Bowker Creek Urban Watershed Renewal Initiative
2005 Annual Report

Goals

The BCI is based on the four goals from the watershed plan:

Goal 1: Individuals, community and special interest groups, institutions, governments and businesses take responsibility for actions that affect the watershed.

Goal 2: Manage flows effectively.

Goal 3: Improve and expand public areas, natural areas, and biodiversity in the watershed.

Goal 4: Achieve and maintain acceptable water quality in the watershed.

Activities

In 2005, the BCI focused on outreach activities, the Master Drainage Plan (MDP) and restoration and monitoring projects.

St. Patrick's Elementary School students planting native vegetation along Bowker Creek.

Background

The Bowker Creek Urban Watershed Renewal Initiative (BCI) is a broad coalition of community, government, businesses and institutions working together to protect and enhance the ecological, social and economic health of the Bowker Creek watershed. The BCI was established in March 2004 following the completion and adoption of the Bowker Creek Watershed Management Plan (BCWMP) by the District of Saanich, City of Victoria, District of Oak Bay and the Capital Regional District (CRD).

The BCI is led by a consensus-based steering committee chaired by the CRD. The committee's role is to implement actions to achieve the goals of the BCWMP. Three subcommittees — Outreach, Master Drainage Plan and Greenways — focus on the key issues of the BCI. A part-time coordinator at the CRD initiates and manages projects, seeks funding and organizes the BCI. This position is funded by the partner municipalities of District of Saanich (59%), City of Victoria (23%) and District of Oak Bay (18%). This is the second annual report since the establishment of the BCI and it provides an overview of the movement forward on the recommendations from the BCWMP.

Activities

In 2005, the BCI focused on outreach activities, the Master Drainage Plan (MDP) and restoration and monitoring projects.

Outreach Activities

During 2005, the BCI Outreach subcommittee implemented actions and activities aimed to raise awareness about the Bowker Creek Initiative and the watershed, and to foster long term citizen stewardship in the watershed.

In 2005, several outreach activities were undertaken. These included:

- Bowker Creek Initiative Launch Party, April 2, 2005 at the Spirit Garden in Victoria. Approximately 100 people came out to a community event to see the new interpretive signs, make fish on sticks, learn about watersheds and paint yellow fish onto catch basins.
- Four large educational interpretive signs were installed in spring 2005, one for each municipality and the University of Victoria. Unveiling events were held at Bowker Creek Walk Park in Oak Bay and Mount Tolmie in Saanich.

- The 8th Annual Bowker Creek Clean Up and Rubber Duck Race (May 14, 2005) was jointly hosted with Oak Bay High School Visions Environmental Club and Interact Club, Oak Bay Rotary Club, Friends of Bowker Creek and CRD Environmental Services. Approximately 45 people helped clean up and remove five shopping carts and two truckloads of garbage. $600 was raised and donated to the Friends of Bowker Creek.
- A working model of the Bowker Creek watershed was created in a joint partnership with the Visions Environmental Club at Oak Bay High School which donated $1,000 and its time to work with the Friends of Bowker Creek Society and the Stream Team to develop the model.
- Presentations were made to conferences, community and school groups such as:
  - Georgia Basin Research Conference in Victoria, BC
  - University of Victoria Restoration of Natural Systems and Environmental Studies classes
  - Bowker Creek Brush Up
  - Habitat Acquisition Trust conference "Connecting for Conservation"
  - Mount Tolmie Community Association, Quadra Cedar Hill Community Association, and Camosun Community Association Community Fair.

Master Drainage Plan

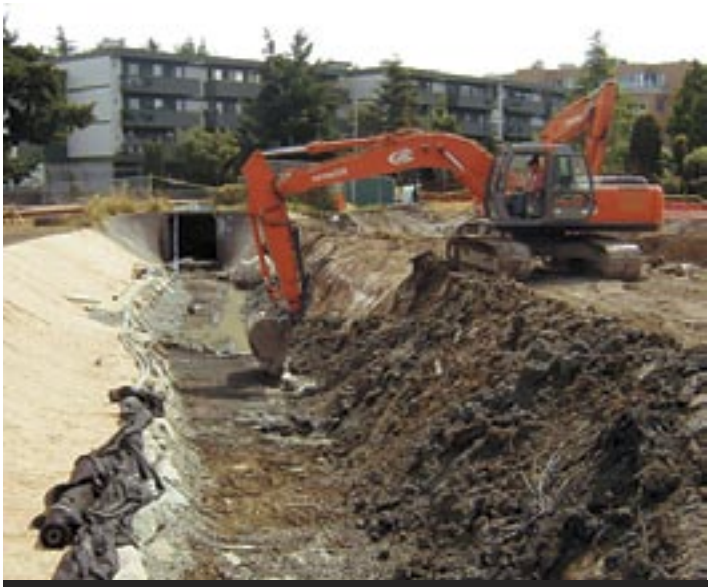
The Master Drainage Plan (MDP) is the first phase of an Integrated Stormwater Management Plan (ISMP). An ISMP combines hydrologic and hydraulic information provided by an MDP with ecological, social and economic information to identify solutions that will meet as many of the goals of the BCWMP as possible. The MDP will identify drainage solutions for the watershed and prioritize hydrological and environmental stormwater problems and potential solutions. The plan will also provide the estimated costs and the benefits for each solution.

The Master Drainage Plan subcommittee completed the terms of reference and sought funding for development of the MDP. The District of Saanich, City of Victoria, District of Oak Bay and the CRD have received confirmation of up to $40,000 in funding for the MDP from the Ministry of Community Services. $15,000 in funding has been confirmed from the municipalities, in addition to in-kind contributions of staff time and equipment for data collection. Additional funding has been applied for through the Federation of Canadian Municipalities and the Georgia Basin Action Plan.

Data collection for the modeling requirements of the MDP has been initiated. Two continuous water level sensors have been installed at Trent and Monterey streets and five storm drain flow meters have been installed in Saanich and Oak Bay to determine infiltration rates in the watershed. In early 2006, the discharge rating curve for the watershed will be developed for use in the MDP models.

Restoration and Monitoring

In 2005, an opportunity arose to work with the CRD Environmental Services department to create a restoration demonstration on



Resloping and stabilizing Bowker Creek banks.

Bowker Creek as part of the Bowker northeast trunk sewer installation. The project is located at St. Patrick's Elementary School on Trent Street, near the borders of Saanich, Victoria and Oak Bay. The project involved:

- a sewer line crossing the creek
- re-sloping the banks and installing a rock toe to improve bank stability
- hosting a bioengineering workshop, open to the community and municipal staff (21 attendees)
- workshop students installed willow wattle fences to create planting terraces adjacent to the creek
- students at St. Patrick's Elementary School and St. Michael's University School planted the riparian area with native vegetation
- students and community members applied leaf mulch (supplied by the District of Saanich) to the riparian area; and
- community members and students will maintain the site by weeding and applying additional mulch.

The following activities conducted in partnership with other organizations supported one or more of the BCWMP goals:

- planting riparian vegetation and invasive species removal with St. Michael's University School
- installing bioengineering to stabilize Bowker Creek banks near St. Patrick's Elementary School (District of Saanich)
- monitoring water quality through sediment sampling (CRD)
- collaborating with the CRD and District of Saanich for a combined sewer and public access right-of-way on Richmond Elementary property between Newton and Townley streets; and
- assisting other groups to participate in the achievement of restoration work on Bowker Creek.

2005 Funding

In 2005, funding was provided for the BCI through various sources. The municipalities of Saanich, Victoria and Oak Bay provided funding for the BCI Coordinator. Many other external funding agencies have shown their support for the initiative by providing funding for projects within the watershed.

Funding Source	Funding	Item
Watershed Plan Coordinator		
District of Saanich	$30,993	
City of Victoria	$12,083	
District of Oak Bay	$9,458	
Project Funding		
MCAWS (CRD and 3 municipalities)	$40,000	Master Drainage Plan
Saanich	$5,000	Master Drainage Plan
Victoria	$5,000	Master Drainage Plan
Capital Regional District	$80,000	Master Drainage Plan (SHWP), Bowker Demo Project (NET - Capital Projects)
Georgia Basin Action Plan	$6,500	Master Drainage Plan
Oak Bay High Visions Environmental Club	$1,000	Watershed Model
TOTAL 2005	**$190,032**	

Applying erosion control fabric and seeding the banks of Bowker Creek.

What's Next?

In 2006, the BCI will continue to implement activites designed to achieve the goals of the BCWMP. These activities include:

Outreach Activities

The BCI will continue increasing community awareness about Bowker Creek by jointly hosting the 9th Annual Rubber Duck Race and Clean Up, organizing a late summer Bowker-focused community event, installing signs that identify the open sections of Bowker Creek, and continuing public presentations and attending community events with the Bowker Creek watershed model to share information about Bowker Creek with the community.

Master Drainage Plan

The BCI expects to initiate the MDP study to assess the drainage of surface water and identify problem areas and solutions in the fall of 2006, after obtaining the remaining funds required. Studies and data collection required to assess the ecological components and bank stability of Bowker Creek for Phase 2 of the ISMP will be initiated.

Restoration and Monitoring

Restoration and monitoring activities will focus on partnering with member municipalities to develop a greenways plan and strategy, initiating vegetation and wildlife inventories, conducting water quality monitoring, and continuing school group invasive species removal and riparian vegetation planting programs.

Watershed Planning

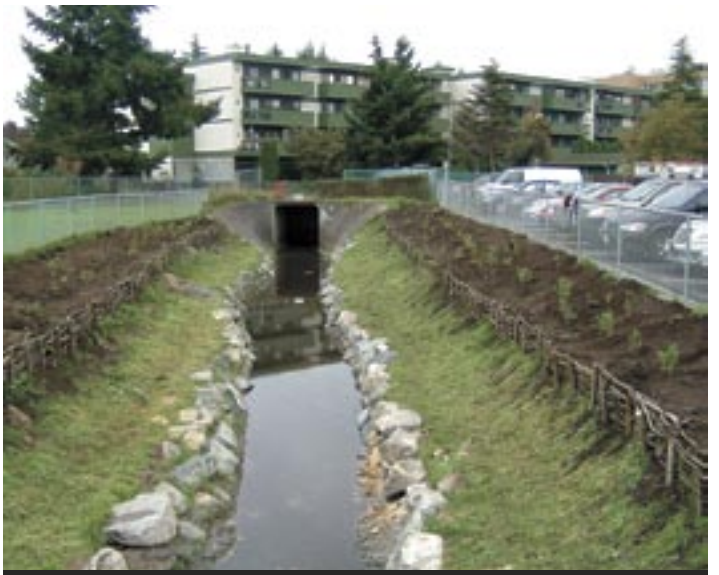
In 2006, the BCI will continue to participate in other aspects of planning in the watershed, such as providing comments on proposed developments in the watershed and preparing the BCI input into the municipal greenway planning processes.

Summary

During 2005, significant progress was made towards achieving the BCI's goals and in the implementation of the BCWMP. Specifically, the BCI held an official launch event, interpretive signs were installed, community events were hosted, the Master Drainage Plan Terms of Reference were developed and 75% of the funding and in-kind support was obtained, on-the-ground restoration and planting activities occurred and a restoration demonstration project was completed.

The BCI worked with several agencies and groups to restore sections of Bowker Creek, raise awareness within the watershed and collaborate on watershed stewardship activities. These activities and projects are working towards decreasing stormwater and contaminant inputs entering the creek, protecting and enhancing habitat quality, achieving ecologically suitable land uses and advocating environmental protection for the watershed. Partnering with the municipal partners, and planning for land use within the watershed, is essential to this process and a key action for the BCI. ■

BEFORE.



AFTER. Bowker Creek after bank stabilization, bioengineering and planting were completed.

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