

# New Westminster Biodiversity and Natural Areas Strategy

April 25, 2022

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**ON TABLE**

City Council Meeting

April 25, 2022 re Item 5.1

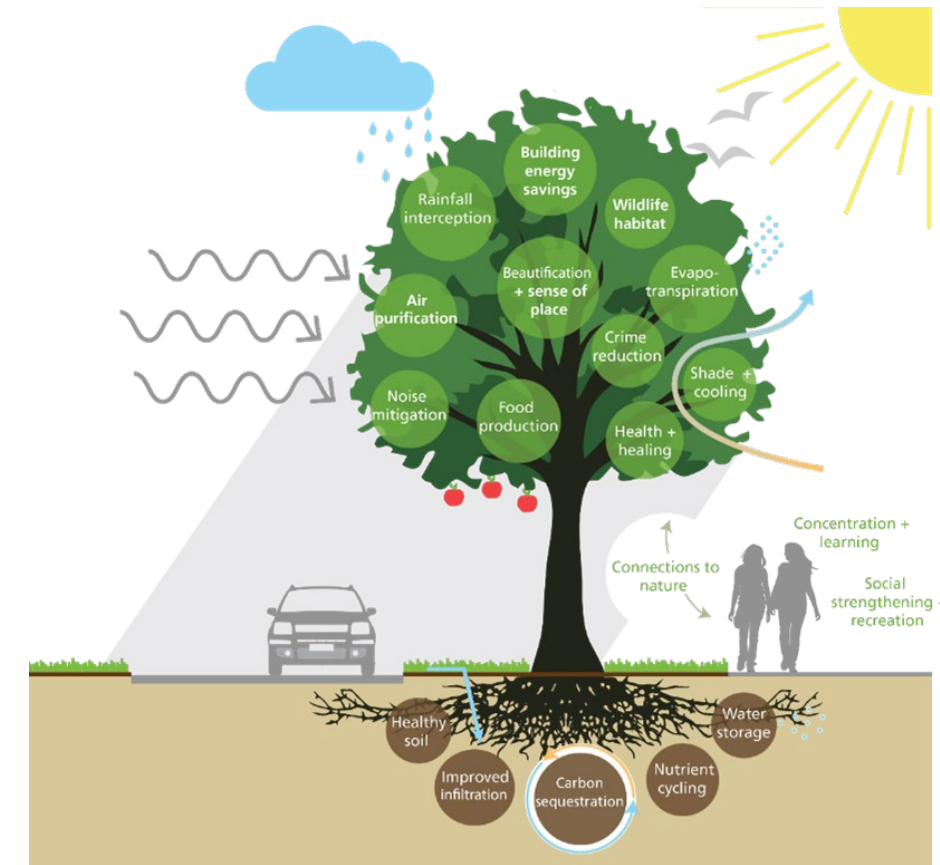
*Biodiversity and Natural Areas Strategy*



# The Challenge

- **Biodiversity is disappearing:** Estimated that species are disappearing at 50-100 times the natural rate as a direct result of human activities (MetroVan, 2006).
- **New Westminster is largely developed:** It has distinct natural areas and established urban areas
- **Limited resources for conservation:** The City has greatest control over publicly-owned land. It has some influence on private lands through regulatory tools (zoning), incentives and education.

*The Challenge - How to maximize biodiversity within this context?*



- Analysis of natural areas and biodiversity
- Constraints and emerging threats
- Toolkit of recommendations
- Guidelines for staff, residents, developers
- Identification of a network of priority areas for acquisition and enhancement
- Monitoring framework



# Where does this strategy fit in?

## HIGHER-LEVEL PLANS



Supports bold steps:  
#6 Robust Urban Forest  
#7 Quality People-Centred Public  
Realm



Environmental  
Strategy & Action  
Plan (ESAP)

## PLANNING TOOLS



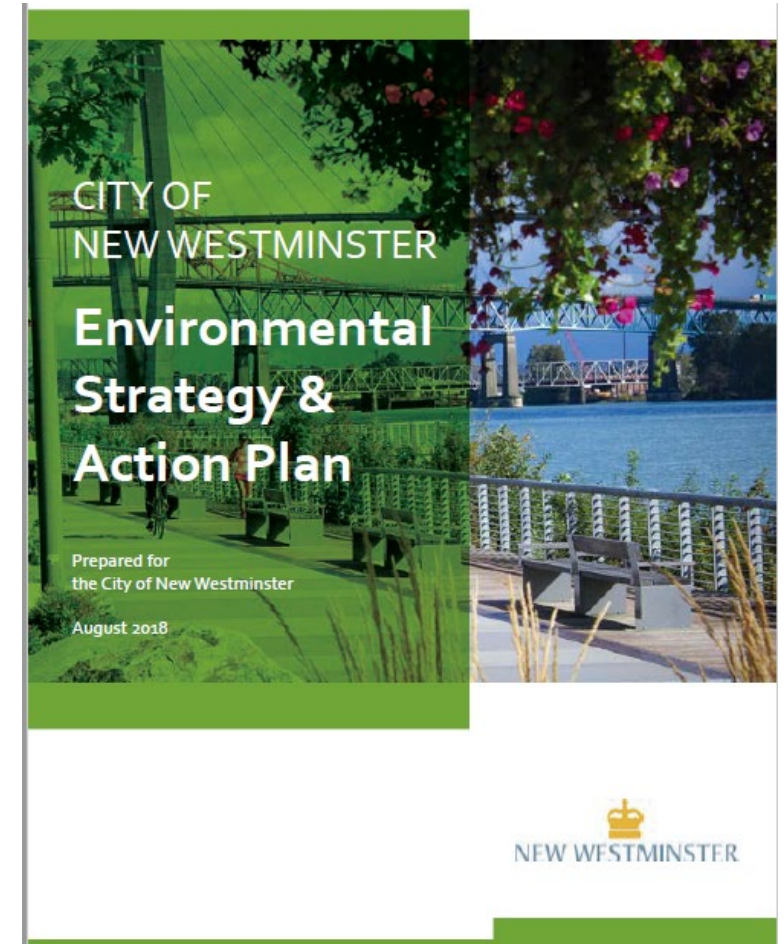
# Where does this strategy fit in?

## Environmental Strategy & Action Plan (2018)

***“New Westminster is a responsible leader that takes bold action on climate change, protects and restores its natural areas, and minimizes the environmental footprint of its highly urbanized community.”***

The vision aims to “enhance natural areas and integrate nature into the urban environment.”

1. *Protecting and enhancing river corridors and watercourses;*
2. *Protecting and restoring the ecological integrity, biodiversity, and connectivity of natural areas;*
3. *Integrating environmental consideration into city activities and practices.*



# Consultation

## PROJECT PHASE

FIELD ASSESSMENT, INVENTORY & ANALYSIS

GREEN INFRASTRUCTURE NETWORK

STAKEHOLDER AND PUBLIC CONSULTATION

DEVELOPMENT OF STRATEGY REPORT



STARTUP

January-April 2020



ENVIRONMENT  
+ CLIMATE  
ADVISORY  
COMMITTEE

May 2020



STAFF INTERVIEWS  
+ DEPARTMENT  
WORKSHOPS

June-July 2020



CITY WEBSITE  
+ INTERACTIVE  
STORYMAP

August-September  
2020



December 2020

ENV & CLIMATE  
TASK FORCE  
PRESENTATION

September 14 2020



PUBLIC  
INFORMATION  
SESSION

September 16 2020



FIPR TASK FORCE  
PRESENTATION

October 2020



ENVIRONMENT  
+ CLIMATE  
ADVISORY  
COMMITTEE

December 2020

FIRST NATIONS INPUT



COUNCIL  
PRESENTATION

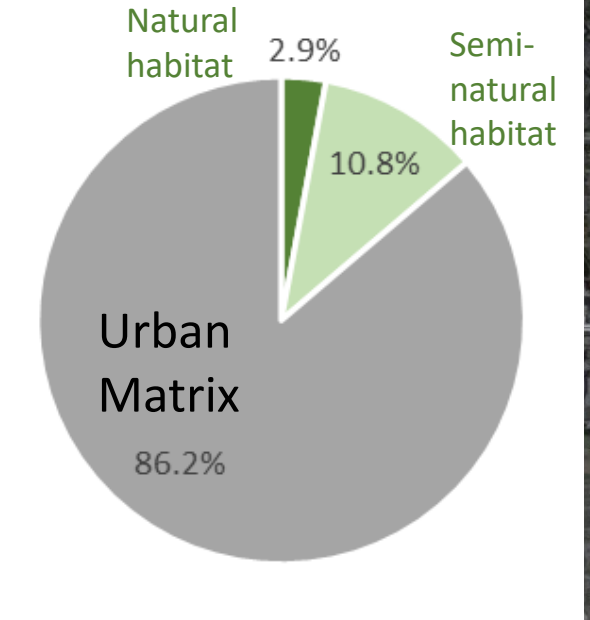
April 2022

## CONSULTATION

# HABITAT TYPES

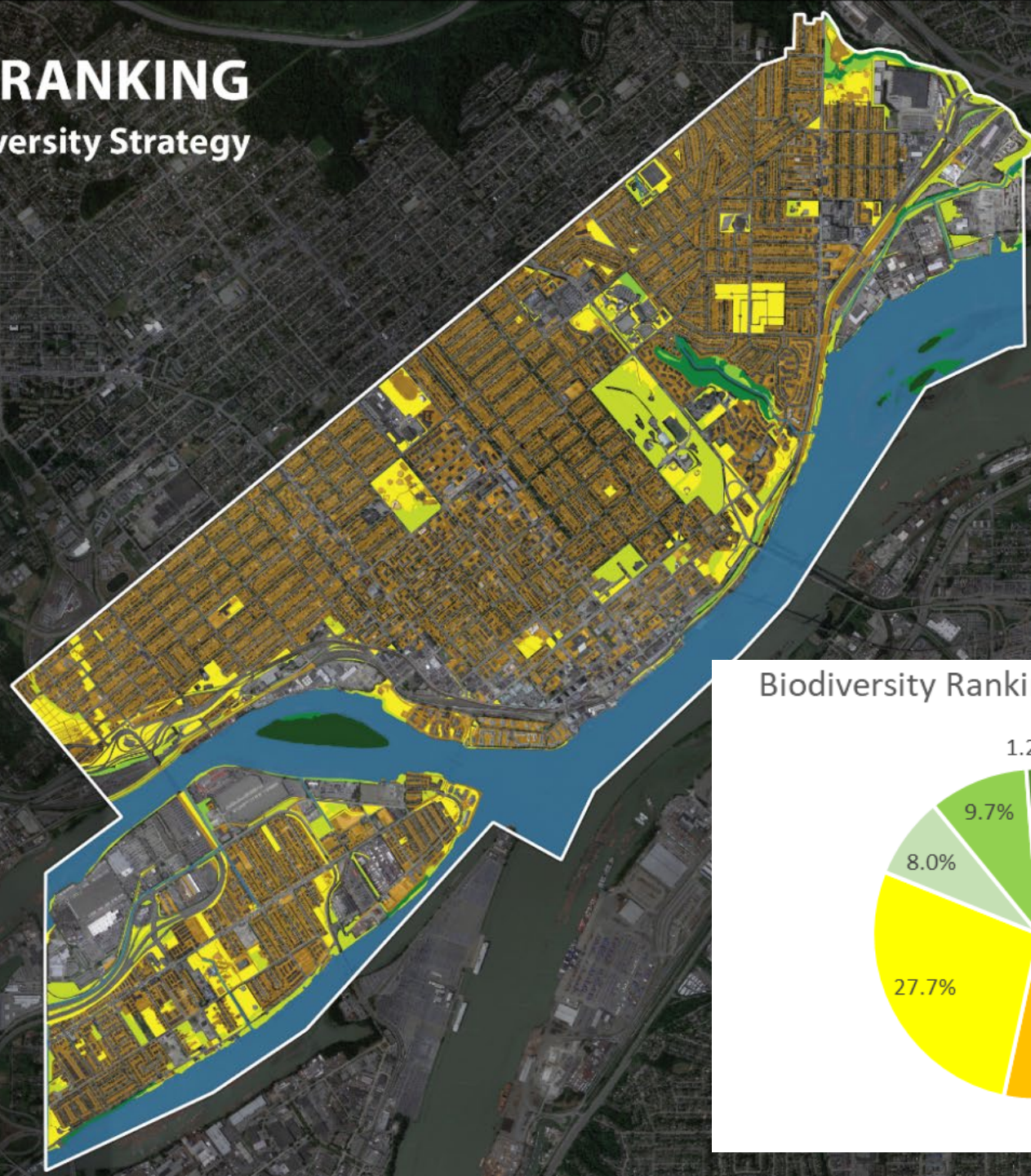
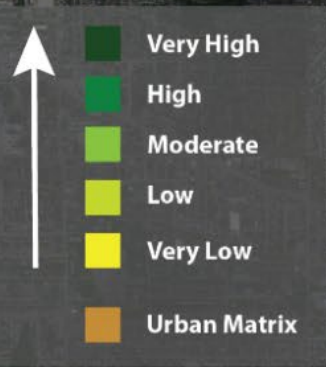
## New Westminster Biodiversity Strategy

- Urban Tree
- Evergreen
- Mixed
- Deciduous
- Shrub
- Herb & Grass
- Managed Grass
- Slough
- Stream
- Lake or Pond
- Wetland
- Garden
- Ditch

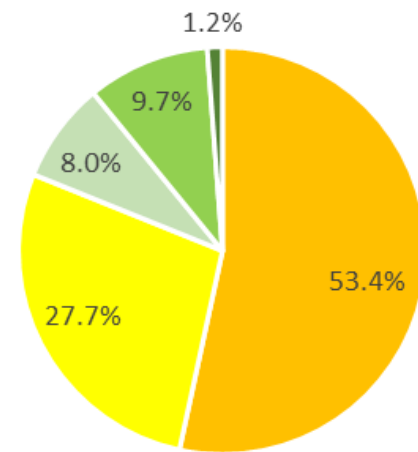


# BIODIVERSITY RANKING

## New Westminster Biodiversity Strategy



Biodiversity Ranking of Habitat Areas





## Protect the remaining habitat areas in the City

- Parks master plans
- Development permit areas/guidelines
- Adopt a no net loss of habitat in parks
- Designate wildlife refuge areas



## Acquire new habitat areas

- Land acquisition
- Wider riparian setbacks
- Covenants/right of ways



## Connect habitat areas – The Green Infrastructure Network

- A network of key habitat areas and corridors
- Helps to prioritise acquisition and restoration efforts
- Includes corridors for people, public and private lands.



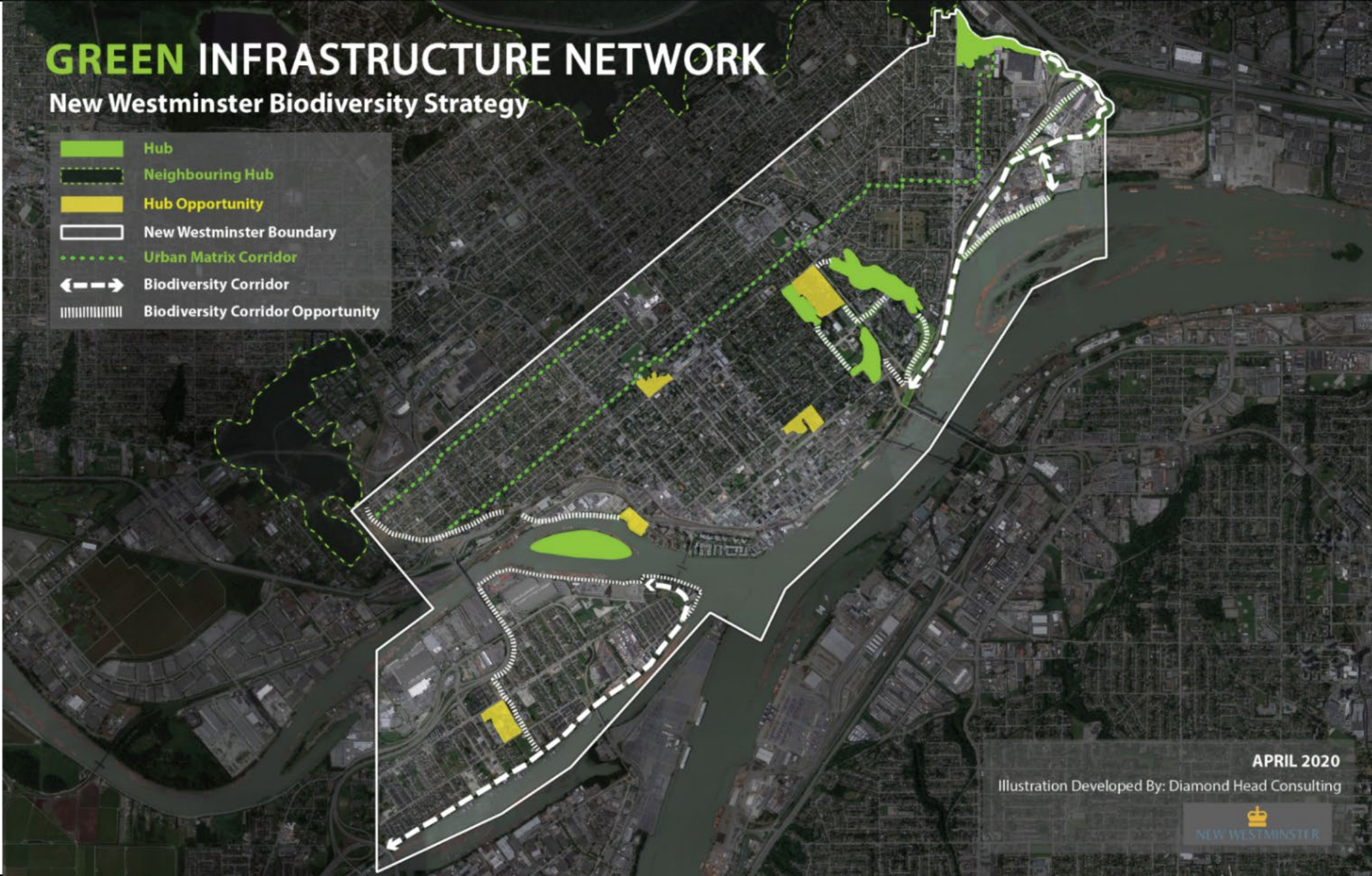
# Green Infrastructure Network



# GREEN INFRASTRUCTURE NETWORK

## New Westminster Biodiversity Strategy

-  Hub
-  Neighbouring Hub
-  Hub Opportunity
-  New Westminster Boundary
-  Urban Matrix Corridor
-  Biodiversity Corridor
-  Biodiversity Corridor Opportunity



APRIL 2020

Illustration Developed By: Diamond Head Consulting



## Enhance the quality of habitat

- Natural Area Parks
- The Fraser and Brunette Rivers
- Urban Parks
- City Streets and Greenways
- Residential Properties
- High Density Development



## Natural Area Parks

- Planting trees and plants to improve species diversity
- Installing specific habitat features (nesting and roosting)
- Designating wildlife refuge areas
- Removing invasive plant species
- Protecting wildlife trees
- Add large woody debris
- Install water features



## Private Residences

- Plant trees
- Native gardens
- Water features
- Pollinator gardens
- Bird friendly windows
- Managed lighting
- Mason bee homes
- Bat boxes
- Bird nesting boxes
- Controlled lighting





# Enhancing Greenways



## Key

- 1 Pollinator plants
- 2 Bioswale
- 3 Diverse tree planting
- 4 Signage for Greenway Corridor
- 5 Native plants

## Four areas of study - consistent with the Master Tree Planting Plan


1. Queensborough
2. Brow of the Hill, Downtown
3. Massey Victory Heights, McBride Sapperton, Brunette
4. Connaught Heights, West End, Moody Park, Glenbrooke North, Queens Park



## Indicators to track biodiversity and natural area health over time

- Tree canopy cover
- Cover of natural habitat areas
- Spread of invasive plant species
- Birds species from annual counts
- Presence of keystone indicator species
- Riparian condition of the Fraser and Brunette



A low-angle photograph of a forest with tall trees and sunlight filtering through the canopy. The image is oriented vertically, with the top of the image showing the ground and the bottom showing the sky. The trees are tall and thin, with a dense canopy of green leaves. Sunlight is visible at the bottom center, creating a bright spot and lens flare. A semi-transparent white horizontal band is overlaid across the middle of the image, containing the text.

Thank you!  
Questions?