



Thursday, 16 March 2023

Issue: 1352

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)	2436	288	2723	487	3210
Storage Change (GWh)	34	64	98	-14	84

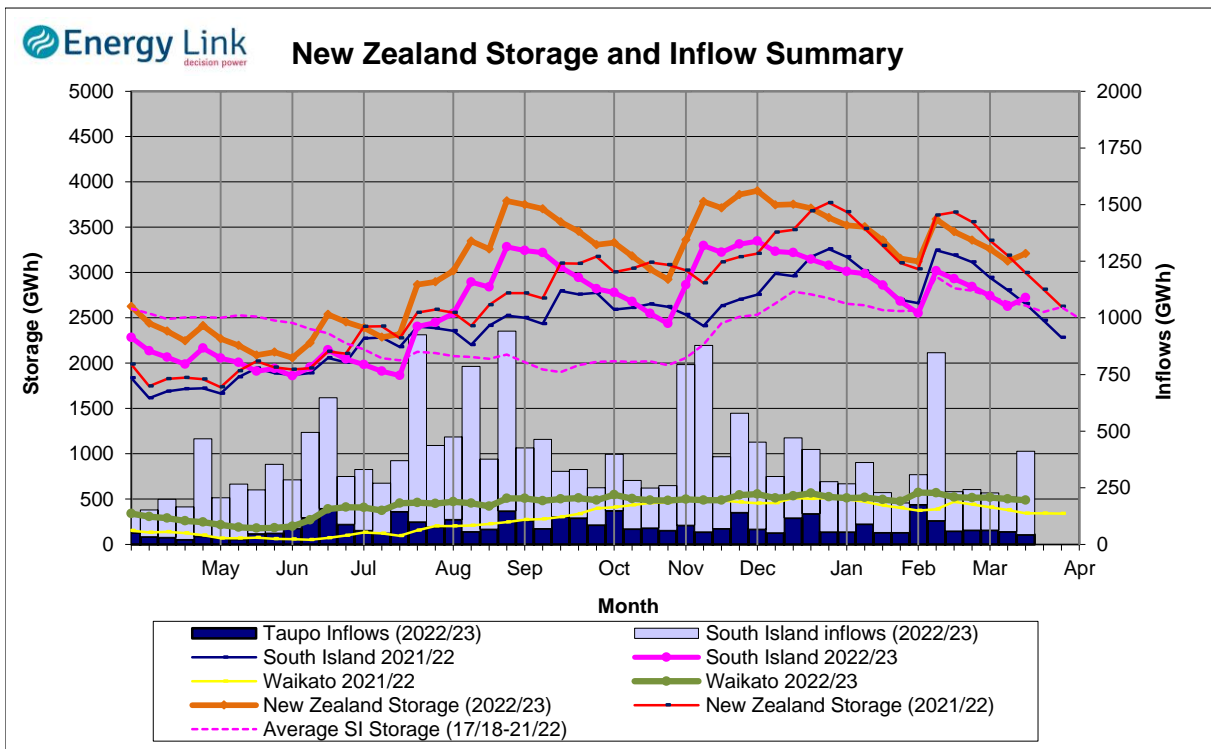
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	2641	487	3128

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 83.6 GWh over the last week. South Island controlled storage increased 1.4% to 2436 GWh; South Island uncontrolled storage increased 28.8% to 288 GWh; with Taupo storage decreasing 2.8% to 487 GWh.



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Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
<b>This Week</b>	205	266	2252	487	3210
Last Week	160	262	2203	501	3127
% Change	27.9%	1.7%	2.2%	-2.8%	2.7%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
<b>This Week</b>	80	75	214	43	412
Last Week	19	36	97	57	209
% Change	312.6%	109.6%	120.4%	-24.1%	96.9%

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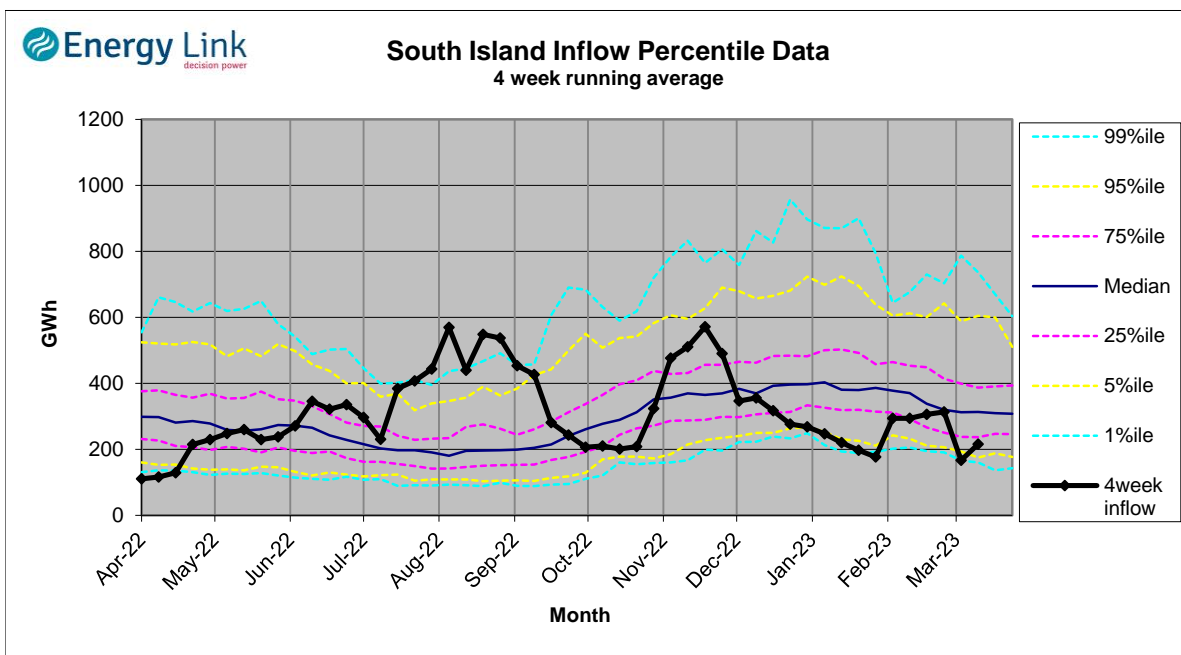
Lake Levels and Outflows

Catchment	Lake	Level	Storage	Outflow	Outflow Change
		(m. asl)	(GWh)	(cumecs)	
Manapouri	Manapouri	177.31	85	17	0
	Te Anau	201.66	120		
Clutha	Wakatipu	309.68	32	107	14
	Wanaka	277.09	50	170	
	Hawea	343.03	184	173	
Waitaki	Tekapo	708.98	690		28
	Pukaki	530.42	1562		
Waikato	Taupo	357.04	487		29

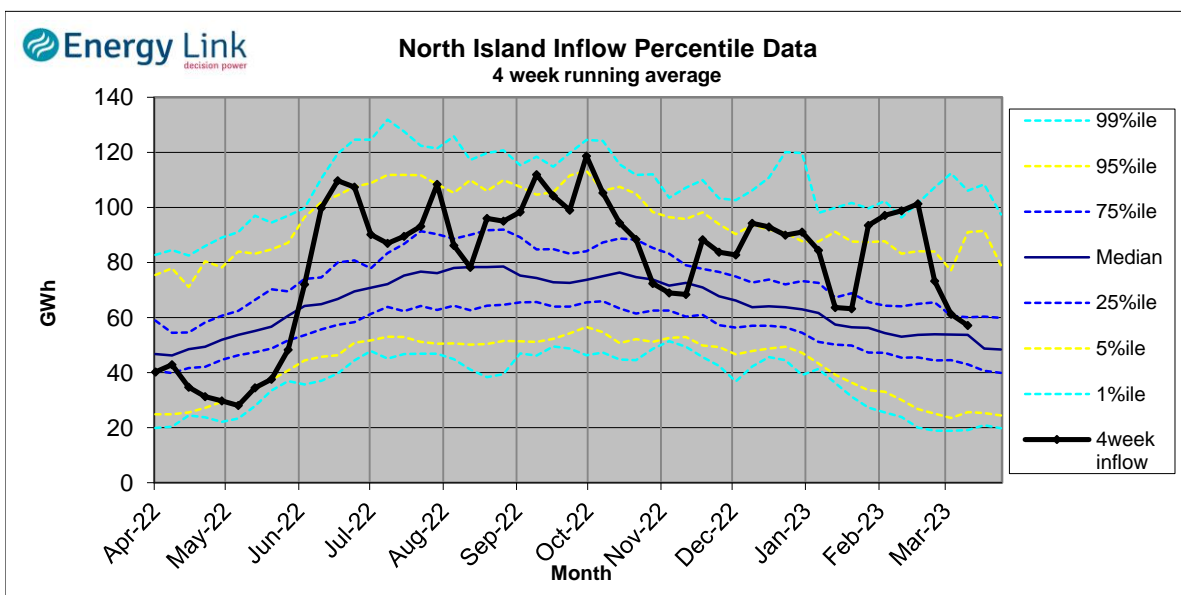
Inflow Summary

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.

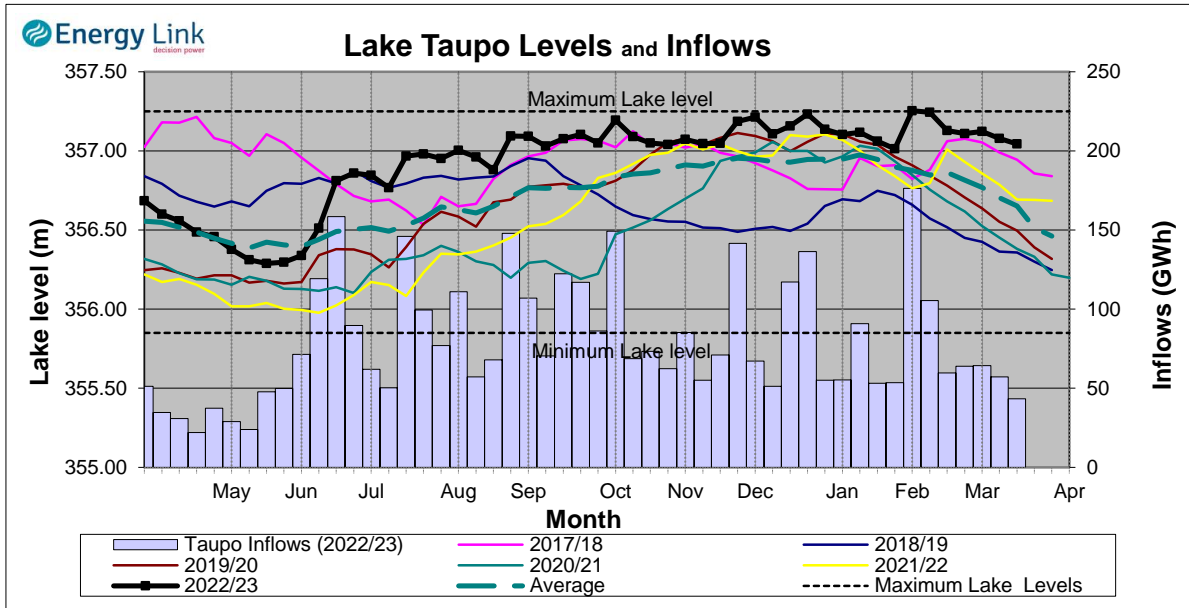
**South Island Inflows** - The past four weeks of S. I. inflows rank as the 15th driest on record.



**North Island Inflows** - The past four weeks of N. I. inflows rank as the 31st wettest on record.



## Waikato System

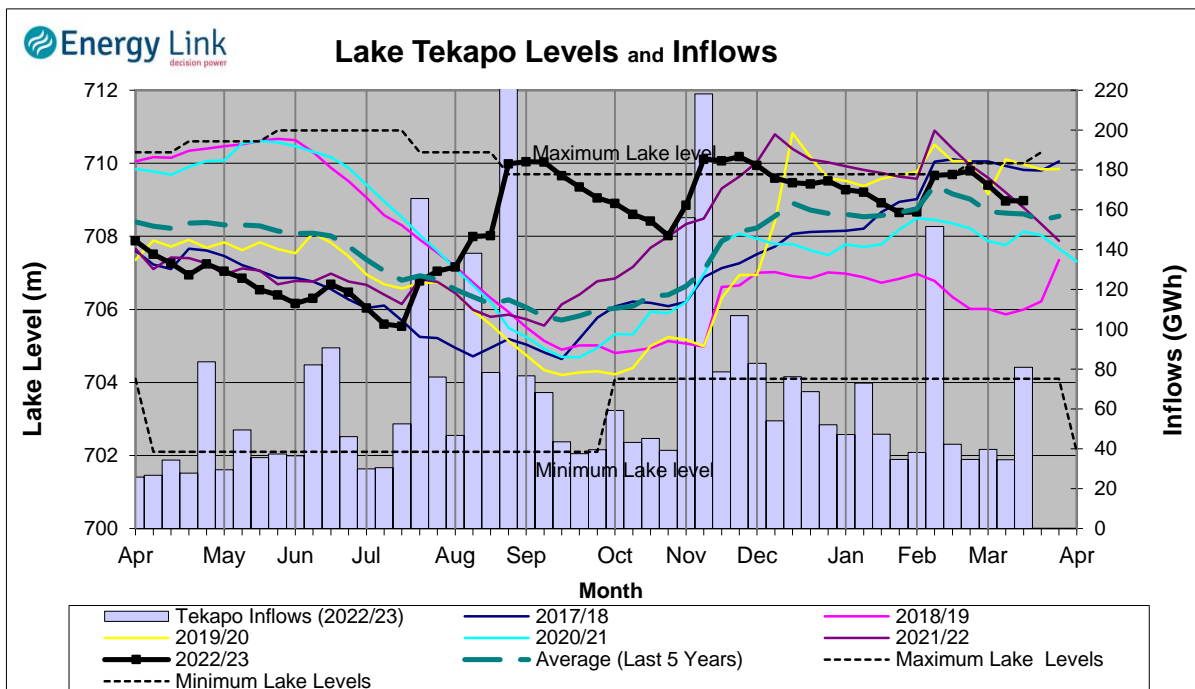


**Lake Levels** - Lake Taupo storage fell to 85.3% of nominal full at 487 GWh.

**Inflows** - Inflows decreased 24.1% to 43 GWh.

**Generation** - Average generation decreased 10.7% to 446.2 MW.

## Tekapo



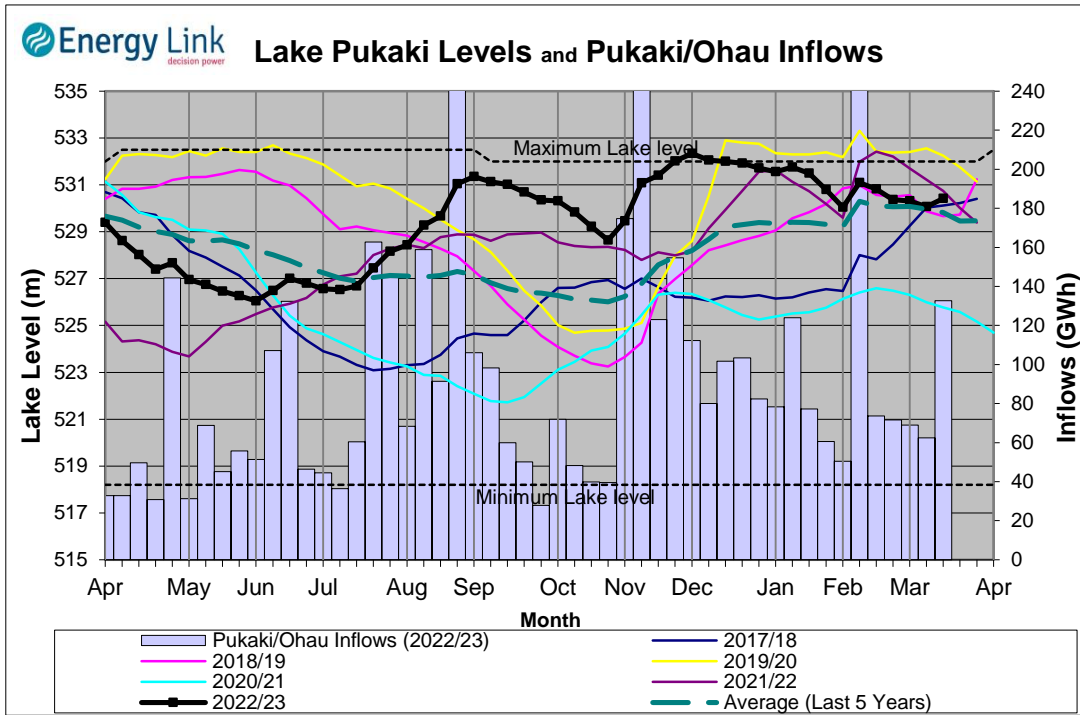
**Lake Levels** - Lake Tekapo ended the week 91% nominally full with storage increasing to 690 GWh.

**Inflows** - Inflows into tekapo increased 134.4% to 81 GWh.

**Generation** - Average Tekapo generation decreased 2.3% to 169.1 MW.

**Hydro Spill** - Lake Tekapo did not spill.

## Waitaki System



**Lake Levels** - Lake Pukaki ended the week 88% nominally full with storage increasing to 1562

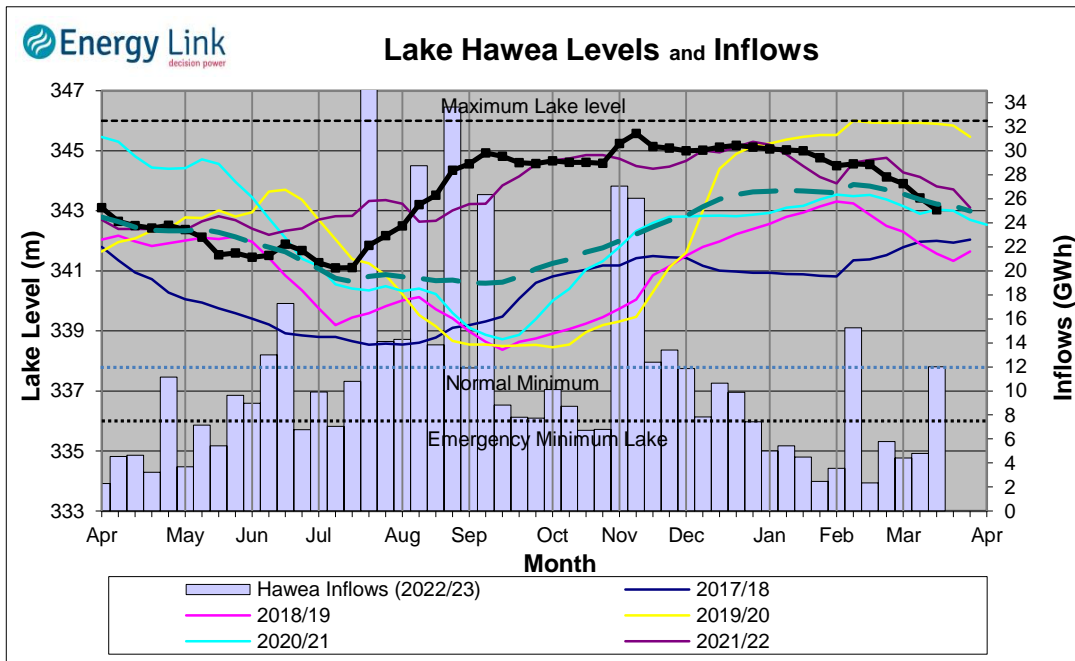
**Inflows** - Inflows into the Waitaki System increased 112.7% to 133 GWh.

**Generation** - Average Waitaki generation decreased 3.8% to 903.5 MW.

**Hydro Spill** - Lake Pukaki did not spill.

**River Flows** - Flows from the Ahuriri River increased to 26.6 cumecs while Waitaki River flows were lower than last week averaging 376.8 cumecs.

## Clutha System



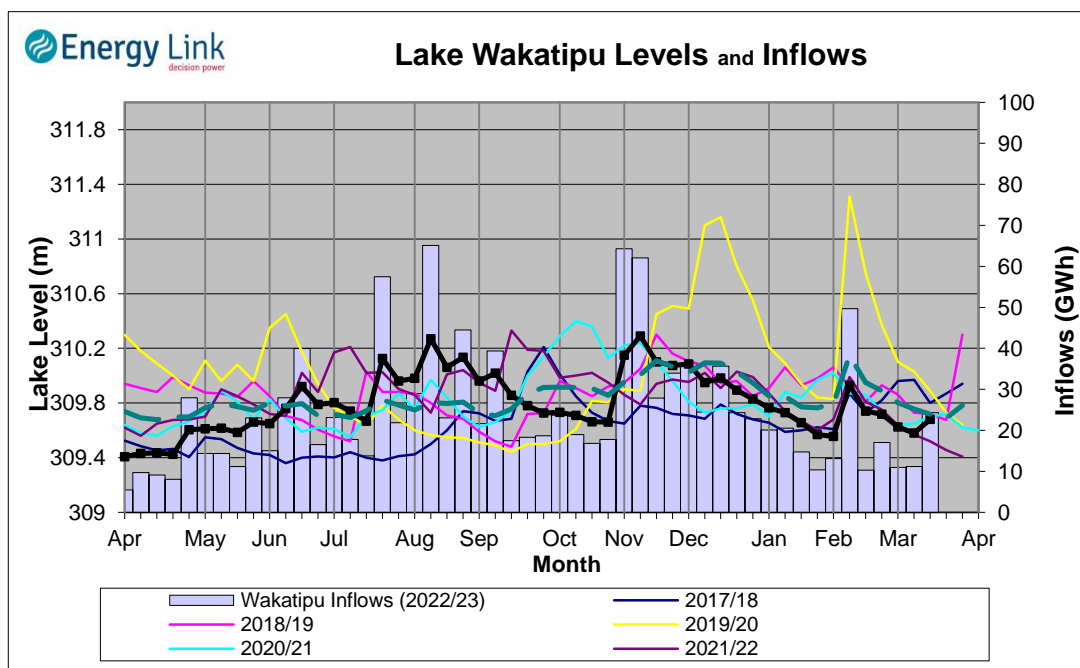
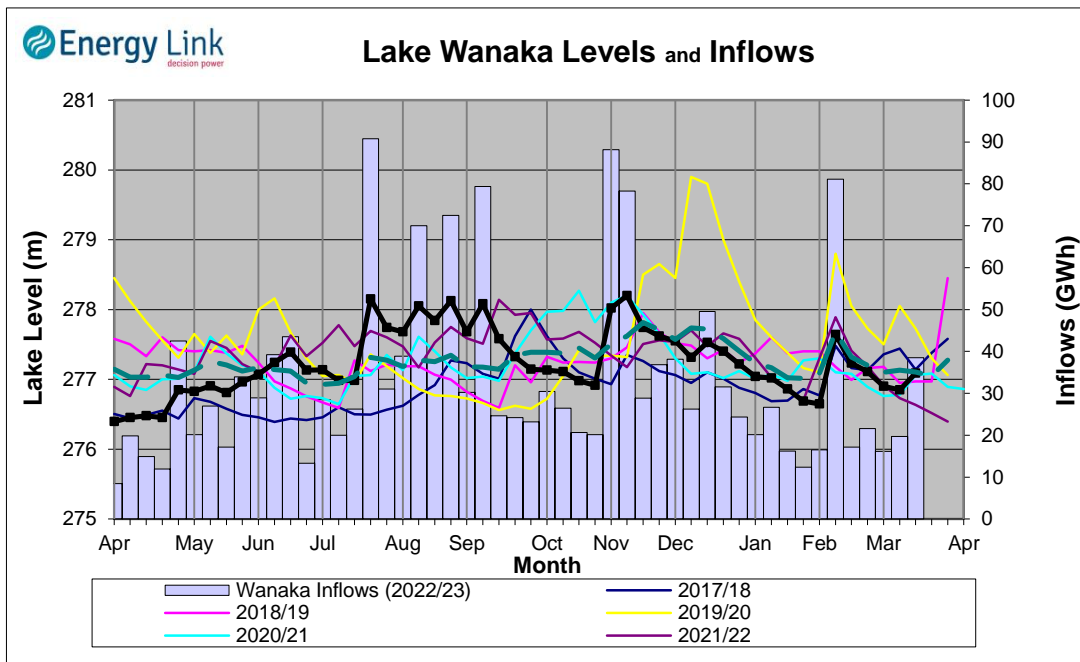
**Lake Levels -** Total storage for the Clutha System increased by 1.7% to 266 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 62.1%, 43.8% and 30.7% nominally full respectively.

**Inflows -** Total Inflows into the Clutha System 109.6% higher at 75 GWh.

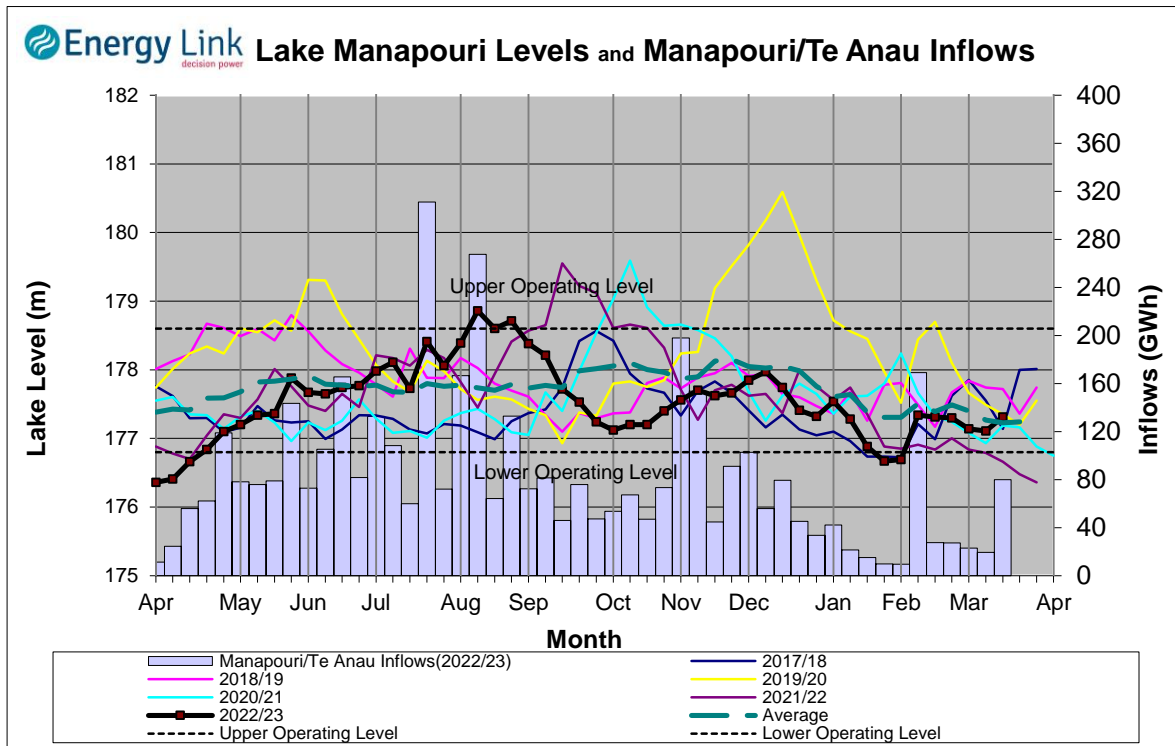
**Generation -** Average generation was 10.3% higher at 419 MW.

**Hydro Spill -** Estimate Spill is 12.8 cumecs.

**River Flows -** Total outflows from the lakes and Shotover River increased to 482.1 cumecs. This comprised of 173 cumecs from Lake Hawea, 170 cumecs from Lake Wanaka, 107 cumecs from Lake Wakatipu and 31 cumecs from the Shotover River.



## Manapouri System



**Lake Levels** - Total storage for the Manapouri System increased by 27.9% to 205 GWh with Lake Manapouri ending the week 52.6% nominally full and Lake Te Anau ending the week 43.5% nominally full.

**Inflows** - Total inflows into the Manapouri System increased 312.6% to 80 GWh.

**Generation** - Average generation was 6.2% higher at 209 MW.

**Hydro Spill** - Estimated spill at the Mararoa Weir was 16.8 cumecs.

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

