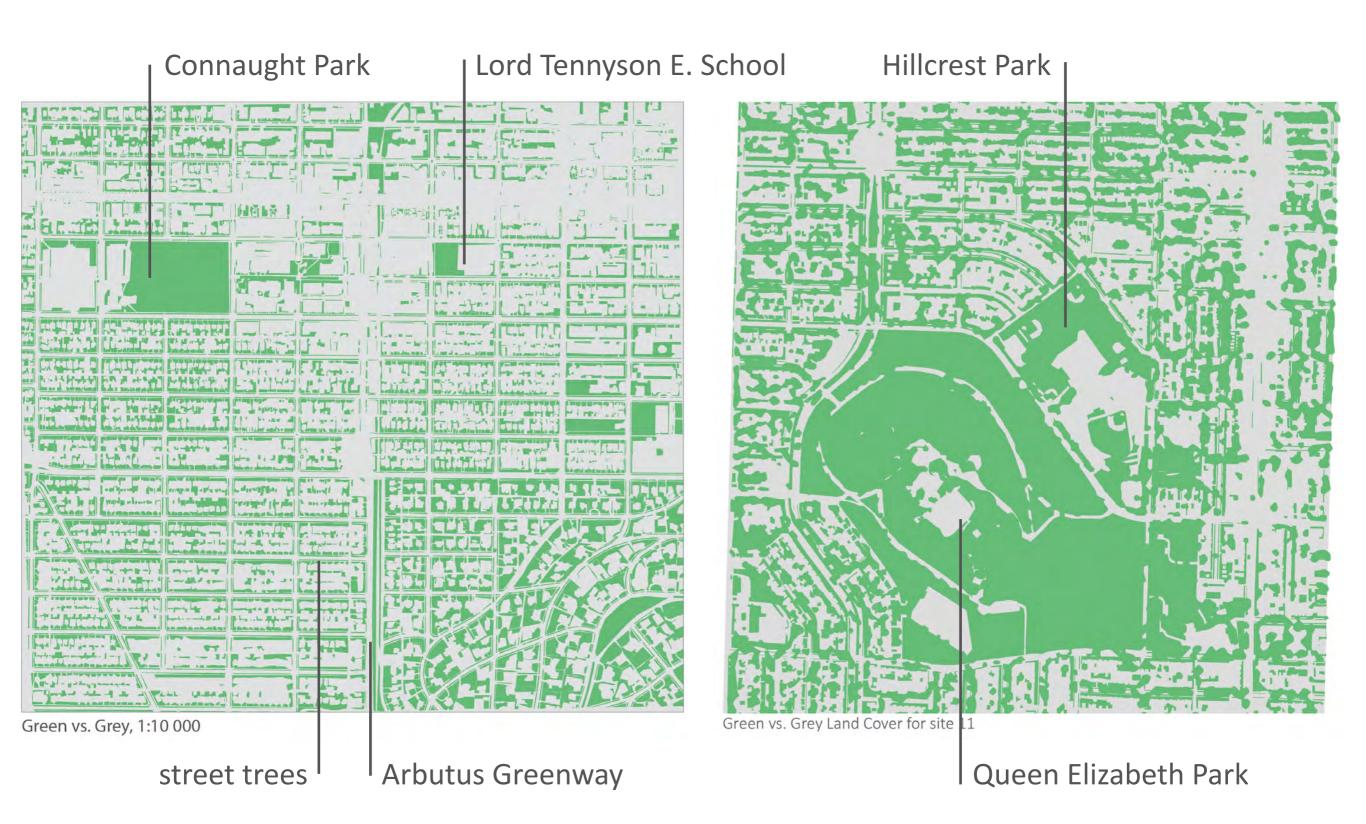
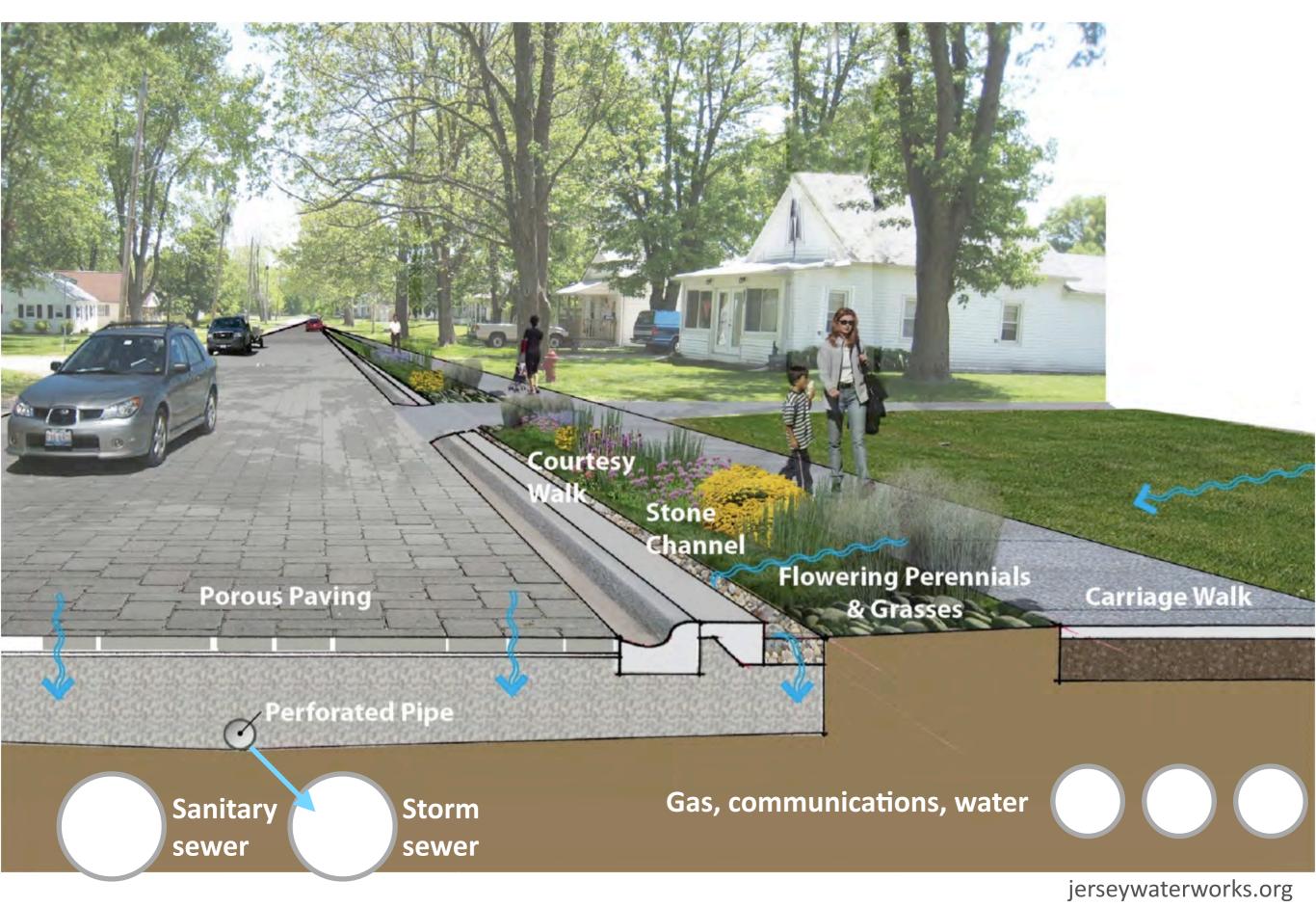
UBC School of Architecture and Landscape Architecture LARC 444/553 Green Network Planning

GOVERNANCE OF URBAN GREEN NETWORKS

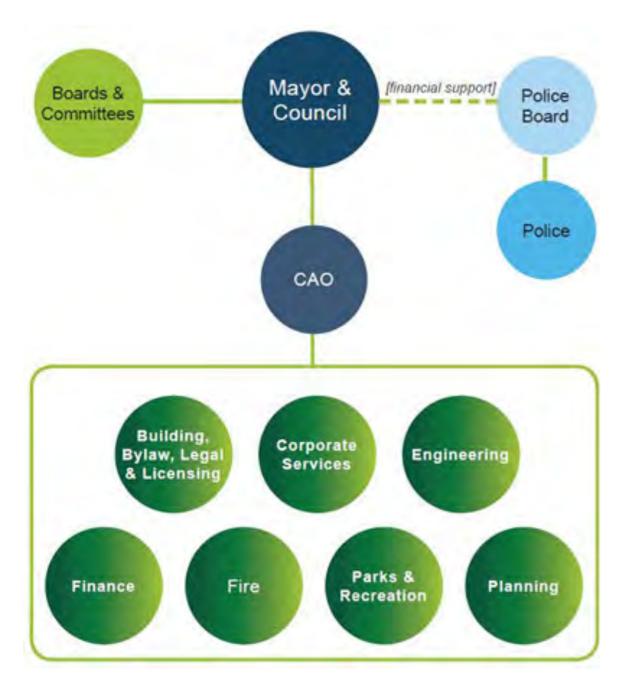
Who plans and manages the green in these images?



Who plans and manages the green in this image?



GOVERNANCE OF URBAN GREENSPACES



City of Saanich organizational chart

What do I mean by governance?

Who governs urban green spaces? levels of government jurisdiction

How are agencies organized? the institutional structure and relationships



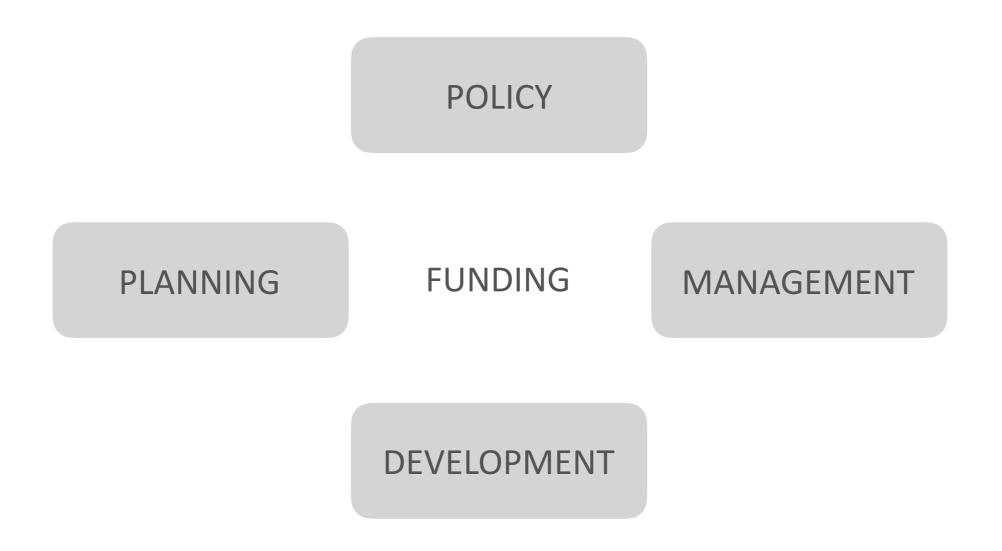


Governance What do regional/local governments do?

make and administer policy plan for future provide funding (from taxation) managing and maintaining provider of goods and services- i.e. streets, parks, schools, emergency services

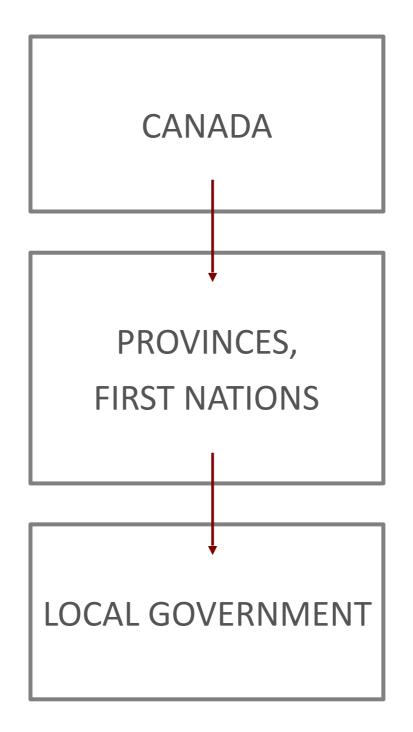
land use control- what is allowed where

democracy- represent a community of peopleopportunity for citizens to have a voice in governing CORE RESPONSIBILITIES- PLANNING AND MANAGEMENT



LEGAL CONTEXT

CANADIAN LEGAL STRUCTURE: Creating Law-legislation



CANADIAN LEGAL STRUCTURE

CONSTITUTION ACT OF 1867

• establishes federal and provincial authority

FEDERAL JURISDICTION

The constitution Federal taxation/ tax law *Immigration/ customs* National security First Nations Air Water **Oceans & fisheries** Federal crown lands Criminal law

PROVINCIAL JURISDICTION

Provincial taxation Local affairs (includes land use) Health safety welfare Provision of Medical services Education Provincial resources Business practices Criminal law

FEDERAL JURISDICTION- Which types impact green networks?

The constitution Federal taxation/ tax law Immigration/ customs First Nations Air Water (freshwaters) Oceans & fisheries Federal crown lands EXAMPLES Coastal Fisheries Protection Act Environmental Assessment Act Forestry Development & Research Act Historic Sites and Monuments Act Migratory Birds Convention Act National Parks Act Plant Quarantine Act Wildlife Canada Act

PROVINCIAL JURISDICTION

Provincial taxation Local affairs (land use) Health safety welfare Provision of Medical services Education Provincial resources Business practices Criminal law EXAMPLES BC Community charter The Vancouver Charter Local Government Act

BC Park Act Fish Protection Act (Riparian Area Reg's) BC Wildlife Act

LOCAL JURISDICTION

BC COMMUNITY CHARTER- establishes municipal governments VANCOUVER CHARTER- establishes Vancouver's authorities BC LOCAL GOVERNMENT ACT- authorizes Regional Districts

> LOCAL GOVERNMENTS: Municipal services Public safety Building codes (shared with BC) Land use plans, zoning Protection of natural environment Animal regulations

> B.C.- REGIONAL DISTRICTS: Provision of water, sewer, garbage, transportation services Regional growth planning

Who plans and manages green spaces in cities?

What agencies/departments are involved?

Who has what responsibilities?

Who else helps to plan and manage urban green spaces?

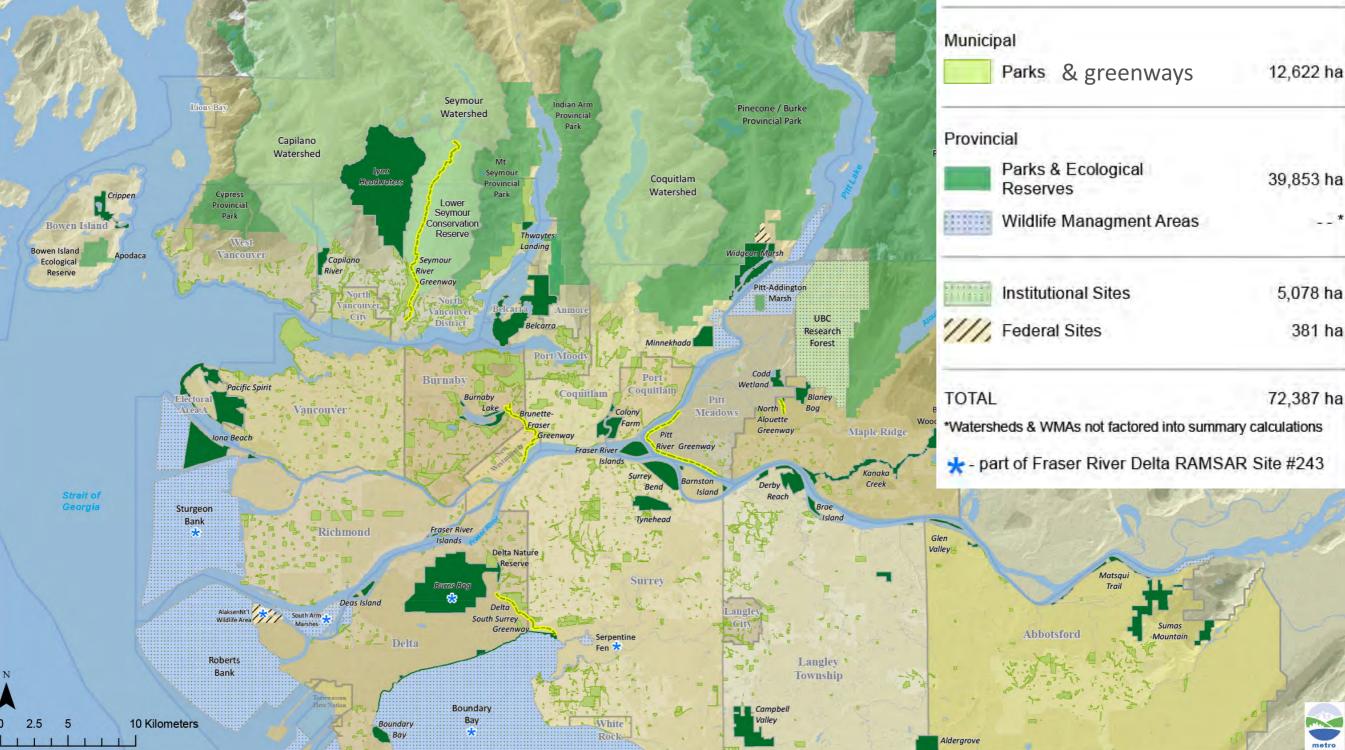
METRO VANCOUVER

Regional Parks

Greenways

Watersheds

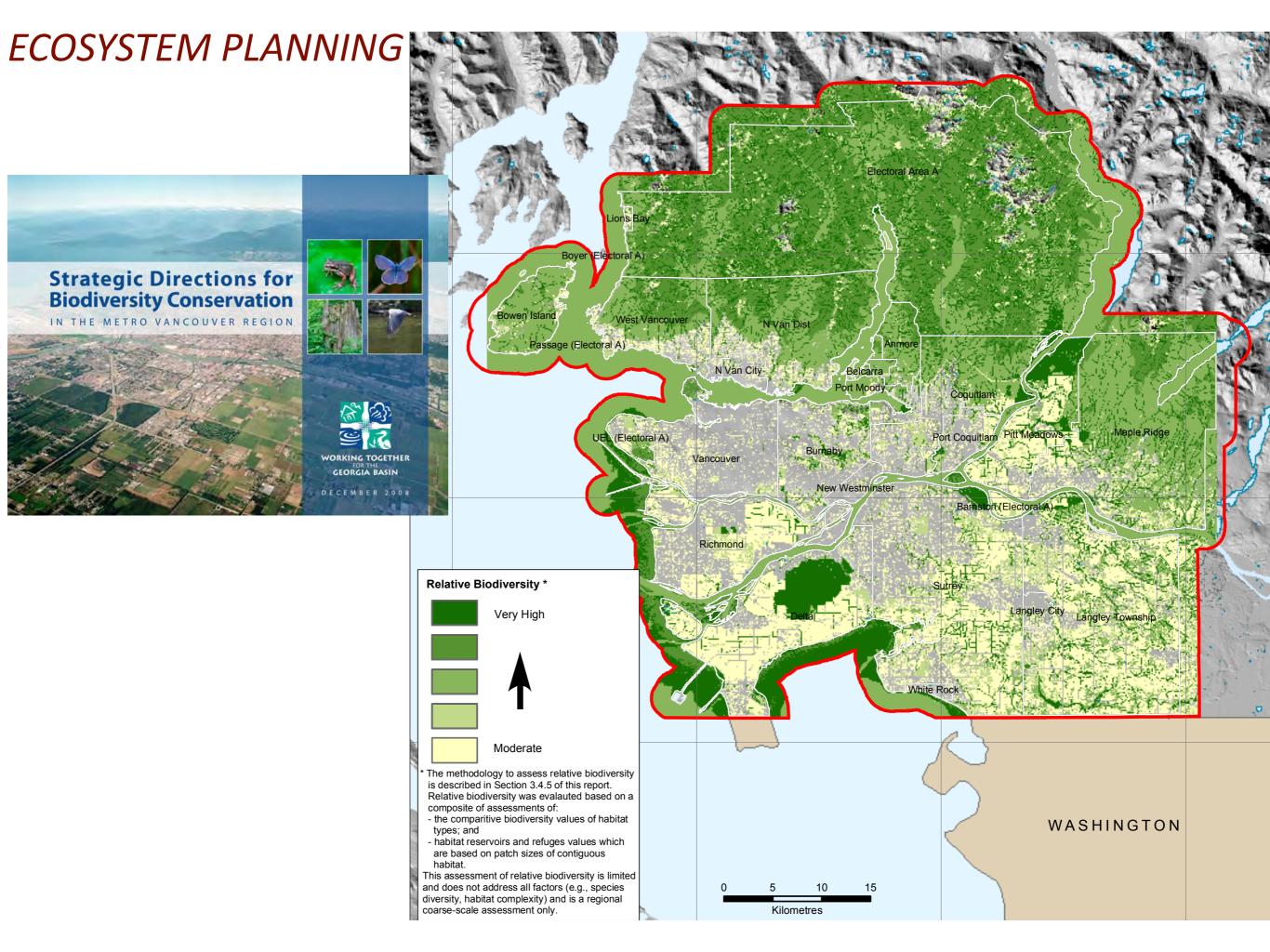
14,452 ha



Rock

JURISDICTIONS IN METRO VANCOUVER

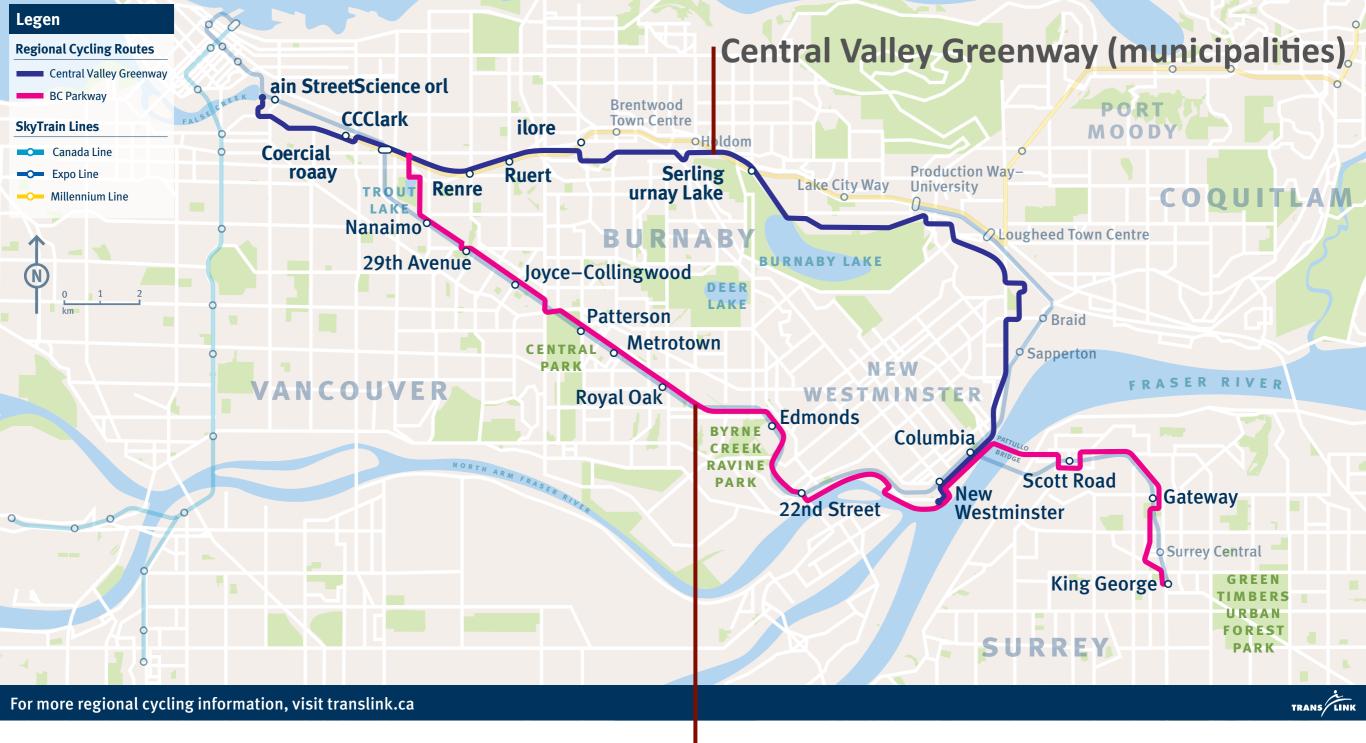
FEDERAL	PROVINCIAL	REGIONAL	MUNICIPAL
The Port Wildlife areas	Provincial parks Wildlife areas	Regional parks Regional greenways Conservation reserves Burns Bog Watersheds	Parks Greenways Conservation areas UBC campus UBC Research Forest
	OTHER	Health districts School districts Universities (except UBC) Translink First Nations	



REGIONAL GREENWAY AND ECOSYSTEM PLANNING



BC Parkway and Central Valley Greenway Map



Translink- BC Parkway



MUNICIPALITIES

VANCOUVER

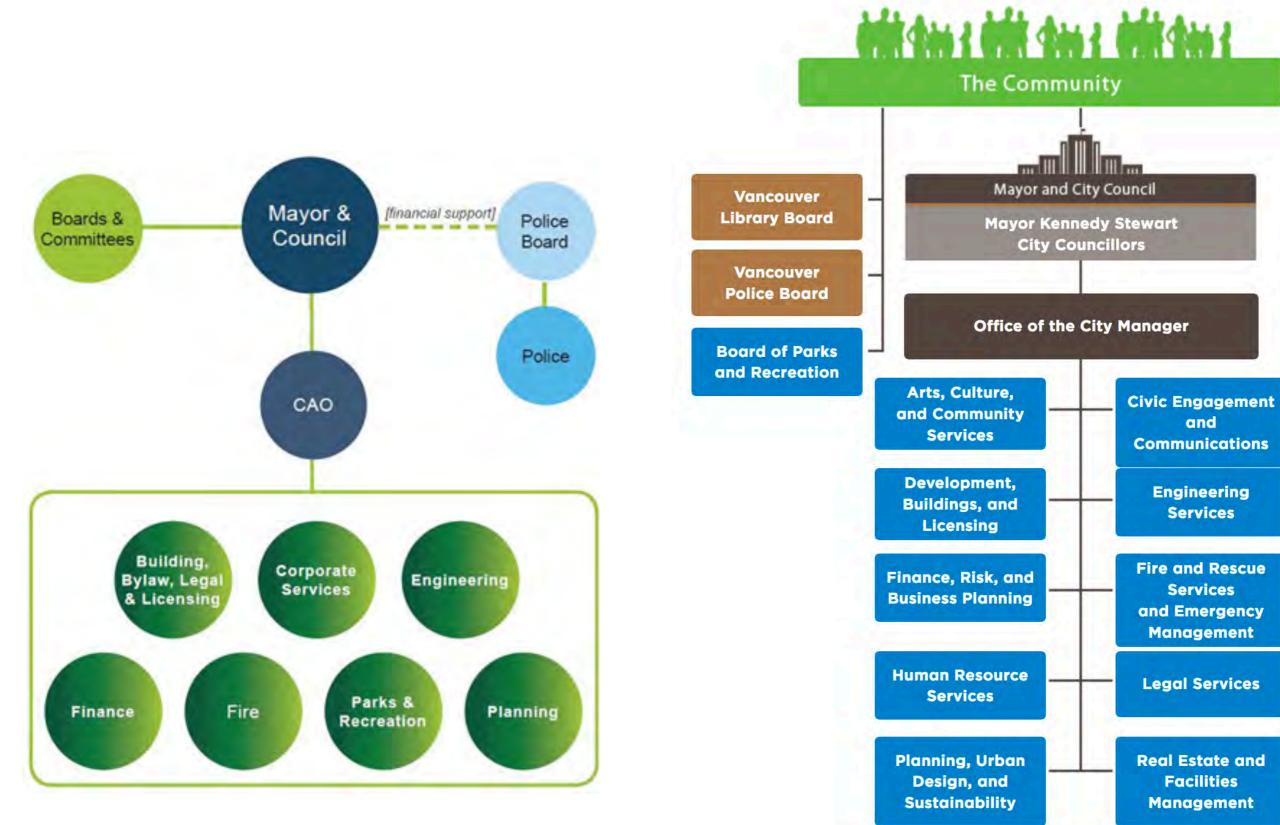
VANCOUVER CHARTERestablishes Vancouver's authorities

ALL OTHER Municipalities

BC COMMUNITY CHARTERestablishes municipal governments

LOCAL GOVERNMENTS: Municipal services Public safety Building codes Land use plans, zoning Protection of natural environment Animal regulations

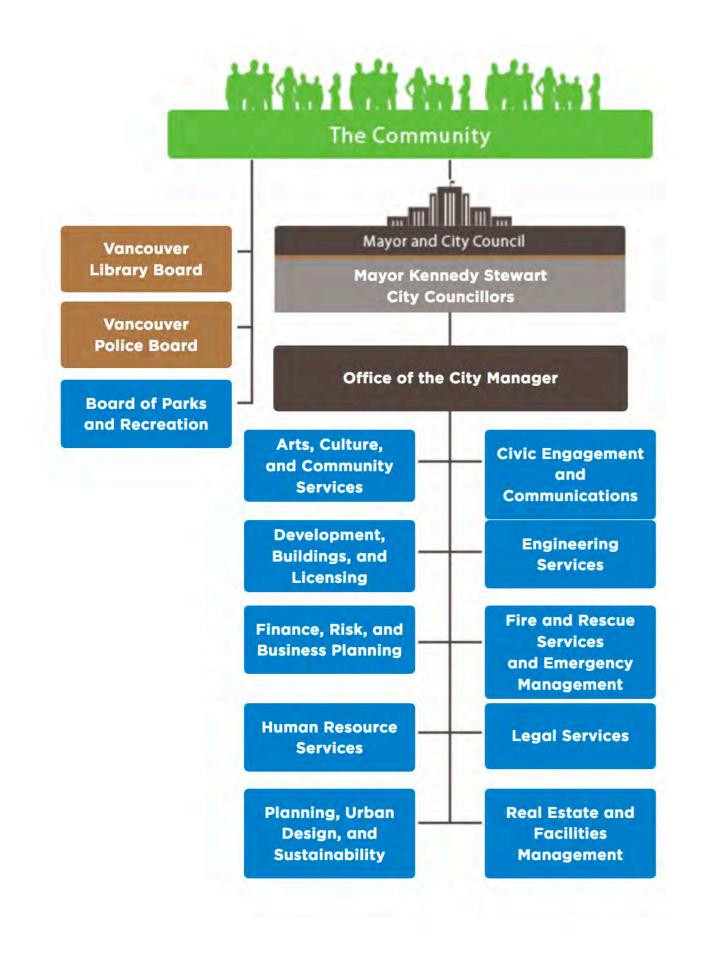
MUNICIPALITIES



City of Saanich organizational chart

City of Vancouver organizational chart

MUNICIPAL- City of Vancouver



DEPARTMENTS overseeing GREEN SPACES

Parks Board

Parks planning Biodiversity planning Urban forestry Recreation planning

Engineering

Streets (street trees)

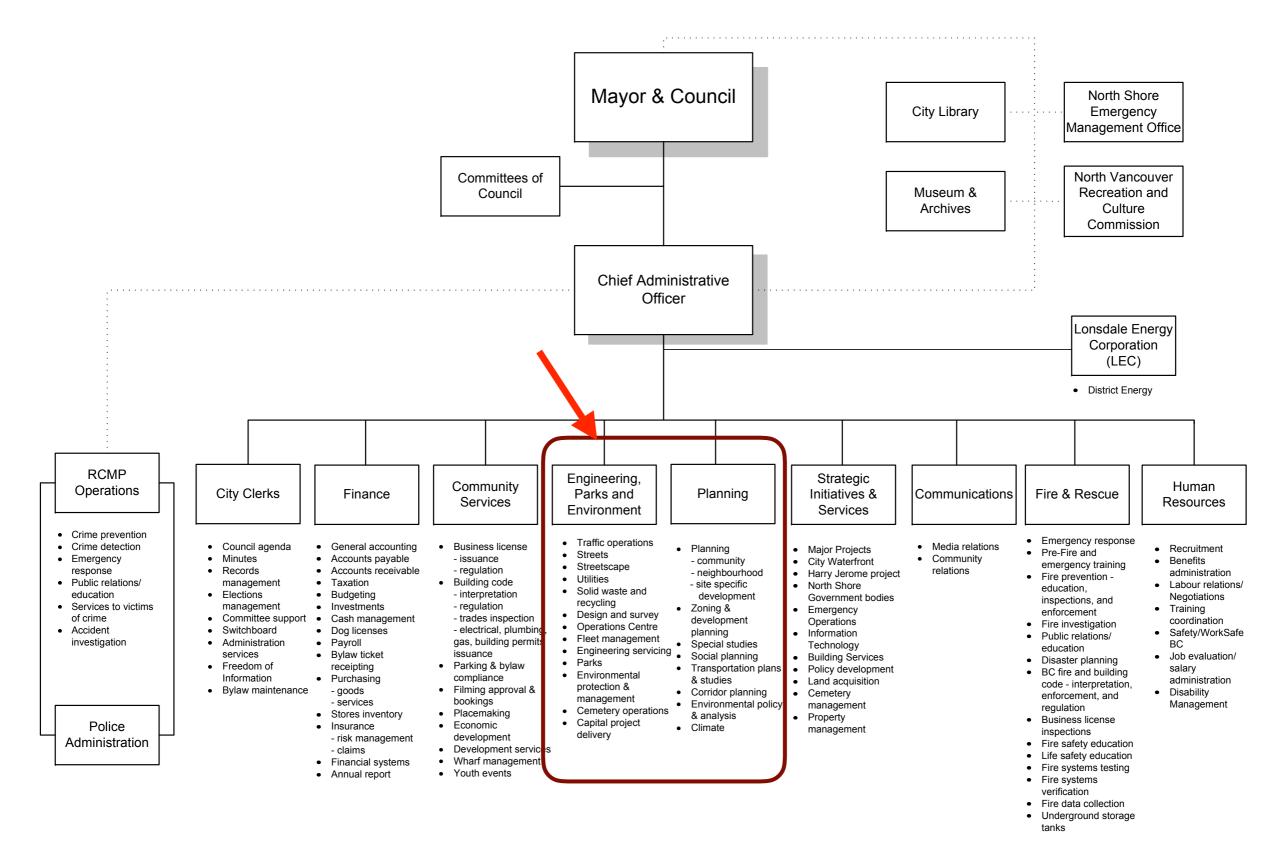
Transportation

Complete streets team

Active transportation team

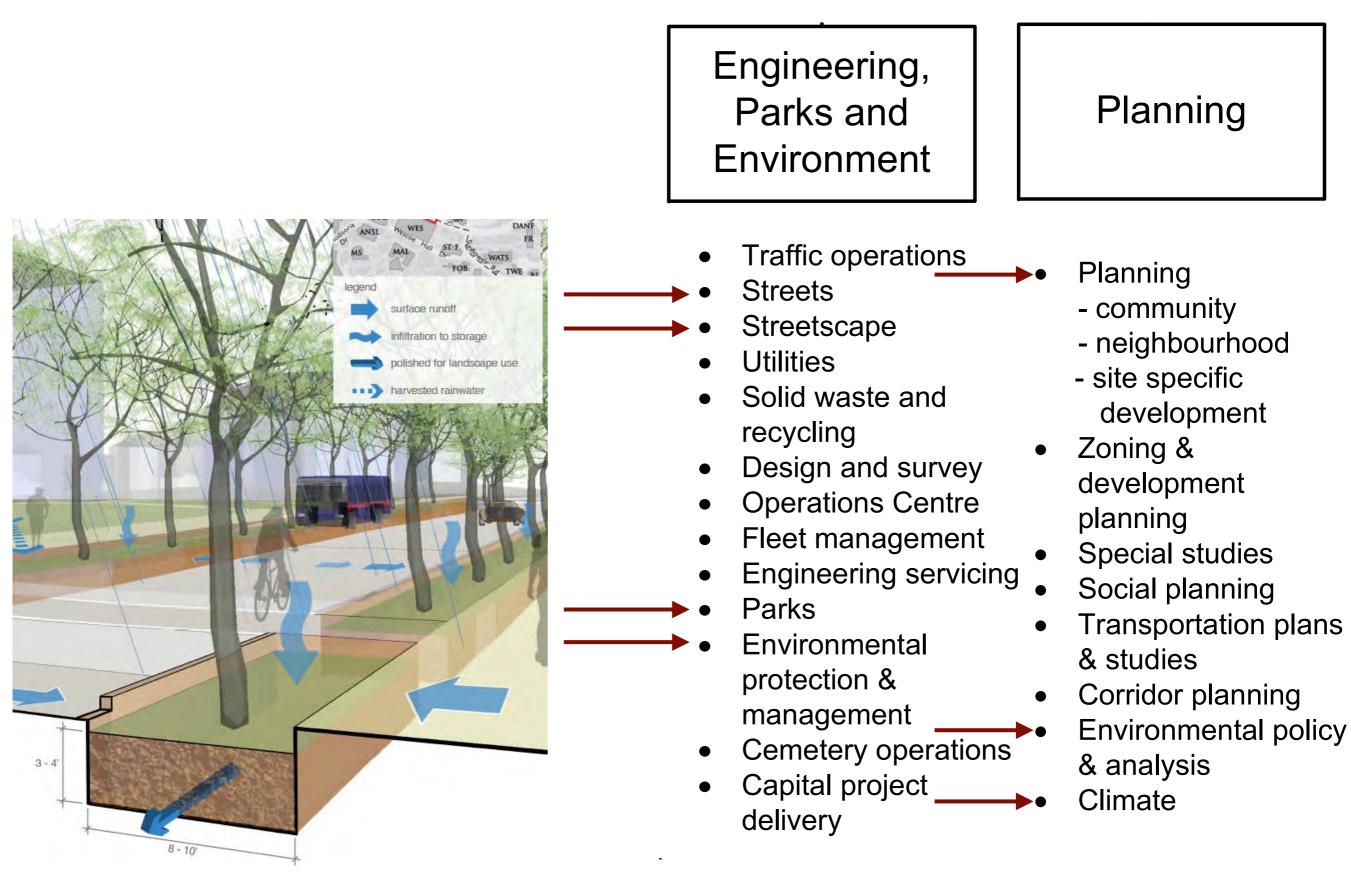
Water, sewer energy

Green infrastructure team



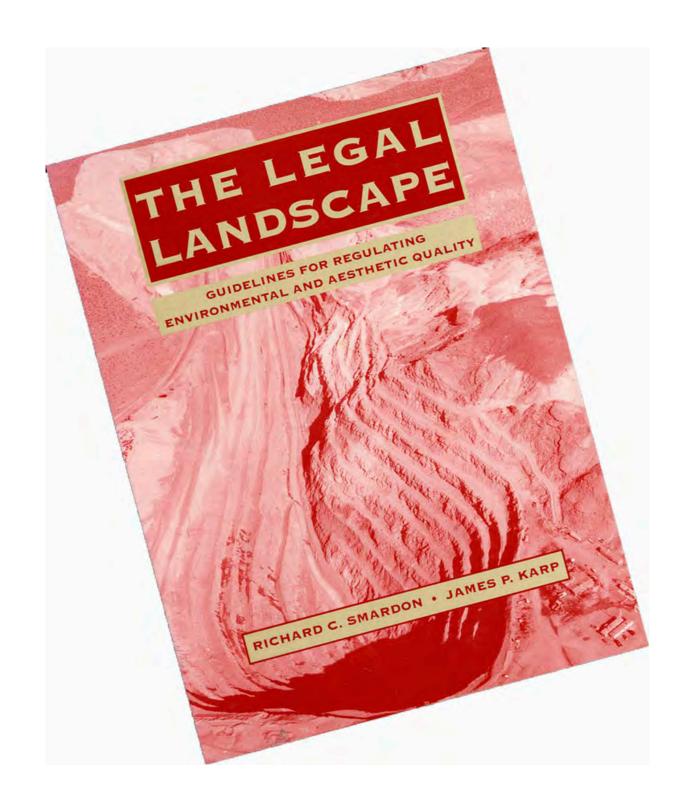
December 2017 City's Function Chart.vsd Visio Doc: 1039412

MUNICIPAL- City of North Vancouver



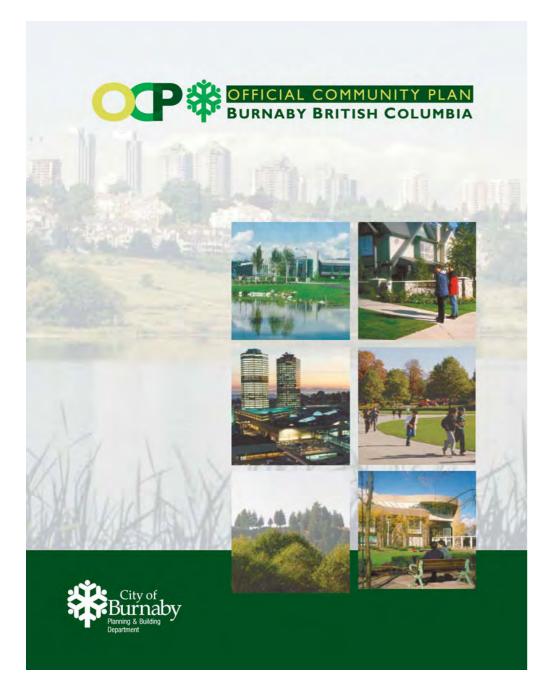
LAND USE & LAND DEVELOPMENT LAWS

LAND USE & LAND DEVELOPMENT LAWS



- Land use laws
- Zoning codes
- Site development standards
- Landscape standards
- Tree protection bylaws

OFFICIAL COMMUNITY PLANS



OFFICIAL COMMUNITY PLANS

A statement of long term objectives and policies to guide decisions on planning and land use management, within the area covered by the plan, respecting the purposes of local government.

OCPs are not enforceable! Need zoning

ZONING

Bylaws regulating the uses of lands and buildings, especially the allowable uses and the density of those uses.....guides day to day implementation.

- passed by the municipal/local government
- specify what land uses are allowed on parcels of land
- may include certain other requirements minimum lot sizes, FARs, parking, setbacks

Common categories:

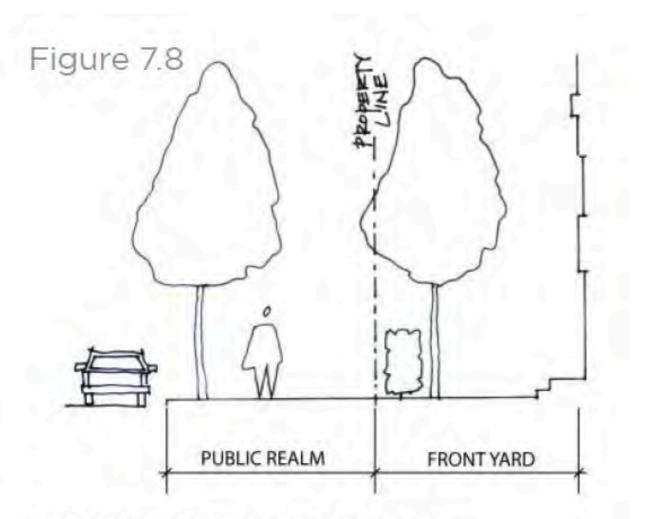
Residential zones Commercial Zones Industrial zones Park zones, etc.

** Most jurisdictions require that zoning ordinances be updated to comply with the OCP.

NEIGHBOURHOOD PLANS- Marpole Community Plan



NEIGHBOURHOOD PLANS- Marpole Community Plan



Public realm and setback at residential buildings

Tree requirements on Oak Street

Landscape and Private Outdoor Space

- 7.2.50 The overall landscape approach should reinforce the neighbourhood character by providing a variety of plant materials and treatments, some of which will achieve a substantial size at maturity.
- 7.2.51 Mature trees and prominent landscape elements should be retained whenever possible.
- 7.2.52 Landscape should be used to enhance and emphasize the design of a project, highlighting the entry, circulation, private and public spaces.
- 7.2.53 On arterial streets, provide a row of trees at the front property line to create a double row of trees in coordination with the street trees on City property.
- 7.2.54 New development should enhance the landscape image of the lane.
- 7.2.55 Provide locations for urban agriculture, whether at or above grade.
- 7.2.56 Dwellings should have private outdoor space in the form of a balcony or patio. Shared rooftop gardens can also be provided to increase opportunities for outdoor enjoyment.
- 7.2.57 Private outdoor spaces for dwellings at grade should be defined by layered planting rather than solid fencing.

OFFICIAL DEVELOPMENT PLANS (ODPS)

OFFICIAL DEVELOPMENT PLANS

- Typically used for "comprehensive development" zoned areas
- Often proposed by developers
- Lands with CD (comprehensive development) zoning

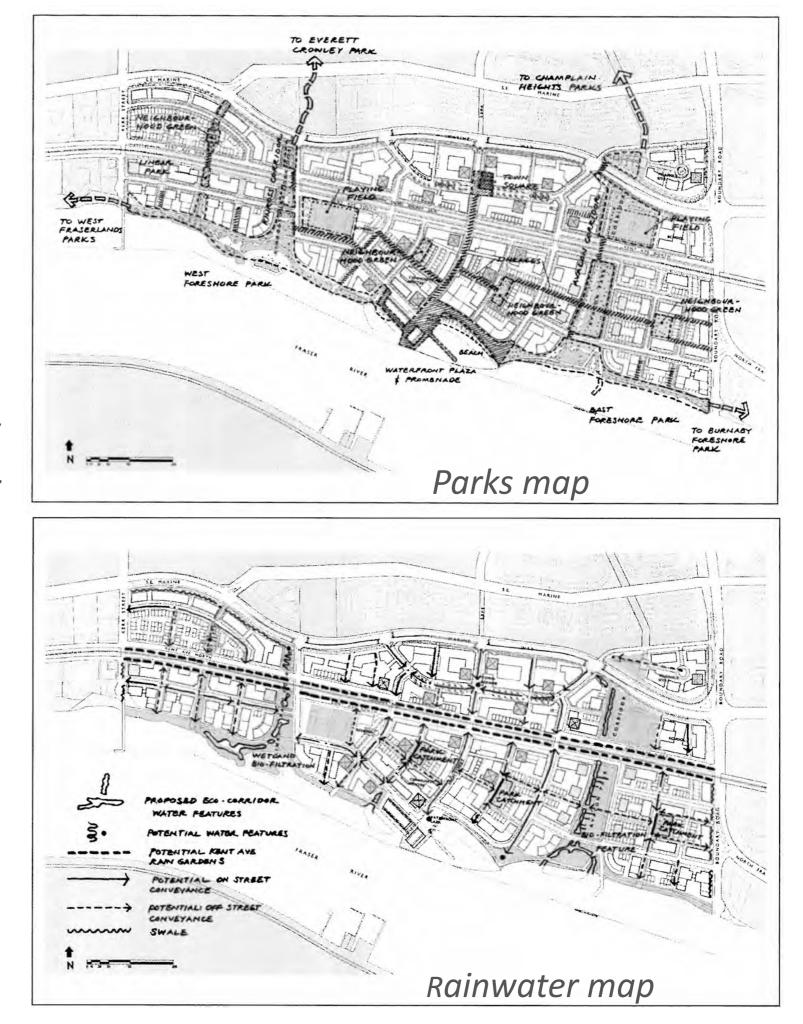
Official Development Plan for SEFC

The Southeast False Creek Official Development Plan By-law and two accompanying Council Reports (Financial Strategy and Sustainability Targets and Indicators) were approved by Vancouver City Council at Public Hearing on March 1, 2005 and enacted on July 19, 2005.



ODPs

East Fraser Lands Official Development Plan Bylaw 9393 2006 City of Vancouver



ODPs & GUIDELINES

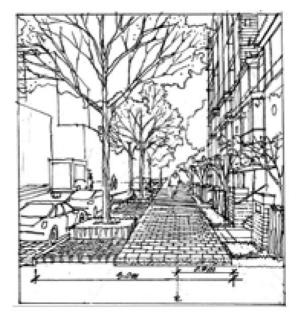
Example of guidelines covering the landscape

DESIGN GUIDELINES

- Typically non-legislated recommendations for the design of buildings, streets, landscaping.
- often overseen by a Design Review panel or developer.

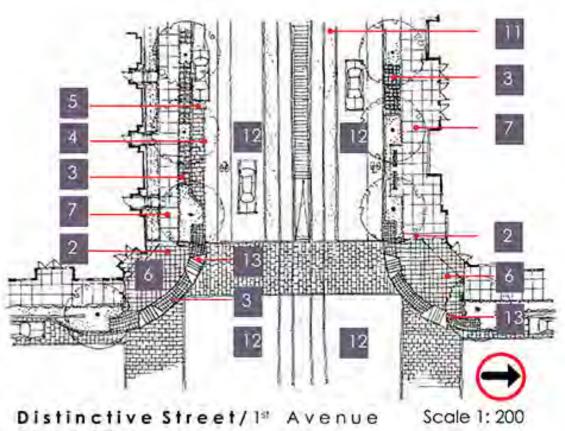






First Ave - North Side

First Ave - South Side



Olympic Village (West of Columbia St. + East of Ontario St.)

SEFC Public Realm Plan- Trees

TREE LEGEND



"ensure there will be large trees within the public realm and particularly on the streets".

 \mathbf{m}

268 2.3

0 0000 000 0 000 0000

0000000 00000

South East False Creek Overall Street Tree Planting Plan

CONTRACTOR OF

jos.

SEFC Public Realm Plan-Hinge Park



Play Park Program

1 Play Mound

A mound that is 3-4m high which features a hand water nump and runnel system that outfalls in the pond or in a sand area depending how the children direct the weirs. The water comes from stored rainwater in a cistern.

2 Sand Play Pit

An area for kids to play in the sand and capture the water running down the runnel. The area is partially framed by a sinuous wall that weaves up and down at different levels for kids to walk along.

(3) Walk the Plank

A concrete walk that extends over the stormwater pond. The path cuts through the play mound with concrete walls that reflect the soil stratification and bugs that would be beneath the ground.

- (4) Big Tree A feature giant tree that provides a sense of permanence and scale to the park.
- 5 Play Structure
- A play structure with resilient material and surrounded by benches and seating plinths. (6) Play Court and Hard Surface
- Play court and hard surface used in various ways from chalk painting, ball hockey, basketball, tai chi and dance to staging and performances.
- **Benches and Seating Plinths** $\overline{7}$

Benches and various height granite seating plinths set in a granular base and beneath trees. The trees provide a shade for the children's parents while the various height plinths provide various seating and play opportunities

(8) Hopscotch Courts

9 Logs

Large logs that offer play and seating opportunities while providing habitat for water microorganisms living in the wetland

(10) Concrete Sidewalk Bridge and Pathway Concrete blocks that extend across the wetland and step up and over the mound. The concrete sidewalk path cuts through the park and extends from the street to the creek. Sandblasted images.

(1) Seating Alcoves Quiet seating alcoves protected and screened by plantings. The areas will provide a variety of seating, small tables and games tables for children, parents and caregivers experiencing the park.

(12) Original Shoreline

The original shoreline will be marked with exposed aggregate paving and a band of Blue Oak Grass, reflecting the original shoreline of False Creek. This feature will extend through the Play Park, Hinge Park, and along First Ave. wherever possible.

(13) Wetland Source

The outfall for the stormwater from the streets and various sources that feed the wetland. At the street level a series of rocks create an informal seating and public art opportunity. The original False Creek shoreline passes through reinforcing the importance of water through history to this area.

(14) Remnant Rail Line

- Railway ties and gravel mark one of the old railway lines through the Worksyard Neighbourhood. The rail line serves as a path for children to run and play along as well as a structured area for trucks that will service the wetland. Names of rail lines, services and goods can be embedded in the ties to remember the reason for the tracks.
- (15) Reeds and Blocks

A series of large granite blocks that extend through the wetland reeds and plants to the waters edge. The granite blocks vary in height and size and provide seating, play, sunning, adventure, and staging opportunities for the children

(16) Play Wall

- A concrete wall of various heights that extends through the entire park. It provides a balancing walk, seating, and play opportunity.
- (17) Storey Telling Circle

(18) Pedestrian Bridge

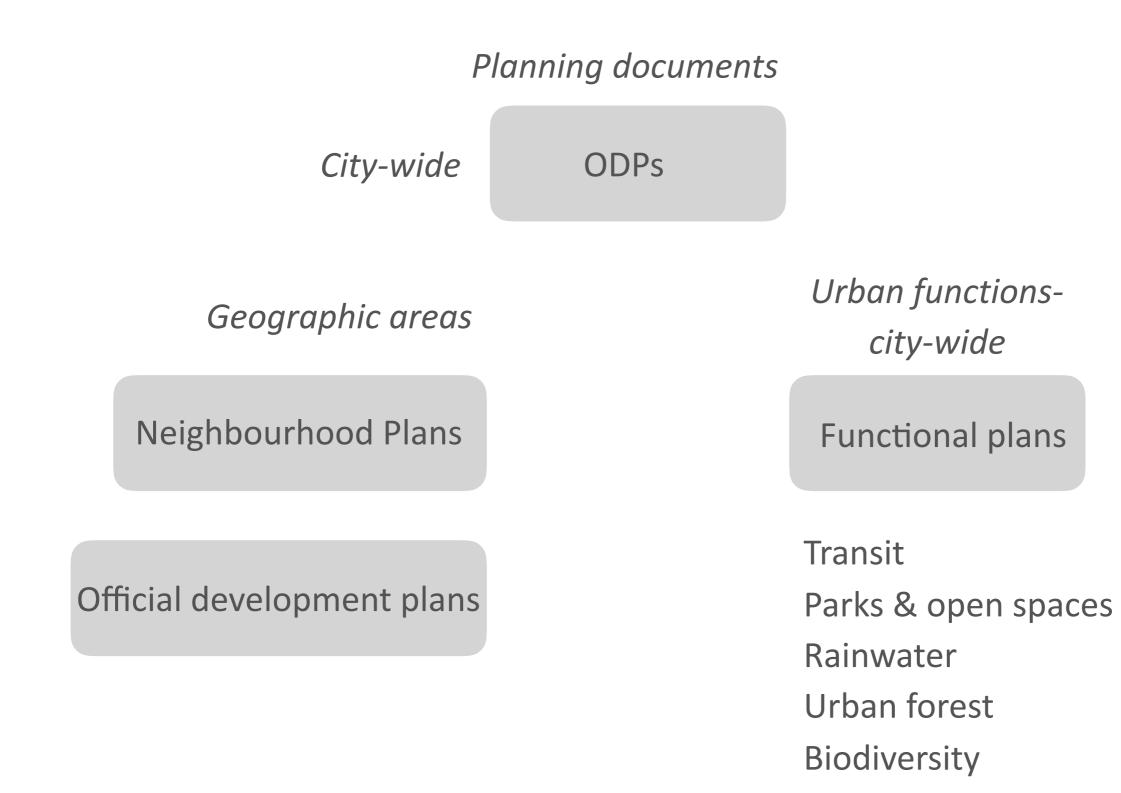
(19) Gabion Rock Walls

Metal wire gabions filled with round river rock of various colours and sizes reflecting the stacks of rock that would have been pilled in the City Worksyard. The gabion wall will be raised slightly at the edge of the walkway creating an edge protection to the water below.

- (20) Timber Dock
- (21) Lawn Terrace
- (22) Picnic Terrace
- (23) Seating Terrace Nestled between the large-scale trees and pedestrian lights a series of double sided benches offer great views to the parks, wetland, and people walking by to the waterfront.
- (24) Large Boulders
- N.T.S.
- Park Concept Plan June 13, 2006 City of Vancouver

Southeast False Creek **Public Realm Plan**

STRATEGIC OR FOCUSED PLANS



STRATEGIC OR FOCUSED PLANS



STRATEGIC OR FOCUSED PLANS- Rainwater Management Plan

Vancouver Integrated Rainwater Management Plan



VOLUME I Vision, Principles & Actions

FINAL DRAFT



WHY RAINWATER MANAGEMENT? THE NATURE OF RAINFALL IN VANCOUVER WHAT DO WE NEED TO DO DIFFERENTLY? WHAT DO WE WISH TO ACHIEVE? HOW DO WE START? HOW DO WE ORGANIZE LONG-TERM FUNDING AND IMPLEMENTATION? WHAT CONSTITUTES SUCCESS?

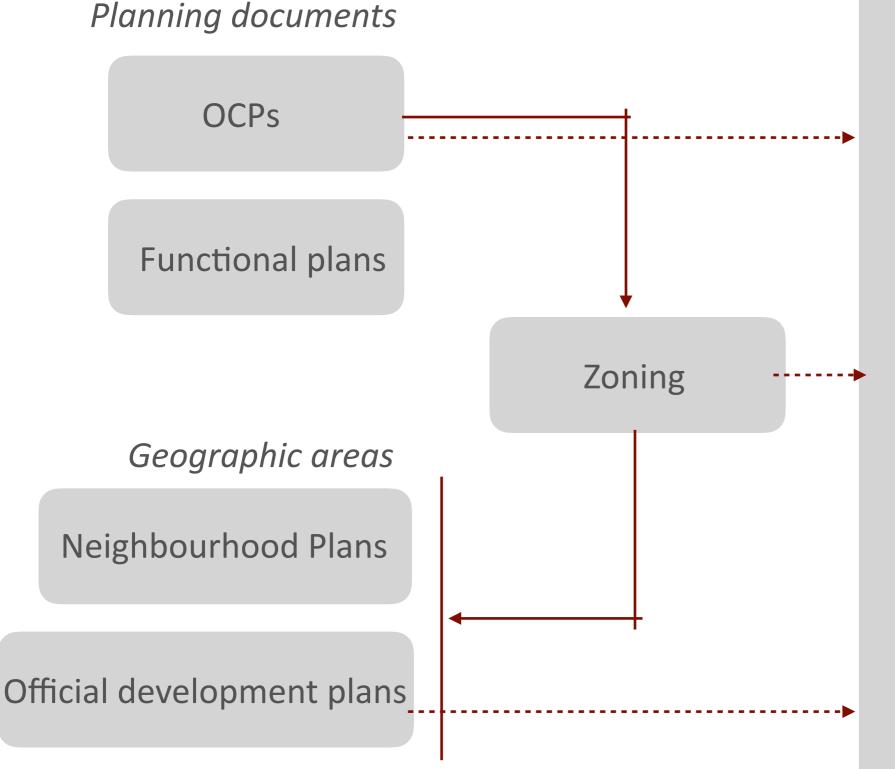
VISION FOR THE CITYWIDE IRMP

Vancouver's abundant rainwater is celebrated as a resource:

- To maintain clean water from watersheds to receiving environments.
- To reduce potable water demand;
- To connect people

to urban and natural ecosystem functions

PLANS, ZONING, BYLAWS



By**laws**



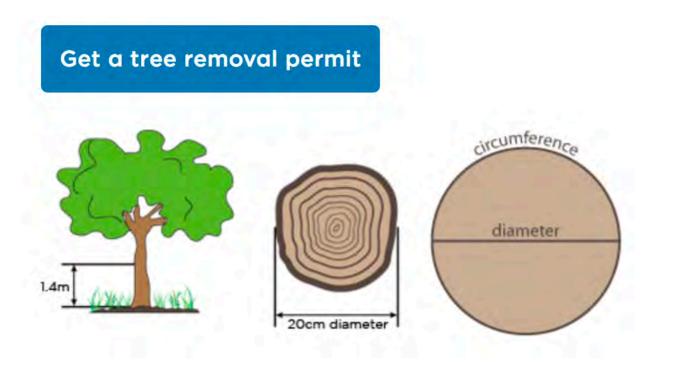
BYLAWS

What is a bylaw?

- a) a law
- b) a set of rules adopted by an organization for governing its own affairs

i.e. within the jurisdiction established by the provincial government, municipalities must adopt by *laws* for governing their affairs.

BYLAWS: City of Vancouver Protection of Trees Bylaw 9958



Property development and trees

Unless a tree requires removal under one of the conditions listed below, all property development (renovation or new building) **requires you to retain** *existing trees located on your property*.

All trees to be retained on the site require protection during any construction or development. All trees on adjacent properties or boulevard trees that are in danger of being damaged must be protected as well.

Tree removal conditions

Property owners may be granted permission to remove trees, if one or more of the following conditions apply:

- The tree on a development site is located within the building envelope
- The tree is located such that a proposed garage or other accessory building cannot be located so as to retain the tree
- An arborist certifies the tree is dead, dying, or hazardous
- An arborist certifies the tree is directly interfering with utility wires and cannot be pruned and still maintain its reasonable appearance or health
- An accredited plumber certifies that the roots of the tree are directly interfering with, or blocking sewer or drainage systems

BYLAWS: City of Vancouver Protection of Trees Bylaw 9958

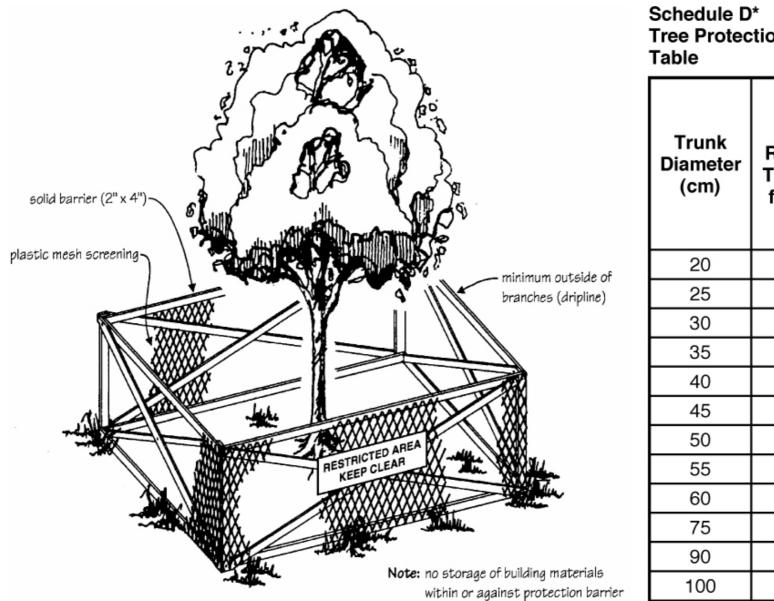


Figure 3 - Tree Protection Barrier

Tree Protection Distance Minimum Protection **Req'd Around Tree (distance** from trunk in metres) 1.2 15

25	1.5
30	1.8
35	2.1
40	2.4
45	2.7
50	3
55	3.3
60	3.6
75	4.5
90	5
100	6.0

Table reproduced from * the By-law

- **BUILDING**
- BUSINESS IMPROVEMENT AREAS
- BY-LAW ENFORCEMENT
- CEMETERIES
- DEVELOPMENT COST LEVIES
- ELECTIONS AND OTHER VOTING
- EMERGENCY SERVICES
- GOVERNANCE AND ADMINISTRATION
- HEALTH
- HERITAGE CONSERVATION
- LICENSING AND BUSINESS REGULATION
- LOCAL IMPROVEMENTS
- NUISANCE
- PLANNING AND LAND USE
 - Boards, Commissions, Panels
 - Demolition
 - Fees
 - Land Regulation
 - Official Development Plan
 - Signs
 - Single Room Accommodation
 - Subdivision
 - Zoning and Development
- **PROTECTION OF TREES**
- PUBLIC WORKS
- REAL-PROPERTY TAXATION
- **RESIDENTIAL TENANCIES**

- PLANNING AND LAND USE
 - Boards, Commissions, Panels
 - Demolition
 - **Fees**
 - Land Regulation
 - Official Development Plan
 - ODP Arbutus Corridor By-law No. 8249
 - ODP Central Waterfront By-law No. 5261
 - ODP Coal Harbour By-law No. 6754
 - DDP Downtown By-law No. 4912
 - ODP Downtown Eastside/Oppenheimer By-law No. 5532
 - ODP East Fraser Lands By-law No. 9393
 - ODP False Creek By-law No. 4812
 - DDP False Creek North By-law No. 6650
 - ODP Greenhouse Gas Emission Reduction By-law No. 10041
 - ODP Heritage Conservation Area No. 11349
 - ODP Regional Context Statement Official Development Plan By-law No. 10789
 - ODP Rental Housing Stock By-law No. 9488
 - ODP South East False Creek By-law No. 9073
 - ODP Southeast Granville Slopes By-law No. 5752

STREETS

City of Vancouver ZONING AND DEVELOPMENT BYLAW # 3575

By-law no. 3575 : A By-law to regulate, within the City of Vancouver, the

development of land, as defined herein, with respect to the use of the same, and

- the location, design, construction, and use of buildings and structures for residence, commerce, trade, industry, recreation, culture, and other purposes;
- to *regulate* and limit *the height, number of storeys and the size of buildings* and other structures to be erected hereafter or the alterations of existing buildings and structures;
- to regulate and determine the size of yards, courts and other open spaces, to prescribe building lines,
- to regulate and *limit the density of population*; to conserve and stabilize the value of property;
- to provide *adequate open spaces for light and air*; to protect and improve amenity;
- to lessen congestion on streets;
- to promote health, safety and the general welfare; and for all or any of the said purposes to divide the City into districts of such number, shape and area as may be deemed best suited to carry out these regulations in accordance with a Town Plan and to provide for the granting or refusal of development permits in accordance therewith including where necessary the imposition of conditions relative to the granting of such permits, and to provide for the enforcement of this by-law and to prescribe penalties for the violation of its provisions]

Includes > 12,300 amendments from 1956 to 2019

HOW DO WE LEARN ALL THESE LAWS?

- Legal research
- Specialists
- Lawyers
- Experience
- Continuing education

TAKE-AWAYS

• Many levels of government plan and manage Metro Vancouver's Green Networks

• Many municipalities (cities)

• Many departments in any city oversee some aspects of Green Networks

- Many types of planning documents
- Thousands of bylaws

• Communication, collaboration, cooperation is necessary

QUESTIONS? COMMENTS?