

# **Green Infrastructure for Sustainable Communities**

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# Good Morning

1. Green infrastructure  
– terminology and rationale
2. Local government powers & opportunities
3. Case studies & strategies



# THE GREEN INFRASTRUCTURE GUIDE



ISSUES,  
IMPLEMENTATION  
STRATEGIES AND  
SUCCESS STORIES



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West Coast  
Environmental  
Law

THE STEWARDSHIP SERIES

## Green Bylaws Toolkit

for Conserving Sensitive  
Ecosystems and  
Green Infrastructure



PREPARED BY ENVIRONMENTAL LAW CO., INC., UNIVERSITY OF VICTORIA FACULTY OF LAW AND DEBORAH CURRAN & COMPANY  
FOR THE WETLAND STEWARDSHIP PARTNERSHIP: DUCCO UNLIMITED CANADA, GRASSLANDS CONSERVATION COUNCIL OF BRITISH COLUMBIA,  
ENVIRONMENT CANADA, AND THE PROVINCE OF BRITISH COLUMBIA



# Natural green infrastructure

- Rivers, streams, wetlands
- Working lands
- Aquifers and watersheds
- Trees, natural forests
- Parks and greenways



# Engineered green infrastructure



- Manage rainwater - detain, infiltrate or convey all volumes
- Emulate natural services
- Metering, rainwater harvesting, dual supply
- District heat systems
- Landfill gas to electricity
- Solar retrofits
- Green waste management facilities

# Benefits



- Biodiversity and habitat
- System resilience/adaptation
- Natural services
- Rainwater management & flood control
- Public benefits
- Property values
- Economic development
- Staying ahead

# Local governments

- Significant powers and many leadership opportunities for proactive protection of ecosystems



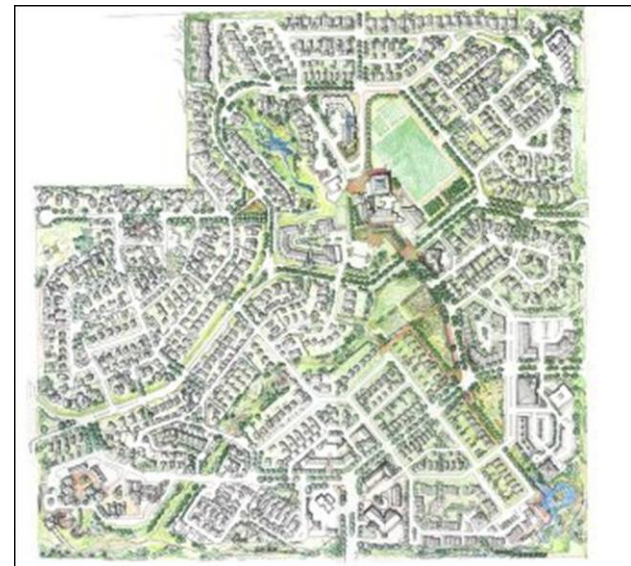
# Regulatory tools

- Long term/high level plans
- Development permit areas
- Zoning and drainage
- Subdivision standards
- Regulatory bylaws
- Covenants
- Reporting/inspection



# Higher level plans

- Guiding language
- Map & identify; set context
- Urban containment
- Coordinate/integrate other plans
- Set standards
- Establish DPAs, guidelines
- Set goals / framework for follow-up and monitoring



# Zoning and regulatory bylaws

- Zoning powers
- Drainage control
- Regulatory bylaws
  - Comprehensive rain water bylaw
  - Subdivision and development control – alternative standards to meet or beat
  - Erosion and sediment control
  - Tree protection
- Comprehensive development agreements
- Phased development



# “Soft” policy tools...

- Civic leadership with own property
- Education & training
- Financial & incentive based
- Integrated process
- Monitoring programs & strategies
- Financial plan



A photograph showing a paved walkway with a metal railing overlooking a body of water. The railing is made of silver metal and runs along the edge of the path. The path is paved with light-colored bricks. In the foreground, there are green bushes and trees. The background shows a paved area and some greenery. The text "Summary: many opportunities" is overlaid in white on the top left.

**Summary:  
many opportunities**

**...and  
many  
resources**

# Funding for West Coast's work generously provided by:

- The Law Foundation of British Columbia
- The Real Estate Foundation of British Columbia
- The Walter and Duncan Gordon Foundation
- McLean Foundation

# Outline

1. Summary: Local Government  
Environmental Protection Jurisdiction
2. Three Conservation Stories  
Region – Capital Region  
Local Government – Highlands  
Site – Colwood/Aquattro Project
3. Common Approaches

Regional Growth Strategies (RGS)	Local Government Act Part 25 (RGS)	Local Government Act Part 25 (RGS)
Official Community Plans (OCP) (including Local Area & Watershed Plans)	Local Government Act ss.875-879, 882, 884, 941 (OCP) Community Charter s.69 (drainage)	Local Government Act ss.875-879, 882, 884, 941 (OCP) Local Government Act ss.540-542
Zoning Density Bonus/Amenity Zoning Parking Runoff Control & Impermeable	Local Government Act s.903 Local Government Act s.904 Local Government Act s.906 Local Government Act s.907	Local Government Act s.903 Local Government Act s.904 Local Government Act s.906 Local Government Act s.907
Development Permit Areas	Local Government Act ss.919.1-920	Local Government Act ss.919.1-920
Riparian Tax Exemption	Community Charter s.225	Local Government Act ss.811-811.1
Impact Assessment Development Approval Info Areas	Local Government Act ss.919-920.01 Local Government Act s.895	Local Government Act ss.919-920.01 Local Government Act s.895
Watercourse Protection Bylaw	Community Charter ss.8(3)(j) & 9(3)(a) Environment and Wildlife Regulation s.2(1)(a)	
Rainwater Management Bylaw	Local Government Act s.907 (impermeable surfaces) Community Charter s.69 (drainage)	Local Government Act s.907 (impermeable surfaces) Local Government Act ss.540-542 (drainage)
Landscaping Bylaw	Local Government Act s.909	Local Government Act s.909
Tree Protection Bylaw	Community Charter ss.8(3)(c) & 50	Local Government Act s.923
Soil Removal & Deposit Bylaw	Community Charter ss. 8(3)(m) & 9(1)(e)	Local Government Act s.723
Pesticide Use Bylaw	Community Charter ss.8(3)(j) & 9(3)(a) Environment and Wildlife Regulation s.2(1)(b)(ii)	
Invasive Species Bylaw	Community Charter ss.8(3)(j), 8(3)(k) & 9(3)(a) Environment and Wildlife Regulation s.2(1)(b)(iii) (control and eradication)	
Security	Community Charter ss.8(8)(c), 17 & 19 Local Government Act s.925	Local Government Act s.925
Subdivision Servicing Bylaw	Local Government Act s.938 Land Title Act ss.83, 86	Local Government Act s.938 Land Title Act ss. 83, 86

# Conservation 1: Capital Region

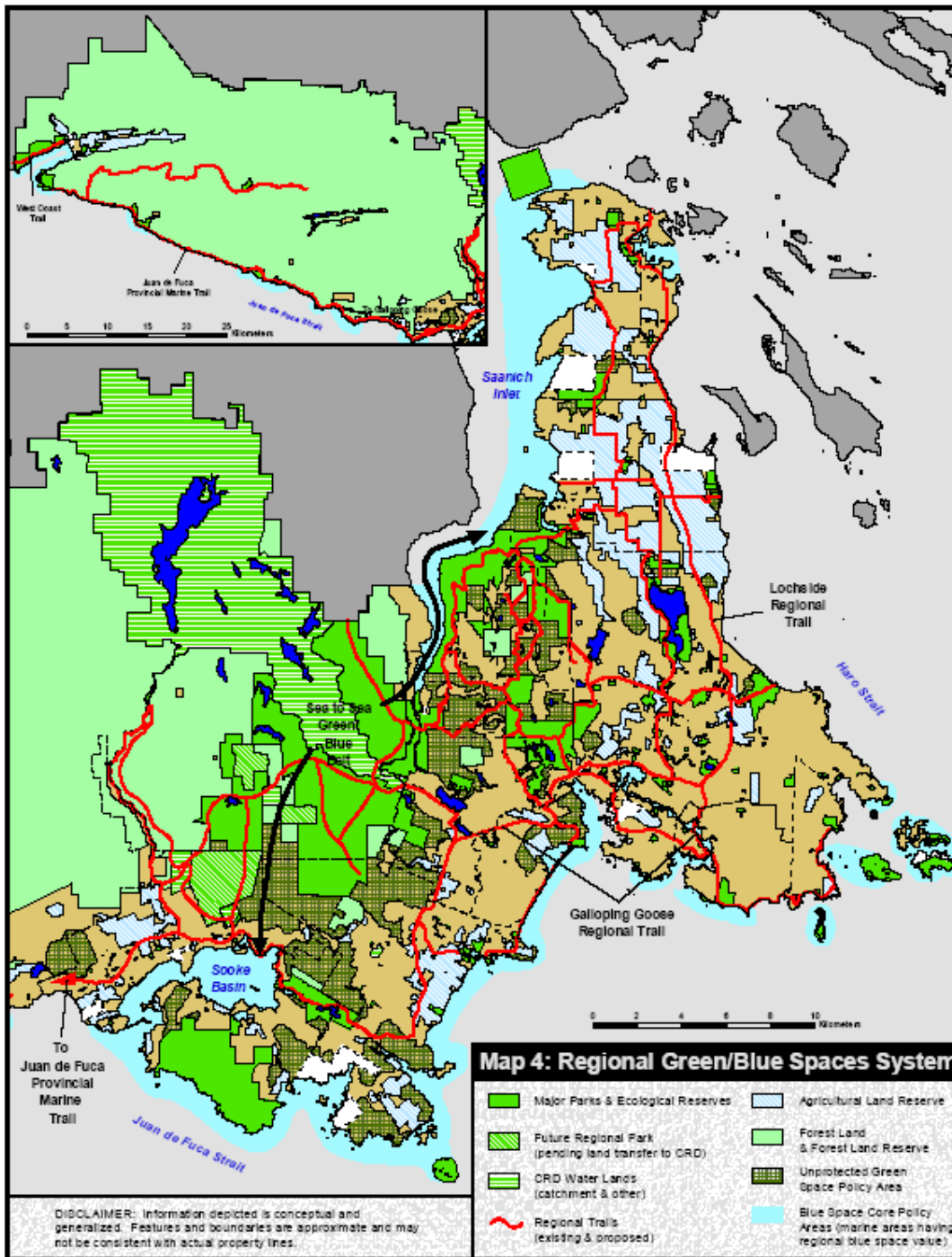


Mapping and Vision -  
Regional  
Green/Blue  
Spaces Strategy

Regional Growth  
Strategy

UCBs

OCP Context  
Statements



E.g. Saanich

Urban containment boundary since 1960's

Viable working landscape

Sensitive ecosystems atlas

Environment and Social Review Process

Revitalization of urban core

Increasing densities on urban side

# Conservation 2: Highlands



Rural municipality  
north of Victoria

First OCP 1997 –  
mapping,  
greenways

Over 30% parkland

Greenway corridor

Large lots

e.g. Scafe Hill – 190 hectare property  
Contained important wetlands,  
watercourses, forest & rare woodlands  
Density bonus & cluster development  
Linked four regional parks by a 3 kilometre  
greenway  
Secured 90% of property in a natural state  
Regional Park gained 145 hectares.  
Covenants protect 75% of land on each lot

# Conservation 3: Colwood



20 hectares on  
Esquimalt Lagoon  
(bird sanctuary)

Neighbourhood of  
subdivisions

Logged, farmed,  
invasive species

Selleck Creek  
channelized



Lagoon Estates Residential Development  
 Illustrative Site Plan

June 22, 2008

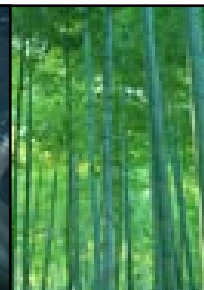
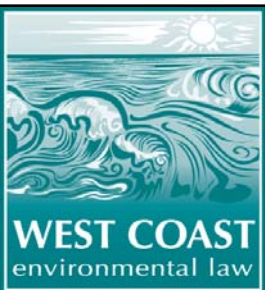


# Common Approaches

1. Identify the Green Infrastructure
2. Contain Urbanized Areas
3. Create Compact Complete Communities
4. Protect Sensitive Ecosystems
5. Cluster Development
6. Assess the Impact of Development
7. Integrate Into Existing Processes

# Toolkit – Thank You

- Ducks Unlimited
- Real Estate Foundation of B.C.
- Environment Canada
- Ministry of Environment
- Grasslands Conservation Council of B.C.



# West Coast Environmental Law

[www.wcel.org](http://www.wcel.org)

## Environmental Law Centre & Ducks Unlimited

[www.elc.uvic.ca](http://www.elc.uvic.ca) [www.greenbylaws.ca](http://www.greenbylaws.ca)

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