



Thursday, 06 July 2023

Issue: 1368

A weekly summary relating to New Zealand hydro storage and inflows.

Compiled by Energy Link Ltd.

Storage Summary	South Island Controlled	South Island Uncontrolled	South Island Total	North Island Taupo	Total Storage
Current Storage (GWh)	2548	353	2901	370	3271
Storage Change (GWh)	-108	-69	-176	7	-170

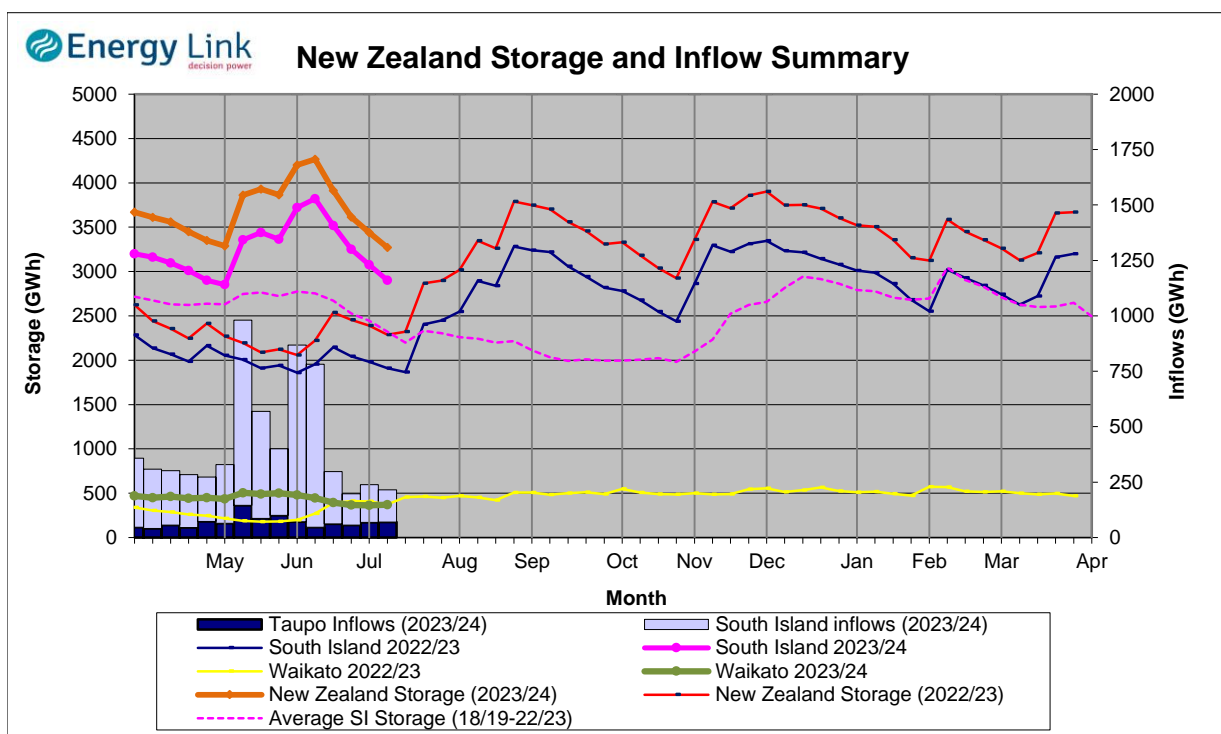
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	2826	370	3195

Note: These figures are provided to align with Transpower's Security of Supply information. However due to variances in generation efficiencies and timing, storage may not exactly match Transpower's figures.

New Zealand Summary

Total storage decreased 170 GWh over the last week. South Island controlled storage decreased 4.1% to 2548 GWh; South Island uncontrolled storage decreased 16.3% to 353 GWh; with Taupo storage increasing 1.8% to 370 GWh.



Thursday, 06 July 2023					
Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	277	255	2369	370	3271
Last Week	329	292	2456	363	3441
% Change	-15.7%	-12.9%	-3.5%	1.8%	-4.9%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	47	35	62	70	215
Last Week	51	47	72	68	238
% Change	-7.4%	-25.3%	-13.3%	3.0%	-9.8%

Subscribe at www.energylink.co.nz/publications

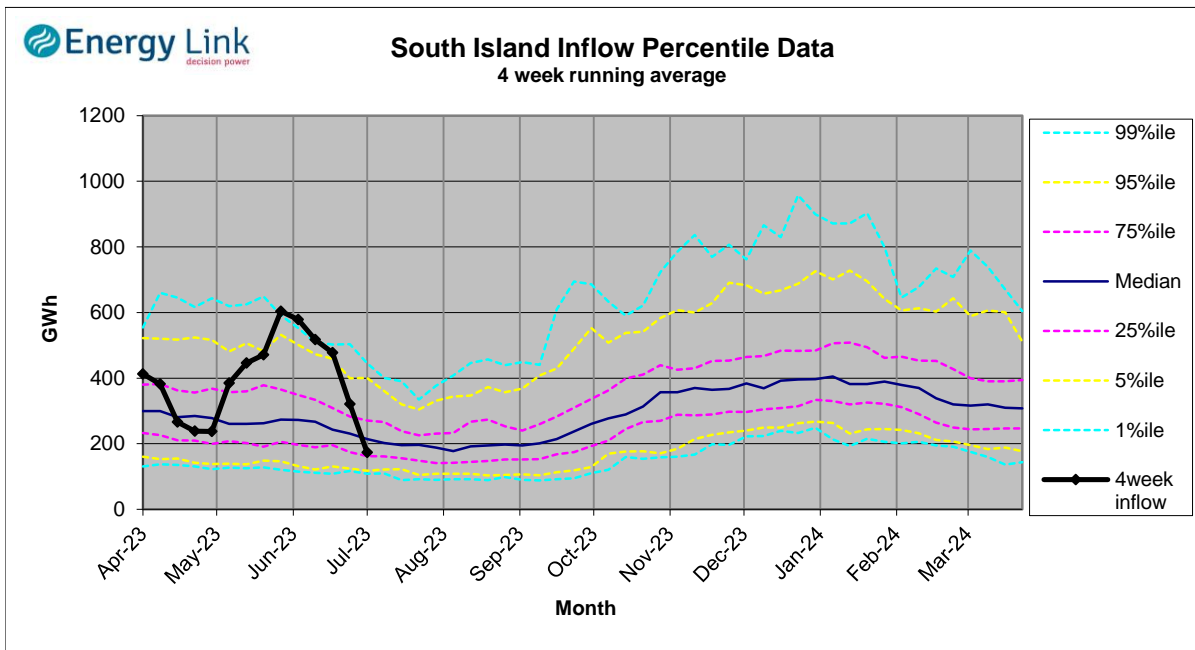
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.72	110	13	0
	Te Anau	201.98	168		
Clutha	Wakatipu	309.66	31	129	-14
	Wanaka	276.97	44	168	
	Hawea	342.92	180	172	
Waitaki	Tekapo	709.30	724		-22
	Pukaki	531.02	1644		
Waikato	Taupo	356.76	370		-21

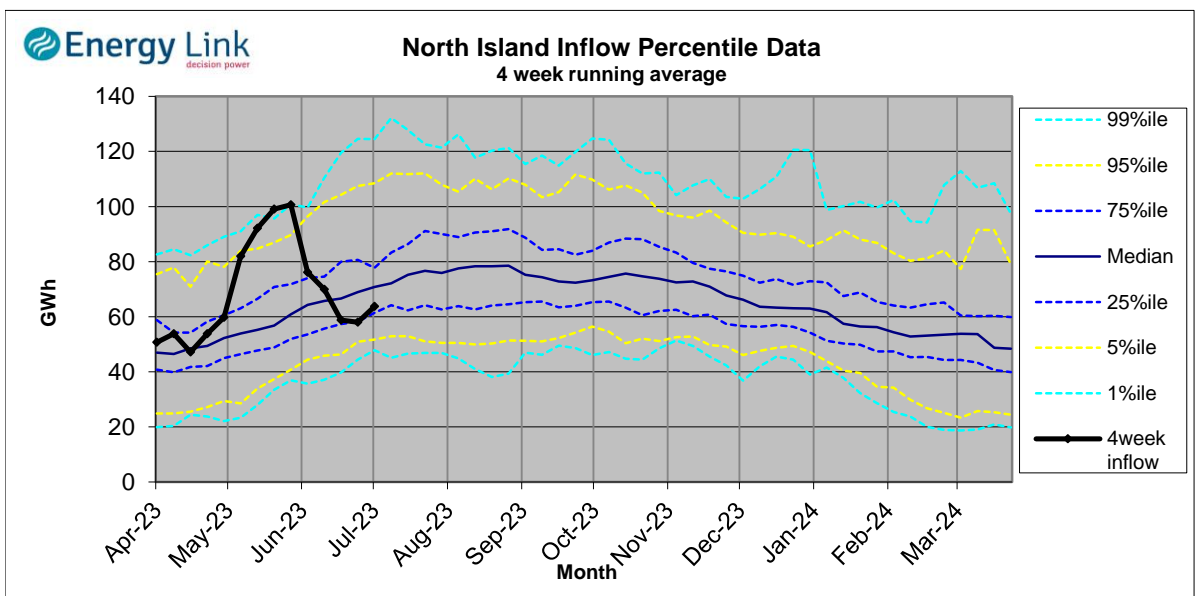
Inflow Summary

The two charts below represent where current inflows are in relation to historic inflow patterns. The percentile values have been calculated using all inflows since 1931.

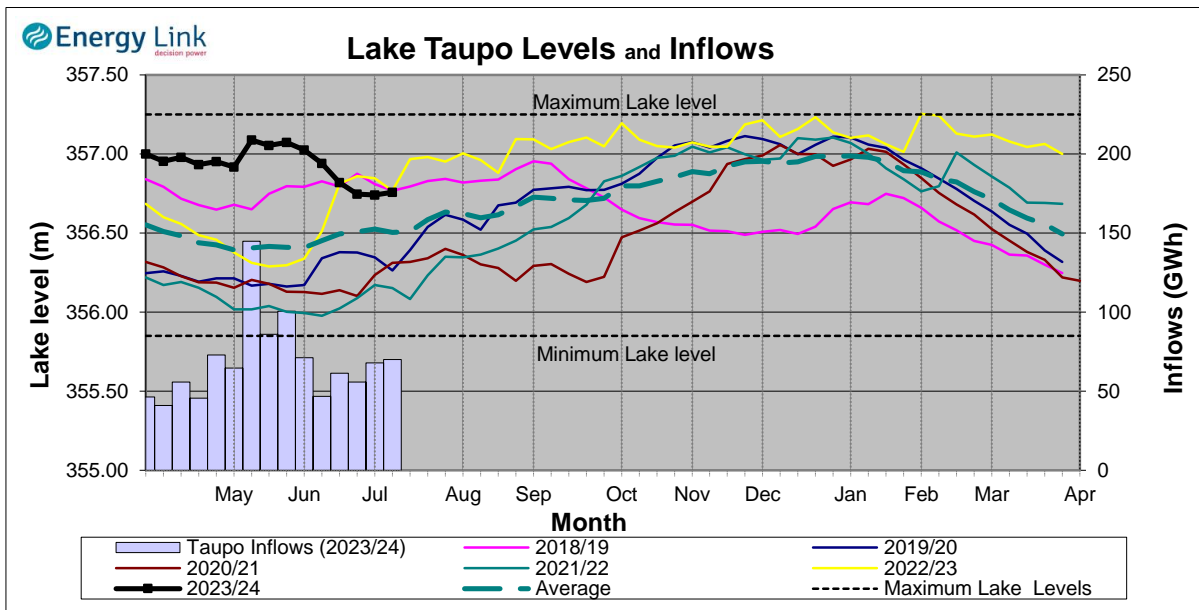
South Island Inflows - The past four weeks of S. I. inflows rank as the 30th driest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 32nd driest on record.



Waikato System

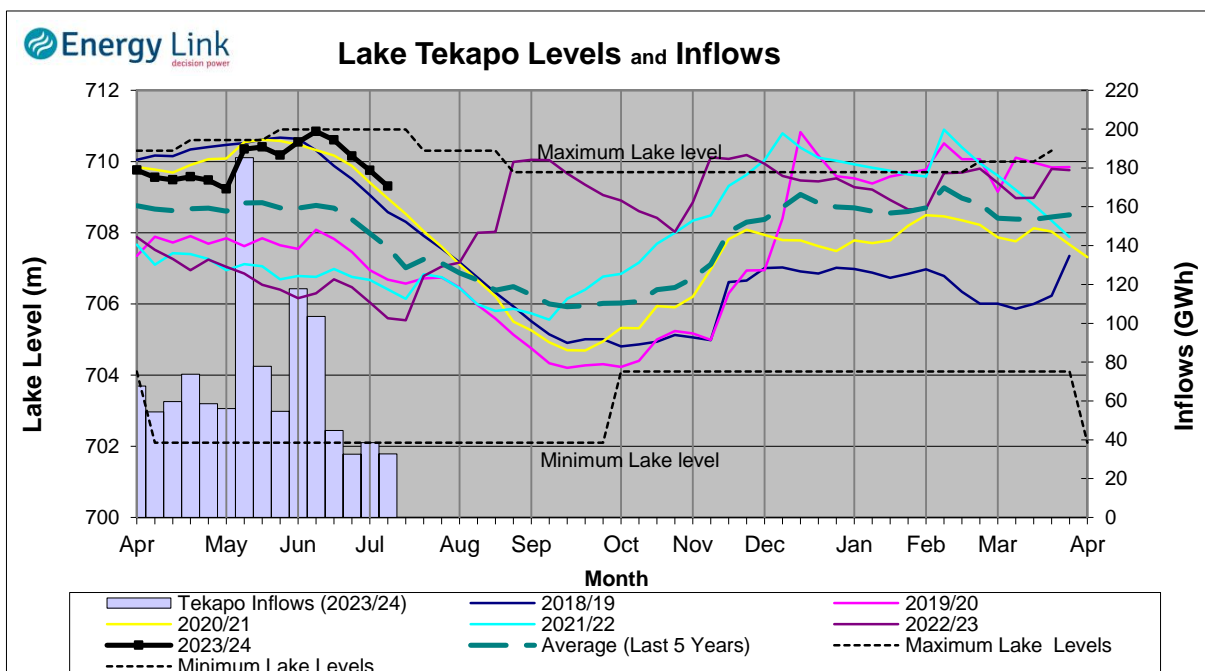


Lake Levels - Lake Taupo storage increased to 64.8% of nominal full at 370 GWh.

Inflows - Inflows increased 3% to 70 GWh.

Generation - Average generation decreased 6.5% to 471.7 MW.

Tekapo



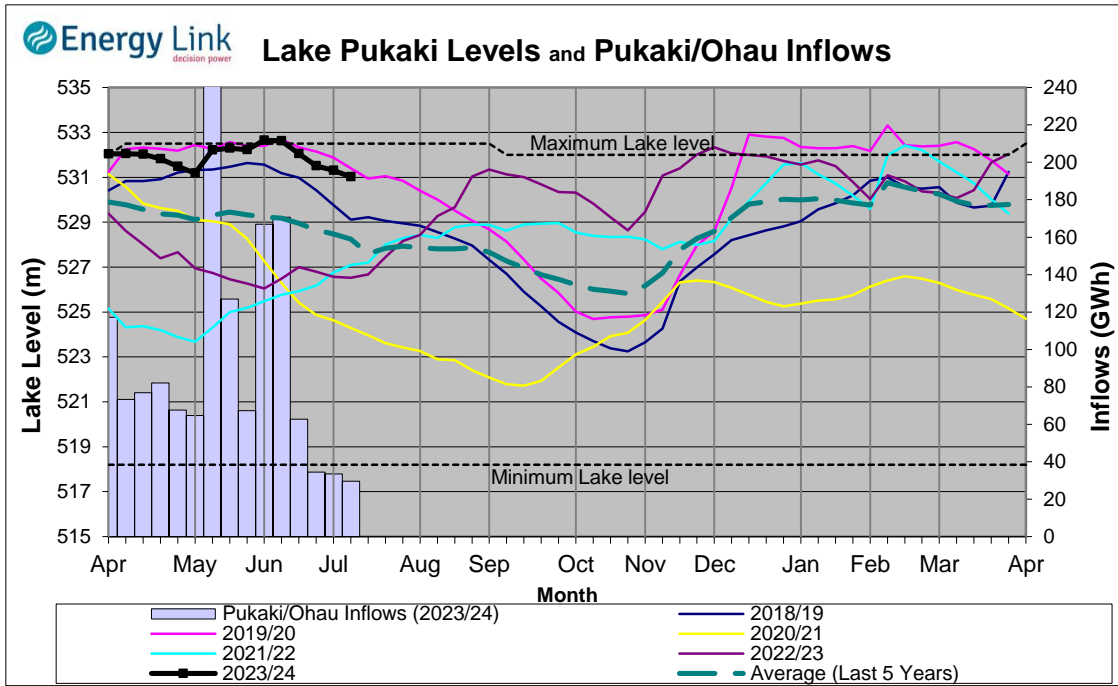
Lake Levels - Lake Tekapo ended the week 85% nominally full with storage falling to 724 GWh.

Inflows - Inflows into tekapo decreased 14.8% to 33 GWh.

Generation - Average Tekapo generation decreased 2% to 174.3 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 89% nominally full with storage falling to 1644 GWh.

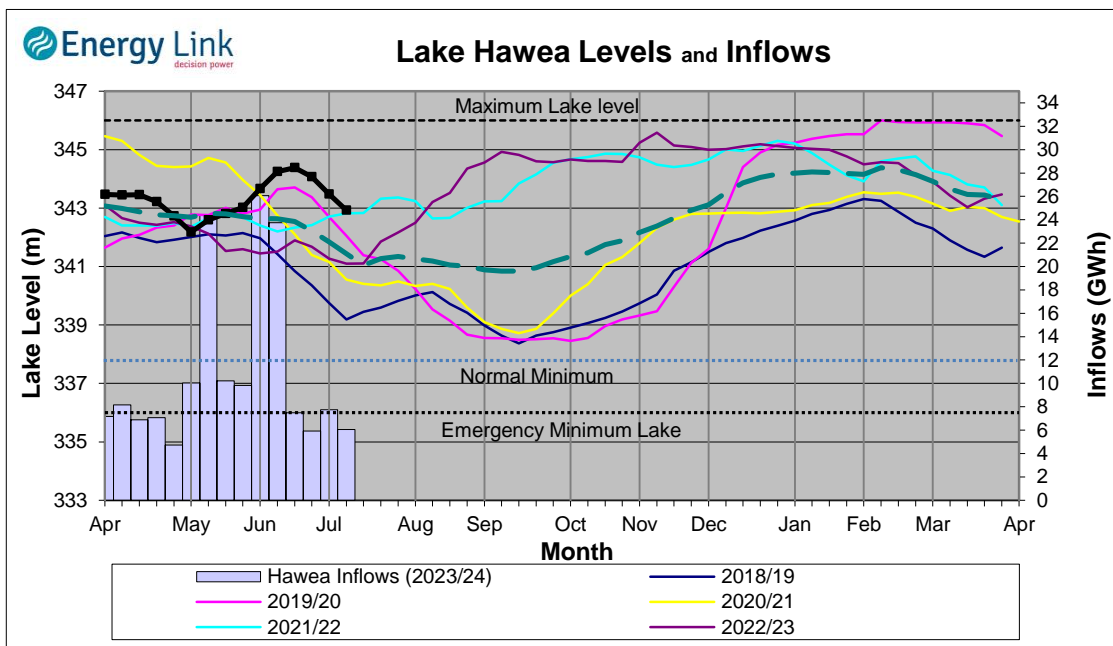
Inflows - Inflows into the Waitaki System decreased 11.5% to 30 GWh.

Generation - Average Waitaki generation increased 2.7% to 816.5 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 20.6 cumecs while Waitaki River flows were lower than last week averaging 338.7 cumecs.

Clutha System



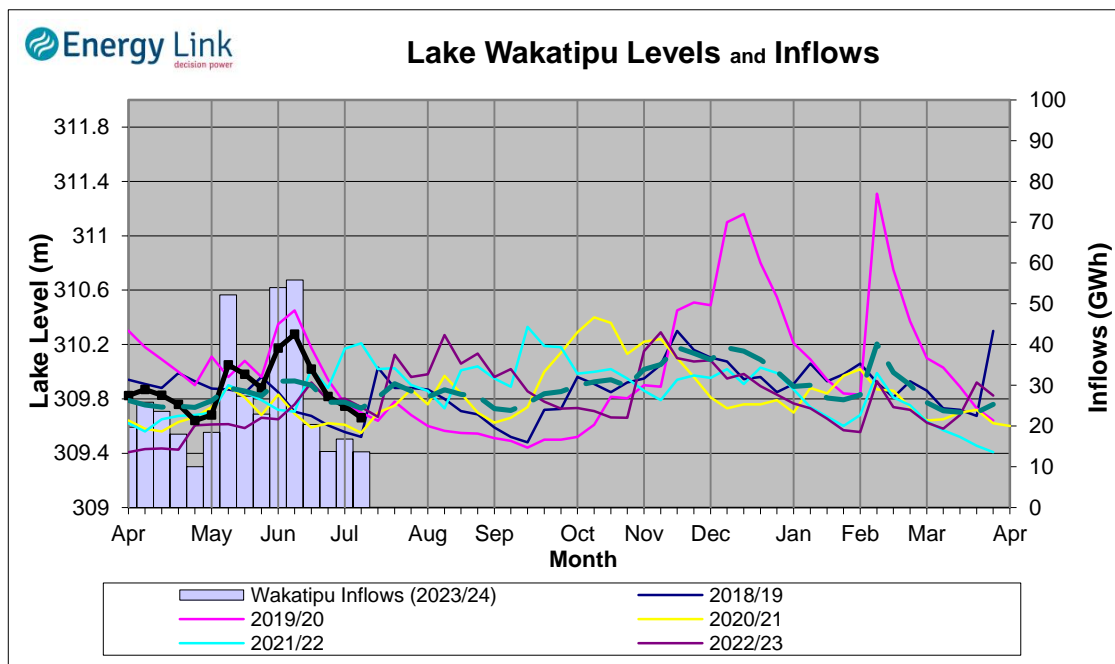
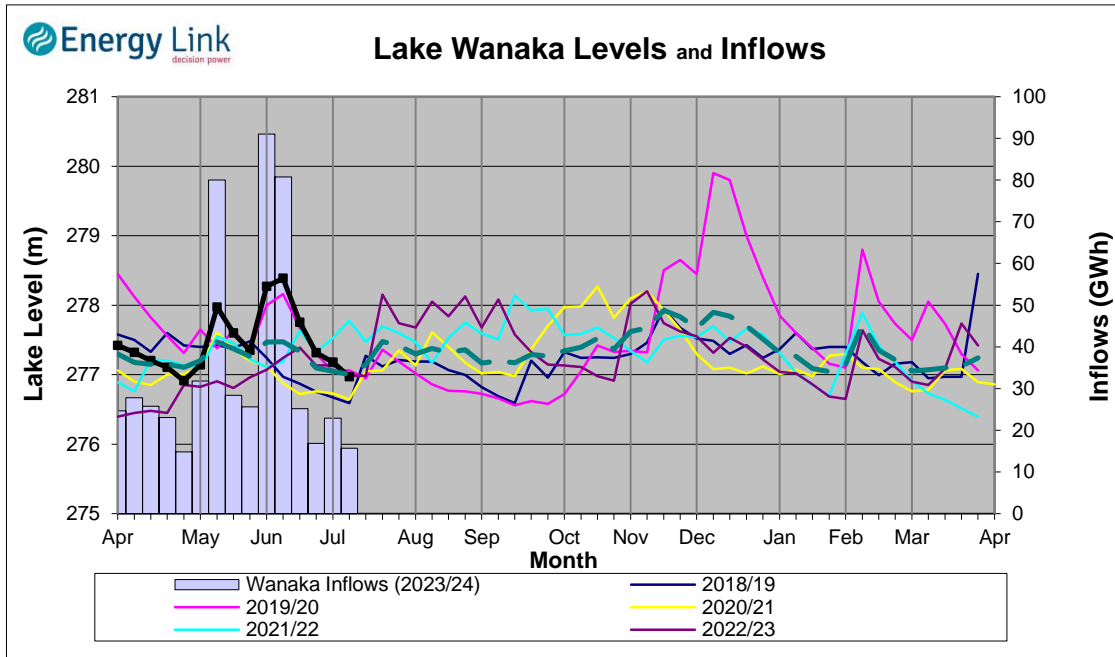
Lake Levels - Total storage for the Clutha System decreased 12.9% to 255 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 60.8%, 38.6% and 29.3% nominally full respectively.

Inflows - Total Inflows into the Clutha System 25.3% lower at 35 GWh.

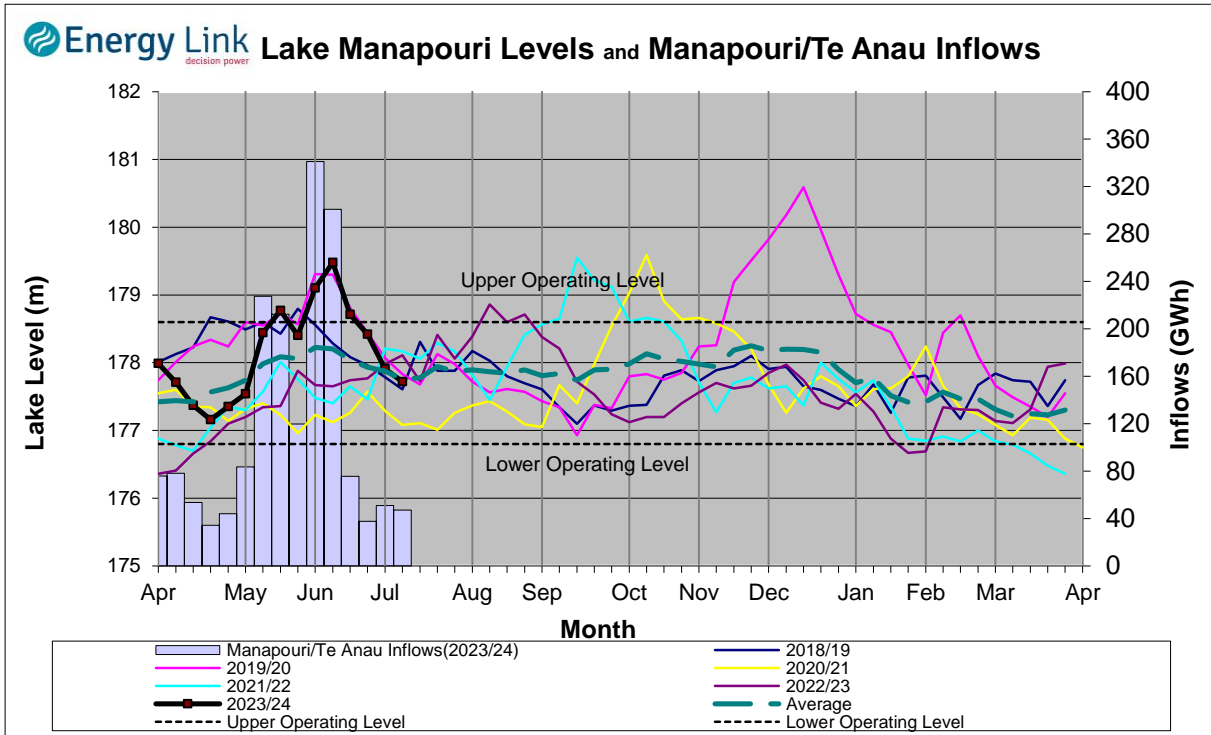
Generation - Average generation was 7% lower at 493 MW.

Hydro Spill - There was no estimated spill

River Flows - Total outflows from the lakes and Shotover River fell to 502.4 cumecs. This comprised of 172 cumecs from Lake Hawea, 168 cumecs from Lake Wanaka, 129 cumecs from Lake Wakatipu and 34 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 15.7% to 277 GWh with Lake Manapouri ending the week 67.6% nominally full and Lake Te Anau ending the week 60.9% nominally full.

Inflows - Total inflows into the Manapouri System decreased 7.4% to 47 GWh.

Generation - Average generation was 14.6% lower at 588 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 12.8 cumecs.

Operating Range - Lakes Manapouri and Te Anau are operating in the middle of their respective 'Main operating range'.

