



Thursday, 07 September 2023

Issue: 1377

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)	1305	302	1606	215	1821
Storage Change (GWh)	-123	-22	-145	8	-137

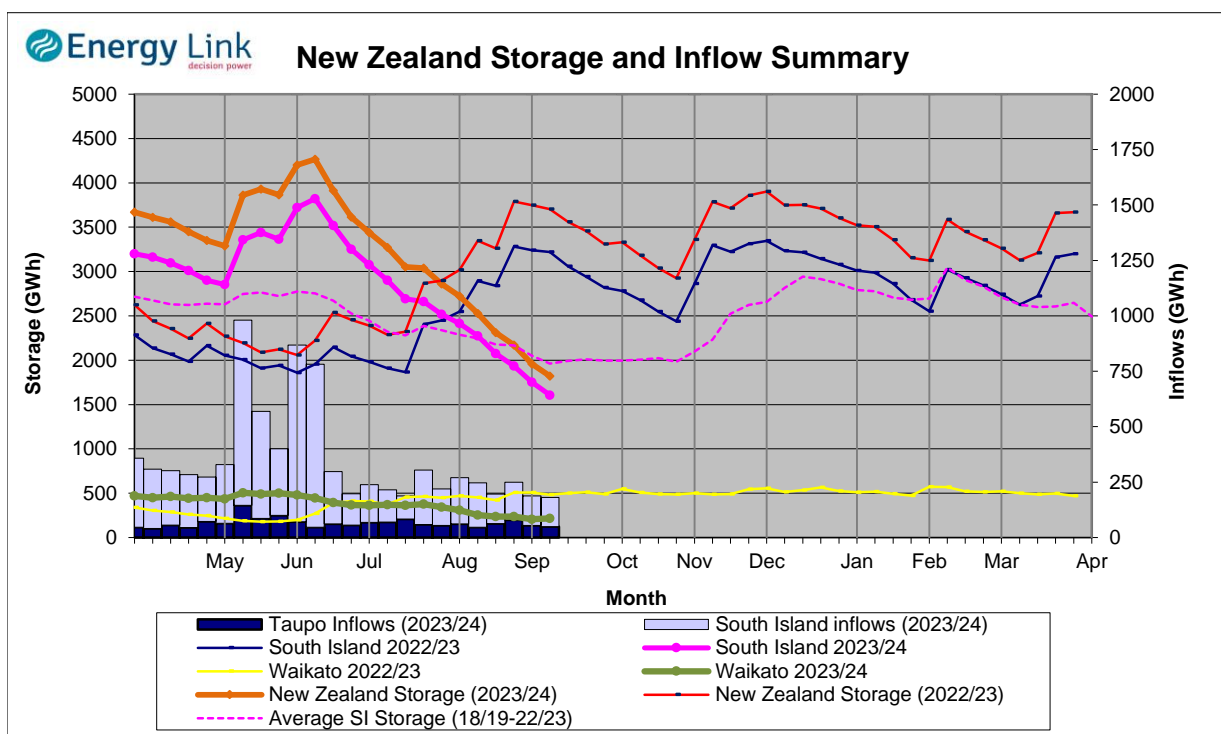
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	1564	215	1779

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 136.8 GWh over the last week. South Island controlled storage decreased 8.6% to 1305 GWh; South Island uncontrolled storage decreased 6.7% to 302 GWh; with Taupo storage increasing 3.7% to 215 GWh.



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Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	259	67	1280	215	1821
Last Week	283	68	1400	207	1958
% Change	-8.2%	-1.9%	-8.6%	3.7%	-7.0%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	65	30	38	49	181
Last Week	67	28	38	55	188
% Change	-3.4%	7.8%	-1.4%	-11.2%	-3.6%

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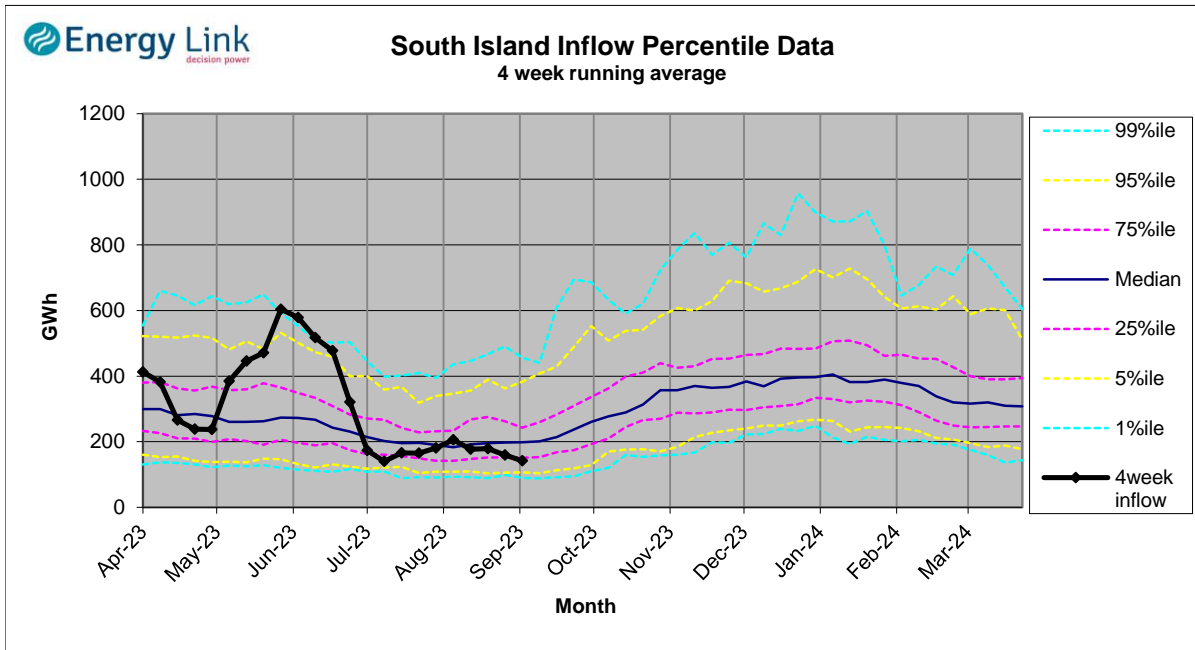
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.19	78	13	0
	Te Anau	202.07	181		
Clutha	Wakatipu	309.48	17	68	-8
	Wanaka	276.58	25	89	
	Hawea	338.72	24	42	
Waitaki	Tekapo	705.37	313		-10
	Pukaki	525.94	967		
Waikato	Taupo	356.38	215		-99

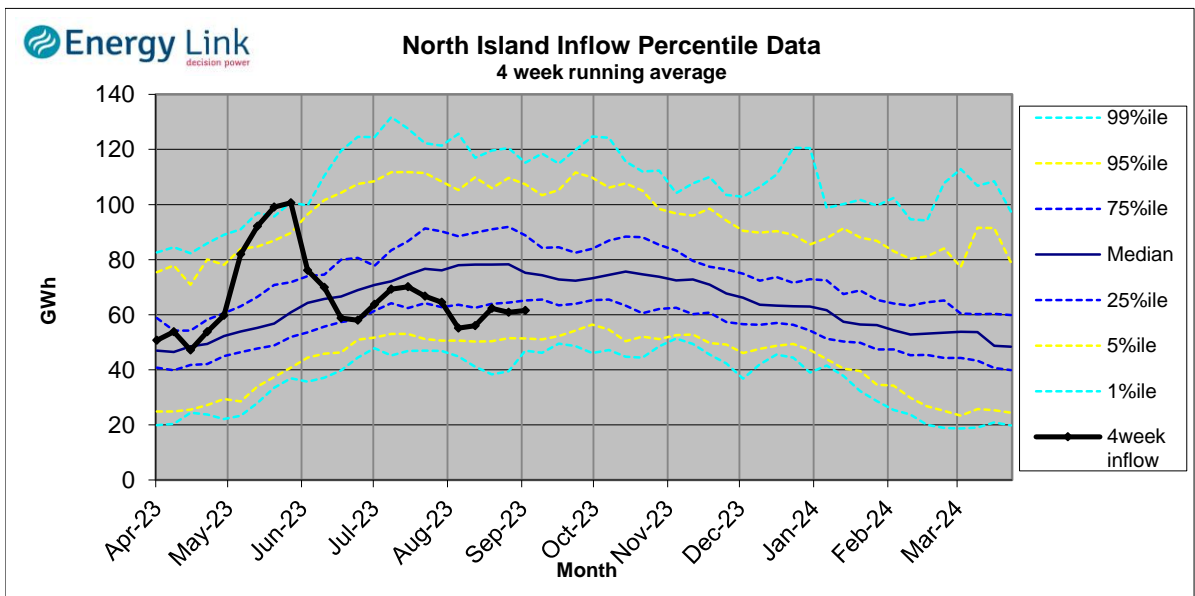
Inflow Summary

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.

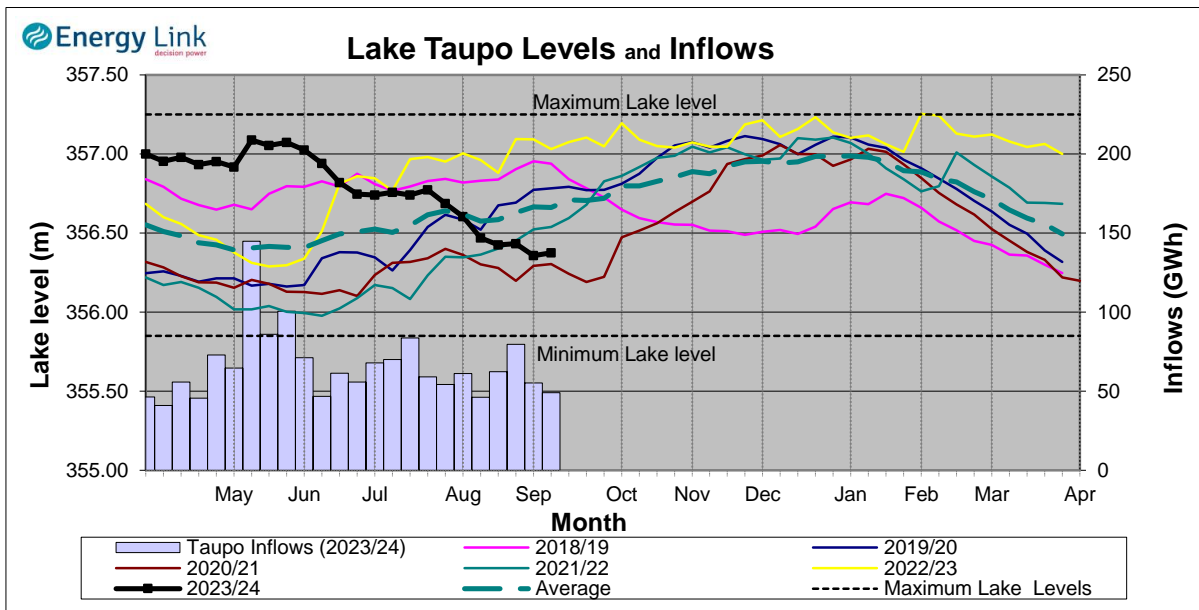
South Island Inflows - The past four weeks of S. I. inflows rank as the 19th driest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 18th driest on record.



Waikato System

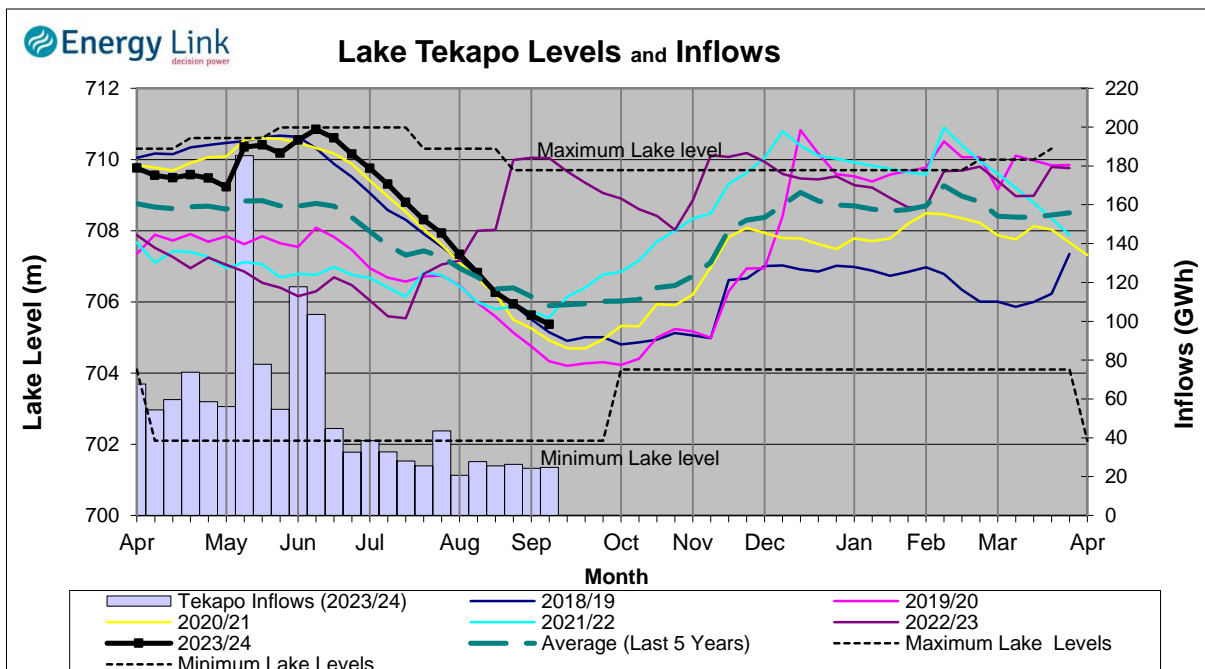


Lake Levels - Lake Taupo storage increased to 37.6% of nominal full at 215 GWh.

Inflows - Inflows decreased 11.2% to 49 GWh.

Generation - Average generation decreased 34.3% to 355.2 MW.

Tekapo



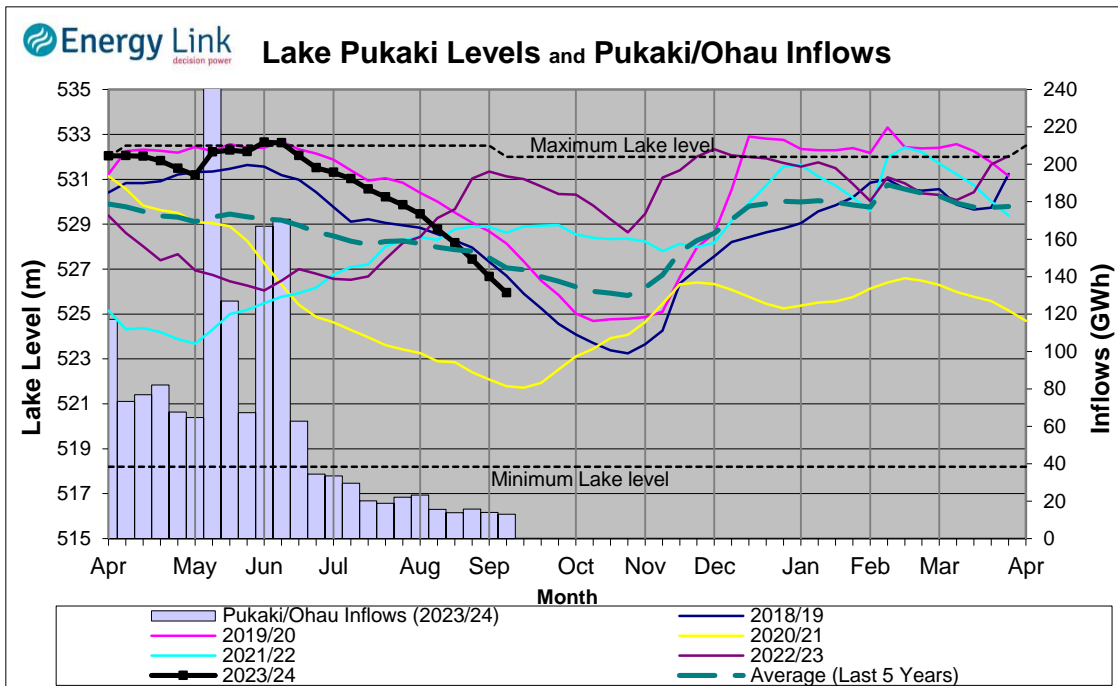
Lake Levels - Lake Tekapo ended the week 39% nominally full with storage falling to 313 GWh.

Inflows - Inflows into tekapo increased 2.1% to 25 GWh.

Generation - Average Tekapo generation decreased 13.8% to 101.8 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 52% nominally full with storage falling to 967 GWh.

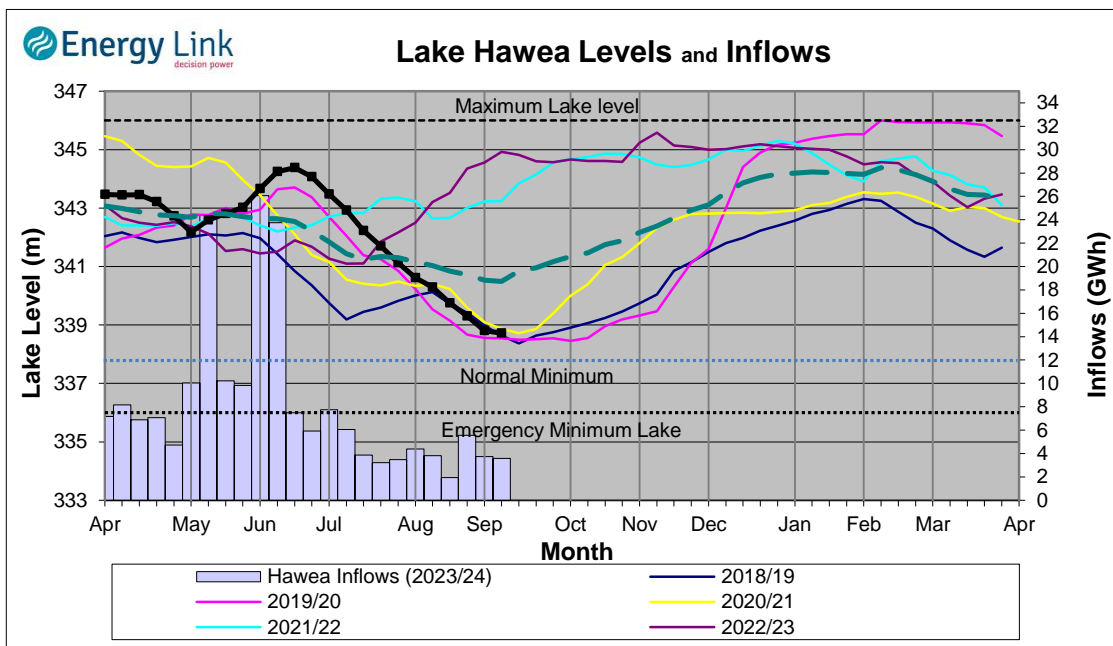
Inflows - Inflows into the Waitaki System decreased 7.4% to 13 GWh.

Generation - Average Waitaki generation decreased 3.6% to 948.2 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 12.2 cumecs while Waitaki River flows were higher than last week averaging 407.6 cumecs.

Clutha System



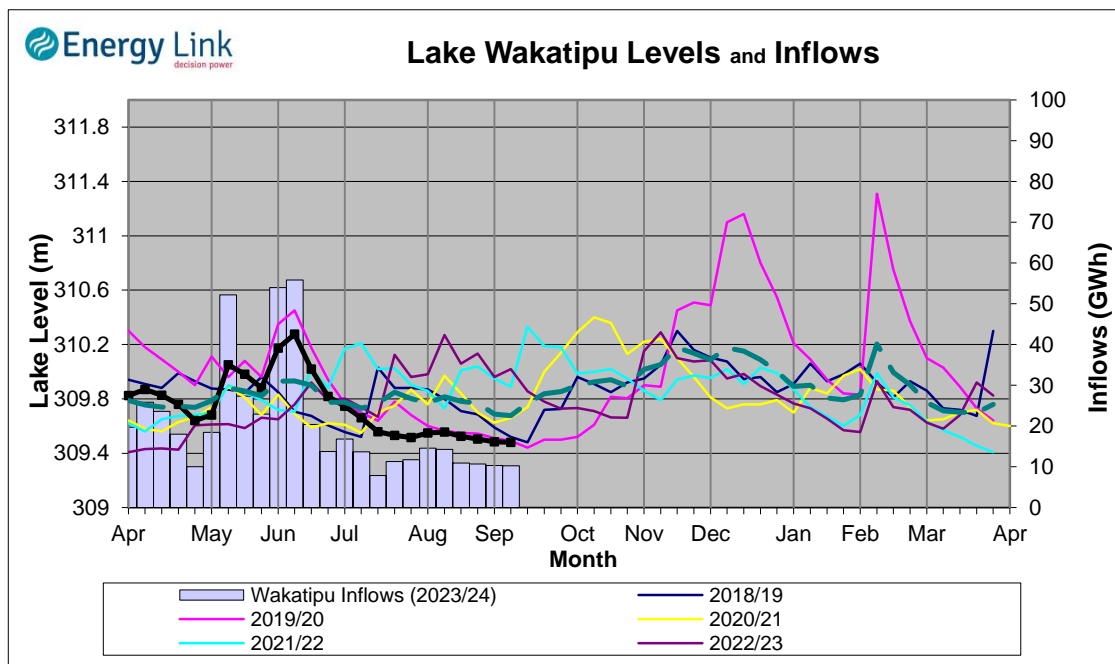
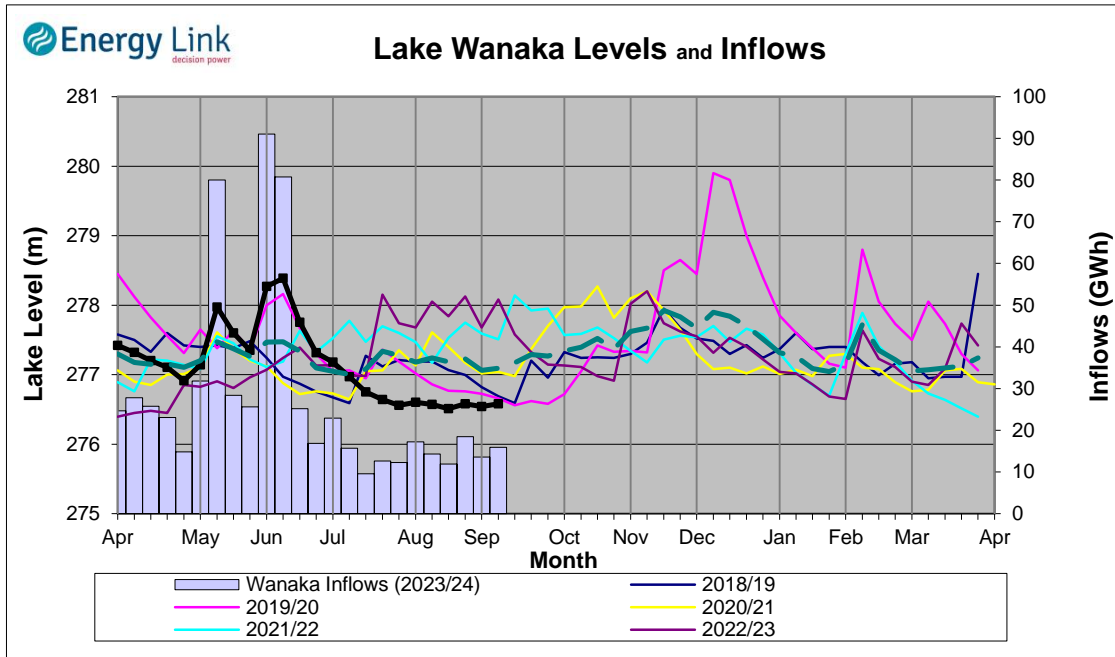
Lake Levels - Total storage for the Clutha System decreased 1.9% to 67 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 8.3%, 21.7% and 16.4% nominally full respectively.

Inflows - Total Inflows into the Clutha System 7.8% higher at 30 GWh.

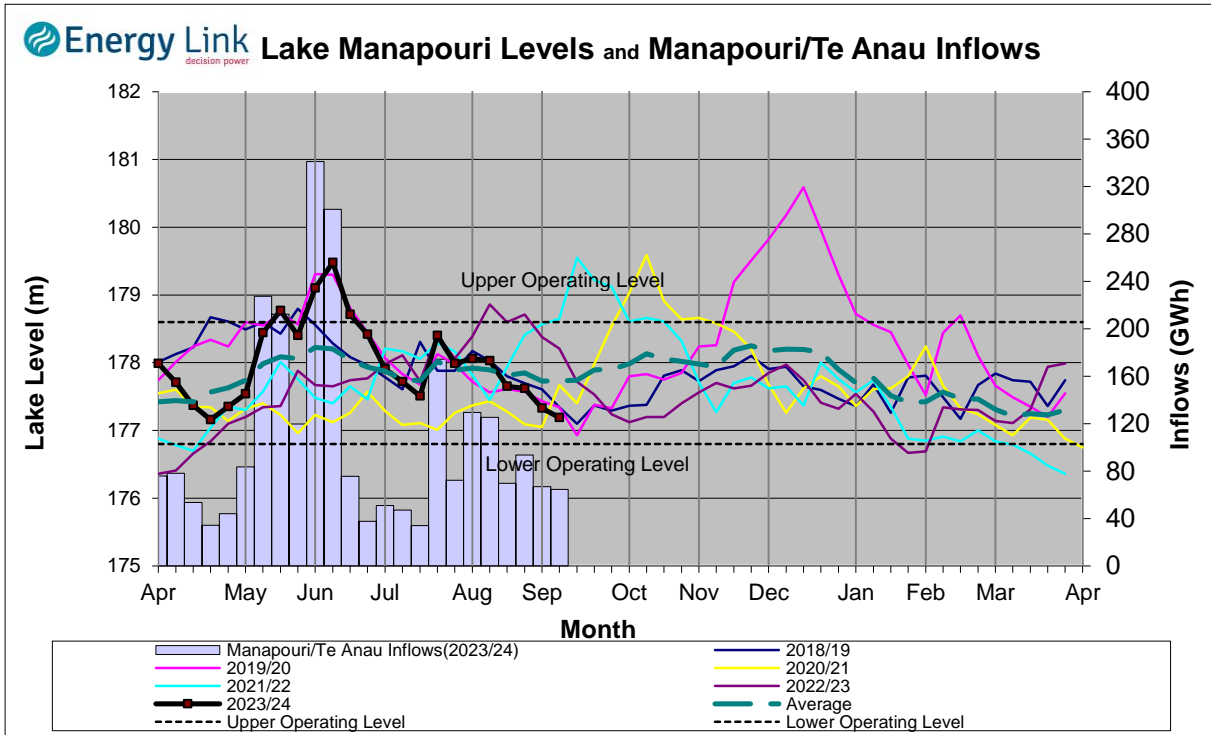
Generation - Average generation was 28.3% lower at 244 MW.

Hydro Spill - There was no estimated spill

River Flows - Total outflows from the lakes and Shotover River fell to 228.2 cumecs. This comprised of 42 cumecs from Lake Hawea, 89 cumecs from Lake Wanaka, 68 cumecs from Lake Wakatipu and 29 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 8.2% to 259 GWh with Lake Manapouri ending the week 48.2% nominally full and Lake Te Anau ending the week 65.8% nominally full.

Inflows - Total inflows into the Manapouri System decreased 3.4% to 65 GWh.

Generation - Average generation was 8.6% lower at 523 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 12.7 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'.

