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**TO:** Committee of the Whole                      **MEETING:** July 10, 2018

**FROM:** Sean De Pol                      **FILE:** 5280-22/5340-01  
Director, Water & Wastewater  
Services

**SUBJECT:** Water System Risk Management Plan

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### **RECOMMENDATION**

That staff be directed to report back upon the completion of the Water System Risk Management Plan.

### **SUMMARY**

Regional District of Nanaimo (RDN) staff participated in a Ministry of Health sponsored “pilot” Water System Risk Management Plan (WSRMP) Workshop on June 21 and 22, 2018. The RDN was one of 4 local governments selected by the Ministry of Health to assist in developing this initiative.

### **BACKGROUND**

The purpose of a Water System Risk Management Plan (WSRMP) is to assess risks to the entire water system (“One Water”), from “watershed to tap to sink to watershed” including water treatment and distribution, wastewater collection, treatment and discharge. This workshop is an initiative developed under the direction of the Ministry of Health, Ministry of Environment and Engineers and Geoscientists BC. It is currently in the trial phase, and the Regional District of Nanaimo is one of four local government organizations participating in the workshop process, and the first regional district to do so. The RDN was asked to assist in the development of a WSRMP due to the RDN’s recognized abilities in the area. RDN participants included senior staff from Planning, Finance and Regional and Community Utilities, as well as operations supervisors and administrative support from Regional and Community Utilities and Emergency Services.

The WSRMP is a high level document developed using the collective knowledge of RDN staff responsible for the watershed, water and wastewater systems identifying all risks to the water system. The goals of the WSRMPs are to focus financial resources where they are most needed, maintain consistent levels of service, maintain resilient utility services and reduce liability exposure. By including representatives from various departments and positions, a systems perspective is developed and all aspects of water cycles are considered. Key concepts considered through the process included resiliency, infrastructure renewal, climate change, work force change, public confidence, systems thinking and the creation of a high level document.

In order to facilitate the identification of risk, eight risk categories were identified: Organizational, Financial, Regulatory, Operational, Watershed, Communication, Strategic and Hazard. The systems approach assists in identifying the interconnectivity of the different risks, which improves the understanding of all the risks and importance of addressing them. Staff identified sources of risk for each risk category and described processes and tools in place to manage the corresponding risk if available. By identifying concerns within their departments, staff facilitated discussion and improved the understanding of those issues that elevated risk.

Through the process, the complexity of water governance in the RDN was identified, particularly with drinking water. There are many different community water systems, managed by different agencies (RDN, Municipalities, Improvement Districts, and First Nations) that draw on a variety water sources and often share sources. It was recognized that regulation and authority around water and land in the regional district context is much more complex than in individual municipal settings. The workshop facilitators from Kerr Wood Leidal acknowledged they had not uncovered these governance issues unique to regional districts at the two workshops previously conducted with municipalities. This workshop confirmed that there is more to be done to understand the nature of the water governance complexities that exist in the RDN, the risks, blockages or issues that stem from overlapping jurisdiction challenges and what interventions or changes to the current governance model would best serve the region from a water risk management perspective.

Once sources of risk had been identified for all the risk categories, staff participating in the workshop identified the top three. Kerr Wood Leidal will complete a report, identifying all sources of risk and highlighting those risks identified as critical. The report and process will help inform the Water Governance work underway, as well as our broader risk management planning.

## **STRATEGIC PLAN IMPLICATIONS**

The Board 2016-2020 Strategic Plan includes strategic focus on service and organizational excellence, with the priorities of viewing our emergency services as core elements of community safety and funding infrastructure in support of our core services employing an asset management focus. The WSRMP will identify opportunities to improve on these services.

The Strategic Plan also includes strategic focus on relationships, with a priority on improving two-way communication within the regional district and facilitating / advocating for issues outside our jurisdiction. The WSRMP Workshop was effective in improving internal dialogue within the RDN, and the completed report could serve as a tool to improve communication with external partners.

Finally, Strategic Plan includes strategic focus on the environment with priorities on protecting and enhancing our environment, evaluating climate impacts as factors in our infrastructure and services planning and preparing for and mitigating the impact of environmental events. The completed WSRMP will identify risks associated to our Water and Wastewater infrastructure with climate change and identify improvements that need to be made to address these risks.



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June 27, 2018

Reviewed by:

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