

## SCLG Aid to Cross 1: Comparison between MC1 and SR1 at various flow rates

Scenario 1: 930 m3/s Flood "1:100"				Scenario 2: 1,240 m3/s Flood "Design Flood"				Scenario 3: 1,984 m3/s Flood "1:1000"			
River Flowrate				River Flowrate				River Flowrate			
	Upstream of SR1	Between SR1 and Glenmore Reservoir <sup>(5)</sup>	Downstream of Glenmore Reservoir		Upstream of SR1	Between SR1 and Glenmore Reservoir <sup>(5)</sup>	Downstream of Glenmore Reservoir		Upstream of SR1	Between SR1 and Glenmore Reservoir <sup>(5)</sup>	Downstream of Glenmore Reservoir
<b>SR1</b>	930 m3/s Flooding <sup>(2)</sup>	330 m3/s Flooding <sup>(4)</sup>	160 m3/s	<b>SR1</b>	1,240 m3/s Flooding <sup>(2)</sup>	640 m3/s Flooding <sup>(4)</sup>	160 m3/s	<b>SR1</b>	1,984 m3/s Flooding	1,384 m3/s Flooding	??
<b>MC1</b> <sup>(3)</sup>	212 m3/s	212 m3/s	170 m3/s	<b>MC1</b> <sup>(3)</sup>	212 m3/s	212 m3/s	170 m3/s	<b>MC1</b> <sup>(3)</sup>	830 m3/s	830 m3/s	??
	<b>SR1 Inferior</b>	<b>SR1 Inferior</b>	Neutral		<b>SR1 Inferior</b>	<b>SR1 Inferior</b>	Neutral		<b>SR1 Inferior</b>	<b>SR1 Inferior</b>	<b>SR1 Inferior</b>

### Notes:

1. Scenarios and rates for MC1 from MC1 Conceptual Design Report, Exhibit 101, page 46, dated August 23, 2017
2. Bragg Creek Berms designed for 990m3/s or 1:100 level of overland flooding; protection against groundwater flooding not expected
3. Maximum target outflow of MC1 was designed at 212 m3/s as the level required for Glenmore Reservoir operations
4. Groundwater flooding and some overland flooding experienced in the 2005 flood for these communities. 2005 flood ~300m3/s
5. Assumed diversion rate for SR1 of 600m3/s per 2018 EIA. Exhibit 159, page 83 reduces this to 480m3/s, which is not reflected above