

## **Summary of post-wildfire risk analyses in 2007, Southern Interior Forest Region – Southeast**

The fire year of 2007 was unusually severe in the southeast region. The weather was extremely hot and dry, comparable to 2003. In July and August, a number of large wildfires occurred. Several of these were adjacent to highways, populated areas, or infrastructure, or in community watersheds.

The Southern Interior Forest Region (SIFR) has been developing a procedure for risk analysis of post-wildfire natural hazards over the last 3 years. In 2006 it was implemented on a trial basis, and 2007 was the first year of full-scale operation. The hazards that are typically of concern include landslides, flooding, and erosion. In brief, the procedure consists of screening all wildfires in the region to identify those that might potentially affect populated areas or other elements at risk such as highways, infrastructure, or community water supply; conducting risk analyses on those that are judged to present a significant potential risk; and if appropriate, recommending mitigation measures to reduce risk. The work is done primarily by SIFR soil, hydrology, and slope stability specialists, and by consultants if the workload requires.

In 2007, risk analyses were conducted on six wildfires. Two of these, the Springer and Sitkum fires, presented high risks to public safety and infrastructure, and mitigation measures were recommended and implemented.

The risk analysis teams were led by Peter Jordan, Joe Alcock, and Doug Nicol, with participation by Mike Curran, Ashley Covert, David Gluns, and Marc Deschenes. Mike Curran was coordinator for the risk analyses, and prepared mitigation proposals. The mitigation works consisted of aerial straw mulching and road and trail deactivation, and were implemented by the Arrow-Boundary and Kootenay Lake Forest Districts. The costs of the risk analyses and mitigation were paid by the MFR Protection Branch, and aircraft and field crews were provided by the Southeast Fire Centre. Communication with stakeholders affected by the risks was done through the Provincial Emergency Program (PEP) and local governments.

The USDA Forest Service contributed to the risk analyses by providing two hydrology and soil specialists, Greg Bevenger and Jim Archuleta, who assisted in field work and analysis for a week, and by preparing burn severity maps from satellite imagery.

A map showing the locations of the fires, and a spreadsheet summarizing the risk analysis results, are on the following two pages. The six risk analysis reports are available on the MFR FTP site, <ftp://ftp.for.gov.bc.ca/>, presently at the following location:

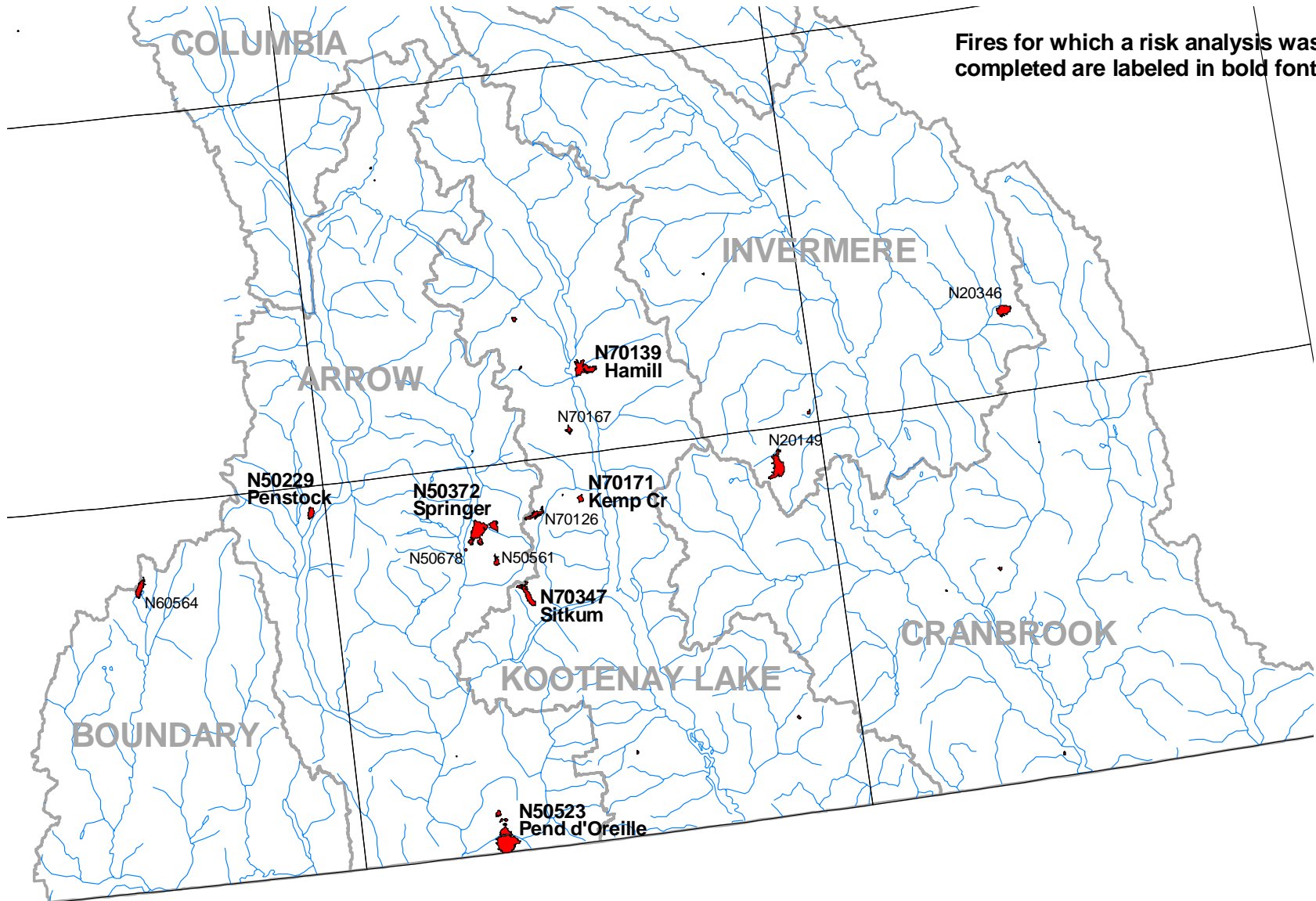
[\RSI\external\publish\Wildfire Erosion\2007 Fire Erosion Risk Analyses.](#)

The reports for the fires in the Regional District of Central Kootenay (RDCK) can also be accessed through their web site, [www.rdck.bc.ca](http://www.rdck.bc.ca).

# Post-Wildfire Risk Analysis : 2007

Significant 2007 wildfires in the Southeast Fire Centre.

Fires for which a risk analysis was completed are labeled in bold font.



**Summary of 2007 fires for post-wildfire natural hazards screening, Southeast Fire Centre**

Grey fields are from the Protection Branch database; yellow fields are added for the risk analyses. Fires for which a risk analysis report was completed are highlighted in blue.

Fire Year	Fire Number	Latitude	Longitude	Geographic	Size, Current (ha)	Date, Discovery	Date, Final Control	Cause, General	Resources at risk	Land status	Risk Analysis?	Risk Analysis Report (lead author, date)	BARC map?	Risk summary	Mitigation	Remarks
2007	N50372	49.8063	-117.4413	Springer Creek	3137	2007-07-29	2007-08-28	Lightning	Residences, Highway 6	Prov forest	yes	Nicol, 2007-09-14	yes	High	Straw mulching, non-status road deactivation	High risks to public safety from debris flows in multiple steep channels. High-risk drainages treated.
2007	N70347	49.6288	-117.2398	Sitkum Cr	1075	2007-07-27	2007-08-08	Lightning	Residences, Highway 3A, community watershed	Prov forest	yes	Jordan, 2007-09-17	yes	High	Straw mulching, FSR road deactivation	High risks to public safety and infrastructure due to flooding on fan. Two small sub-drainages treated.
2007	N50229	49.9386	-118.0417	Penstock	315	2007-07-17	2007-08-31	Lightning	BC Hydro generation station, power lines	Prov forest	yes	Alcock, 2007-09-27	no	Low	none	
2007	N50523	49.0068	-117.4412	Pend D'Oreille River	3969	2007-08-11	2007-08-29	Lightning	BC Hydro generation station, power lines, community watershed	Prov forest, private	yes	Alcock, 2007-09-25	yes	Low	none	Only a small part of community watershed affected.
2007	N70139	50.2022	-116.9204	Hamill Creek	1528	2007-07-14	2007-08-07	Lightning	Residences, FSR bridge, park trail	Mostly park, some prov forest	yes	Jordan, 2008-07-24	no	Low (most), moderate (trail)	none	Mostly low risk
2007	N70171	49.8879	-116.9873	Kemp Cr	200	2007-07-15		Lightning	community watershed	Prov forest	yes	Jordan, 2007-10-03	no	Moderate	none	Moderate risk to community watershed infrastructure
2007	N50678	49.7932	-117.4613	2km north of City of Slocan	13	2007-08-31	2007-09-12	Lightning	Highway 6	Prov forest	yes	none	no	Risk to highway from rockfall.	none	Report to MOT prepared by Nicol; no risk analysis report.
2007	N50561	49.7417	-117.3505	Lemon creek road	267	2007-08-16	2007-08-23	Lightning	domestic water	Prov forest	no					
2007	N70126	49.8508	-117.1929	Blacktail Creek	920	2007-07-14	2007-09-26	Lightning	none known	Park	no					
2007	N70167	50.0585	-116.9907	Schroeder Creek	253	2007-07-15	2007-07-25	Lightning	domestic water	Prov forest	no					
2007	N60564	49.7624	-118.7790	Nevertouch Lake	841	2007-08-16	2007-08-24	Equipment use	none known	Prov forest	no					
2007	N20149	49.8775	-116.2016	Skookumchuck Crk	1897	2007-07-15	2007-08-18	Lightning	none known	Park	no					
2007	N20346	50.2040	-115.2005	Rock Canyon Creek	1003	2007-07-27	2007-08-10	Lightning	none known	Prov forest	no					