



Progress update on **Climate Change Adaptation** Strategy (Dec. 2018)

- **Background**
- Progress Highlights
- > Next Steps



# **Carbon Action**

### MITIGATION

Avoid the unmanageable

# ADAPTATION

Manage the unavoidable

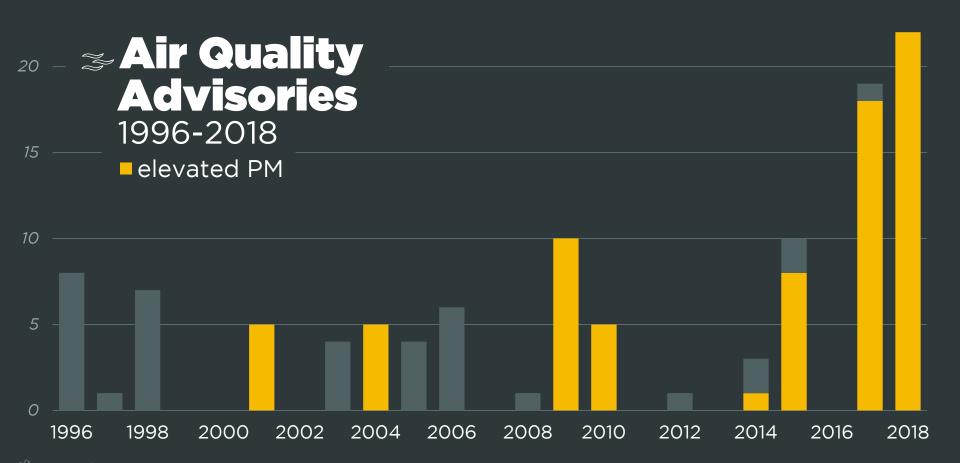


# Low Carbon Resilience

Integrating strategies
that reduce carbon pollution
and vulnerabilities
to climate change

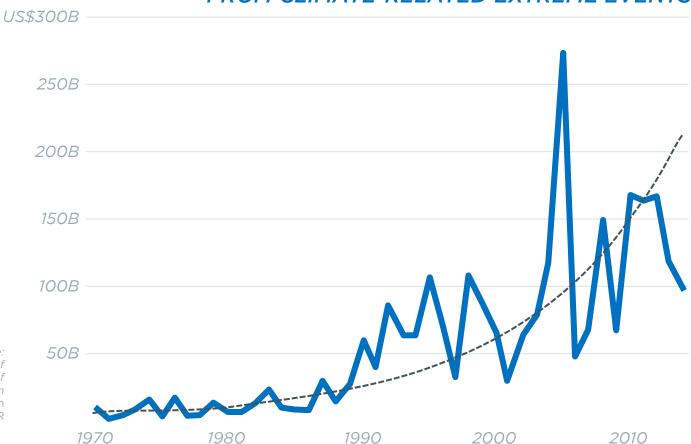








## GLOBAL ECONOMIC LOSSES FROM CLIMATE-RELATED EXTREME EVENTS



adapted from source:
"The Economic Impacts of
the Weather Effects of
Climate Change on
Communities", Green
Analytics Corp. and OCCIAR



# Adaptation Cost vs Benefits

#### saves

**\$1** spent in preparation



- *Global Commission on Adaptation*
- The Economist

Federation of Canadian Municipalities



Burrard Holet

Grandview-Woodland

### Climate change disproportionally impacts individuals, groups and neighbourhoods

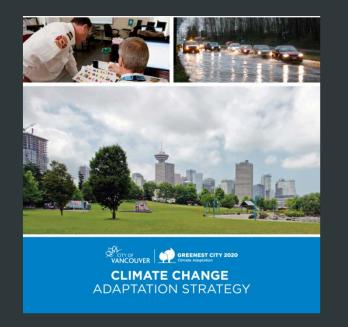
Vancouver

Hastings-Su

Still Creel



# **Climate Adaptation in Vancouver**







### **Vancouver Priority Risks**



SEWER SYSTEM IMPACTS

BUILDING DAMAGE COASTAL INFRASTRUCTURE IMPACTS ECOSYSTEM IMPACTS



### **Vancouver Priority Risks**



HEALTH IMPACTS

MALADAPTED BUILDINGS

**WATER SUPPLY**  NATURAL ASSETS



# **Vancouver Priority Risks**

INCREASED INTENSITY/FREQUENCY OF EXTREME EVENTS

NATURAL ASSETS RESIDENT SAFETY SERVICE DISRUPTION

CASCADING IMPACTS





SIDEM

### **BC Climate Risk Assessment 2019**

RISK EVENT		PRESENT-DAY LIKELIHOOD	2050 LIKELIHOOD	CONSEQUENCE	RISK SCORE AND RATING	
<b>(M</b> )	Severe wildfire season	3	4	4.5	18.0	High
( <u>k</u> z	Seasonal water shortage	4	5	3.4	16.9	High
	Heat wave	3	4	3.6	14.5	High
<u></u>	Ocean acidification	2	5	2.8	13.8	High
<b>(4)</b>	Glacier mass loss	1	5	2.5	12.5	High
	Long-term water shortage	3	3	4.0	12.0	High

Summary of Risk Assessment Rankings



**CORE** ACTIONS

**ENABLING ACTIONS** 





# Progress Update

- 84 Core Actions
- 17 Enabling Actions
- All on track: planning stage, underway or completed

# Progress Highlights











#### **CLIMATE ROBUST INFRASTRUCTURE**

Sewer & Rainwater Management Plan underway

Southlands Drainage
Study

pump station upgrades underway

Groundwater
Management
Strategy
scoping/initiation

working toward
15% reduction
per-capita potable
water use by 2030

Rain City Strategy Completed



#### **SECURITY SECURITY SE**

heat pump permitting streamlining

future climate loads incorporated into VBBL

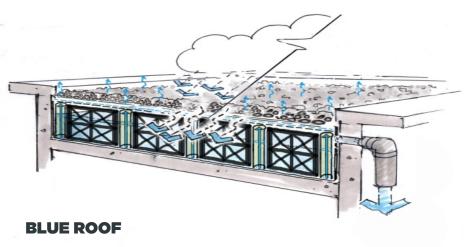
resilience checklist
large-site rezoning

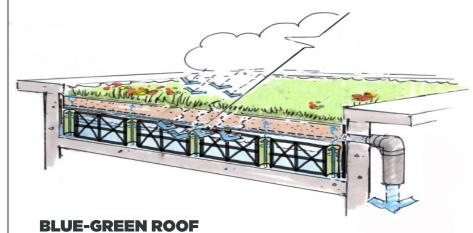
### thermal comfort

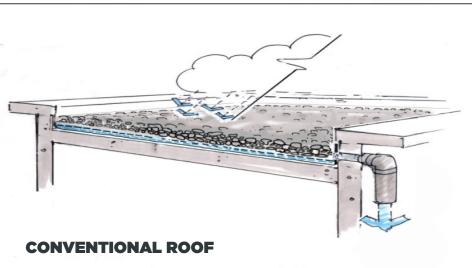
researching enhanced standards for 2021 Green Building Policy for Rezoning and future code

green infrastructure
in private buildings











#### ⇒ HEALTHY, VIGOROUS NATURAL AREAS AND GREEN SPACE

150,000 trees planted since 2011

Retain healthy mature trees

Biodiversity
Strategy
implementation

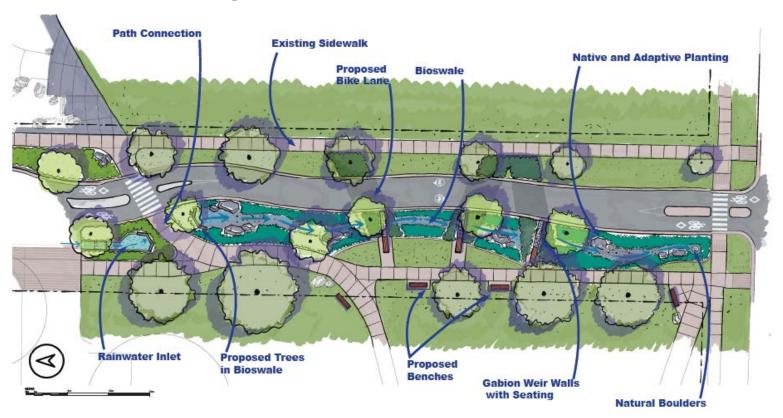
Stanley Park fire preparedness and fire fuel management

> DTES street tree planting coordination

forest
naturalization
expansion



#### **FOCUS PROJECT: PARKS**



### **Sunset Park Prince Edward Street Bioswale**

#### **PREPARED, CONNECTED COMMUNITIES**

universal personal preparedness

clean air spaces

life-sized board game pilot project

**Evergreen**engagement project

Climate Leaders

pilot project

**Cooling**Non-market housing





#### **COASTAL PREPAREDNESS**

### Shoreline Flood Protection Guidelines

two Engineering Performance Criteria Guidelines underway

Waterfront Road critical infrastructure collaboration

new St. Paul's
Hospital
adoption of Resilience
Rezoning Condition

Sea2City Coastal Design Challenge Phase 1 Engagement launch





# FOCUS PROJECT: SEA2CITY DESIGN CHALLENGE

urban development and ecological revitalization in False Creek and Fraser River foreshore

to inform next phase of Coastal Adaptation Plan

community values and design principles in False Creek and Fraser River foreshore

#### **ENABLING ACTIONS**

### **TCFD**

Vancouver Plan resilience integration

Asset
Management Policy
integration of climate risk

# continued work with partners

Addressing COVID-19 & overheating in non-profit housing











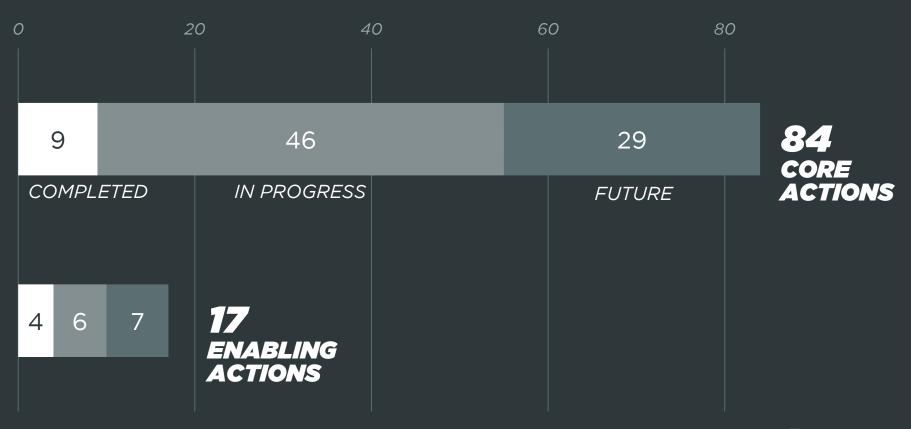
#### **≫ NEXT STEPS**

continue strategy implementation

adaptation & multi-hazard resilience into Vancouver Plan

next refresh
2023
(post-IPCC AR6)





# **Progress Update**