



Thursday, 09 December 2021

Issue: 1286

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)	2539	448	2986	457	3444
Storage Change (GWh)	229	3	231	3	234

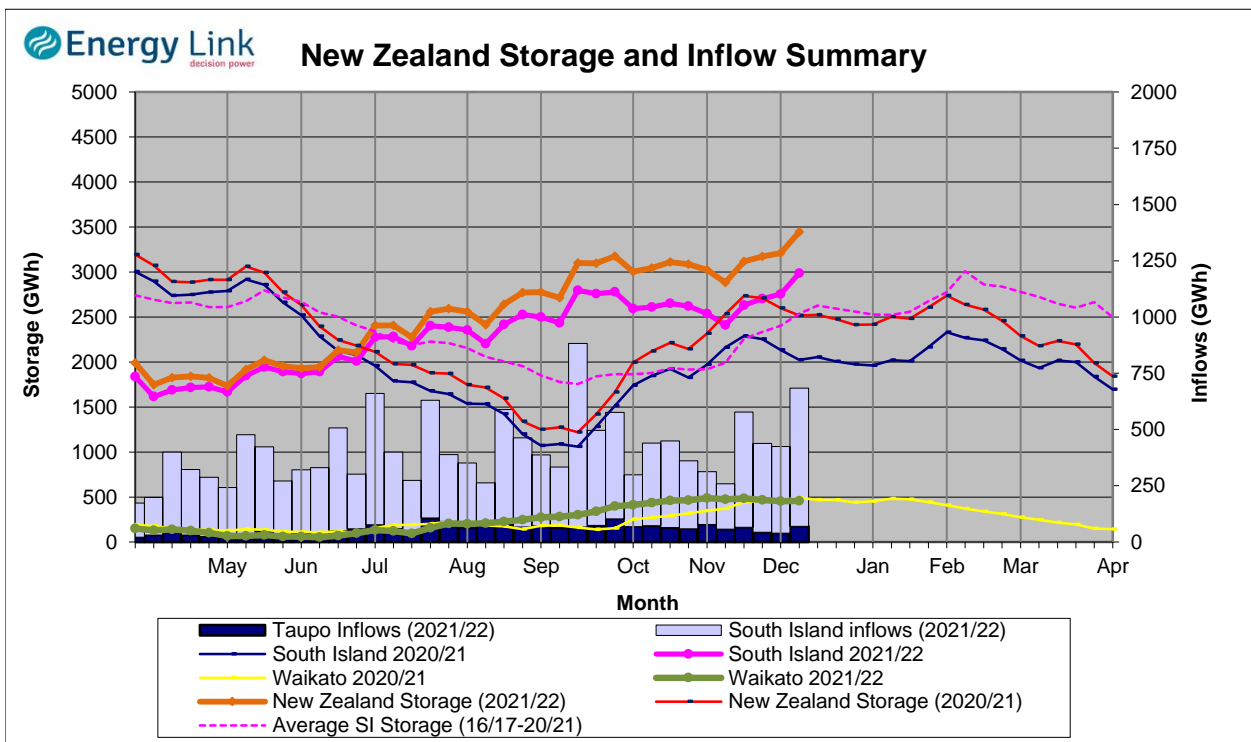
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	2848	457	3305

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 234.1 GWh over the last week. South Island controlled storage increased 9.9% to 2539 GWh; South Island uncontrolled storage increased 0.6% to 448 GWh; with Taupo storage increasing 0.6% to 457 GWh.



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Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	309	397	2281	457	3444
Last Week	319	370	2065	454	3209
% Change	-3.2%	7.1%	10.4%	0.6%	7.3%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	92	106	416	69	684
Last Week	93	80	211	39	424
% Change	-0.9%	31.9%	97.1%	76.0%	61.3%

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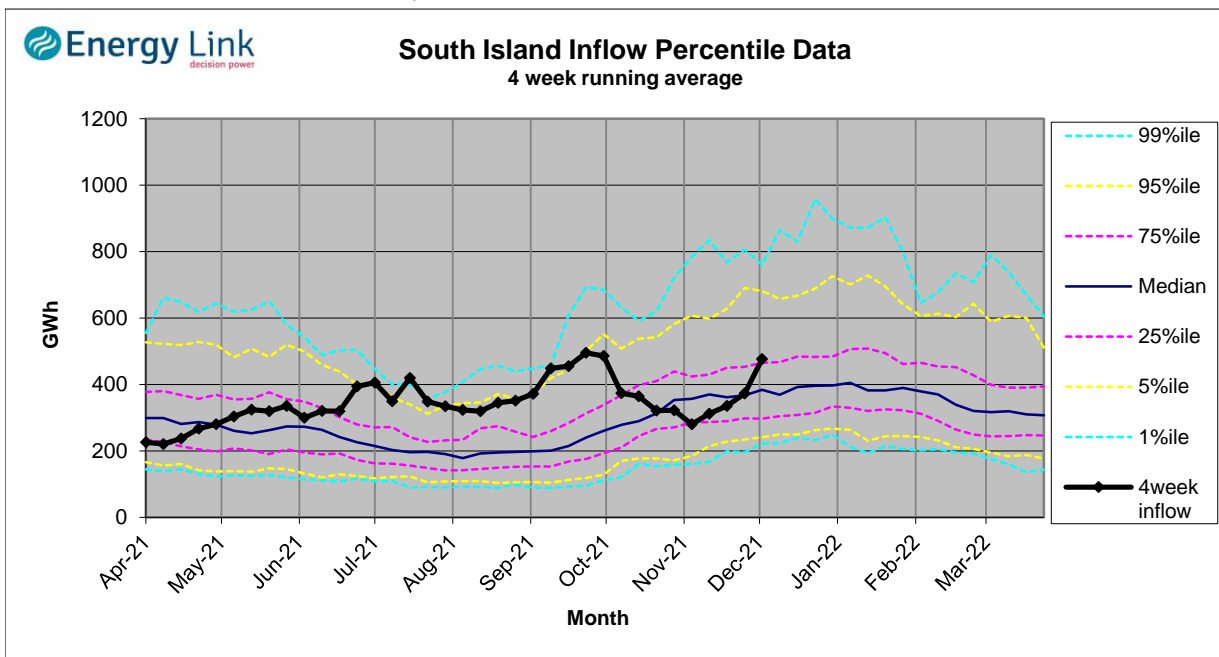
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.65	106	18	-2
	Te Anau	202.22	203		
Clutha	Wakatipu	310.02	58	197	4
	Wanaka	277.70	81	277	20
	Hawea	345.01	258	38	2
Waitaki	Tekapo	710.79	890		
	Pukaki	529.15	1391		
Waikato	Taupo	356.97	457		

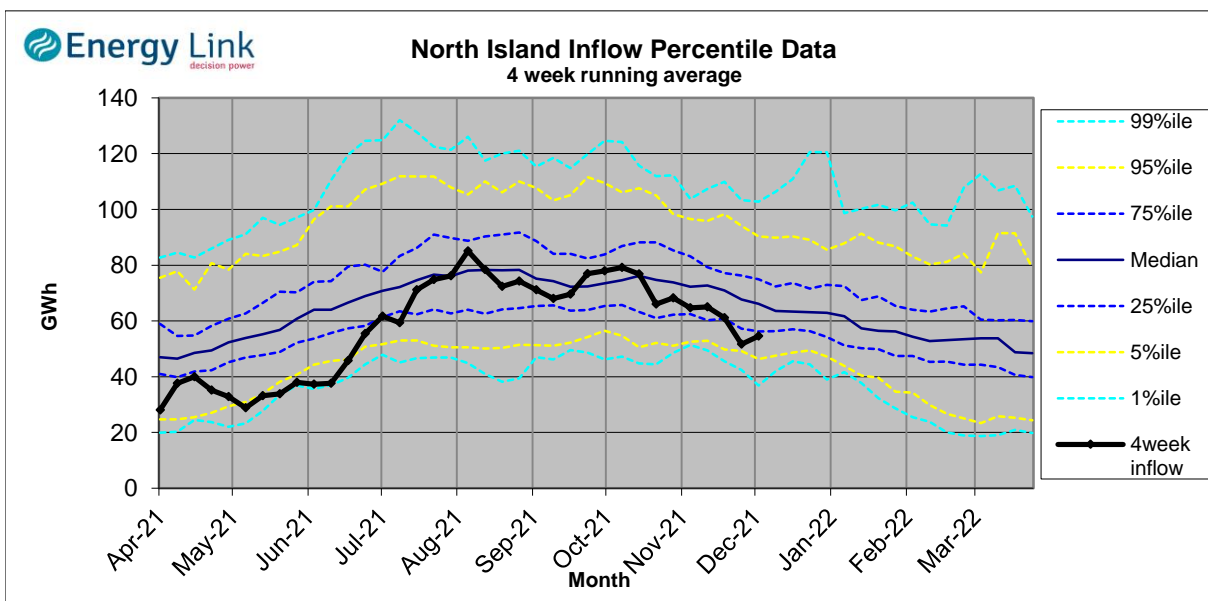
Inflow Summary

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.

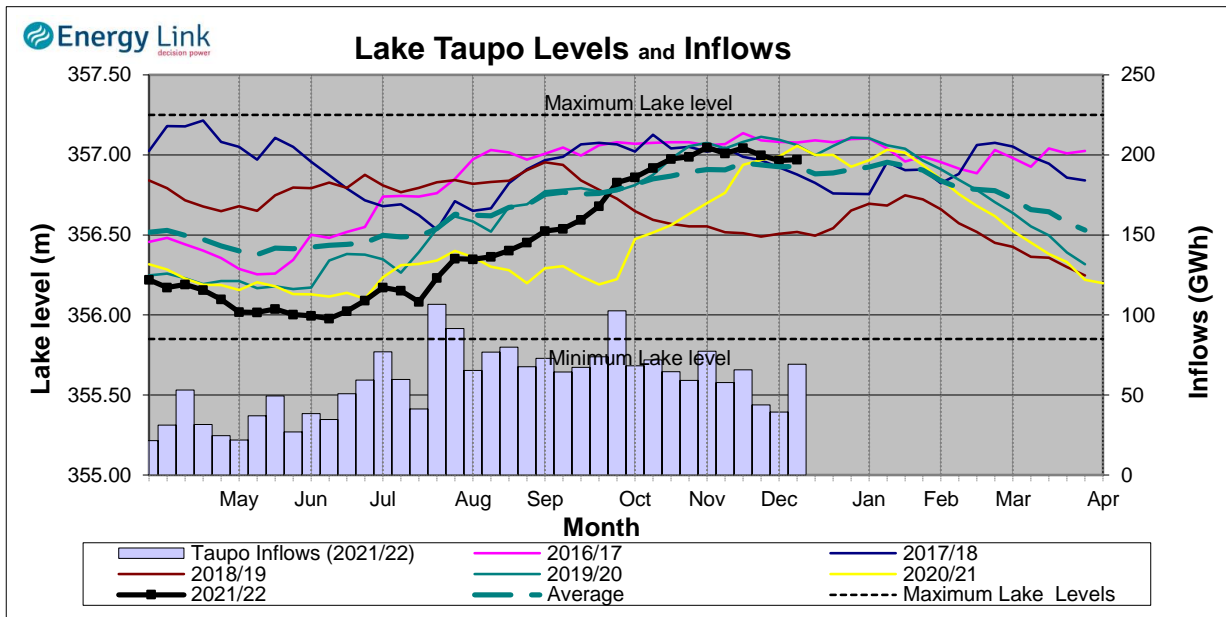
South Island Inflows - The past four weeks of S. I. inflows rank as the 22nd wettest on record.



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



Waikato System

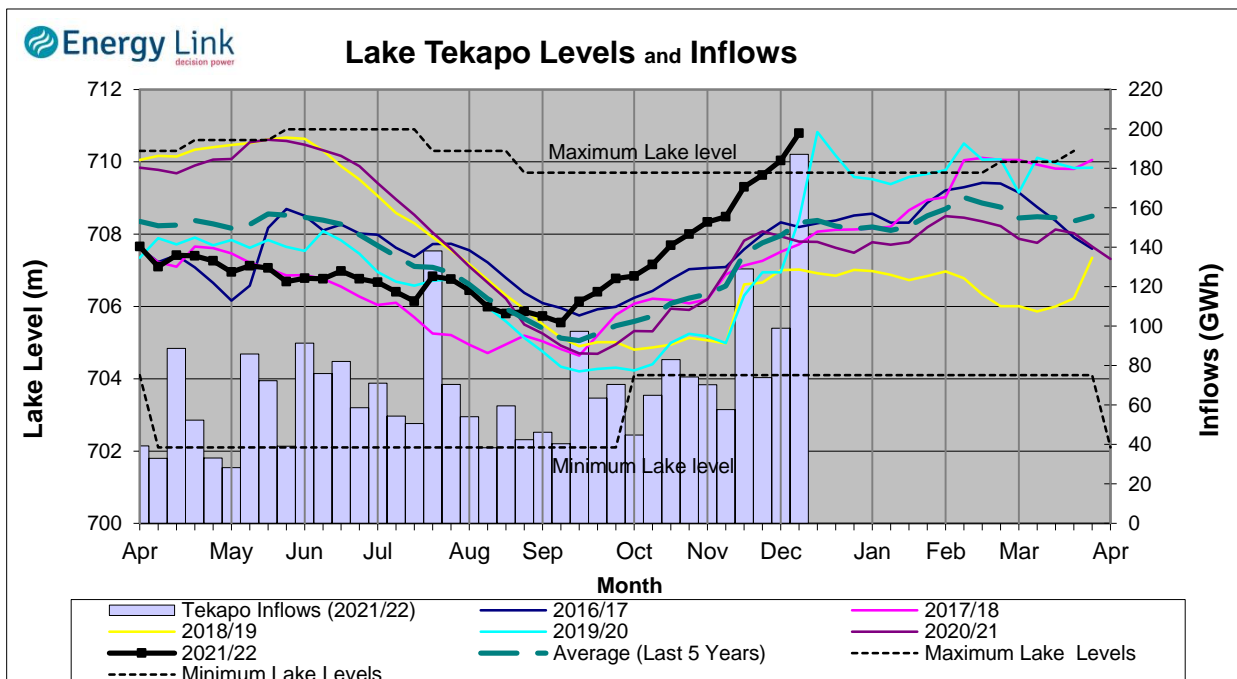


Lake Levels - Lake Taupo storage increased to 80.1% of nominal full at 457 GWh.

Inflows - Inflows increased 76% to 69 GWh.

Generation - Average generation increased 2.5% to 416 MW.

Tekapo



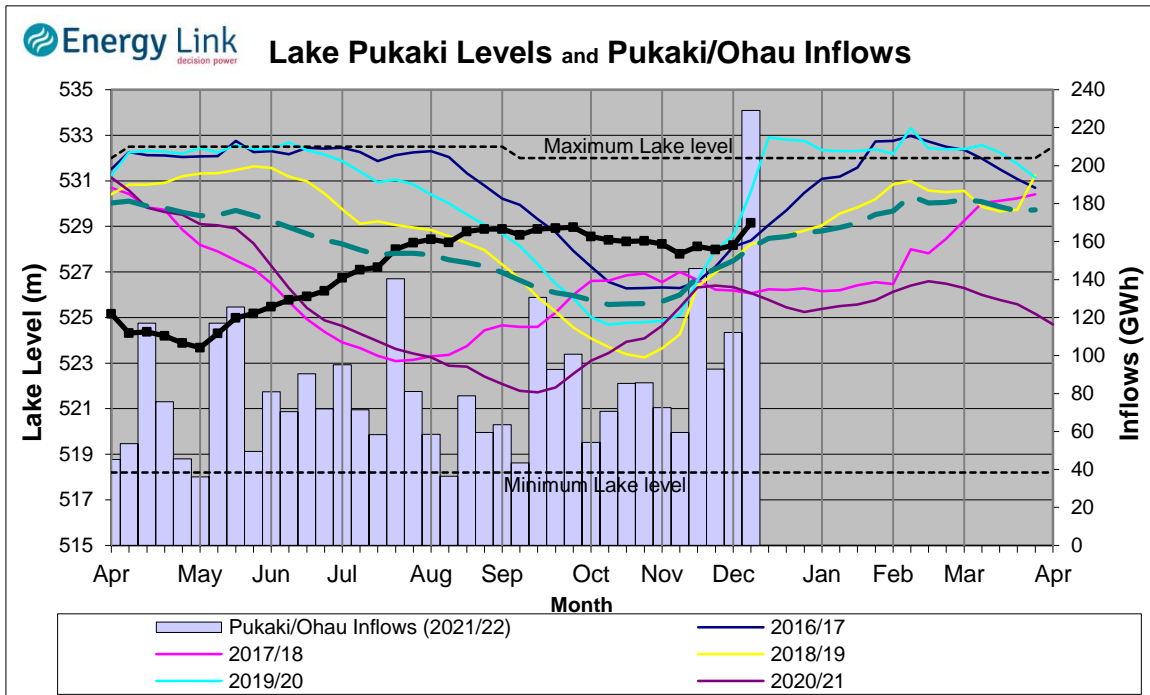
Lake Levels - Lake Tekapo ended the week 123% nominally full with storage increasing to 890 GWh.

Inflows - Inflows into tekapo increased 89.1% to 187 GWh.

Generation - Average Tekapo generation remained steady at 89.5 MW.

Hydro Spill - Lake Tekapo spill was 90.3 cumecs.

Waitaki System



Lake Levels - Lake Pukaki ended the week 78% nominally full with storage increasing to 1391 GW

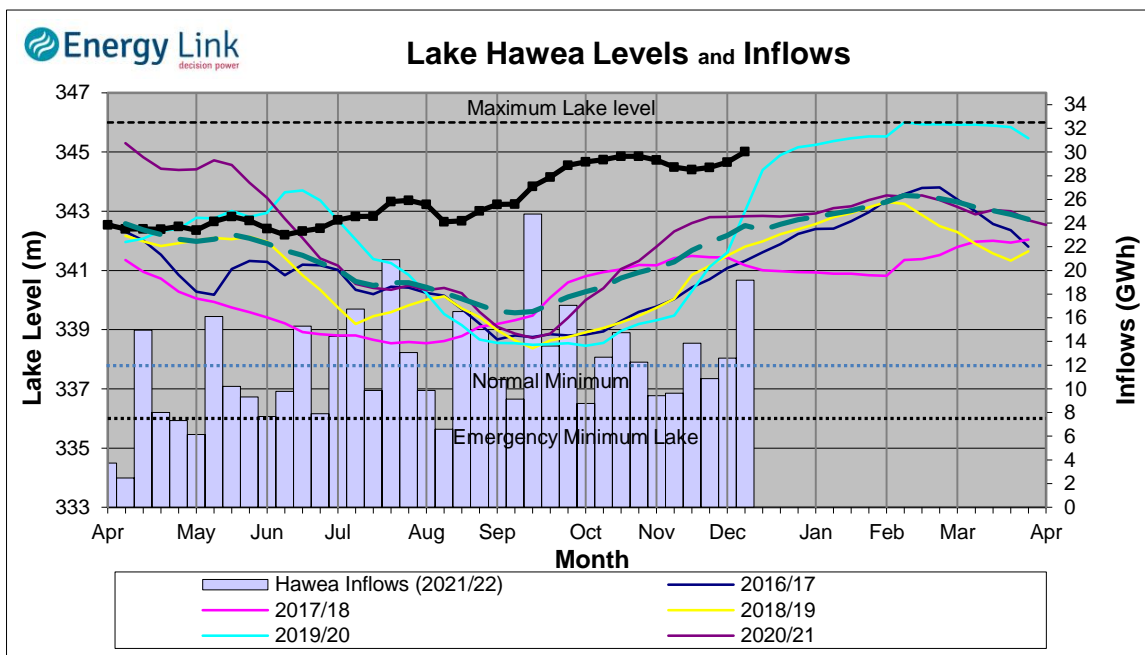
Inflows - Inflows into the Waitaki System increased 104.2% to 229 GWh.

Generation - Average Waikati generation increased 19.3% to 989.3 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River increased to 46.8 cumecs while Waitaki River flows were higher than last week averaging 475.5 cumecs.

Clutha System



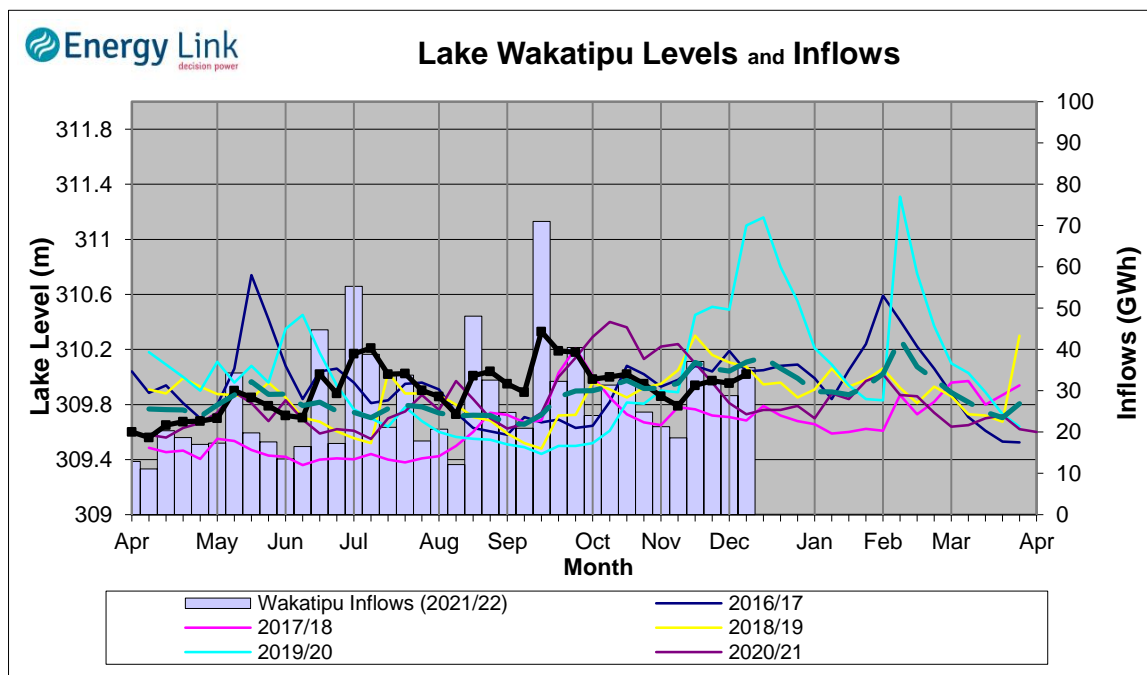
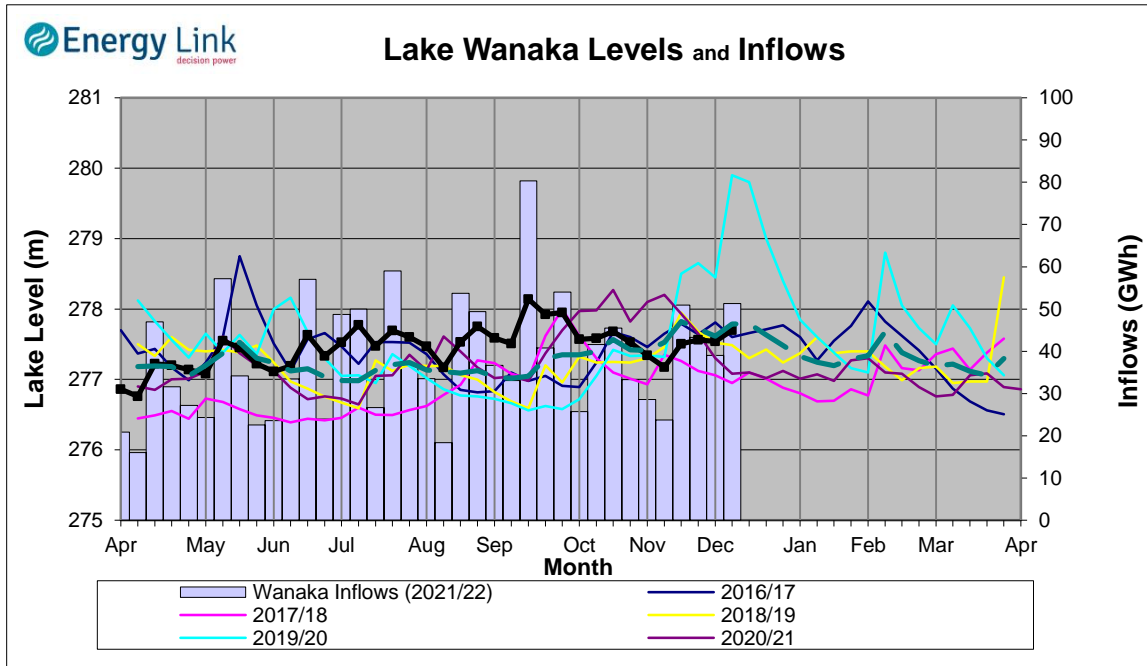
Lake Levels - Total storage for the Clutha System increased by 7.1% to 397 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 87.3%, 70.3% and 55% nominally full respectively.

Inflows - Total Inflows into the Clutha System 31.9% higher at 106 GWh.

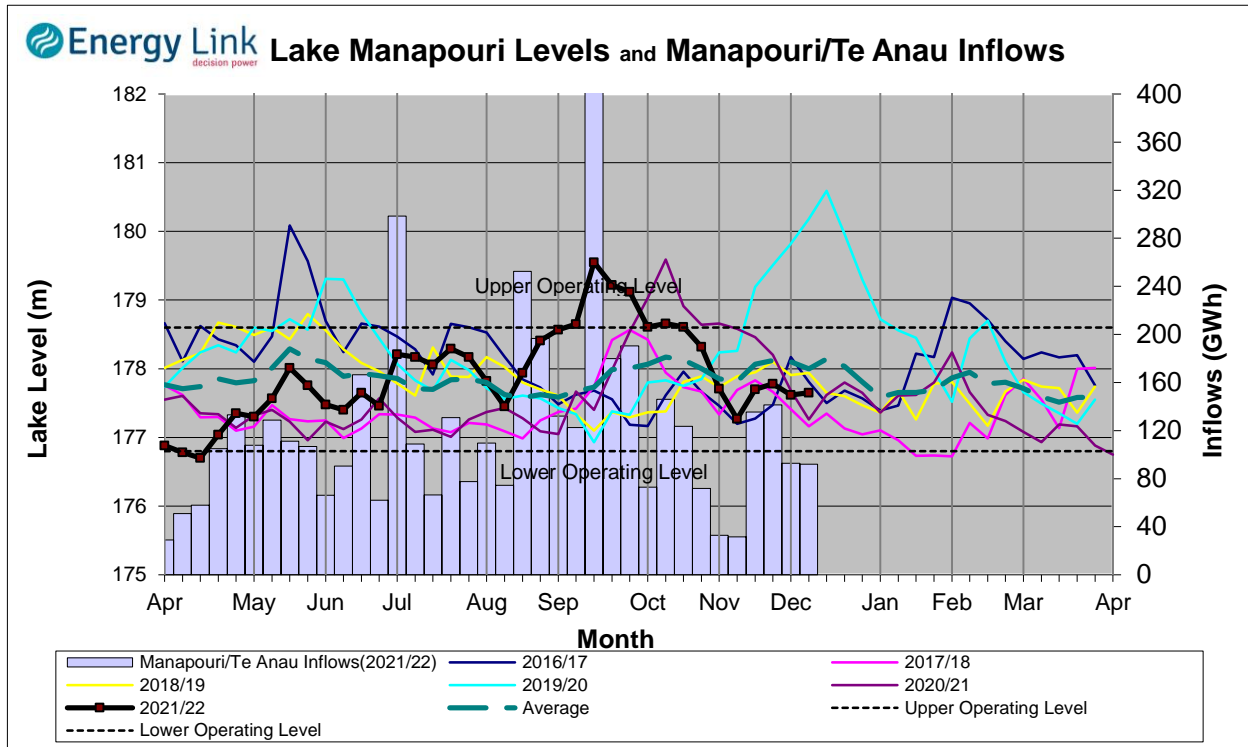
Generation - Average generation was 3.2% higher at 533 MW.

Hydro Spill - There was no estimated spill

River Flows - Total outflows from the lakes and Shotover River increased to 569.5 cumecs. This comprised of 38 cumecs from Lake Hawea, 277 cumecs from Lake Wanaka, 197 cumecs from Lake Wakatipu and 57 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 3.2% to 309 GWh with Lake Manapouri ending the week 65% nominally full and Lake Te Anau ending the week 73.9% nominally full.

Inflows - Total inflows into the Manapouri System decreased 0.9% to 92 GWh.

Generation - Average generation was 10.6% lower at 608 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 17.6 cumecs.

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

