

SCLG Aid to Cross 2: SR1 vs MC1: Limitations

	SR1	MC1
	Exhibit 159	Exhibit 101
Storage Capacity (m3), net flood storage	70,210,000	70,100,000 ⁽³⁾⁽⁴⁾
Restriction on Reservoir Intake	600m3/s ⁽¹⁾ / 480m3/s ⁽²⁾	PMF
Restriction on Reservoir Outflow	27m3/s ⁽⁵⁾	2,600m3/s ⁽⁶⁾

Notes:

1. SR1 EIA, 2018, Exhibit 18
2. SR1 Design Report December 2020, Exhibit 159, page 83
3. MC1 water storage is 93,000dam3 in a PMF, Exhibit 101, page 46
4. MC1 gross volume is 73,600 dam3 in a 1:1000 flood, including permanent water of 3,500 dam3
5. SR1 Design Report Exhibit 159, pg 202
6. MC1 Conceptual Design Report, 2017, Exhibit 101, page 46 (below)

MC1 Report Conceptual Design Report, Page 46 of pdf

6.1.5. Summary

In summary, a routing model has been developed and used to evaluate the hydraulic performance of the proposed flood mitigation scheme. The results of these runs are summarized in Table 6.1 below.

Table 6.1: Summary of Flood Passage

Description (Peak Values)	Floods				
	20-year	100-year	Jun-13	1000-year	PMF
Peak reservoir inflow (m ³ /s)	440	930	1240	1984	2770
Tunnel outlet structure peak discharge rate (m ³ /s)	212	212	212	830	1000
Service spillway peak discharge (m ³ /s)	0	0	0	0	600
Auxiliary earth channel peak discharge (m ³ /s)	0	0	0	0	1000
Maximum reservoir water surface elevation (m)	1404.7	1419.8	1424.4	1424.5	1428.1
Maximum total contained water volume (dam ³)	13,400	52,100	73,500	73,600	93,000