



Thursday, 12 October 2023

Issue: 1382

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)	1489	602	2091	371	2462
Storage Change (GWh)	13	-140	-127	4	-123

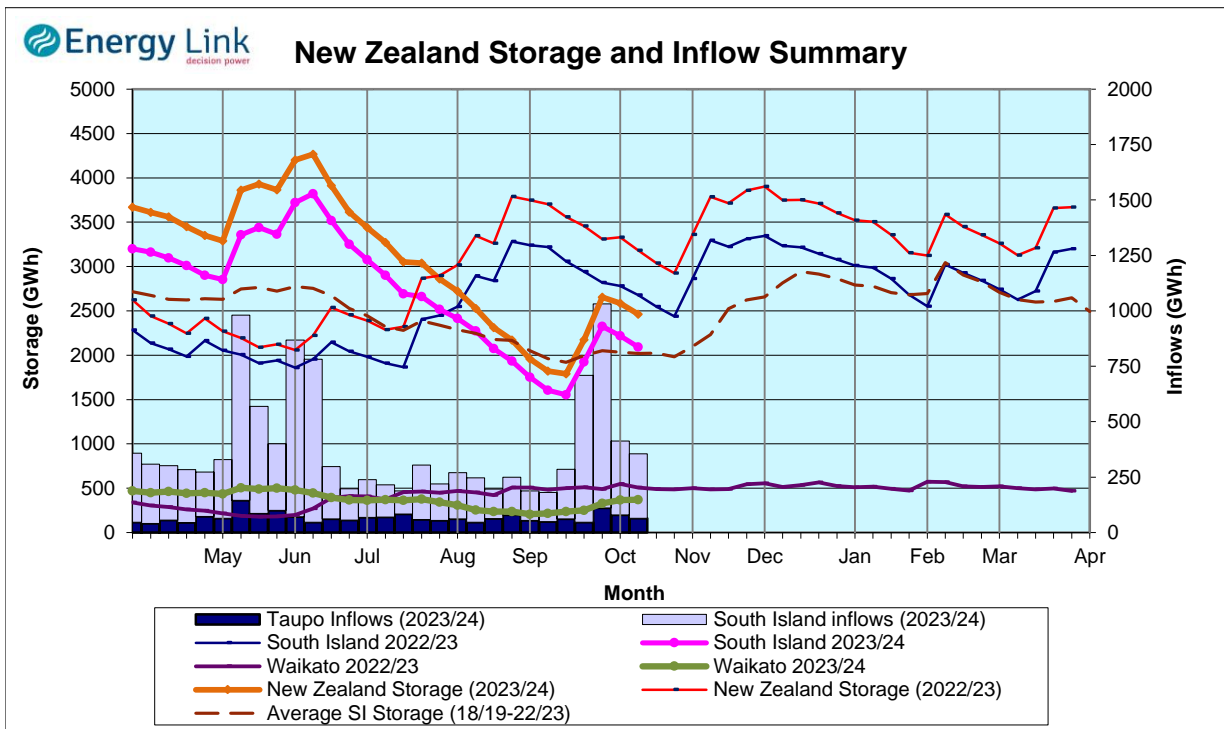
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	1948	371	2319

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 123.1 GWh over the last week. South Island controlled storage increased 0.9% to 1489 GWh; South Island uncontrolled storage decreased 18.9% to 602 GWh; with Taupo storage increasing 1.1% to 371 GWh.



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Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	459	249	1382	371	2462
Last Week	564	276	1378	367	2585
% Change	-18.6%	-9.5%	0.3%	1.1%	-4.8%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	99	65	127	64	354
Last Week	150	85	98	80	413
% Change	-34.0%	-24.0%	28.9%	-19.7%	-14.2%

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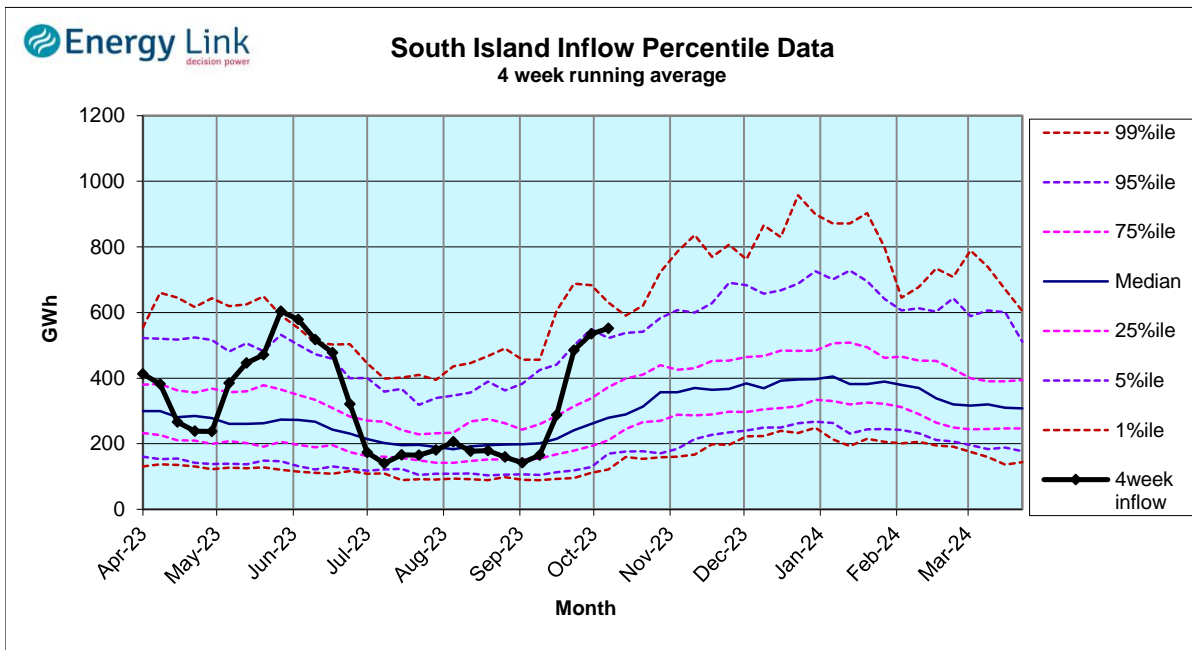
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	178.66	166	429	-102
	Te Anau	202.82	293		
Clutha	Wakatipu	310.12	66	274	-67
	Wanaka	277.62	77	298	
	Hawea	340.97	107	12	
Waitaki	Tekapo	705.86	363		-75
	Pukaki	526.34	1019		
Waikato	Taupo	356.76	371		1

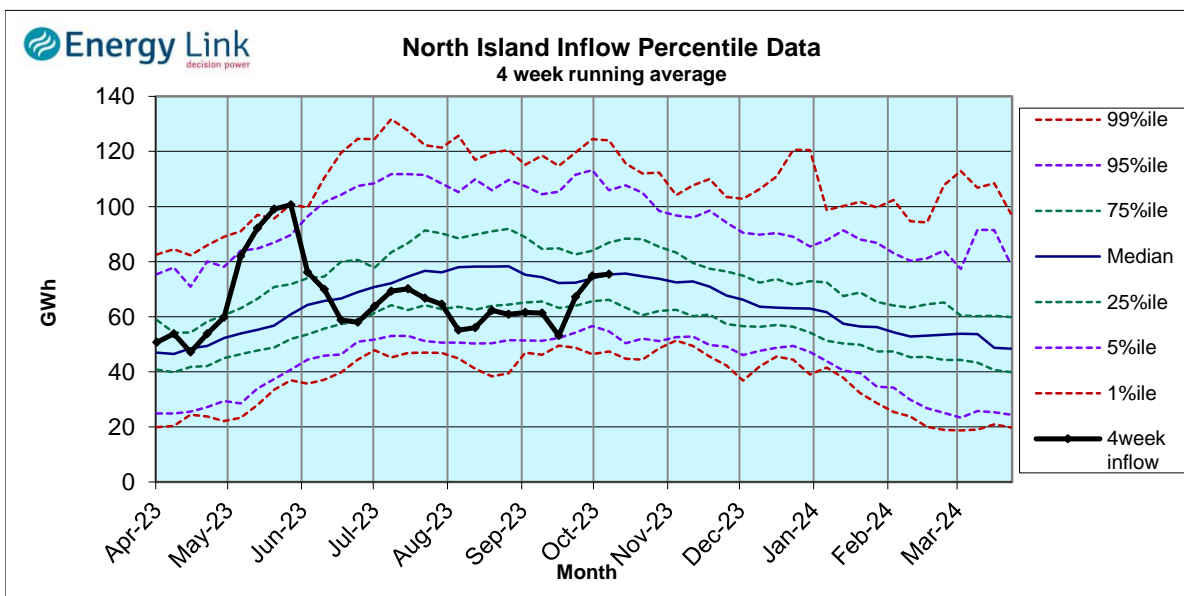
Inflow Summary

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.

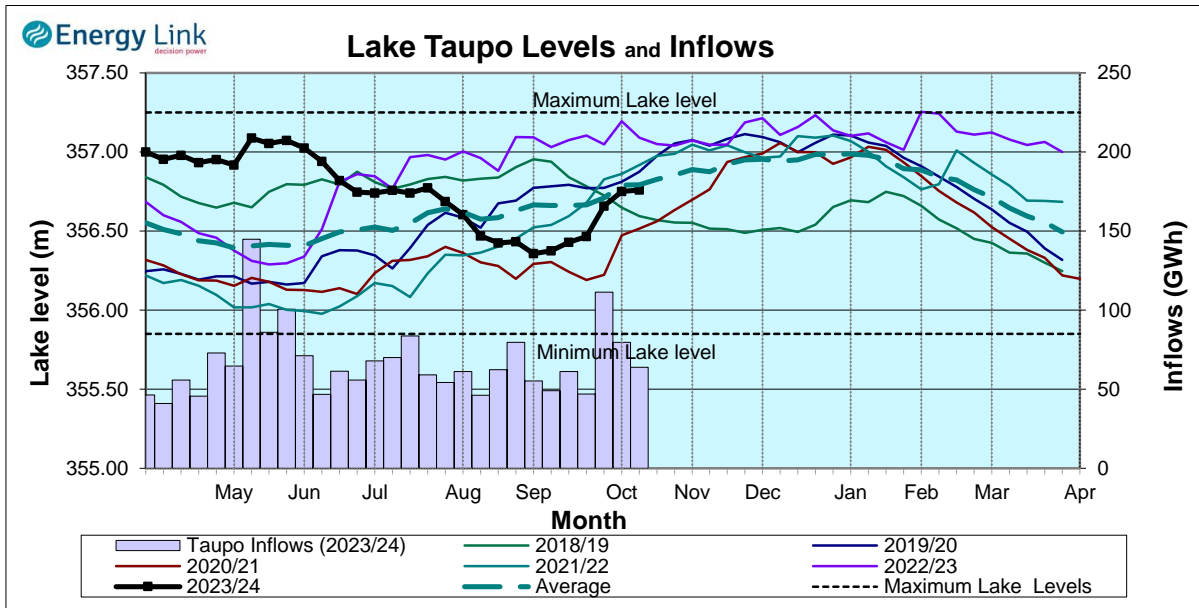
South Island Inflows - The past four weeks of S. I. inflows rank as the 3rd wettest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 46th wettest on record.



Waikato System

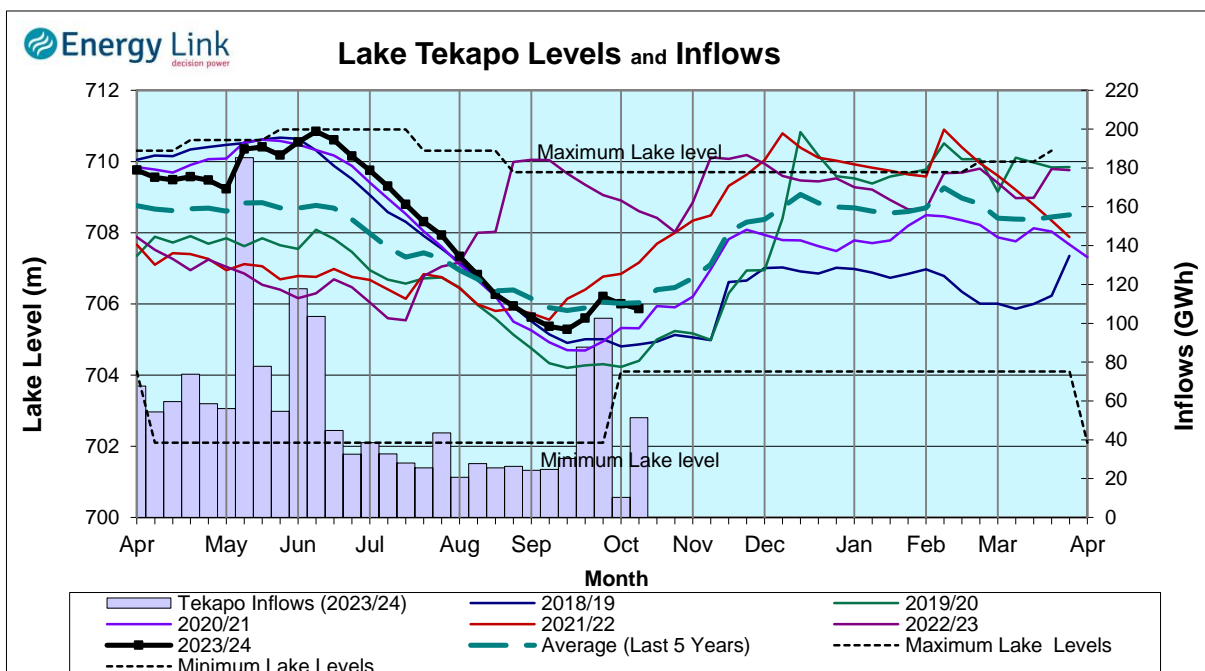


Lake Levels - Lake Taupo storage increased to 65% of nominal full at 371 GWh.

Inflows - Inflows decreased 19.7% to 64 GWh.

Generation - Average generation increased 17.4% to 444.2 MW.

Tekapo



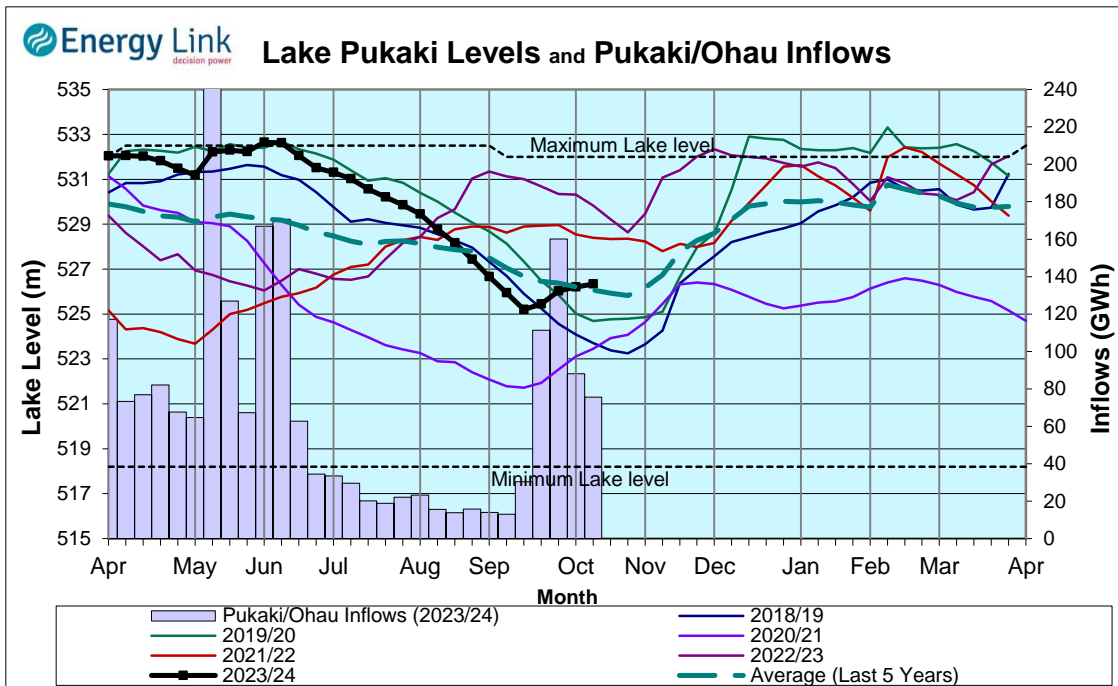
Lake Levels - Lake Tekapo ended the week 50% nominally full with storage falling to 363 GWh.

Inflows - Inflows into tekapo increased 396.1% to 51 GWh.

Generation - Average Tekapo generation increased 111.9% to 137.2 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 57% nominally full with storage increasing to 1019 GV

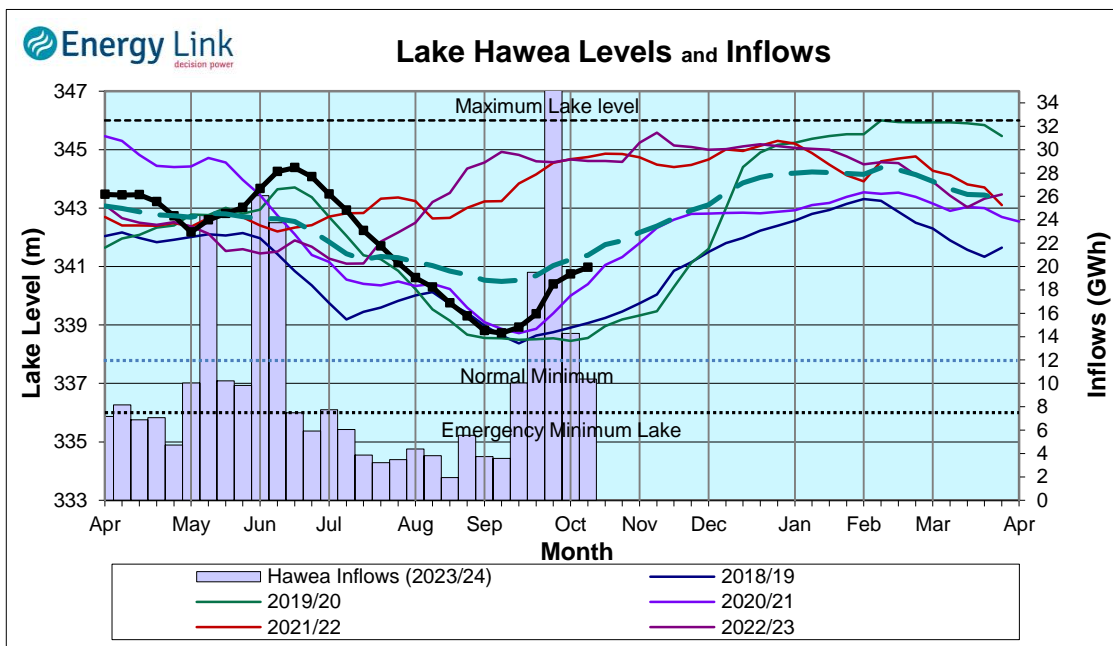
Inflows - Inflows into the Waitaki System decreased 14.3% to 76 GWh.

Generation - Average Waitaki generation increased 7.4% to 739.3 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 25.2 cumecs while Waitaki River flows were lower than last week averaging 332.3 cumecs.

Clutha System



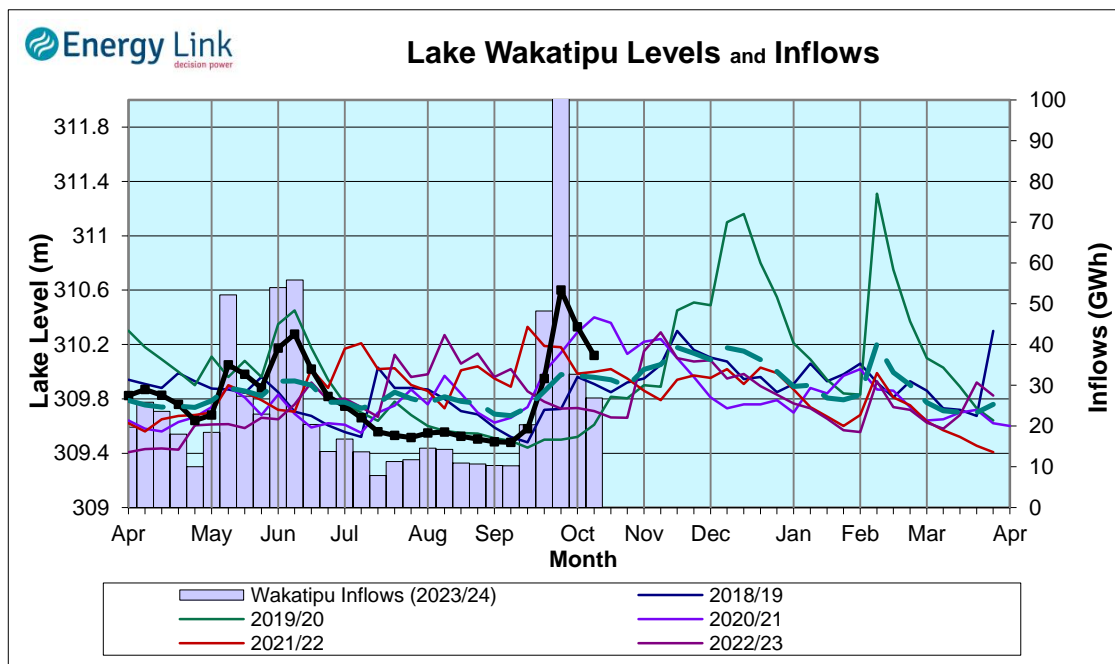
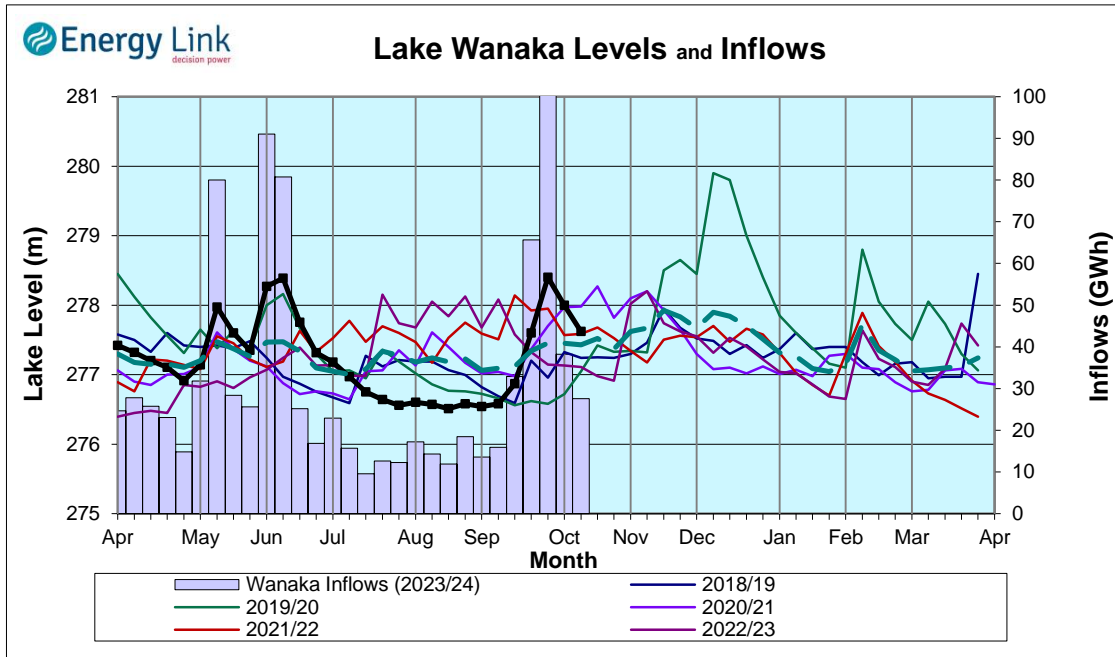
Lake Levels - Total storage for the Clutha System decreased 9.5% to 249 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 36.2%, 66.9% and 62.1% nominally full respectively.

Inflows - Total Inflows into the Clutha System 24% lower at 65 GWh.

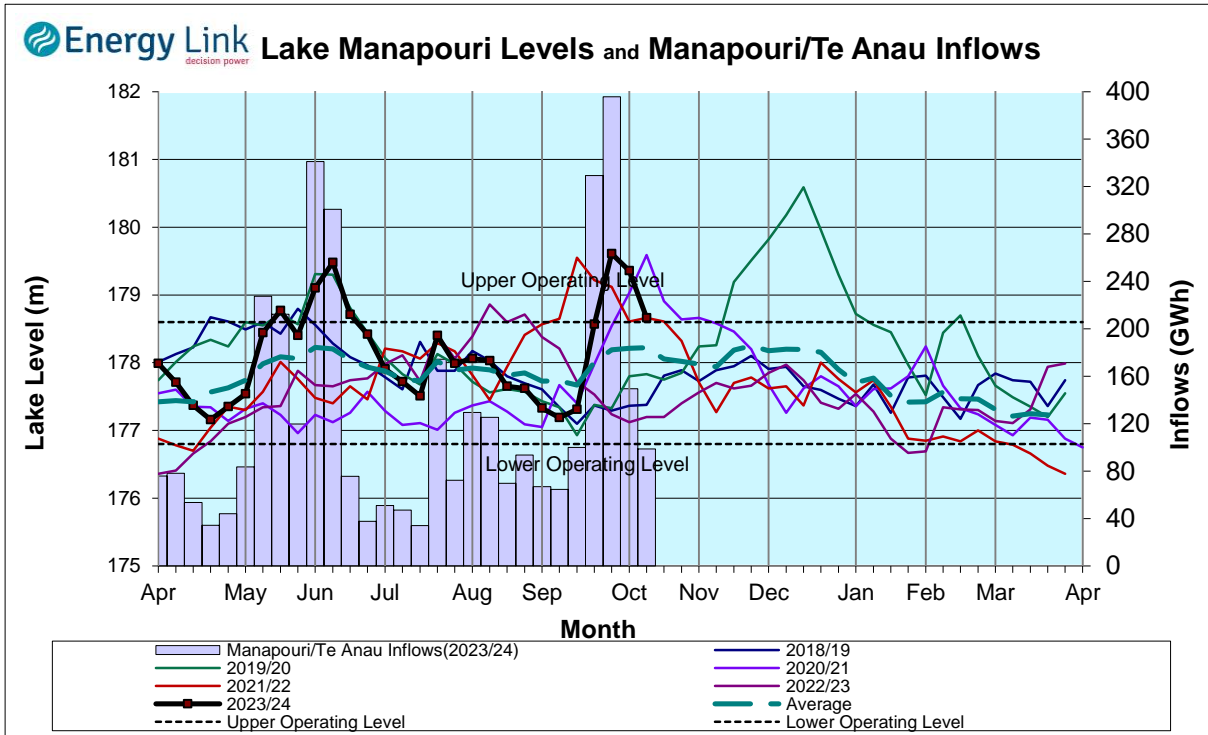
Generation - Average generation was 0.3% lower at 632 MW.

Hydro Spill - Estimate Spill is 20.3 cumecs

River Flows - Total outflows from the lakes and Shotover River fell to 660.3 cumecs. This comprised of 12 cumecs from Lake Hawea, 298 cumecs from Lake Wanaka, 274 cumecs from Lake Wakatipu and 76 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 18.6% to 459 GWh with Lake Manapouri ending the week 102.2% nominally full and Lake Te Anau ending the week 106.5% nominally full.

Inflows - Total inflows into the Manapouri System decreased 34% to 99 GWh.

Generation - Average generation was 2.1% lower at 578 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 428.9 cumecs.

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

