



Thursday, 22 June 2023

Issue: 1366

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)	2752	498	3250	365	3615
Storage Change (GWh)	-136	-132	-268	-30	-298

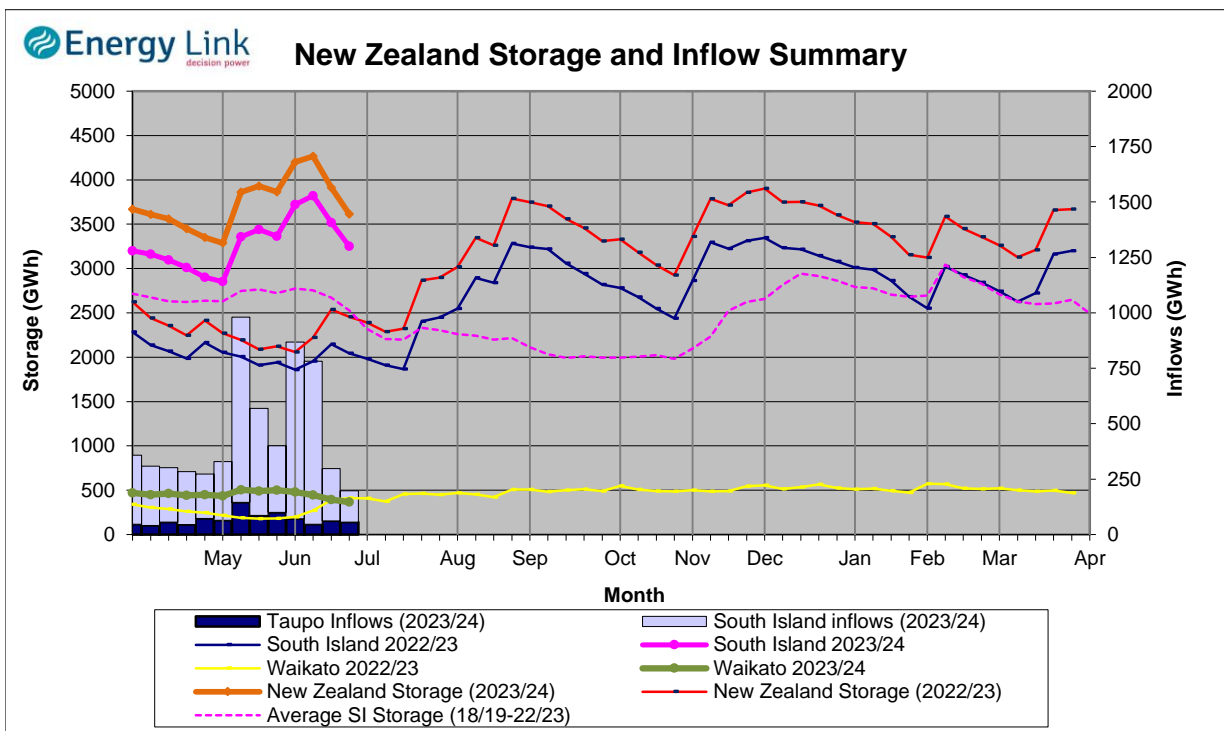
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	3146	365	3511

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 298.2 GWh over the last week. South Island controlled storage decreased 4.7% to 2752 GWh; South Island uncontrolled storage decreased 21% to 498 GWh; with Taupo storage decreasing 7.5% to 365 GWh.



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Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	394	327	2529	365	3615
Last Week	489	375	2654	395	3914
% Change	-19.5%	-12.9%	-4.7%	-7.5%	-7.6%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	38	36	67	56	197
Last Week	76	53	108	61	298
% Change	-50.1%	-31.2%	-37.6%	-9.3%	-33.8%

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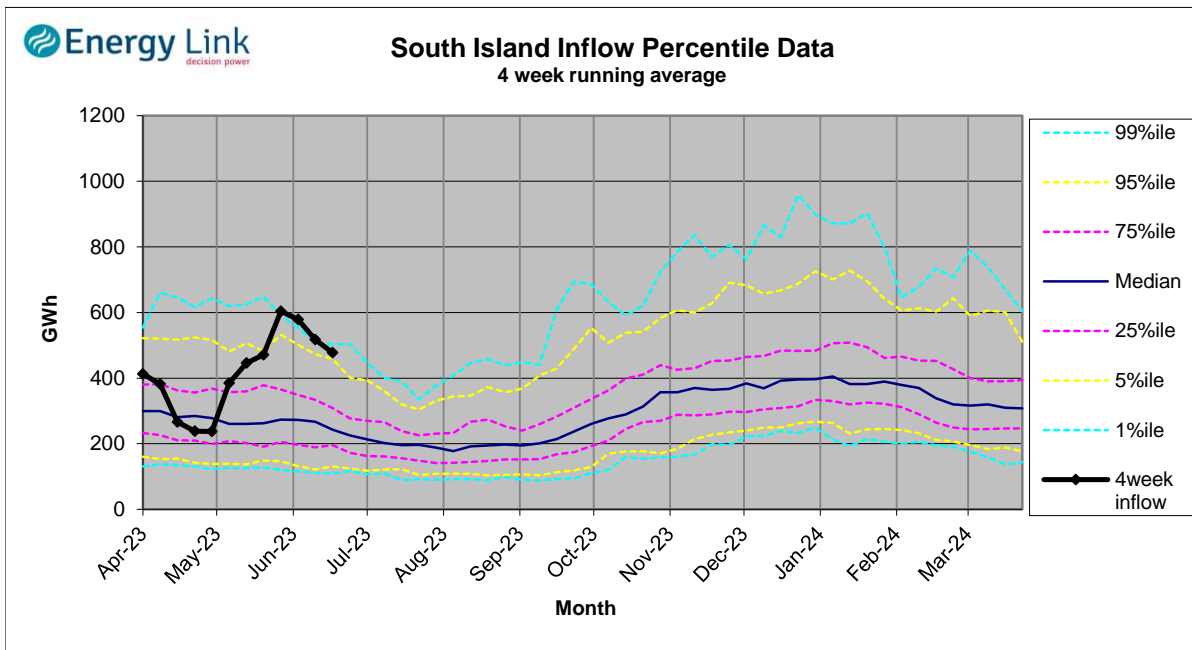
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	178.42	152	50	-363
	Te Anau	202.48	242		
Clutha	Wakatipu	309.82	43	186	-69
	Wanaka	277.32	61	248	
	Hawea	344.08	223	112	
Waitaki	Tekapo	710.15	818		-116
	Pukaki	531.51	1711		
Waikato	Taupo	356.75	365		97

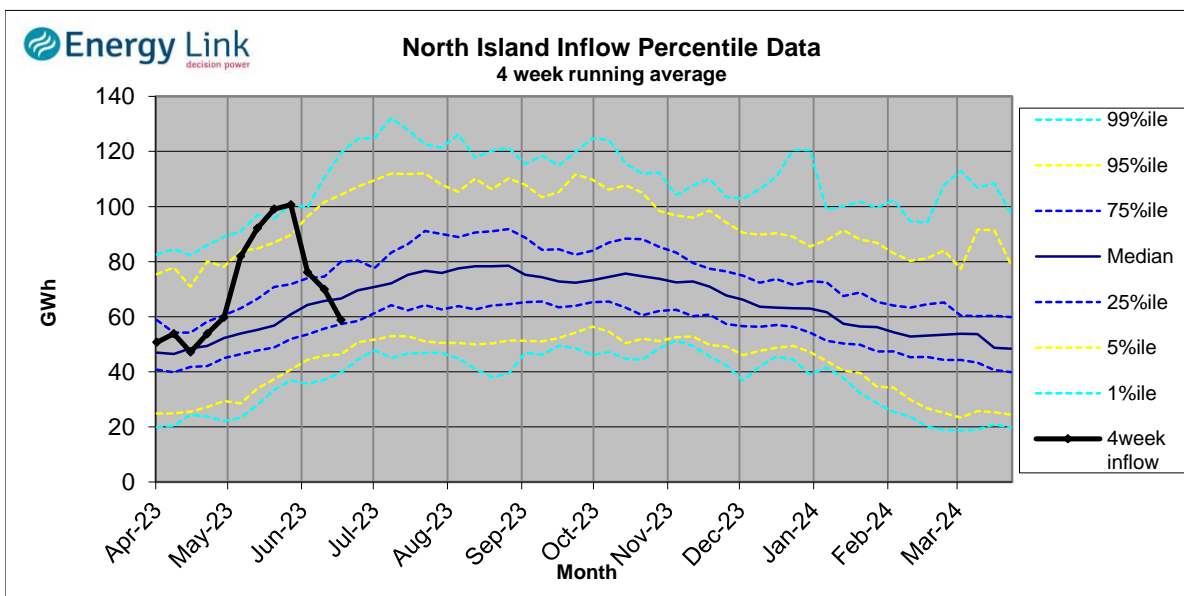
Inflow Summary

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.

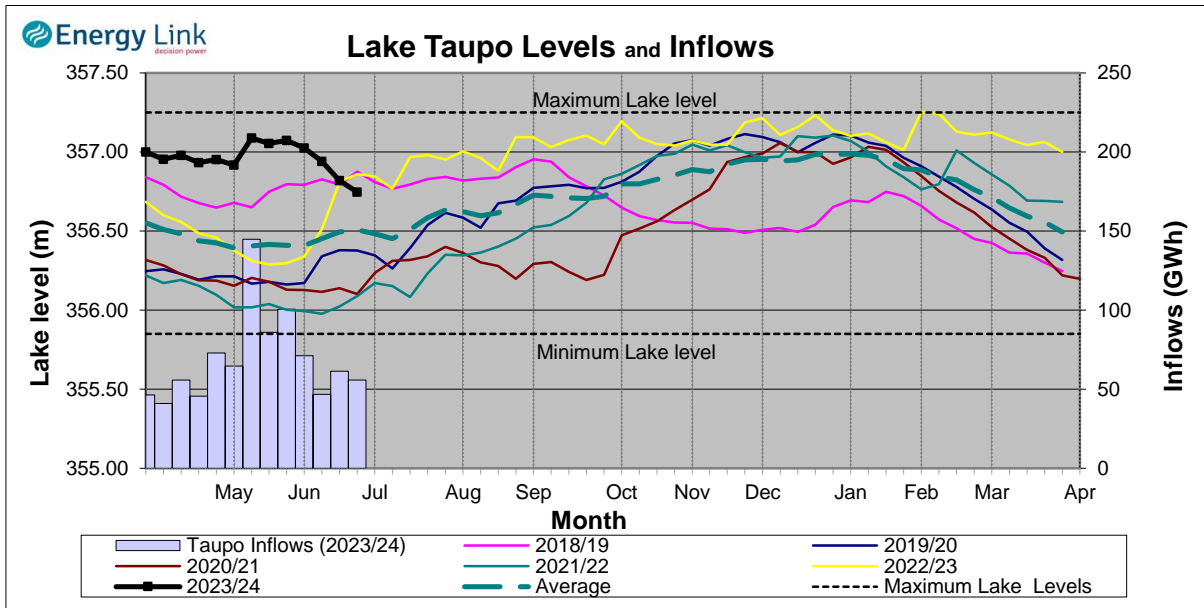
South Island Inflows - The past four weeks of S. I. inflows rank as the 4th wettest on record.



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



Waikato System

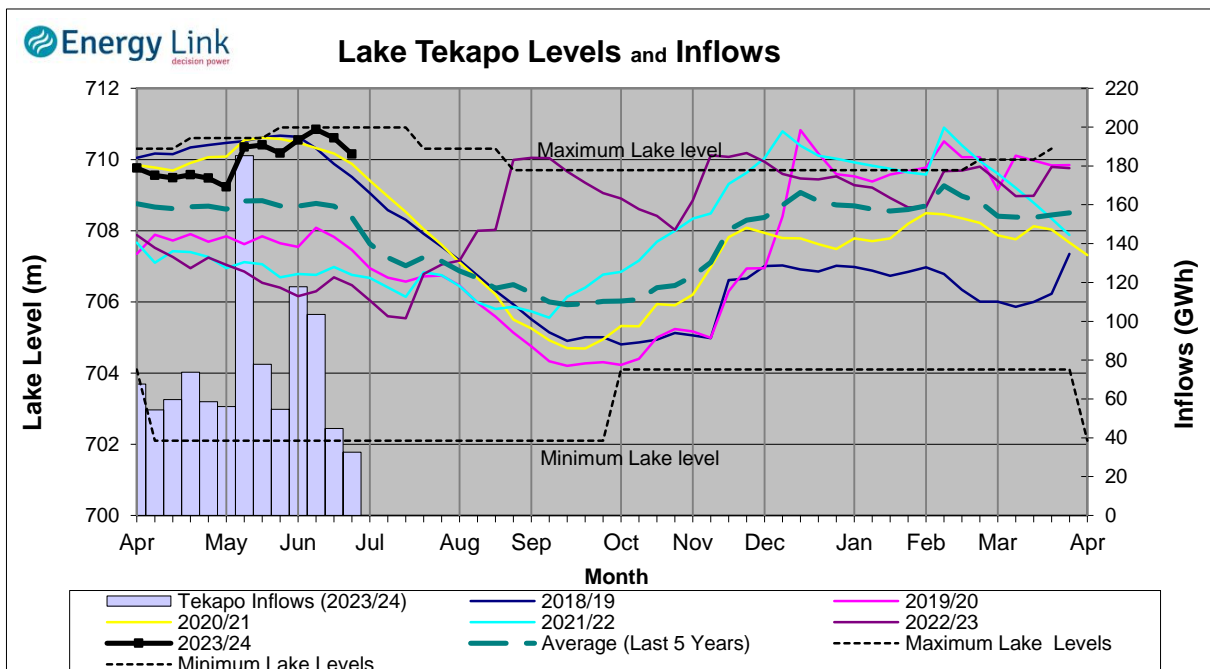


Lake Levels - Lake Taupo storage fell to 64% of nominal full at 365 GWh.

Inflows - Inflows decreased 9.3% to 56 GWh.

Generation - Average generation decreased 14.8% to 551.7 MW.

Tekapo



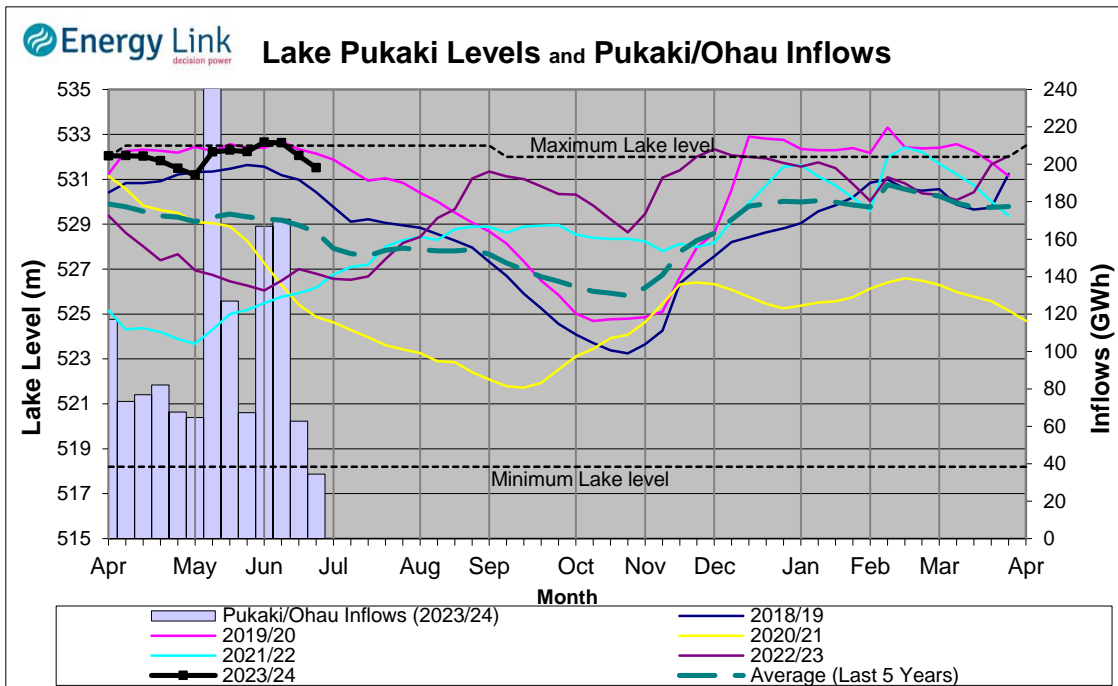
Lake Levels - Lake Tekapo ended the week 96% nominally full with storage falling to 818 GWh.

Inflows - Inflows into tekapo decreased 27.3% to 33 GWh.

Generation - Average Tekapo generation increased 17.2% to 178.3 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 93% nominally full with storage falling to 1711 GWh.

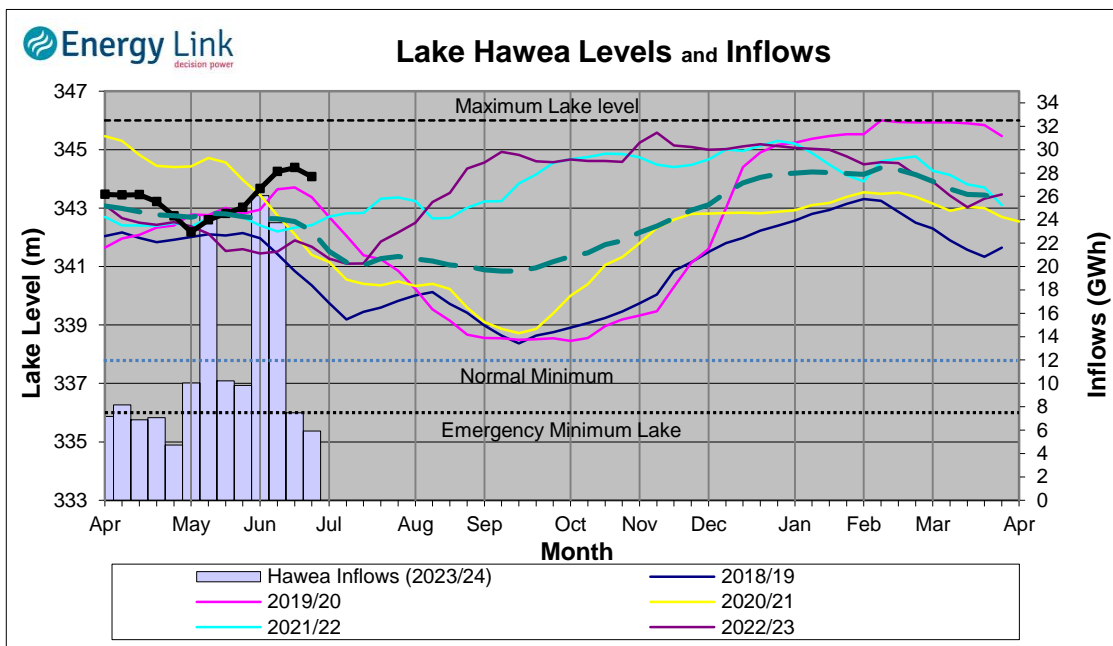
Inflows - Inflows into the Waitaki System decreased 45% to 34 GWh.

Generation - Average Waitaki generation decreased 6.2% to 1089.7 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 23.5 cumecs while Waitaki River flows were lower than last week averaging 459.9 cumecs.

Clutha System



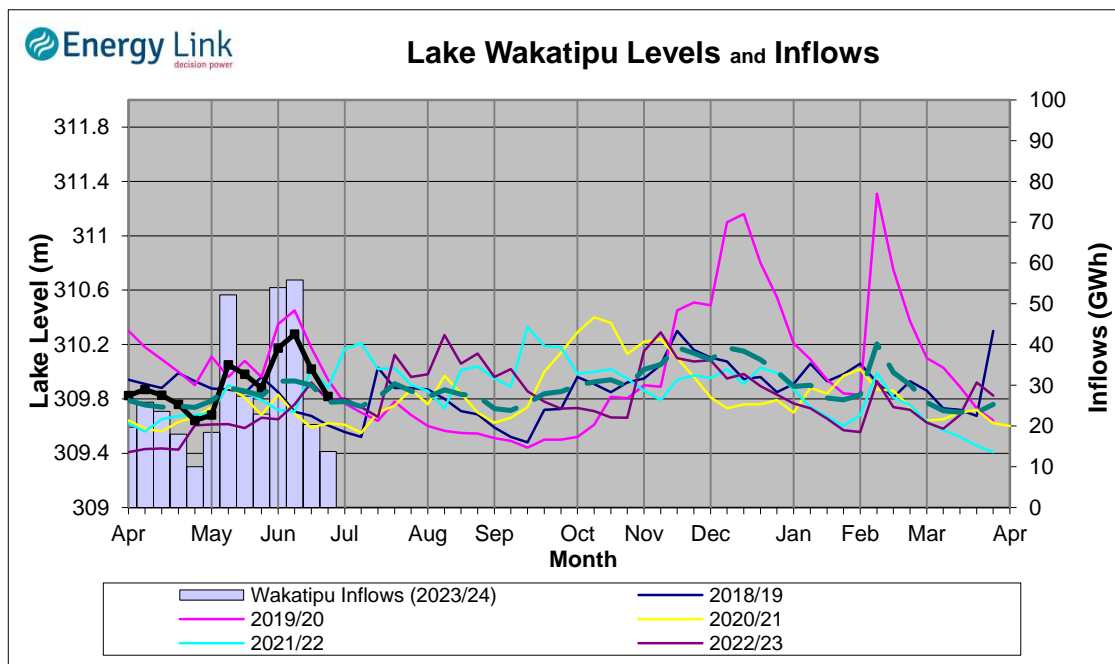
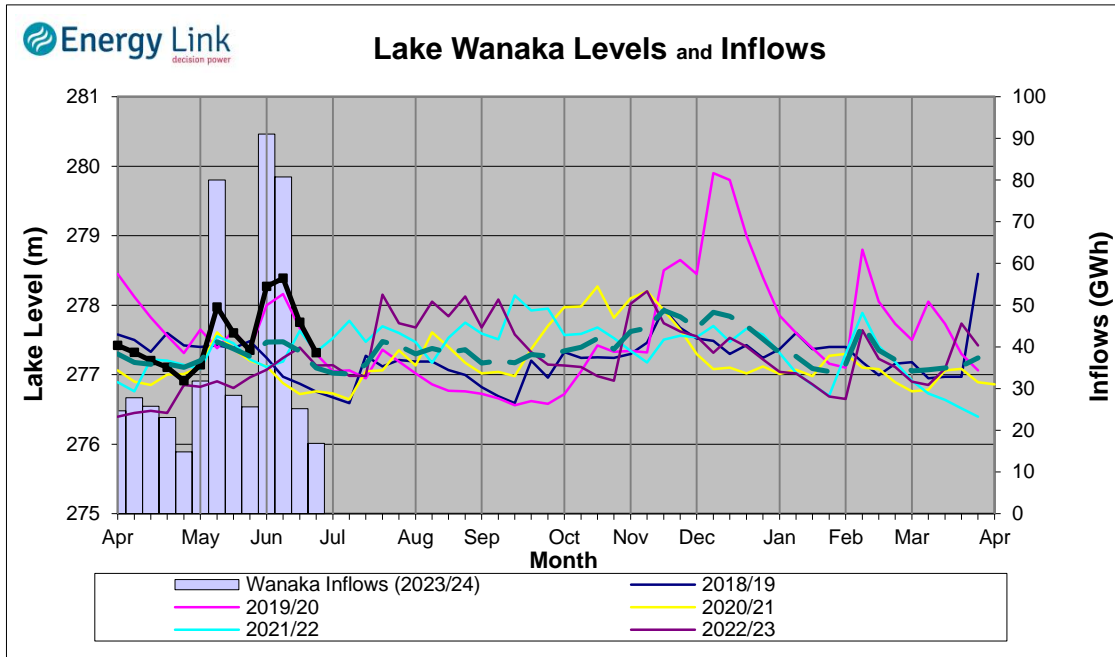
Lake Levels - Total storage for the Clutha System decreased 12.9% to 327 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 75.4%, 53.6% and 40.6% nominally full respectively.

Inflows - Total Inflows into the Clutha System 31.2% lower at 36 GWh.

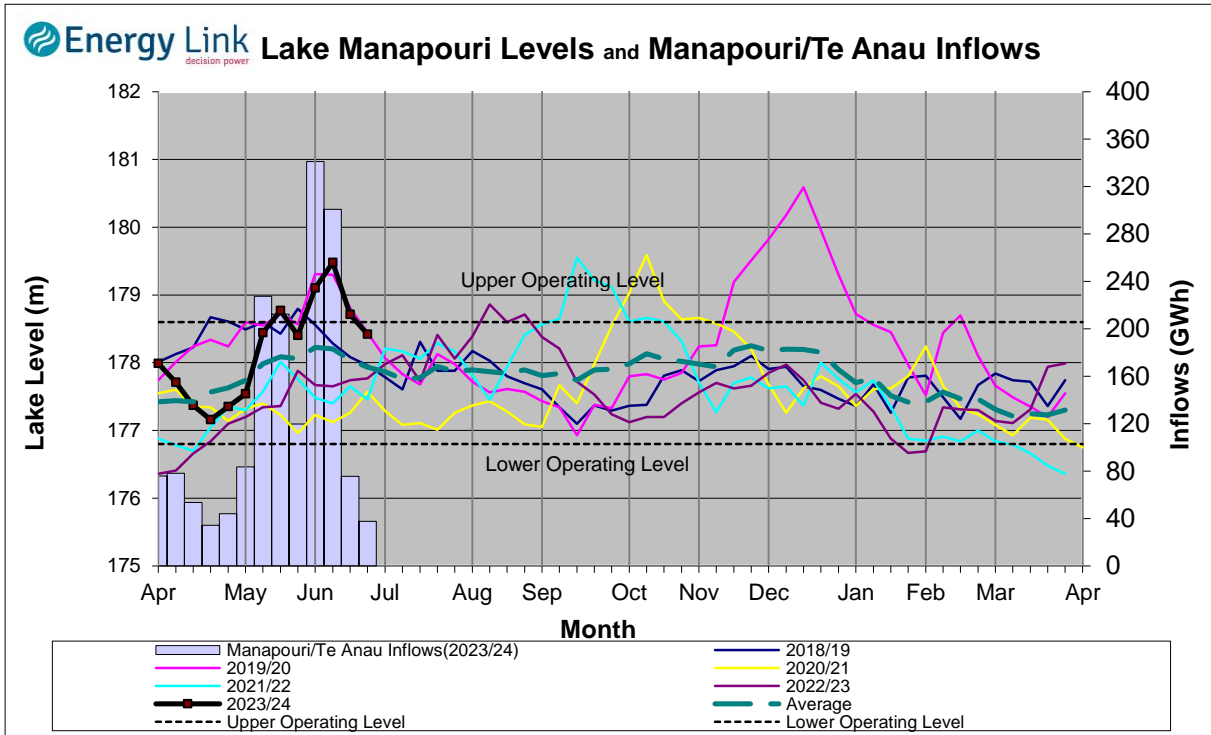
Generation - Average generation was 1.3% lower at 540 MW.

Hydro Spill - There was no estimated spill

River Flows - Total outflows from the lakes and Shotover River fell to 580.5 cumecs. This comprised of 112 cumecs from Lake Hawea, 248 cumecs from Lake Wanaka, 186 cumecs from Lake Wakatipu and 35 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 19.5% to 394 GWh with Lake Manapouri ending the week 93.4% nominally full and Lake Te Anau ending the week 88% nominally full.

Inflows - Total inflows into the Manapouri System decreased 50.1% to 38 GWh.

Generation - Average generation was 0.5% lower at 732 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 50.3 cumecs.

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

