



Thursday, 27 April 2023

Issue: 1358

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)	2623	277	2900	449	3349
Storage Change (GWh)	-75	-34	-110	8	-102

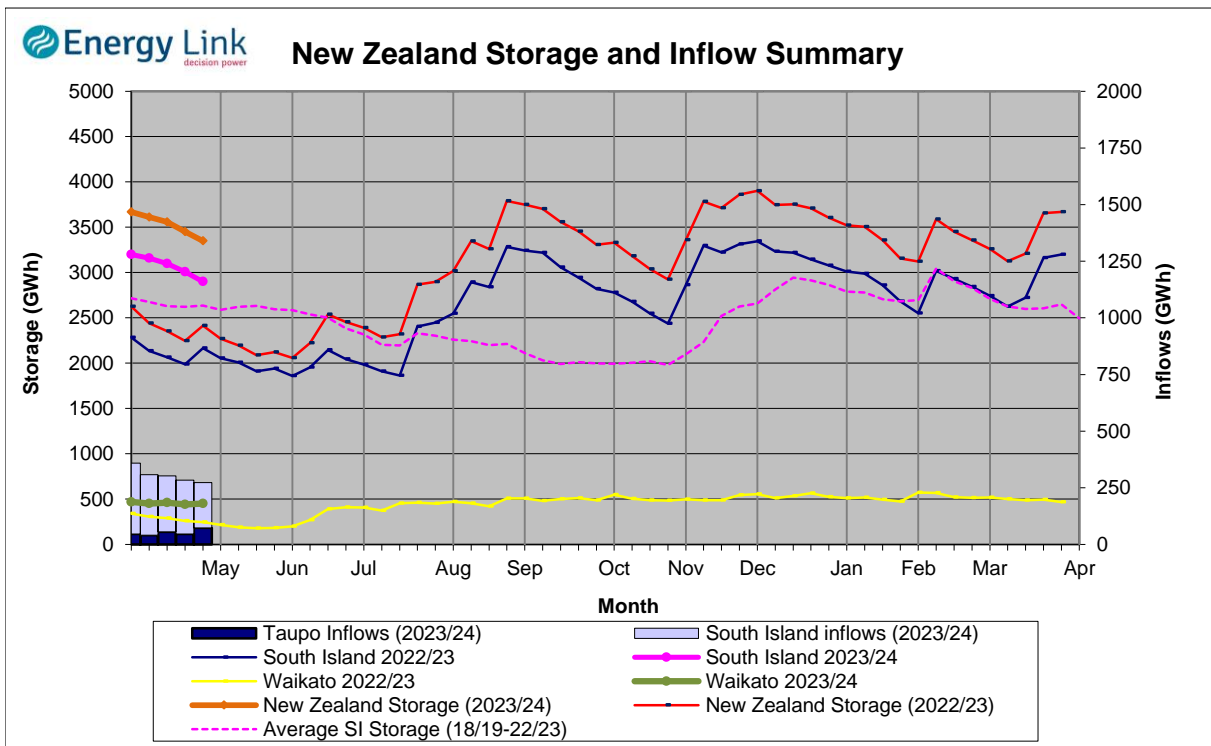
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	2829	449	3278

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 102 GWh over the last week. South Island controlled storage decreased 2.8% to 2623 GWh; South Island uncontrolled storage decreased 11% to 277 GWh; with Taupo storage increasing 1.8% to 449 GWh.



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	Manapouri	Clutha	Waitaki	Waikato	NZ
Storage (GWh)					
This Week	206	243	2451	449	3349
Last Week	222	280	2507	442	3451
% Change	-7.1%	-13.3%	-2.3%	1.8%	-3.0%
Inflow (GWh)					
This Week	44	30	126	73	273
Last Week	34	48	156	46	284
% Change	28.4%	-38.7%	-19.0%	59.7%	-4.0%

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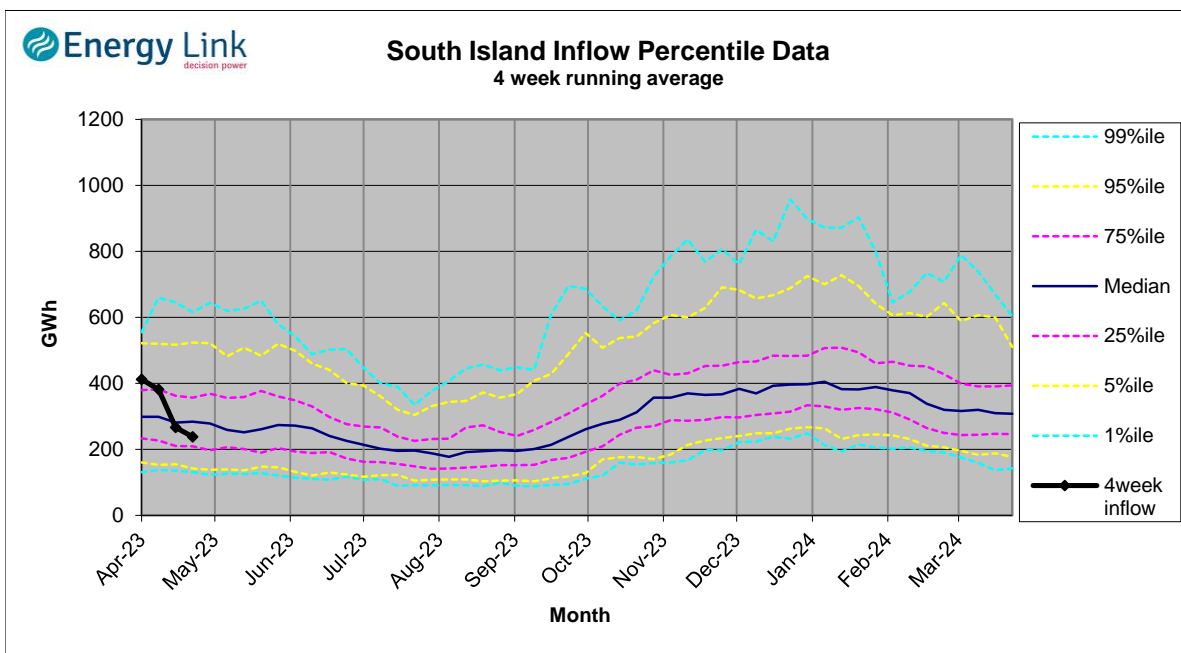
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.35	88	20	5
	Te Anau	201.65	118		
Clutha	Wakatipu	309.64	29	122	-25
	Wanaka	276.91	41	157	-22
	Hawea	342.73	172	149	48
Waitaki	Tekapo	709.48	744		
	Pukaki	531.48	1707		
Waikato	Taupo	356.95	449		

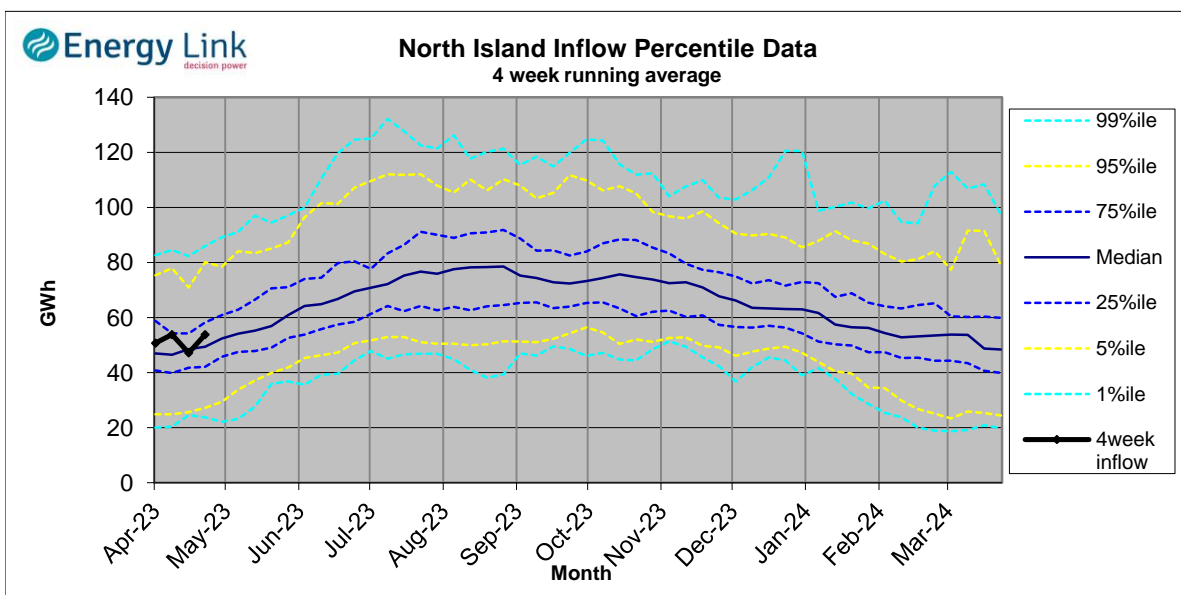
Inflow Summary

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.

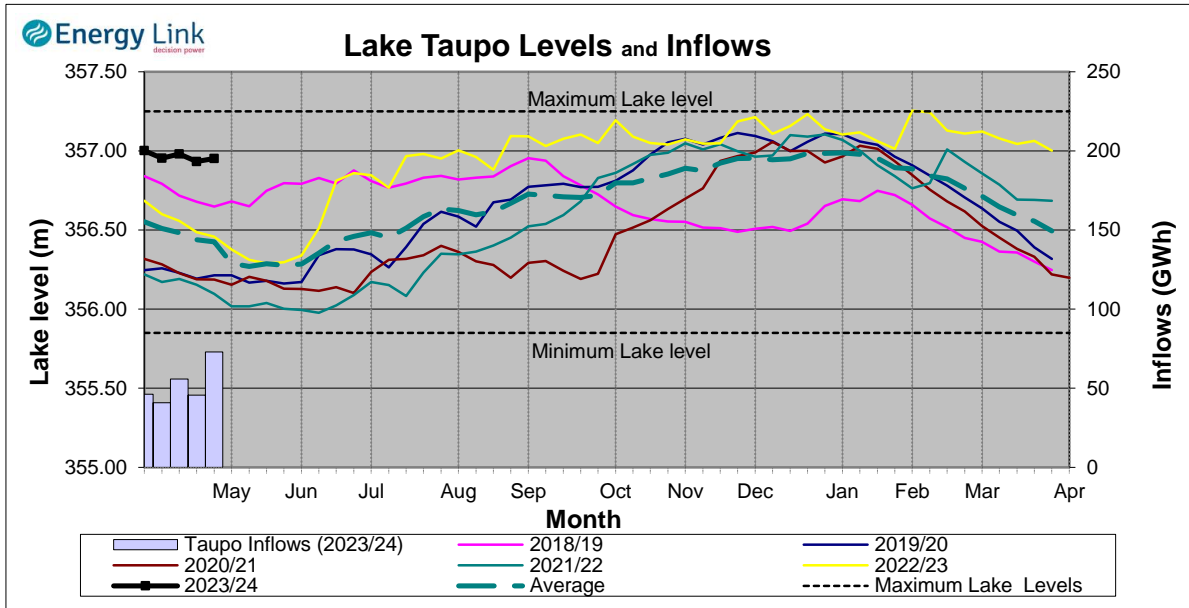
South Island Inflows - The past four weeks of S. I. inflows rank as the 36th driest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 38th wettest on record.



Waikato System

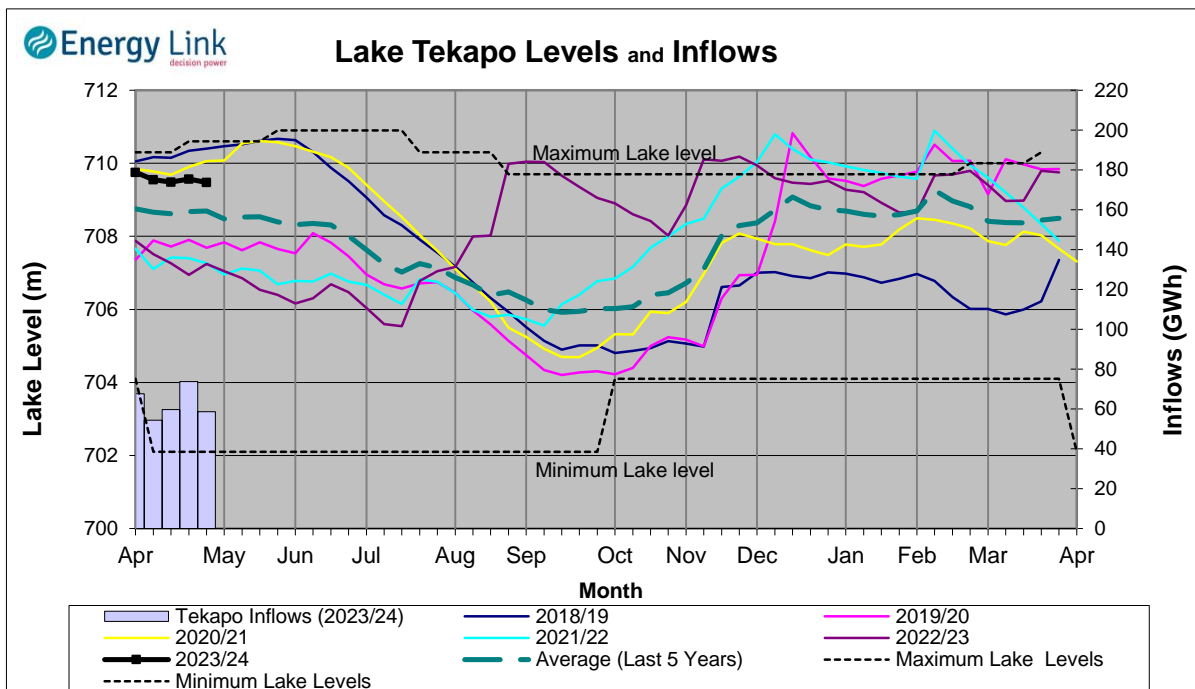


Lake Levels - Lake Taupo storage increased to 78.7% of nominal full at 449 GWh.

Inflows - Inflows increased 59.7% to 73 GWh.

Generation - Average generation increased 6.7% to 464.7 MW.

Tekapo



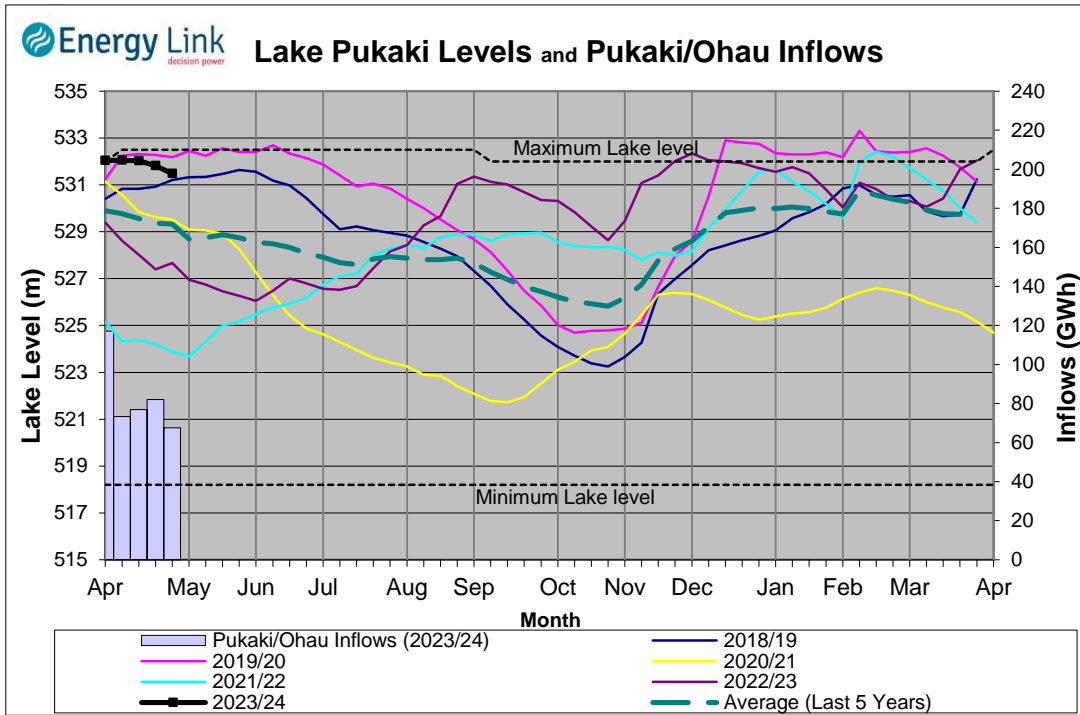
Lake Levels - Lake Tekapo ended the week 93% nominally full with storage falling to 744 GWh.

Inflows - Inflows into tekapo decreased 20.5% to 59 GWh.

Generation - Average Tekapo generation increased 5.6% to 146.9 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 92% nominally full with storage falling to 1707 GW

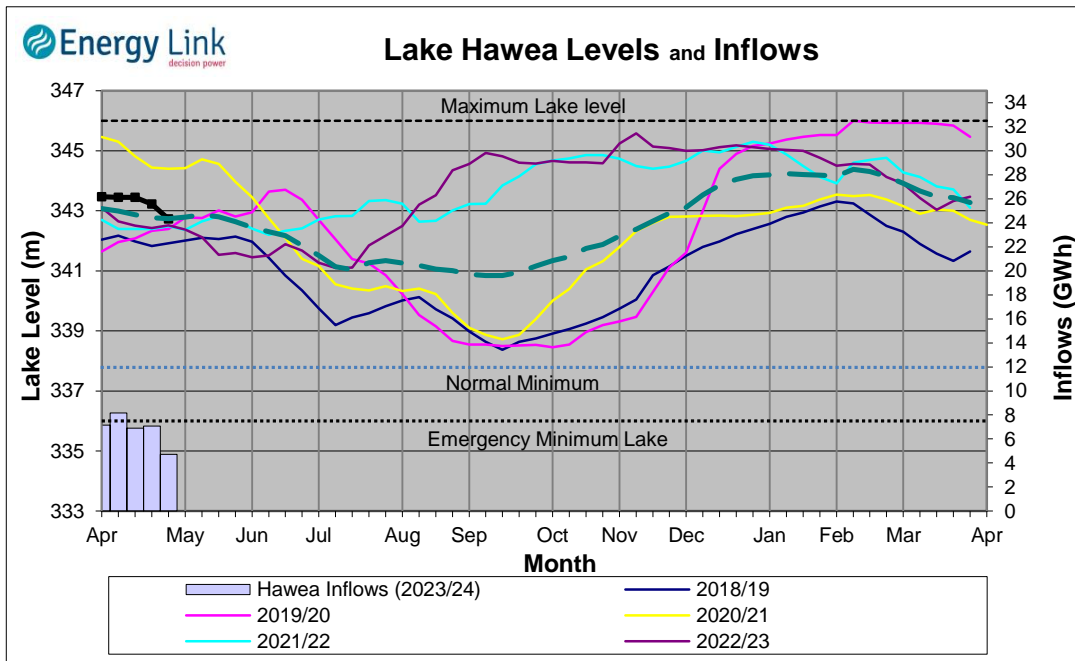
Inflows - Inflows into the Waitaki System decreased 17.6% to 68 GWh.

Generation - Average Waitaki generation increased 8.2% to 1097.1 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 21.6 cumecs while Waitaki River flows were higher than last week averaging 471.4 cumecs.

Clutha System



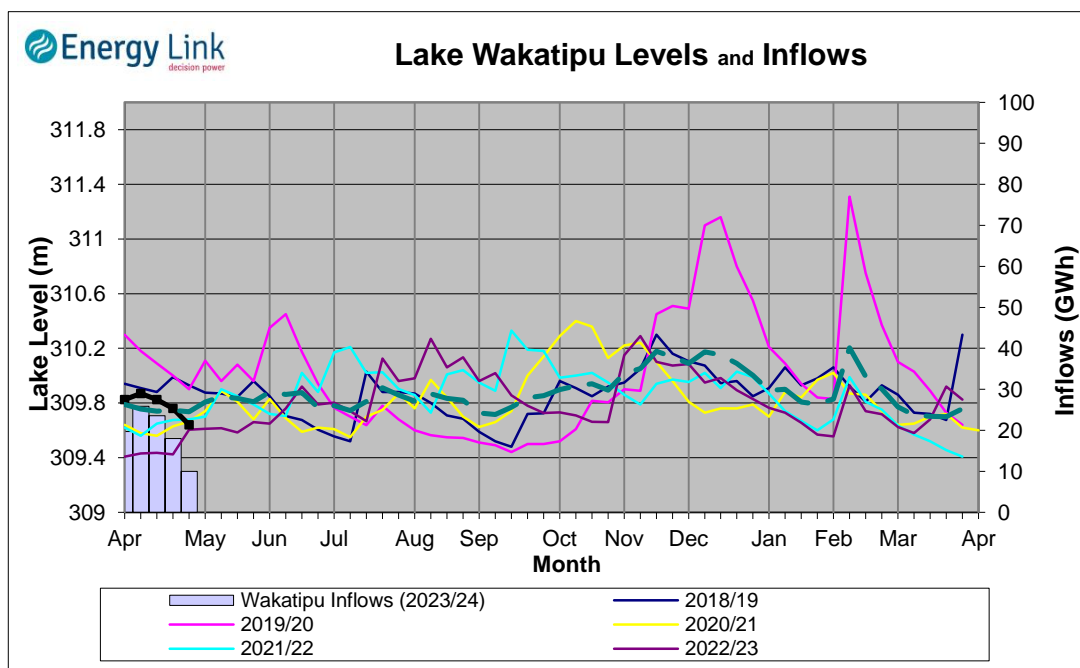
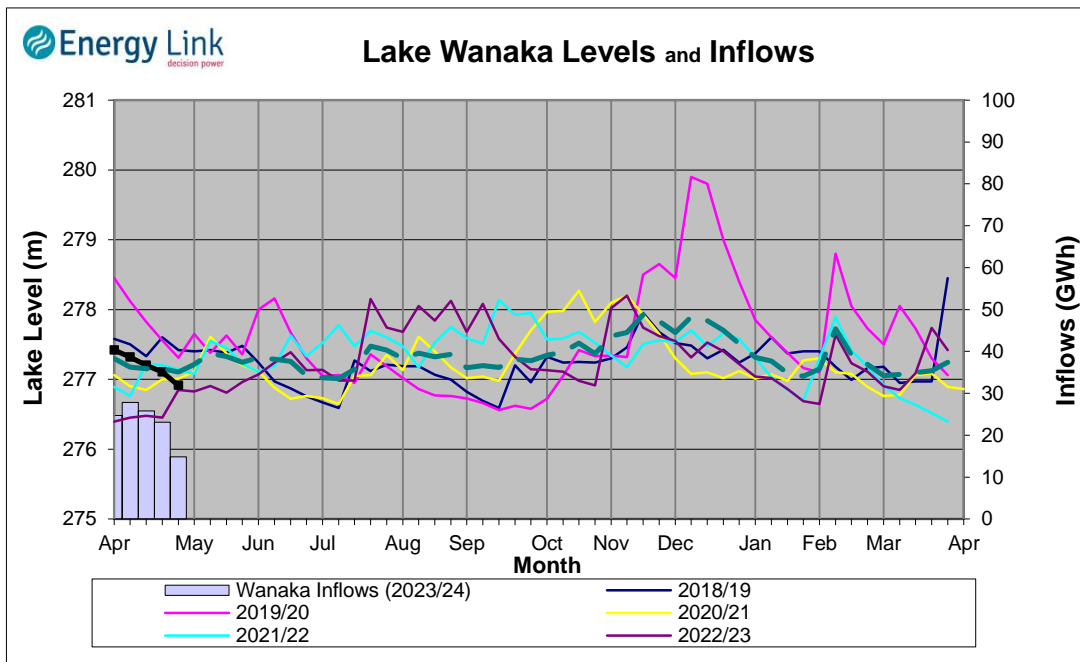
Lake Levels - Total storage for the Clutha System decreased 13.3% to 243 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 58.3%, 36.1% and 27.9% nominally full respectively.

Inflows - Total Inflows into the Clutha System 38.7% lower at 30 GWh.

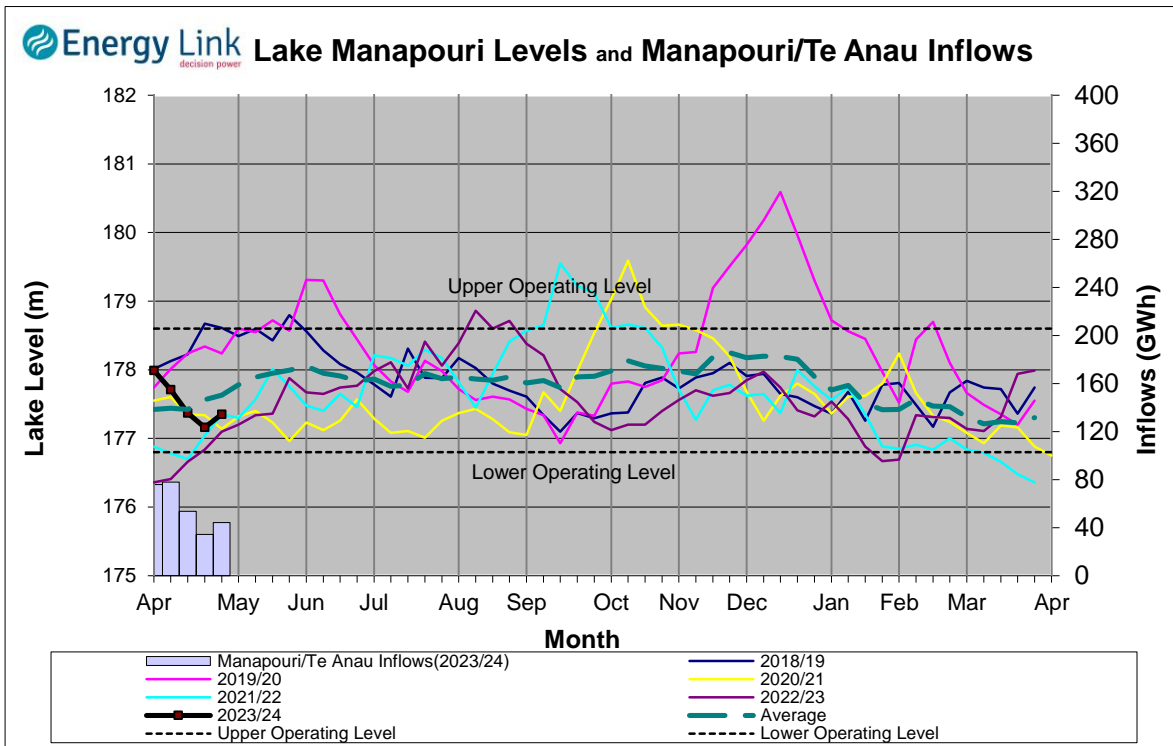
Generation - Average generation was 3.7% lower at 436 MW.

Hydro Spill - There was no estimated spill

River Flows - Total outflows from the lakes and Shotover River fell to 455.5 cumecs. This comprised of 149 cumecs from Lake Hawea, 157 cumecs from Lake Wanaka, 122 cumecs from Lake Wakatipu and 27 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 7.1% to 206 GWh with Lake Manapouri ending the week 54.1% nominally full and Lake Te Anau ending the week 42.9% nominally full.

Inflows - Total inflows into the Manapouri System increased 28.4% to 44 GWh.

Generation - Average generation was 29% lower at 356 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 19.9 cumecs.

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

