City of Richmond

Report to Committee

To:	Public Works and Transportation Committee	**Date:**	April 19, 2002
From:	Steve McClurg Manager, Water Services	**File:**	-
	Shawn Issel Manager, Divisional Programs		
Re:	**Project WET - (Water Services School Program)**		

Staff Recommendation

1. That staff be directed to implement the Project WET (Water Services School Program) in Spring, 2003 and

2. That this report be referred to the School Board/City Liaison Committee for information.

Shawn Issel
Manager, Divisional Programs

Steve McClurg
Manager, Water Services

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Staff Report

Origin

As a result of drinking water tragedies in Walkerton Ontario and North Battleford, Saskatchewan as well as, the provinces June 19, 2002 release of its purposed "Action Plan for Safe Drinking Water in British Columbia," the importance of safe and good quality drinking water has come to the forefront of public concern. Staff have recognized though the increasing number of customer enquiries their growing concern over affordable and safe drinking water.

The *Water Conservation Strategy for British Columbia,* developed by the British Columbia Water and Wastewater Association, identifies school and community education programs at the local government level as an important component of water conservation.

Staff in partnership with the Richmond School Board have developed a water education program. This report outlines the pilot program, which was implemented in late April and the proposal to continue the program in the 2002-2003 school year.

Findings of Fact

In the past water has been viewed as an endless resource. However, despite the apparent abundance of water in BC, our water supply is not as plentiful as we would like to think. Over 17% of our surface water sources have reached or are nearing their capacity to supply water reliably. Groundwater levels are declining and over one-third of our aquifers are vulnerable to contamination. While the water supply situation is not yet a serious problem for many communities, these figures tell us that the availability of a healthy, sustainable and plentiful water resource can no longer be presumed.[1]

Drinking water is no longer considered to be an abundant and inexpensive commodity. Changes made through the provinces "Drinking Water Protection Plan" and "Drinking Water Protection Act passed, but not proclaimed, have resulted in action by the Greater Vancouver Regional District to implement a one billion dollar Drinking Water Treatment Program. This includes the construction of water filtration infrastructure as well as, the upgrading of disinfections systems. These costs will be passed along to the consumers over the next 5 years, a minimum increase of a 50% to the water rates is anticipated.

Analysis

In the Fall, 2001 a staff team began to develop an educational program which supports the Environmental Sustainability Strategy by fostering a greater understanding and appreciation of our natural resources.

The staff team developed a partnership with the Richmond School District, which resulted in four elementary teachers joining the team. The focus of this joint team was the development of educational program which raised awareness of the services provided by the Water Department and had a 'good fit' with the elementary science curriculum.

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[1] Water Conservation Strategy for B.C., Ministry of Sustainable Resource Management, Province of B.C.

Through discussion the joint team determined the focus of the education program would encompass the following key areas:

- Water Conservation
- Water as a System
- Sewer and Drainage
- Richmond' unique characteristics related to water, i.e. the dyke system

Project WET

Project WET is a water education elementary science module co-created by the Richmond School District and City of Richmond. WET is the acronym for 'Water Education Team'. The program is offered to students in grades 3-7. The components of the components of the program are:

- A **teachers resource package** outlining water science activities to be carried out in the classroom, other resources available,
- A **field trip to the Operations Yard** - including a video presentation, a series of four outdoor stations with interactive exhibits, a walk along the dyke and a tour of a pump station.
- **handouts to students** promoting water conservation, with a focus on what they could do.

Benefits of the Program

The pilot program offered in the Spring highlighted a number of benefits. Primarily, students came away with a better understanding of water conservation and the part they can play in conserving Richmond's water. They have a better understanding of the role the City plays in ensuring the provision of safe water, and are encouraged to show the handout material to their parents to discuss what they have learned.

Spin-off benefits of the program are:

- *Continued partnership with the school district* - our teacher partners were very enthusiastic, their input ensured the program elements were age appropriate and contained learning enriched activities. The school district also contributed to the program by funding substitute teachers, so that our teacher partners could be released from teaching to plan the program with us.
- *Staff development* – Water department staff manned the four stations at the Works Yard. They were required to make presentations, teaching the students about the various aspects of water.
- *Staff morale* – This program gave Water department staff the opportunity to tell young people what they do and how important this service is to the community.

Next Steps

The joint school district/city team plan to develop and refine the program in the Fall, with the expectation that the program would launched in Spring 2003.

The team anticipates the program would be offered for a two week period. This would allow the displays to be erected and kept in place for the two week program, causing minimal disruption to

Works Yard operations rather than offering the program for one day a week over a period of months.

The displays, visual tools and equipment utilized in this program come from existing maintenance, employee training and orientation programs or past open house events. The actual display costs are minimal. If this program continues, we will be looking for a secured location to permanently construct the displays. Until then it is necessary to utilize staff resources to set-up and take down these displays for each presentation program.

During the tour there are eight staff presenters and for safety reasons there are two to four staff tour leaders to escort the student and teachers, through the displays.

The team will be pursuing sponsorship opportunities with local businesses to enhance the program and keep costs at a minimum.

Financial Impact

The proposed program costs for running a two week program is shown in Table 1. The funding for this year's program would come from the Water Services Rate Stabilization Fund. Staff time allocated to running the program would be taken from existing salary accounts in Engineering and Public Works.

Table 1

PROGRAM COMPONENTS	COSTS
Handout Costs	$ 200
Fridge Magnets Costs	$ 300
Set-up & Breakdown Costs	$,500
Miscellaneous Costs	$ 500
Total Estimated Costs	**$3,500.00**

Conclusion

The purpose of Project WET is to give elementary school students an opportunity to learn about the importance of our natural resource and how the City provides stewardship of that resource to ensure the safety of the community.

Shawn Issel
Manager, Divisional Programs

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