



To: Public Works and Transportation Committee **Date:** December 13, 2019
From: Milton Chan, P.Eng.
Acting Director, Engineering **File:** 10-6060-04-01/2019-
Vol 01
Re: **Regional Flood Protection Management and Governance**

Staff Recommendation

1. That the following be endorsed as the City’s position on regional flood protection management:
 - a. That flood protection continue to be evaluated and managed at the local government level, currently through the Diking Authority model, with additional support from senior levels of government;
 - b. That dedicated funding for flood protection be established at the Provincial and Federal level, to be used by Diking Authorities, which include local governments, for flood management projects; and
 - c. That the Province require Diking Authorities, which include local governments, to develop and maintain flood risk management plans and strategies for their respective areas so that regional objectives are met.
2. That staff communicate the comments and recommendations in the report titled “Regional Flood Protection Management and Governance,” dated December 13, 2019, from the Acting Director, Engineering, to regional Diking Authorities, the Fraser Basin Council, and the Province.

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REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Law	<input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: CT	APPROVED BY CAO

Staff Report

Origin

In 2014, the Fraser Basin Council (FBC) started the development of a Lower Mainland Flood Management Strategy (LMFMS) with the purpose of reducing flood risk for communities along British Columbia's Lower Fraser River and south coast. The City of Richmond has been a funding partner supporting the LMFMS along with most local governments and agencies in the region. As part of developing a long-term regional strategy, FBC has proposed options for changing the current province-wide flood protection governance structure. These options were shared at a forum with a regional audience, including municipalities and senior government officials, held on October 8 and 9, 2019.

This report provides an overview of the governance options proposed by FBC and the related staff comments and recommendations.

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

1.3 Ensure Richmond is prepared for emergencies, both human-made and natural disasters.

This report supports Council's Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

5.4 Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.

Analysis

Existing Flood Protection Governance

In 2004, the provincial role with regards to flood protection and management was significantly altered with legislative changes to a number of statutes including the *Land Title Act*, *Local Government Act*, and the *Flood Hazard Statutes Amendment Act*. Currently, under the *Dike Maintenance Act*, responsibility and general supervision for the construction and maintenance of dikes lies with the office of the Provincial Inspector of Dikes.

Local governments, acting as Diking Authorities, are responsible for local flood protection and management including the ongoing operations and maintenance of diking infrastructure. The office of the Inspector of Dikes provides technical recommendations and permitting related to dike construction. Additionally, the City has the authority, through the *Local Government Act*, to designate a floodplain and to set construction requirements for developments.

Funding sources for flood protection projects are currently established by local Diking Authorities with senior government assistance through competitive grant programs. Grant funding is generally awarded to projects that demonstrate priority due to risk, have detailed plans for execution, and are managed by authorities that are evaluated to be capable.

Under the existing governance structure, the City of Richmond has established one of the most advanced flood protection programs in the region. The City's Flood Protection Management Strategy has been in place since 2006 and was most recently updated this year. The City has also developed four phases of the Dike Master Plan, which is currently being implemented.

Richmond's dike network is extensive and, in some cases, located within private property or constructed as part of land development projects. Decisions for managing these dikes and implementing dike upgrades are highly integrated with land use issues and the City has been very successful in addressing and resolving these issues at the local level.

Governance Options Proposed by FBC

FBC has proposed four options that range from status quo to complete ownership and management of flood protection infrastructure by a regional entity. Adoption of any of these options by the Provincial government, other than the status quo, would impact flood protection funding, planning and implementation by local governments.

The governance options presented by FBC are listed from the least to most significantly different from the current structure:

1. Status Quo Option

Diking Authorities are responsible for flood risk management within their respective jurisdictions, with financial support from senior government.

2. Advisory Option

A provincially-mandated regional entity would focus on regional flood risk considerations and provide advice to Diking Authorities.

3. Management Option

A provincially-mandated regional entity would control funding, establish priorities, and provide resources for projects with the greatest regional-scale benefits. This entity could also have an advisory role.

4. Ownership Option

A provincially-mandated regional entity would have complete authority and responsibility for flood risk management in the Lower Mainland. This entity could potentially be established as a crown agency and its responsibilities would include implementation of the LMFMS, as well as ownership and operation of flood protection diking systems in the region. The entity could also have more significant

influence on regional planning and policy to implement non-structural solutions for flood risk reduction.

The FBC has completed valuable work and helped raise the profile of the flood protection challenge presented to the region by climate change and sea level rise. While this work highlights a collective regional risk, it does not present any compelling rationale for moving away from the existing governance structure. All of the elements within the FBC governance options are being delivered or can be delivered through existing local governments and Provincial entities.

With the existing governance structure, local governments are in the best position to implement flood protection improvements and make associated land use decisions, with Provincial support and co-ordination. Creation of a new entity or changing the existing structure would add bureaucracy without any discernible benefit.

Proposed Alternative Solution

Development of local flood protection management strategies and master plans, as well as the ownership, management and implementation of those strategies and plans, should be the responsibility of Diking Authorities, which include local governments. Staff recommend that the Province require Diking Authorities to develop and maintain flood risk management plans and strategies for their respective areas. Much of Richmond's success with having a well-managed flood protection system is the result of developing and maintaining these plans and strategies in partnership with the province.

A similar model is in place for Liquid Waste Management Plans, where the Provincial Environmental Management Act allows local governments to develop plans through the regional government that are approved by the Minister of Environment.

While climate change affects the entire region, impacts due to climate change need to be addressed with area-specific solutions. The City will continue to share our information, experience and knowledge to assist other communities in developing their flood protection framework.

Funding

As described in the "Ageing Utility and Road Infrastructure Planning – 2019 Update" report dated August 16, 2019, staff are pursuing a minimum of 50% in funding assistance from senior government grants and partnerships to deliver the dike upgrades needed to address climate change -induced sea level rise. Currently, funding from senior government is obtained through competitive grant funding programs. Staff recommend that the Provincial and Federal governments be asked to establish dedicated funding streams for flood protection to better enable all local municipalities to plan and implement measures to address sea level rise over the long term.

Financial Impact

None.

Changes to the existing governance structure may impact the availability and allocation of future grants from senior government. Any reduction in grant funding for the City's flood protection works may result in an increase to utility fees or the requirement to borrow funds.

Conclusion

The options to change the current governance structure, presented by the Fraser Basin Council, would create another entity or level of government with a mandate ranging from guidance to complete ownership of flood protection infrastructure that is currently managed by Diking Authorities. Staff recommend that flood risk continues to be evaluated and managed at the local level, with support from senior government.



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JH:cc