



Ministry of Forests, Lands
and Natural Resource Operations

Nicola Lake Dam Operations

By

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Ministry of Forests Lands and Natural Resource Operations



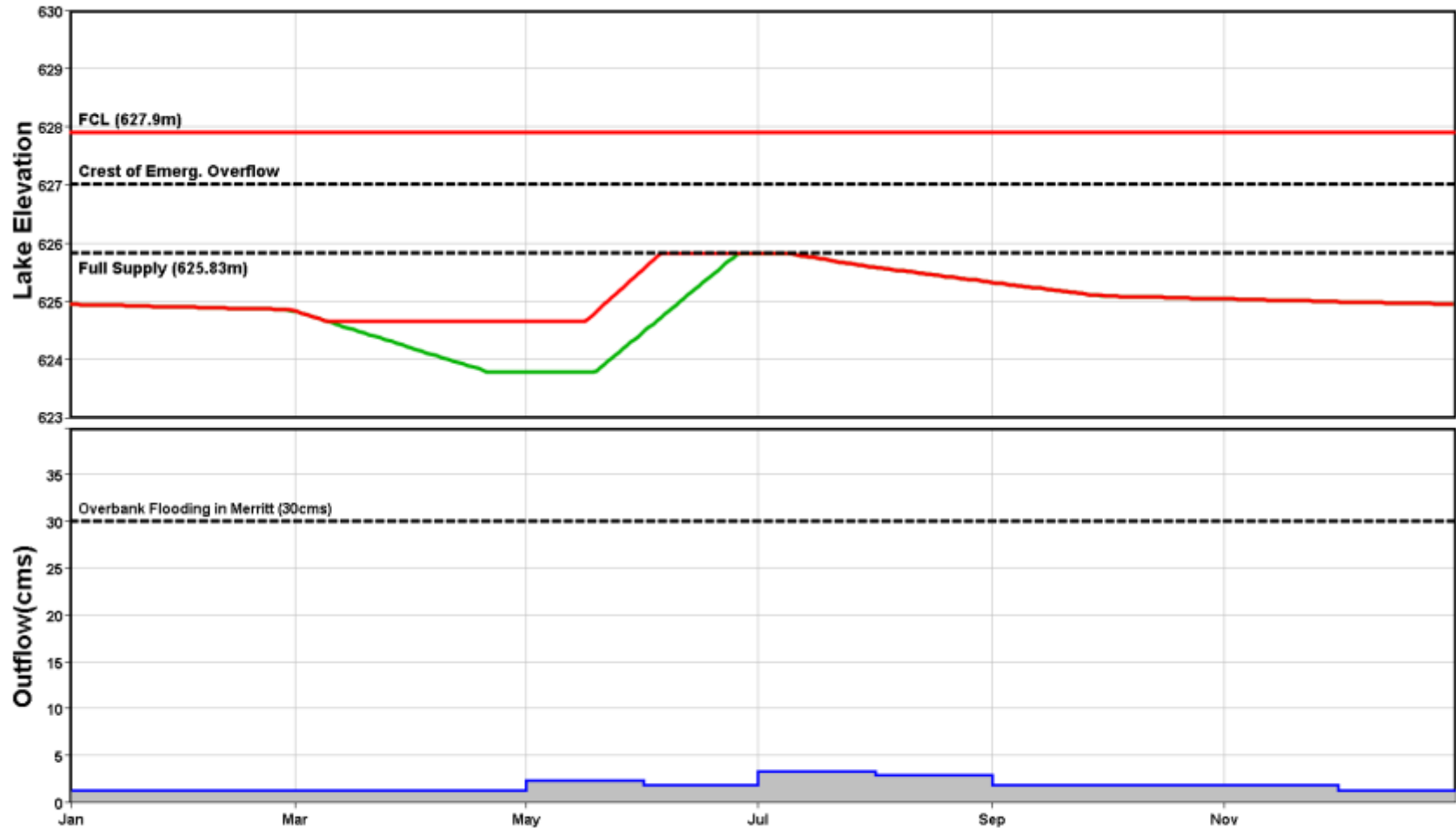
Historical Background

- Dam First Built by Nicola Ranch in 1920's for irrigation and power generation
- In Early 1980's Nicola Ranch indicated that they wanted to abandon the dam
- Current Dam was reconstructed in mid 1980's (upgraded in 2005)using Federal, Provincial and Municipal Funding;
- Intent of reconstructed dam was to:
 - Provide water for expansion of irrigation;
 - Fisheries resources maintenance flows; and
 - Downstream flood control within the Nicola Valley
- Construction problems resulted in partial development of design storage potential
- All storage rights on lake are held by the Federal Government (DFO) and Province of BC (MFLNRO), all other current licences on lake are baseflow type.
- Since 1990's dam has been operated by the province

Operation Background

- April through September inflow volume forecast provided by the River Forecast Centre in Victoria
- Weekly and Daily inflow rates must be estimated from current conditions and weather forecasts
 - Snow cover and melt conditions
 - Temperature
 - Rainfall
 - Current streamflow (inflow and outflow)
 - Operator experience

Nicola Lake Dam - Current Operational Rules



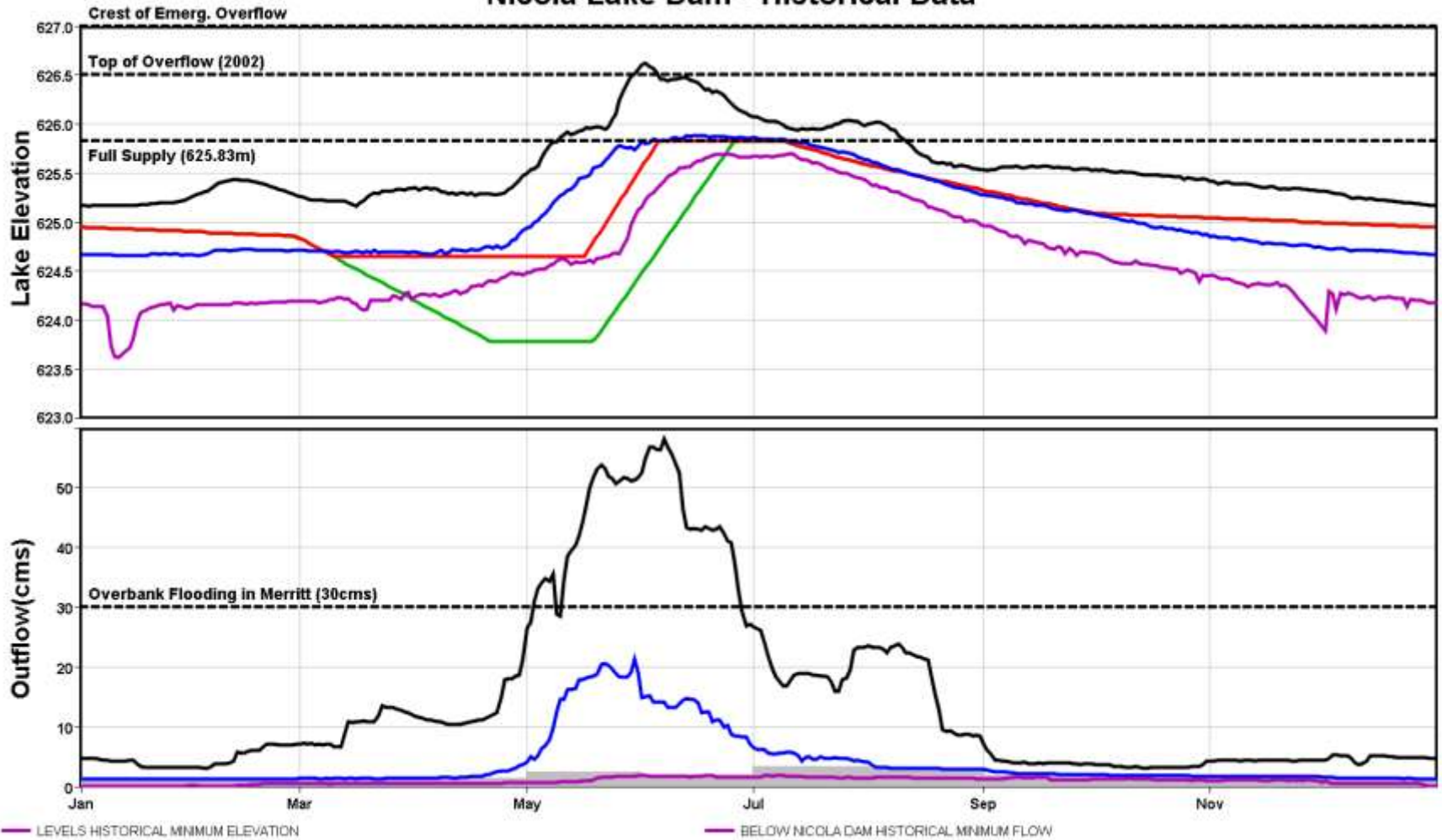


Discharge Facilities

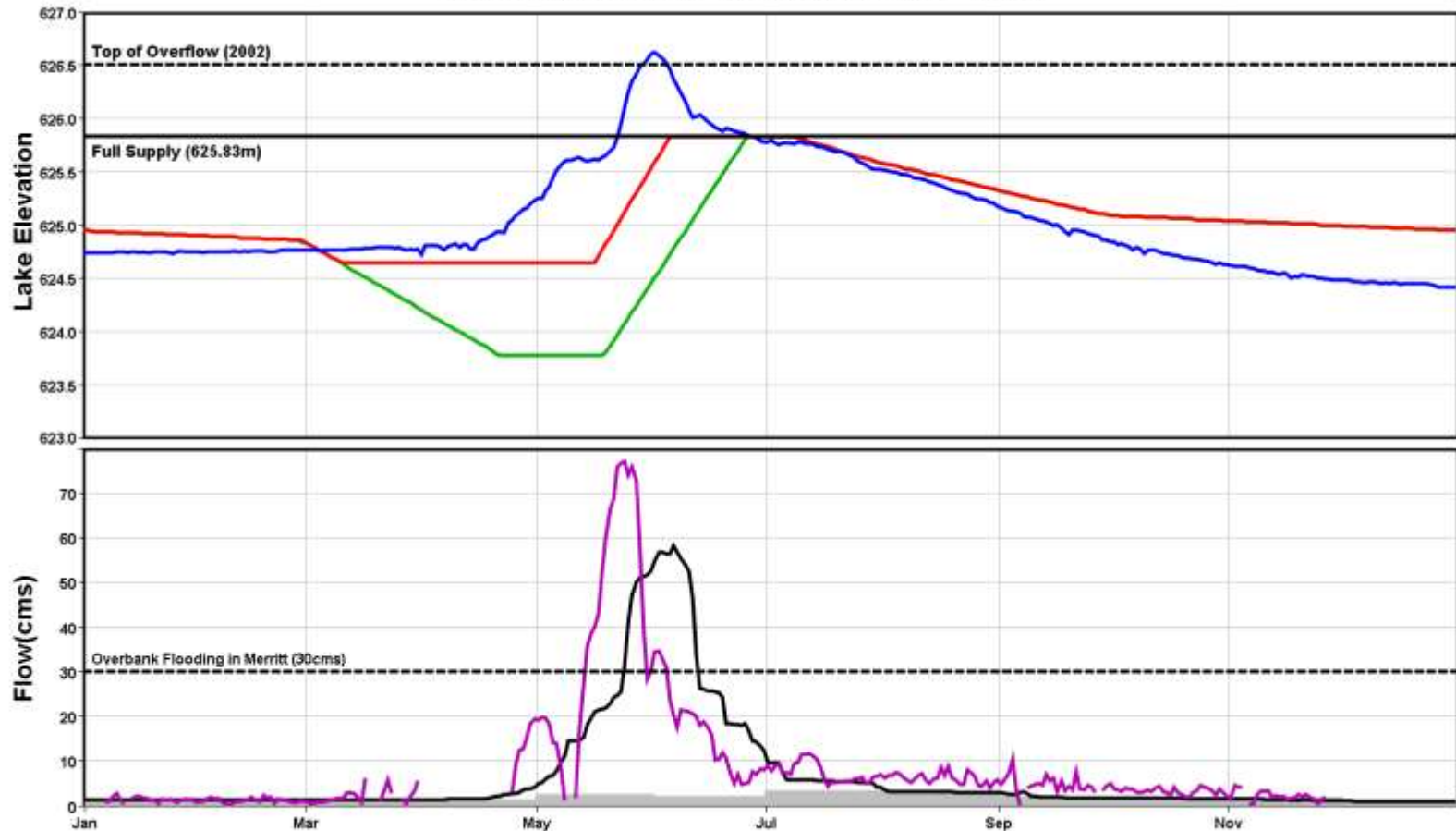


Rip Rap
Emergency
Spillway

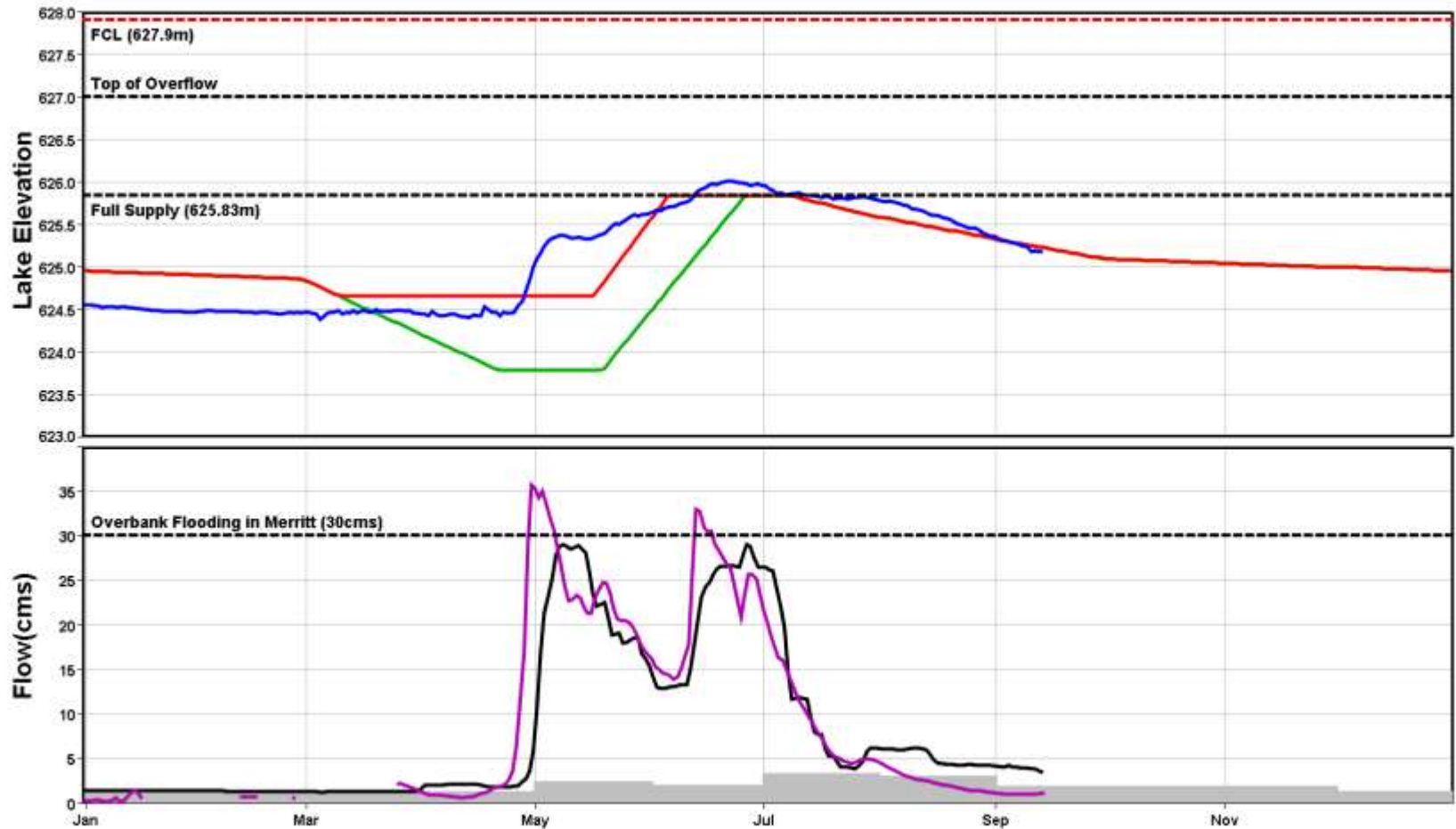
Nicola Lake Dam - Historical Data



Nicola Lake Dam - Historical Data - 2002



Nicola Lake Dam - Historical Data - 2012





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Questions?