City of Richmond

Report to Committee

To Public Works & Transportation - Aug 25, 200

To: Public Works and Transportation Committee **Date:** July 5, 2004

From: Robert Gonzalez, P.Eng.
Director, Engineering

File: 10-6045-01

Re: **Fraser River Flood Hazard Evaluation**

Staff Recommendation

That the City contribute $15,000 from the 2004 Public Works Minor Capital program to support funding of the Lower Fraser River Flood Hazard Evaluation proposed by the Fraser Basin Council.

for Robert Gonzalez, P.Eng.
Director, Engineering
(4150)

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ROUTED TO: CONCURRENCE Roads & Dykes ..... Y ☑ N ☐ Development Applications ..... Y ☑ N ☐	CONCURRENCE OF GENERAL MANAGER
REVIEWED BY TAG YES ☑ NO ☐	REVIEWED BY CAO YES ☑ NO ☐

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Staff Report

Origin

The City has been approached by the Fraser Basin Council for a contribution of $15,000 towards the completion of an up-to-date Lower Fraser River Flood Hazard Evaluation study. This report reviews the merits of participating in such an endeavour.

Analysis

The Fraser Basin Council is a non-profit, non-government organization, which focuses their efforts towards advancing the sustainability of the Fraser River Basin. This organization brings together four levels of Canadian government, specifically at the federal, provincial, local and First Nations levels, to find common ground and develop solutions to complex sustainability challenges.

The primary objective of this endeavour is to evaluate the significance of the Lower Fraser River flood hazard and the adequacy of the existing dike system. The deliverables provided to the City upon completion of the study are also expected to provide the secondary benefits of an increased understanding of the effects of dredging and sedimentation.

A study of the Lower Fraser River Basin over the areas proposed was last completed in 1969 while the Upper Fraser River evaluation was most recently completed in 2001. Since this time, there have been considerable changes both in and adjacent to the river including new bridges, dike systems, dredging, etc., as well as significant advances in our ability to analyze river systems through more advanced computing, use of satellites, etc.

Upon completion of the study, the City specifically stands to benefit in the following areas:

- Operation and maintenance of the dike system;
- Land use planning and development in floodplain areas;
- Emergency planning, preparedness and response;
- Monitoring and managing of dredging activities;
- Improved river level forecasting;
- Site specific flood profiles;
- Data specifically applicable to the City's Drainage Model.

The Fraser Basin Council requires $600,000 to proceed with their proposed flood hazard evaluation study. To date they have received funding confirmation from three federal agencies. Of the 13 local government municipalities who stand to benefit from the proposed work, one has confirmed their financial support and the City has been advised that formal confirmation from the others is pending.

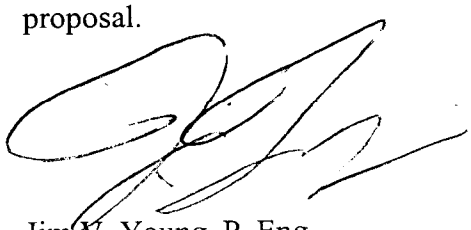
The work by the Fraser Basin Council is tentatively scheduled to be completed over the period September 2004 to August 2005. Upon completion of the study, the City will be provided a final report, the river model software, model results and a users manual.

Financial Impact

The recommended contribution of $15,000 to the Fraser Basin Council for completion of the Lower Fraser Flood Hazard Evaluation can be accommodated through the 2004 Public Works Minor Capital program (account 40105).

Conclusion

The City should support the Fraser Basin Council through a $15,000 contribution as the City is within the Fraser River flood plain, has an extensive dike system and has ongoing dredging activities. The City's support should be contingent upon the Fraser Basin Council's confirmation that they have received the funding necessary to proceed with the work according to their proposal.



Jim V. Young, P. Eng.
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JVY:jvy