



Sediment Removal from the Vedder River – WSA Approvals

**Vedder River Sediment Removal Meeting
November 27, 2017**

Representatives here today

- **Bryan Robinson**
Section Head, Surface Water Authorizations
- **Remko Rosenboom**
Manager Water Authorizations

Brief History

- Plans to drain Sumas Lake were formulated in the 1920's
- As part of this plan the Vedder River was diverted into the newly formed Vedder Canal in 1924
- The Vedder Canal receives the flow from Vedder River and the Chilliwack River above Vedder Crossing
- Dikes are located on both sides of the Vedder Canal and these are regulated under the BC Dike Maintenance Act

Sediment Removal

- Sediment removal required to maintain the Provincially recommended level of flood protection
- Removal sites are selected to provide 0.75 m of dike freeboard during a 1 in 200 year flood event
- Sediment removal occurs every two years (non-pink salmon years) as part of a multi-government flood protection and management program for this area
- This includes FLNRORD, the City of Chilliwack and the City of Abbotsford

WSA component of Sediment Removal Approval

- FLNRORD has two main roles
 - Flood group - Vedder River Management Area Committee
 - Surface Water group - regulator under the WSA
- Two main issues
 - Need for work to be completed and the amount of sediment that is to be removed
 - Mitigation of impacts
- Mitigation policy
 - Avoid, Minimize, Restore on site, Offset



WSA component of Sediment Removal Approval

- Water Rights
- Would the change affect other property or infrastructure?
- First Nations Consultation
- Physical Environment
 - Fish habitat
 - Other aquatic species
 - Riparian areas
- Protection of Water Quality

Example WSA conditions

- Work to be completed in the least risk Fish Window
 - July 15 to September 15
- Sediment removal boundaries to be clearly delineated prior to commencement of work.
- All sediment excavation to be completed in isolation of the stream flows.
- The works shall be designed and installed so as not to restrict fish passage and/or lead to fish stranding.

Example WSA conditions

- Environmental monitor to be onsite at all times with the authority to stop work to address risks to the environment
- QEP required for fish salvages if any dewatering or isolation of flows is required
- Equipment maintenance and spill kit requirements
- Protection and avoidance of disturbance of wildlife in the Blue Heron Nature Reserve

Example WSA conditions

- Submission of plans to the FLNRORD Authorizations Specialist:
 - Monitoring Plan
 - Hydraulic Analysis Report
 - Sediment Removal Plan
 - Biennial Vedder River Sediment Removal Project report
 - Offsetting and Mitigation Plan

Recent WSA Sediment Removal Approvals

- WSA Approval A 2005954 & 58 signed August 3rd 2010
 - Allowed for the removal of 129,400 m³ (71,000 + 58,400)
- WSA Approval A 2005953 signed August 3rd 2012
 - Allowed for the removal of 53,500 m³
- WSA Approval A2006150 signed August 7th 2014
 - Allowed for the removal of 63,500 m³
- Last WSA Approval A2004412 signed August 8th 2016
 - Allows for the removal of up to 100,000 m³ of sediment every 2 years up to the end of the fisheries window in 2020

Some Issues raised following the last sediment removal

- Why was the work window extended?
- Why did FLNRORD give a longer term approval in 2016?
- Haul roads
 - Sufficient buffer between the road and the waters edges?
 - Silt curtains in place to prevent fines entering the water?
 - Dirty fill used as the base for the haul road?
- Hydraulic modelling reports
- Sediment removal calculations and reports
- Environmental monitoring reports



Ministry of Forests, Lands
and Natural Resource Operations

Thank you

Contact details:

Bryan Robinson

Section Head, Surface Water Authorizations

E-mail: Bryan.Robinson@gov.bc.ca

Phone: 604-586-4000