

**Recommendations From the Kelly Creek Fire
Post Wildfire Hazard Assessment and Partial Risk Analysis**

2009 Fire C40429 Near Clinton

Prepared for the BC Ministry of Forests and Range

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Kelly Creek Fire Post- Wildfire Recommendations

1. Communicate incremental hazards and partial risks to local residents, landowners, local governments, and stakeholders. This communication should include the results of the Chapman et al report and additional information describing the type of events which may occur and how the stakeholders can protect both themselves and infrastructure. A major concern that became apparent after discussion with some landowners in the area is the possibility of damage to and activity around water intakes as these are the most vulnerable structures in the area. Maintenance activities would commonly be needed during high flow periods and persons working on water intakes at such times could be placing themselves in the most risky circumstances that are likely to occur as a result of the Kelly Creek fire.
2. More detailed assessment of debris flow potential and downstream risk could be conducted on and below drainages where there is a moderate or high partial risk and where property values or property owners concerns suggest that further refinements to the risk analysis might be used to help choose between alternative risk mitigation strategies. The assessments should be partially accompanied by local property owners for access purposes and for public communication information/communication purposes.
3. Evaluate the need for and potential effectiveness of risk mitigation alternatives such as diversion berms, catch basins, site treatments etc.
4. The owners of all existing values at risk including houses, outbuildings, roads, culverts, bridges, and utilities should consider relevant risk reduction measures to protect themselves and infrastructure. A public meeting to disseminate information on these topics might be of value.
5. Improvements to road and trail drainage should be made where necessary, to reduce hazards from possible road drainage diversions or surface water concentration originating from increased runoff in severely burned areas.
6. No salvage logging, harvesting or road or trail construction should proceed in drainages above the noted elements at risk unless an assessment determines that such activities will not significantly increase the partial risk to the elements of value.
7. Rainfall, erosion events, revegetation, soil recovery and the effectiveness of any risk mitigation treatments should be monitored for several years or until the hazard is considered low above areas with elements of value.
8. Reforestation may be desirable to promote hydrologic recovery in the burned areas. There was an undetermined level of mountain pine beetle mortality in the area prior to the fire, which can affect ability of a stand regenerate naturally. Tree reestablishment could be monitored to assure that natural forest regeneration is proceeding at a suitable rate (with recognition that the parks in the area may have objectives that could override any reforestation initiative).