TO:

CITY MANAGER

1996 APRIL 30

FROM:

DIRECTOR PLANNING AND BUILDING

OUR FILE: 10.250

SUBJECT:

BURNABY LAKE SYSTEM PROJECT - FUNDING REQUEST

PURPOSE:

To request Council approval of BCIT's 1996 funding request for the Burnaby Lake

System Project.

RECOMMENDATION:

 THAT Council approve a \$10,000 grant to the BCIT Burnaby Lake System Project to help undertake those projects proposed for 1996 and summarized in Section 3.0 of this report.

- 2. **THAT** a copy of this report be forwarded to the Parks and Recreation Commission and the Environment and Waste Management Committee for their information.
- 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. A grant of \$10,000 to the BLSP was approved by Council in 1995.

At the Council meeting on March 11, 1996 Mr. Mark Angelo, Program Head from BCIT's Fish, Wildlife and Recreation Program appeared as a delegation and outlined the work undertaken by the BLSP in 1995 and the proposed program for 1996, and requested a \$10,000 grant for 1996.

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The purpose of this report is to outline the work undertaken in 1995 and the proposed program for 1996.

2.0 BLSP PROJECTS UNDERTAKEN IN 1995

Details of the projects undertaken in 1995 are outlined in *Attachment 1*. In summary, BCIT through its BLSP has undertaken projects in three general areas - Applied Research, Stewardship and Education, and Community Enhancement. BCIT has advised that approximately \$80,000 in materials and applied research and over 1800 volunteer hours have been applied to the projects. Major projects undertaken include:

- extensive involvement in Environment Week and Rivers Day activities;
- removal of over 1,000 m of former Oakalla fencing;
- stream enhancement improvements at Eagle Creek and Deer Lake Brook;
- assessing and monitoring the watershed's beaver, coyote and deer populations;
- construction of an information kiosk/mural at Deer Lake Park.

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. The BLSP continues to involve a broad cross-section of the community in stewardship activities.

3.0 BLSP PROPOSED 1996 PROGRAM

Attachment 1 also details the 1996 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:

- in conjunction with the City, GVRD and Westwater Research developing an issue and action plan for Still Creek;
- implementing an Adopt-a-Stream program;
- developing education and interpretation material;
- continue stream enhancement projects at Still Creek, Beecher Creek, Eagle Creek and Stoney Creek.

As in the past, a key thrust of the BLSP in 1996 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.

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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 1995 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 supportive of 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 will continue to assist in defining environmental issues and opportunities for restoration and enhancement.

The projects planned for 1996 builds on the foundation established in previous years. They are projects that the City had not planned to undertake in 1996. Staff are of the opinion that the 1996 BLSP program will benefit the watercourses, fish and wildlife of the Central Valley in a cost effective manner. Given the nature of the projects undertaken in 1995, and the ability of the 1996 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 approve a project grant of \$10,000 to the BLSP for 1996.

In 1995, 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 1996 grant will be drawn from the same account unless otherwise directed.

D.G. Stenson, Director PLANNING & BUILDING

BLS/jp

Attachment

CC:

Deputy City Manager Corporate Services Deputy City Manager Labour Relations Director Engineering Director Finance Director Recreation & Cultural Services Chief Environmental Health Officer City Clerk

Burnaby Lake System Project

Burnaby Lake ... Deer Lake ... Brunette River System

1995 was another successful year for the Burnaby Lake System Project (BLSP). Over 15 individual projects were initiated throughout the watershed and several new community partnerships were developed, including GVRD Sewerage and Drainage Department, Stoney Creek Environmental Committee and Yes Canada (through the CityCorps II program). Through the support of BCIT, the City of Burnaby and the BLSP partnership, approximately 1800 volunteer hours and over \$80,000.00 were contributed to the community through applied research, stewardship, education and enhancement projects.

A summary of 1995 project activities is attached. Although projects have been categorized into three general groups: applied research, stewardship and education and community enhancement work, many of our projects bridge all these categories and provide a multitude of benefits to the community. For example, our coyote watch phone reporting system implemented during this project not only provided our students with sighting information, but it also provided BCIT the opportunity to talk to the community and dispel many of the fears associated with coyotes. Likewise, BLSP activities on Still Creek has drawn attention, awareness and support of the community effort currently underway to manage and enhance the resources of this important waterway.

In 1996, project work will continue throughout the watershed. However, over the next two years the BLSP will focus project activities on the following:

1. Still Creek.

Currently the BLSP is working with the Brunette Watershed Task Group (BCIT, City of Burnaby, GVRD Sewerage and Drainage (GVRDS&D) and Westwater Research, UBC to develop a management and enhancement strategy for Still Creek. Concurrently, the BLSP is developing a brochure on Still Creek that will identify the ecological and recreational values, environmental problem, efforts underway to restore the waterway and to promote better stewardship through a best management practices strategy. Input from the Brunette Watershed task group will be received prior to producing this brochure. In addition to this work, the BLSP will be consulting and assisting the GVRDS&D on several maintenance projects along Still Creek and throughout the watershed. This collaboration will ensure environmental values are protected and enhanced through community participation.

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2. Implementing an Adopt -A -Stream Program.

Currently the BLSP is working on a community adopt-a-stream program with the assistance of Elmer Rudolph of the Sapperton Fish and Game Club. This program will build upon the Stream Keepers program developed by DFO and further promote stream stewardship within Burnaby. Eagle Creek, the first stream we hope to implement this project on with the support of Elmer Rudolph, will assist groups wishing to adopt a local stream, act as mentors for the group and provide training, information and technical support. A community adopt-a-stream resource package is currently being developed by the BLSP.

3. Interpretation and Education.

In addition to the Still Creek brochure, the BLSP is proposing several additional interpretive and education projects including, one or two interpretive mural/kiosk within the watershed and a 1996 poster series. We will also continue to participate and organize displays and stewardship activities for community, national and international environmental events, such as Discovery Days, Rivers Day and Earth Day.

4. STREAM ENHANCEMENT.

Fisheries habitat enhancement activities will continue throughout the watershed during 1996. In partnership with GVRDS&D, two fisheries projects will be implemented this summer on Still Creek, including one which will be organized as a community event. The BLSP also hopes to implement several projects this summer within the Deer Lake watershed and currently a group of BCIT students are putting together a report on possible enhancement opportunities for four Deer Lake tributaries. We are also assessing and identifying possible projects on Beecher Creek, Eagle Creek and Stoney Creek in partnership with other community groups. Currently we are investigating the status of the coho over wintering pond fishway project initiated by BCIT and currently under the direction of DFO and an environmental consultant.

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1995 STEWARDSHIP AND Education Projects

Project	Description	Status	Community Pariners
Burnaby Lake System Project	Two poster series promoting environmental stewardship	Completed - over 3000 posters have been distributed	City of Burnaby VanCity
Posters Environment Week - Burnaby	and BLSP support BLSP supported this event through community environmental displays, placement of nesting boxes at Deer Lake Park and assisting a local school with storm drain marking program.	Completed	City of Burnaby Stoney Creek Community School St. Helen's Catholic School
BC Great Outdoor Show	BLSP and stream habitat display	Completed - this event provide exposure and the opportunity to present community environmental initiatives within Burnaby	BLSP partnership
Great Salmon Send-Off	BLSP display and community environmental information	Completed	Stoney Creek Community School
Urban Forest/Safe Drinking Water Week	BLSP & stream habitat display	Completed	GVRD - Seymour Demonstration Forest
Discovery Days	BLSP & stream habitat display	Completed	City of Burnaby
Burnaby Outdoor Leisure Show	BLSP & stream habitat display	Completed	Metro Town Centre
BC Rivers Day	Still Creek clean up Guichon Creek clean up Deer Lake native vegetation planting	Completed	City of Burnaby
Deer Lake Park Mural and Information Kiosk	Information kiosk and mural on the Central Valley Watershed and the importance of urban stream	Completed (phase one, we hope to add to this kiosk in the future)	City of Burnaby Friends of the Environment Foundation (Canada Trust)
Vancouver Aquarium Youth Environmental Study	This was a joint project with a group from China. BCIT assisted this group on water quality sampling and on environmental issues within the watershed	Completed. Vancouver Aquarium is completing a report and a video on this project	Vancouver Aquarium MoELP
CityCorps II - Coho Distribution Assessment at Selected Coho Release Sites	This was a joint project with the CityCorps II program, funded under the YES Canada employment program. The program is designed to give youths job experience and life development skills	Pending - report in final stages of completion/editing by BLSP.	CityCorps II Yes Canada DFO

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1995 Applied Research Projects

PROJECT	Description	Status	Community Partners
Burnaby Mountain Deer Study	Assessment of deer habitat on Burnaby Mountain	Completed - work is currently underway to provide additional information	City of Burnaby
Brunette River Rearing Pond	Assessment of coho fry survival released over winter & survey work for installing a fishway to Brunette River	Complete survival assessment - consultant working with DFO on fishway design	DFO Triton Environmental Consultants Sapperton F&G (future)
Beaver Assessment - Burnaby Lake/Still Creek Corridor	Assessment of beaver lodges, feeding areas and possible problem areas	Completed	GVRD Parks
Deer Lake Winter Bird Inventory	Winter bird inventory and habitat use in Deer Lake Park	Completed	City of Burnaby
Burnaby Lake - Trail Mapping and Park Facilities Inventory	Mapping of trail system, trail surface types and park features using GIS and GPS technology	Completed	GVRD Parks
Coyote Monitoring	Mapping and recording coyote sightings in Burnaby	Completed (potential future project may result from this information)	City of Burnaby and community (coyote watch reporting line)

1995 Enhancement Projects

Project	DESCRIPTION	Status	Community Pariners
Deer Lake Fence Removal	Removal of approximately 1000 m of old prison fencing. Over 100 individuals from the community participated in this project.	Completed.	City of Burnaby
Eagle Creek Fish Passage Improvements	Installation of a third baffle within the Lougheed Highway culvert.	Completed	GVRDS&D City of Burnaby DFO
Deer Lake Brook Spawning Gravel	Second application of spawning gravel in creek. BC Rivers Day project that was supported by some 20 participants	Completed. Monitoring site.	City of Burnaby DFO
Brunette River Rearing Pond	Assessment of pond as over wintering habitat for juvenile salmonid 2) Survey access route into pond	Phase one completed. Status of fishway design/access is unknown and is currently under the direction of DFO and an environmental consultant.	DFO Sapperton F&G

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Student projects within the Central Valley Watershed for the 1995-96 school term include:

1. A continuation of the deer study on Burnaby Mountain,

2. The development of a fisheries enhancement plan for four Deer Lake tributaries

Beaver Creek (tributary 3)

Buckingham Creek

Deer Lake Brook

Unnamed tributary on the south side of Deer Lake (referred to as Oakland Creek)

3. An environmental assessment/impact study for dredging Burnaby Lake

4. The development of a interpretation sign plan/proposal for Deer Lake Park

5. The development of a concept proposal/management plan for the Still Creek corridor, including:

mitigation strategies for urban runoff (including ongoing monitoring) fish, wildlife and recreation enhancement opportunities environmental stewardship/education information for the community

As with previous years, the Burnaby Lake System Project continues to provide BCIT students with invaluable educational experiences and opportunities for Burnaby residents to participate in a variety of community environmental projects. We thank the City of Burnaby Council and Staff and the community of Burnaby for their continuing support.