

Project Completion Abstract

Environmental Maintenance Project - Stream Crossing Deactivation

At vicinity of 14.5 km Skyline FSR – FL A18667

Objectives of the project

The objective of the project was to reduce the risks associated with an existing older wooden box culvert/crossing located at 14.5 km on the Skyline FSR by removal of the structure and stabilization of the stream banks. The likelihood of an event occurring due to the prior state of the crossing was judged to be high with the potential for a debris flow initiating as a direct result of failure. Downslope impacts upon the elements at risk (private property, possible impact to transportation corridor, potential public safety issues) were rated as high if left in place.

The study area is located within the Mara – Skyline area and is not within a community watershed.

FIA Investment Schedule Number and Project Number

Investment Schedule # SOTSA 224267
Project # 4267009

Recipient Name and Division/ MoF District/ MoF Region

- Riverside Forest Products Ltd
- Armstrong Division
- Okanagan Shuswap Forest District
- Kamloops Forest Region

Author of the Project Completion Abstract

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Name of Watershed / Sub-basin, & Location

The study area is located within the Mara/Skyline Operating area of FL A18667, Okanagan Shuswap Forest District and south of the town of Sicamous. The site stabilization is more specifically located approximately 125m downslope of 14.5 km on the Skyline FSR within mapsheet 82L/NE (see 1:5,000 scale map attached to original report).

Introduction

The study area consists of an older (>20 years) log box culvert crossing an S5 stream channel that is a direct tributary to Mara Creek, some 550m downslope. The structure had been constructed with large logs laid in place and fill materials overlain. No lashing or pinning was noted. Fillslopes of the approaches reached 80% with numerous areas of tension cracks and settlement across the running surface of the culvert. In addition to the above, the structure had started to fail and debris had accumulated across the upstream edge. It was estimated that ~357m³ of material could potentially fail creating a debris flow within the stream channel.

It was therefore recommended to remove the structure and stabilize the stream channel and road/trail prism. The original prescription was prepared by G.W. Lord, P. Eng., of Cascade Forest Engineering Ltd., dated November 5, 2003 (File C-05-13-03)

Environmental Maintenance Project Plan (Roads Activity Area) or Prescriptions (Terrestrial Activity Area)

The plan consisted of a deactivation/rehabilitation prescription preparation and completion of the prescription with a follow-up field review. The initial follow-up review was conducted during the early winter months with a snow cover of approximately 400mm. An additional field inspection is planned during snow-free conditions in April, 2004.

Description of Completed Works

As per the recommendations of the deactivation prescription, the log culvert structure was removed and the stream banks stabilized. The residual risk (the risk remaining following implementation of the recommendations made for the restoration activity) has been reduced to an acceptable level of low for this particular crossing. As the road corridor has not been utilized for a number of years and was heavily overgrown, the road prism was deactivated to a permanent level with vehicular access removed. The works were completed over the period of November 13, 2003 to November 20, 2003.

Project Cost Summary

Labour	\$1,074
Equipment	12,509
Supervision	1,205
Total	\$14,788

Project Photographs

Post construction photos to be appended following inspection in April, 2004.

Completed By:

Cascade Forest Engineering Ltd

Garth W. Lord, P.Eng

