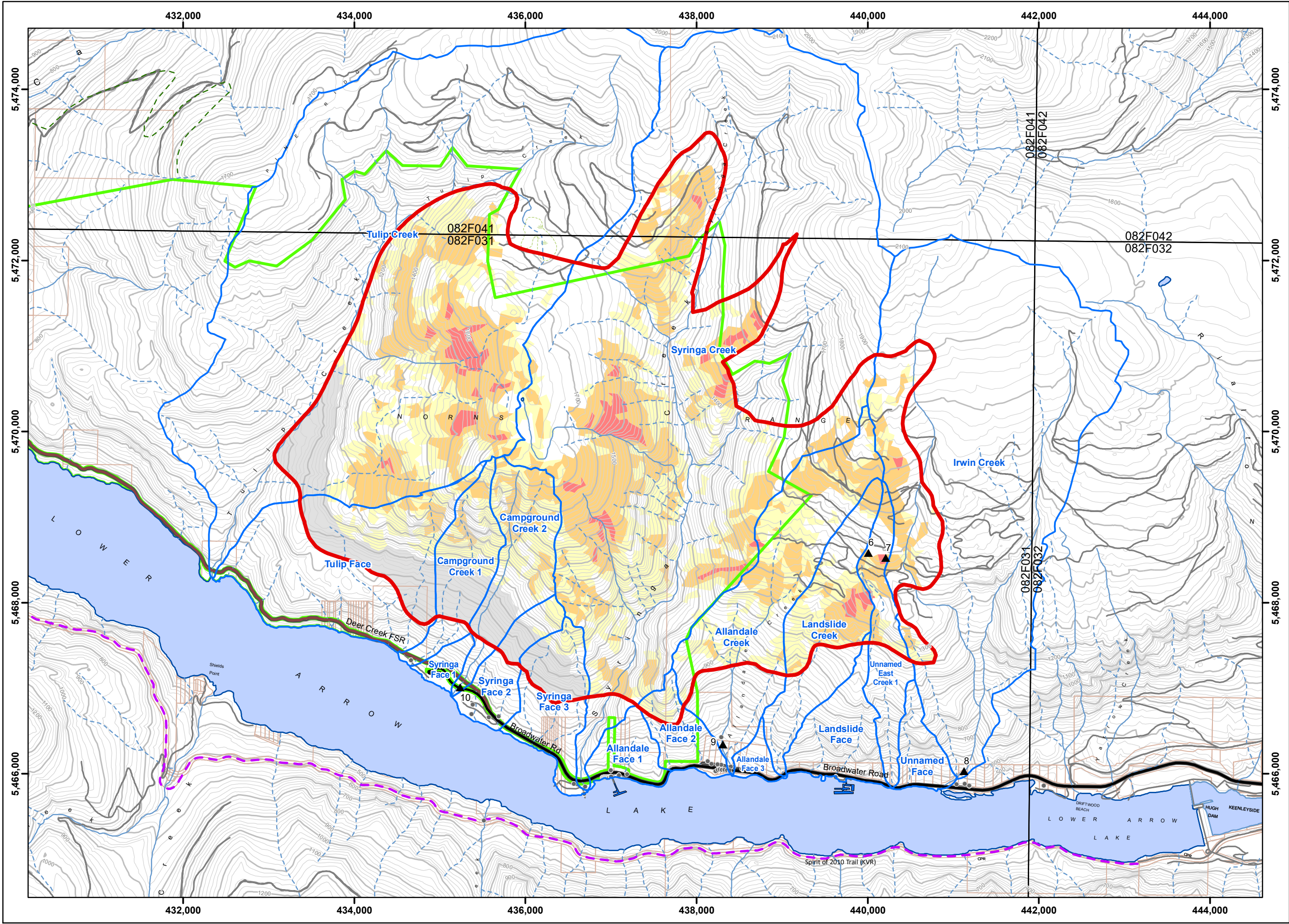


MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS

POST-WILDFIRE RISK ANALYSIS – PRELIMINARY REPORT

NOTE: The results given on this form are preliminary in nature and are intended to be a warning of potential hazards and risks. It is not a final risk analysis and further work may alter the conclusions. Please contact the author for more information.

FIRE: N52548 Syringa Creek	FIRE YEAR: 2018	DATE OF REPORT: 2018-11-23
AUTHOR: SNT Geotechnical Ltd.		
REPORT PREPARED FOR: Selkirk Resource District (Arrow FD), and Southeast Fire Centre		
FIRE SIZE, LOCATION, AND LAND STATUS: 3193 ha. North side of Lower Arrow Lake, 15 km northwest of Castlegar. Syringa Creek Provincial Park, and provincial forest. Private land along lakeshore below fire perimeter.		
VALUES AT RISK: Provincial park campground; houses at Allandale Cr and Irwin Cr; Broadwater Road		
WATERSHEDS AFFECTED ¹:	TOTAL AREA (ha)	AREA BURNED ² (ha)
Campground Creek 1	116	95
Campground Creek 2	150	137
Syringa Creek	2169	1273
Allandale Creek	350	270
"Landslide Creek"	190	121
"Unnamed East Creek"	106	52
Irwin Creek	1156	155
1. Only watersheds with significant risks are included		2. Area within fire perimeter
		BURN SEVERITY ³
		% High % Moderate
		0 9
		0 24
		2 17
		0 20
		3 20
		1 20
		0 3
		3. % of total watershed area
SUMMARY OF HAZARDS AND RISKS:		
Campground Creek 1 – debris flow or flood		HAZARD ⁴ RISK ⁵
Campground Creek 2 – debris flow or flood		VL L
Syringa Creek – possible flooding		L-M L
Houses at Allandale Creek – debris flow		L L
Houses at Allandale Creek –avulsion of creek on fan		L-M M
Broadwater Road at "Landslide Creek" and "Unnamed East Creek" – debris flow		H H
Houses at Irwin Creek – debris flow or avulsion of creek		M H
		VL L
4. Hazard = P(H), the probability of occurrence of a hazardous event		
5. Risk = Partial risk P(HA) = P(H) × the probability of it reaching or affecting an element at risk		
FURTHER ACTIONS:		
Allandale Creek – recommend constructing a berm at fan apex to prevent possible avulsion of creek. Consider replacing culverts at Allandale Crescent and Broadwater Road.		
Ensure adequate deactivation of old roads in headwaters of Allandale and "Landslide" Creeks..		
COMMENTS:		
The debris flow and avulsion hazards on Allandale Creek are mostly pre-existing, due to extensive logging and old roads in the headwaters. The 2018 fire has increased these hazards slightly. Allandale Creek is subject to potential avulsion (change of course of the creek) on the fan apex due to low banks and recent aggradation in the channel.		
Campground Creek 2 – this is the larger creek, which flows between the two campsite areas. It flows in an incised, apparently stable channel on its alluvial fan.		



MAP 1

Incident: N52548

Fire Name: Syringa

Post-wildfire

Natural Hazard

Risk Analysis

Date: 2018/11/21

- Fire Perimeter
- Watershed with ID
- Burn Severity**
 - High
 - Moderate
 - Low
 - Unknown
- Field Plot with ID
- Structure
- Trail
- Heritage Trail
- Contour - 100m
- Contour - 20m
- Main Road
- Deer Creek FSR
- Road
- Marina
- Syringa Provincial Park
- Cadastral Boundary

N

1:40,000

0 0.25 0.5 1 1.5

Kilometers

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