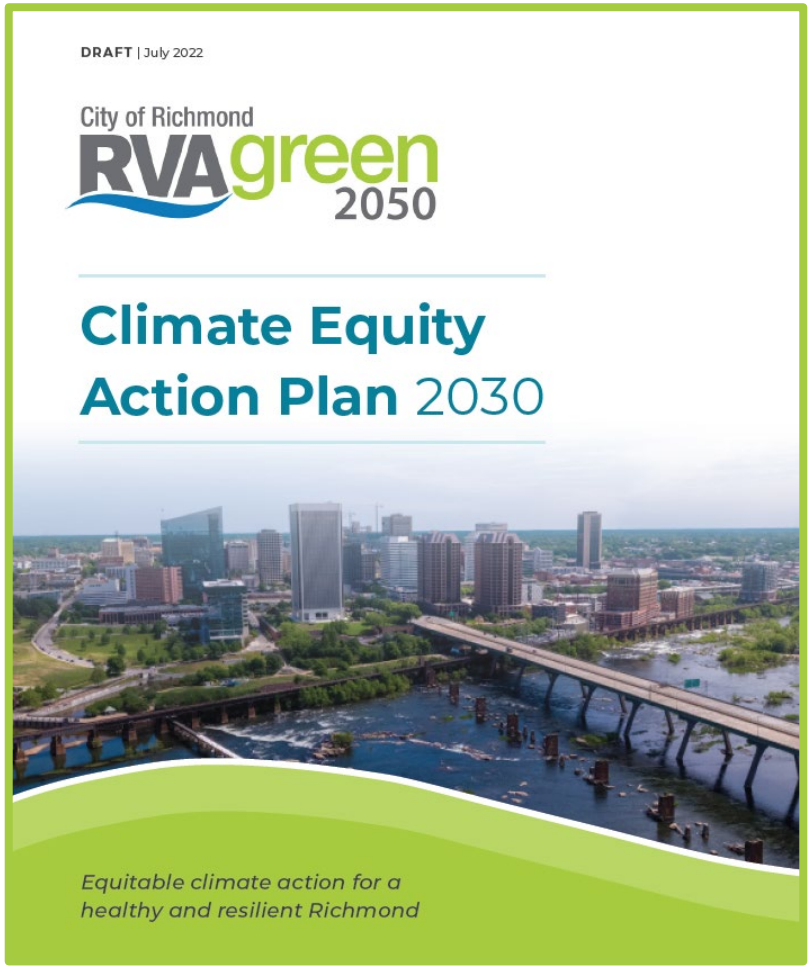








RVAgreen 2050 by the Numbers



1 Vision: all Richmonders, regardless of their identity or neighborhood, thrive in a climate-resilient and climate neutral community

2 Goals: 45% reduction in GHG emissions by 2030 and net zero by 2050; Prepare for, adapt, and improve the community's resilience to local climate impacts

5 Pathways: Buildings & Energy, Community, Environment, Transportation & Mobility, Waste Reduction & Recovery

49 Strategies: Co-created by the 5 Working Groups, Racial Equity & Environmental Justice Roundtable and the Office of Sustainability

Community Outcomes

- Advanced green economy
- Climate-ready community
- Increased flood resilience
- Less landfill waste
- Cleaner and more efficient buildings
- Engaged and involved community
- More green space and trees
- Increased support for climate action and resilience
- Improved air quality
- Cleaner and more efficient transportation
- Lower greenhouse gas emissions
- Increased heat resilience

Community Benefits

22% Reduction in energy burden growth through 2050

This will improve quality of life for frontline communities in Richmond and reduce inequitable energy costs.

- 2018 median energy burden level: 8.4%
- A household is considered "high burden" if its energy burden exceeds 6% of their annual income.

$231M Public health savings through 2050

Lower emissions also means fewer diseases and conditions caused by exposure to pollution like asthma.

- CO_2 reductions exceed 6 million metric tons through 2050

10,900 New jobs created through 2050 (net)

The transition to a carbon-free economy will open up twice as many job opportunities as are lost.

- Median annual household incomes will increase by $226 through 2050
- Job gains are strongest in Construction and Environmental Management

$3.6B Total net benefits (benefits minus costs)

Aggressive pursuit of decarbonization efforts are cost-effective.

- Benefit/Cost Ratio: 2.2
- Cumulative benefits: $6.6B
- Cumulative costs: $3B

Community Priorities

Racial Equity & Environmental Justice

Affordable Housing

Government Accountability

Health & Well-Being

Community Wealth

Engagement & Communication

Neighborhoods

Community Voices

- 5,700+ Community Members: commentary, survey responses, event attendance, etc.
- Attended 100+ Events
- Digital Engagement
- Supporting Groups

Frontlines of Climate Change

- Population (children, elderly, etc.)
- Household (renters, elderly living alone, etc.)
- Income & Education (SNAP, public assistance income, etc.)
- Housing & Transportation (internet access, vehicle access, etc.)

**Based on data from the U.S. Centers for Disease Control: Social Vulnerability Index*

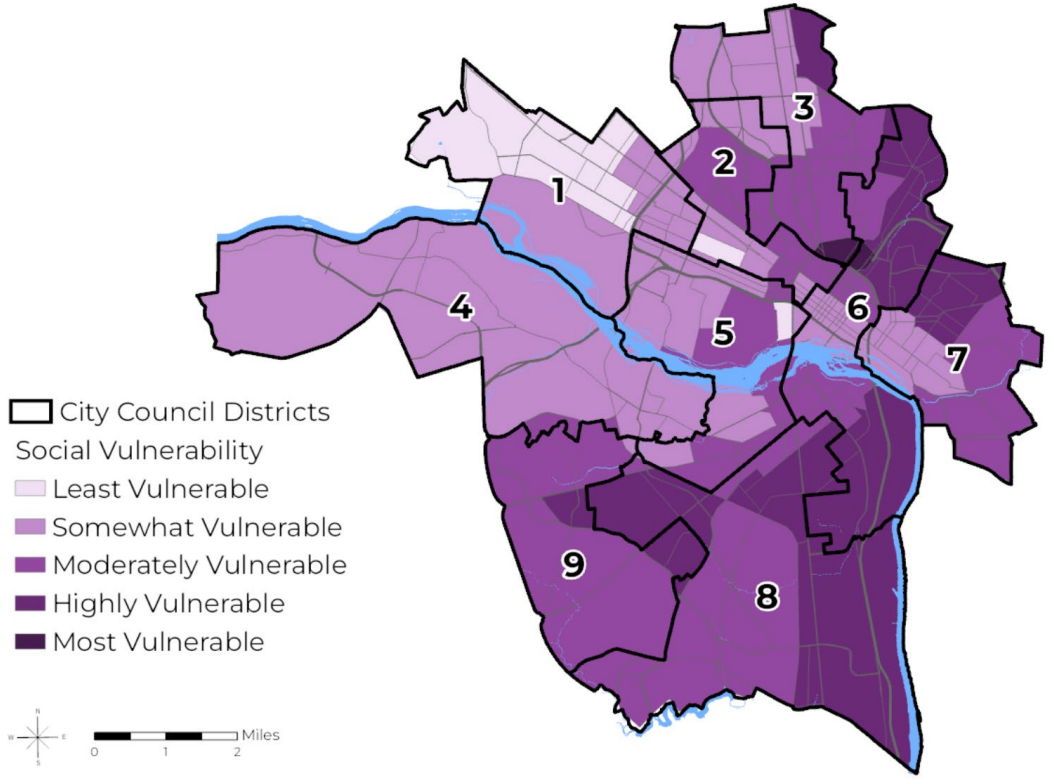


Figure 3.6. Social Vulnerability to Climate Change (RVAgreen 2050 Climate Equity Index, 2019)

Community Resilience

Low-income populations and communities of color are more likely to…

live in areas with less greenspace and are more vulnerable to respiratory and heat related illnesses

lack access to energy efficient housing and often are disproportionately impacted by high energy bills

be impacted by extreme weather events as a result of climate change

live in neighborhoods that lack convenient access to transit, or safe walking and biking options

live in housing without air conditioning and are more vulnerable to heat related and respiratory illnesses and death

exposed to pollution and airborne allergens and are more vulnerable to asthma and other respiratory illnesses

Climate Impacts

Richmond is already seeing the impacts of climate change when it comes to temperatures. Richmond has experienced, and will continue to have, higher average temperatures, more dangerously hot days (above 95 degrees), and longer heat waves.

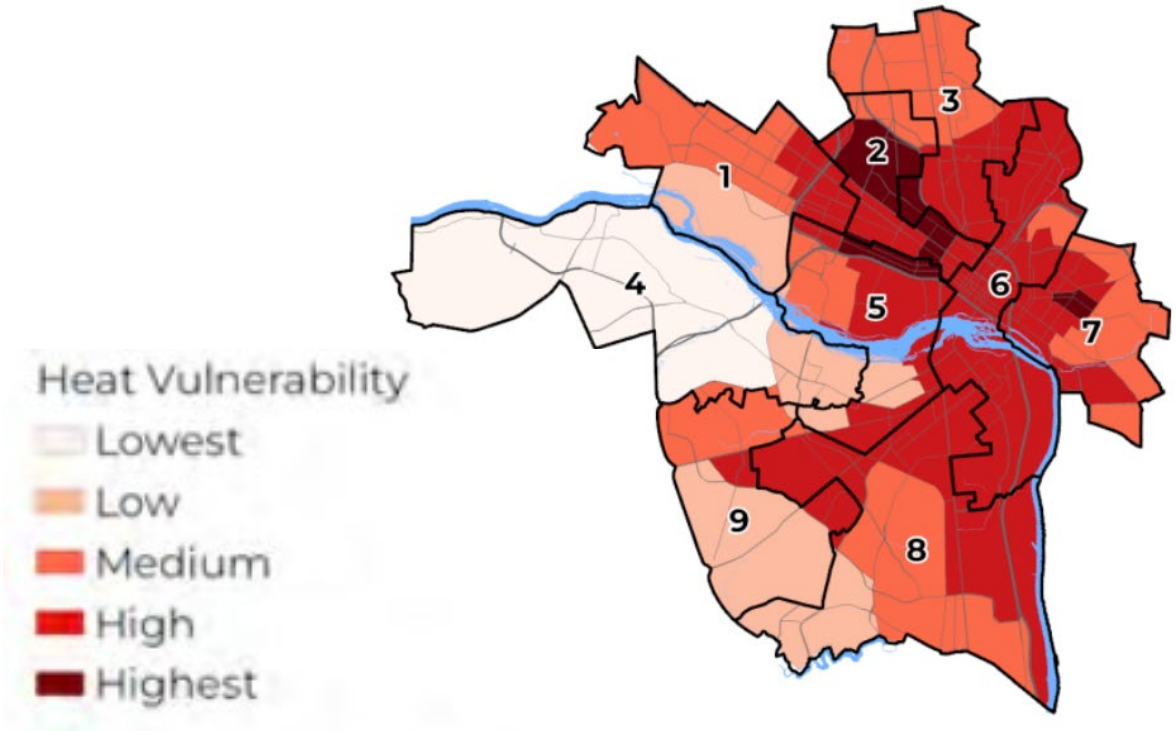


Figure 5.4. Heat Vulnerability by Census Tract (RVAgreen 2050 Climate Equity Index, 2019)[4]

Climate Impacts

Annual precipitation and the number and intensity of **heavy precipitation events are projected to continue increasing**.

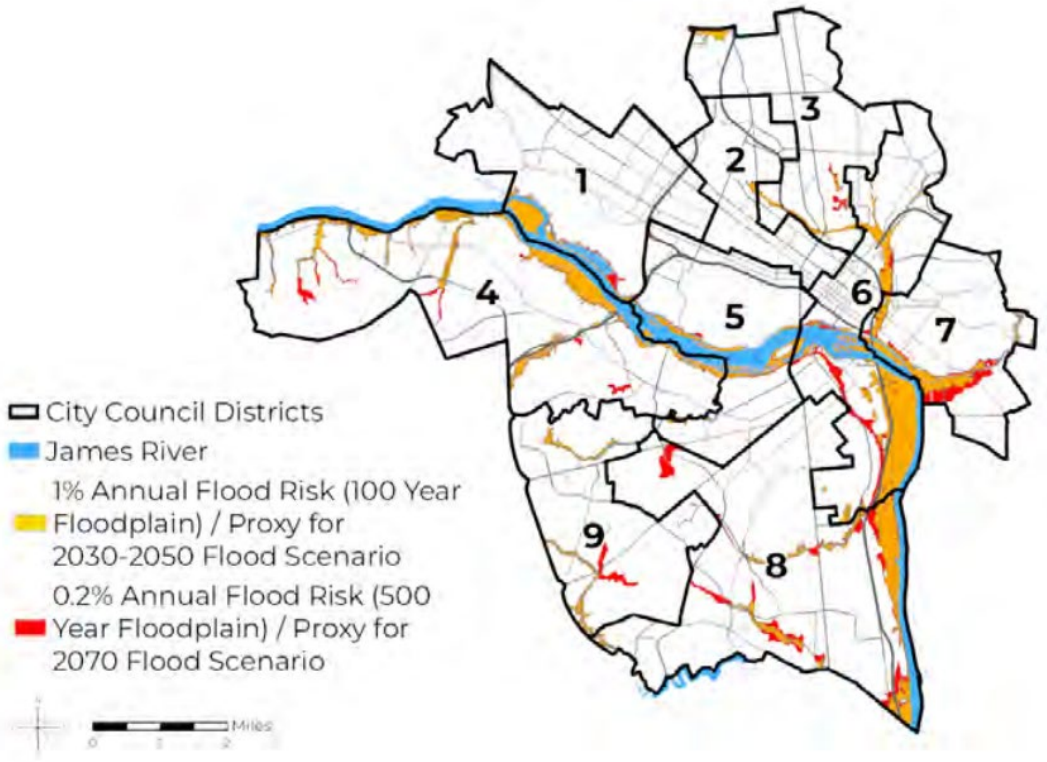
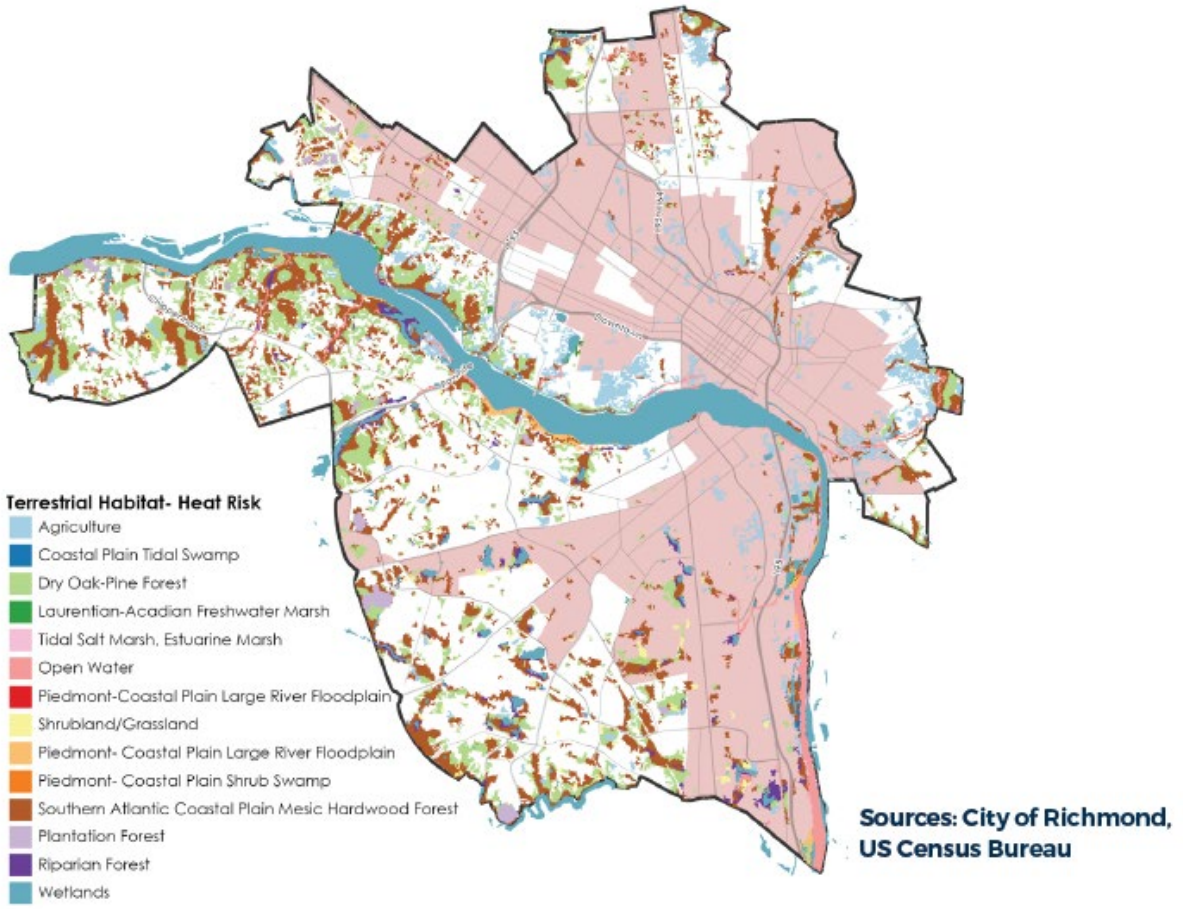


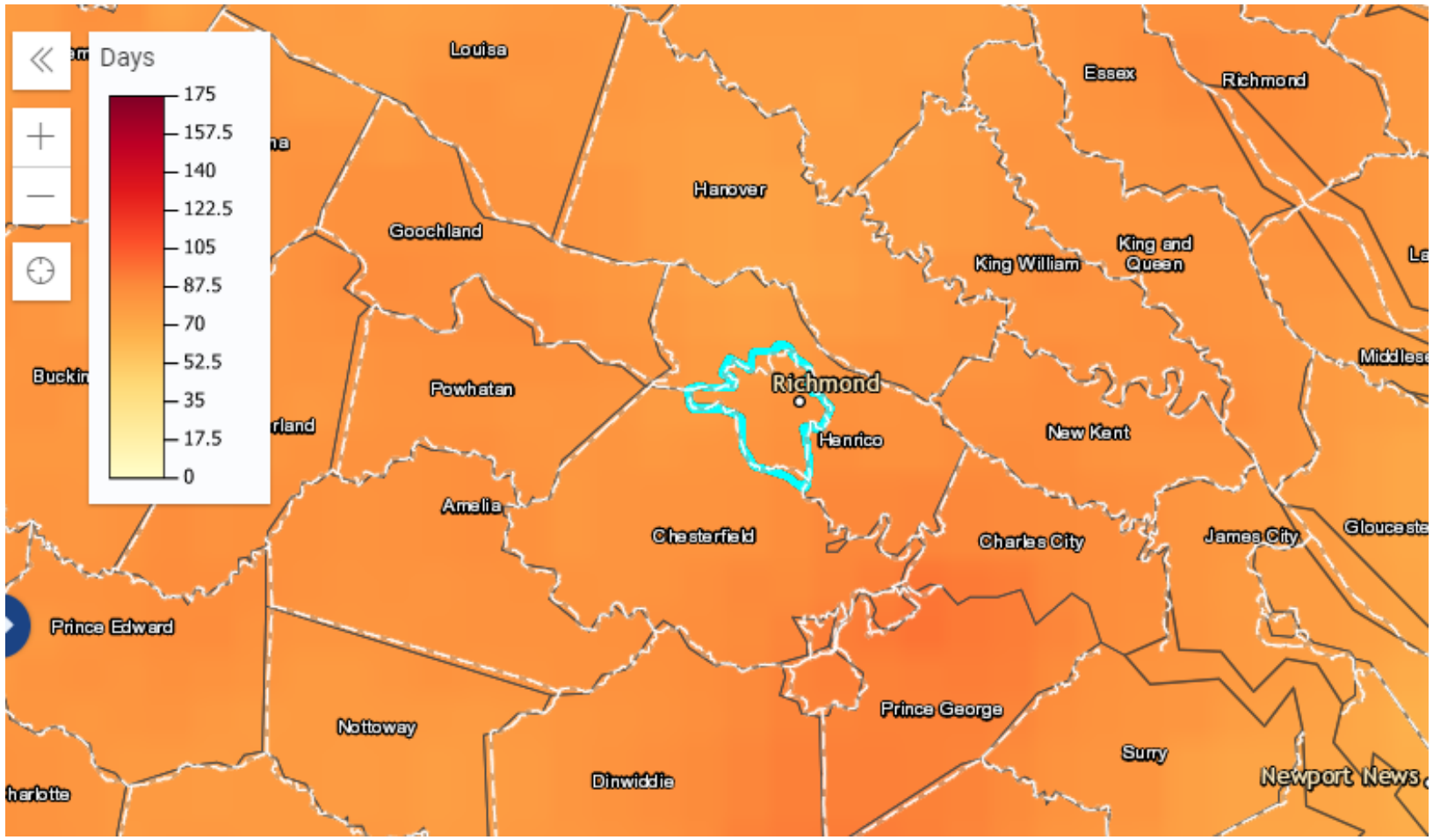
Figure 5.6. Future Flooding Scenarios (RVAgreen 2050 Climate Equity Index, 2019)

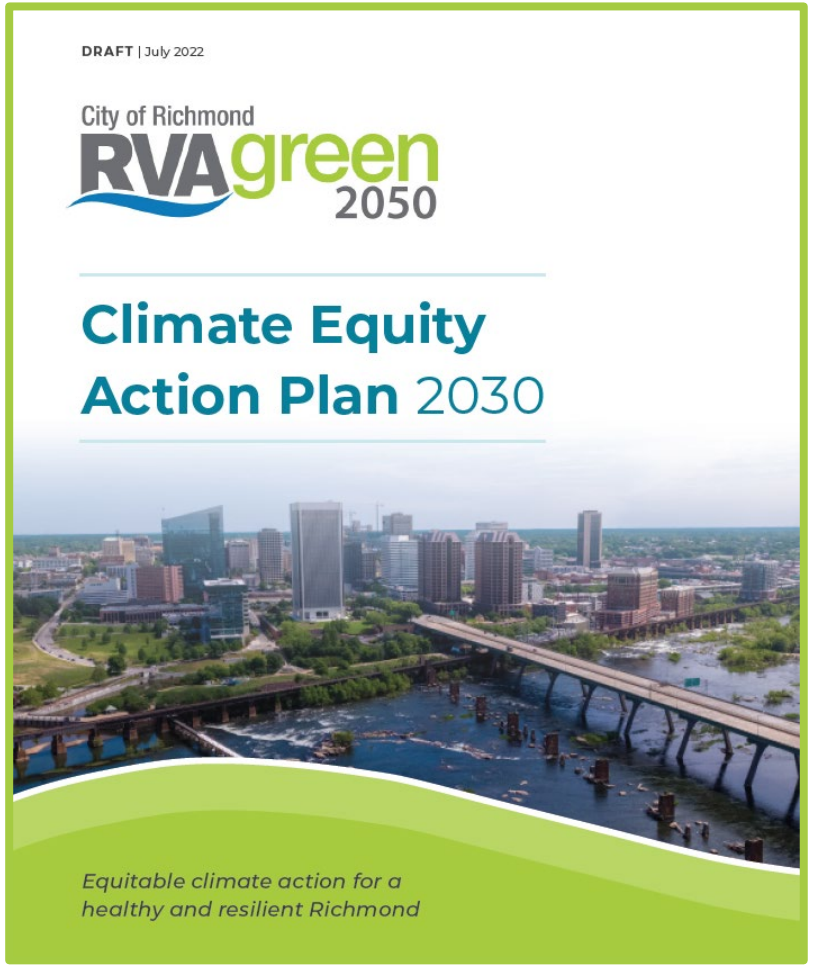
Climate Impacts

During dry periods, **naturally occurring droughts will be more intense** due to higher temperatures.



Regional Climate Impacts

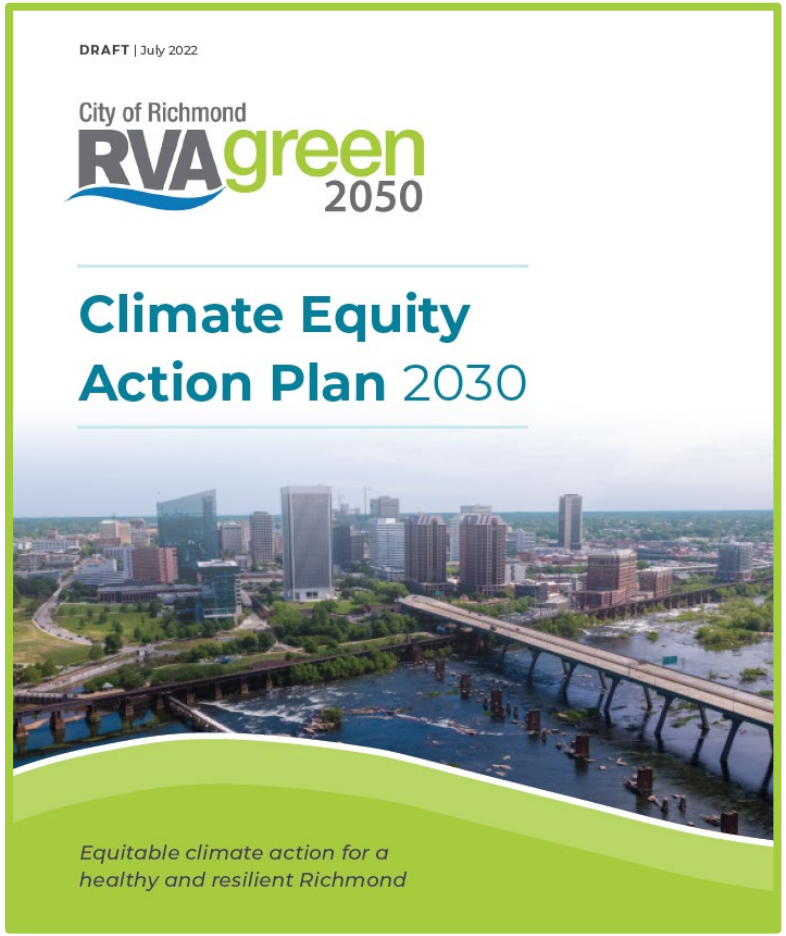




U.S. Climate Resilience Toolkit
Days with Temperatures over 95°

Office of Sustainability - Next Steps

- Capacity Building
- Climate Equity Action
- Focused Implementation
- Funding Mechanisms



Questions?

Laura Thomas
Director of Sustainability
RVAgreen@rva.gov