

DEPARTMENT OF ENERGY &
ENVIRONMENT



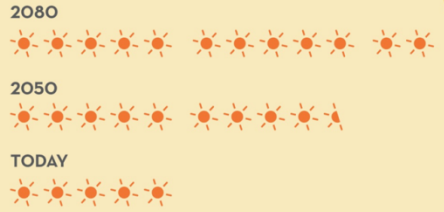
Making DC Climate Ready

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CLIMATE PROGRAM ANALYST

★ ★ ★ DEPARTMENT
OF ENERGY &
ENVIRONMENT
GOVERNMENT OF THE DISTRICT OF COLUMBIA

WE ARE WASHINGTON
GOVERNMENT OF THE
DISTRICT OF COLUMBIA
DC MURIEL BOWSER, MAYOR

Heat waves will grow longer, hotter, and more frequent as temperatures rise.



☀ Days in an average heat wave

Installing more lighter-colored roofs can keep the city cool.

COOL ROOFS ABSORB 70% LESS SUNLIGHT & REDUCE SUMMER AIR TEMPERATURES BY 4-5°F.



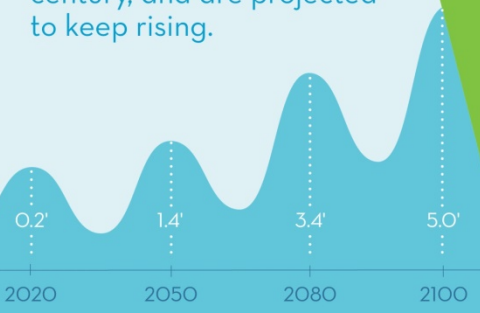
Heavy rain events that cause flooding and run-off pollution will happen more frequently and drop even more rain.



Green solutions like raingardens, green roofs, and trees can help manage water from heavier rains.



Tides on the Potomac and Anacostia Rivers have risen 11 inches in the past century, and are projected to keep rising.



Restoring wetlands and natural shorelines along our rivers can help us adapt to rising tides and protect against flooding.

AN ACRE OF WETLAND CAN STORE 1-1.5 MILLION GALLONS OF FLOODWATER.



Severe storms like hurricanes and derechos could be energized by warmer air and water.



Technologies like solar panels coupled with batteries and microgrids can keep buildings running when storms knock out power.





01 DIRECT HEALTH RISKS
heat stroke, heat
exhaustion, heat rash



02 INDIRECT HEALTH RISKS
Worsening air quality,
increased vector borne
diseases, adverse birth
outcomes



06 CRIME
Increased
homicide rates



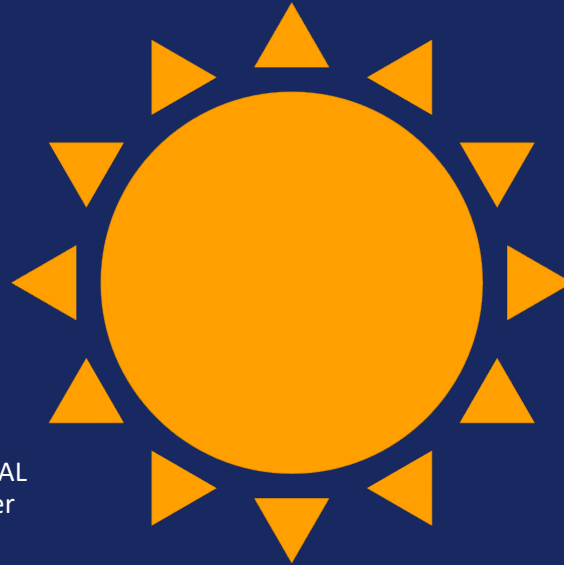
05 ENVIRONMENTAL
Decreased water
quality



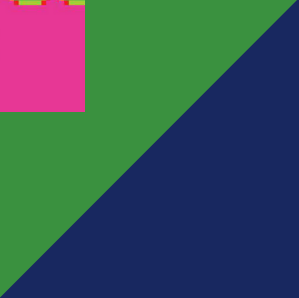
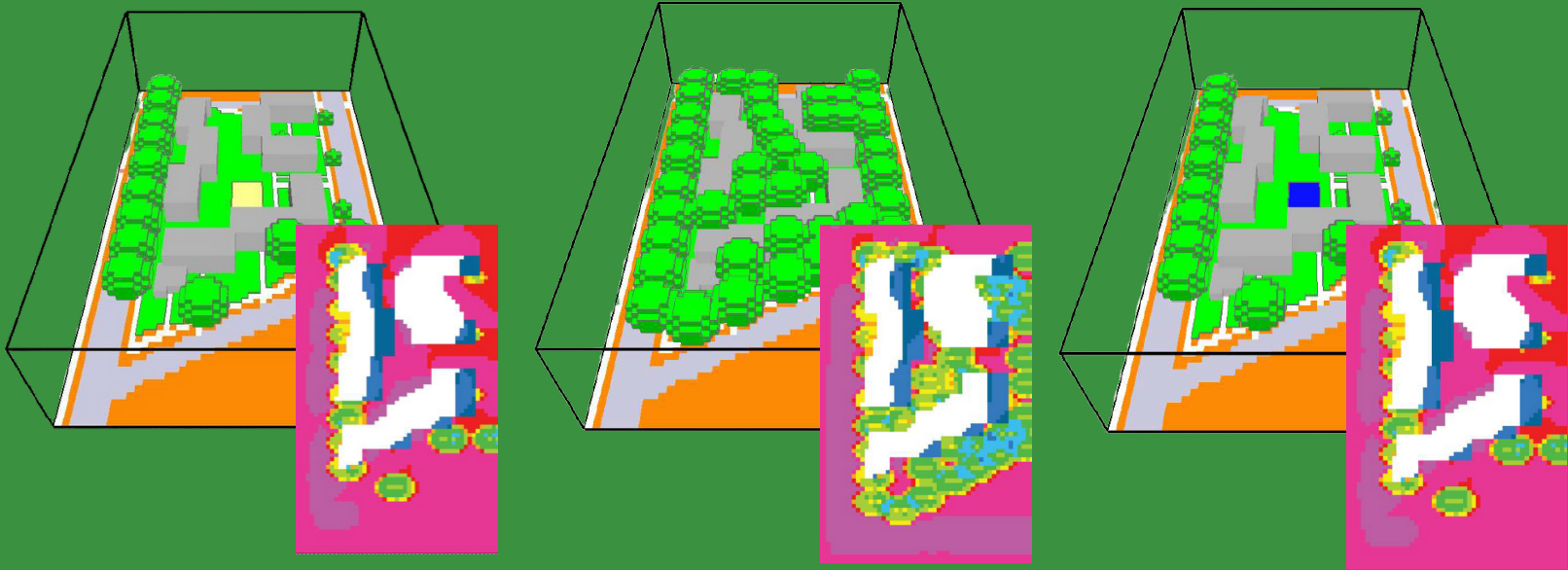
04 ENERGY RISKS
Higher emissions,
blackouts



03 INFRASTRUCTURE
Rail buckles, softening
asphalt, airline
disruptions



HEAT MODELING: CARVER TERRACE



Tree Canopy in Most Heat Sensitive/Exposed Census Tracts

11.6% canopy

Columbia Heights

12.8% canopy

Mt. Vernon-North Capitol

13.3% canopy

Buzzard Point

22.5% canopy

Brightwood

21.9% canopy

Michigan Park

15.8% canopy

Brentwood-Trinidad-Langston

20.8% canopy

Benning-Marshall Heights

Tree canopy data from July 2015
Sensitivity/Exposure index combines data on income, age, race, asthma, disability, obesity, coronary heart disease, air temperature, impervious surface, and tree canopy

Community

Vision for Ward 7 Resilience Hubs

Identify sites, partners, metrics of success

Ensure hubs respond to Ward 7 needs



+

Government

Create formal designation for hubs

Assess feasibility of sites

Explore opportunities for government agencies to fund/support/host hubs



A decorative graphic on a yellow background. On the left, a large blue circle is partially overlapping a green triangular shape. A green line extends from the bottom right of the blue circle. In the top right corner, a horizontal green line is partially obscured by a diagonal blue line.

For Resilience, Critical Infrastructure & Microgrids to enable Washington's decarbonization goals, we must first ensure **frontline community members are making key decisions, the primary beneficiaries of investments, and the owners of resilience assets.**



THANK YOU



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