

Road deactivation for hillslope restoration: lessons learned on the Escalante Watershed Restoration Project

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Abstract

Permanent deactivation is often carried out using hillslope restoration for roads on moderate to steep hillslopes. In the Escalante River area, many potentially unstable roads were deactivated in the late 1990's with roadfill pullback due to stability concerns, and the remainder of the roads were crossditched with some light pullback. In January 1996, intense rainfall caused numerous landslides on these deactivated roads. Funded by Forest Renewal British Columbia, the Escalante Watershed Restoration Project was initiated to assess the roads in the watershed and carry out deactivation work where needed for long term road stability. Assessment of the existing deactivation work storm provided valuable information on its effectiveness in preventing landslides. Due to the existing roadfill pullback and landslide sites, it was necessary to assess the roads in terms of the expected difficulties and cost to re-establish access, and whether it was feasible to improve the existing deactivation. During the deactivation work, several techniques were developed to improve the standard of deactivation.