



City of Richmond

Report to Committee

To Public Works & Transportation

To: Public Works and Transportation Committee **Date:** March 14, 2005 *mar 23, 2005*

From: Robert Gonzalez, P.Eng.
Director, Engineering **File:** 03-1087-19-01

Re: **British Columbia Community Water Improvement Program Grant Applications**

Staff Recommendation

1) That the projects identified in the report dated March 23, 2005 from the Director of Engineering be submitted for the British Columbia Community Water Improvement Grant Program; and

2) That the City's portion of the project cost and Water Utility Reserve and Sanitary Sewer DCC Reserve funding sources for the projects be conditionally approved, pending the award of that project grant.

Robert Gonzalez, P.Eng.
Director, Engineering
Local 4150

FOR ORIGINATING DIVISION USE ONLY					
ROUTED TO:		CONCURRENCE		CONCURRENCE OF GENERAL MANAGER	
Budgets		Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>		
REVIEWED BY TAG	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	REVIEWED BY CAO	YES <input type="checkbox"/>	NO <input type="checkbox"/>

Staff Report

Origin

On February 5, 2005, the Ministry of Community, Aboriginal and Women's Services (MCAWS) announced the creation of an \$80 million grant program called the British Columbia Community Water Improvement Program (BCCWIP). The purpose of the program is to provide British Columbians with safe, reliable and accessible drinking water and improved waste water systems.

Analysis

A maximum of two BCCWIP applications had to be submitted by February 28, 2005. The program would fund up to two-thirds of the eligible project costs and the local government will provide the remaining one-third. The following are the eligible projects which apply to the City of Richmond:

- Water systems for the purpose of distribution of domestic potable water;
- Waste water facilities such as lift stations and sanitary sewers; and
- Water management infrastructure works that abate erosion and enhance or reverse the deterioration of fish/aquatic habitat such as storm water management works and remedial land drainage.

Certain restrictions and criteria apply to each type of project which can be found in Appendix I BC Community Water Improvement Program: Program Guide.

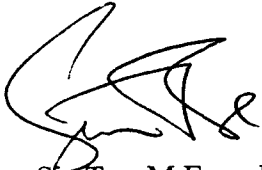
Staff elected to submit a project on the extension of the Volunteer Water Meter Program and on the West Cambie and Hamilton Sanitary Sewer Infrastructure. The proposed Volunteer Water Meter Program project has an estimated value of \$3,000,000 for a duration of three years starting January 2007 and ending in December 2009. It will be similar to our current Volunteer Water Meter Program. The proposed West Cambie and Hamilton Sanitary Sewer Infrastructure project has an estimated value of \$2,051,000 for a duration of over two years starting September 2005 ending in October 2007. This project will include the installation of lift stations and pressure mains to allow these areas to develop and connect to the municipal sewer system.

Financial Impact

There is no funding impacts at this time; however, if we are successful in acquiring these grants, we will be required to fund a minimum of one-third of the project costs. These two projects are currently not in the Capital Program and will need to be included upon being notified of award of the grants. The recommended funding sources will be the Water Utility Reserve and the Sanitary Sewer DCC Reserve.

Conclusion

In order to proceed with and expedite the City's BC Community Water Improvement Program grant applications, the MCAWS requires that the City through Council resolution confirm the approval of the project submissions and provide a commitment to project funding and funding sources for each application.



Stu Tse, M.Eng., P.Eng.
Manager, Engineering Planning
Local 4075

March 14, 200

- 4 -

Appendix I

B.C. Community Water Improvement Program

PROGRAM GUIDE

Application deadline: February 28, 2005



**BRITISH
COLUMBIA**

Ministry of Community,
Aboriginal and Women's Services
Local Government Infrastructure and Finance Division

February 2005

B.C. COMMUNITY WATER IMPROVEMENT PROGRAM

1. Overview of Program

Purpose

The program will direct provincial and local resources to improve water and wastewater infrastructure that will provide the basis for strong local and regional economies.

Selection Process

All projects must:

- develop infrastructure through the construction or rehabilitation of physical assets;
- follow applicable planning and environmental legislation; and
- ensure that any ongoing operational costs are borne by the project proponent.

In addition, priority will be given to projects that:

- provide necessary public health or environmental protection;
- implement, in whole or part, a Drinking Water Plan, and/or are designed to meet the *Drinking Water Protection Act* and supporting Regulations;
- implement, in whole or part, a Liquid Waste Management Plan, and/or are designed to meet the Municipal Sewerage Regulation (MSR);
- implement, in whole or part, a Drought Management Plan or a Community Water Conservation Strategy;
- demonstrate sustainability through the principles of best management practices, best construction practices, full cost accounting, innovation, energy efficiency and/or demand side management;
- support resource communities or regions experiencing a critical transition in their economic base;
- support regional growth strategies which promote human settlement that is socially, economically and environmentally healthy and that makes efficient use of public facilities and services, land and other resources; or
- demonstrate innovative technology or other aspects of Smart Development Partnership and Smartgrowth BC.

2. Infrastructure Implementation Grants

Selection Criteria

Applications will be assessed according to the following criteria, as appropriate for the type of project:

- Improvement of community infrastructure:
 - Support for Official Community Plan;
 - Support for regional growth strategy goals;
 - Support for local community plans; and
 - Support for communities experiencing transition in the economic base.
- Fiscal and non fiscal capacity of the community to fund project and assume long term operation.
- Supports Financial Plan and other capital plans:
 - Demonstrated need for provincial government funding; and
 - Demonstrated benefits to be achieved at completion of project.
- Infrastructure Sustainability:
 - New approaches and best practices;
 - Encouraging innovation; and
 - Demand side management.
- Health and environmental impact:
 - Improvements made to drinking water quality, resulting in improved protection and response mechanisms for public and/or environmental health;
 - Improvements made to water management, resulting in improved protection of public and/or environmental health;
 - Improvements made to wastewater management, resulting in improved protection of public and/or environmental health;
 - Other improvements made to drinking water quality, water management and waste water management;
 - Improvements to energy efficiency;
 - Overall sustainability of the proposed infrastructure; and
 - Demand side management.

The Ministry will accept TWO applications from each municipality and ONE application for each regional district community.

Eligible Applicants

An eligible applicant is a local government, defined as a municipality or a regional district, including the City of Vancouver, the Greater Vancouver Sewerage and Drainage District, and the Greater Vancouver Water District.

Eligible Projects

Program funding may be allocated for the construction of the following local government infrastructure projects:

Water facilities, such as, but not limited to: water systems, water treatment plants and ancillary works, reservoirs, impoundments (dams), groundwater development (wells), and pumping stations for the collection, treatment, storage and distribution of domestic potable water.

Wastewater facilities such as, but not limited to: wastewater treatment (disposal) plants and ancillary works, sanitary sewers and lift stations for the collection and treatment of wastewater, and the discharge and/or re-use of treated effluent wastewater and biosolids.

Water management infrastructure works that abate and prevent erosion and enhance or reverse the deterioration of fish/aquatic habitat such as, but not limited to: storm water management works, remedial land drainage, residential subdivision runoff and surface water supply protection.

Important: Funding requests generally far exceed available funding. For large, long-term improvements to major infrastructure that require significant funding support, applicants are strongly encouraged to submit a “phased” approach, paying particular attention to those project components that are considered necessary to meet immediate public health and environmental issues.

Ineligible projects

Applications will not be considered for projects that are already under construction or completed. A project is defined to be under construction if a tender has been awarded or, if construction has started.

Eligible Capital Costs

Eligible capital costs are defined as all direct costs properly and reasonably incurred and paid solely and specifically in relation to the project. Such costs would normally be capitalized in the records of the local government.

Included are engineering, design, interim borrowing costs (where applicable), including the use of a local government’s own work force if used for project construction. Committed engineering or design costs are eligible for reimbursement provided construction has not commenced or a construction tender has not been awarded.

Only those projects and itemized estimated project costs approved by the Province will be funded.

Any grants that may be approved will be based on the net cost to the applicant, that is, net of contributions from other governments, other provincial programs and/or private contributions.

Ineligible capital costs

Ineligible costs include administration or administrative overhead charges.

Amount of Grant

Successful applications will be awarded grant funding of 66.67% of the eligible project capital costs (as detailed in the application). Consideration will be given to increasing this amount to 75% in small communities for high priority projects if the project has not already been approved for grants under another Provincial or Federal program.

Project Benefits

Projects that are approved for funding under the BCCWIP must demonstrate how they support the program objectives set out as the purpose of the program. Applicants are asked to describe the project's principal impact for the community in terms of measurable benefits. Some possible measures have been preselected for the application form, but other measures may be added, if they better summarize the main impact of the project. Where ever possible the measures used should be quantifiable.

Technical Requirements

- **Engineering standards**

All water and wastewater infrastructure projects should comply with the Master Municipal Construction Documents (MMCD), or better; be compatible with the Municipal Design Guidelines for Sustainability, published by the MMCD Association www.mmcd.net for the Province of British Columbia. Additionally, projects for treatment plants should also comply with the latest version of the *Recommended Standards for Water Works or Sewage Works* (commonly known as the Ten State Standards). See www.hes.org for ordering information.

We recommend that all applications be referenced to the InfraGuide, the National Guide to Sustainable Municipal Infrastructure. This is available on the internet at <http://www.infraguide.ca/> Several of the best practices guides are appropriate for the BCCWIP including Decision Making and Investment Planning; Potable Water; Storm and Wastewater; Environmental Protocols: and Multi Discipline.

- **Operator Certification**

Applicants that receive funding under this program for drinking water and wastewater facilities will be required to have the plant classified by the Environmental Operators Certification Program, to employ appropriately qualified operator(s) and to operate and maintain the plant to consistently meet the standards and requirements under the applicable provincial legislation.

- **Water Distribution/Wastewater Collection Extensions**

All applications for waterlines or sewer projects to replace failing private water supplies or on-site sewage disposal systems **must provide a documentary report**, detailing the nature and extent of individual failures in a survey which includes water, soil, wastewater and groundwater sampling and analysis, with results prepared by a certified laboratory.

Normally only on-site systems serving at least 25 lots, where there is a minimum 25 percent failure rate, will be considered for funding.

Projects to correct on-site sewage disposal problems will be considered within the context of the growth strategy goals noted above in Section 1. To support these goals, grants will normally only be provided for projects to replace failing on-site systems with community sewer in **urbanizing areas of incorporated municipalities.**

Applications must demonstrate that there is an adequate planning process in place, supported with applicable bylaw(s), that supports future development in a sustainable fashion.

For on-site sewerage systems, the development and adoption of a Liquid Waste Management Plan for decentralized wastewater will be considered as meeting this requirement. In addition to meeting the LWMP requirement, applications must include confirmation that a bylaw is in place which requires community sewer service to all new lots of less than one hectare in size within the boundaries under the jurisdiction of the applicant. This document must be supported by the appropriate zoning land use and engineering standards documents.

- **Value Engineering**

A formal "Value Engineering" analysis, or approved equivalent, is required for projects with capital costs in excess of \$10 million, and may be required for other complex projects of lesser cost. Its use is encouraged for all sizeable projects. The process is described in the 1995 Ministry publication, "Value Engineering for Municipal Projects". Copies are available from the Municipal Engineering Services Branch of the Ministry.

Value Engineering is a process that must be considered and implemented in the early stages of project development in order to be effective. If the proposed project exceeds \$10 million, the applicant should contact the Municipal Engineering Services Branch to ensure that this eligibility criterion can be met.

- **Water conservation programs**

The province encourages water conservation initiatives. For **all water related** projects, sound water conservation practices must be part of the project planning. A community water conservation plan, which includes those water conservation measures currently implemented and any additional measures that **will** be adapted in the future will be required **with the application**. In addition, projects which include supply side management or components related to growth will not be considered for funding unless appropriate demand side management is being implemented.

Reducing demand is to be encouraged through water conservation practices, pricing mechanisms, or by making existing water consumption more efficient through a combination of a new water ethic, education and skilful use of innovative and appropriate technologies.

- **Water Management**

For water management projects, proposed projects must clearly demonstrate an Integrated Management Approach, making linkages between water source/supply requirements, wastewater treatment needs and environmental considerations.

- **Water Treatment**

If your application is for the construction of works to improve drinking water quality, the proposed treatment technology must be supported by your Regional Health Authority (RHA). It is important to demonstrate that an appropriate level of communication between the water purveyor (the local government) and the RHA has been established to ensure that the proposed project will meet *Drinking Water Protection Act* requirements. This communication should be ongoing, but is very important at the planning stage.

Further, the project should be supported by good records of water consumption and water quality over a period of years and this information must be provided upon request.

In most cases, approval of a grant for construction of water treatment facilities will be conditional on pilot plant testing being performed prior to adopting a treatment technology and commencing final design. The results of the pilot testing program and the rationale for choosing a particular type of treatment process shall be submitted to the RHA and the Ministry for review prior to the commencement of final design. The applicant should ensure the estimated project cost includes a sufficient allowance to complete a pilot testing program. Only those costs incurred after a project has been approved for a grant will be considered an eligible cost.

- **Environmental Assessment**

As this program is funded and administered by the Province, approved projects are not subject to the Canadian Environmental Assessment Act process. However, it should be noted that those projects that include First Nation partnerships and/or may include infrastructure built on Federal Lands, may be subject to the Canadian Environmental Assessment Act.

In addition, larger groundwater projects (extraction or expansion of existing facilities) may trigger the British Columbia Environmental Assessment Act.

For further information, please refer to the Canadian Environmental Assessment Agency (http://www.ceaa.gc.ca/index_e.htm) or the British Columbia Environmental Assessment Office (<http://www.eao.gov.bc.ca/>).

3. Application Process

How to Apply

Each new project application will require a completed application form and supporting documentation. Applications should be sent to:

B.C. Community Water Improvement Program
Local Government Infrastructure and Finance Division
Ministry of Community, Aboriginal and Women's Services
PO Box 9490 Stn Prov Govt
Victoria BC V8W 9N7

Location Address: 4th Floor - 800 Johnson Street, Victoria BC

E mail: infra@gems2.gov.bc.ca

Please note that electronic submissions must be followed by a paper copy of the application with original signatures.

Grant Application Form

A grant application form is attached to this brochure. Submit a separate form for each new project. Photocopy the form as needed.

Local governments with existing Canada/British Columbia Infrastructure Program applications on file with the Ministry may optionally update the existing application using the Project Status form.

You must send in either a BCCWIP Grant Application form or a CBCIP Project Status form (where applicable) for your application to be considered for approval.

If you require assistance to complete the application form, please contact the Ministry of Community, Aboriginal and Women's Services by email at infra@gems2.gov.bc.ca or by telephone at (250) 387-4060.

Application Guidelines

Applicants are responsible for ensuring that full and accurate information is submitted to the Ministry. Applications with incomplete information will not be considered until all necessary information has been submitted.

Therefore, please ensure that all necessary information is attached and you have checked off all the appropriate boxes. If there is no supporting documentation, or the question is not applicable to your project, provide a brief explanation.

Funding sources requiring Ministry approval

If the local government share of the cost of the project is to be funded through a source of funds that requires Ministry approval, please note that the grant application process and the bylaw approval process are separate. You should submit the bylaw with the normal information included with that type of bylaw. Approval of a bylaw does not constitute the awarding of a grant.

Application Deadline

Applications or Project Status Forms that are received in the Ministry by February 28, 2005 will be considered for program funding.

Transfers between projects

Grant approvals are project specific and may not be transferred from one project to another. An exception may be considered only where a substitute project will produce exactly the same results as the project for which the grant was approved.

4. Approval and Payment of Grants

Terms and Conditions

If your application is successful, the Ministry will inform you by letter. Successful applicants will also receive a contract that sets out the terms and conditions of the funding. This will confirm our understanding of the project, its cost and the maximum grant amount to which it is entitled. The schedule will also include a payment timetable and an expiry date.

Any changes to the scope of the project must be approved in advance by the Ministry.

Progress Reports

Successful applicants will be required to make regular quarterly progress reports to the Ministry providing details of the progress of approved projects, with photos to illustrate construction progress (if feasible). Completion of these reports on a timely basis will be a condition of the grant.

Payment of Grants

The Ministry will provide claim forms that must be used to request payment of the grant. Payments will be made in accordance with the schedule of payments negotiated between the Ministry and the successful applicant.

The total amount of the grant payable will not exceed the amount noted in the approval letter or the approved percentage of the actual eligible costs, whichever is less.

Claim Period and Expiry of Grant

The claim period for the project, the payment schedule and the expiry date for the grant will be set out in the contract between the Province and the local government. The claim period will normally be for a period of five years. Requests for an extension of this claim period will only be considered where there are unforeseen or extenuating circumstances. Such requests will not be considered if received after the end of the claim period. In any event, no claims for payment received after March 31, 2010 will be approved for payment.