



HydroWatch

Thursday, 13 April 2023
Issue: 1356
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)	2727	371	3098	461	3558
Storage Change (GWh)	-10	-53	-63	11	-52

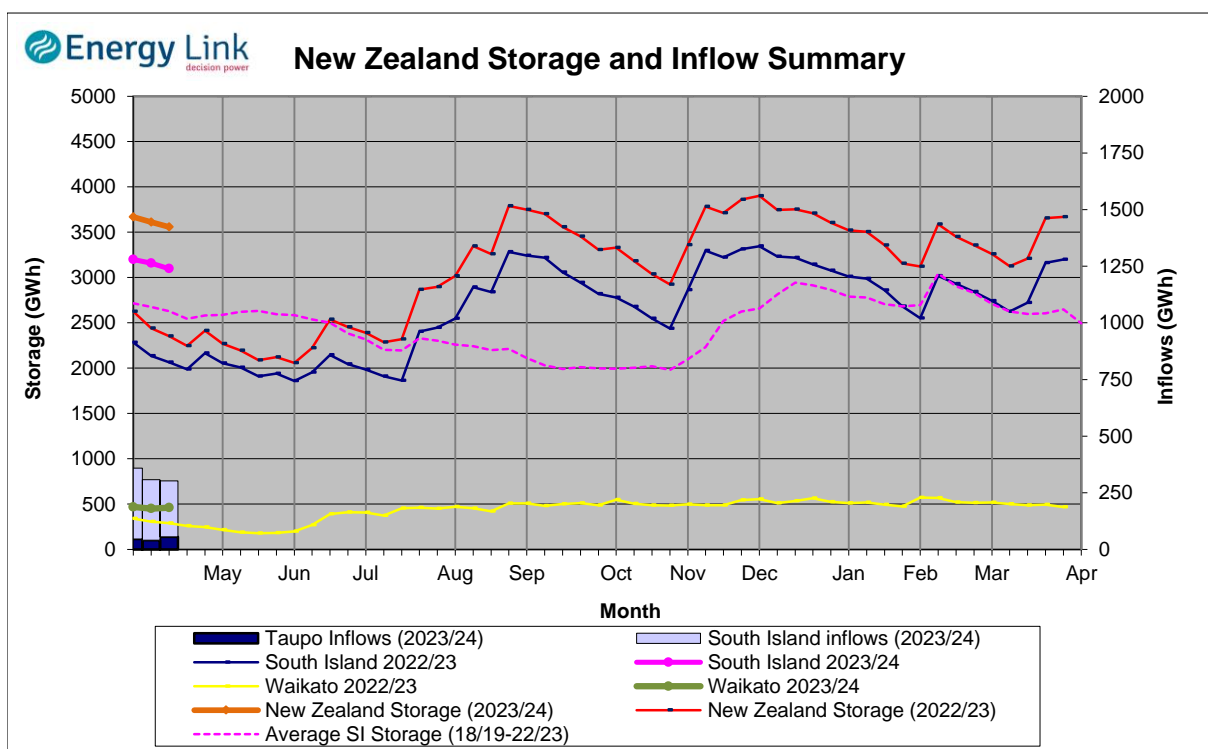
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	2998	461	3459

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 52.5 GWh over the last week. South Island controlled storage decreased 0.4% to 2727 GWh; South Island uncontrolled storage decreased 12.6% to 371 GWh; with Taupo storage increasing 2.4% to 461 GWh.



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	Manapouri	Clutha	Waitaki	Waikato		NZ
Storage (GWh)						
This Week	272	299	2527	461		3558
Last Week	316	308	2537	450		3611
% Change	-14.0%	-2.9%	-0.4%	2.4%		-1.5%
Inflow (GWh)						
This Week	54	56	137	56		302
Last Week	78	62	128	41		308
% Change	-31.3%	-9.0%	6.9%	36.4%		-2.0%

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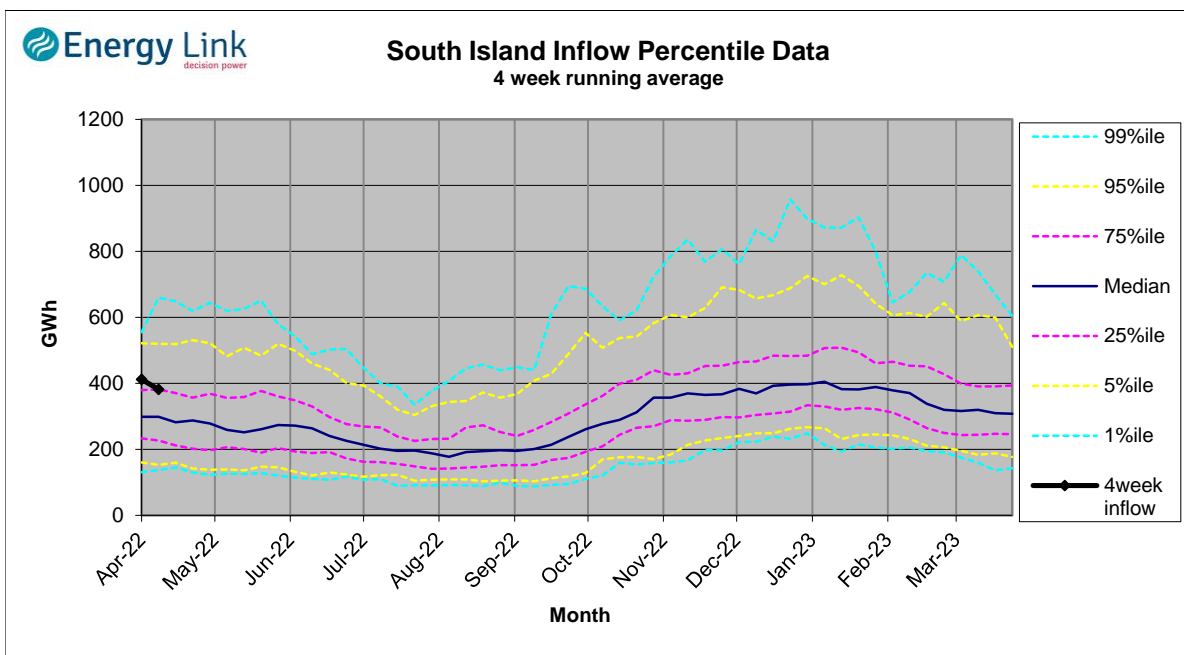
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.37	89	15	-2
	Te Anau	202.08	183		
Clutha	Wakatipu	309.83	44	172	29
	Wanaka	277.20	56	203	-8
	Hawea	343.45	199	44	-14
Waitaki	Tekapo	709.49	745		
	Pukaki	532.03	1783		
Waikato	Taupo	356.98	461		

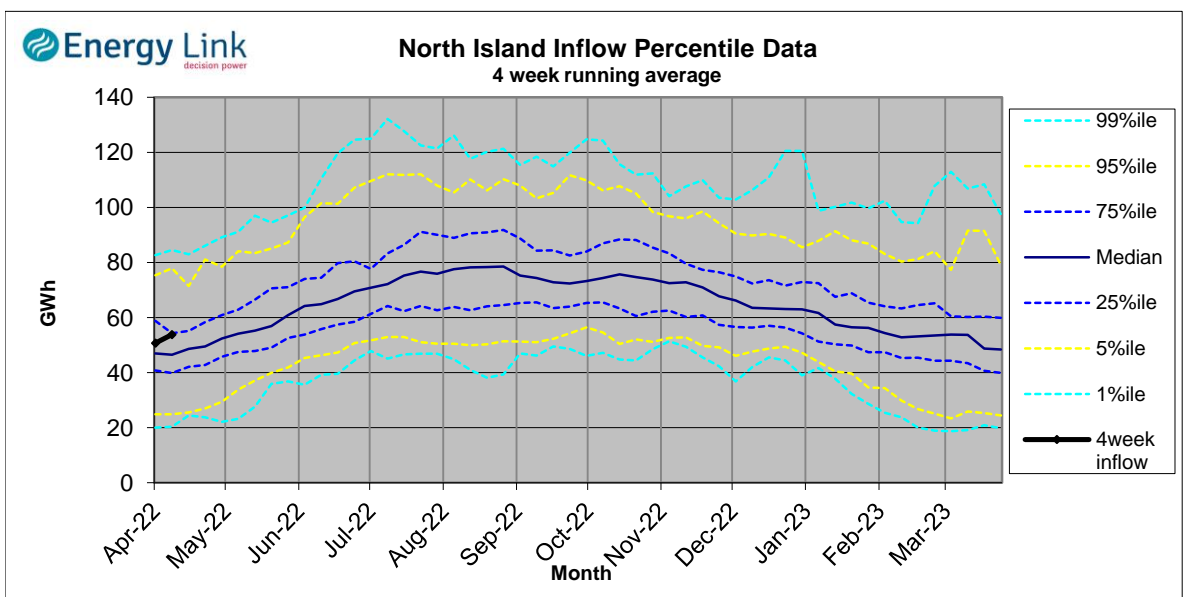
Inflow Summary

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.

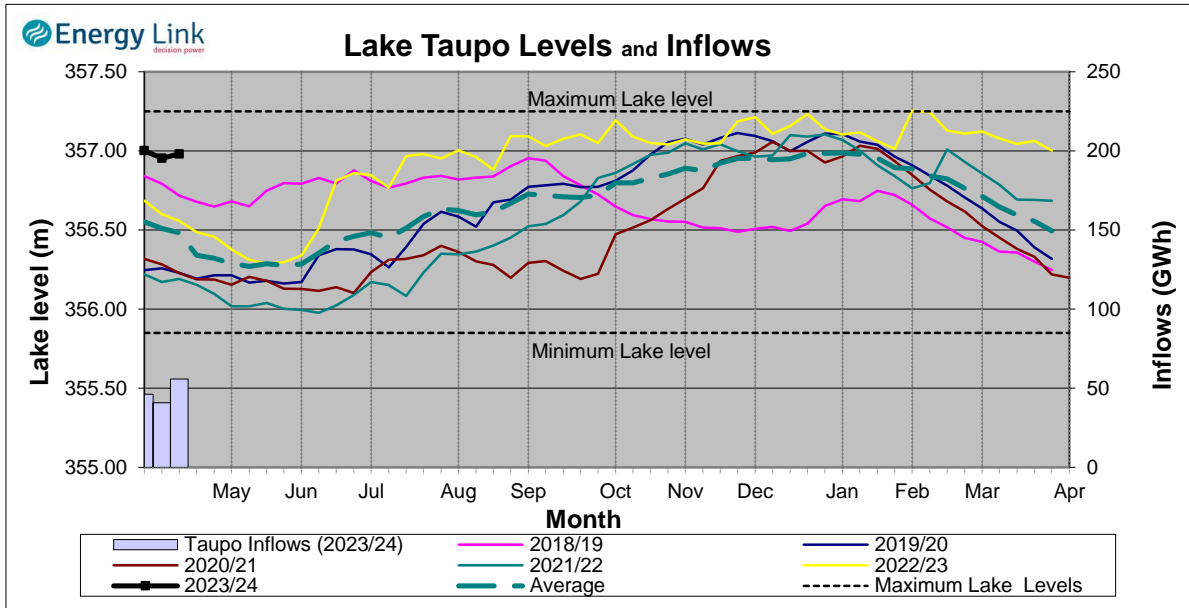
South Island Inflows - #N/A



North Island Inflows - #N/A



Waikato System

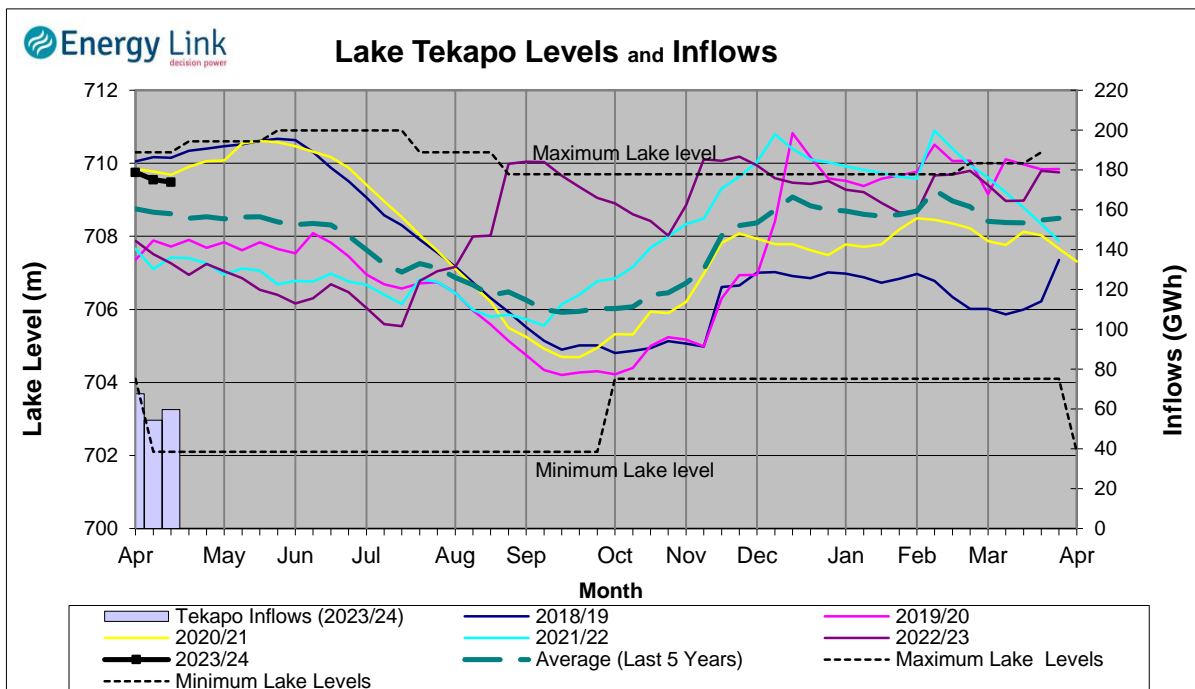


Lake Levels - Lake Taupo storage increased to 80.7% of nominal full at 461 GWh.

Inflows - Inflows increased 36.4% to 56 GWh.

Generation - Average generation decreased 19.5% to 364.9 MW.

Tekapo



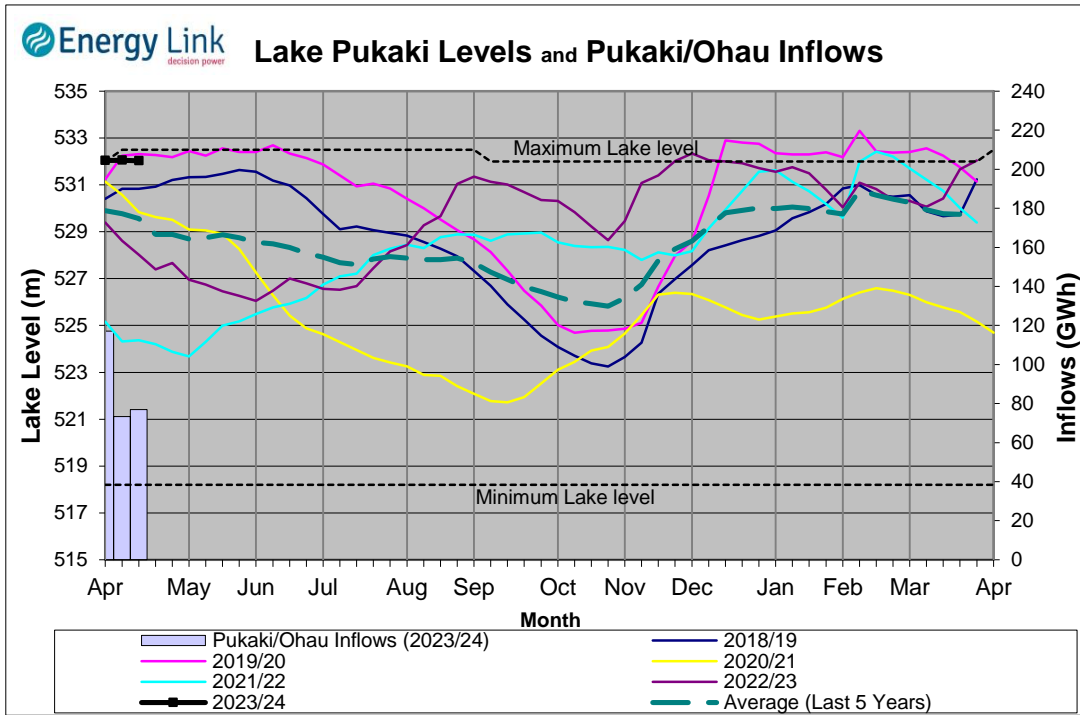
Lake Levels - Lake Tekapo ended the week 94% nominally full with storage falling to 745 GWh.

Inflows - Inflows into tekapo increased 9.8% to 60 GWh.

Generation - Average Tekapo generation decreased 13% to 142.7 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 96% nominally full with storage falling to 1783 GW

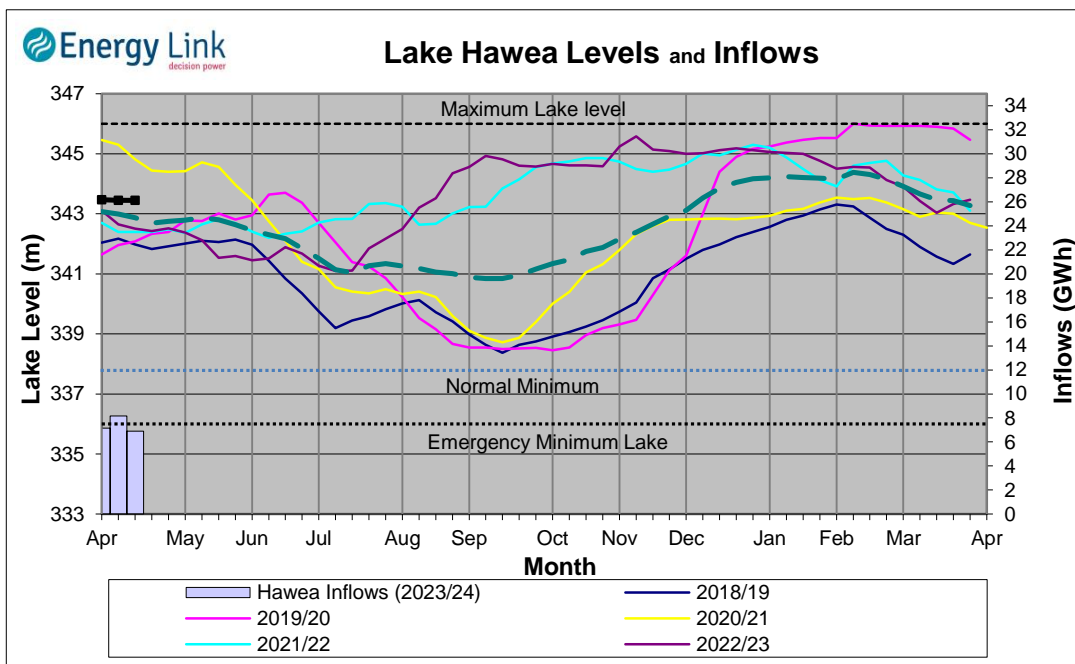
Inflows - Inflows into the Waitaki System increased 4.8% to 77 GWh.

Generation - Average Waitaki generation increased 1.5% to 838.5 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River increased to 22.8 cumecs while Waitaki River flows were lower than last week averaging 353.7 cumecs.

Clutha System



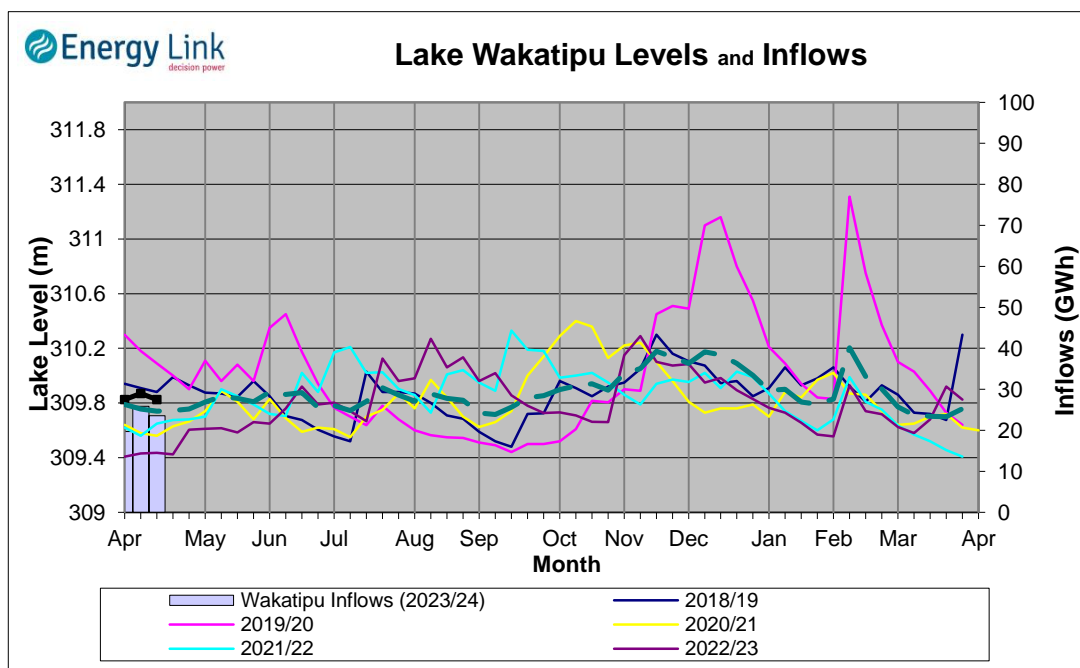
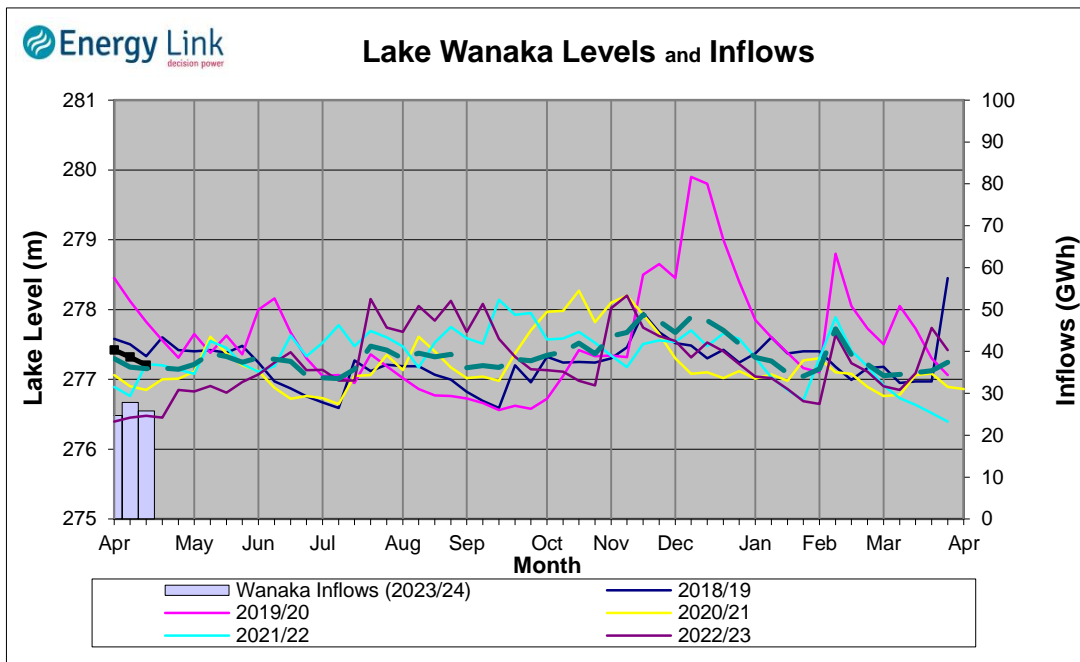
Lake Levels - Total storage for the Clutha System decreased 2.9% to 299 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 67.5%, 48.7% and 41.1% nominally full respectively.

Inflows - Total Inflows into the Clutha System 9% lower at 56 GWh.

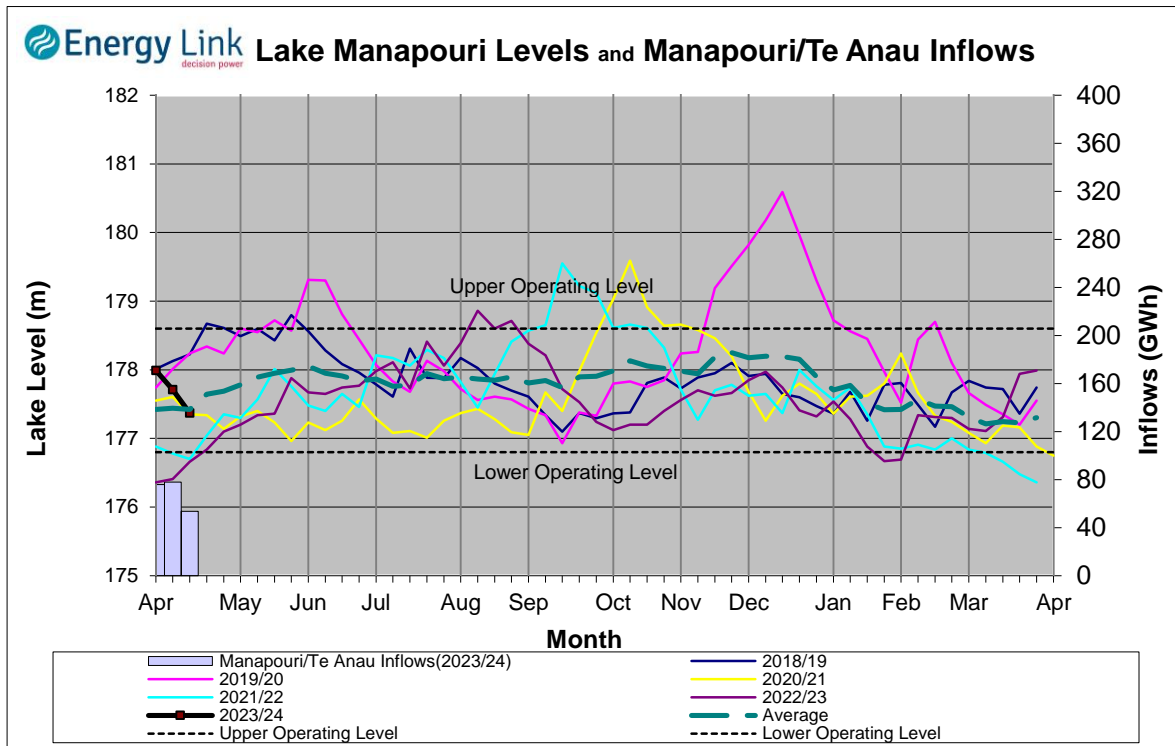
Generation - Average generation was 5.5% higher at 450 MW.

Hydro Spill - There was no estimated spill

River Flows - Total outflows from the lakes and Shotover River increased to 461.3 cumecs. This comprised of 44 cumecs from Lake Hawea, 203 cumecs from Lake Wanaka, 172 cumecs from Lake Wakatipu and 43 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 14% to 272 GWh with Lake Manapouri ending the week 54.8% nominally full and Lake Te Anau ending the week 66.3% nominally full.

Inflows - Total inflows into the Manapouri System decreased 31.3% to 54 GWh.

Generation - Average generation was 4.9% higher at 582 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 14.7 cumecs.

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

