

DATE: August 9, 2011

FILE: 5225-06

TO: Chair and Directors
Committee of the Whole

FROM: Debra Oakman, CMA
Chief Administrative Officer

RE: Electoral area stormwater and drainage management

Purpose

The purpose of this report is to provide an overview of current stormwater and drainage issues in the Comox Valley's electoral areas and how these issues are being managed.

Policy analysis

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

CVRD does have responsibility to ensure proper stormwater 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. Appendix A includes a diagram summarizing the responsibilities for stormwater and drainage in electoral areas.

The rural Comox Valley official community plan (OCP) and the recently adopted regional growth strategy (RGS) contain numerous policies around protection of water resources and utilization of stormwater management best practices. This includes:

- OCP policy C.10 (a) and (b)
 - *Development proposals shall be required to address stormwater management to ensure that post-development peak flows do not exceed pre-development peak flows.*
 - *The use of innovative technologies for the collection, treatment and discharge of wastewater and stormwater shall be encouraged.*
- RGS policy 5C-3
 - *In Rural Areas the regional district should work with the Ministry of Transportation and Infrastructure to develop guidelines for an Integrated Stormwater Management to be used in the subdivision approval process.*

Executive summary

In recent years there has been an increase in the number of stormwater 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 CVRD has no jurisdiction or responsibility to manage stormwater 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, the MoTI has the primary responsibility for managing stormwater and drainage outside of municipal boundaries. In certain cases, such as the rezoning or development permit process, CVRD is authorized to require that a stormwater management plan be prepared.

There are a number of issues related to stormwater and drainage that require coordination between the regional district, member municipalities and the provincial government. A number of options exist, including retaining the status quo, improving the existing approach and developing a partnership with the province and other local governments. 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. Management of stormwater and responsiveness to property issues is a central component to the MoTI implementation agreement outlined in the RGS. And while stormwater 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.

Recommendations from the chief administrative officer:

1. THAT the following resolution be submitted to the 2011 Union of BC Municipalities convention for consideration:

WHEREAS there are numerous and significant problems with drainage and stormwater management throughout the electoral areas;

AND WHEREAS the authority for managing stormwater and drainage in electoral areas is the primary responsibility of the Ministry of Transportation and Infrastructure as well as the development of legislation, policies and programs, and for providing resources to plan, construct and maintain drainage systems and enforce drainage standards;

THEREFORE BE IT RESOLVED that the Comox Valley Regional District board of directors request the Union of BC Municipalities to urge the Province of BC, through the Ministry of Transportation and Infrastructure to improve their approach for the effective management of stormwater and drainage in electoral areas within the province of BC.

2. 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.

3. THAT staff engage the Ministry of Transportation and Infrastructure, through the development of operational agreements and the regional growth strategy implementation agreement, to ensure that stormwater and drainage best management practices are being utilized outside of CVRD's jurisdiction

4. THAT the board send a letter to the appropriate agencies, including the Ministry of Transportation and Infrastructure, City of Courtenay, Town of Comox and Village of Cumberland, to obtain interest in working together on the development of an integrated watershed approach to stormwater management in the Comox Valley.
5. THAT the board consider in the 2012 to 2014 strategic planning process the development of an integrated watershed approach to stormwater management that takes into account climate change adaptation and green infrastructure best practices.

Respectfully:

D. Oakman

Debra Oakman, CMA
Chief Administrative Officer

History/background factors

In recent years there has been an increase in the number of stormwater and drainage related problems that have arisen in the electoral areas. These problems, primarily flooding events, slope stability issues and erosion, have caused damage to downstream property owners, public safety concerns, road closures and water quality impacts. For the purposes of this report drainage is associated with the road network while stormwater is considered runoff from land development. While the CVRD has no jurisdiction or responsibility to manage stormwater and drainage in many of these cases, affected residents are contacting the CVRD as the local government responsible for electoral areas. As such it is important to understand the roles and responsibilities for stormwater and drainage management.

In the CVRD, and throughout the province, the Mo'TI is responsible for managing stormwater and drainage outside of municipal boundaries through the construction and maintenance of the provincial road network as well as through the subdivision process. While CVRD does not have a drainage or stormwater service, nor the appropriate staff expertise or regulatory tools, it does play an advisory role as part of the subdivision referral process through the provincial approving officer. CVRD staff have had success in the past working with Mo'TI on a case by case basis, however a more efficient approach is required in the long term.

Stormwater and drainage related problems can be attributed to insufficient planning, construction and maintenance of roadway drainage, poor stormwater management practices at the subdivision approval stage, and construction of driveway accesses across ditches without proper drainage controls. With regard to the latter, Mo'TI is no longer issuing residential driveway access permits and according to residents these are now being constructed without standards or proper guidance and methods. Changes to the frequency and magnitude of storm events are also compounding the problems as has increased development activity.

CVRD does have responsibility to ensure proper stormwater and drainage management when land alteration occurs as a result of development that was enabled by CVRD, such as through a rezoning or development permit process. In these cases the CVRD has the authority to require that a stormwater management plan be prepared by a professional engineer to ensure that pre-development peak runoff flows are maintained, that water quality is protected and that best management practices are utilized. It is important to note there are currently no legal tools (e.g. development permit areas) that CVRD can use to focus on stormwater management for single family residential development resulting from subdivision.

It is also important to note that in many cases problems occur as a result of land alteration on private property where the activities, such as major landscaping and tree cutting, are not regulated by CVRD. These are issues between property owners and CVRD is not involved.

Options

There are a number of issues around stormwater and drainage management in the Comox Valley electoral areas and it's important that CVRD work with the appropriate jurisdictions on solutions to current problems and avoidance of future issues. The latter is pressing given the number of large scale developments being proposed in settlement nodes within electoral areas. Addressing existing conditions is equally important given climate related events and historical maintenance issues. A number of options exist that CVRD could explore to address these two areas, including retaining the status quo, improving the existing approach taken and developing a partnership with the province.

Status quo would involve MoTI continuing to have primary jurisdiction over drainage and stormwater management in electoral areas with CVRD requiring stormwater planning through the rezoning and development permit process.

The improved process approach would require the provincial government to improve how they plan, construct and maintain drainage systems, enforce drainage standards and undertake stormwater management throughout the electoral areas. In addition, CVRD would look at improvements to its bylaws, policies and procedures to ensure consistency and consider downstream and basin wide impacts as well as long term operation, maintenance and security of any systems that are engineered or built on site.

CVRD could also consider working with the province to develop a shared responsibility model for drainage and stormwater management which may include CVRD establishing service areas to manage road drainage and subdivision processes as well as regulations for land alteration on private properties. There are a number of challenges with this approach, including that CVRD does not have the appropriate staff expertise or regulatory tools. A legal and technical review would be required to understand the implications to CVRD as well as the specific requirements should new services be established.

There are a number of issues around stormwater and drainage that require coordination between regional districts and the provincial government. 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 stormwater 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 Convening for Action on Vancouver Island – Comox Valley learning lunch series which has been ongoing since 2007/2008.

Financial factors

Any review of legal and technical implications to the current or potential CVRD stormwater management processes and requirements would have an associated cost as external consultants would be retained. This is expected to cost approximately \$60,000, which could be funded by equal contributions from Electoral Areas A, B, and C community works funds.

There will also be financial implications should the CVRD proceed with establishing new services, primarily associated with creating internal capacity as currently there is no department within CVRD that has relevant expertise. This could involve hiring staff with relevant skills and experience related to stormwater and drainage or retaining a consulting engineer to assist with service administration.

Legal factors

Drainage and stormwater problems could result in legal risk to the CVRD. In order to protect the CVRD from any potential legal actions it is important to ensure that responsibilities and jurisdiction are clear and that solutions are sought. It is particularly important that where CVRD does have jurisdiction, the requirements and processes are appropriate and that there is internal capacity to administer in a thorough manner.

Sustainability implications

The Comox Valley sustainability strategy includes numerous goals, objectives, targets and action around stormwater management. This includes the following:

Objective 2.1.3: Sustainable practices are used in site planning for new projects and redevelopment projects.

Goal 3.7: Stormwater (rainwater) is managed to maintain the performance of watershed systems, preserve ecosystem health and protect groundwater.

Objective 3.7.1: Buildings and sites are designed to manage stormwater in an ecologically sensitive manner.

Intergovernmental factors

In order to manage stormwater 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 the provincial ministry of transportation and infrastructure and large private land owners such as forestry companies.

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 stormwater and drainage management. Coordination amongst these and other departments will be critical to improving the way in which CVRD handles stormwater and drainage issues in the electoral areas.

Citizen/public relations

Proper management of stormwater 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:

Concurrence:

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Attachments:

Appendix A – Diagram - responsibilities for stormwater and drainage in electoral areas

Appendix A: Responsibilities for stormwater and drainage in electoral areas.

