CLIMATE READY DC

The District’s Climate Adaptation & Preparedness Plan
HEAT TOLL COULD HIT 300

116 Die; Few Using City Cooling Centers

Partly sunny, breezy and a bit cooler and less humid today with a high of 85 and a low in the 60s. Tuesday and Wednesday will be even cooler, with highs near 80.

RELIEF ON THE WAY

County Morgue Trying to Cope

Ford's New Spin On the Taurus

IRAQ FREES 2 AMERICANS

CUBS BEAT CINCINNATI 7-5
OUTLINE

1. Climate Change in DC
2. DC’s Risk & Vulnerabilities
3. Resilient Design Solutions to Prepare and Adapt
PROCESS

1. ANALYZE CLIMATE IMPACTS
2. ASSESS RISKS & VULNERABILITIES
3. IDENTIFY & PRIORITIZE SOLUTIONS
DC Climate Impacts

Precipitation

Sea Level Rise

Extreme Heat

Extreme Weather

Storm Surge
# Extreme Heat Events: Days Over 95°F Heat Index

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- **30 days**
- **50 days**
- **70-80 days**
- **75-105 days**

- Days above 95°F Heat Index (low emission scenario)
- Days above 95°F Heat Index (high emission scenario)
EXTREME PRECIPITATION

TODAY’S 100-YEAR RAIN EVENT (8 IN)
SEA LEVEL RISE & STORM SURGE

PROJECTED SEA LEVEL RISE

2020s: 2.4 inches
2050s: 1.4 feet
2080s: 3.4 feet

Source: USACE North Atlantic Coast Comprehensive Study map overlaid on GIS map base created by Kleinfelder, 2015.
VULNERABILITY & RISK ASSESSMENT

GOAL: Identify the District’s infrastructure, public facilities, and populations at greatest risk to climate change.
Ward 7 is home to the largest number of vulnerable community resources such as schools, medical services and human services.

Public safety resources at risk of flooding, including police, fire, and local and federal emergency operations centers, are concentrated in Downtown and Southwest.
HEAT WAVE: A SOCIAL AUTOPSY OF DISASTER IN CHICAGO

Erik Klinenberg
Measuring Vulnerability

Adaptive Capacity
Factors that influence an individual’s ability to bounce back or adapt to stresses caused by climate change.

- Unemployment
- Level of education
- Housing (rent/own)
- Poverty Prevalence

Sensitivity
Social, biological or economic factors that make individuals more sensitive to climate impacts.

- Age
- Obesity
- Asthma
- Other chronic health conditions
- Poverty
- Unemployment
- Education
VULNERABILITY & RISK ASSESSMENT

Vulnerable Populations

- Unemployment
- Educational attainment
- Poverty prevalence
- Obesity
- Adult asthma
- Age (65+)
VULNERABILITY & RISK ASSESSMENT

PRIORITY PLANNING AREAS

1. Bloomingdale & LeDroit Park
2. Watts Branch
3. Downtown/Federal Triangle
4. Southwest/Buzzard Point
5. Blue Plains

+Vulnerable Populations in Ward 7 & Ward 8
Climate Ready DC
Plan Organization
18 High-Level Strategies and 77 Specific Actions

Transportation & Utilities
- Improve transportation and utility infrastructure to maintain viability during periods of extreme heat, extreme weather, and flooding.

Buildings & Development
- Upgrade existing buildings and design new buildings and development projects to withstand climate change impacts.
- Make neighborhoods and communities safer and more prepared by strengthening community, social, and economic resiliency.

Neighborhoods & Communities
- Establish the policies, structures, and monitoring and evaluation procedures to ensure successful implementation of the adaptation plan.

Governance & Implementation

DOEE.DC.GOV/CLIMATEREADY
Implementation Outlook

- Additional Analysis of Priority Planning Areas
- Establish an Equity Advisory Group in Ward 7
- Develop Implementation Plan & Design Guidelines
- Interagency Coordination
Priority Planning Areas — Watts Branch
PRIORITY AREA - BUZZARD POINT

Buzzard Point Framework Plan

» Builds off of soccer stadium and South Capitol Street
» Envisions mixed-use neighborhood with 6,000 residential units
» Environmentally responsive infrastructure
» Dynamic parks and open spaces
» Streets as vibrant public space
COMMUNITY RESILIENCE HUBS
Will the project result in an asset that will operate after 2050?

Yes

Would the consequences of damage be significant and disruptive

No

Less need for heightened review

Yes

and/or

Would it be expensive to replace or repair the project if damaged?

No

Less need for heightened review

Yes

Needs more review
Reducing District Risk - Co-benefits

- Will the project increase impervious surface?
+ Can the project be adapted to include on-site stormwater retention?

+ Could the project reduce flooding by absorbing rainwater?
+ Can the project be adapted to include green infrastructure?

Increasing Precipitation

- Is the project vulnerable to flooding? And would flooding cause adverse consequences?
+ Can electrical equipment or other vulnerable assets be elevated?

+ Can it be designed to rapidly recover from flooding?
As a member of 100RC, the District will build a plan designed to prepare the city for acute shocks – severe floods and power outages – while lessening key chronic stresses, like the lack of affordable housing and job diversity.