

# CLIMATE READY DC

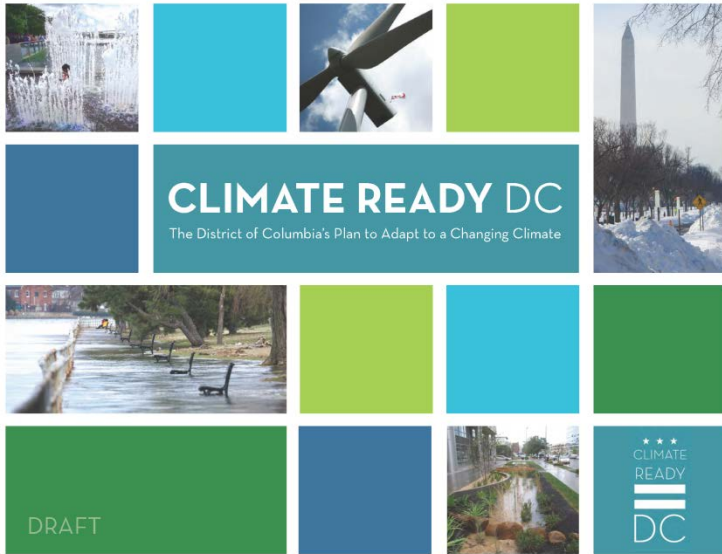
The District's Climate Adaptation & Preparedness Plan

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# CLIMATE READY DC DEVELOPMENT

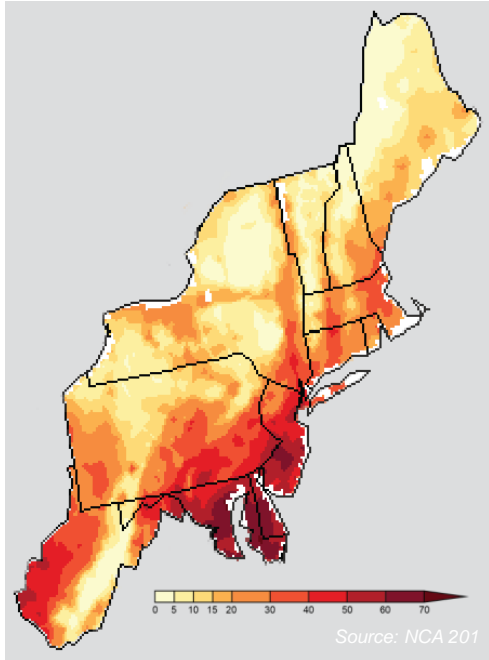
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- 1 Analyze Climate Impacts
- 2 Assess Risks & Vulnerabilities
- 3 Identify & Prioritize Solutions

# LOCAL CLIMATE CHANGE IMPACTS

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Number of days > 90°F

## HEAT



# EXTREME HEAT EVENTS

## Days Over 95°F Heat Index

Baseline

June	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	1	2	3	4	5
July	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31	1	2
	3	4	5	6	7	8	9
August	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						

30  
days

2020s

June	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	1	2	3	4	5
July	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31	1	2
	3	4	5	6	7	8	9
August	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						

50  
days

2050s


June	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	1	2	3	4	5
July	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31	1	2
	3	4	5	6	7	8	9
August	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						

70-80  
days

2080s

June	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
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	17	18	19	20	21	22	23
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	7	8	9	10	11	12	13

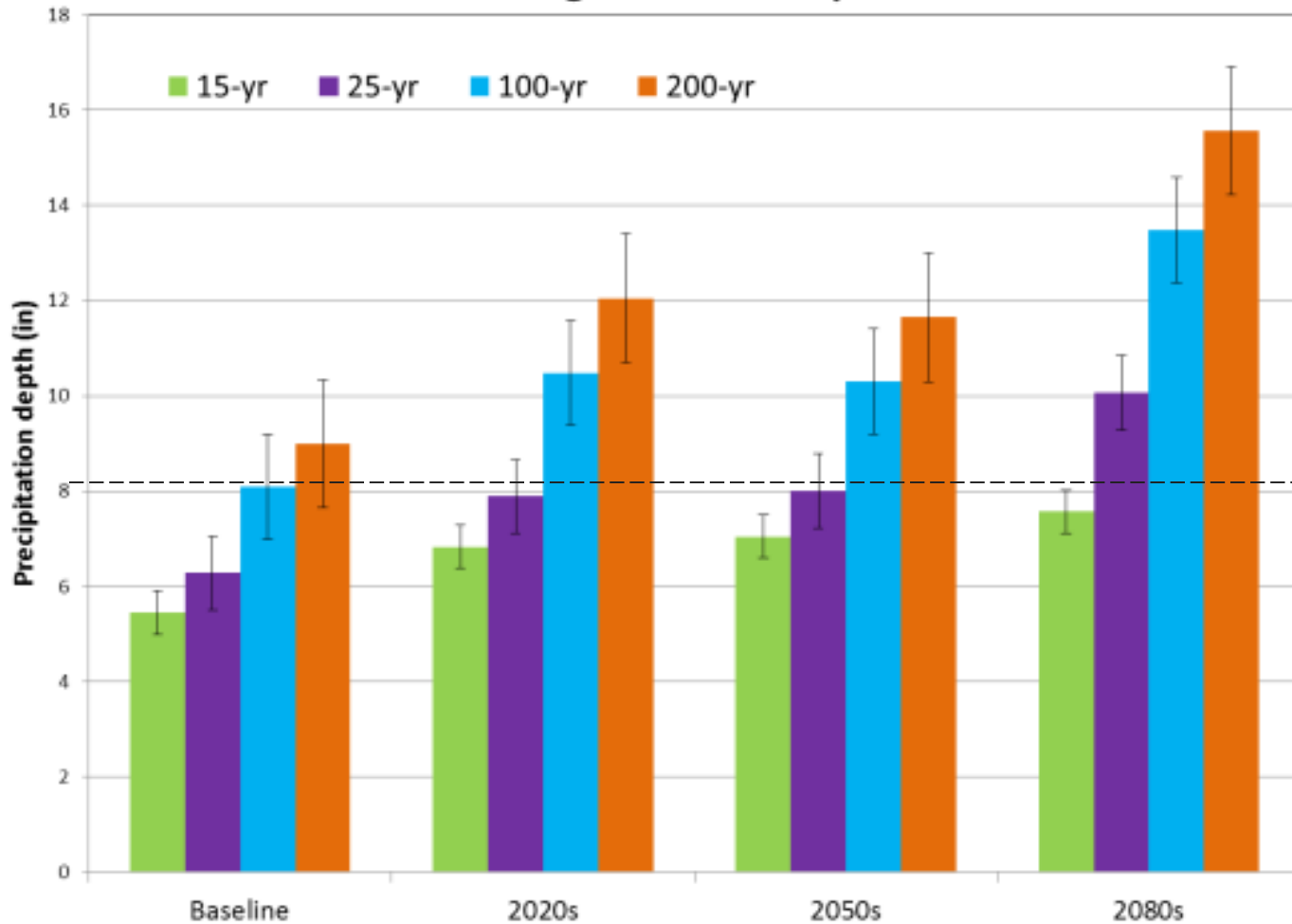
75-105  
days

 Days above 95°F Heat Index (low emission scenario)

 Days above 95°F Heat Index (high emission scenario)

# EXTREME PRECIPITATION EVENTS

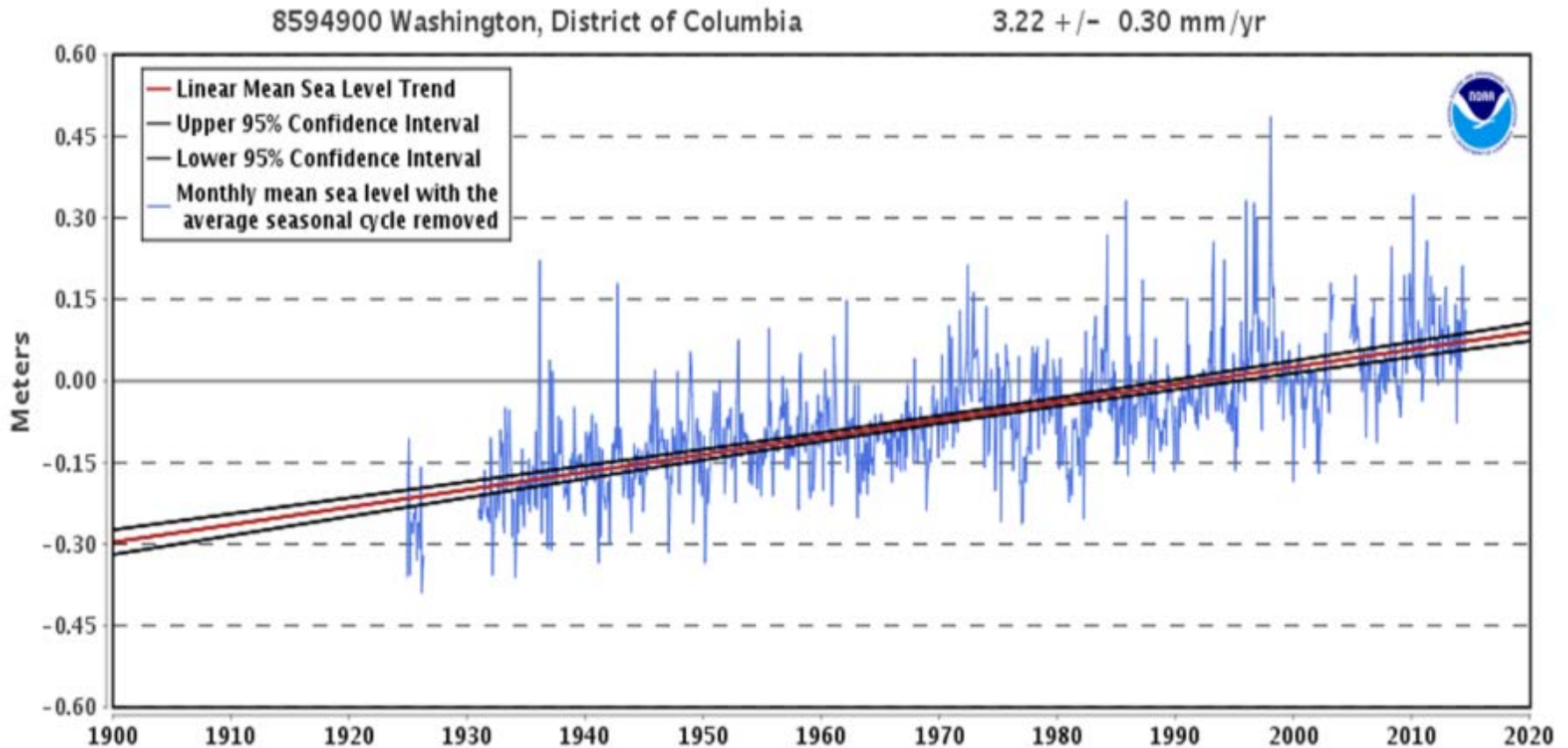
## 24-hr Design Storms Compared



Today's  
100-year  
rain  
event (8  
inches)

Extreme precipitation events, when a large amount of rain/snow falls in a short period of time are projected to become **more frequent** and **more intense**.

# LOCAL SEA LEVEL IS RISING

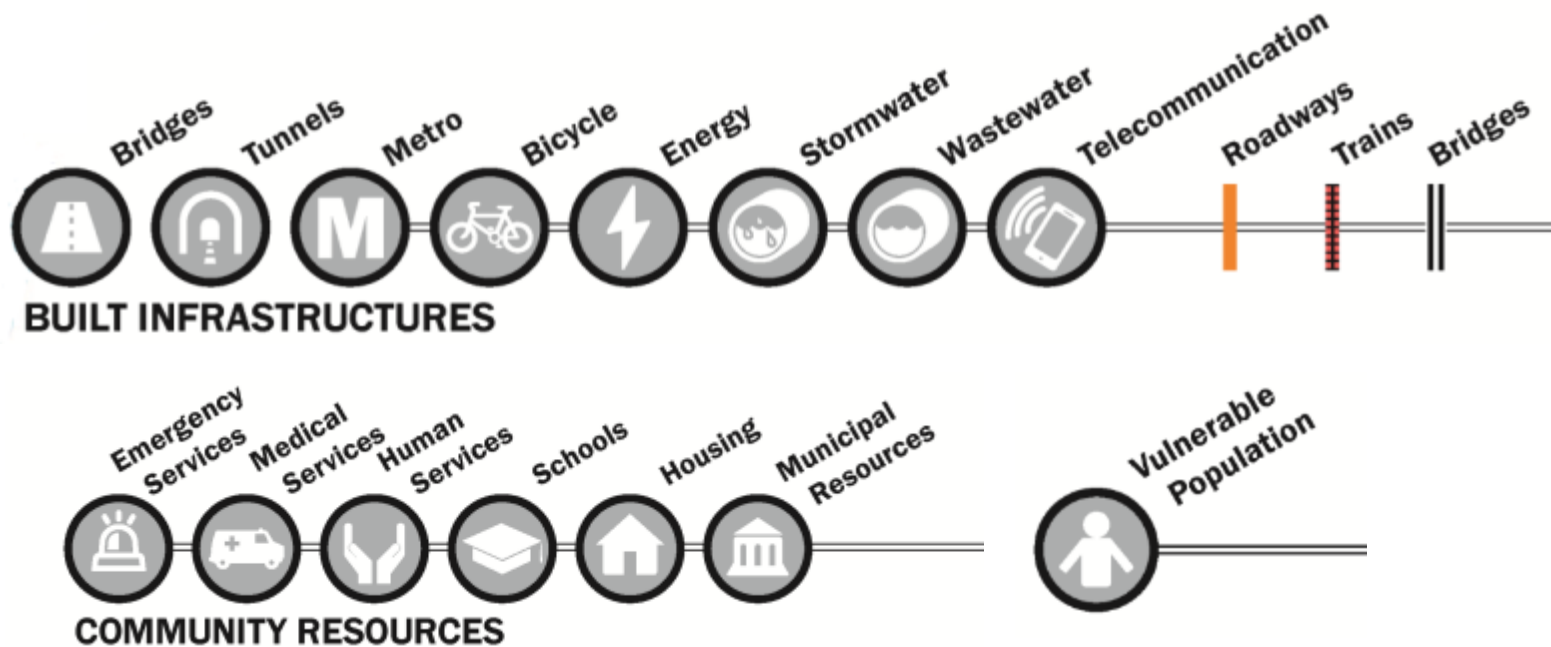


Source: NOAA gauge 8594900 in Washington Channel

**Local sea level has risen 11" since 1924.**

# VULNERABILITY & RISK ASSESSMENT

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**GOAL:** Identify the District's infrastructure, public facilities, and populations at greatest risk to climate change.

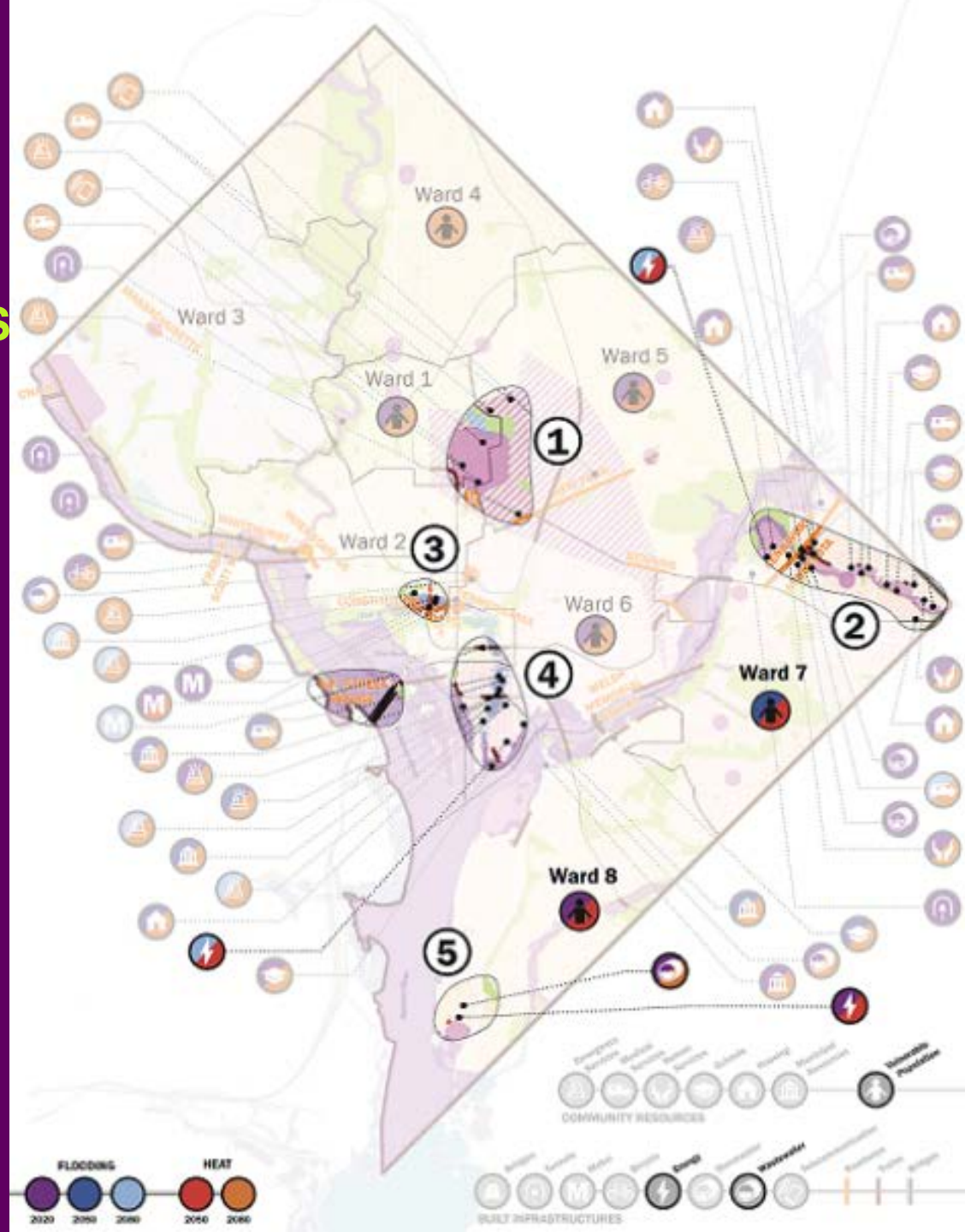


# VULNERABILITY & RISK ASSESSMENT

## 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





# PLAN ORGANIZATION

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18 high-level strategies and 77 specific actions

TRANSPORTATION  
& UTILITIES

BUILDINGS &  
DEVELOPMENT

NEIGHBORHOODS  
& COMMUNITIES

GOVERNANCE &  
IMPLEMENTATION

# TRANSPORTATION + UTILITIES

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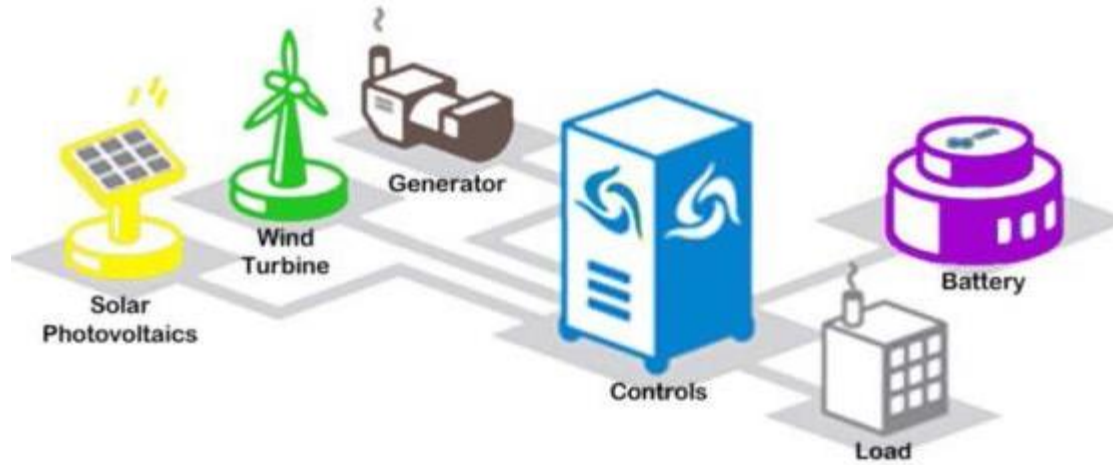
**GOAL:** Improve transportation and utility infrastructure to maintain viability during periods of extreme heat, extreme weather, and flooding.

#	ACTION
TU 1.0	Develop site-level adaptation plans for all at-risk facilities
TU 2.0	Increase the resilience of energy systems
TU 3.0	Increase the resilience of water systems
TU 4.0	Increase resilience of communication systems
TU 5.0	Increase resilience of transportation systems

Key Agencies & Partners: HSEMA, DOEE, DC Water, DDOT, PSC

# MICROGRIDS

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# BUILDINGS + DEVELOPMENT

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**GOAL:** Upgrade existing buildings and design new buildings and development projects to withstand climate change impacts.

#	ACTION
BD 6.0	Provide back-up power for emergencies at all identified critical facilities
BD 7.0	Improve thermal safety of buildings during extreme heat events
BD 8.0	Pursue deep energy and water efficiency for all buildings
BD 9.0	Incorporate climate resilience into development planning and review
BD 10.0	Leverage land-use planning to promote resiliency
BD 11.0	Provide incentives to private property owners and developers for flood resilience

Key Agencies & Partners: DCRA, DGS, OP, DOEE, HSEMA, DCHA, DHCD

# RESILIENT BUILDINGS

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# NEIGHBORHOODS + COMMUNITIES

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**GOAL:** Make neighborhoods and communities safer and more prepared by strengthening community, social, and economic resiliency.

#	ACTION
NC 12.0	Improve emergency preparedness and planning related to climate change
NC 13.0	Reduce risks of extreme heat and the urban heat island
NC 14.0	Strengthen Community Cohesion for Safety + Resilience
NC 15.0	Develop Eco-Resiliency District and Community Resilience Hubs

Key Agencies & Partners: DOH, HSEMA, DMGEO, OP, DOEE, DOES, DDOT, Serve DC



# COOL NEIGHBORHOODS

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Cool roofs, trees, light colored pavement, and green space can reduce urban heat island impacts and save lives.

# GOVERNANCE + IMPLEMENTATION

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**GOAL:** Establish the policies, structures, and monitoring and evaluation procedures to ensure successful implementation of the adaptation plan.

#	ACTION
GI 16.0	Continue to analyze climate vulnerability to account for latest science
GI 17.0	Integrate Climate Ready DC into related planning efforts
GI 18.0	Establish the necessary structures to ensure successful implementation

Key Agencies & Partners: OCA, OCFO, DOEE, EOM

# IMPLEMENTATION:

## FY17-18 OUTLOOK

- Additional Analysis of Priority Planning Areas
- Establish an Equity Advisory Group
- Develop Implementation Plan & Design Guidelines
- Interagency Coordination
  - 100 Resilient Cities Strategy Development
  - Comprehensive Plan
  - All Hazard Mitigation Plan Update
  - Clean Energy DC



# Mayor's Order to Adopt the Paris Agreement



# QUESTIONS?

**Kate Johnson**

**Email:** [katherine.johnson@dc.gov](mailto:katherine.johnson@dc.gov)

[www.doe.dc.gov/climateready](http://www.doe.dc.gov/climateready)

