



MINISTRY OF FORESTS, LANDS, NATURAL RESOURCE OPERATIONS AND RURAL DEVELOPMENT
POST-WILDFIRE RISK ANALYSIS – RECONNAISSANCE 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: Michaud Creek (N51765)		FIRE YEAR: 2021	DATE OF REPORT: November 3, 2021	
AUTHOR: Sarah Crookshanks				
REPORT PREPARED FOR: District Manager, Southeast Fire Centre				
FIRE SIZE, LOCATION, AND LAND STATUS: 14032 ha. East shore of Arrow Lakes north of Renata. Mostly Crown land, with some parcels of private land scattered throughout.				
VALUES AT RISK: Bowman Point Recreation Site, domestic water intakes (Dog, Renata and Bowman Creeks) and dwellings (at Bowman Point, Renata and Cinnamon Lake)				
WATERSHEDS AFFECTED:	TOTAL AREA	AREA BURNED¹	BURN SEVERITY²	
			% High	% Moderate
Cinnamon Creek	2745 ha	1345 ha (49%)	5	27
Michaud Creek	1436 ha	874 ha (61%)	6	35
Bowman Creek	6059 ha	1374 ha (23%)	1	9
Renata Creek	8613 ha	2446 ha (28%)	3	13
Dog Creek	19705 ha	598 ha (3%)	0	1
		¹ (% of watershed area)	² % of watershed area	
SUMMARY OF HAZARDS AND RISKS: <u>Hazards:</u> The most significant hazards are flooding and water quality impacts. <u>Risks:</u> 1. Flooding on Renata Creek impacting dwellings 2. Flooding on Dog Creek impacting dwellings 3. Flooding on Bowman Creek impacting dwellings or recreation site 4. Water quality impacts to domestic water users on Dog, Renata and Bowman Creeks 1. Hazard = $P(H)$, the probability of occurrence of a hazardous event 2. Risk = Partial risk $P(HA) = P(H) \times$ the probability of it reaching or affecting an element at risk			HAZARD¹	RISK²
			VL	L
			VL	L
			L	L
			L	M
FURTHER ACTIONS: None recommended.				
POTENTIAL MITIGATION: None recommended.				
SIGNATURE: Original signed and sealed		ATTACHMENTS: See attached report, map and photos for further details.		

Michaud Creek Fire (N51765) 2021 – further details on the Post-Wildfire Risk Analysis

The Michaud Creek fire began on July 10, 2021 and burned a large area on the east shore of Arrow Lake north of Renata. Most of the fire was on Crown land, with a handful of parcels of private land. An aerial overview was completed for this fire on October 1. No field work was undertaken, because the post fire natural hazard risks were deemed to be low.

Burn severity mapping was produced for this fire in late September by regional geomatics staff. Provincially contracted burn severity mapping was released in early November and it appears to align more closely with the vegetation burn severity captured in the aerial photos. Therefore, the provincial burn severity data were used in this analysis.

As the attached map shows, the fire is primarily composed of low and moderate burn severity. The impacts on Renata Creek, Dog Creek and Bowman Creek will be minimal due to the low proportion of the watershed with moderate or high burn severity. A larger proportion of the Cinnamon Creek and Michaud Creek watersheds burned; however, there are no elements in these watersheds that are at risk due to postfire geohazard events.

Sarah Crookshanks, P.Geo.
November 3, 2021

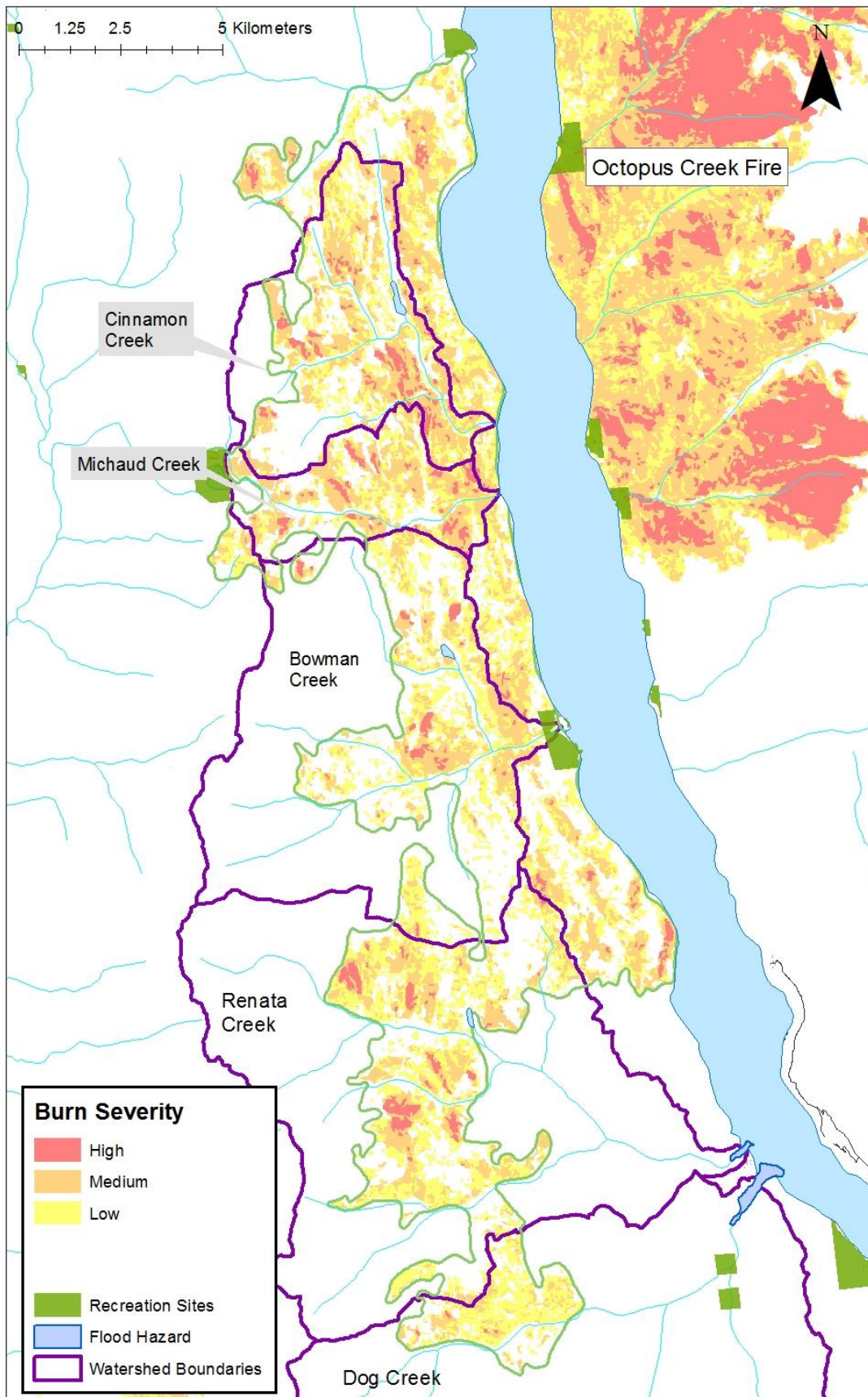




Photo 1. North branch of Renata Creek (view from the South)



Photo 2. Bowman Creek