



Thursday, 08 June 2023

Issue: 1364

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)	2989	833	3822	445	4266
Storage Change (GWh)	52	48	100	-35	65

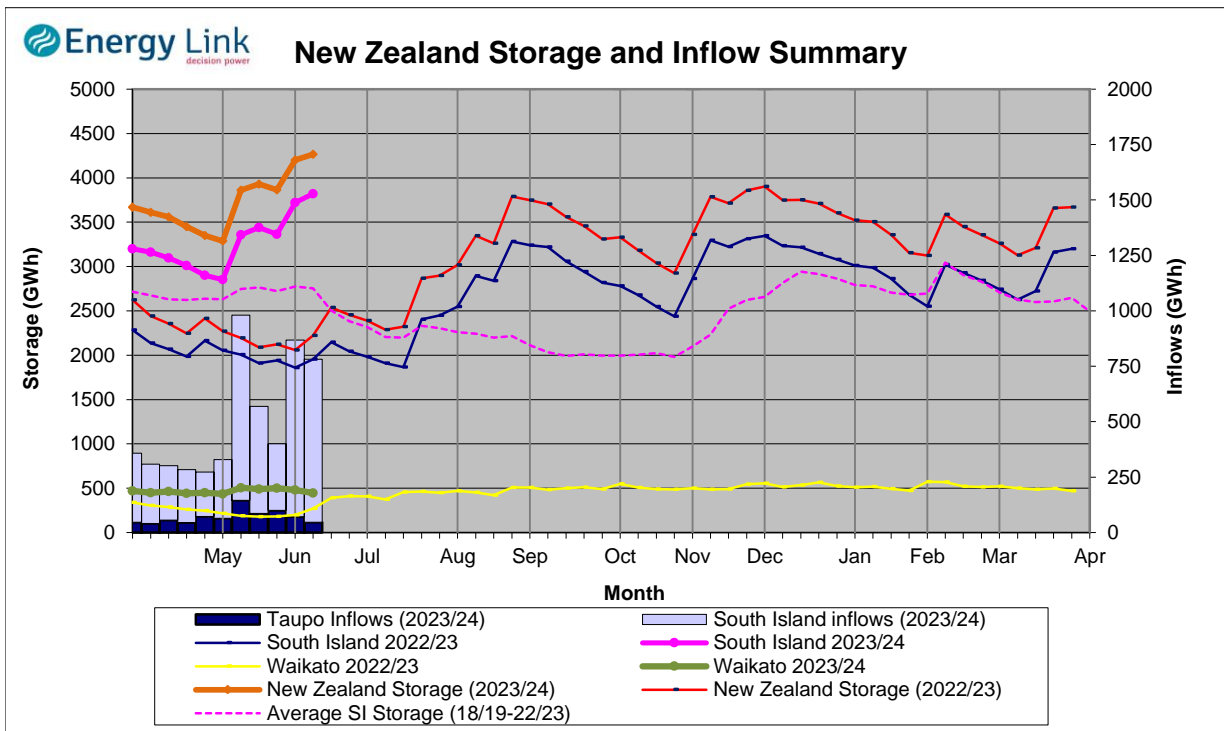
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	3629	445	4074

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 increased 65.2 GWh over the last week. South Island controlled storage increased 1.8% to 2989 GWh; South Island uncontrolled storage increased 6.2% to 833 GWh; with Taupo storage decreasing 7.3% to 445 GWh.



Thursday, 08 June 2023					
Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	640	421	2760	445	4266
Last Week	605	386	2730	480	4201
% Change	5.8%	9.2%	1.1%	-7.3%	1.6%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	301	160	274	47	782
Last Week	341	171	285	71	868
% Change	-11.8%	-6.3%	-3.7%	-34.4%	-9.9%

Subscribe at www.energylink.co.nz/publications

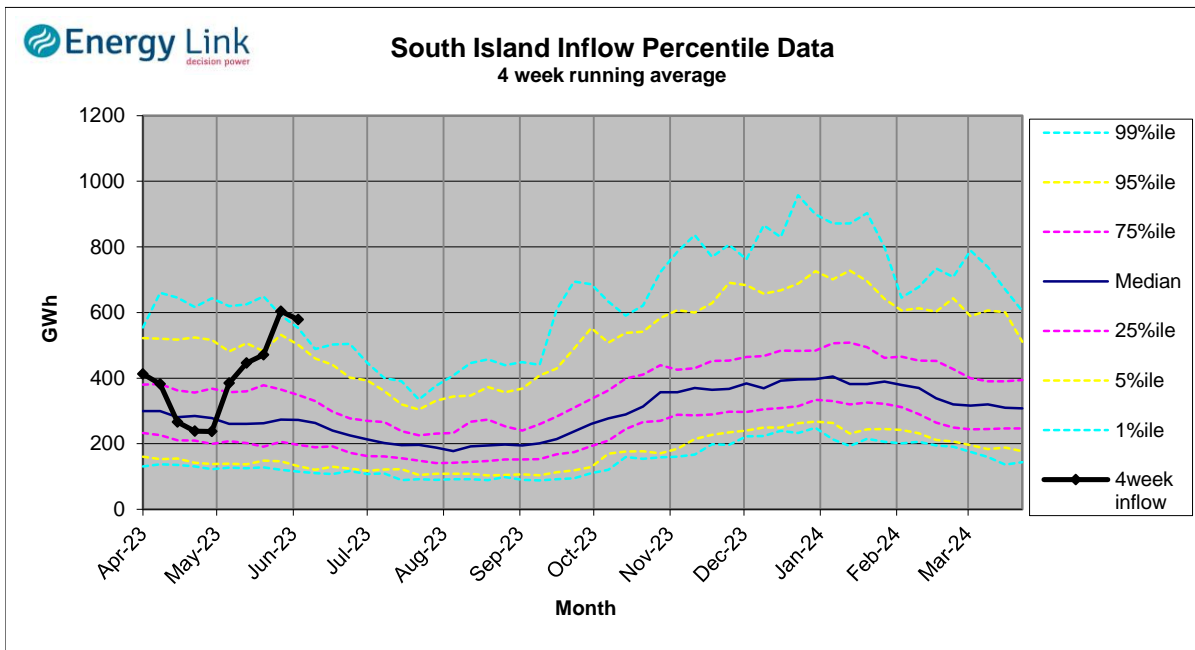
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	179.48	216	570	356
	Te Anau	203.70	425		
Clutha	Wakatipu	310.28	77	309	105
	Wanaka	278.39	115	480	
	Hawea	344.24	229	13	
Waitaki	Tekapo	710.84	896		189
	Pukaki	532.62	1864		
Waikato	Taupo	356.94	445		0

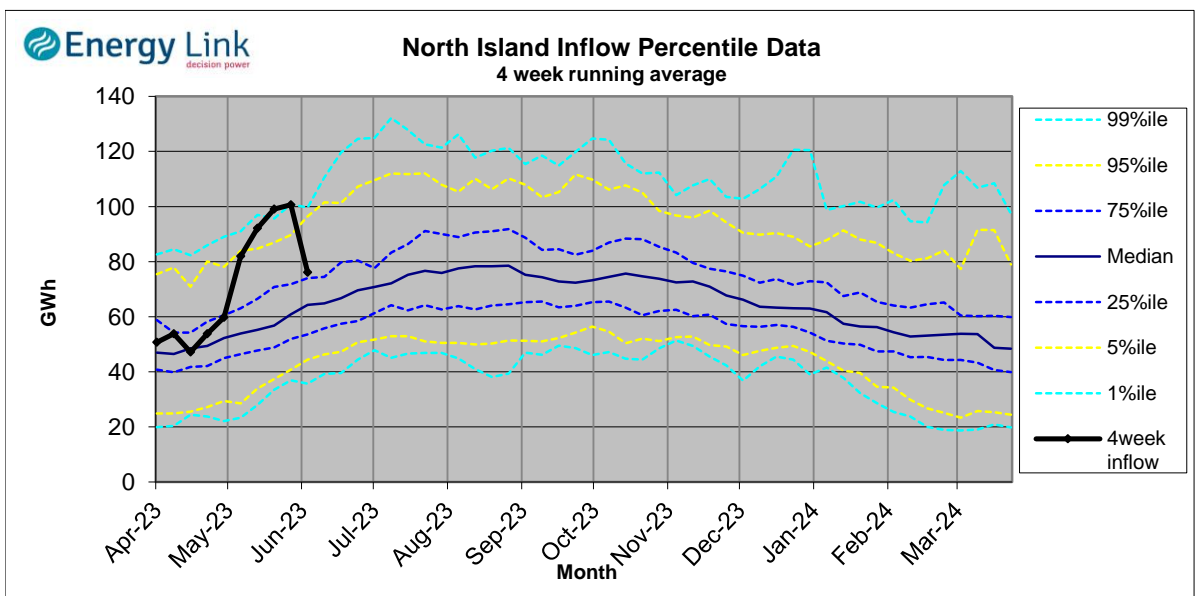
Inflow Summary

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.

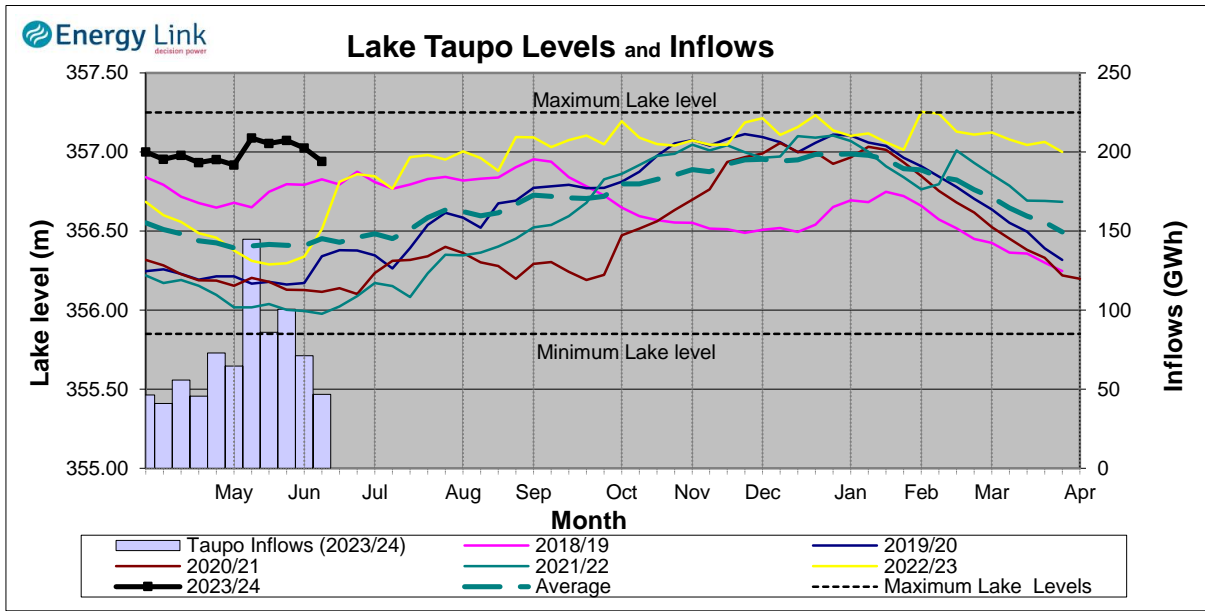
South Island Inflows - The past four weeks of S. I. inflows rank as the wettest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 22nd wettest on record.



Waikato System

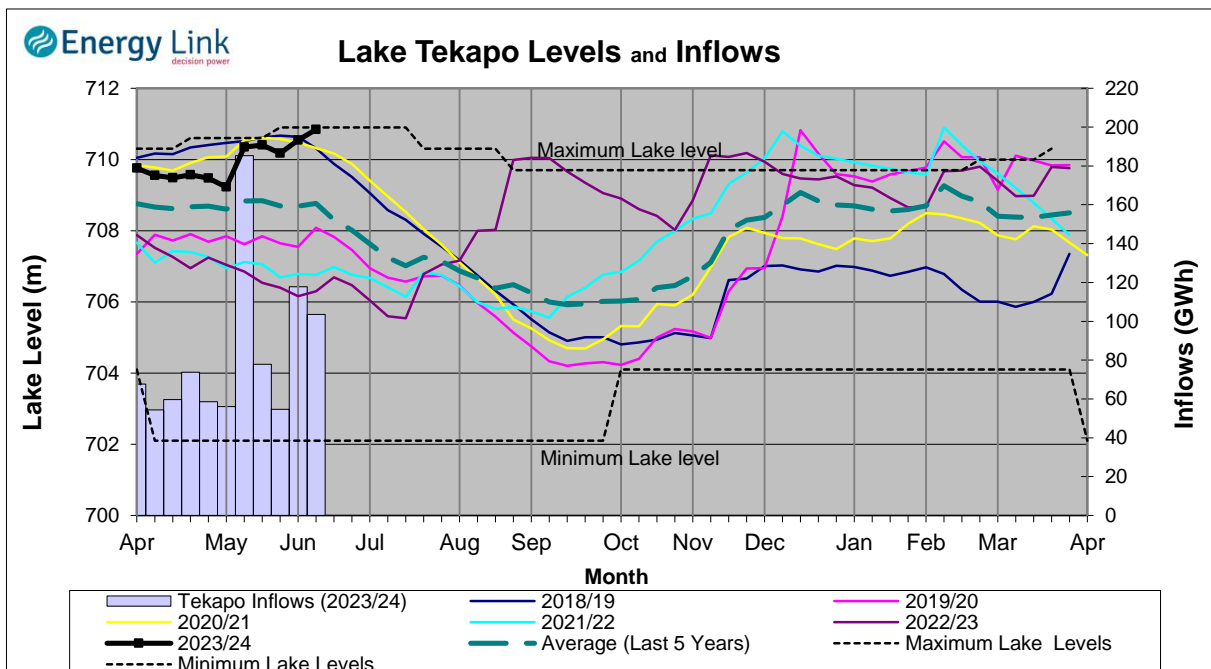


Lake Levels - Lake Taupo storage fell to 77.9% of nominal full at 445 GWh.

Inflows - Inflows decreased 34.4% to 47 GWh.

Generation - Average generation decreased 8.5% to 477.2 MW.

Tekapo



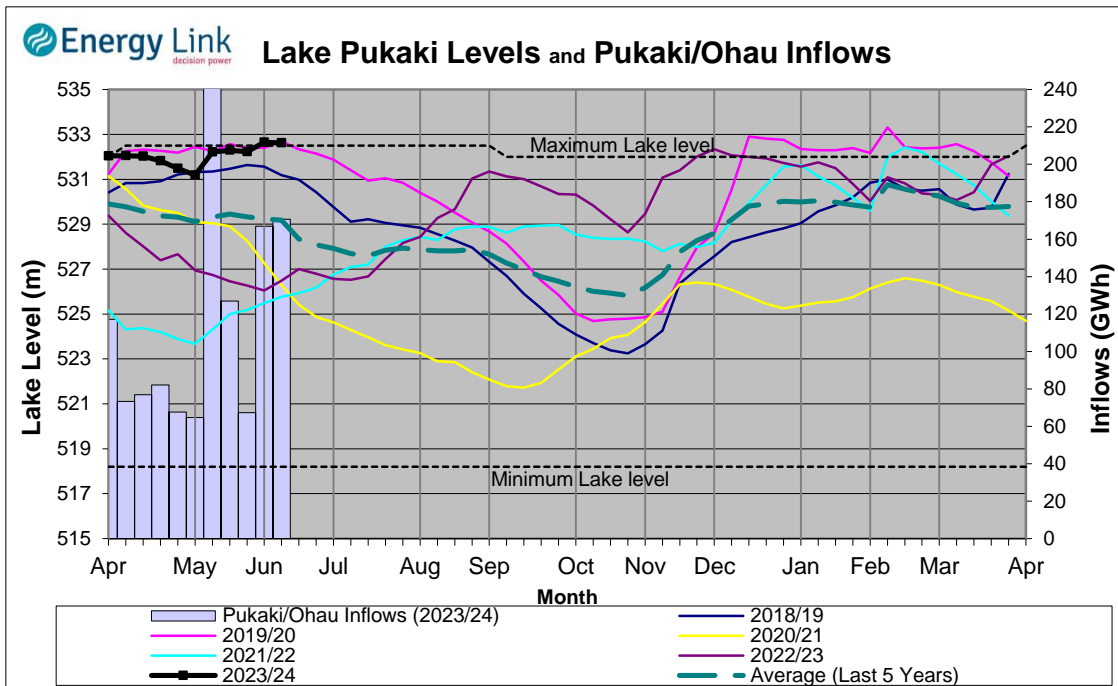
Lake Levels - Lake Tekapo ended the week 109% nominally full with storage increasing to 896 GWh.

Inflows - Inflows into tekapo decreased 12.1% to 104 GWh.

Generation - Average Tekapo generation decreased 5.6% to 150.8 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 101% nominally full with storage falling to 1864 GWh.

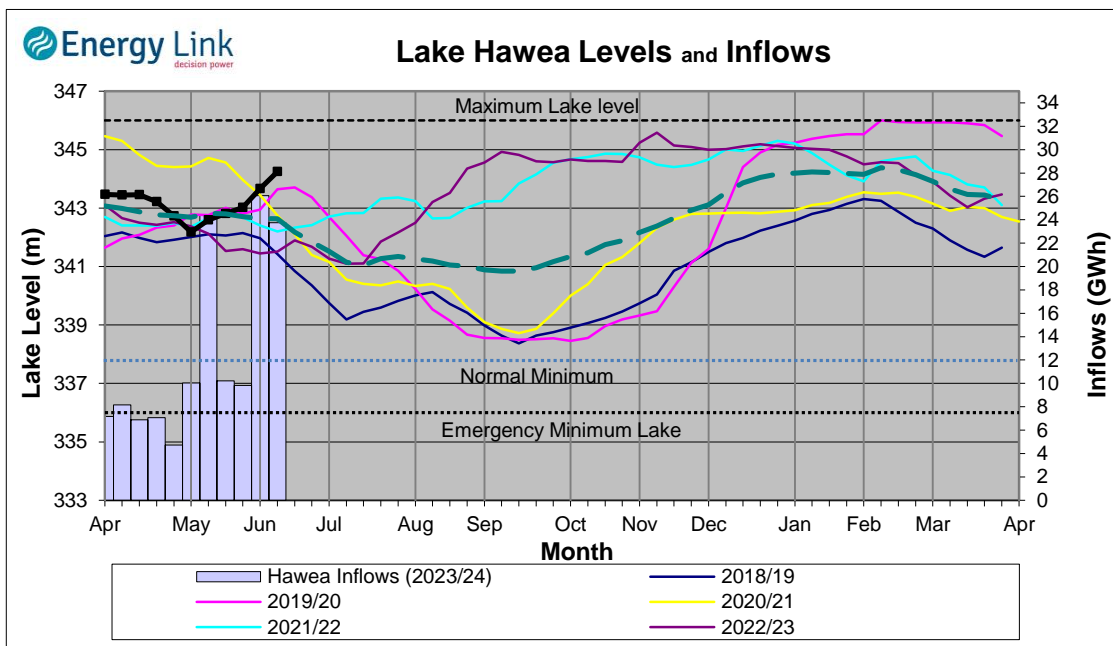
Inflows - Inflows into the Waitaki System increased 2.3% to 171 GWh.

Generation - Average Waitaki generation increased 10.3% to 1008.5 MW.

Hydro Spill - Lake Pukaki spill was 221 cumecs.

River Flows - Flows from the Ahuriri River increased to 58.5 cumecs while Waitaki River flows were higher than last week averaging 566.3 cumecs.

Clutha System



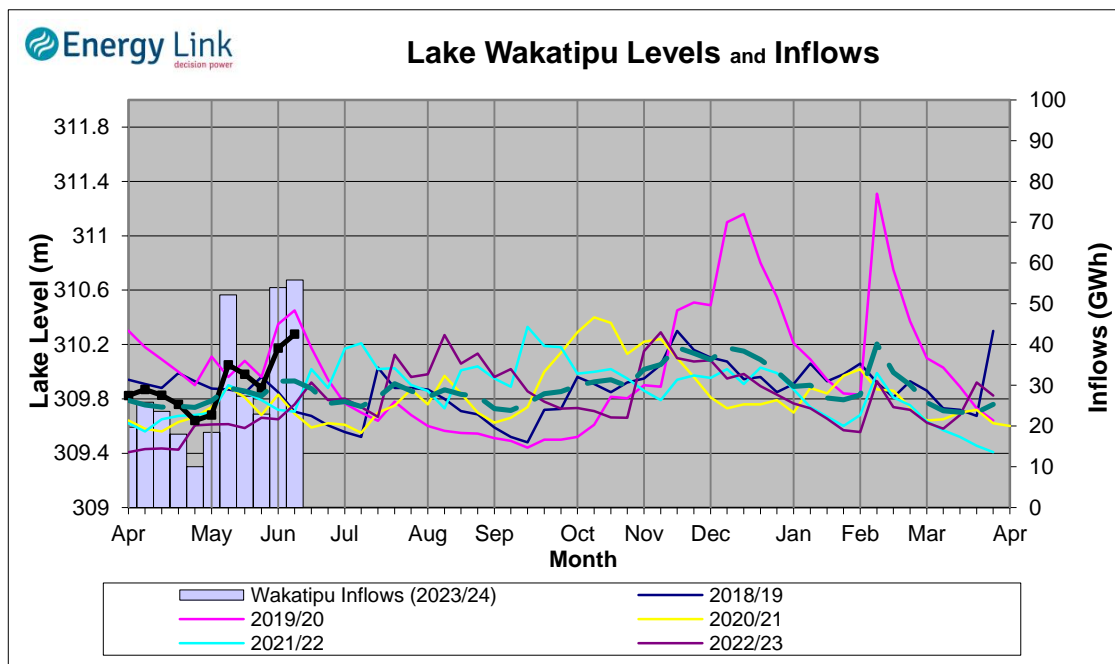
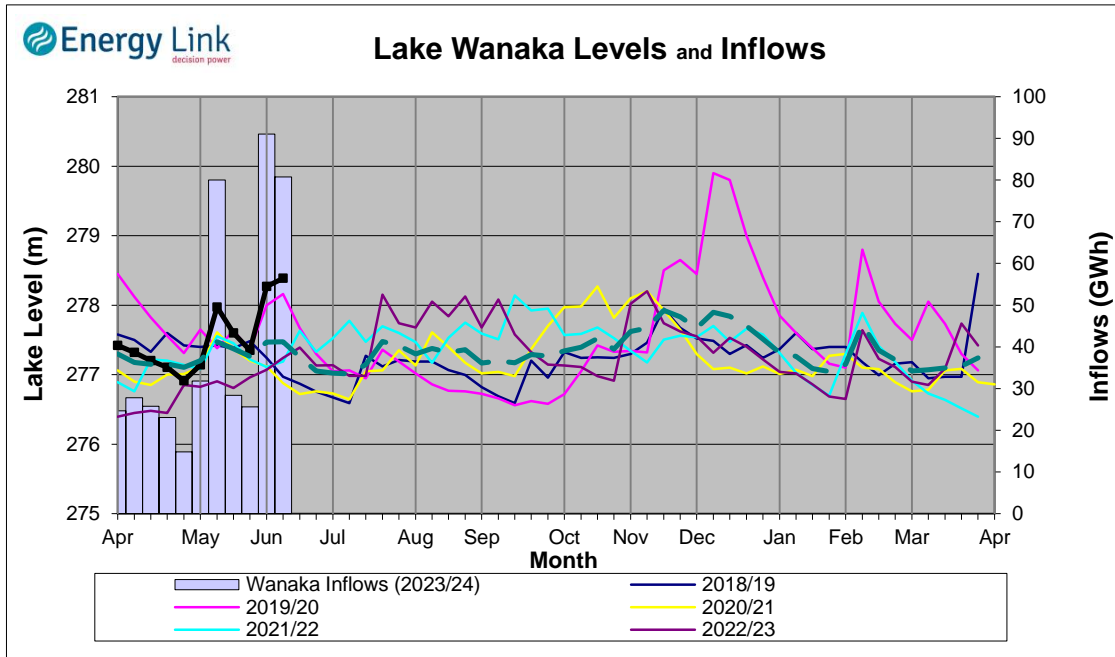
Lake Levels - Total storage for the Clutha System increased by 9.2% to 421 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 77.5%, 100.2% and 73.3% nominally full respectively.

Inflows - Total Inflows into the Clutha System 6.3% lower at 160 GWh.

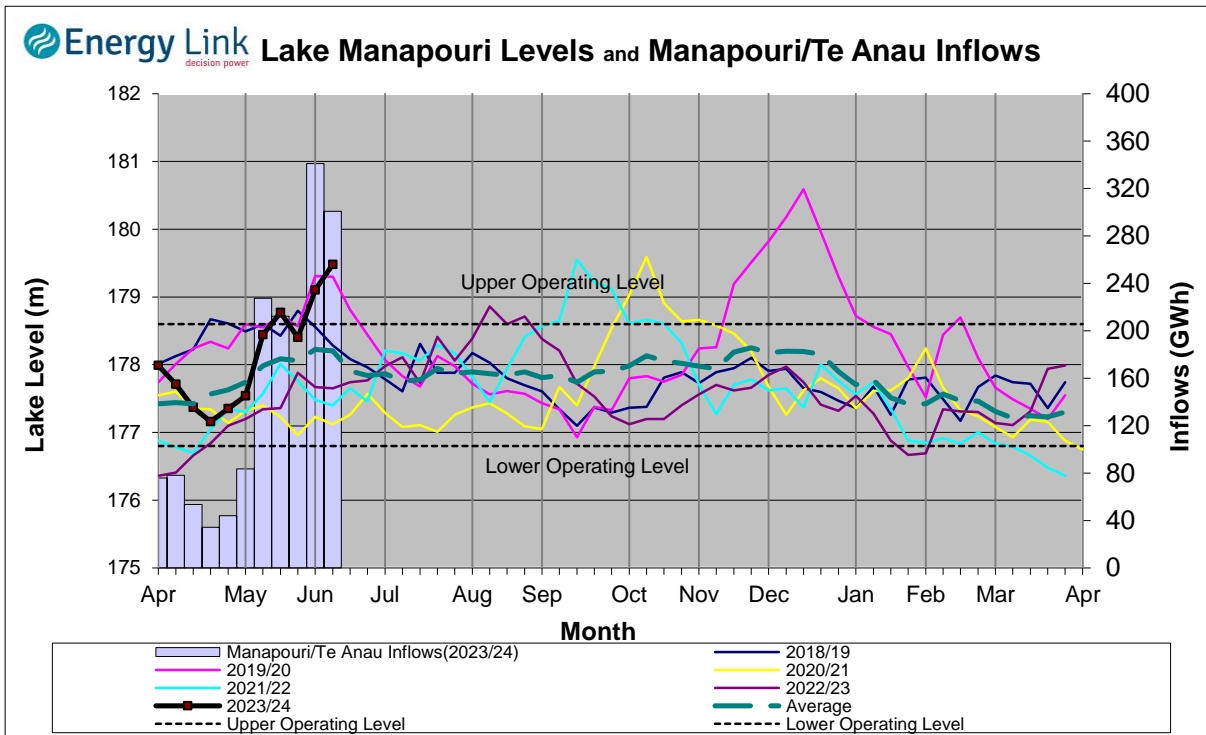
Generation - Average generation was 2.6% lower at 441 MW.

Hydro Spill - Estimate Spill is 400.1 cumecs.

River Flows - Total outflows from the lakes and Shotover River increased to 890.8 cumecs. This comprised of 13 cumecs from Lake Hawea, 480 cumecs from Lake Wanaka, 309 cumecs from Lake Wakatipu and 89 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System increased by 5.8% to 640 GWh with Lake Manapouri ending the week 132.6% nominally full and Lake Te Anau ending the week 154.3% nominally full.

Inflows - Total inflows into the Manapouri System decreased 11.8% to 301 GWh.

Generation - Average generation was 0.3% lower at 730 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 569.8 cumecs.

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

