The Biodiversity Conservation Strategy for the Greater Vancouver Region is a partnership initiative under the Georgia Basin Action Plan involving the Greater Vancouver Regional District, Environment Canada, BC Ministry of Environment, Burrard Inlet Environmental Action Plan - Fraser River Estuary Management Plan working in conjunction with municipalities, non-governmental organizations (NGOs), stewardship groups and post-secondary institutions. For more information see the GVRD Biodiversity website at http://www.gvrd.bc.ca/growth/biodiversity.htm

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Cover Photo Credits: Green Links Program-Douglas College Institute of Urban Ecology, “Green Street” site - City of Vancouver, Invasive plant removal on Como Creek-P. Zevit Como Watershed Group, Snow geese on winter cover crop field in Delta, M. Merkens DFWT
Preface

This report provides a glimpse into initiatives that are contributing to the conservation of biodiversity in the Greater Vancouver Region. Profiles selected for this report were drawn from a range of public and private sector initiatives involved with conservation and land use planning in the region. The actions profiled contribute to sustaining our natural capital in multiple ways and reflect a move from concept to action in conserving biodiversity. They reflect successful processes or outcomes transferable to other jurisdictions and organizations in the region.

The most challenging aspect of producing this report was choosing which initiatives to profile. There are many more projects underway whose direct contribution to the conservation of our biodiversity infrastructure is not immediately evident this is because many are directed towards the improvement or protection of social capital (actions to benefit human society). Yet, these efforts to improve the condition and health of our communities are also of benefit to biodiversity. Whether they are community gardens, recreational greenways, preservation of agricultural land or “Smart Growth development”, they also represent actions that contribute to protecting our region’s biodiversity.
Acronyms

Organizations and government agencies included in this document are often referred to by their acronym.

BIEAP – Burrard Inlet Environmental Action Program
BMP – Best Management Practices
CMN – Community Mapping Network
CWS – Canadian Wildlife Service
DFO – Department of Fisheries & Oceans Canada
DFWT – Delta Farmland Wildlife Trust
DUC – Ducks Unlimited Canada
EC – Environment Canada
FREMP – Fraser River Environmental Management Program
GVRD – Greater Vancouver Regional District
GVWD – Greater Vancouver Water District
LEPS – Langley Environmental Partners Society
MOE – Ministry of Environment (British Columbia)
NGO – Non-government Organization
TC – Transport Canada
TLC – The Land Conservancy
VNHS – Vancouver Natural History Society
Acknowledgements

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Michael Hunter – City of North Vancouver
Michael Nihls – City of Coquitlam
Nancy S. McLean – Corporation of Delta
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Richard Boase – District of North Vancouver
Rob Knight – BC Ministry of Environment
Rob McGregor – Douglas College Institute of Urban Ecology
Robyn Wark – City of Burnaby
Ross Davies – Kanaka Education and Environmental Partnership Society
Ross Vennesland – BC Ministry of Environment
Roy Strang – Sunnyside Acres Heritage Society
Theresa Duynstee – Greater Vancouver Regional District
Zo Ann Morten – Pacific Streamkeepers Federation
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Greater Vancouver Regional Profiles

The following profiles occur at various locations throughout the Greater Vancouver region.

Burrard Inlet Environmental Management Program
Evergreen Programs
Forest Ecosystem Management Implementation Program
Fraser River Brochure Series
Fraser River Estuary Management Program
Green Links Program
Invasive Species Management GVRD Parks
Once upon a Bee
Operation WEB (West-Coast Exploration of Biodiversity)
Regional Parks and Greenways Plan
Riverworks
South Coast Conservation Program
The Community Mapping Network
Wildlife Tree Stewardship Program
Young Naturalist Club of BC
The Burrard Inlet Environmental Management Program (BIEAP) is an intergovernmental partnership program established to coordinate the environmental management of Burrard Inlet, a significant marine area in the Lower Mainland. The area encompassed by BIEAP includes the marine foreshore and tidal waters east of a line between Point Atkinson and Point Grey, including False Creek, Port Moody Arm, and Indian Arm.

**Key Actions**
BIEAP partners coordinate a joint action program to improve and protect the environmental quality of Burrard Inlet. In addition to development of a Consolidated Environmental Management Plan (CEMP) in 2002, BIEAP is now working towards a State of the Environment Report for Burrard Inlet. As part of this, the partners are using a risk assessment approach to monitoring environmental quality in the Inlet, based on key ecosystem risks. Other deliverables include a study on cumulative impacts to Indian Arm and a review of key upland impacts to Burrard Inlet.

**Benefits to Biodiversity**
Burrard Inlet is one of the most recognizable features in Greater Vancouver. As part of the larger Georgia Basin region, Burrard Inlet is a significant component of one of Canada's most productive marine and terrestrial ecosystems. The CEMP for Burrard Inlet includes goals and actions focused on healthy ecosystems and biodiversity in the Inlet.

**What’s Next?**
In the near future BIEAP will complete a State of the Environment Report including an assessment of changes to shoreline habitat types over the past 30 years.

**Contributors**
BIEAP/FREMP, EC, DFO, MOE, TC, GVRD, Fraser River Port, North Fraser Port Authority, Vancouver Port Authority, municipalities and First Nations

**Link**

Map graphic credit: BIEAP
**Evergreen Programs**

Evergreen, through a range of programs, works to help protect and restore natural and cultural landscapes in urban and developing communities across Canada. *Common Grounds* is a national service to protect natural and cultural landscapes, restore degraded environments, and protect open spaces. *Learning Grounds* helps schools create outdoor classrooms to provide students with a healthy place to play, learn and develop a genuine respect for nature. *Home Grounds* and the associated *Lawn and Garden Smart* program is specially designed to encourage environment-friendly lawn care practices on the home landscape.

**Key Actions**

Evergreen has developed accompanying digital and hardcopy toolkits, a native plants database, and a registry to support its programs. Evergreen has also assisted numerous groups in local naturalization initiatives, restoration activities and invasive species management initiatives as well as provided workshops on its programs and services.

**Benefits to Biodiversity**

Community naturalization is a collective effort that includes people from all walks of life in the revitalization of their schools, homes, or community to benefit the environmental, social, and economic functioning of their cities.

**What’s Next?**

With support from Vancity and the Vancouver Foundation, Evergreen, introduced *Invasive Species: Education to Action*, a new initiative addressing urban invasive plants in the Lower Mainland. Launched as a forum for municipal decision-makers and community members, this initiative highlights ways to tackle invasive species problems and the role played by local stewards. A series of workshops and presentations are underway for nurseries, retail garden outlets, and communities.

**Contributors**

Evergreen, various Lower Mainland municipalities, stewardship groups, schools, and local clubs.

**Link**


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Planting and naturescaping photo credit: Evergreen
Forest Ecosystem Management Implementation Program

The Forest Ecosystem Management Implementation Program (FEMIP) applies to the Capilano, Seymour, and Coquitlam watersheds and is a component of the broader GVRD’s Drinking Watershed Management Plan. The overarching goal of the plan is “Watersheds that provide clean, safe water and are managed and protected as natural assets of the highest importance to the Greater Vancouver region”. The objective of the FEMIP is to minimize the amount of human induced disturbances to the forest ecosystems of the drinking watersheds.

Key Actions
To achieve this, implementation programs utilizing adaptive management, risk management and ongoing monitoring are conducted continuously to measure effectiveness. Designs and prescriptions are included for forest and watershed management activities in each year and receive input from public and advisory committees. Results are documented in an annual report that describes the state of the watersheds.

Benefits to Biodiversity:
The overall management strategy for the watersheds and components like the FEMIP provide an ecologically sensitive approach that minimizes the amount of human induced disturbances. Actions such as reduction of the amount of roads in the watersheds address potential drinking water contamination issues while contributing to decreasing fragmentation and disturbance impacts.

What’s Next?
Several annual reports were produced to date and it appears that most of the environmental objectives are being met. Long-term monitoring of the watersheds to ensure this continues is a key activity of the plan.

Contributors
GVRD, Province of BC

Link
http://www.gvrd.bc.ca/water/pdfs/WSMP-5YearImplementation.pdf

Photo credit: Adamah Consultants (Coquitlam River watershed)
The Fraser River Coalition produced the *Fraser River Brochure Series* to educate the public on the importance of enhancing and preserving the Fraser River and its estuary. The brochure series is designed to fill the awareness gap between agency and non-government education programs for the lower Fraser area.

**Key Actions**
The brochures were developed then distributed to agencies and advocacy groups for review. The Fraser River Discovery Center in New Westminster was used to launch the brochure series as well as the GVRD’s Park Forum and numerous other venues, events and partners.

**Benefits to Biodiversity**
The brochure series raises awareness about the complex ecological processes and relationships in the Fraser River and estuary. It provides the public with a mobile toolkit to understand and appreciate the jewel that the Fraser River and its estuary represent. The Fraser River and estuary is not just a “working” river, but also a living river supporting a rich variety of species that need to be conserved.

**What’s Next?**
While the desire was to explore all aspects of the Fraser Estuary, limited funding restricted the brochure series to the key elements for education. There is an opportunity to further develop fact sheets and brochures focusing on other critical aspects of the River (e.g. invasives species, gravel removal, dyking, stormwater etc.). Future products include video, CD Rom and DVD programs, that can be distributed to wider target audiences and user groups through a website portal.

**Contributors**
Fraser River Coalition, various Fraser River watershed groups and senior government agency supporters.

**Link**
The brochures are presently available only in hardcopy through the Fraser River Coalition (contact Judy Williams judyw@direct.ca). A list of brochures is available on the FREMP website @ [http://www.bieapfremp.org/fremp/publications/current.html](http://www.bieapfremp.org/fremp/publications/current.html)
Fraser River Estuary Management Program

The Fraser River Estuary Management Program (FREMP) is an intergovernmental partnership program established to coordinate the environmental management of the Fraser River Estuary - a significant aquatic ecosystem in the Lower Mainland of British Columbia and Canada. FREMP applies to the wet side of the dike of the Fraser River downstream from Kanaka Creek and Pitt Lake to the Strait of Georgia and includes Sturgeon Bank, Roberts Bank and Boundary Bay.

Key Actions
FREMP partners have provided a framework to protect and improve environmental quality, provide economic development opportunities and sustain the quality of life in and around the Fraser River estuary. In addition to ongoing coordinated review of foreshore initiatives in the estuary, major milestones accomplished by FREMP include the Estuary Management Plan (EMP). Deliverables have included updating the FREMP habitat classifications, a partnership study on the feasibility of intraregional short-sea shipping, and completion of the Pitt River Reach Overview as part of implementing an Ecological Features and Functions Approach (EFFA) to managing the estuary. The FREMP EMP Monitoring Report (released September 2006) includes an indicator of habitat losses and gains specific to habitat compensation initiatives.

Benefits to Biodiversity
As a component of the most significant salmon-producing watershed in the world, the Fraser River estuary is home to an extraordinary diversity of species. All are important to the continued health of the Fraser River ecosystem and the social and natural capital values it provides.

What’s Next?
Ongoing initiatives include ground-truthing the habitat inventory of intertidal and riparian habitat in the estuary, and updating the EMP Monitoring Report.

Contributors
BIEAP/FREMP, EC, DFO, MOE, TC, GVRD, Fraser River Port North Fraser Port Authority, Vancouver Port Authority, municipalities and First Nations

Link
http://www.bieapfremp.org

Report and Fraser Estuary reach map graphic credit: FREMP
Green Links Program

Green Links, a program of Douglas College’s Institute of Urban Ecology in New Westminster was initiated in 1996 to increase the ecological value and biodiversity of urban wildlife habitats and green spaces. This is primarily achieved through connecting fragmented urban habitats and creating corridors that serve to link habitat ‘islands’. Projects are located in Surrey, Burnaby, Port Coquitlam, Coquitlam, and Delta.

Key Actions
A central aspect of all Green Links projects is involvement of neighboring communities. The program tries to get people involved in planting events, which are open to anyone in the community. The work Green Links does in backyards focuses on the introduction of habitat elements such as ponds and feeders. Program components include Hydro corridor naturalization, plant salvages, native plant workshops, plant propagation, and backyard naturalization contests.

Benefits to Biodiversity
Green Links aims to connect fragments of environmentally sensitive land through corridors of native vegetation. Its main purpose is to increase plant and animal biodiversity in areas where species have declined due to loss of habitat. The program has a specific focus on counteracting negative impacts on green spaces through re-establishing regional connectivity.

What’s Next?
The Institute of Urban Ecology is working on ground beetle diversity in and around Hoy Creek in Coquitlam and is continuing with its educational workshops. New program directions include integrated pest management and biological control research.

Contributors
Douglas College Institute of Urban Ecology along with various utility companies, municipalities, and school districts.

Link
http://www.douglas.bc.ca/community/urban-ecology/restoring.html

Planting and naturescaping photo credit: DC IUE Green Links
Invasive Species Management  GVRD Parks

Park Associations, volunteers, and community groups are working with GVRD Parks to manage invasive species in several regional parks. In December of 2005, a "Framework for Invasive Plant Management in GVRD Parks" report was completed. Species being targeted include: English Ivy, Himalayan Blackberry, Japanese Knotweed, English Holly, and Lamium.

Key Actions
There are numerous examples of invasive species management in GVRD Parks. The Weedbusters Program at Burnaby Lake, Pacific Spirit Park Society - Invasive Species Working Group, Catching the Spirit Program (Derby Reach, Campbell Valley, Kanaka Creek and Aldergrove Lake Regional Parks) are some of the partner-based initiatives for invasive removal. Recent events to tackle the problem included a large-scale broom removal with 200 VanCity employees at Iona Regional Park in October 2006. This was the largest group of volunteers at an invasive plant removal program in a GVRD Park.

Benefits to Biodiversity
Removal of invasive plant species in regional parks in conjunction with enhancement of native plant communities restores important habitat components for wildlife. Invasive plants tend to reduce the biodiversity of natural areas by their ability to spread rapidly and in dense populations.

What’s Next?
GVRD Parks are looking to expand the role of invasive plant management to include a science-based approach with an initial focus on monitoring. Operations staff are taking a more active role in invasive plant removal in their annual work plans. The GVRD Parks department has also developed an Invasive Species Brochure to educate and raise awareness of the issue amongst gardeners.

Contributors
GVRD Parks, Park Associations, park partners, NGOs, horticultural businesses, Vancouver Natural History Society and other environmental organizations.

Link
http://www.gvrd.bc.ca/parks/Pest-management.htm

Yellow flag iris photo credit: Ernie Sellentin
Purple loosestrife photo credit: GVRD Parks
Once upon a Bee

Simon Fraser University began this initiative with research into bee biodiversity in Vancouver. This research was aimed at educating the public about bees and their importance in the urban environment thru workshops, presentations, and displays.

Key Actions
More than 5,000 people were educated on the importance of bees and bee-friendly habitats. The results of the research were published in the Canadian Entomologist in November 2004 and provided to Vancouver and Burnaby municipalities to take into considerations when designing gardens.

Benefits to Biodiversity
The program enabled residents to create natural bee friendly habitats in their own backyards, enhancing bee diversity in their communities. The public events and presentations educated the public in valuing the natural greenspaces in the city, both manicured gardens and wild areas as habitats for bees and other fauna that are worth maintaining and managing soundly.

What’s Next?
This program was discontinued due to lack of resources, however contributors are looking into at least getting the original website back up and running.

Contributors
SFU students: Alice Miro and Desiree Tommasi, with help from Heather Higo, bee lab coordinator at SFU, and Mark Winston’s.

Link
http://www.sfu.ca/biology/faculty/winston/

Brochure graphic credit: Margreit Dogterom (Beediverse)
Operation WEB (West Coast Exploration of Biodiversity)

Operation WEB promotes interest in learning about, enjoying and sustaining the biodiversity of the region. It also integrates information and activities on biodiversity with curriculum objectives and explores the role GVRD parks, reserves and greenways play in protecting biodiversity. This program was initially piloted in three Regional parks: Burnaby Lake, Campbell Valley, and Boundary Bay.

Key Actions
This educational program focuses on designing new and innovative materials specifically targeted to Grade seven classes in the region with links to science and other curriculum and learning objectives. The overall theme is exploring the diversity of life in GVRD Regional Park ecosystems to gain an appreciation and understanding of biodiversity.

Benefits to Biodiversity
Operation WEB encourages appreciation and understanding of biodiversity through exploration of the diversity of life in GVRD Regional Park ecosystems.

What’s Next?
GVRD Parks staff will assess the response and outcomes with participants and determine to what extent the program should continue.

Contributors
GVRD Park Interpretation and other departmental staff, various school districts.

Link
http://www.vsb.bc.ca/NR/rdonlyres/ABD4BD40-D397-4B7C-9750-C4F2E4CC251B/0/WQposterFAX.pdf

Operation W.E.B. curriculum graphics credit: GVRD Parks
Regional Parks and Greenway Plan

The Regional Parks and Greenways Plan (RPGP) provides direction and priorities for parks and greenways programs and services in the region over the next decade. The plan has three main goals: 1) protect and enhance regional landscapes, biodiversity and heritage features; 2) provide outdoor recreation opportunities and education programs, and foster community stewardship and; 3) support economic development and quality of life in the region.

Key Actions
The RPGP contributes to the Green Zone by protecting biodiversity, providing outdoor recreation opportunities, and offering education programs that foster environmental stewardship through community development. The plan also assists in achieving stormwater and floodplain management objectives where parks and greenways function as recharge, filtration and natural drainage areas.

Benefits to Biodiversity
A key strategy of the plan is to manage conservation lands and habitats to protect biodiversity. As well, important green spaces identified in the Green Zone will be secured, protected, and managed for public use and conservation.

What’s Next?
The strategic directions and priorities of the RPGP will be the foundation for preparing a detailed Parks, Greenways and Open Space Systems Plan that will guide land acquisitions, programs and services, capital development, community partnerships and volunteer initiatives. GVRD will monitor the implementation of the RPGP and undertake a review of the plan every five years to provide updates and revisions where required.

Contributors
GVRD Parks, municipalities, public, and private sector partners.

Links
http://www.gvrd.bc.ca/parks/planning-and-consultation.htm
http://www.gvrd.bc.ca/parks/pdfs/ParksGreenwaysPlan.pdf

Plan and map graphic credit: GVRD Parks
River Works

River Works is a Vancouver Aquarium conservation program that inspires the stewardship of aquatic habitats through public involvement, monitoring activities, habitat restoration, educational experiences, and community connections. The program is instrumental in developing environmentally active citizens in the Fraser River estuary through workshops and field activities designed to promote direct action and natural environment enhancement.

Key Actions
Each year, hundreds of volunteer hours are contributed towards the inventory, monitoring, and restoration of vital wetland habitats through school and community members who become engaged in positive environmental action.

Benefits to Biodiversity
River Works aims to maintain or increase biodiversity at project sites. The program has inspired and instilled messages of stewardship and conservation to a multitude of volunteers, elementary students and members of the public, having immeasurable effects on the choices and actions that these individuals will make in their life.

What’s Next?
The program is encouraging River Works volunteers to visit sites at regular intervals over the long-term to monitor changes. Maintenance is important, but a consistent and thorough monitoring program is essential to determine how much change has occurred in an area, be it positive or negative.

Contributors
Vancouver Aquarium, volunteer and NGO’s throughout the region.

Link
http://www.riverworks.org/
South Coast Conservation Program

Established in 2005, the South Coast Conservation Program (SCCP) is a multi-partner, landscape-level conservation program for the Lower Mainland region. Its purpose is to facilitate and coordinate maintenance and recovery efforts for species and ecosystems at risk.

Key Actions
Through ongoing participation, program partners and sub-committees focus on various conservation actions, government regulation, planning, cooperative stewardship, research and information management. The SCCP’s website with its associated database and partner program linkages is helping to promote the program and its objectives.

Benefits to Biodiversity
The program is designed to coordinate and facilitate conservation action in all necessary/available areas. Recent efforts have already led to the creation of legislated Wildlife Habitat Area reserves for high priority initiatives (e.g., Olympic venues in Whistler, urban development on Sumas Mountain); wildlife use permitting under the BC Wildlife Act; and production of a new Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status Report for Great Blue Heron.

Increased use of best practices to protect habitat through development of BMP guidelines and public education and outreach have been, along with ongoing research on various at risk species, fundamental to conservation of species and habitat.

What’s Next?
For 2007, the SCCP will be sponsoring a series of workshops targeting improved conservation planning by land use decision makers. The SCCP is still evolving, for now having all the necessary players at the table is a critical factor to the program’s success in this relatively new, exceedingly complex, and multi-jurisdictional area of conservation.

Contributors

Link
http://www.sccp.ca/

SCCP graphic credit: SCCP
Photo Credits: Ross Vennesland, Mike Pearson, Joanne Neilson and Ryan Durand
The Community Mapping Network

Headquartered in Surrey, the Community Mapping Network (CMN) is a mapping portal that provides tools to support the planning of sustainable communities and to document sensitive habitats. A key focus is to capture information on priority ecosystems like wetlands, riparian areas, estuaries, and grasslands that are more susceptible to the impacts of human disturbance.

Key Actions
The CMN integrates data from many sources and provides web-based access to mapping information for the Georgia Basin, the Okanagan Basin, and many other areas in BC. Province-wide coverage is available for watercourses, fish distribution, coastal resources, transportation and many other themes. Several mapping initiatives exist for specific resources or for specific geographic locations.

Benefits to Biodiversity
Products generated from the CMN greatly improve information availability about watercourses, enabling better protection and restoration of streams and riparian habitats in the face of continued land development. The CMN also assists resource managers, planners and communities alike in successful resource inventory, land use planning, freshwater restoration, enhancement and assessment of BC’s urban/rural watercourses.

What’s Next?
All new contributions to the CMN help build capacity amongst CMN partners. The next step is to expand the network of local partners and communities of interest and find more innovative approaches for cooperative community mapping.

Contributors

Link
http://cmnbc.ca

South Coast Cutthroat Atlas

Georgia Basin Habitat Atlas

Eelgrass Bed Mapping Atlas

Frogwatch Sighting Mapping Tool

CMN graphic and sample community mapping tools credit: CMN
Wildlife Tree Stewardship Program

The Wildlife Tree Stewardship Program (WiTS) provides tools and information to educate public and private sectors on employing best practices to reduce threats to trees with significant wildlife value. The program has improved the protection of nest trees and designation of appropriate buffer zones for nest management for a range of species including raptors and herons. The WiTS program is also working towards developing wildlife tree model bylaws with Lower Mainland municipalities.

**Key Actions**
Activities have focused on mapping of wildlife trees, stewardship and conservation education, an eagle nest hotline and landowner contact program. Recent activities like the eagle nest camera provided learning outcomes of both a positive and negative nature (i.e. they improved awareness on raptor lifecycles but required disturbance of nesting activity to observe behavior).

**Benefits to Biodiversity**
The program coordinates and assists a network of community stewards committed to conserving coastal wildlife tree habitats through volunteer monitoring, landowner agreements, and community education in southern British Columbia.

**What’s Next?**
The program is preparing a workshop to recruit volunteers, including Registered Professional Biologists to inventory nest trees. Long-term goals include resolving issues surrounding protection of trees with recognized wildlife values.

**Contributors**
LEPS, EC/CWS, Habitat Conservation Trust Fund, Islands Trust, MOE, Pacific Conservation Trust Fund, Comox-Strathcona Regional District, GVRD

**Link**
http://www.wildlifetree.org/

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**Welcome to the Wildlife Tree Stewardship Atlas**

- **Atlas Description**
  - View information about the atlas and its functionalities.
  - For public viewing the Wildlife Tree Stewardship Atlas (no login required).

- **Launch Atlas**
  - In order to add new data and get access to the mapping tools, you need an account.

- **Request Account**
  - Login required for viewing and adding new data.

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WITS What’s Up?

WITS graphics and photo credit: WITS Program
Young Naturalist Club of BC

The Young Naturalist Club of British Columbia (YNCBC) are a special group of young people, age 5 - 14, who care about conserving nature in B.C. The club produces education and outreach tools, and coordinates and facilitates the creation of local youth oriented naturalist clubs within various communities.

Key Actions
The YNCBC produces the NatureWILD magazine four times a year containing articles written by leading BC naturalists. The magazine communicates stories about and from members who are undertaking exciting and challenging initiatives all around the province. The YNCBC also works with local naturalists to customize and deliver elements of the program for local interests and issues.

Benefits to Biodiversity
The program motivates conservation action by providing indirect and direct tools for nature studies, local conservation initiatives, and participation in local community events such as shoreline cleanup, school nature gardening, Pitch-in week, and recycling campaigns.

What’s Next?
The tools and messaging provided by the program has been successful in motivating youth to become more aware of the value nature plays in their daily lives. The YNCBC continues to support the creation of more local affiliate clubs and expand its work in the province.

Contributors

Link
http://www.ync.ca/index.html

YNCBC graphic and activity photo credit: YNCBC
Northwest Profiles

Profiles from the northwest sector of the region cover projects from the Northshore.

Lighthouse Park Preservation Society
Mahon Park Natural Areas Rehabilitation
Maplewood Creek Watershed Restoration Initiative
Maplewood Flats
The Green Necklace
Lighthouse Park Preservation Society

The Lighthouse Park Preservation Society (LPPS) is working to protect the natural integrity of Lighthouse Park in the District of West Vancouver by promoting public awareness and encouraging public support of the Park’s natural features.

Key Actions
Efforts have focused on invasive species management, trail management and trailside restoration, native plant propagation and native plant community restoration, public outreach and education.

Benefits to Biodiversity
Lighthouse Park provides habitat for a unique variety of south coast flora and fauna found nowhere else. Invasive species management is reducing impacts to the native plant community. Activities and efforts are helping to spread the word about invasive species and the unique values of the park with the region.

What’s Next?
The goal is to expand the ecological boundaries of the park. This will also be a step towards the re-creation of a linked system of parkland radiating from Lighthouse Park and, in the future with the forested Upper Lands of West Vancouver. Other plans include reintroducing some plant species that have gone missing in the last few decades and trail fencing to protect the only wetland in the park. Outreach and education continues by direct mailing and through LPPS displays at community events. In partnership with the District of West Vancouver, the Society has been working on a campaign to discourage sale of invasive garden plants.

Contributors
Lighthouse Park Preservation Society, District of West Vancouver

Link
http://www.westvancouver.net/article.asp?a=2011&c=649

Photo credit: District of West Vancouver
LPPS graphic and Six Park Network map credit: LPPS
Mahon Park Natural Area Rehabilitation and Management Plan

The Parks and Environment staff at the City of North Vancouver initiated the Mahon Park Natural Area Rehabilitation and Management Plan in late 2001. A two-component plan was developed through a public workshop in May 2002 to introduce the issues and receive the community’s thoughts and concerns about the future protection of the Park. The first component of the plan, the Rehabilitation Plan takes immediate action to address problem areas in the park.

Key Actions
To facilitate part one of the plan, a community based park stewardship group was created through a partnership with Evergreen, resulting in monthly volunteer events to remove invasive exotic species and restore the park’s native vegetation. Work to date has focused on instream habitat enhancement, invasive species removal and restoration and maintenance of native plant communities.

Benefits to Biodiversity
Mahon Park supports one of the few urban forests left in the City of North Vancouver that supports a wide range of native species and a salmon-bearing stream. This initiative contributes to the restoration and preservation of those assets. The Management Plan will address the long-term protection and sustainability of the natural areas of Mahon Park.

What’s Next?
Part two, which focuses on community stewardship, environmental education and interpretation, will be an integral part of completing the plan and ensure that proposed changes will be aligned with the long-term vision for the park.

Contributors
City of North Vancouver, Mahon Park Stewardship Society, Evergreen

Links
http://www.cnv.org/server.aspx?c=3&i=54

Planting photo credit: Eva Antonijevic, Evergreen
Ortho image: City of North Vancouver
Maplewood Creek Watershed Restoration

Local streamkeepers began work on Maplewood Creek to improve habitat values for salmonids in the early 1990’s. The District of North Vancouver became involved shortly thereafter, coinciding with the development of its comprehensive municipal environmental protection bylaw and designation of the Maplewood Creek headwaters (Hogan’s Pools) as a park and conservation area. Maplewood Creek connects to the Seymour River above the rivers’ estuary.

Key Actions
Efforts have focused on restoration of the headwater springs and associated wetlands, ongoing installation of instream habitat complexing, spawning habitat and riparian ecosystem recovery throughout the watershed. As well, a number of studies were undertaken to tie in upland restoration to the lowland floodplain area (Maplewood Farm).

Benefits to Biodiversity
Maplewood Creek is one of the few remaining systems in the District of North Vancouver with natural, unconfined spring fed sources. This supports relatively high water quality and given its size, a range of aquatic fauna not typically found in other urbanized watersheds in the area.

What’s Next?
Components for long-term recovery of the watershed include restoring the highly modified habitat at Maplewood Farm to a more naturalized historic level of complexity. The next major initiative will be a partnership between the GVRD and the District to reconfigure Maplewood Creek adjacent to the Seymour Parkway and Seymour River to naturalize the lower portion of the creek. This will incorporate educational signage, better access control, and an opportunity to further connect the community to the watershed.

Contributors
District of North Vancouver, Maplewood Farm, GVRD / GVWD MoT, MOE, BIEAP, DFO, EC, TC, North Shore Streamkeepers, North Shore Fish and Game Club, Pacific Streamkeepers Federation, Maplewood Community Association, Wild Bird Trust, Tsleil’waututh Nation, Vancouver Port Corporation, BC Rail, BC Hydro, Private land owners, School District 44: Maplewood Community School, North Shore/Vancouver Historical Society

Further Information
http://www.pskf.ca/ecology/watershed/northvan/maplewood02.htm

Maplewood Creek photo credit: Pacific Streamkeepers Federation
Maplewood Flats Conservation Area

The Maplewood Flats Conservation Area in North Vancouver is the last undeveloped foreshore wetland on the north shore of Burrard Inlet. In 1992, the Vancouver Port Authority leased the area for 49 years to Environment Canada to permit the establishment of a wildlife conservation area. The Wild Bird Trust created the first wildlife sanctuary on Burrard Inlet's north shore there, combining wildlife habitat with education and public enjoyment.

**Key Actions**
Efforts to date have focused on education and outreach, bird and wildlife surveys, migratory bird (e.g. purple martin) nest box program, interpretive “theme walks and annual festivals. With over three kilometers of wheelchair accessible trails and ongoing habitat enhancement, Maplewood Flats serves as a model for future sanctuaries throughout the Province.

**Benefits to Biodiversity**
This 75-acre site adjoins and helps protect the largest area of salt marsh and mudflats in Burrard Inlet. The system is now a breeding habitat for a wide range of migratory and resident bird species as well as estuary dependent fauna. An extensive freshwater marsh and pond system with inter-connecting creeks was developed in the western part of the site to further increase habitat complexity and capacity.

**What's Next?**
The future focus is on continued conservation of the flats, education programs, tours, and dealing with invasive species.

**Contributors**
Wild Bird Trust, Maplewood Wetlandkeepers, District of North Vancouver, CWS/EC, Vancouver Port Authority

**Link**
http://www.wildbirdtrust.org/

Maplewood Flats photo credits: Triple F Family Adventures 1998, Dr. Joseph Lin Green Club BC.
The Green Necklace

The Green Necklace is a multi-use trail system that will link parks, public spaces, and natural habitats while providing safe, alternative transportation options and recreation. When complete it will stretch seven kilometers and encompass the Central Lonsdale area of North Vancouver. The Green Necklace and the City’s Greenways Plan are significant steps towards fulfilling the vision of a sustainable community.

Key Actions
Phase 1 of the Green Necklace consisted of a 3 metre wide multi-use path built on existing City right-of-way and parkland. Street trees and traffic calming were added to enhance the greenway and improve safety.

Benefits to Biodiversity
The Green Necklace is part of the citywide Parks & Greenways Strategic Plan. This plan outlines a long-term vision for the integration of recreational, ecological and sustainable transportation networks throughout the City of North Vancouver. When complete, the Green Necklace will provide a network of habitat linkages for urban wildlife between existing green spaces with street trees and naturalized landscapes.

Along the Green Necklace route, innovative storm water management features such as bio swales and rain gardens will expose natural processes that are typically covered over in the urban environment.

What’s Next?
The next project is tree planting at the intersection of Keith and Mahon in partnership with Evergreen.

Contributors
City of North Vancouver, Evergreen, Tree Canada, Green Streets Canada

Link
http://www.greennecklace.org/main.htm

Green Necklace graphic and planting photo credit: City of North Vancouver
Northeast Profiles

Profiles from the northeast sector of the region cover projects from Burnaby, Coquitlam, Pitt Meadows and the Maple Ridge area.

Burnaby’s Environmental Framework
Codd Island Wetlands Conservation Initiative
Como Watershed Restoration & Rehabilitation Strategy
KEEPS Education Program
Project Rivershed
Still Creek Integrated Stormwater Management Plan
The Community Ecosystem Restoration Initiative
Walton Urban Forest
Watershed Pledge Program
Watershed Wise Program
Burnaby’s Environmental Framework

The City of Burnaby has embarked on a number of major planning initiatives to plan the future course for conserving key natural areas. Following extensive community involvement in 1993, the City adopted the State of the Environment Report a framework for addressing environmental issues in Burnaby.

Key Actions
Actions include planning from a watershed and ecosystem perspective, adoption of an Integrated Pest Management Program that uses an ecological approach to vegetation and pest management on City properties and working with community partners to protect and enhance Burnaby’s ecosystems (e.g., the establishment of the Environmental Resource and Education Centre in partnership with the Burnaby School District).

Benefits to Biodiversity
Burnaby has extensive green areas and open spaces that help moderate temperature, air, and water quality. The Environmental Framework recognizes that environmental stewardship cannot be created through City bylaws alone and requires a range of approaches that include: an ecosystem and watershed planning perspective; investments in parks, conservation areas and public works; partnerships; and land use regulations. The City of Burnaby’s Environmental Framework conserves biodiversity by identifying and preserving ecological functions and linkages across the landscape.

What’s Next?
The City of Burnaby has committed to fulfilling the framework in a number of ways mainly through comprehensive land use planning processes for environmental hotspots throughout the municipality such as foreshore and marine areas, upland conservation plans and watershed management plans.

Contributors
City of Burnaby, various NGO's, public and private sectors.

Link
http://www.burnaby.ca/cityhall/departments/departments_planning/plnnng_plans/plnnng_plans_offcic/plnnng_plans_offcic_environment.html#framework
Codd Island Wetlands

The Codd Island wetlands near Blaney Bog Regional Park Reserve was acquired through a collaborative partnership, and protects one of the region’s last remaining undyked floodplain wetlands of the Pitt River. It was slated for agricultural use that would have had severe environmental impacts. The Pitt Polder Preservation Society spearheaded the campaign to preserve it.

Key Actions
The Province of BC took the lead in conducting negotiations while the GVRD worked behind the scenes with landowners. On May 31, 2004, through a public ceremony, the purchase of the 104.5 hectares of Codd Island Wetlands was officially announced. GVRD Parks is the designated management agency. The partners have developed and ratified a set of principles and directions to guide the management and use of the wetlands in the interim before a management plan was in place.

Benefits to Biodiversity
Protection of the Codd Island wetlands preserves critical aquatic habitat features for many species of salmon. As an Ecological Conservancy Area, the priority for this site is ecological protection, not public use. It provides habitat for numerous species of birds, mammals and amphibians, including both red (endangered) and blue (vulnerable) listed species. The area is also a key part of the Pacific Flyway and provides one of the three known nesting sites in the Lower Mainland for the greater sandhill crane.

Next Steps
The GVRD will prepare the area’s management plan and establish a planning team to address such issues as encroachment, trespassing, land use on neighbouring properties, public education and awareness, invasive species management, species-at-risk, fish habitat and water access. Since the Codd Island Wetlands only includes the wetland and waterways and is surrounded by private lands, GVRD will attempt to secure adjacent lands for wildlife viewing and interpretation.

Contributors
MOE, GVRD, DUC (on behalf of the Pacific Estuary Conservation Program partners) TLC, District of Pitt Meadows, Aquilini Investment Group, Pitt-Polder Preservation Society.

Links
http://www.pittpolder.com/coddisland.html
http://www.conservancy.bc.ca/news_view.asp?id=342&ref=todays_news

Pitt-Polder Preservation Society photo credit: Ross Davies
Air photo image credit: The Land Conservancy
Como Watershed Restoration & Rehabilitation Strategy

The Como Watershed Group (CWG) developed a comprehensive spatial assessment and restoration strategy for species and ecosystems of the Como Creek watershed in Coquitlam. Similar to Langley’s Wildlife Habitat Conservation Strategy, it utilizes detailed ecological mapping, regional indicator species and invasive species management information to create a restoration and conservation toolbox.

Key Actions
Over two years, the watershed was mapped based on components of ecological value, biodiversity, and invasive species. The results and recommendations of this study provide essential next steps for conservation by the City of Coquitlam and the community.

Benefits to Biodiversity
The strategy provides a comprehensive assessment of ecosystem values as well as species and habitat information to guide restoration planning for the entire watershed. The strategy guides stakeholders through present and future conservation and management activities for aquatic and terrestrial habitats and the species associated with them.

What’s Next?
The CWG and the City of Coquitlam are now identifying ways to address the recommendations in the study. Mitigating the impacts of direct habitat loss is a major component of present activities, however, dealing with the introduction and proliferation of invasive species, as well as managing for species at risk and their habitats, are also key components of a long-term action plan.

Contributors
CWG, City of Coquitlam, Habitat Conservation Trust Fund.

Link (The report and maps are available on CD Rom from the CWG)
www.vcn/bc/ca/cwg

Prioritizing biodiversity hotspot areas in the Como Creek watershed: Source - Planning and Assessment of Restoration and Rehabilitation Objectives for the Como Creek Watershed 2006. Graphic credit CWG
KEEPS Education Programs

The Kanaka Education and Environmental Partnership Society (KEEPS) offers a variety of interactive environmental education programs about the Kanaka Creek watershed in Maple Ridge. The entire mainstem and portions of its many tributaries are within Kanaka Creek Regional Park. Programs are available throughout the year and focus on connecting people with all aspects of salmonid and freshwater ecosystem conservation.

Key Actions
The KEEPS aims to maintain the health of the Kanaka Creek watershed ecosystem through education, community involvement, scientific research, land preservation and partnerships based on stewardship principles. Mentoring the public on how to do data collection, watershed monitoring, stream cleanups and habitat restoration does this. Participants take part in a variety of watershed initiatives while learning about teamwork and the environment.

Benefits to Biodiversity
The program raises the awareness of ecological relationships from the site to watershed level. It also links aquatic and terrestrial ecosystem health in a way that bridges age and demographic barriers.

What’s Next?
Public school programs are now complete for the 2005-2006 school year and work is being directed to the 2006-2007 year of the program.

Contributors
KEEPS, DFO, GVRD, Catching the Spirit Society, local schools and clubs.

Links
http://www.keeps.org/
http://www.gvrd.bc.ca/parks/pdfs/KanakaManagementPlan.pdf

KEEPS graphic and photo credit: KEEPS
Kanaka Creek Regional Park Management Plan map credit: GVRD Parks.
Project Rivershed

The goal of Project Rivershed – a Rivershed Society of BC (RSBC) initiative, is to protect and conserve rivershed ecosystems in the Fraser River Basin and to encourage individuals and communities to reduce their ecological footprint.

Key Actions
The initiative involves undertaking a range of activities that build on existing work done by The RSBC in various river basins such as community engagement, development of Rivershed Profiles, establishment of sustainability indicators and implementation of action plans.

Benefits to Biodiversity
Project Rivershed builds community capacity, educates the public, and encourages conservation and stewardship of natural resources, especially salmon and water. It encourages individuals and communities to reduce their resource use (e.g. energy & water) in riversheds to sustainable levels.

What’s Next?
The initiative is being piloted in the Brunette River Basin and has already successfully brought together land use and community interests in the watershed.

Contributors
The RSBC, stewardship groups, federal, GVRD, provincial and local governments, progressive businesses, faith groups, schools, neighbourhood groups, social & economic development organizations and First Nations

Link
http://www.rivershed.com/project_rivershed_07.htm

Project Rivershed Pilot watershed map and photo credit: RSBC
Still Creek Integrated Stormwater Management Plan

The Still Creek Integrated Stormwater Management Plan (ISMP) integrates drainage management with environmental planning to address the impact of stormwater and drainage infrastructure modifications on environmental and recreational values in the watershed. It is a joint project by the City of Burnaby, the City of Vancouver and the GVRD.

Key Actions
Since the initiation of the Still Creek ISMP project in 2003, five public open houses and stakeholder meetings were held to present the study, its goals and strategies and the draft report. A broad cross section of participants including streamside property owners, residents, environmental stewardship groups, business owners and developers have attended the meetings and provided valuable input.

Benefits to Biodiversity
The vision for the Still Creek ISMP embraces the value of nature as an essential part of the regional economy. The ISMP hopes to achieve by 2055, reductions in flooding (even in the face of redevelopment), enhancement of the watershed’s environmental health and developing Still Creek into a system of unique connected green areas.

What’s Next?
Over 100 action items were identified in the ISMP for future consideration. Many of the recommended actions are based on programs that are already underway. The Still Creek ISMP will be used as one of the infrastructure and land use planning tools for the watershed to reduce the cumulative impacts of development on the environment, and to shape the future of the drainage infrastructure.

Contributors
City of Vancouver, City of Burnaby, GVRD, various public and private sector organizations.

Links
http://www.city.vancouver.bc.ca/com msvcs/cityplans/stillcreek/

http://www.city.burnaby.bc.ca/__shar ed/assets/Environmental_-_ Still_Creek_Council_Report3493.pdf# search=%22still%20creek%20integrat ed%20stormwater%22

Still Creek photo and watershed map credit: City of Burnaby
The Community Ecosystem Restoration Initiative

This initiative involves a unique approach to help fight climate change by planting trees to remove carbon dioxide. Management of non-native invasive species is also being incorporated into this program. The ultimate goal is to return degraded ecosystems back to their original state. The District of Maple Ridge was the GVRD’s pilot municipality and work is beginning in the Township of Langley. It is estimated that this initiative will generate more than $2.5 million in direct restoration benefits to Maple Ridge.

Key Actions
This initiative supports Maple Ridge’s progressive stance in addressing climate change mitigation at a community level. Up to 300,000 trees will be planted at identified sites resulting over the 80-year term of the initiative in the removal of more than one million tonnes of CO2. Private companies and other organizations in Maple Ridge can voluntarily neutralize their greenhouse gas footprints by participating.

Benefits to Biodiversity
Benefits of urban tree and forest recovery include creation of refugia habitat for species at risk and restoration of unique ecosystems in urban environments.

What’s Next?
The initiative recently got underway and will be ongoing for several years. Ecosystem Restoration Associates (ERA), the private sector consultant working with Maple Ridge and the Township of Langley will oversee implementation and hopes to expand this initiative throughout British Columbia, Western Canada and beyond.

Contributors
District of Maple Ridge, Township of Langley, Ecosystem Restoration Associates Inc (ERA), KEEPS, Alouette River Management Society (ARMS)

Links
http://www.econeutral.com/ceri.html
http://www.gvrd.bc.ca/sustainability/casestudies/MR_ecosystem.htm

Photo and CERI graphic credit: Ecosystem Restoration Associates Inc.
Walton Urban Forest

The Walton Urban Forest is a wildlife corridor and urban forest patch connecting two major tributaries to the Coquitlam River. It is also home to the Walton giant - the tallest Douglas fir tree in Coquitlam. Community advocacy resulted in a Council decision to defeat a proposal for mixed-use residential housing / park designation on 4 ha of forested city land referred to by neighbourhood residents as the Walton Urban Forest.

Key Actions
City Council has directed staff to rezone the entire 4 ha property as park and to consult with area residents regarding the future parkland use and ongoing management of the land.

Benefits to Biodiversity
Preservation of an important small refuge and habitat stepping stone was secured. The site provides urban forest cover and mature second growth forest ecosystem components that are becoming increasingly rare in this urbanized area.

What’s Next?
Council has voted to retain the entire forest as park and directed staff to consult with area residents to develop a vision for future park use and a forest management plan. At present the partnership is in its early stages, the goal is to establish a Walton Urban Forest Community Association and forest management plan.

Contributors
City of Coquitlam, West Walton neighbourhood residents

Links

Photo credit: Paul Van Peenen – The Now News
Watershed Pledge Program

The Watershed Pledge Program (WPP) was launched in Burnaby in the fall of 1999, targeting residents, businesses, and schools. The goal was to provide citizens with practical actions that can be taken toward improving water quality and protecting local streams and lakes.

Key Actions
The initial target audience lies within the Brunette River watershed. However, the initiative also seeks to educate people outside the watershed through its web site, public events, and media promotion. Components of the program include a residential program, a business program and school program.

Benefits to Biodiversity
The Brunette River watershed supports over 200 bird species, 23 mammal species, and a range of fish species including salmon and trout. The Brunette Basin Task Group formed in 1997 identified several key challenges in the watershed including conservation of biodiversity. The WPP works towards addressing these issues with the intent of improving the overall health of the Brunette River watershed and the species and habitat it supports.

What’s Next?
The Watershed Pledge Program will be available to serve as a model for future education programs in other municipalities.

Contributors
BCIT, City of Burnaby, Burnaby Lake Park Association, City of Vancouver

Link
http://commons.bcit.ca/watershed/

WPP graphics credit: The WPP- BCIT
Watershed Wise Program

The Watershed Wise Program is an ecological literacy program developed by the Como Watershed Group (CWG) to increase understanding of, and connect communities to, the value of urban watersheds and wildspaces.

Key Actions
The Urban Wildspace Conservation Series, a toolkit of PowerPoint modules and planning exercises are the cornerstone to the program and are delivered through workshops. The WWP is presently available as a web based product with presentations of specific modules occurring periodically upon request.

Benefits to Biodiversity
Two modules of the program deal directly with concepts of biodiversity science and conservation in Greater Vancouver and are used for outreach and education on biodiversity and species at risk conservation issues.

What’s Next?
While funding shortcomings presently restrict the ability for ongoing delivery, the program still remains current and available on the CWG’s website. In the long-term the CWG aims to secure resources and sponsorship to launch the program in a sustainable way.

Contributors
CWG, RSBC, City of Coquitlam, local schools and NGO’s.

Link
http://www.vcn.bc.ca/cwg/CWGWWP/WatershedWiseProgram.html

WWP graphics credit: CWG
Southwest Profiles

Profiles from the southwest sector of the region cover projects from the Vancouver, Richmond and Delta – Fraser Estuary area.

Camosun Bog Restoration Project
Delta Farmland Wildlife Trust
Delta Nature Reserve Improvement Initiative
East Fraserlands
Hastings Park Restoration Initiative
Marine Conservation Initiative - Boundary Bay
Richmond Fruit Tree Initiative
River Green
The Green Gateway
The Vancouver Fruit Tree Project
Vancouver’s Crown Street
Vancouver’s Green Streets Program
Vancouver Landfill Naturescaping
Camosun Bog Restoration Project

The Camosun Bog Restoration Group (CBRG) is working to restore and save Camosun Bog, a rare and unique ecosystem that was nearly lost in UBC’s Pacific Spirit Regional Park.

Key Actions
The CBRG in collaboration with the GVRD and Vancouver Nature are removing invasive plant species, recreating conditions to sustain bog processes and recover the bog plant community. Construction of the 180m long walkway that meanders round the bog and opens up the restored area to public viewing was completed in 2005.

Benefits to Biodiversity
A rare ecosystem, this is the only significant bog remaining in the City of Vancouver and as such, its restoration will be important to providing representative habitats of these types in Greater Vancouver.

What’s Next?
The CBRG has restored over 80% of the bog and plans to complete the rest of the work over the next couple of years. One of their main objectives is to ensure that new generations of volunteers become involved in its conservation. The CBRG also recognizes a long-term monitoring is essential and is working on its development.

Contributors
CBRG, GVRD, Friends of Pacific Spirit Park, VNHS, UBC

Link
http://www.naturalhistory.bc.ca/CamosunBog/
Delta Farmland and Wildlife Trust

Founded In 1993 by local farmers and conservationists, the Delta Farmland and Wildlife Trust (DFWT) works to conserve agricultural and wildlife resources in Delta. The DFWT recognizes that Delta’s farmland is some of the most productive agricultural land in Canada, contributes significant environmental services to the greater community, and provides critical habitat for internationally significant migratory bird populations on the west coast of North America.

Key Actions
The DFWT has an integrated program of research, education, and financial incentives to develop and promote land stewardship. The Society administers a number of stewardship programs available to farmers that operate on the Fraser River delta. Under these programs the cost of specific management practices contributing to soil and/or wildlife habitat conservation and enhancement are shared.

Benefits to Biodiversity
Over the winter nearby intertidal marshes and mudflats that provide important sources of food for migratory birds (i.e. eelgrass, invertebrates and marsh plants) are covered by the tide during the day, making the adjacent farm fields important upland resting areas as well as additional sources of food. In particular, waterfowl consume remnant crops that remain after harvest, graze on winter cover crops and search out insects and seeds.

What’s Next?
The DFWT sees the opportunity for the community to be a key player in conserving farmland close to home through promoting shopping for local produce and supporting initiatives that conserve farmland resources.

Contributors
DFWT, Corporation of Delta, GVRD, EC/CWS – Delta Farmers Institute and Boundary Bay Conservation Committee, Delta Agricultural Society

Links
http://www.deltafarmland.ca/

DFWT educational signage credit: DFWT
Lesser snow geese from Russia are just some of the waterfowl using the Fraser River delta from fall to spring benefiting from farm stewardship programs. Photo credit: Markus Merkens DFWT.
Delta Nature Reserve Improvements

The Delta Nature Reserve, a section of Burns Bog east of Highway 91, is currently the only area of Burns bog open to the public. Since the purchase of 5,045 acres of Burns Bog in 2004 by four levels of government, the majority of Burns Bog has been off limits to the public. The goal of this initiative, developed by the Burns Bog Conservation Society (BBCS) is to improve management and develop balanced use of the bog. Other public access to the bog will take several years until the government develops a comprehensive management plan.

Key Actions
Funded components of the initiative include linking the inner and outer boardwalks, creating interpretive signage, surveying the vegetation in the Delta Nature Reserve and of critical importance monitoring water levels. There is also a desire to organize volunteer groups to remove invasive species and create a demonstration bog garden to profile the unique local flora.

Benefits to Biodiversity
The initiative provides a venue for increasing scientific knowledge of the bog, while capitalizing on the educational potential of the reserve and increasing the public's involvement to protect its unique values.

What’s Next?
Partners will continue to collect data on water levels and vegetation cover to promote meaningful volunteer experiences in bog restoration.

Contributors
BBCS, GVRD, Corporation of Delta, VanCity

Links
www.burnsbog.org

Open pond and DNR trail photo credit: Sarah Howie
Map credit: Burns Bog Conservation Society

Biodiversity Action Profiles
January 2007
East Fraserlands

East Fraserlands is a proposed neighbourhood development for approximately 13,000 people located on a brownfield site on the Fraser River south of Everett Crowley Park. The development is being designed as a community that enhances and celebrates local biodiversity.

Key Actions
The development will integrate a strong sustainability and biodiversity framework into an urban community design. Development of The Urban Songbird Landscape Guidelines is one component that has been included in the approved Official Community Development Plan. The plan addresses the importance for urban neighbourhoods to find ways to integrate ecological systems and associated habitat into the urban landscape.

Benefits to Biodiversity
Components like The Songbird Design Guidelines will help ensure that the neighbourhood will be designed, developed, and maintained to maximize the diversity of bird species using the site for nesting and foraging. Other ecological dimensions of the sustainability strategy include connecting the neighbourhood to a regional open space system and restoring the Fraser River foreshore.

What’s Next?
The Songbird Design Guidelines are anticipated to be available in the fall of 2006 after completing further research and design workshops.

Contributors
ParkLane Homes Ltd. and WesGroup Income Properties Inc., Holland Barrs Planning Group Inc., Professor Patrick Mooney (Associate Professor, Landscape Architecture, Faculty of Land and Food Systems, UBC), Don Wuori Design

Links
http://thetyee.ca/Views/2006/08/03/Holland/
http://www.parklane.com/eastfraserlands/

Photo and map source: ParkLane Homes Ltd.
Hastings Park Restoration Plan

Extensive community consultation led to the Hastings Park Restoration Plan, a comprehensive planning document adopted by the Vancouver Park Board and City Council in 1997. Hastings Park is considered a "signature" park that draws visitors from across the city. At 66 hectares, it is one of Vancouver’s largest parks.

Key Actions
The Vancouver Park Board and City Council approved the restoration concept in February 1996 with the full plan being approved in March 1997. The initiative involved the "daylighting" of the old stream that used to run through the site, which was culverted 50-60 years ago, and the collection of rainwater from the residential area south of the park to feed the stream.

Benefits to Biodiversity
While not all of the park restoration involves naturalization, the key feature is the "Sanctuary", a 4-hectare section of the park containing a large pond surrounded by extensive native plantings. This area provides significant refuge values and connectivity for wildlife, especially songbirds between Vancouver Harbour and the Hastings and Renfrew neighbourhoods to the southeast. The pond acts as a reservoir and as a biofiltration system whereby plants and animals clean rainwater and runoff before it is fed into the stream (and eventually into Burrard Inlet).

What’s Next?
Initially, the pond needed to be supplemented by the municipal water supply. A moderate amount of rainwater run-off was available from within the park site and the residential area to the south of Hastings Street. It is anticipated to increase over the next decade. A recirculation system was installed and remains active until the later phases of park restoration, once the stream connection between Hastings Park and Burrard Inlet are completed. Additional phases of restoration work are planned but have yet to begin.

Contributors
Vancouver Park Board, Hastings Park Community Association.

Links
http://www.city.vancouver.bc.ca/parks/parks/hastings/restoration.htm

http://www.city.vancouver.bc.ca/parks/parks/hastings/index.htm

Photo Credit: Vancouver Park Board
Marine Conservation Initiative - Boundary Bay

The key objectives of this Boundary Bay watershed initiative are to build local capacity and expertise, share ideas and link all community data across administrative boundaries. While many management agencies and jurisdictions are responsible for various parts of the watershed, all understand the necessity to combine limited resources, share information and employ an integrated planning and resource management approach.

Key Actions
This initiative has produced a Georgia Basin Habitat Atlas that integrates community and government natural resource information to better facilitate land use planning, to promote sensitive habitat conservation and protection, and to raise awareness and respect for ecological values.

Benefits to Biodiversity
The extensive eelgrass meadows in Boundary Bay are the basis of a complex food web in the South Georgia Basin that supports a diverse range of marine and migratory species as well as an important crab fishery. The Eelgrass beds protect local beaches from erosion and produce a significant amount of oxygen.

What’s Next?
The long-term objectives are: sustain community monitoring of high risk environmentally sensitive areas such as eelgrass meadows; map the baseline data of existing forage fish spawning locations in Boundary Bay; increase public and decision maker knowledge; provide free training workshops and field experience; and to promote environmental and conservation knowledge.

Contributors
Friends of Semiahmoo Bay Society, BC Nature and other local naturalist groups, CMN, City of Surrey, Corporation of Delta, City of White Rock, Semiahmoo First Nation, Georgia Basin Action Plan

Link
www.birdsonthebay.ca

Photo credit: Marg Cuthbert, Friends of Semiahmoo Bay Society
Map credit: Friends of Semiahmoo Bay Society.
Richmond Fruit Tree Sharing Project

The Richmond Fruit Tree Sharing Project connects growers with surplus fruit or vegetables with those who have the time to harvest it. This initiative has grown to be more than just being about fruit trees. In five years, the Project has harvested over 73,000 pounds of fruit and vegetables to give to those living with poverty.

Key Actions
Growing food at the Terra Nova Sharing Farm, picking fruit, and gleaning second harvests from farmer’s fields are the focus of activities. The project also promotes sustainability through workshops on issues related to food rescue, food security, organic practices, farm gardens and youth.

Benefits to Biodiversity
The work helps to preserve orchards and the agricultural land base in human settlement areas. It also promotes natural organic farming techniques and community gardens to provide wildlife habitat for pollinators essential for fruit and vegetable production.

What’s Next?
Volunteers to help plant, cultivate, harvest, and to pick fruit in the summer are a constant need. For the immediate future The Terra Nova Sharing Farm will be developed in phases to become the permanent home for the Richmond Fruit Tree Sharing Project.

Contributors
Richmond Fruit Tree Sharing Project, City of Richmond, Richmond Food Bank, FarmFolk/CityFolk, Volunteer Richmond, Richmond Family Place Richmond Community Canning Program, Richmond Food Security Group West Coast Seeds, members and volunteers.

Links
http://www.richmondfruittree.com/index.html

Contributors
Richmond Fruit Tree Sharing Project, City of Richmond, Richmond Food Bank, FarmFolk/CityFolk, Volunteer Richmond, Richmond Family Place Richmond Community Canning Program, Richmond Food Security Group West Coast Seeds, members and volunteers.

Links
http://www.richmondfruittree.com/index.html
River Green

The River Green Program is designed to help offset habitat loss in the Corporation of Delta, primarily riparian woodlands which are becoming increasingly rare in the municipality. The loss of healthy and mature trees, either through development, land use changes or natural processes is a significant community issue since trees provide numerous tangible and intangible benefits.

Key Actions
The original focus of the River Green Program was the planting of cottonwood trees and the restoration of woodlands on the Fraser River foreshore. However, these activities were expanded to allow for wider range of opportunities to improve riparian conditions in upland areas as well.

Benefits to Biodiversity
Riparian woodlands, especially native cottonwood ecosystems provide valuable habitat, including nesting for species such as eagles and great blue herons. Trees near watercourses also moderate water temperatures and provide a source of in-stream woody debris, both of which are important to aquatic life.

What’s Next?
As part of River Green or a separate initiative, the Corporation of Delta is investigating the feasibility of developing a municipal habitat compensation bank.

Contributors
Corporation of Delta

Link
http://www.corp.delta.bc.ca/EN/main/residents/771/786/rivergreen_program.html
The Green Gateway

This initiative is designed to create a green ‘welcome mat’ to the region by enhancing vegetation along Highway 99 adjacent to the Vancouver Landfill. The BC Ministry of Transportation who owns land in the area granted the Corporation of Delta the right to plant a green corridor three kilometers long from 80th Street to 96th Street along Ladner Trunk Road. The site, previously an illegal dumpsite is now covered with over 6,400 trees and shrubs.

Key Actions
The objective was to plant both fast-growing and slow-growing trees and shrubs to increase natural vegetation cover, improve aesthetics, and increase community involvement in natural areas management. Other sites were initiated under the Forest 2020 program. The most recent site is the intersection of Ladner Trunk Rd. and Highway 17.

Benefits to Biodiversity
The initiative enhances ecological services in the area by combating air pollution from the highway traffic, diversifying a monoculture of non-native grasses, creating a buffer between two major roads, and increasing links for wildlife habitat in close proximity to Burns Bog.

What’s Next?
Requirement for a long-term maintenance budget is needed as part of the process as well as providing information to the community through an ongoing outreach program.

Contributors
Corporation of Delta, GVRD’s Sustainability Enterprise Fund, Bill and Lillian Vander Zalm, the GVRD Nutrifor Program, Sylvis Environmental, the Institute of Urban Ecology (Douglas College), the Canadian Forestry Service, Forest 2020, Scott Paper, and Ken Davie and Bryon Funnell, Delta Fire Department.

Link
http://www.corp.delta.bc.ca/EN/main/municipal/323/798/green_gateway.html

Highway 99 (Green Gateway) planting photo credit: Nancy McLean Corporation of Delta
The Vancouver Fruit Tree Project

The Vancouver Fruit Tree Project (VFTP) enables communities to connect through the harvest, distribution, and celebration of locally grown, backyard fruit. In doing so, the project fosters community engagement, alternatives to market-based agriculture, and strong food security networks in Vancouver. The VFTP works with over 50 tree owners and 100 volunteers to harvest approximately 4,000 lbs of fruit annually from backyards throughout Vancouver.

Key Actions
The main activities of the VFTP are to connect people who have excess fruit from their backyard trees with volunteers who have the time and energy to harvest it. Most of the harvested fruit is donated to community organizations such as neighbourhood houses, community kitchens, and friendship centers. Educational canning workshops enhance food preservation skills by training diverse members of the communities to safely preserve fruit using simple, up-to-date canning processes.

Benefits to Biodiversity
The Project works to promote preservation of tree cover and fruit producing trees in urban settlements that in turn support pollinator species and bird diversity. Activities also promotes awareness about the value of fruit trees to urban biodiversity, maintenance of local natural food sources, maintaining urban greenspaces that sustain food sources as well as making greenspaces, trees, and especially fruit trees recognized as a natural asset.

What’s Next?
The VFTP will continue to address food security and green space preservation issues in the community through innovative approaches and capacity building.

Contributors
The Vancouver Fruit Tree Project Society, Farm Folk City Folk

Link
http://www.vcn.bc.ca/fruit/home.html

VFTP graphic and photo credit: VFTP
Vancouver’s Crown Street

The City of Vancouver is committed to protecting and improving its natural environment by adhering to and promoting the principles of urban sustainability. At the same time they are also committed to providing roads, lanes, and sidewalks to ensure the citizens of Vancouver can get around. Vancouver’s Crown Street in the Musqueam-Southlands area has become the city’s first Sustainable Streetscape. The design uses innovative ideas to integrate transportation into an environmentally sensitive setting.

Key Actions
In partnership with Musqueam Ecosystem Conservation Society (MECS), the Musqueam Indian Band and the Crown Street residents, the road width was reduced from the standard 8.5m to 6.7m. Broad, shallow swales were layered with 30cm of absorbent soil and vegetated with native plants. The vegetation filters pollutants and rainwater runoff infiltrates into the ground naturally.

Benefits to Biodiversity
As a result, local salmon bearing streams like Musqueam Creek are protected from rain-induced volume surges. Rainwater is filtered naturally instead of the roadway runoff being directly discharged into the streams. Equally important, the native plantings and naturescaping provides refuge areas and habitat for songbirds and pollinators.

What’s Next?
Monitoring the effectiveness of the initiative is still ongoing; water quality in the retention ponds and creek discharge is being monitored in partnership with the University of British Columbia. Over the next five years, data will be collected and compared to a neighbourhood street that utilizes standard curb-and-gutter drainage. In 2006, Engineering Services will prepare a formal summary report for Vancouver City Council to review the potential for future residential street improvement options to be influenced by the Crown Street design.

Contributors
City of Vancouver and the Musqueam Ecosystem Conservation Society (MECS)

Links
http://www.city.vancouver.bc.ca/engs/vcs/streets/design/enviro.htm

http://www.mecsweb.org/Projects/Projects.html

Crown Street photo credit: City of Vancouver
Musqueam FN planting photo credit: MECS
Vancouver’s Green Streets Program

The City of Vancouver’s Green Streets Program encourages citizens to beautify their neighbourhoods by sponsoring and maintaining street gardens in traffic circles and corner bulges. The program began in 1994 as a pilot initiative in Vancouver’s Mount Pleasant neighbourhood. The success of the pilot initiative inspired other neighbourhoods to get involved and liven up their streets. Volunteer street gardeners agree to work with the City and with their communities to help the gardens grow during the year. The principles of waterwise gardening help prevent unnecessary wastage.

In turn, these plants provide food sources for resident and migratory songbirds. The naturescaping values also provide connectivity between ground and street trees and increased refuge areas for local wildlife. The use of Integrated Pest Management (IPM) strategies to deal with plant health problems is strongly supported.

What’s Next?
The program continues to grow with dozens of sites in various neighbourhoods around the City. The Street Gardener’s Information Exchange is a page on the City’s website where gardeners can advertise plants they have to donate, plants they are looking for or information they have to share. The Green Streets Master Gardener Mentoring Program offers street gardeners the opportunity to receive free advice from a certified Master Gardener.

Contributors
City of Vancouver, residents and community associations

Key Actions
Green Street gardens are landscaped traffic circles and corner bulges in neighbourhoods. Traffic circles are located in the middle of residential intersections and are landscaped by the City. Corner bulges are widened boulevards at the corners of some intersections and are sometimes landscaped by the City. They are used to slow traffic and increase safety in residential areas.

Benefits to Biodiversity
The program provides increased plant diversity in otherwise monoculture landscapes and provides a significant increase in flowering plants for insects.

Link
http://www.city.vancouver.bc.ca/ENG/SVCS/streets/greenstreets/index.htm

Contributors
City of Vancouver, residents and community associations

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Vancouver Landfill Naturescaping

The City of Vancouver has incorporated naturescaping into a garden within the Vancouver Landfill to improve the aesthetics of a highly disturbed landfill site and create natural habitat values. Edward Van Veenendaal from Gardens by Nature created the garden. He is known locally for promoting naturescaping and landscape naturalization practices.

**Key Actions**
Key features of the garden are a naturalized landscape plan that uses native plants, hibernacula (dens) for reptiles and woody debris for ground-oriented species (insects, amphibians). Attractants for butterflies, pollinators and hummingbirds and bat boxes are also included. The naturescaping garden is featured in the annual Vancouver Landfill Open House every June.

**Benefits to Biodiversity**
The garden increases natural structural features, plant diversity and habitat values for a range of flora and fauna and improves natural service values for the site.

**What’s Next?**
Ongoing activities are to continue annual tours, bird counts and expand use of gardens for education and awareness. Further naturalized plantings are anticipated during the restoration phases of the landfill.

**Contributors**
City of Vancouver, GVRD, Naturescape Program of BC, Scouts, Corporation of Delta, Federation of BC Naturalists

**Links**

http://www.hctf.ca/nature.htm
(Naturescape BC)

Photo credit: Tania Gheseger, GVRD
Southeast Profiles

Profiles from the southeast sector of the region cover projects from the Surrey and Langley area.

Glen Valley Organic Farm Cooperative
Nature Matters
Sunnyside Acres Urban Forest Initiative
Surrey’s Natural Areas Partnership
The A Rocha Field Study Center
The Arbour Ribbon Program
Wildlife Habitat Conservation Strategy
Yorkson Watershed Stewardship Committee Community Green Map
West Creek Wetlands
Glen Valley Organic Farm Cooperative

The Glen Valley Organic Farm Cooperative (GVOFC) works to feed and educate present and future generations by co-operatively holding, stewarding and sustainably farming the land. The land is owned collectively, and then leased out at affordable rates so that farmers can actually make a living farming.

Key Actions
Work of the Co-op includes stewarding the land, education and supporting sustainable food production. All major decisions for the co-op are achieved through consensus. This process helps to ensure that issues are carefully thought through before action is taken.

Benefits to Biodiversity
The GVOFC is operated on the principles of sustainability for soils, as well as producing food in harmony with natural processes and stewardship of the native flora and fauna. This includes management of nutrients and runoff to protect nearby aquatic ecosystems and groundwater resources. Incorporation of native plant communities and preservation of tree cover and forest areas provides habitat and food sources for a range of species.

Livestock are appropriately managed to reduce human/wildlife conflicts, and tillage and food propagation practices utilize natural methods and integrated pest management to reduce impacts to local native insect and songbird populations.

What’s Next?
The focus for the Co-op is to secure succeeding generations of farmers and investors to maintain the vision and principles of the cooperative.

Contributors
GVOFC, Farm Folk/City Folk, The Land Conservancy

Link
http://www.gvofc.org/index.php

Photo credits: Community Sustainable Agriculture Association, The Land Conservancy.
Nature Matter

Nature Matters is the evolution of Surrey's environmental programs. It is a commitment to environmental causes beyond fish habitat and natural areas, and a way of drawing all efforts together with a cohesive plan and cause. Nature Matters brings together key environmental stewardship and ecological restoration efforts underway in the City of Surrey including the Salmon Habitat and Restoration Program (ShaRP) and Surrey’s Natural Areas Partnership (SNAP).

Key Actions
Nature Matters is focused on: Protecting and enhancing Surrey’s environment through hands on action; Educating and engaging residents in environmental issues in Surrey through private property stewardship; Increasing youth involvement through stewardship activities; Encouraging volunteerism in the community; Working closely with teachers and students to integrate environmental principles into local curriculum.

Benefits to Biodiversity
The City strives to protect its natural areas through policy documents such as the Official Community Plan, the Strategic Natural Areas Management Plan, and the City’s 10-Year Servicing Plan, and by establishing parks, open spaces, protected habitats and conservation areas. Nature Matters is a means to link these types of higher-level plans to on the ground actions that protect species and habitats.

What’s Next?
Components such as SHaRP and SNAP are ongoing programs delivered annually with a range of partners. Other efforts to deliver the key actions of Nature Matters will range from continued work with educators, private property owners and volunteers.

Contributors
City of Surrey, Green Timbers Heritage Society, Surrey and White Rock Naturalists, Sunnyside Acres Heritage Society and various volunteers, residents and organizations throughout the municipality.

Link
http://www.surrey.ca/Living+in+Surrey/Environment/default.htm

SNAP photo credit: Lanny Englund, City of Surrey
Nature Matters brochure graphic credit: City of Surrey
Sunnyside Acres Urban Forest

Logged early last century, Sunnyside Acres in south Surrey is a rare coastal Douglas fir/coastal western hemlock interface, considered a significant natural amenity to the community. Public concern and interest in preserving this unique forest ecosystem resulted in a referendum to protect it in perpetuity.

Benefits to Biodiversity
This urban forest area provides critical habitat for red listed ecosystems and species (e.g. cottonwood stand communities) and is a major refuge and connectivity corridor for the adjacent urbanized area.

What’s Next?
Ongoing education is needed to engage the community to steward, protect and respect this vital natural asset. The chief goal for the SAHS is to recruit and sustain volunteers to keep the group and conservation activities ongoing.

Contributors
City of Surrey (Parks), SAHS

Links
http://www.surrey.ca/Living+in+Surrey/Environment/Parks+Natural+Areas+and+Walks/Nature+Trails/Sunnyside+Acres+Urban+Forest.htm
http://www.greatervancouverparks.com/Sunnyside01.html

Sunnyside Acres plaque photo credit: Greater Vancouver Parks.com

Map credit: City of Surrey
The Arbour Ribbon Program

The Arbour Ribbon Program was designed to preserve tree cover as part of regional and municipal park linkages and as a way to connect parkland across the Township of Langley. Oriented towards community health and livability, it was also a means to incorporate rural-urban land use buffers for agricultural lands in concert with Ministry of Agriculture.

Key Actions
To fulfill the objectives of the Program, efforts have focused on land acquisition, urban tree and riparian forest preservation and restoration activities. The concept plan for the location and extent of the ribbon was developed and recently the Township purchased part of the floodplain adjacent to Nicomekl River for the Program.

Benefits to Biodiversity
The Program enhances wildlife connectivity corridors, integrates wildlife needs into land use planning in conjunction with the Township’s Wildlife Habitat Conservation Strategy, and provides buffers for wildlife between urban land use and agricultural land use.

What’s Next?
The present focus is to apply an "escarpment concept" including arboretums and natural area parkland. Ongoing acquisition and right of way agreements are in the works for the foreseeable future.

Contributors
Township of Langley, BC Ministry of Agriculture & Lands

Links
The program is still under development

What's Next?
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Contributors
Township of Langley, BC Ministry of Agriculture & Lands

Links
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What’s Next?
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Contributors
Township of Langley, BC Ministry of Agriculture & Lands

Links
The program is still under development
The A Rocha Field Study Center

The A Rocha Field Study Centre is a diverse 10-acre property, formerly used as a dairy farm. This is A Rocha’s (an international Christian environmental non-profit) first field study centre in Canada. Volunteers come to participate in conservation research, environmental education, and community living.

Key Actions
The field center has several components that form the hub of conservation activities including an ecology center and a demonstration garden. The Ecology Centre offers hands-on environmental education to school, church, and community groups. The garden is designed to demonstrate and promote sustainable agriculture. Through the combination of scientific studies and practical restoration projects, activities focus on the Little Campbell River Watershed and Boundary Bay, rated Canada’s top Important Bird Area.

Benefits to Biodiversity
A Rocha recognizes the importance of protecting and stewarding vulnerable habitats and species. It is hoped that its stewardship initiatives will protect riparian areas, and improve habitat and water quality. Through research and monitoring, the goal is to inform government management and decision-making levels so that future development will respect natural values and protect key habitat areas.

What’s Next?
An interpretive trail is being planned to run through the property, making use of the varied habitats on site from woodland to wetland. A Rocha Canada hopes to build bridges with landowners, First Nations and local government to create awareness of the ecosystem values in the community.

Contributors
A Rocha Canada, Friends of Semiahmoo Bay, LEPS, Pacific Streamkeepers Federation, Pacific Salmon Foundation, Trinity Western University, University College of the Fraser Valley.

Link
http://en.arocha.org/cacentre/index.html

A Rocha site photo and field center map credit: A Rocha Canada
West Creek Wetlands

The West Creek wetlands lie within the upper West Creek watershed of Langley, BC and were recently acquired for conservation purposes. The area encompasses approximately 163 acres of natural terrain containing a small lake, wetlands, and creeks. On the east, west and south boundaries are private rural properties many of which are still partially or wholly forested. The West Creek Wetlands lie only a short distance from the forested ridges of Glen Valley, just above the Fraser River. The site is also connected by forest corridor to the Ponder Park Nature Reserve, which lies adjacent to the Glen Valley Bluffs.

Running through the property is the main channel of West Creek, one of BC's 14 designated "sensitive" streams, with healthy stocks of Coho and Chum Salmon. Wood Duck Lake located in the northern half of the property was created by dam building activities of the resident beaver population.

What’s Next?
The intent is to have the West Creek wetlands managed as a nature park with low-impact facilities such as walking trails, boardwalks, and bird viewing areas. With most of the infrastructure in place, the site will eventually provide a valuable venue for educating families and citizens about the importance of wetlands.

Contributors
The Land Conservancy, Glen Valley Watershed Society, Township of Langley, GVRD, BC Trust for Public Lands, Langley Environmental Partners Society, Green Club of BC, various donors, sponsors.

Links
http://www.conservancy.bc.ca/content.asp?sectionid=226&regionack=LM
http://www.greenclub.bc.ca/Green_Club_Activity/GVRD_Parks_Events/Action/West_Creek/west_creek.htm
http://www.gvws.ca/wetland.html

Key Actions
Through a partnership between GVRD, the Township of Langley, BC Trust for Public Lands and The Land Conservancy (TLC) the property was secured in December 2006. The former landowner generously agreed to reduce the purchase price of donating $1.1 million to TLC’s fundraising campaign. The Glen Valley Watershed Society was instrumental in raising public awareness and also contributed to the fundraising.

Benefits to Biodiversity
As one of the largest areas of wildlife habitat in the municipality, the wetlands are home to nearly 170 different types of fish, amphibians, reptiles, birds, and mammals, including up to 18 endangered or threatened species.

Wood Duck Lake photo credit: Dr. Joseph Lin, Green Club of BC
Air photo credit: The Land Conservancy
Wildlife Habitat Conservation Strategy

In 1999, Langley Environmental Partners Society recognized the accelerating threat to wildlife habitat and biodiversity in Langley and in response launched the “Wildlife Habitat Conservation Strategy” initiative with the Township. The Strategy’s goal is to put in place effective municipal policies and procedures that will ensure the long-term protection biodiversity and important wildlife habitat in Langley.

Key Actions
The first three phases of the initiative are complete and include reports documenting habitat status, habitat mapping, and habitat identification necessary to maintain healthy wildlife populations. Other actions focus on habitat goal setting, identifying what needs to be preserved and/or restored to support local wildlife populations.

Benefits to Biodiversity
The Township of Langley provides habitat for a multitude of fish and wildlife species. The Strategy integrates wildlife needs into land use planning and provides spatial and database information to identify critical areas for conservation, connectivity and improved management for common and at risk species.

What’s Next?
The second part of this strategy will involve the preparation of a Wildlife Habitat Viability Strategy, which will identify policies, programs and opportunities - with their corresponding financial implications - for wildlife habitat protection and conservation within Langley. The Township of Langley has initiated a process to integrate wildlife habitat conservation into municipal policies and programs. The Official Community Plan was identified as the key policy document for the municipality to use in habitat conservation. Integration of wildlife habitat requirements into Neighbourhood Plans will also be considered.

Contributors
LEPS, TOL, CWS, DFO, MOE, Wildlife Habitat Canada, Habitat Conservation Trust Fund, VanCity, McLean Foundation, CMN, Eco Action (Environment Canada)

Links
http://www.leps.bc.ca/wildlife_pgm.html
http://www.smartgrowth.bc.ca/index.cfm?group_ID=3452

LEPS graphic credit and Yorkson neighbourhood land cover map credit: LEPS
Yorkson Community Green Map

The Yorkson Watershed Stewardship Committee (YWSC) created a community green map to increase awareness of local sustainability choices. Through the mapping process people can locate groceries stores because they have local and/or organic food, find places to bring injured wildlife and other types of integrated community values. The map also highlights municipalities with eco friendly planning and development designs or provides information about habitat restoration sites.

Key Actions
With the support of the Green Map program the YWSC has been able to put together an online community green map atlas that is available through the Community Mapping Network (CMN).

Benefits to Biodiversity
This online atlas provides a community based approach to identifying significant sites of ecological and social value on a map that can be used to connect community ecological and cultural values.

What’s Next?
The community mapping initiative is just getting started through the Community Mapping Network’s registry that involves public on-line identification of sites of interest.

Contributors
Yorkson Watershed Stewardship Committee, LEPS, CMN, DFO

Links
http://www.shim.bc.ca/atlases/greenmap/Index.cfm
http://www.ywsc.ca/

YSWCS graphic, watershed map and volunteer photo credit: YWSC
Lessons Learned

In preparing these profiles, many common outcomes, challenges, and keys to success were identified by contributors. The learning outcomes experience by these initiatives can guide the efforts and actions others.

The key lessons learned are as follows:

- Actions often take longer than anticipated to achieve desired results. Perseverance and strategic planning are essential.
- Conservation in urban landscapes must embrace new ways of organizing and constructing space and be seen as an opportunity to explore and adopt new, innovative designs. The challenge for urban communities is to move into a new era embodying a balance between human settlements and healthy ecosystems.
- Continued involvement by stewardship groups and other knowledgeable representatives through all steps of a project is essential.
- Local champions are key for promoting actions early in the process and to demonstrate success.
- One of the most discernable difficulties is satisfying the general and specific needs that arise with a diverse range of participant interests.
- Mentoring and involving new generations of volunteers is critical for long-term success.
- Utilize a co-operative approach that involves a variety of participants, including representatives from all levels of government, conservation organizations, professionals and the public.
Other Profiles to Consider

- BC Farmland Watch - The BC Farmland Watch Network is a project of FarmFolk/CityFolk. http://www.ffcf.bc.ca/BCFarmlandWatch.html
- Protect our Greenbelt - Without a strong commitment to its preservation our supply of agricultural land, and the quality of life it serves, is sentenced to a slow, piecemeal, but inevitable demise. http://www.greenbelt.bc.ca/
- Strathcona and Cottonwood Community Gardens – another local food security initiative that supports sustainable agricultural land preservation in urban areas. http://newcity.ca/Pages/Cottonwood_garden.html
- The BC Agricultural Council’s Environmental Farm Plan Program: http://www.bcac.bc.ca/efp_programs.htm
- The David Avenue Connector – an example of aquatic ecosystem compensation for a major municipal road infrastructure development. http://www.coquitlam.ca/Residents/Transit+and+Transportation/Roads+and+Traffic/David+Avenue+Connector.htm
- The Earthwise Garden – a community garden in Delta, one of the first in Canada designed to demonstrate ecological principles in landscaping. http://www.drsociety.bc.ca/gardentour.htm
- The Pacific Streamkeepers Federation: The PSkF is a major support network for watershed stewardship, restoration and advocacy across the region. www.pskf.org