

CITY OF BURNABY

ENVIRONMENT AND WASTE MANAGEMENT COMMITTEE

HIS WORSHIP, THE MAYOR  
AND COUNCILLORS

RE: BURNABY LAKE SYSTEM PROJECT - FUNDING REQUEST

RECOMMENDATIONS:

1. THAT Council approve a \$10,000 grant to the BCIT Burnaby Lake System Project to help undertake those projects proposed for 1995 and summarized in Section 3.0 of the attached report.
2. THAT a copy of the report be forwarded to the Parks and Recreation Commission.
3. THAT a copy of the report be forwarded to Mr. Mark Angelo, Program Head, BCIT, Fish, Wildlife and Recreation Program, 3700 Willingdon Avenue, Burnaby, B.C. V5G 3H2.

R E P O R T

The Environment and Waste Management Committee at its meeting held on 1995 April 11 received and adopted the attached report providing recommendations on BCIT's 1995 funding request for the Burnaby Lake System Project.

The Committee therefore places the recommendations before Council for approval.

Respectfully submitted,

Councillor D. Drummond  
Chair

Councillor D. Johnston  
Member

Councillor D. Lawson

: COPY - CITY MANAGER  
- DIRECTOR ENGINEERING  
- DIRECTOR FINANCE  
- DIR. PLNG. & BLDG.  
- DIR. REC. & CULT. SERV.

TO: CHAIR AND MEMBERS,  
ENVIRONMENT AND WASTE MGMT. COMMITTEE

1995 APRIL 05

FROM: DIRECTOR PLANNING AND BUILDING

SUBJECT: BURNABY LAKE SYSTEM PROJECT - FUNDING REQUEST

PURPOSE: To provide the Committee with recommendations on BCIT's 1995 funding request for the Burnaby Lake System Project.

---

**RECOMMENDATION:**

THAT the Environment and Waste Management Committee recommend the following to Council:

1. THAT Council approve a \$10,000 grant to the BCIT Burnaby Lake System Project to help undertake those projects proposed for 1995 and summarized in Section 3.0 of this report.
2. THAT a copy of this report be forwarded to the Parks and Recreation Commission.
3. THAT a copy of this report be forwarded to Mr. Mark Angelo, Program Head, BCIT, Fish, Wildlife and Recreation Program, 3700 Willingdon Avenue, Burnaby, B.C. V5G 3H2.

**REPORT**

**1.0 BACKGROUND**

In 1994, BCIT proposed a five year program of community projects to help protect, enhance and rehabilitate fish, wildlife and recreation resources in the Central Valley watershed. The City was invited to be a partner in the project - the "Burnaby Lake System Project" (BLSP).

On the recommendations of the Environment and Waste Management Committee, Council in 1994 supported in principle BCIT's BLSP and approved a \$10,000 grant for work to be undertaken in 1994. In addition, Council adopted a recommendation that similar grants for 1995 and 1996 be considered by Council subject to an annual review of work accomplished in the previous year and work proposed for the grant year.

The City has now received a request from BCIT for a \$10,000 grant for 1995. The purpose of this report is to review the work accomplished in 1994 and the proposed program for 1995.

## 2.0 BLSP PROJECTS UNDERTAKEN IN 1994

Details of the projects undertaken in 1994 are outlined in **Attachment 1**. In summary, BCIT through its BLSP has undertaken projects of an educational, environmental improvement and research nature. Approximately \$100,000 in materials and applied research and over 1500 volunteer hours have been applied to the projects. They include:

- ▶ an informational brochure and video
- ▶ construction of fishways at two locations on Eagle Creek
- ▶ removal of a fish barrier on Deer Lake Brook
- ▶ habitat improvement projects at Deer Lake Brook; and Guichon, Eagle and Beecher Creeks.
- ▶ applied research in the Central Valley watershed in the areas of wildlife, fisheries and remote environmental sensing.

Many organizations and individuals have been partners with BCIT in the Burnaby Lake System Project over the past year. They include Federal, Provincial and Regional government agencies; businesses and foundations; community groups and citizens from the community. While not formal members of the partnership, many members of the community have been involved in stewardship activities sponsored by the BLSP (eg. Deer Lake Brook, Guichon Creek, Eagle Creek, Beecher Creek habitat improvement). From this list it is readily apparent that through the BLSP a broad cross-section of the community has been involved in stewardship activities.

The reports on the applied research are presently being finalized and will be conveyed to the City at the end of April.

## 3.0 BLSP PROPOSED 1995 PROGRAM

Attachment 1 also details the 1995 program. This program is primarily focused on implementing environmental improvements and continuation of applied research to help better define projects for subsequent years of the program. Projects include:

- ▶ elimination of the former Oakalla prison fencing
- ▶ creating salmonid over-wintering habitat on the Brunette
- ▶ enhancing wildlife and fisheries habitat on Eagle, Beecher, Guichon and Deer Creeks
- ▶ assessment and monitoring of purple loosestrife in Deer Lake Park
- ▶ assessing and monitoring the watershed's beaver, coyote and deer populations
- ▶ continuing with Deer Lake Park wildlife inventory
- ▶ developing education and interpretive signs
- ▶ participating in community environmental events

As in 1994, a key thrust of the BLSP in 1995 will be to involve the community in its stewardship initiatives. All project work will be subject to necessary regulatory approvals and be consistent with City management plans.

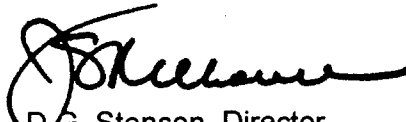
#### 4.0 PROJECT REVIEW

The City has had a long and continuous history of recognizing the environmental importance of the Central Valley. The work undertaken through the BLSP in 1994 was complementary to many of the City's initiatives and policies and had not been planned to be undertaken by the City. In addition, the BLSP initiatives are also complementary to the State of the Environment goals relating to environmental stewardship and protection and enhancement of environmentally sensitive areas.

The clean-up efforts and enhancement projects are making the waterways of the Central Valley more hospitable to fish. Community involvement is making the community more conscious about their environment. Applied research has assisted in helping define environmental issues and opportunities for restoration and enhancement.

The projects planned for 1995 builds on the foundation established in 1994. They are projects that the City had not planned to undertake in 1995. Staff are of the opinion that the 1995 BLSP program will benefit the watercourses, fish and wildlife of the Central Valley in a cost effective manner. Given the success of the projects undertaken in 1994, and the ability of the 1995 program to continue to advance incrementally the City's goals of protecting and enhancing environmentally sensitive areas and environmental stewardship, it is recommended that Council be requested to approve a project grant of \$10,000 to the BLSP for 1995.

In 1994, the grant was drawn from Council's Committees and Boards Donation and Grant Expenditures budget. Should Council concur with the recommendations of this report, the 1995 grant will be drawn from the same account unless otherwise directed.



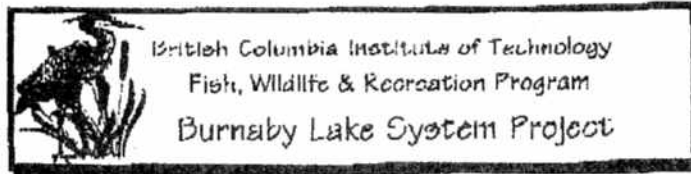
D.G. Stenson, Director  
PLANNING & BUILDING

BLS/jp

Attachment

cc: City Manager  
Deputy City Manager - Corporate Services  
Director Finance  
Director Recreation & Cultural Services  
Chief Environmental Health Officer  
City Clerk

## ATTACHMENT 1



BRITISH COLUMBIA  
INSTITUTE OF TECHNOLOGY  
3700 Willingdon Avenue  
Burnaby, British Columbia  
Canada V5G 3H2  
Tel. (604) 434-5731

March 13, 1994

Mr. Basil Luksum  
Senior Planner  
City of Burnaby  
4949 Canada Way  
Burnaby, B.C.

Dear Basil

### Burnaby Lake System Project Funding Request for 1995

On behalf of BCIT's Fish, Wildlife and Recreation Program and The Burnaby Lake System Project (BLSP) partnership, we would like to thank The City of Burnaby for their continuing support of our work.

As outlined in to Burnaby Council on January 9, this past year was a very successful and exciting year for the BLSP. It was a year of new ventures, new partnerships and elevated community involvement. During 1994, the BLSP contributed close to *\$100,000 and over 1500 volunteer hours* to the community through applied research projects, enhancement work and environmental stewardship initiative. Of the 19 new ventures initiated by the project in 1994, 10 were completed and several more will be completed this spring. A complete summary of project work initiated in 1994 is attached.

In 1995 the BLSP has planned a number of projects and events (subject to the appropriate approvals) aimed at monitoring, protecting and enhancing the Central Valley Watershed. Proposals for individual projects are presently being developed and will be submitted to the appropriate agencies/departments for approvals. In the coming months our proposed work schedule includes:

- eliminating a section of prison fencing within Deer Lake Park (this project was approved and is scheduled for April 8)
- creating salmonid over-wintering habitat in the Brunette River (joint project with DFO and Sapperton Fish & Game Club)

.../2

(2)

- constructing, placing and monitoring bat houses in Deer Lake Park (a proposed applied research and community enhancement project)
- enhancing wildlife and fisheries habitat on Eagle, Boccher, Guichon and Deer creeks (i.e. vegetation planting, bank stabilization, fishway construction, water quality improvements)
- assessing and controlling purple loosestrife in Deer Lake Park (applied research and monitoring project)
- inventorying and mapping (GIS) environmentally sensitive areas under the new ESA strategy
- assessing and monitoring the watershed's beaver, coyote and deer populations (coyote sighting are presently collected by BCIT through our 'coyote watch' telephone number and will be used to map coyote distribution throughout the city)
- continuing with the Deer Lake Park wildlife inventory
- developing education and interpretive signs (including a large mural in Deer Lake Park and a series of signs to identify important streams within the watershed)
- participating in community environmental events.

During 1995, the BLSP will provide greater opportunities for public participation. We are also presently working to establishing a relationship with several community groups, including; *City Core* (a federal funded program designed to give young persons job/career experiences and currently based in Burnaby) and *The Burnaby Volunteer Center*. Through these ventures and the projects outlined above, the BLSP will again in 1995 help to enhance the watersheds natural resources and promote community .

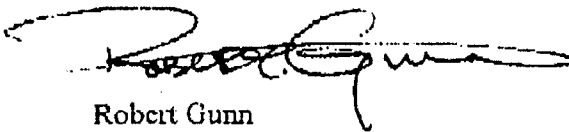
BCIT is again asking Burnaby to support our community work. Therefore, we are requesting the City of Burnaby to proceed with the second stage of it's donation; \$10,000.00 for 1995.

If you require additional information please contact either Mark Angelo (432-8270) or Bob Gunn (432-6860). Once again we thank the City of Burnaby's for their continued support.

Sincerely,



Mark Angelo  
Program Head



Robert Gunn  
Projects Coordinator

Encl.



## Work initiated by The Burnaby Lake System Project in 1994

Project Title	Description	Current Status
Burnaby Lake System Project Brochure	Informational Brochure	Completed. Over 2000 distributed (in second printing).
Central Valley Watershed Video	12 min. Informational & educational video	Completed. Presently used in community presentations and has been broadcast on community TV.
Eagle Creek Fishway (Lougheed Hwy)	Construction of concrete fishway and culvert baffles	Completed. BCIT and DFO are currently monitoring use by salmonids.
Eagle Creek Fishway (Burnaby Lake)	Construction of wooden (temporary) fishway on Mrs. Wolfe's property	Completed. BCIT and DFO are currently monitoring use and looking at future, more permanent enhancement opportunities
Deer Lake Brook Course Fish Barrier	Removal of coarse fish barrier	Completed.
Deer Lake Brook Spawning Gravel	Placement of spawning gravel near lake outlet. (Completed as a BC Rivers Day Project)	Completed. Project was reduced in scope due to City concerns over lake water levels. Currently monitoring use.
Guichon Creek Habitat Enhancement	Riparian vegetation planting (BC Rivers Day project)	Phase one completed. Additional riparian and stream enhancement work is being considered.
Eagle Creek - Habitat Enhancement/Vegetation Protection	Beaver proofing trees and stream clean-up work (BC Rivers Day Project)	Completed phase one. Monitoring beaver activity prior to protecting additional trees.

Project Title	Description	Current Status
Beecher Creek - Habitat enhancement/Vegetation Protection	Beaver proofing trees and stream clean-up work (BC Rivers Day Project)	Completed phase one. Monitoring beaver activity and considering additional stream enhancement work.
Deer Lake Osprey Nesting Platform	Construction and placement of nesting platform	Pending.
Deer Lake Biophysical Inventory	Wildlife inventory of Deer Lake Park (to be completed in phases over the next year or two).	Phase one includes vegetation/habitat work, summer bird inventory, incidental sightings and wildlife tree inventory work.
Central Valley Watershed Interactive CD-ROM	Interactive education & informational CD-ROM on the Burnaby Lake Watershed.	Presently in the development stage. This project will likely require another year to complete

The following is a list of Burnaby Lake System student projects initiated this fall:

Project Title	Description	FWR Student Crew
Burnaby Mountain Deer Study	Habitat assessments & requirements, possible radio telemetry work, GIS work	Bruce Harrison Gary Letts
Fisheries - Burnaby Lake Tributaries	Adult enumeration, stream surveys, monitoring BCIT enhancement work. Juvenile survival assessment of a Brunette River rearing pond.	Ksan Duxbury Cheryl Melville
Burnaby Lake Trail System	Mapping trails/stream using GPS and GIS	Susan Bujold Sheri Luzzi



Project Title	Description	FWR Student Crew
Beaver Assessment - Burnaby & Deer lakes	Location of lodges, relative abundance, other species using lodges, diet & feeding areas, historical & background information	Kristin Svendsen Shawn Gurney
Deer Lake Park Biophysical Inventory	Winter Bird inventory & habitat work. Incidental wildlife sightings. Possible small mammal work in the spring.	Chris Thevarg
Coyotes - Deer Lake Area	Mapping sightings and complaints. Background information on urban coyotes.	Bruce Bifford Sam Blair
Remote Environmental Sensing/Monitoring Equipment	Pilot project to develop and/or modify environmental monitoring equipment to collect, store and transmit environmental field data to BCIT computer base station. (See attached project outline).	Joint student project between BCIT's FWR Program, Electronics Technology and Instrumentation Technology.

Additional student projects within the Burnaby area:

- Bryne Creek point source water filtration unit (joint BCIT/DFO project).  
Student: Lucyna Kresinska
- Crows - flight paths, destination locations, roost sites/trees  
Students: Jay Sitar and Bryan Roberts

