

Lake Eppalock webinar 6 July 2023



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Overview



- Completed in 1964
- Catchment area 2,124km²
- Fixed crest dam no gates
- Primary, secondary and tertiary spillways
- Capacity 304,651 ML
- Supplies irrigation, environmental, stock and domestic water including critical for water supply to Coliban and Central Highland Water districts
- Significant recreational, economic and social value in the region





Lake Eppalock Operations





How Lake Eppalock operates



- Shared between Goulburn-Murray Water (82%) and Coliban Water (18%)
- Outlet capacity of around 1,600 ML a day
- Releases are made to meet customer orders typically between 70 ML/d and 250 ML/d
- Once full, flows pass over the primary spillway
- The dam surcharges above 100% capacity and throttles outflows which significantly reduces flood flows



How a fixed crest dam works





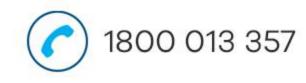
GMW's obligations

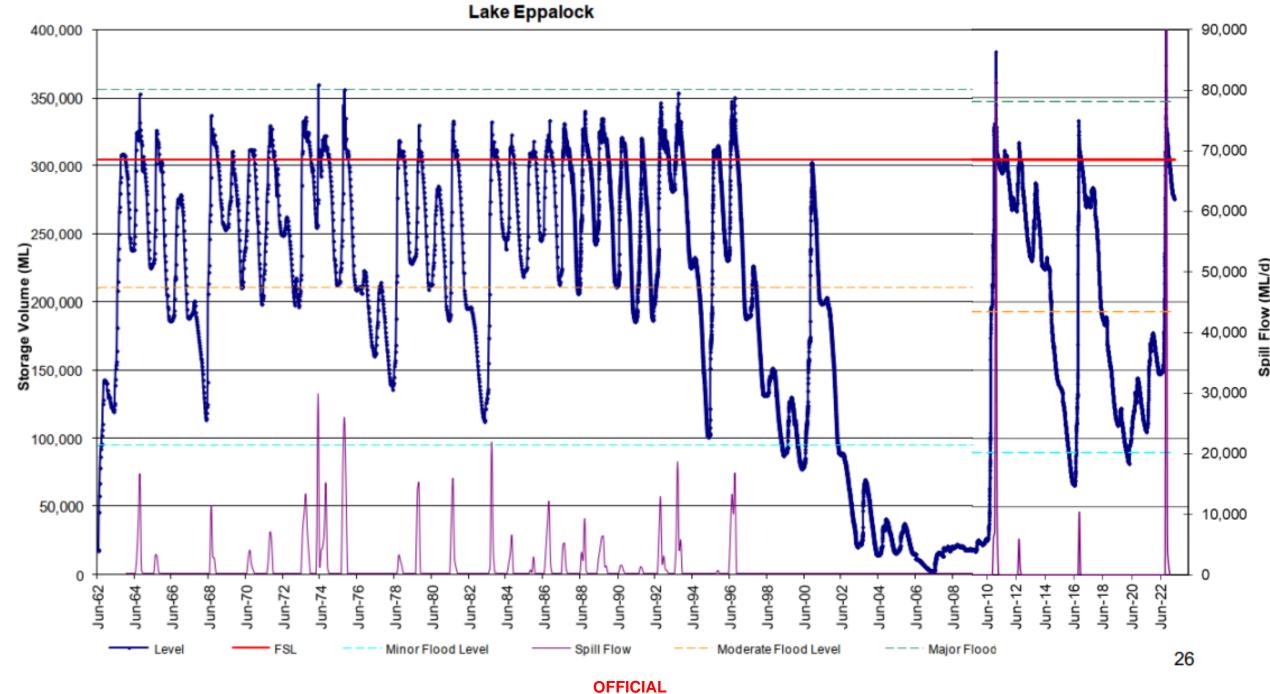


- GMW's Campaspe System Bulk Entitlement
 - Primary obligation to store and deliver on behalf of individual entitlement holders
- GMW Flood Operations Policy
 - Provides direction for routing floods through storages
- Water Plan Service standards
 - Customer commitment to maximise storage capacity

Lake Eppalock Historic Levels







Review of October 2022 Flood





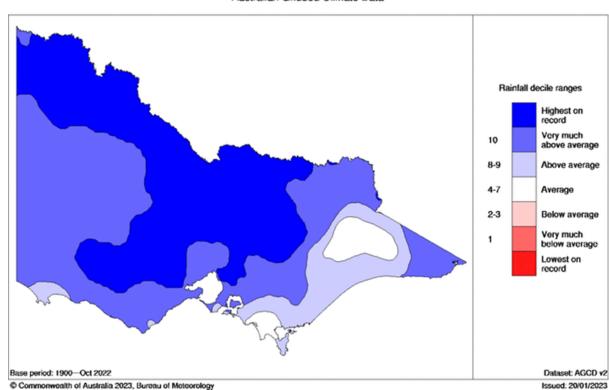
Spring 2022 floods



Victorian rainfall deciles

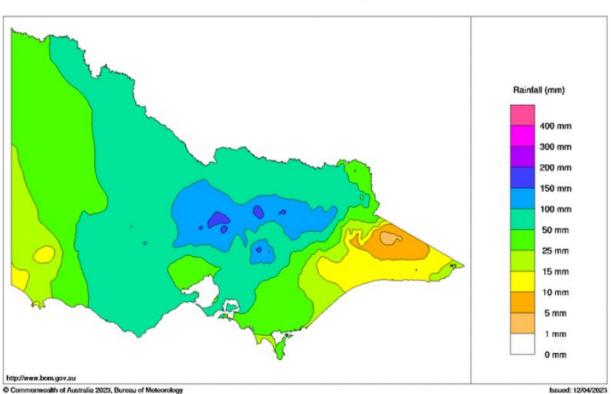
October 2022

Australian Gridded Climate Data



Victorian Rainfall Totals (mm) Week Ending 15th October 2022

Australian Bureau of Moteorology



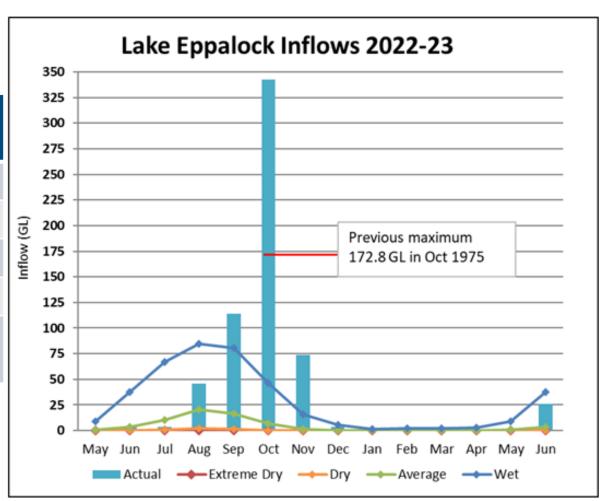
Lake Eppalock inflows 2022



Eppalock inflows	Volume (GL)	Average (GL)	Percentage of average
August	45	35	130%
September	114	32	236%
October	343	18	1,875%
November	74	7	1,114%
July to November	579	117	494%

Note: October inflows highest since dam

constructed

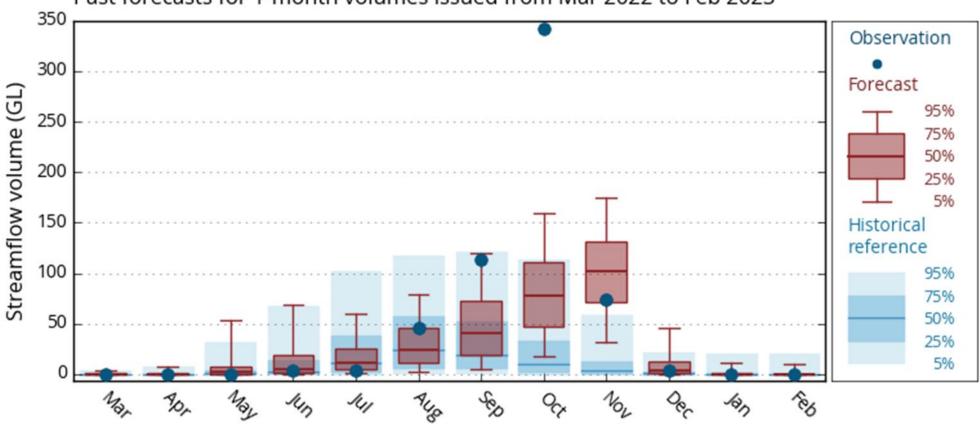


Lake Eppalock inflows 2022



Total Inflows to Lake Eppalock

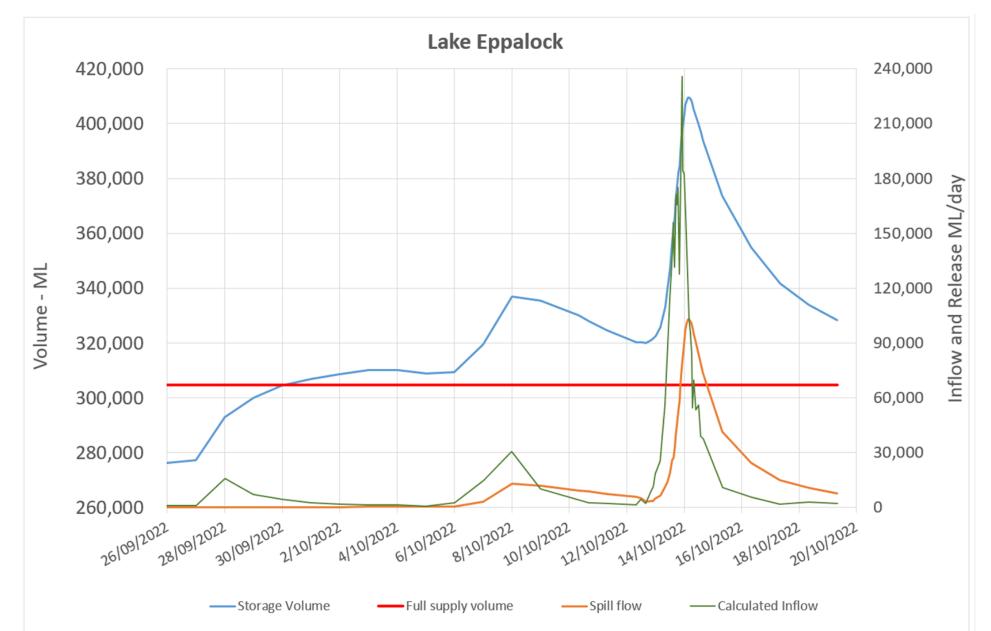
Past forecasts for 1-month volumes issued from Mar 2022 to Feb 2023



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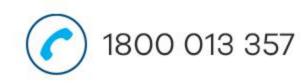
Floods October 2022





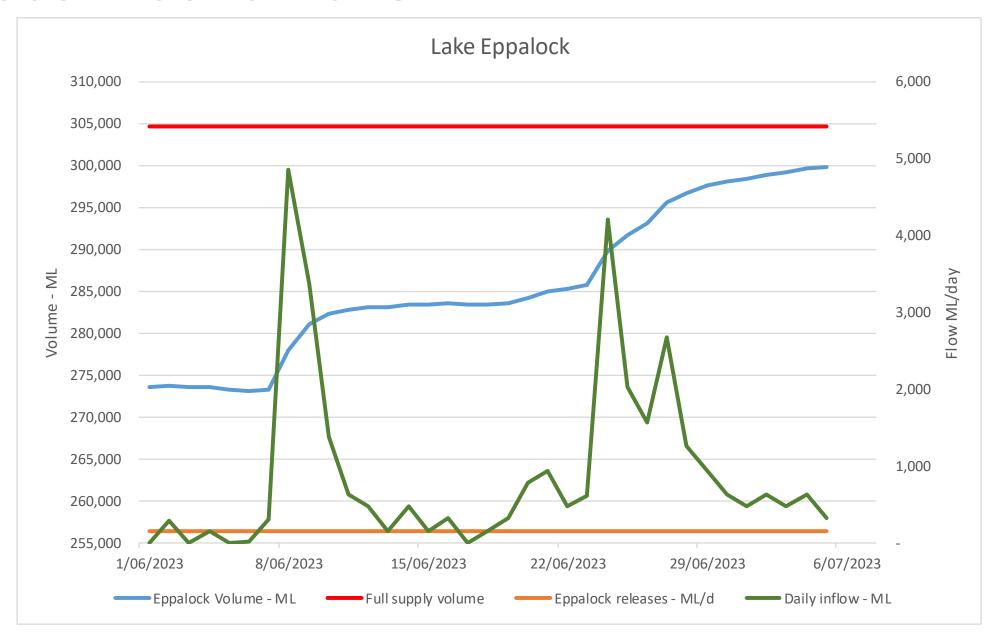
Current Conditions





Recent conditions





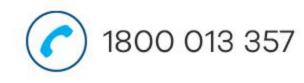
Current storage position



- 299,980 ML 98.5% of capacity
- Release ~160 ML/d meeting passing flow requirements
- Ongoing environmental orders through winter and spring
- May pre-release ahead of a rain event noting limited capacity to significantly reduce storage level

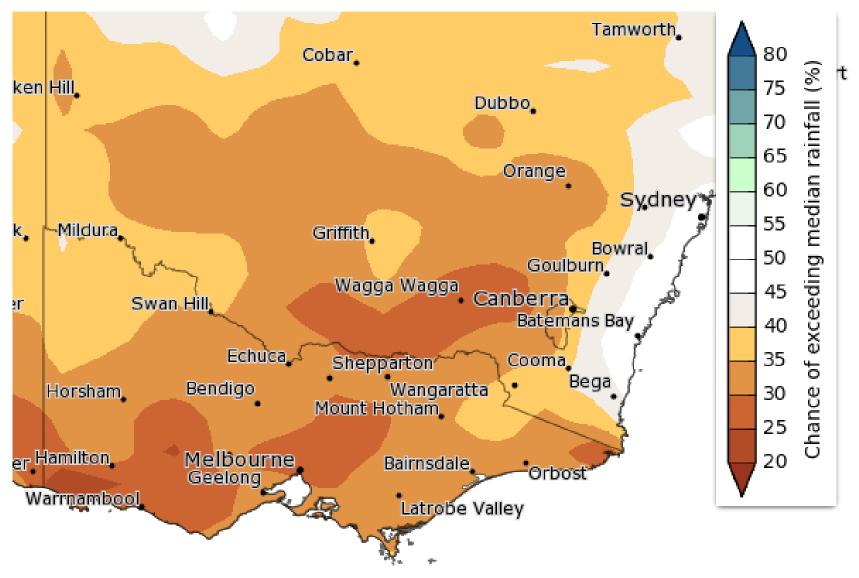
BoM Outlook





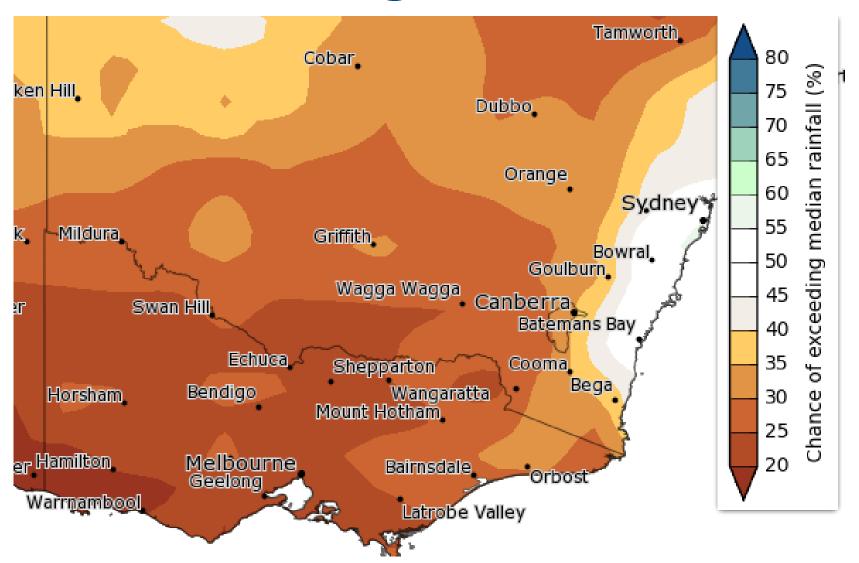
Rainfall Outlook July - September





Rainfall Outlook August - October





What's Next?





Flood mitigation technical assessment



- Lead by the Department of Energy, Environment and Climate Action
- Engineering consultants, HARC have been engaged to assess options
- Lake Eppalock operating arrangements assessment (water.vic.gov.au)



Further information



- Further queries may be submitted via the GMW website: <u>www.g-mwater.com.au/contact</u>
- We will continually update the Managing Lake Eppalock page on the GMW website: www.g-mwater.com.au/managing-eppalock
- Subscribe to daily storage level updates via the GMW website: <u>www.g-mwater.com.au/subscribe</u>

Further support



- Storage levels and river flows/levels
 - GMW website: <u>www.g-mwater.com.au/storage-levels</u>
 - BOM website: <u>www.bom.gov.au</u>
 - Water Measurement Information System (WMIS) https://data.water.vic.gov.au/
- SES is lead agency for emergencies in Victoria
 - VicEmergency website/app <u>www.emergency.vic.gov.au</u>
- Victorian Government Flood Hotline 1800 560 760





Contact us





