

Best Management Practices WATER QUALITY: EROSION AND SEDIMENT CONTROL

March 29, 2010

INTRODUCTION

This is one of a series of Best Management Practices that guide the activities of BC Timber Sales Skeena Business Area. It addresses the topics of water quality, soil erosion and sediment control with the goal to mitigate the potential for BCTS operations to introduce sediment into watercourses.

BACKGROUND

BCTS operates under existing legislation, plans, and an Environmental Monitoring System (EMS) which requires management of water quality and of mitigating the risk of soil erosion and water sedimentation. British Columbia has legislation and regulations defining requirements to manage for water quality, and specifically for forestry operations, the *Forest and Range Practices Act* and its *Forest Planning and Practices Regulation*. In accordance with the *Forest and Range Practices Act*, BC Timber Sales must operate under an approved Forest Stewardship Plan (FSP) that defines strategies for operating in riparian management zones and for managing water quality. BC Timber Sales operations are required to follow these strategies and to achieve the results defined in the FSP. BC Timber Sales EMS also has requirements in its Environmental Field Procedures for managing erosion and sediment. All BCTS operations are required to conform with EMS requirements.

BEST MANAGEMENT PRACTICES

Conform with existing Legislation and Regulations, and with the FSP and EMS

- BCTS operations will conform with all existing legislation and regulations.
- BCTS operations will conform with all strategies described in the FSP.
- BCTS operations will conform with our EMS.

Assess/Identify/Document the Risk

- Where available, Terrain Mapping will be reviewed to identify potential slope erosion and sediment risk areas as part of development planning.
- BCTS field staff and contractors will assess and identify areas of potential slope erosion and sedimentation sources during planning, layout, and design activities.
- Terrain stability assessments will be completed by qualified professionals in areas requiring detailed assessments to identify areas of potential erosion and sedimentation. Recommendations made by the qualified professional to mitigate the risk of landslides, erosion or sedimentation will be implemented.
- Operational plans will identify areas with potential erosion or sedimentation concern.
- BCTS will plan and conduct inspections on a frequency based on a risk assessment, and assess, identify, and record areas of potential erosion and sedimentation.

Mitigate the Risk

• BCTS will mitigate the risk of erosion and sedimentation as soon as practicable.

- Areas with known or potential risk of erosion or sedimentation will be identified and discussed by BCTS with contractors and licensees during prework meetings.
- During operations, BCTS and its licensees will implement erosion and sediment control measures to effectively mitigate the risk, to the extent that is practicable.
- Where site specific conditions pose a significant risk of erosion and sedimentation, detailed prescriptions will be prepared, communicated and implemented.
- Where site conditions require routine mitigation measures, contractors and licensees will apply appropriate measure to mitigate the risk.
- BCTS will encourage innovative solutions to mitigate erosion and sedimentation risk.

Effectiveness Monitoring

- The effectiveness of mitigation measures will be assessed during operations and during routine inspections; if required, changes to the measures will be made.
- BCTS will review the effectiveness of applied mitigation measures by planning and conducting inspections on a frequency based on a risk.
- BCTS will use the results of monitoring to guide future mitigation activities and improve mitigation results.

Best Management Practices Reference Documents

BCTS recognizes there is an abundance of published information on forest operations with respect to managing water quality and mitigating soil erosion and sedimentation. The documents listed below are recommended as good sources of information on best management practices for water quality and for erosion and sediment control. These documents can inform planners, contractors and licensees on when and how to apply appropriate mitigation measures.

Fish-stream Crossing Guidebook, Forest Practices Code, Ministry of Forests and Range, March 2002

http://www.for.gov.bc.ca/ftp/TSK/external/!publish/EMS2/Supplements/FSCGdBk.pdf

Best Management Practices Handbook: Hillslope Restoration in British Columbia, Ministry of Forests, November 2001

http://www.for.gov.bc.ca/ftp/TSK/external/!publish/EMS2/Supplements/HillslopeRestoration bmp_hndbk2001 214p.pdf

Erosion and Sediment Control Practices for Forest Roads and Stream Crossings, FP Innovations, FERIC Division, Advantage Vol.9 No.5, December 2007 <u>http://www.for.gov.bc.ca/ftp/TSK/external/!publish/EMS2/Supplements/Erosion_Sediment_C</u> <u>ontrol_Practices_Forest_Roads_FERIC.pdf</u>