



Thursday, 31 August 2023

Issue: 1376

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)	1428	323	1751	207	1958
Storage Change (GWh)	-151	-33	-184	-31	-215

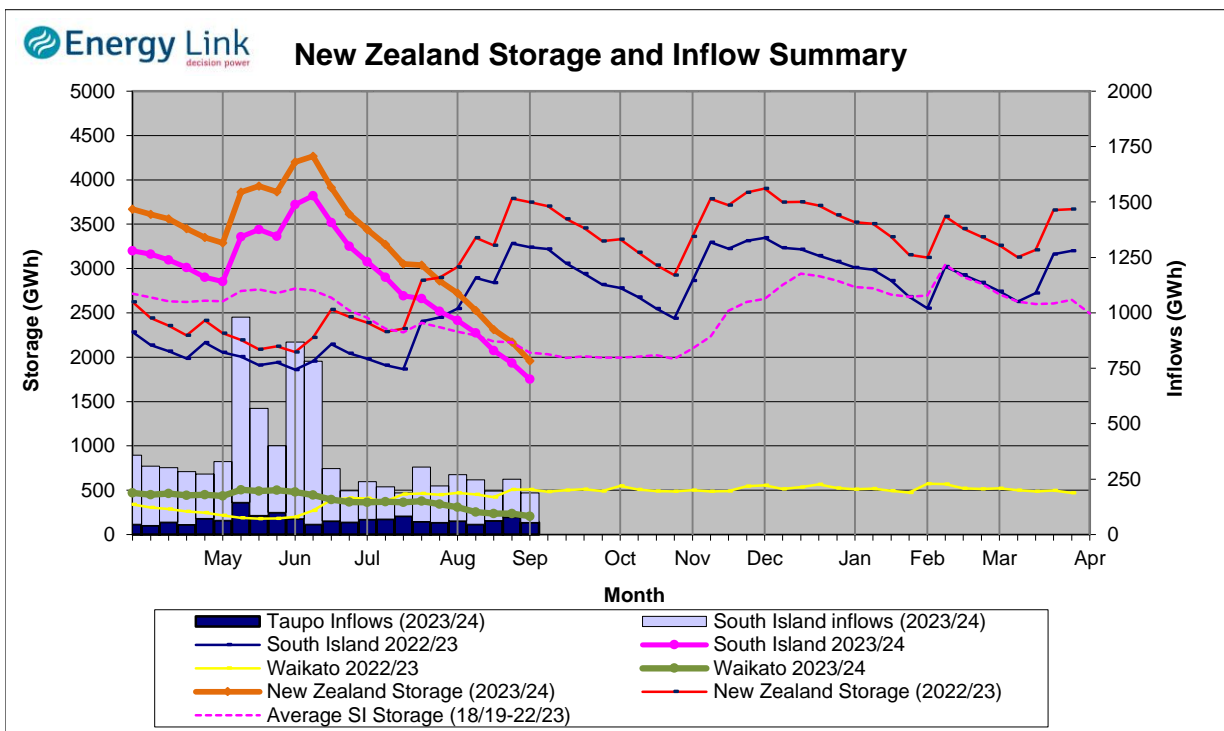
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	1710	207	1917

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 214.5 GWh over the last week. South Island controlled storage decreased 9.6% to 1428 GWh; South Island uncontrolled storage decreased 9.2% to 323 GWh; with Taupo storage decreasing 12.9% to 207 GWh.



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Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	283	68	1400	207	1958
Last Week	312	90	1533	237	2172
% Change	-9.4%	-24.3%	-8.7%	-12.9%	-9.9%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	67	28	38	55	188
Last Week	94	35	42	80	250
% Change	-28.6%	-20.6%	-9.1%	-30.6%	-24.9%

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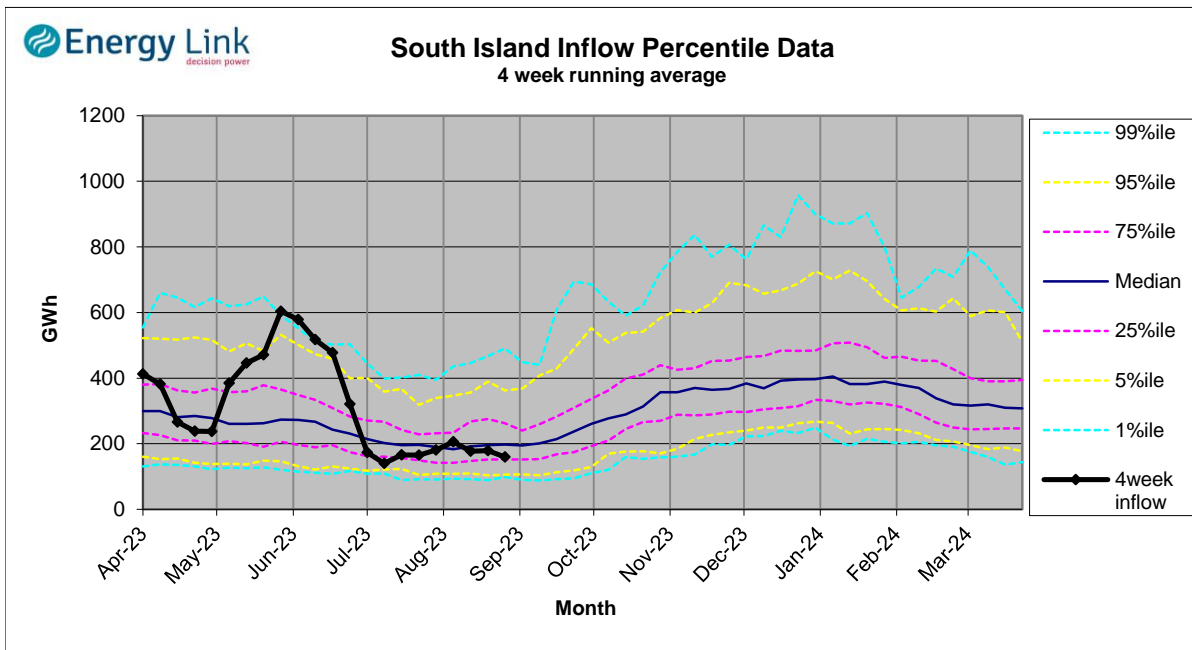
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.33	87	13	0
	Te Anau	202.17	196		
Clutha	Wakatipu	309.49	18	76	-3
	Wanaka	276.54	23	100	
	Hawea	338.80	27	141	
Waitaki	Tekapo	705.63	339		4
	Pukaki	526.66	1061		
Waikato	Taupo	356.36	207		0

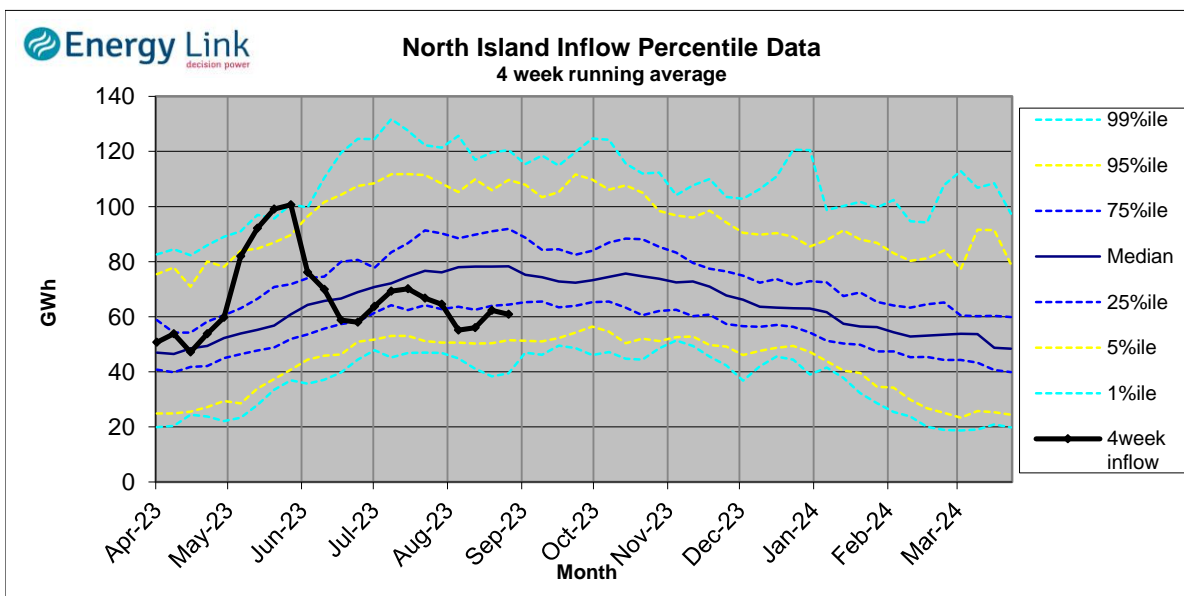
Inflow Summary

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.

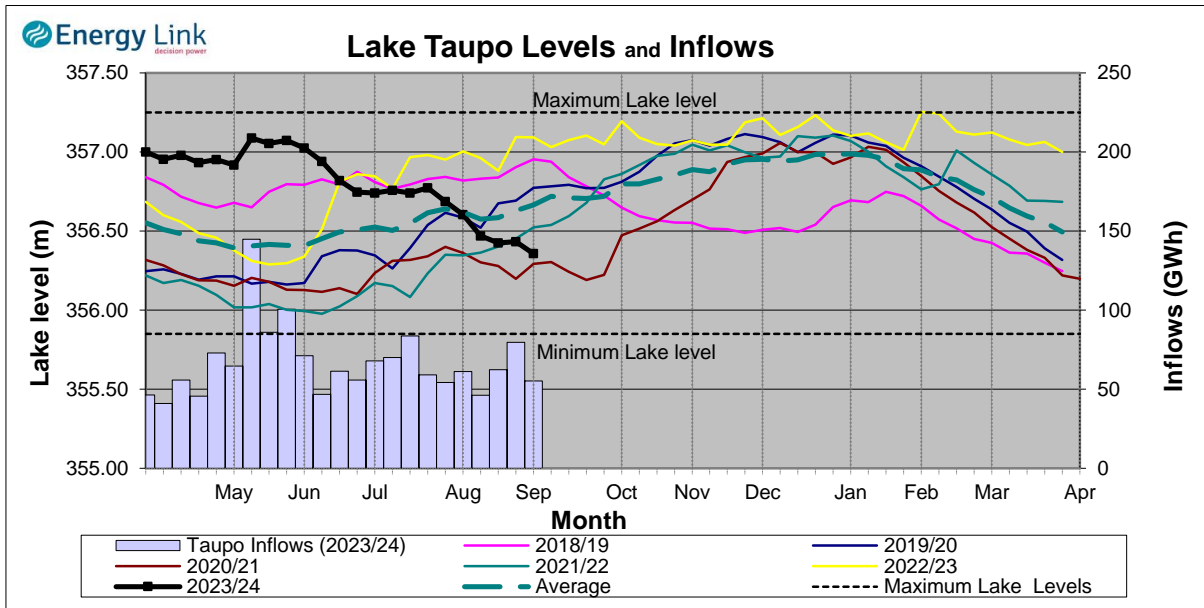
South Island Inflows - The past four weeks of S. I. inflows rank as the 28th driest on record.



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



Waikato System

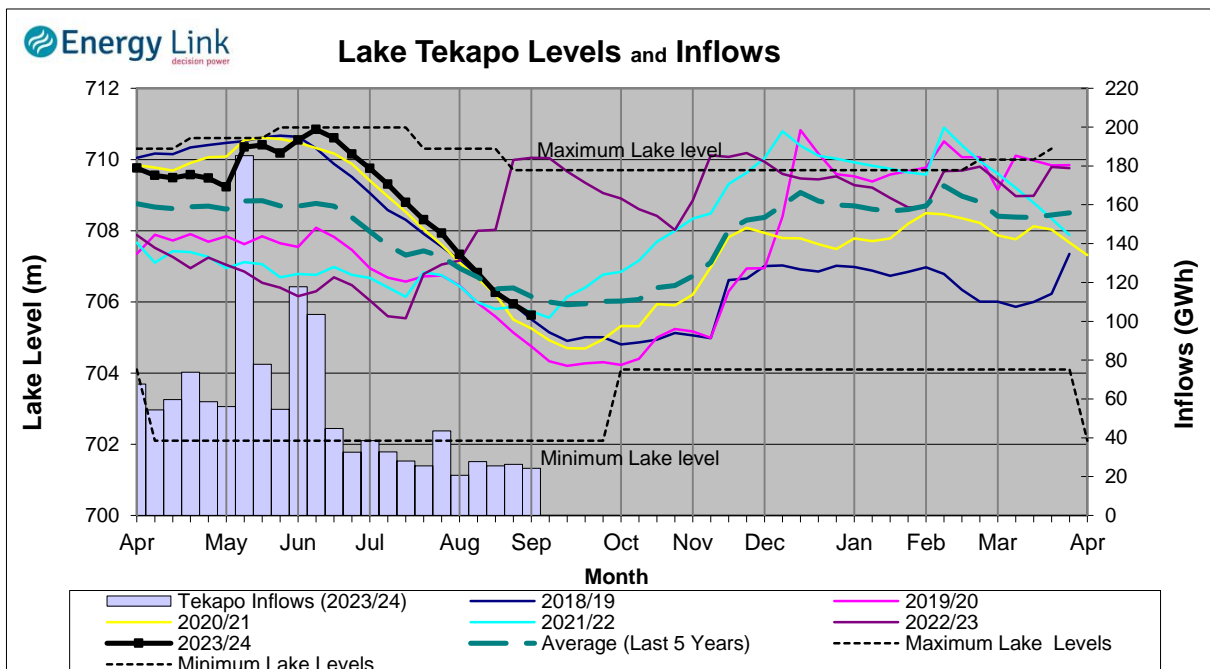


Lake Levels - Lake Taupo storage fell to 36.2% of nominal full at 207 GWh.

Inflows - Inflows decreased 30.6% to 55 GWh.

Generation - Average generation increased 3.1% to 540.4 MW.

Tekapo



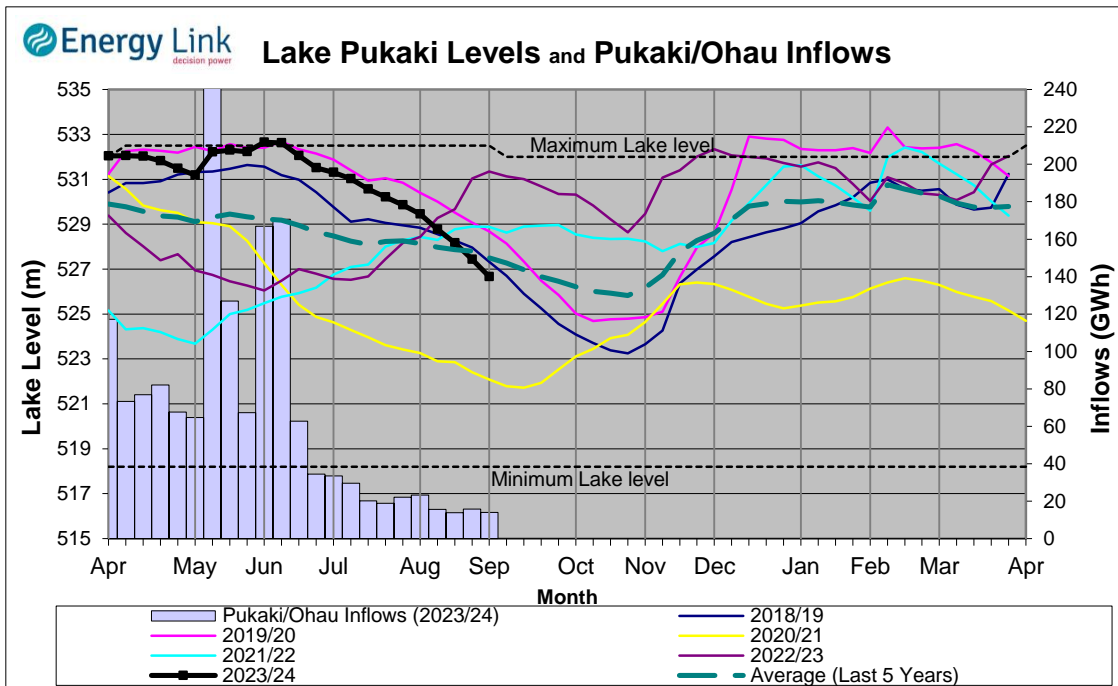
Lake Levels - Lake Tekapo ended the week 43% nominally full with storage falling to 339 GWh.

Inflows - Inflows into tekapo decreased 8% to 24 GWh.

Generation - Average Tekapo generation decreased 2.6% to 118.1 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 57% nominally full with storage falling to 1061 GWh.

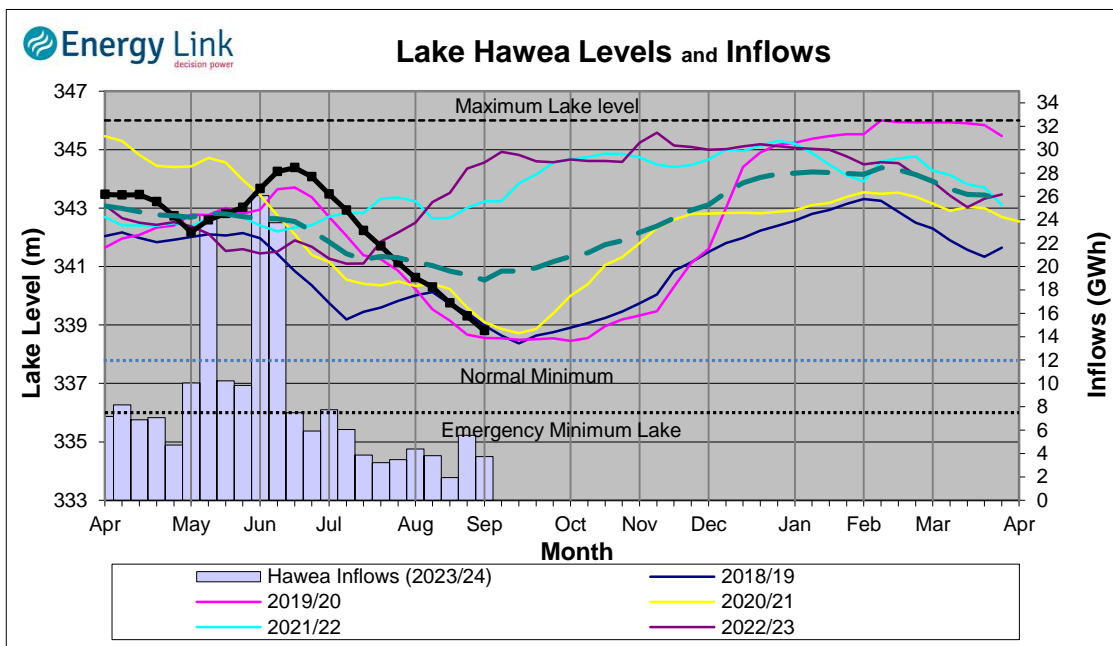
Inflows - Inflows into the Waitaki System decreased 10.9% to 14 GWh.

Generation - Average Waitaki generation decreased 1.5% to 983.8 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 13.2 cumecs while Waitaki River flows were lower than last week averaging 398.3 cumecs.

Clutha System



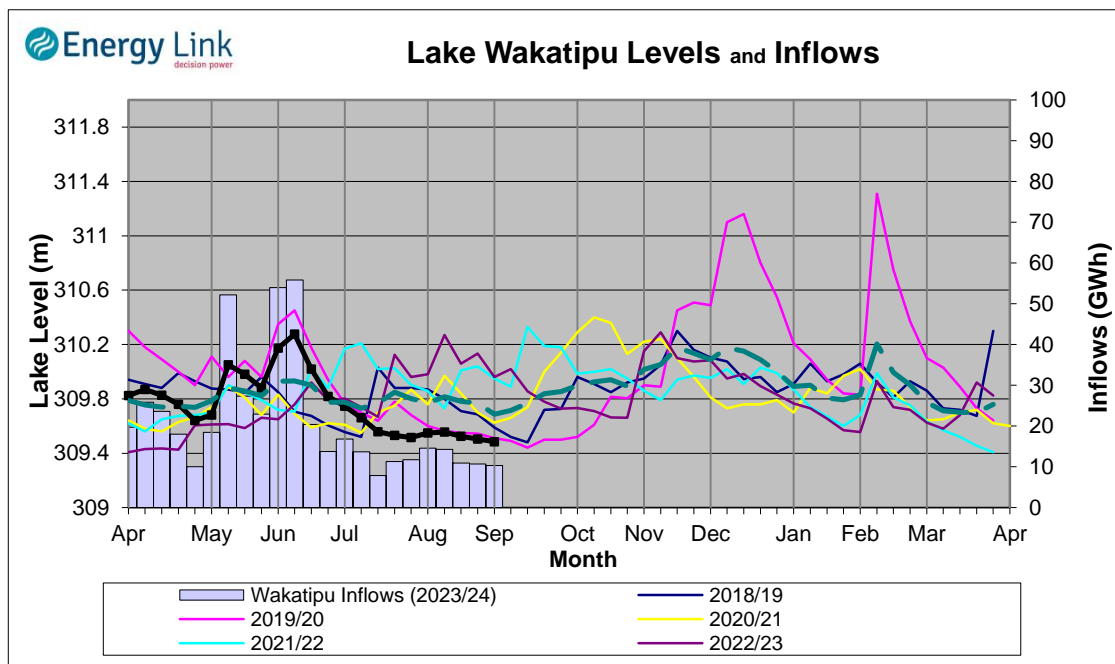
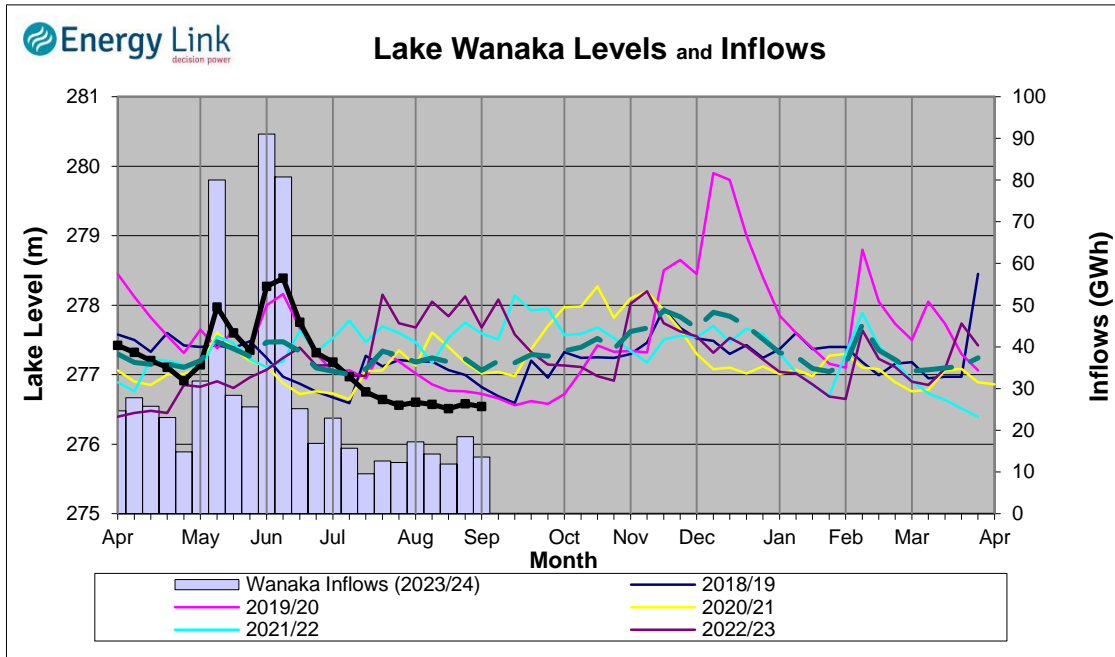
Lake Levels - Total storage for the Clutha System decreased 24.3% to 68 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 9.3%, 19.9% and 16.8% nominally full respectively.

Inflows - Total Inflows into the Clutha System 20.6% lower at 28 GWh.

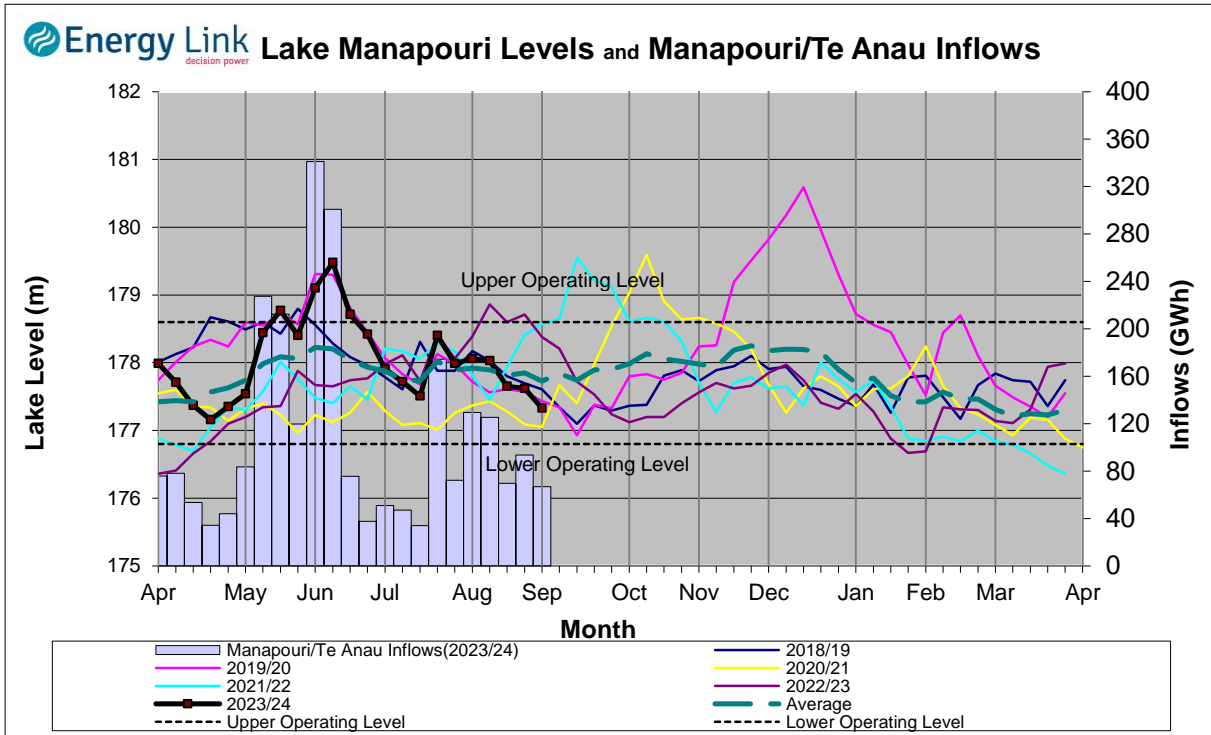
Generation - Average generation was 0.2% lower at 340 MW.

Hydro Spill - There was no estimated spill

River Flows - Total outflows from the lakes and Shotover River increased to 345.7 cumecs. This comprised of 141 cumecs from Lake Hawea, 100 cumecs from Lake Wanaka, 76 cumecs from Lake Wakatipu and 29 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 9.4% to 283 GWh with Lake Manapouri ending the week 53.3% nominally full and Lake Te Anau ending the week 71.2% nominally full.

Inflows - Total inflows into the Manapouri System decreased 28.6% to 67 GWh.

Generation - Average generation was 5.6% higher at 571 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'.

