

Nature-based Solutions, Environmental Justice & Climate Adaptation in Urban Environments

Commission for Environmental Cooperation (CEC)
30th Regular Session of the CEC Council
Victoria BC June 29 2023

Doug Smith, City of Vancouver



Vancouver
Plan



Land acknowledgment

The City of Vancouver is located in the unceded and ancestral homelands of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səliłwətał (Tsleil-Waututh) Nations who have lived on and stewarded these lands and waters since time immemorial.

These lands continue to be occupied by settlers, and Indigenous peoples face ongoing dispossession and colonial violence.



Every fraction of a degree matters

A large crowd of people is gathered on a city street for a climate protest. Many individuals are holding up handmade signs with messages such as "LOOKING FORWARD TO A BRIGHT WONDERFUL FUTURE", "CLIMATE ACTION NOW", "THERE IS NO PLANET B", and "ANIMAL SLAVERY FEEDS GLOBAL WARMING". Some protesters are also carrying flags, including a Canadian flag and a red flag with a yellow sun symbol. The background shows urban buildings, a bridge, and overhead power lines under a cloudy sky.

CEAP 2022 Annual Report | 2023-02-15 | 3

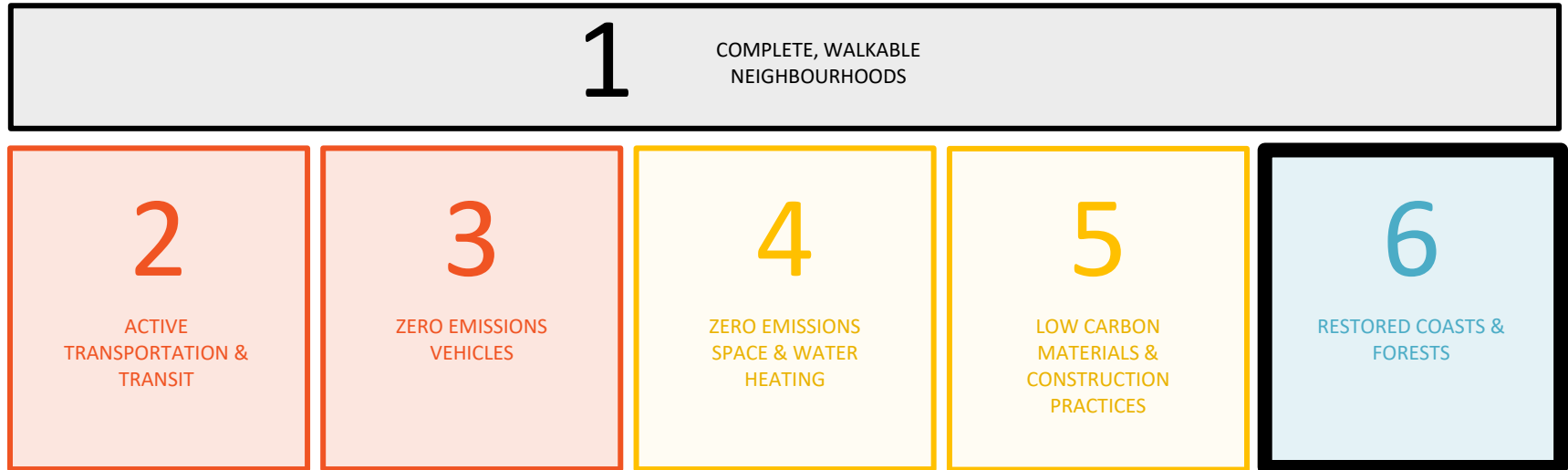
Photo: Flickr - Hillel Sani



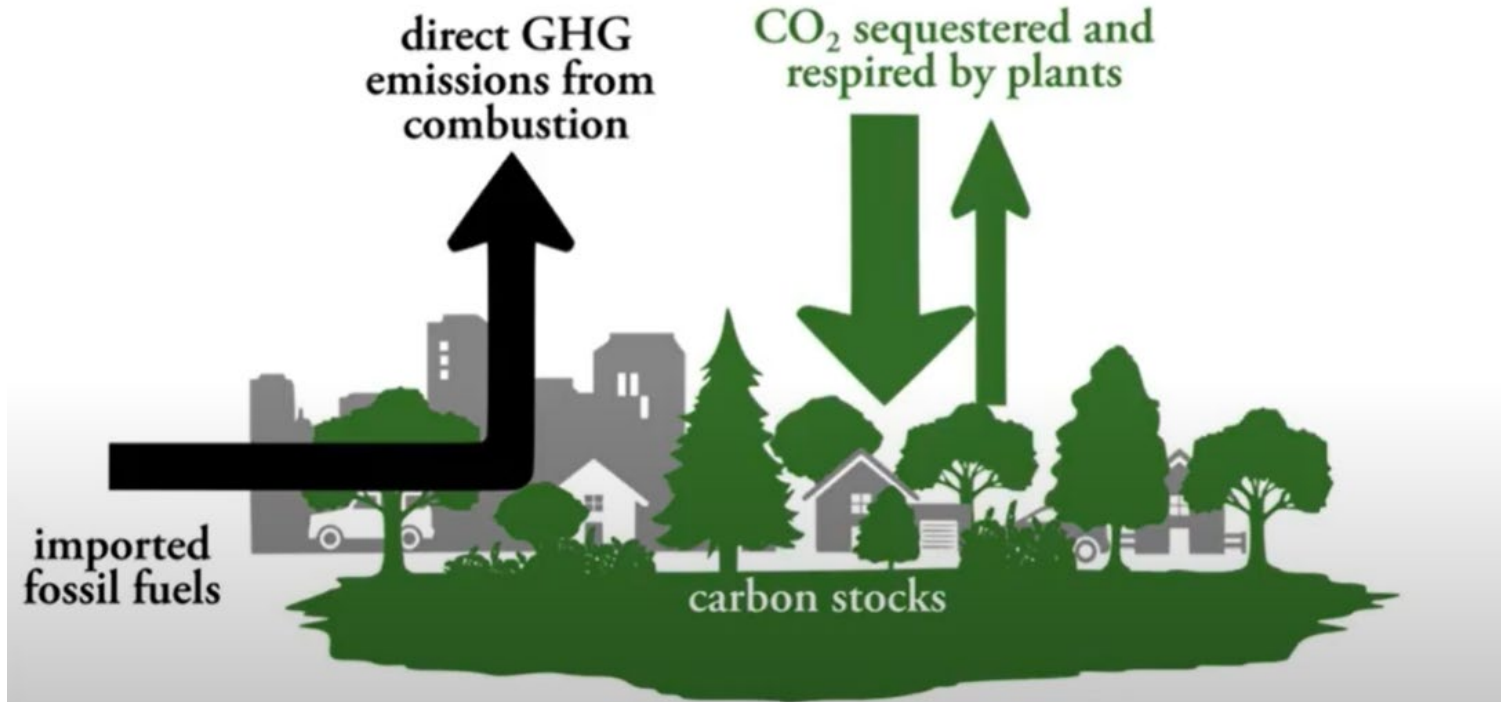
Climate Emergency Action Plan



Climate Emergency Action Plan



Carbon Mitigation



Current baseline inside city

PATHWAY	NET BIOSEQUESTRATION <i>tCO₂e/year</i>
Street + Private Trees	13,147
Forest + Park Trees	2,068
Urban Areas	371
Wetland	228
Grassland	4
TOTAL	15,819

Vancouver target: 250,000 tCO₂/yr by 2050

VANCOUVER

Proposed addition to baseline*:

5,000

tCO₂/yr by 2050

* 15,819 tCO₂e/yr baseline

REGIONAL APPROACH

Report back in

2024

with a proposed target for outside of Vancouver

Natural Climate Solutions (NCS) - Benefits



Climate Mitigation



Carbon Sequestration



Emissions Reduction



Adaptation & Climate Resilience



Heat Management



Reduced Drought Risk



Reduced Flood Risk



Reduced Fire Risk



Improved Air & Water Quality



Increased Biodiversity



Equity



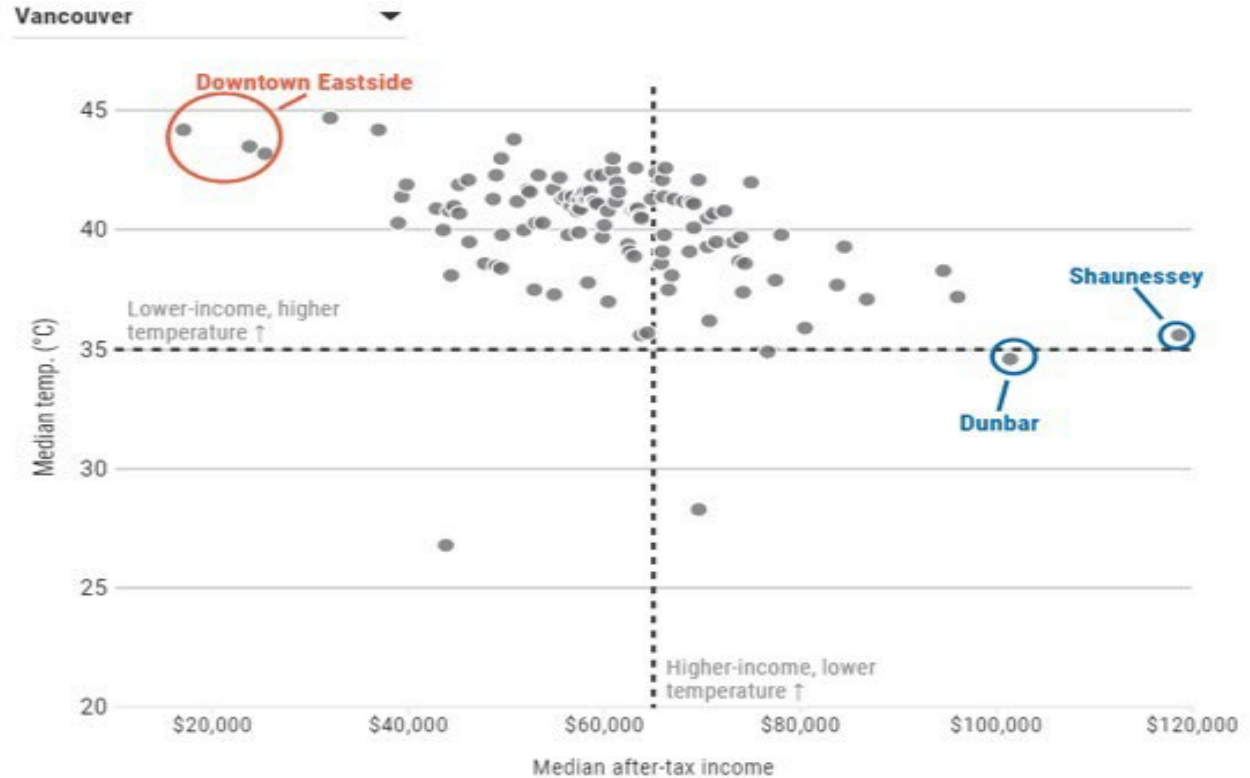
Equity-Based
Economic
Opportunities



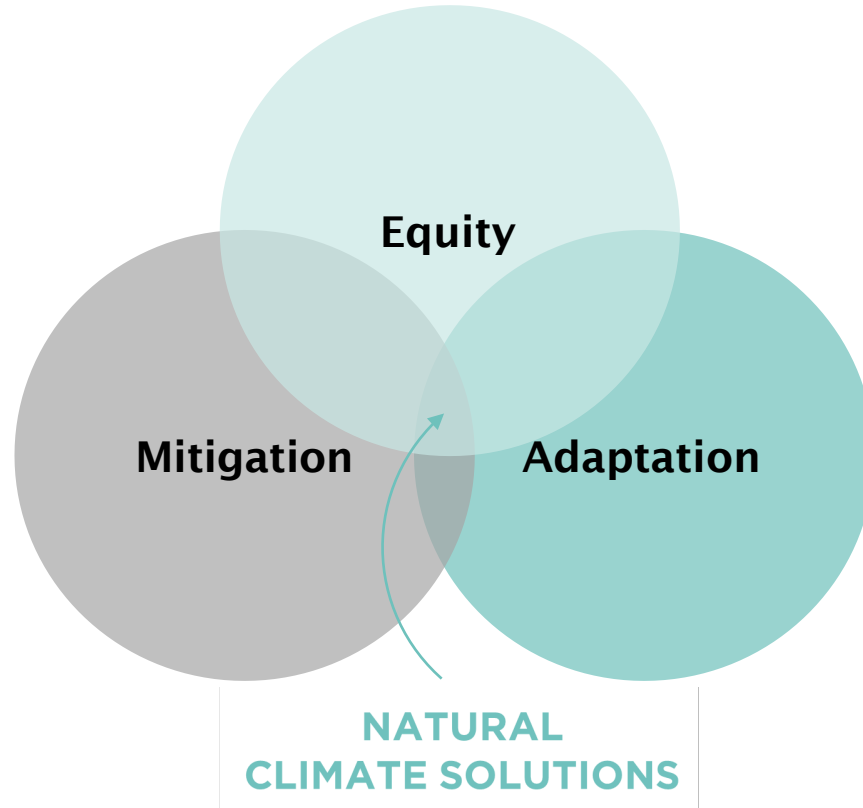
Equitable
Distribution of
Ecosystem Services

Climate impacts + equity

Neighbourhood
temperatures
during 2021 heat
dome by income

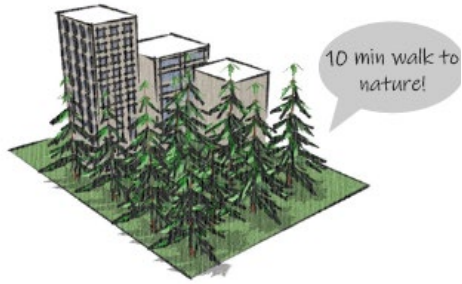


Natural Climate Solutions (NCS)

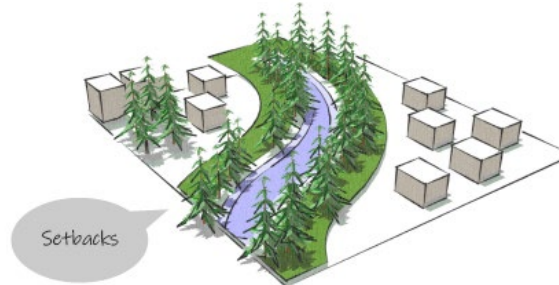


Principles of Natural Areas

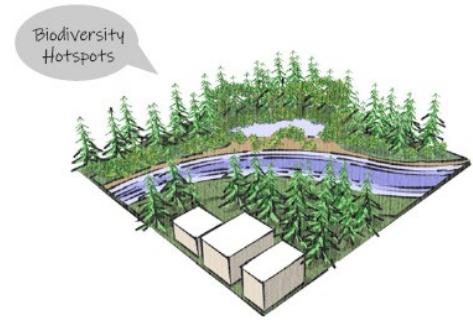
PEOPLE NEED NATURE



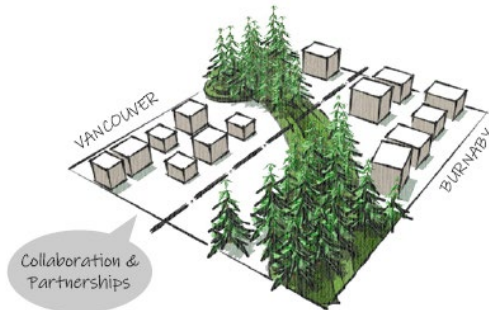
NATURE NEEDS SPACE



NATURE DEPENDS ON CRITICAL PLACES



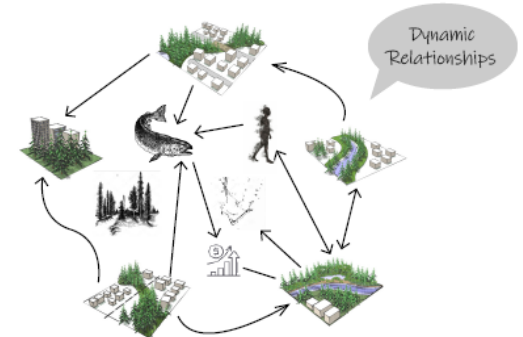
NATURE DOES NOT KNOW PROPERTY BOUNDARIES



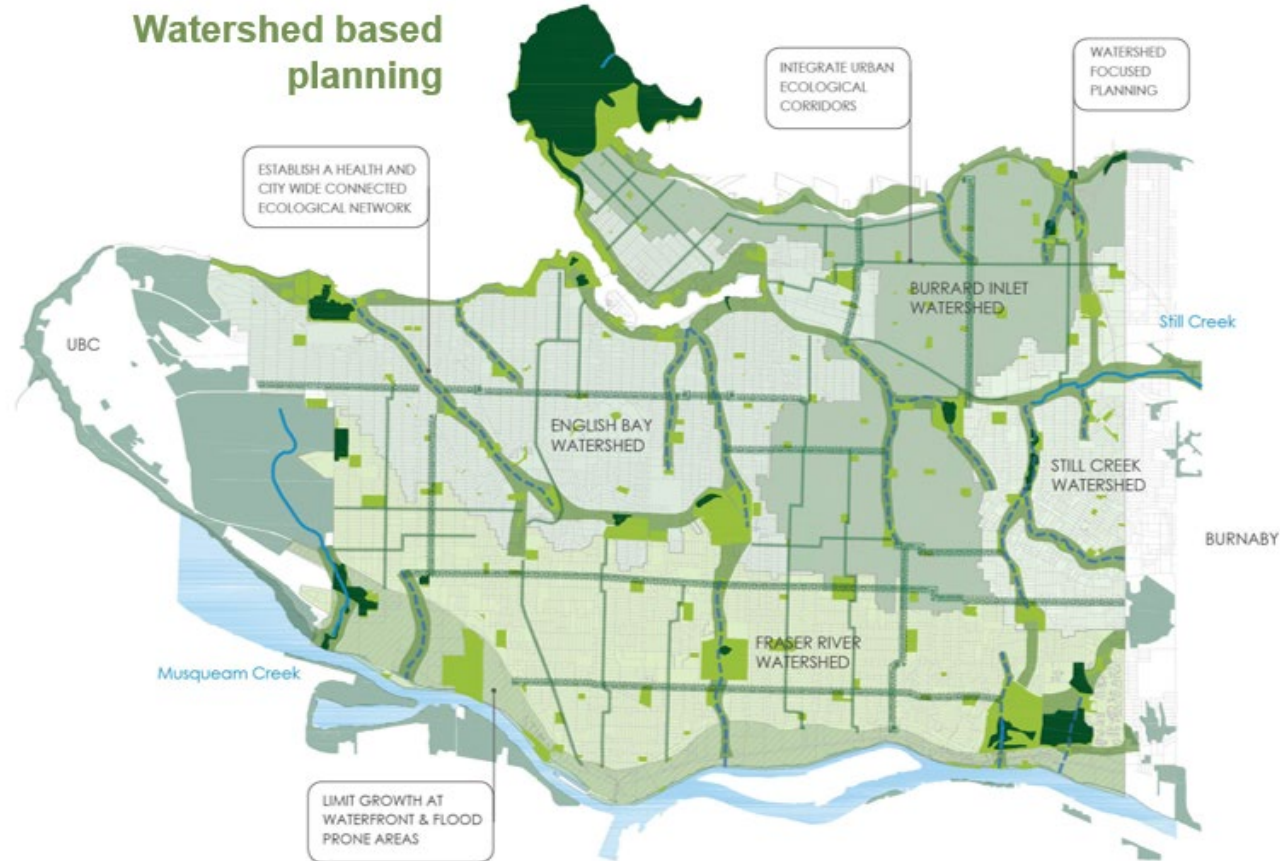
NATURE NEEDS CONNECTIVITY



NATURE IS COMPLEX & NEEDS HOLISTIC THINKING



Environmental Land Use Plan



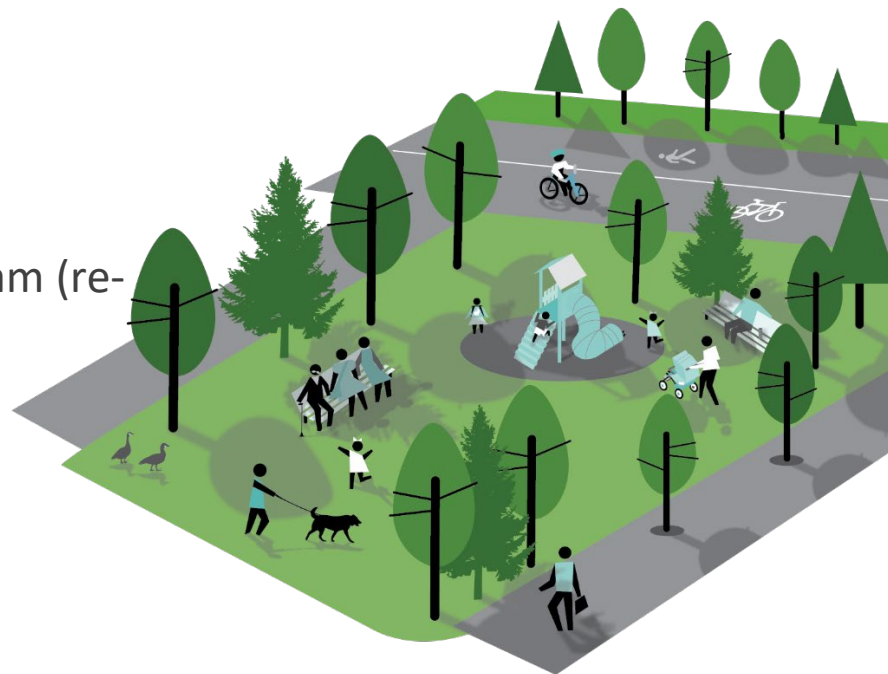
Retain and enhance NCS on Private Land

- Update tree bylaw
- Flexible land use planning
- Catalyze business action on NCS



Enhance NCS on public land

- Update Urban Forest Strategy
- Amplify the Naturally Managed Areas program (re-wilding)
- Trees in equity zones, school hot blocks
- Supporting actions: dedicated funding, soil guidelines, natural asset inventory



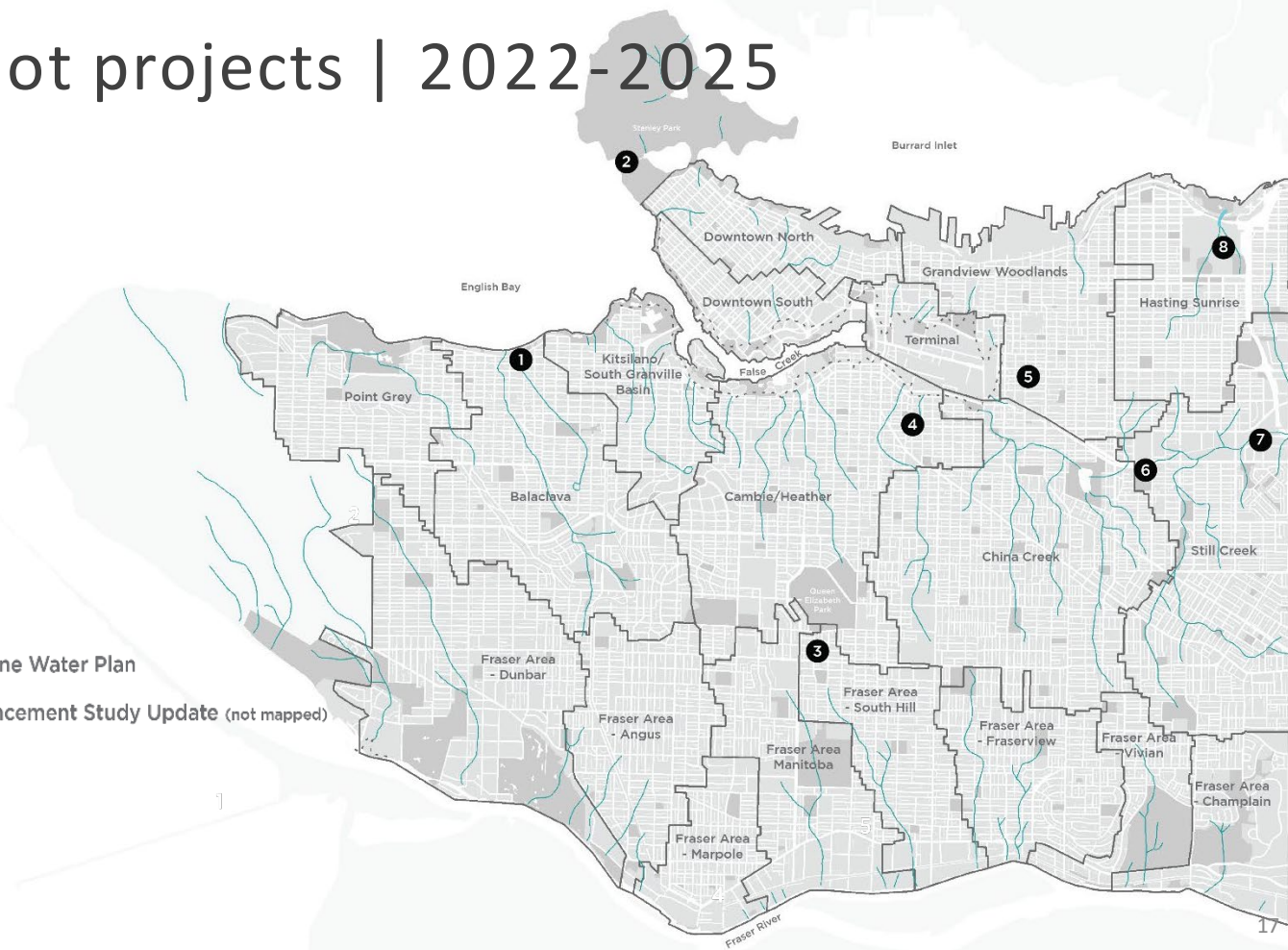
Inside city pilot projects | 2022-2025

- 1 Tatlow & Voluneteer Park
- 2 Lost Lagoon Restoration
- 3 Alberta Street & Columbia Park
- 4 St. George Rainway
- 5 Woodland Street & E 2nd Avenue
- 6 Beaconsfield Park
- 7 Still Creek Cornett Road
- 8 Hastings-Sunrise/ Renfrew Creek One Water Plan
- 9 Still Creek Rehabilitation and Enhancement Study Update (not mapped)

 Historic Streams

 Historic Shoreline

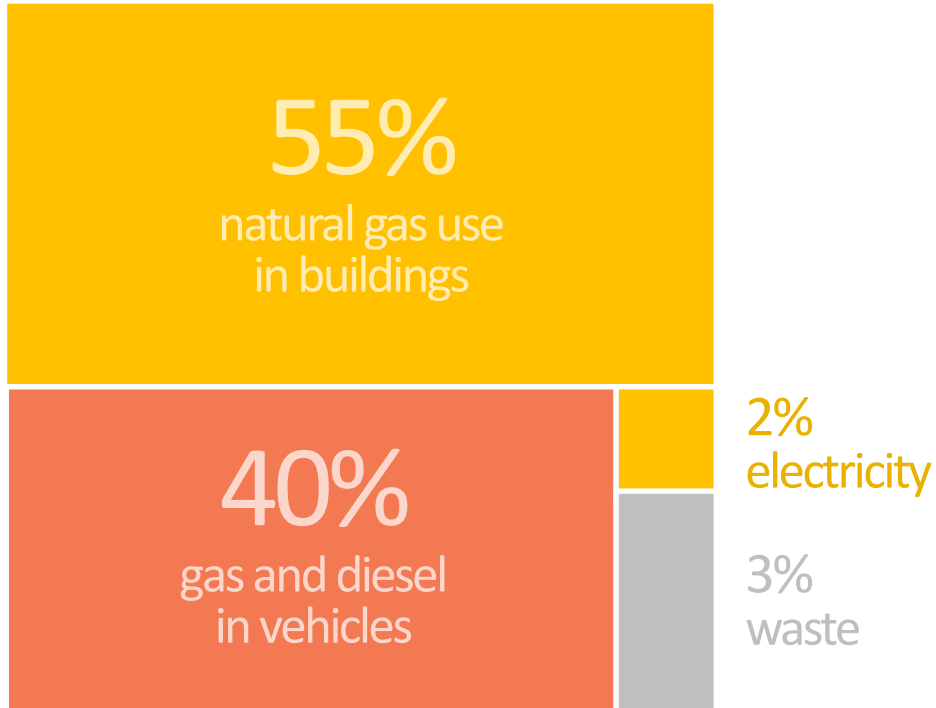
 Watersheds





THANK YOU

Vancouver's Carbon Pollution



*Community-wide
emissions, 2021*

(GPC Basic, Scopes 1 and 2)

City Tools

