



Thursday, 04 May 2023

Issue: 1359

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)	2535	316	2851	436	3287
Storage Change (GWh)	-87	39	-48	-14	-62

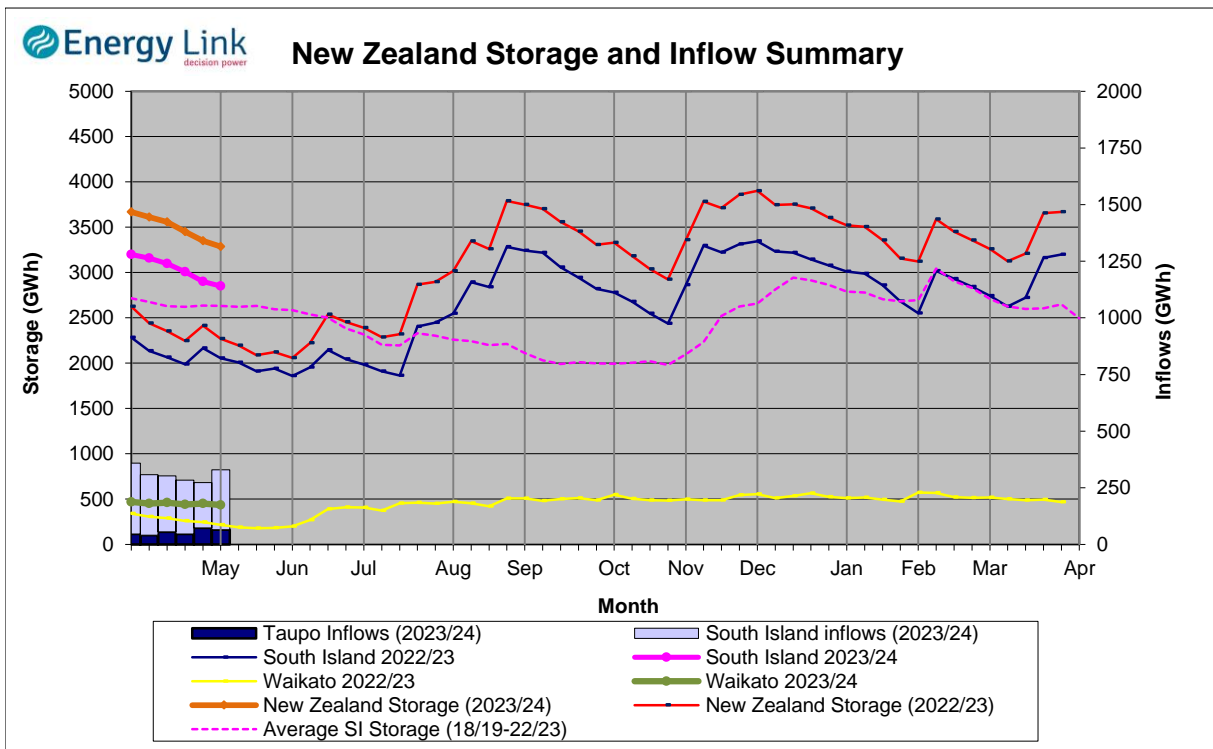
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	2766	436	3202

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 62.1 GWh over the last week. South Island controlled storage decreased 3.3% to 2535 GWh; South Island uncontrolled storage increased 14.1% to 316 GWh; with Taupo storage decreasing 3.1% to 436 GWh.



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Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	231	237	2384	436	3287
Last Week	206	243	2451	449	3349
% Change	12.0%	-2.4%	-2.7%	-3.1%	-1.9%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	83	60	121	65	329
Last Week	44	30	126	73	273
% Change	89.1%	104.1%	-4.3%	-11.2%	20.7%

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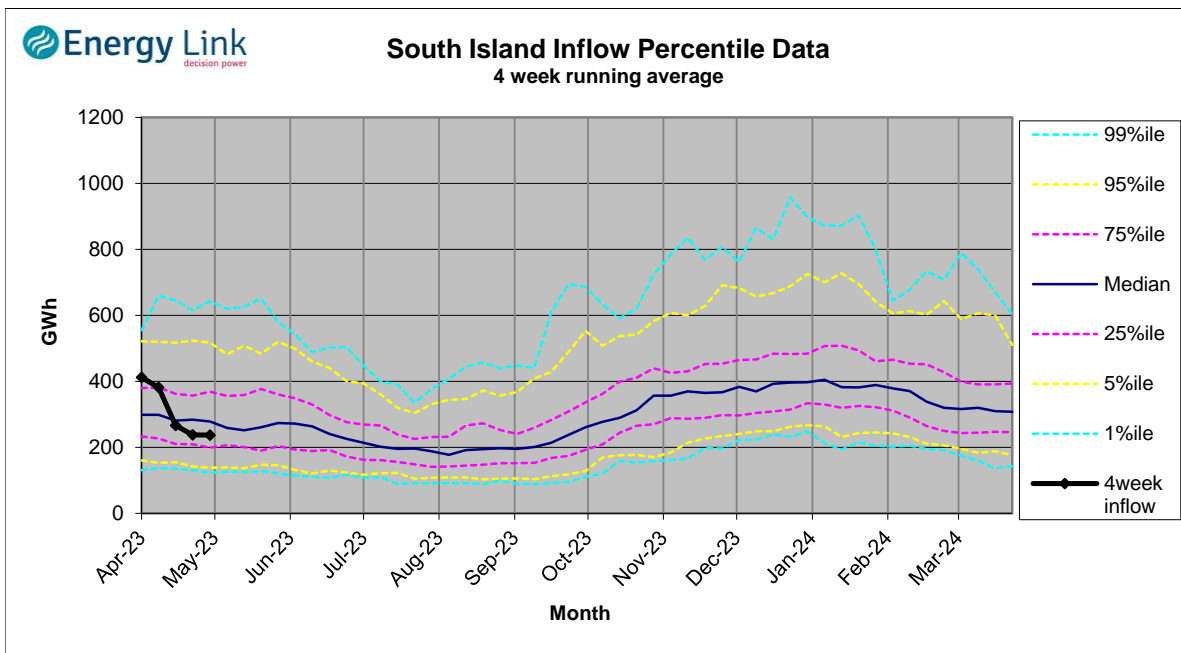
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.54	99	14	-6
	Te Anau	201.74	132		
Clutha	Wakatipu	309.68	32	99	-23
	Wanaka	277.14	53	131	-26
	Hawea	342.18	152	195	46
Waitaki	Tekapo	709.23	716		
	Pukaki	531.19	1667		
Waikato	Taupo	356.92	436		

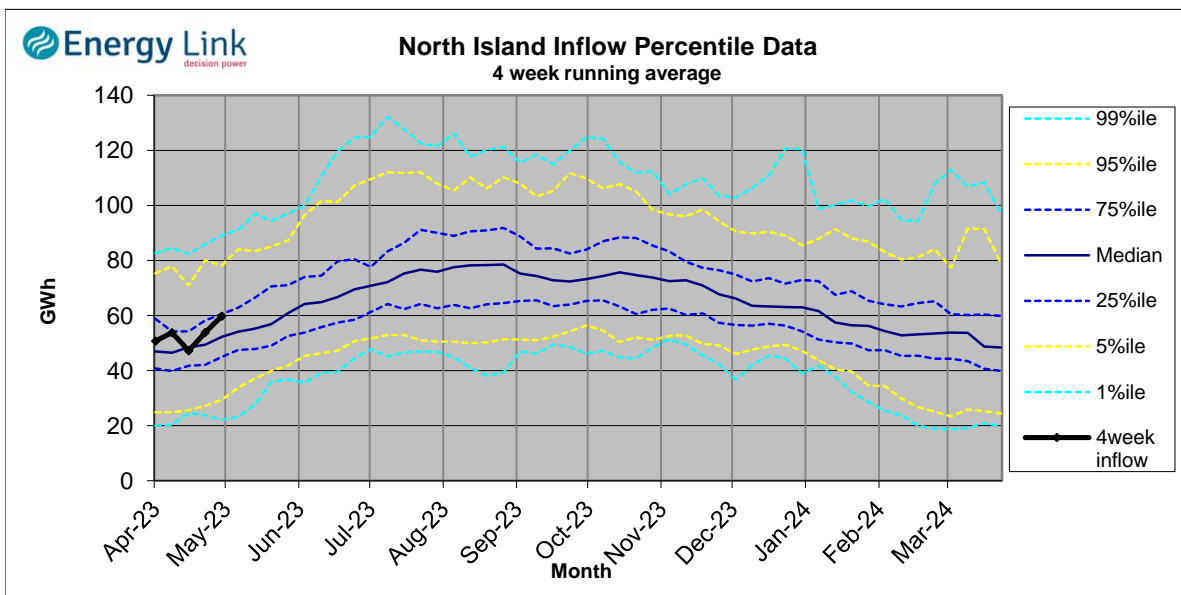
Inflow Summary

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.

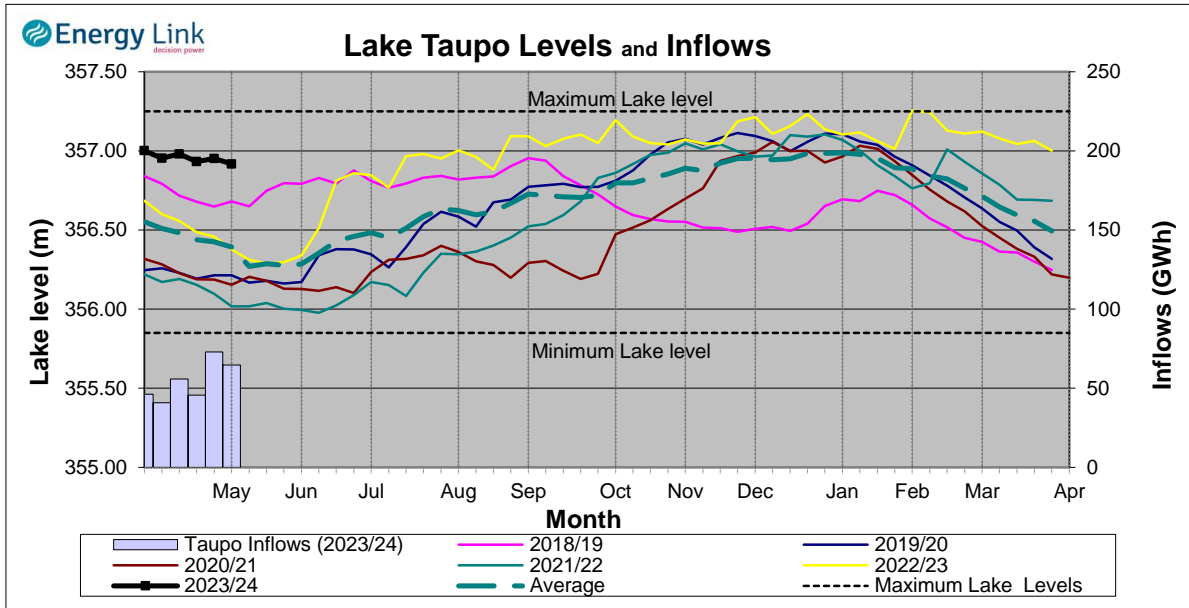
South Island Inflows - The past four weeks of S. I. inflows rank as the 33rd driest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 25th wettest on record.



Waikato System

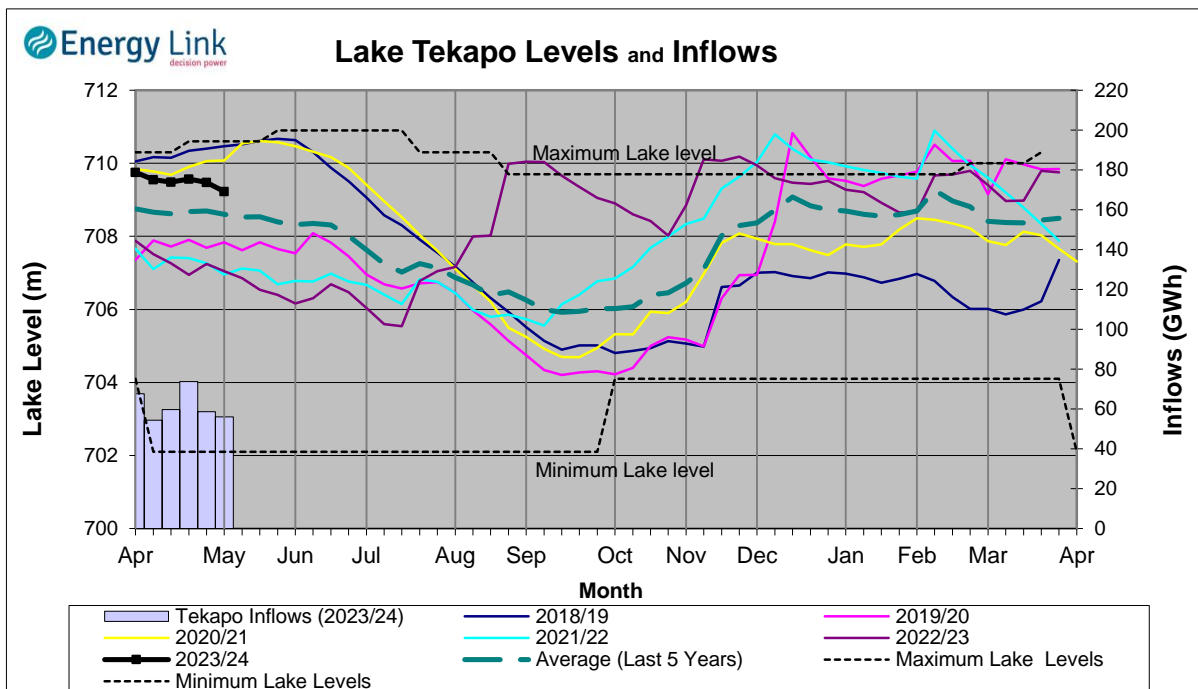


Lake Levels - Lake Taupo storage fell to 76.3% of nominal full at 436 GWh.

Inflows - Inflows decreased 11.2% to 65 GWh.

Generation - Average generation increased 13.2% to 526 MW.

Tekapo



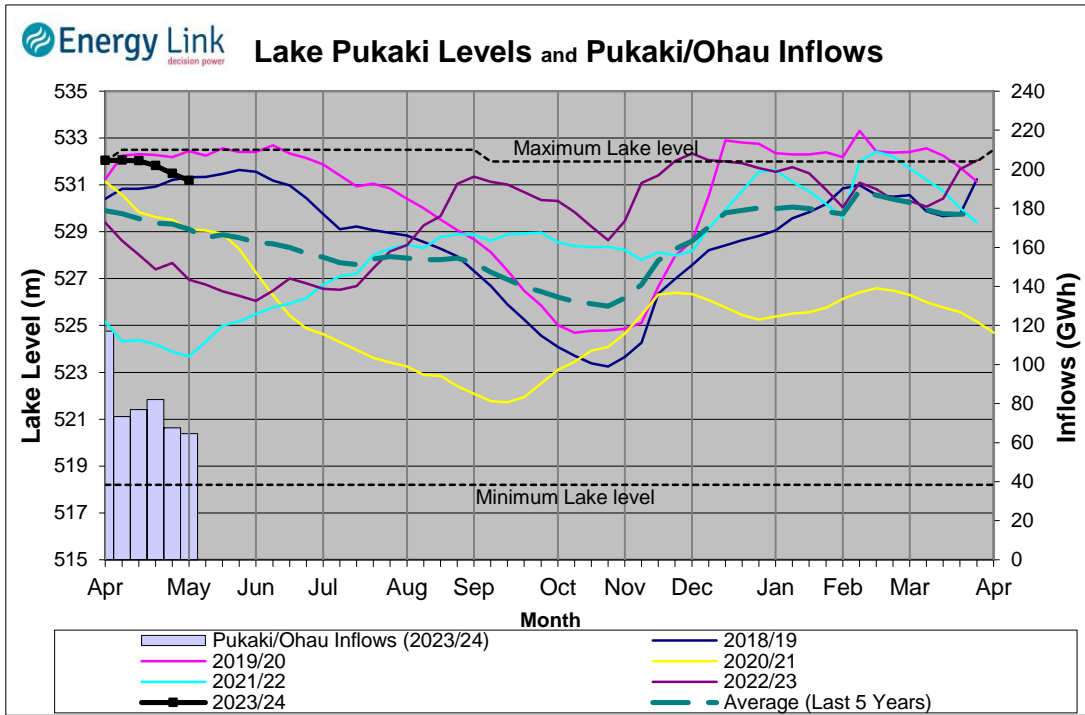
Lake Levels - Lake Tekapo ended the week 90% nominally full with storage falling to 716 GWh.

Inflows - Inflows into tekapo decreased 4.4% to 56 GWh.

Generation - Average Tekapo generation increased 20.7% to 177.4 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 90% nominally full with storage falling to 1667 GW

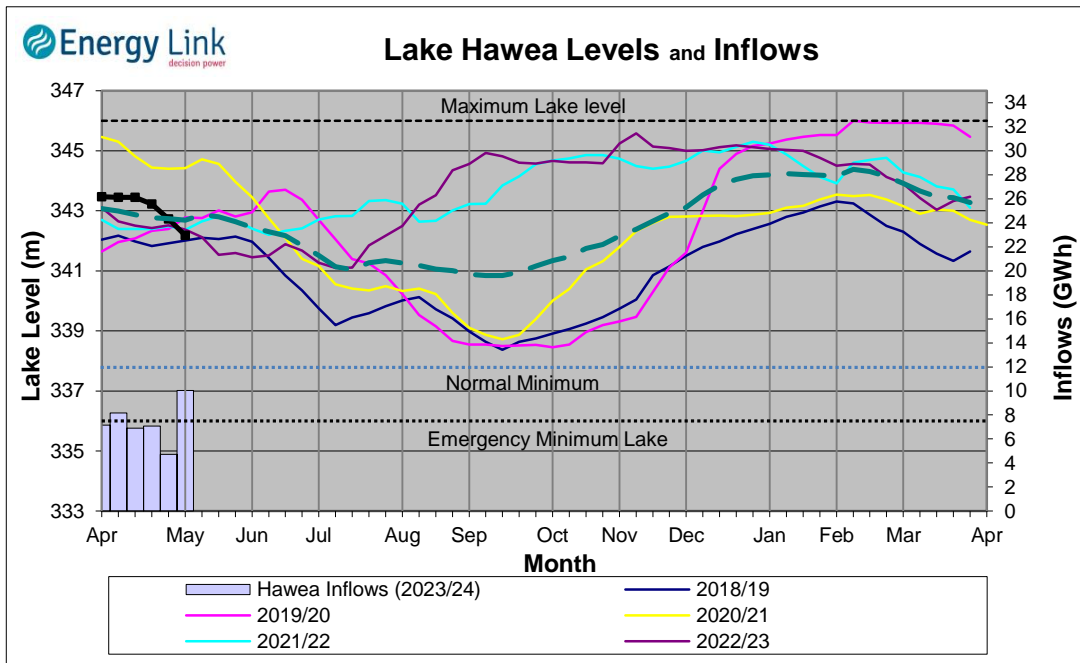
Inflows - Inflows into the Waitaki System decreased 4.3% to 65 GWh.

Generation - Average Waitaki generation decreased 0.9% to 1087.7 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 19.5 cumecs while Waitaki River flows were lower than last week averaging 454.1 cumecs.

Clutha System



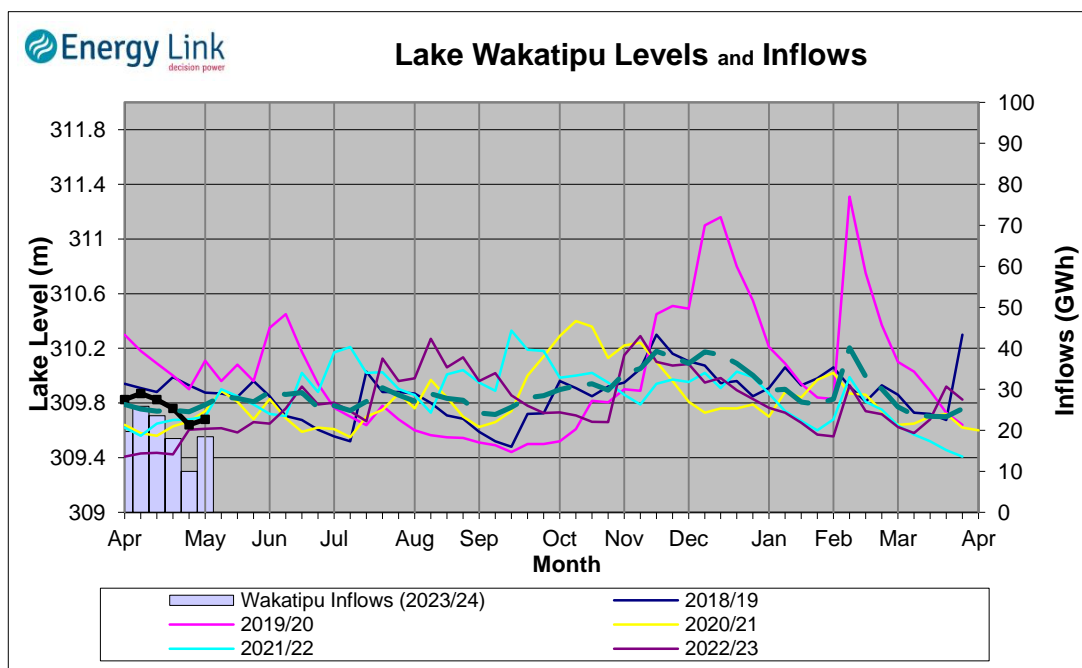
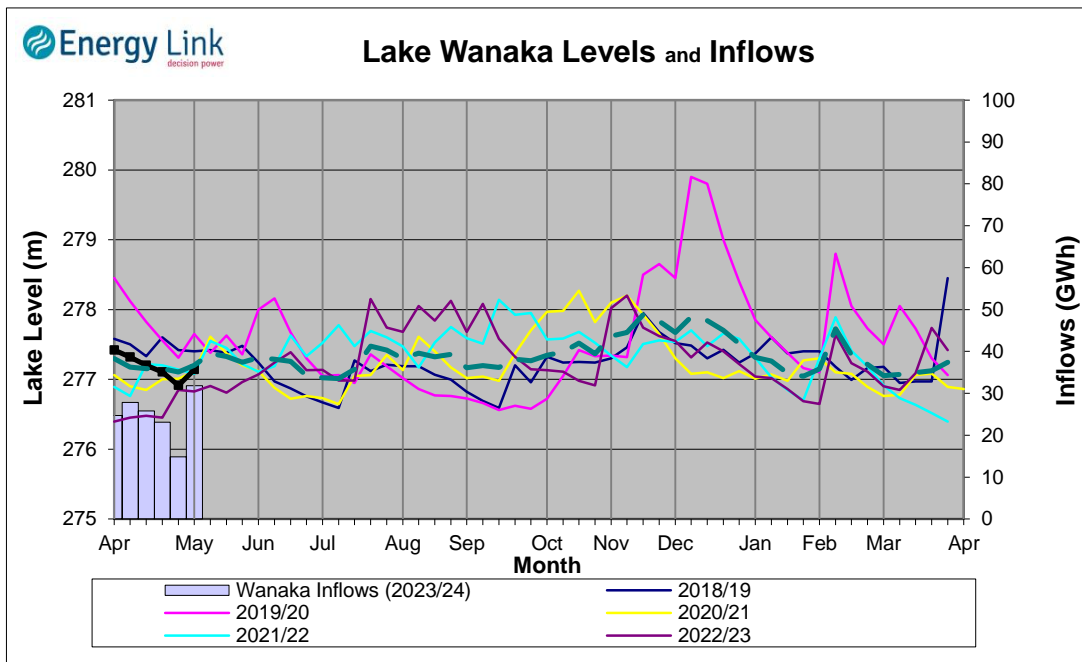
Lake Levels - Total storage for the Clutha System decreased 2.4% to 237 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 51.4%, 46% and 30.7% nominally full respectively.

Inflows - Total Inflows into the Clutha System 104.1% higher at 60 GWh.

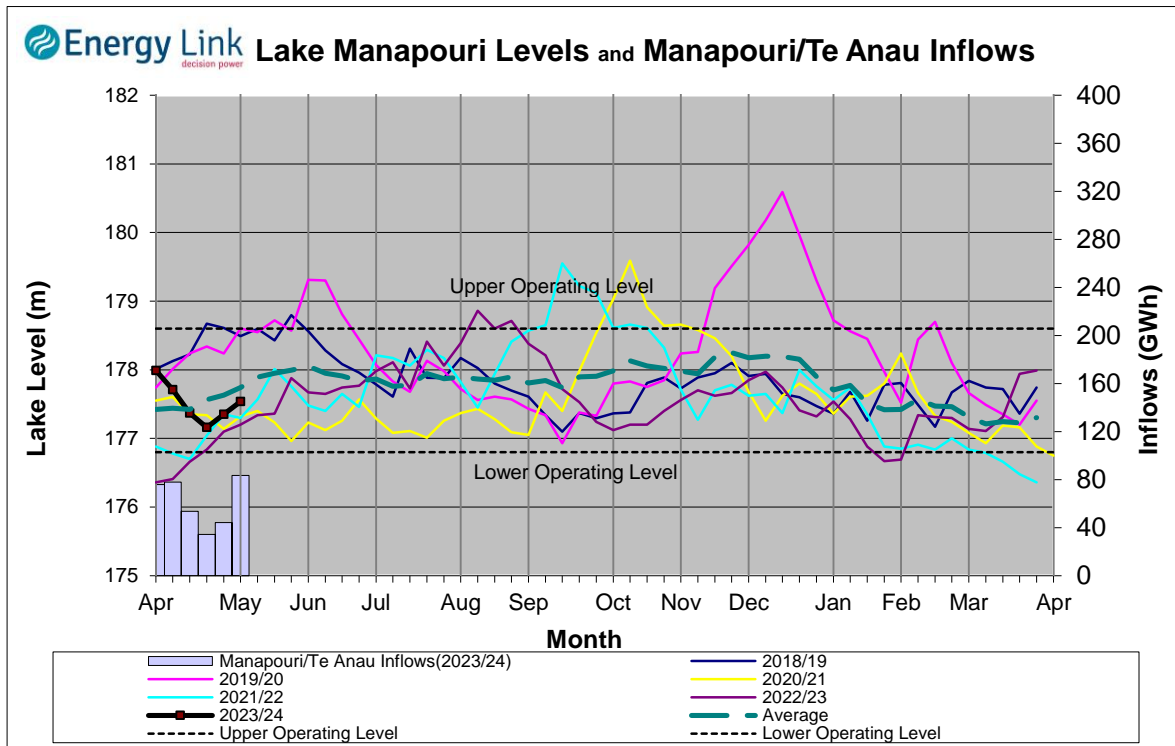
Generation - Average generation was 0.7% lower at 433 MW.

Hydro Spill - There was no estimated spill

River Flows - Total outflows from the lakes and Shotover River fell to 456.3 cumecs. This comprised of 195 cumecs from Lake Hawea, 131 cumecs from Lake Wanaka, 99 cumecs from Lake Wakatipu and 32 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System increased by 12% to 231 GWh with Lake Manapouri ending the week 61% nominally full and Lake Te Anau ending the week 47.8% nominally full.

Inflows - Total inflows into the Manapouri System increased 89.1% to 83 GWh.

Generation - Average generation was 1.8% lower at 349 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 13.9 cumecs.

Operating Range - Lake Manapouri is operating in the middle of its 'Main operating range' while Lake Te Anau is operating in the lower end of its 'Main operating range'.

