



Waste Management Committee Meeting Date: September 8, 2010

To: Waste Management Committee

From: Ed von Euw, Senior Engineer, Regional Utility Planning
Bob Cavill, Division Manager, Watershed Management

Date: June 14, 2010

Subject: **Update on Greater Vancouver Sewerage and Drainage District (GVS&DD) Integrated Stormwater Management Planning**

Recommendation:

That the Waste Management Committee receive the report dated June 14, 2010 titled "Update on GVS&DD Integrated Stormwater Management Planning" for information.

1. PURPOSE

To update the Waste Management Committee on progress-to-date in implementing Metro Vancouver's action items contained in the Still Creek Integrated Stormwater Management Plan (ISMP) and to outline the upcoming Port Moody Coquitlam Drainage Area ISMP process.

2. CONTEXT

The Liquid Waste Management Plan (LWMP), and now the Integrated Liquid Waste and Resource Management Plan, requires that municipalities develop and implement ISMPs for urban watersheds by 2014. Municipalities are directly responsible for stormwater management and through the GVS&DD, Metro Vancouver is responsible for designated drainage facilities within the Still Creek – Brunette River Drainage Area, and the Port Moody – Coquitlam Drainage Area (Attachment 1).

Still Creek – Brunette River Drainage Area

On October 17, 2002 the Board directed staff to work with Vancouver and Burnaby to develop an Integrated Stormwater Management Plan for the Still Creek watershed. A comprehensive report which contained short, medium and long-term (50 year) action items was developed by the project steering committee and presented to Burnaby and Vancouver City councils. A modified version of the ISMP report, containing only the GVS&DD and collaborative action items, was considered by the Waste Management Committee on July 11, 2007, and adopted by the Board on July 27, 2007. A copy of this ISMP is attached (Attachment 2).

Update on key GVS&DD and collaborative action items:

- Metro Vancouver has completed a feasibility study on sediment control facilities along Still Creek and is currently working with Burnaby and Vancouver to determine an implementation schedule.
- Metro Vancouver will assess the feasibility of a sediment control facility on Eagle Creek (tributary to Burnaby Lake) in 2010.

- Metro Vancouver is currently designing a permanent fish ladder to replace the temporary structure at the Cariboo Dam at the outlet of Burnaby Lake. This new structure is intended to mimic a natural channel and improve fish access to Burnaby Lake and the upstream creeks. Detailed design is currently underway and construction is scheduled during the fisheries construction window in 2011.
- Metro Vancouver continues to assess channel conditions in Still Creek on an annual basis and as a result removed 400m³ of material along a 200m reach of the waterway in Burnaby in 2009.
- Metro Vancouver continues to employ bioengineering techniques at locations along Still Creek to improve erosion control through use of native plants. A pilot study has been conducted on the resources required to remove invasive plant species and maintain the channel with native plants. Over the past 3 years, more than 1000 m of the creek bank has been planted with native species.
- Metro Vancouver has worked with Vancouver to enhance 500 m of Still Creek leading to improved conveyance and public access. Additional collaborative plans are underway to improve the channel and habitat near Grandview Highway.
- Metro Vancouver is working with Burnaby to improve conveyance and flood storage in a 200 m section of Chub Creek flowing through Jim Lorimer Park (Chub Creek is a tributary of Still Creek).
- Metro Vancouver worked with Burnaby to improve canoe and kayak access from Burnaby Lake to Still Creek by modifying one of our trash collection booms.
- Metro Vancouver collaborated with Burnaby to consider the feasibility of installing aeration structures in the Still Creek Brunette River watershed. It was determined that the installation of mechanical aeration structures is not currently feasible.
- Metro Vancouver is assessing the impacts of channel impediments and assisting operations and maintenance activities and design work.
- An operations coordination group was created with members from Vancouver, Burnaby, New Westminster, Port Moody, Coquitlam and Metro Vancouver. This group meets periodically to allow for more effective maintenance and channel improvements throughout the Still Creek Brunette River Drainage Area.

Metro Vancouver will continue to work with the member municipalities to complete the remaining short, medium and long-term collaborative actions. Vancouver and Burnaby are implementing the action items that are specific to each municipality and continue to collaborate with Metro Vancouver on the joint action items. The plan will be reviewed in 2019 in accordance with requirements in the LWMP.

Port Moody – Coquitlam Drainage Area

The existing Master Drainage Plan for the Port Moody Coquitlam Drainage Area (PMCDA) was completed in 1988 and requires updating. In 2009, Metro Vancouver's Board approved capital funding of \$250,000 to complete an ISMP in this Drainage Area. Costs for this work are allocated to the Drainage Area member municipalities only – in this case Port Moody and Coquitlam. Metro Vancouver has worked with Port Moody and Coquitlam to develop a terms-of-reference and scope for the ISMP. A Request-for-Proposals to assist with the technical aspects of this project has recently been issued by Metro Vancouver. As with most ISMPs that have been completed by member municipalities, this multi-phase study is anticipated to take about 24 months to complete.

A Steering Committee has been established with members from Port Moody, Coquitlam and Metro Vancouver's Policy and Planning, and Operations and Maintenance Departments.

The Steering Committee is co-chaired by the municipalities. Metro Vancouver will participate on the Steering Committee and administer the consulting contract. The ISMP process typically includes multiple interested parties and a public consultation process which will be led by the municipalities.

The completed Port Moody Coquitlam ISMP is expected to include:

- A strategic plan and action items for the municipalities and Metro Vancouver to more effectively manage rainwater and the impacts of stormwater runoff and to maintain and improve conveyance capacity in this Drainage Area.
- An assessment of Metro Vancouver and municipal infrastructure in the Drainage Area.
- A slope hazard assessment review.
- A tree assessment to determine the life expectancy of trees in the ravines.
- An environmental and habitat inventory.
- A hydrologic model to allow better assessment of runoff on existing infrastructure and the impacts of channel impediments and potential climate change impacts on conveyance capacity.

A draft report will be brought forward to the Waste Management Committee for their consideration. The final report will be presented to the Committee and Board for adoption.

3. ALTERNATIVES

None presented

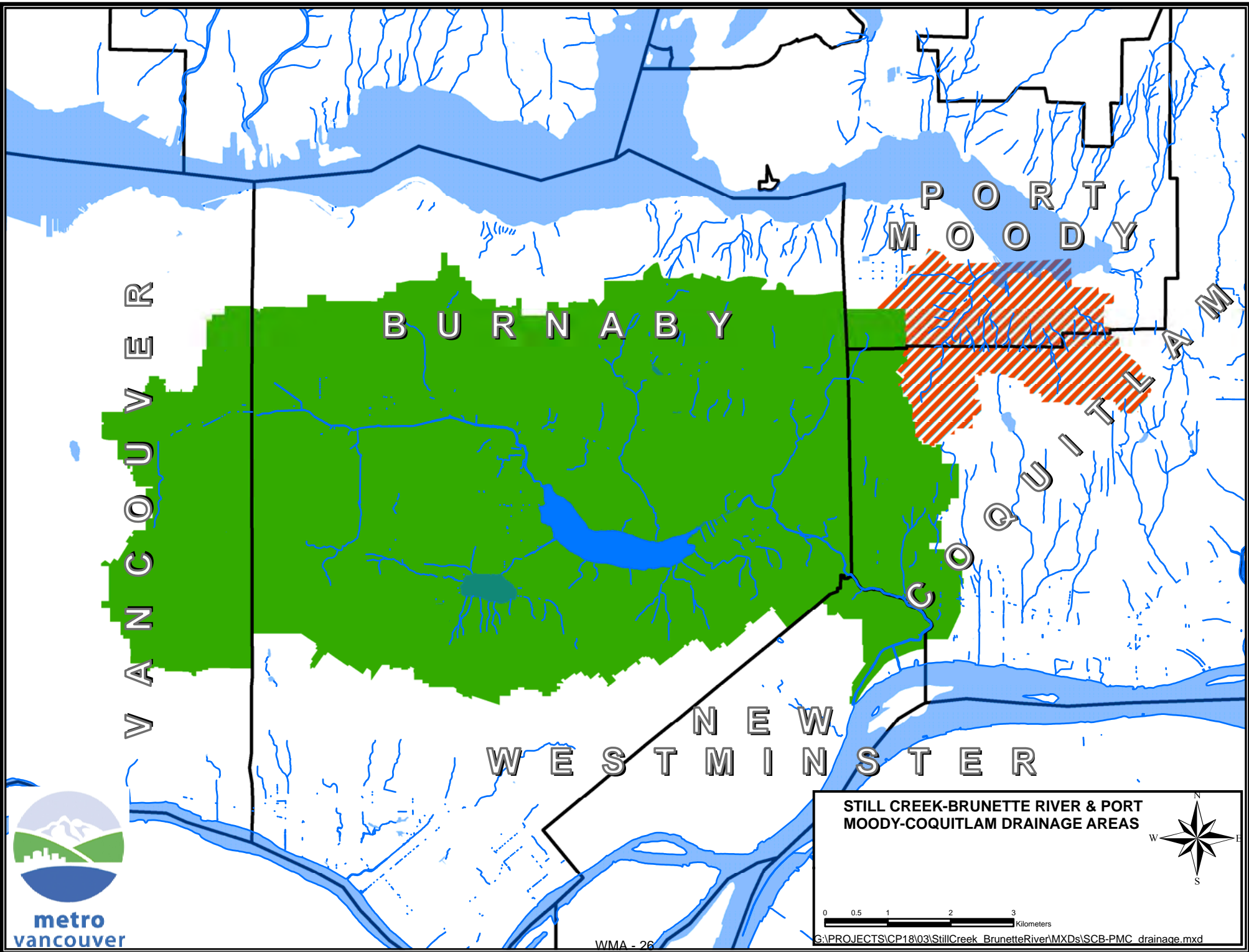
4. CONCLUSION

Metro Vancouver and member municipalities have made significant progress in implementing the short, medium and long-term action items in the Still Creek ISMP. Further implementation will occur on the outstanding action items in the coming years.

The Port Moody – Coquitlam ISMP process will begin in 2010 with Port Moody, Coquitlam and Metro Vancouver leading the process. It is estimated that the process will last about 24 months and a draft report will be presented to the Waste Management Committee when complete.

Attachments

1. Map of Still Creek Brunette River and Port Moody Coquitlam Drainage Areas (4176435)
2. Still Creek Integrated Stormwater Management Plan (4176632)



**STILL CREEK-BRUNETTE RIVER & PORT
MOODY-COQUITLAM DRAINAGE AREAS**

0 0.5 1 2 3 Kilometers

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