

4.6.2 Blackwood Creek

The morphology of the assessed 8 km of Blackwood Creek can be broken into four distinct reaches. Heading upstream, the initial 4 km contains fluvial deposits. The next 1.8 km is characterized by alterations from gravel mining; the next 1.2 km contains the combined alluvium of the four major tributaries; and the final km is a bedrock canyon. The reach comprising the lowest 4 km of Blackwood Creek from the mouth to the Barker Pass Road bridge (Figure 4-23) was assessed via RGAs at five locations. The remaining 4 km between the Barker Pass Road bridge to where the eastern most stream fork crosses the road to Barker Pass were assessed by stream walk (Figure 4-23).

Within the 0.5 km nearest the lake sea walls have been constructed along the stream, thereby helping to reduce sediment delivery from bank failures. The remaining 3.5 km of the initial reach (Hotspots 1-5, Table 4-8) is primarily a gravel- bedded sinuous channel. There are one to three m-high banks primarily silt and sand at the RGA sites. Measured quantities of silt/clay content for each site are given in Appendix B, with an average bank composition of 6%. The vegetation ranges from pine forests to grass meadows, however the outside bends are sufficiently high to prevent roots from protecting the full height of the banks (Figure 4-21).



Figure 4-21. Typical failing outside bend along the lower 4 km of Blackwood Creek. This site is rated “high” in fine-sediment availability due to the bank height and length of reach failing. Similar sites, with lower banks, are rated “moderate.”

The reach affected by mining spans the next 1.8 km (Hotspots 6 to 9, Table 4-8) above the Barker Pass Road bridge. It is the lowest portion of the broad alluvial valley where alluvium from the upper four tributaries has been deposited. This reach was historically mined for gravel during the 1960’s, with the channel being diverted during the active mining period and then restored in 1978 (Stubblefield, 2002). The channel along this reach consists of braided cobbles with low (0.5 to 2 m-high) unconsolidated silt/gravel/cobble banks and a 20 m-wide active bed.