DATE: March 4, 2013

TO: Chair and Directors
   Committee of the Whole

FROM: Debra Oakman, CMA
   Chief Administrative Officer

RE: Rainwater management – legal and technical review

Purpose
The purpose of this report is to provide a legal and technical review related to rainwater management issues in the Comox Valley Regional District (CVRD).

Policy analysis
The Ministry of Transportation and Infrastructure (MoTI) is responsible for managing rainwater and drainage outside of municipal boundaries through the construction and maintenance of the provincial road network. Much of the drainage and infrastructure related to rainwater is studied, designed and constructed through the subdivision process controlled by MoTI. The CVRD does play an advisory role as part of the subdivision referral process through the provincial approving officer.

The CVRD does have the responsibility to ensure proper rainwater and drainage management when land alteration occurs as a result of development that was enabled by the CVRD, typically through a rezoning or development permit process.

A rainwater strategy is identified as a NOW priority on the September 2012 strategic plan.

At the August 2011 board meeting, the following resolution was passed:

   THAT a legal and technical review of current CVRD bylaws, policies and procedures be included in the 2012 work plan to ensure that the CVRD is exercising due diligence with respect to stormwater management within its existing jurisdiction;

   AND FURTHER THAT $20,000 be committed from Community Works Funds for each of electoral areas A, B, and C for a total of $60,000 towards the legal and technical review.

Executive summary
In recent years there has been an increase in the number of rainwater and drainage related problems that have arisen in the electoral areas. This includes flooding, slope stability issues and erosion resulting in property damage, public safety concerns, road closures and water quality impacts. While the CVRD has no jurisdiction or responsibility to manage rainwater and drainage in many of these cases, affected residents are contacting the CVRD as the local government responsible for electoral areas. In the CVRD, and throughout the province, MoTI has the primary responsibility for managing rainwater and drainage outside of municipal boundaries. In certain cases, such as the rezoning or development permit process, the CVRD is authorized to require that a stormwater management plan be prepared.

Fernhill Consulting was hired as a rainwater coordinator to oversee and participate in a legal and technical review of the CVRD rainwater related bylaws, policies and procedures and to develop an
integrated watershed development approach for rainwater management. West Coast Environmental Law (WCEL) provided the legal review components. The review highlights that there is already high-level guidance to support an integrated watershed approach to rainwater management in the CVRD. There is however very little measures on the ground that stem from the high-level guidance. The report recommends the following short term steps to be completed in 2013 and 2014:

1. Work with neighbouring municipalities under the Convening for Action for Vancouver Island (CAVI) umbrella to develop management recommendations for the Brooklyn Creek watershed;
2. Develop rainwater management policy statements and development permit area guidelines for the official community plan (OCP) update;
3. Explore economies of scale in rainwater management and planning with the local municipalities;
4. Create a memorandum of understanding with MoTI to develop a comprehensive approach to rainwater management in areas currently experiencing development pressure; and
5. Develop an overall approach for implementing rainwater management in the CVRD electoral areas.

Developing an overall approach will help lead the recommended medium and long term steps:

6. Develop an integrated suite of bylaw updates and new bylaws to implement rainwater management OCP policy in the CVRD electoral areas (2014-2016); and

**Recommendations from the chief administrative officer:**

1. THAT rainwater management policy statements and development permit area guidelines are developed and include objectives to address climate change impacts, adaptive management and performance standards and are implemented as part of the current official community plan review.

2. THAT the Comox Valley Regional District enter into a memorandum of understanding with the Ministry of Transportation and Infrastructure to develop a more comprehensive approach to rainwater management.

3. THAT a report on the resource requirements and next steps for implementing a rainwater management strategy for the Comox Valley Regional District electoral areas be prepared.

4. THAT the Comox Valley Regional District pursue grant funding for a pilot project to test an integrated rainwater management approach.

5. THAT a letter be sent to the Minister of the Ministry of Transportation and Infrastructure acknowledging staff participation and providing a copy of the staff report dated March 4, 2013 and the Fernhill Consulting report.

6. THAT a letter be sent to the City of Courtenay, Town of Comox and Village of Cumberland acknowledging staff participation and providing a copy of the staff report dated March 4, 2013 and the Fernhill Consulting report.

Respectfully:

*D. Oakman*

Debra Oakman, CMA
Chief Administrative Officer
History/background factors
There are a number of issues around rainwater and drainage that require coordination between regional districts and MoTI. Detailed analysis and recommendations on improvements are needed to ensure that the processes and requirements of the CVRD and MoTI are effective, follow best management practices and that no gaps in responsibility are present. While rainwater and drainage issues are often dealt with on a case by case basis, an integrated basin-wide approach is ultimately required to handle issues that affect all local governments within the CVRD. This integrated watershed scale approach has been a key message and topic of discussion at the CAVI Comox Valley learning lunch series which has been ongoing since 2007.

Fernhill Consulting was hired as a rainwater coordinator to oversee and participate in a legal and technical review of the CVRD rainwater related bylaws, policies and procedures and to develop an integrated watershed development approach for rainwater management. The report received from Fernhill Consulting contains a legal review of existing practices and options from WCEL.

WCEL reviewed a number of CVRD policies and bylaws including the regional growth strategy (RGS), the Comox Valley sustainability strategy (CVSS), the OCP, the zoning bylaw, the electoral area and local area plans. While these high-level guidance documents support an integrated watershed approach to rainwater management within the CVRD, WCEL recommends developing a more detailed technical assessment of needs for watershed management supported by community and stakeholder consultation to identify priorities for action.

Jurisdiction and risk were also reviewed and it is the opinion of WCEL that the CVRD would likely not expose itself to additional liability by taking a more active role in rainwater management, provided that it ensures that any program or service is offered with reasonable care to those likely to be impacted by the program or service. The CVRD may decrease its liability in some cases by properly addressing rainwater management.

Some of the options identified to address rainwater management are listed below:
- increased involvement in subdivision approvals;
- updated development permit areas;
- create regulatory bylaws;
- update zoning bylaws;
- update building bylaw;
- create drainage service;
- create a region-wide service area for research, planning and public education;
- provide rainwater management policies and guidance for OCP amendments; and
- develop a design and policy manual for rainwater management.

The report recommends the following short term steps to be completed in 2013 and 2014:
1. Work with neighbouring municipalities under the CAVI umbrella to develop management recommendations for the Brooklyn Creek watershed;
2. Develop rainwater management policy statements and development permit area guidelines for the OCP update;
3. Explore economies of scale in rainwater management and planning with the local municipalities;
4. Create a memorandum of understanding with MoTI to develop a comprehensive approach to rainwater management in areas currently experiencing development pressure; and
5. Develop an overall approach for implementing rainwater management in the CVRD electoral areas.
Developing an overall approach will include a review of resource requirements, budgets, identification of desired technical performance standards and bylaws and the development of strategy for public and stakeholder engagement. This approach will help lead the following recommended medium and long term steps:

6. Develop an integrated suite of bylaw updates and new bylaws to implement rainwater management OCP policy in the CVRD electoral areas (2014-2016); and

Along with the legal review, Fernhill Consulting was asked to develop a potential pilot project to test integrated rainwater management approaches. Two pilot project concepts were developed as follows:

1. A pilot green street project in the next significant subdivision development with the CVRD electoral areas. This pilot will demonstrate new and improved approaches to rainwater infiltration and detention within road rights-of-ways.

   Option one demonstrates an approach that can be replicated more widely across the CVRD electoral areas, develops staff expertise and experience, and creates a closer working relationship with MoTI. It would introduce alternative roadway designs intended to infiltrate, detain and/or clean runoff and would be best done during the subdivision planning stages. Funding sources that could provide financial support include the Federation of Canadian Municipalities Green Fund and the Union of BC Municipalities Gas Tax.

2. A retrofit of street ditches that can be implemented in the short term. This retrofit does not address flooding or erosion concerns, but does improve habitat in Brooklyn Creek, which flows in ditches along Parry Place. Thus this pilot demonstrates the natural habitat aspect of integrated watershed management.

   Option two would see ditches converted into more natural fish habitats in other areas of the CVRD. It would also allow for the CVRD and MoTI to work together to improve the Brooklyn Creek watershed as part of a multi-jurisdictional effort with the Town of Comox and the City of Courtenay and could be coordinated through CAVI. The CVRD has been working with CAVI since 2007 towards the goal of an integrated approach towards rainwater management. There are multiple funding sources that could provide financial support including MoTI, RBC Blue Water program, the TD Friends of the Environment as well various others.

**Options**
The CVRD has the following two options with respect to rainwater management:

1. Continue with the status quo.
2. Identify rainwater management and policy statements and explore options to address rainwater management.

In recent years there has been an increase in the number of rainwater and drainage related problems that have arisen in the electoral areas. As the CVRD is currently undergoing an OCP update, it is timely to develop policy statements around rainwater management. In addition, rainwater management is listed as a NOW priority on the strategic plan, therefore only option two is recommended.
Financial factors
The contract to Fernhill Consulting and WCEL to complete the work to date has cost approximately $20,000. Further budget has been allocated in 2013 to continue work on rainwater management. Staff recommends pursuing grant funding opportunities to support a pilot project.

Legal factors
A legal review of options was completed by WCEL and is contained in the Fernhill Consulting report as Appendix 4.

Sustainability implications
The CVSS contains several targets applicable to addressing stormwater management within the electoral areas and support an integrated watershed approach.

Intergovernmental factors
In order to manage rainwater and drainage according to best practices, an integrated, basin-wide approach is needed. This will involve close collaboration between the CVRD and member municipalities as well as MoTI, and large private land owners such as forestry companies. The Comox Valley regional CAVI team includes these members and has been meeting regularly over the past four years to discuss these issues.

Interdepartmental involvement
The engineering services and planning services departments as well as the strategic and long range planning department are all involved in dealing with issues around rainwater and drainage management. Coordination amongst these and other departments will be critical to improving the way in which CVRD handles rainwater and drainage issues in the electoral areas.

Citizen/public relations
Proper management of rainwater runoff and drainage is an important issue to many residents in the electoral areas as it can and has significantly impacted their properties, primarily as a result of flooding. These residents are often in contact with the CVRD as the local government in their area.

Prepared by:

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