

HydroWatch

Thursday, 01 December 2022

Issue: 1337

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)	2878	468	3345	556	3902
Storage Change (GWh)	16	16	32	11	43

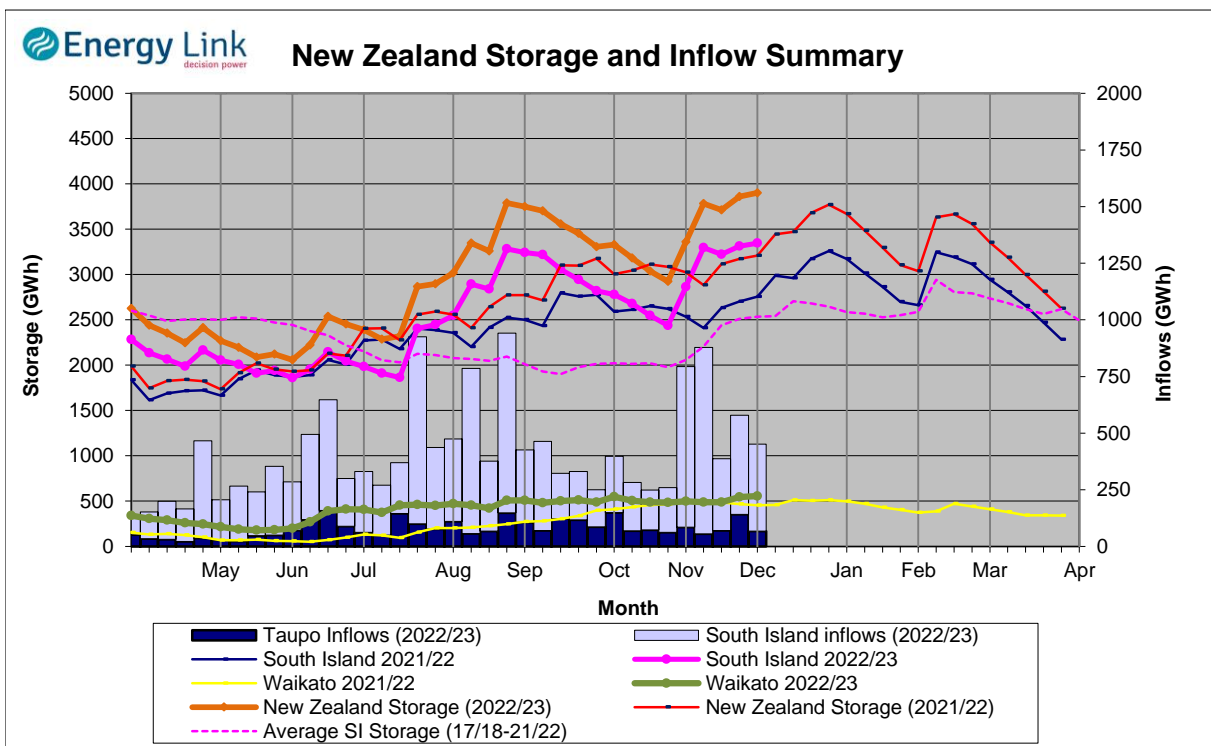
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	3209	556	3766

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 increased 42.7 GWh over the last week. South Island controlled storage increased 0.5% to 2878 GWh; South Island uncontrolled storage increased 3.6% to 468 GWh; with Taupo storage increasing 2% to 556 GWh.



Thursday, 01 December 2022					
Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	332	394	2620	556	3902
Last Week	313	400	2601	545	3859
% Change	6.0%	-1.5%	0.7%	2.0%	1.1%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	103	86	195	67	451
Last Week	91	84	262	142	579
% Change	12.6%	2.4%	-25.4%	-52.6%	-22.0%

Subscribe at www.energylink.co.nz/publications

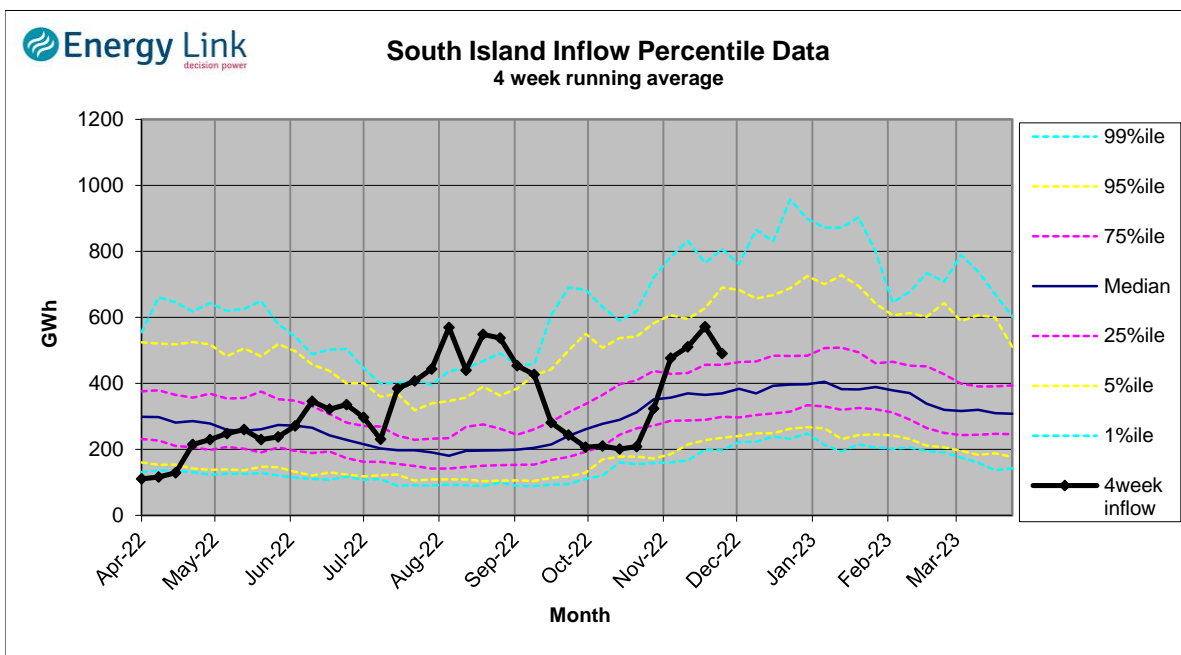
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.85	118	37	-1
	Te Anau	202.29	214		
Clutha	Wakatipu	310.09	63	228	-2
	Wanaka	277.55	73	267	
	Hawea	345.00	258	97	
Waitaki	Tekapo	709.94	795		-8
	Pukaki	532.34	1826		
Waikato	Taupo	357.21	556		-4

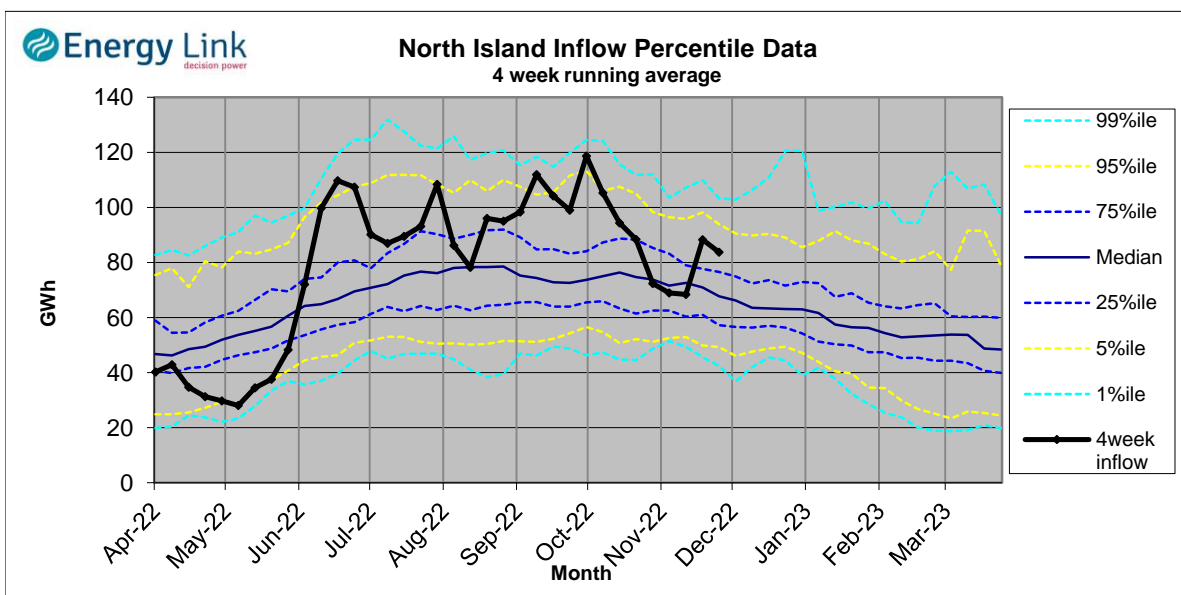
Inflow Summary

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.

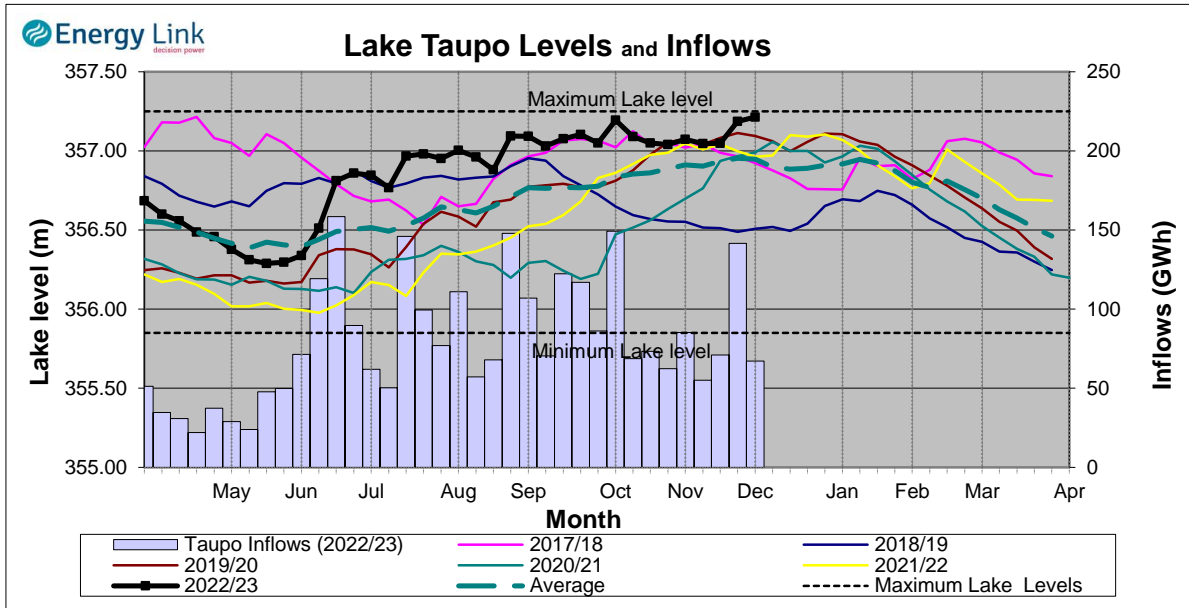
South Island Inflows - The past four weeks of S. I. inflows rank as the 16th wettest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 11th wettest on record.



Waikato System

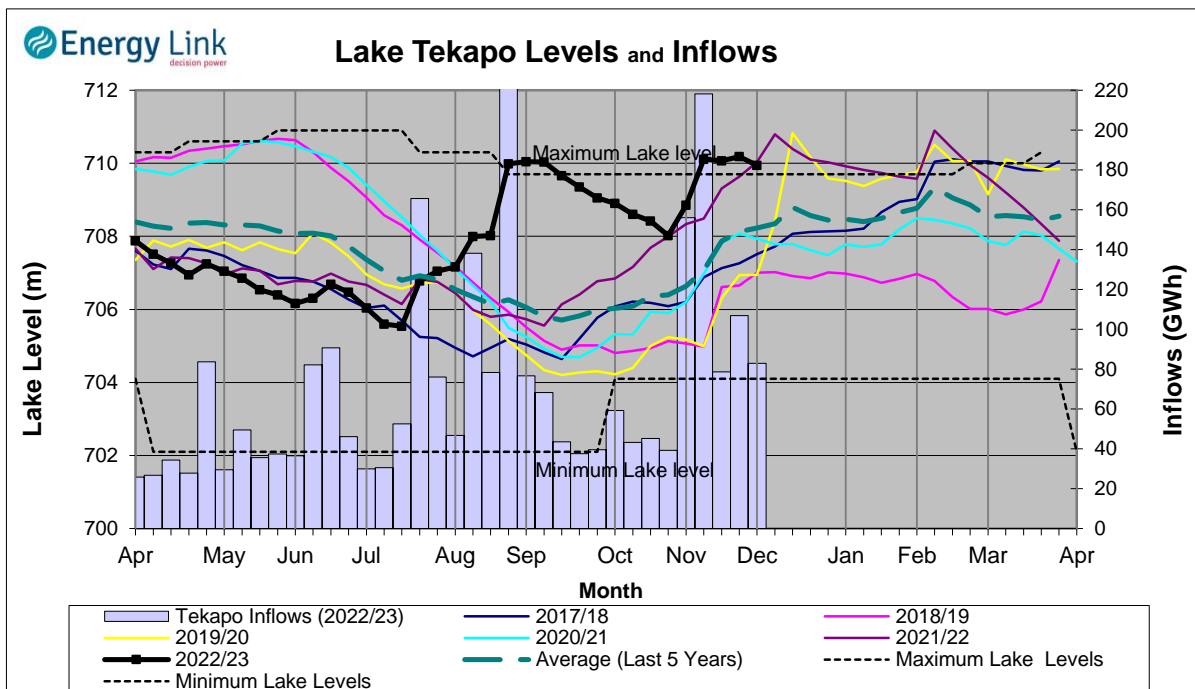


Lake Levels - Lake Taupo storage increased to 97.4% of nominal full at 556 GWh.

Inflows - Inflows decreased 52.6% to 67 GWh.

Generation - Average generation decreased 7.4% to 479.1 MW.

Tekapo



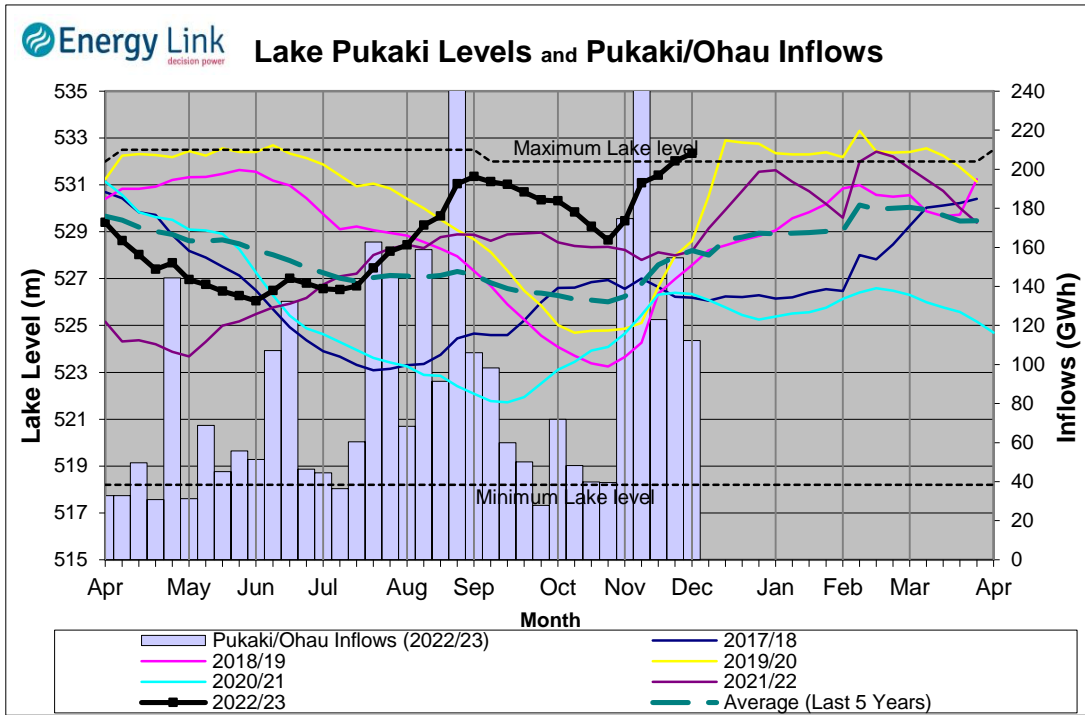
Lake Levels - Lake Tekapo ended the week 110% nominally full with storage falling to 795 GWh.

Inflows - Inflows into tekapo decreased 22.4% to 83 GWh.

Generation - Average Tekapo generation decreased 7.9% to 157.1 MW.

Hydro Spill - Lake Tekapo spill was 52.7 cumecs.

Waitaki System



Lake Levels - Lake Pukaki ended the week 103% nominally full with storage increasing to 182

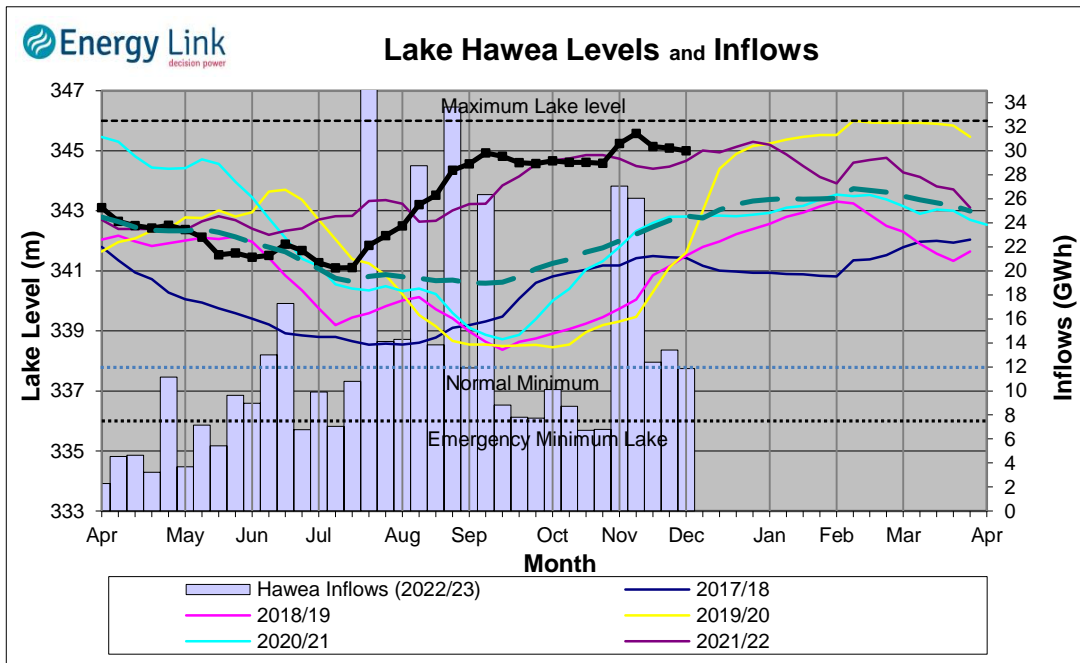
Inflows - Inflows into the Waitaki System decreased 27.5% to 112 GWh.

Generation - Average Waitaki generation decreased 0.8% to 921.4 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River increased to 39.8 cumecs while Waitaki River flows were lower than last week averaging 435.8 cumecs.

Clutha System



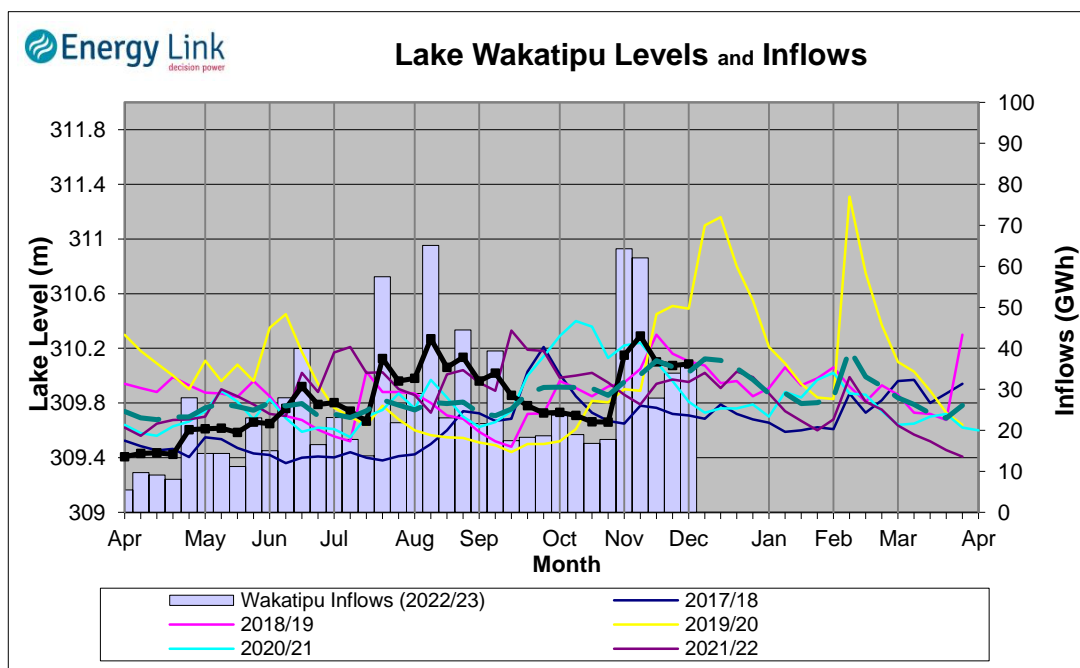
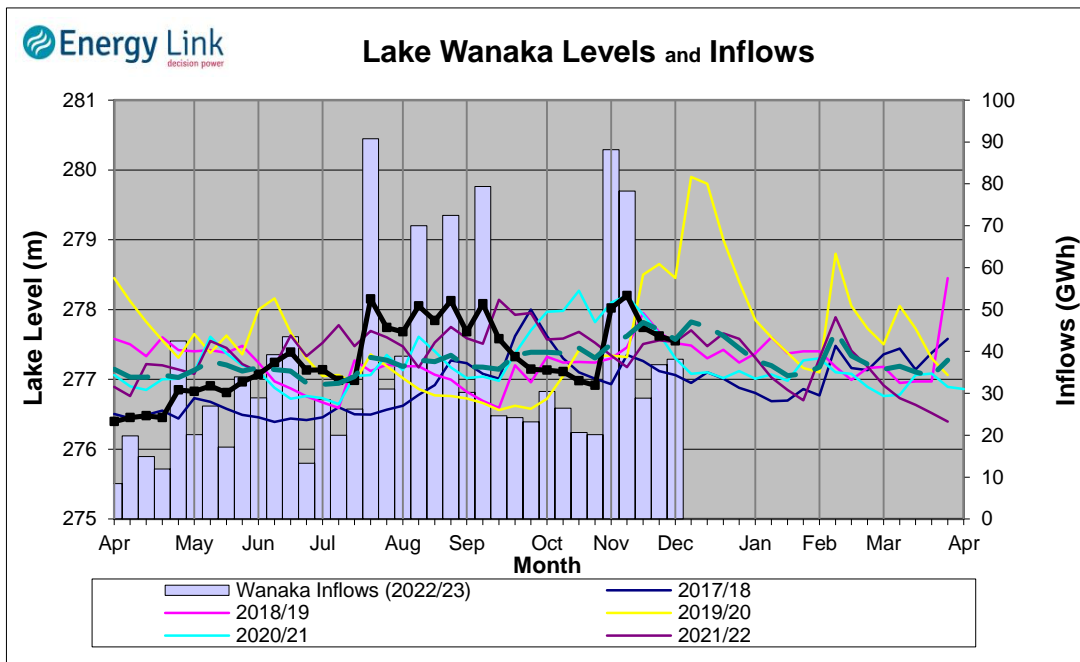
Lake Levels - Total storage for the Clutha System decreased 1.5% to 394 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 87.2%, 63.8% and 59.6% nominally full respectively.

Inflows - Total Inflows into the Clutha System 2.4% higher at 86 GWh.

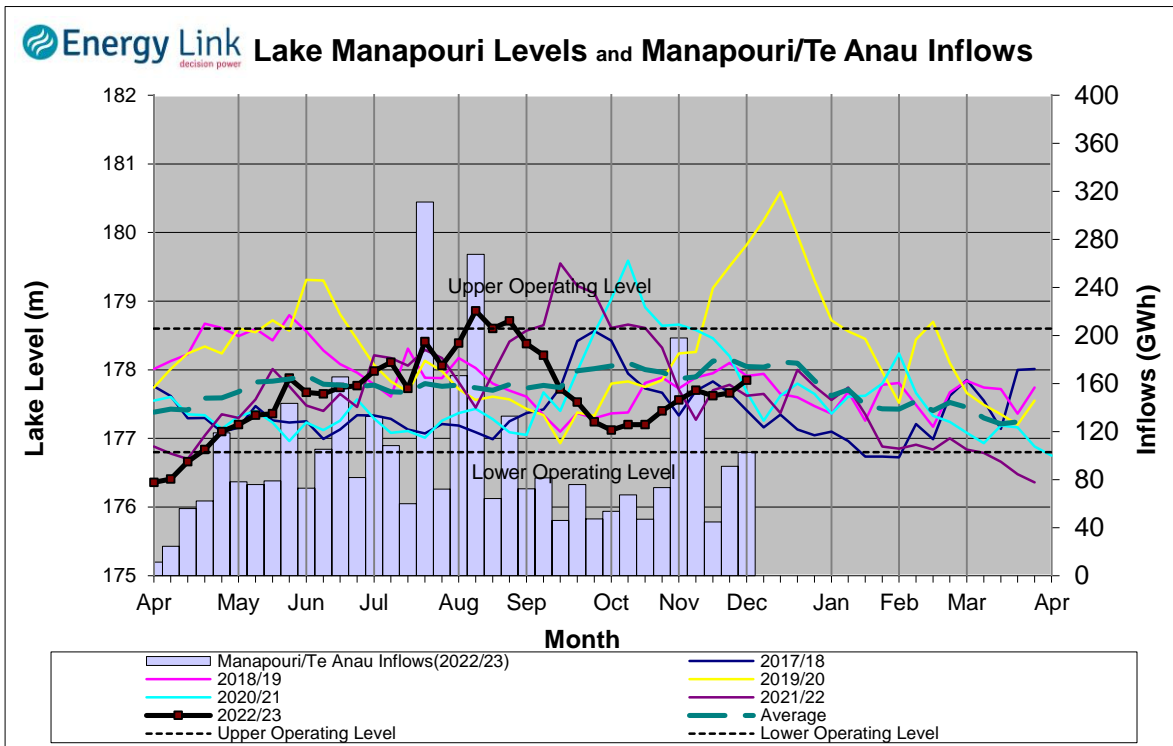
Generation - Average generation was 11.7% lower at 508 MW.

Hydro Spill - Estimate Spill is 93.8 cumecs.

River Flows - Total outflows from the lakes and Shotover River fell to 651.6 cumecs. This comprised of 97 cumecs from Lake Hawea, 267 cumecs from Lake Wanaka, 228 cumecs from Lake Wakatipu and 60 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System increased by 6% to 332 GWh with Lake Manapouri ending the week 72.4% nominally full and Lake Te Anau ending the week 77.7% nominally full.

Inflows - Total inflows into the Manapouri System increased 12.6% to 103 GWh.

Generation - Average generation was 3.9% lower at 499 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 37.1 cumecs.

Operating Range - Lakes Manapouri and Te Anau are operating in the middle of their respective 'Main operating range'.

