

### Thursday, 29 December 2022

A weekly summary relating to New Zealand hydro storage and inflows.

#### Compiled by Energy Link Ltd.

Storage Summary	South Island	South Island	South Island	North Island
	Controlled	Uncontrolled	Total	Taupo
Current Storage (GWh)	2751	329	3080	525
Storage Change (GWh)	-22	-45	-66	-40

Total Storage 3604 -106

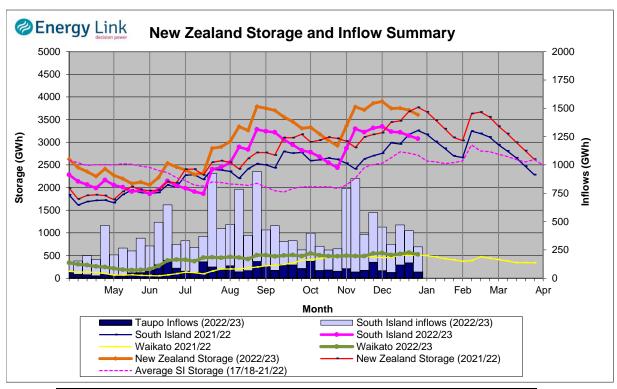
Issue: 1341

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)	2979	525		3504
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 105.9 GWh over the last week. South Island controlled storage decreased 0.8% to 2751 GWh; South Island uncontrolled storage decreased 12% to 329 GWh; with Taupo storage decreasing 7% to 525 GWh.



Thursday, 29 December 2022					
	Manapouri	Clutha	Waitaki	Waikato	NZ
Storage (GWh)					
This Week	228	363	2489	525	3604
Last Week	259	379	2508	564	3710
% Change	-11.9%	-4.2%	-0.8%	-7.0%	-2.9%
Inflow (GWh)					
This Week	34	55	134	55	278
Last Week	45	66	172	136	419
% Change	-26.1%	-16.9%	-21.8%	-59.5%	-33.8%

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#### **Lake Levels and Outflows**

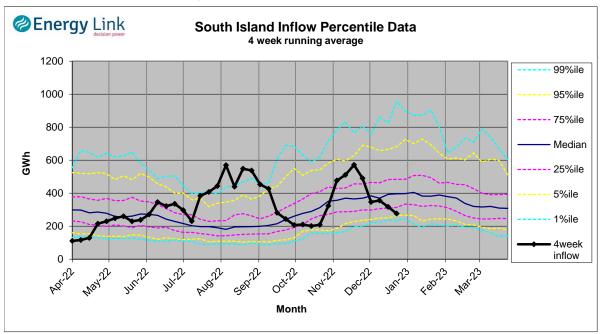
Catchment	Lake	Level	Storage	Outflow
		(m. asl)	(GWh)	(cumecs)
Manapouri	Manapouri	177.32	86	17
	Te Anau	201.81	142	
Clutha	Wakatipu	309.83	44	177
	Wanaka	277.22	57	214
	Hawea	345.13	262	61
Waitaki	Tekapo	709.52	749	
	Pukaki	531.72	1740	
Waikato	Taupo	357.14	525	

Outflow Change
-19
-22
-29
14

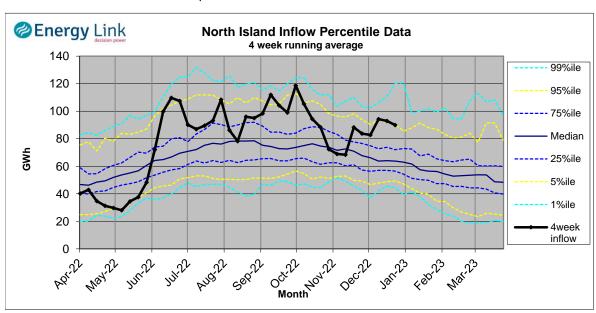
#### **Inflow Summary**

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.

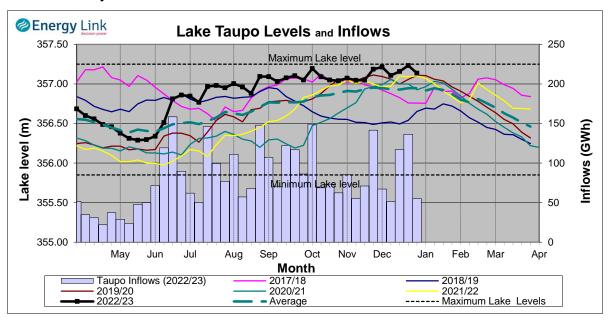
South Island Inflows - The past four weeks of S. I. inflows rank as the 13th driest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 6th wettest on record.



## **Waikato System**

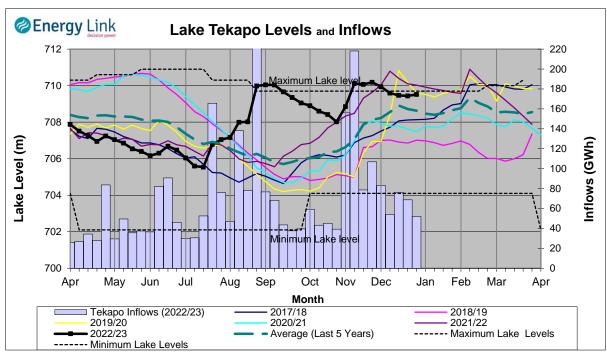


Lake Levels - Lake Taupo storage fell to 91.9% of nominal full at 525 GWh.

Inflows - Inflows decreased 59.5% to 55 GWh.

Generation - Average generation decreased 15.2% to 442 MW.

# Tekapo



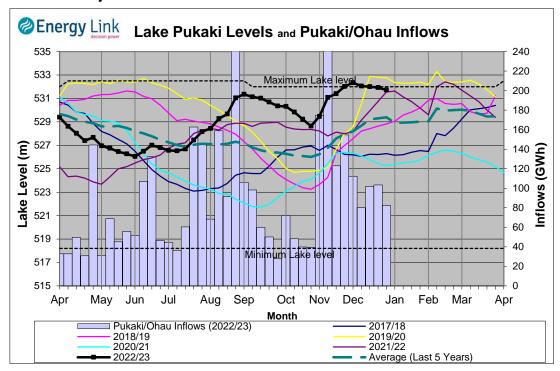
Lake Levels - Lake Tekapo ended the week 103% nominally full with storage increasing to 749 GWh.

Inflows - Inflows into tekapo decreased 24.2% to 52 GWh.

**Generation -** Average Tekapo generation decreased 39.4% to 93.5 MW.

Hydro Spill - Lake Tekapo did not spill.

### Waitaki System



Lake Levels - Lake Pukaki ended the week 98% nominally full with storage falling to 1740 GW

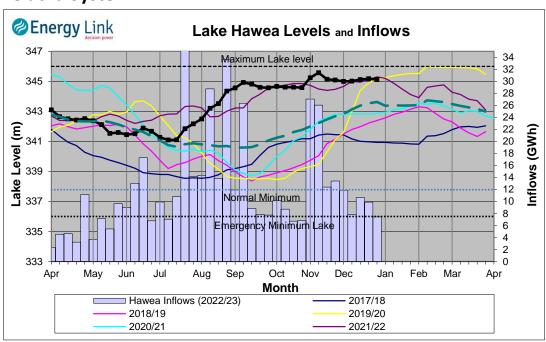
Inflows - Inflows into the Waitaki System decreased 20.3% to 82 GWh.

**Generation -** Average Waitaki generation decreased 7% to 960.7 MW.

Hydro Spill - Lake Pukaki did not spill.

**River Flows -** Flows from the Ahuriri River fell to 28.1 cumecs while Waitaki River flows were lower than last week averaging 416.9 cumecs.

# **Clutha System**



Lake Levels - Total storage for the Clutha System decreased 4.2% to 363 GWh.
Lakes Hawea, Wanaka and Wakatipu ended the week 88.8%, 49.5% and 41.4% nominally full respectively.

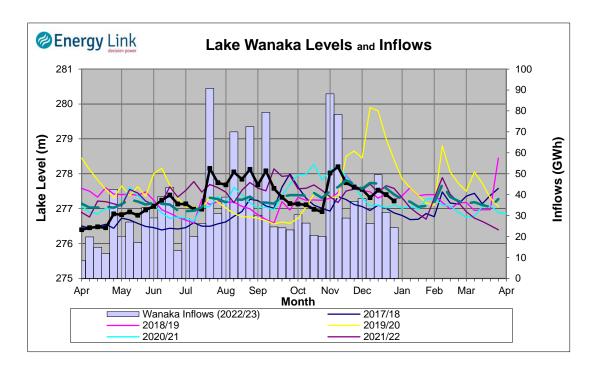
**Inflows** - Total Inflows into the Clutha System 16.9% lower at 55 GWh.

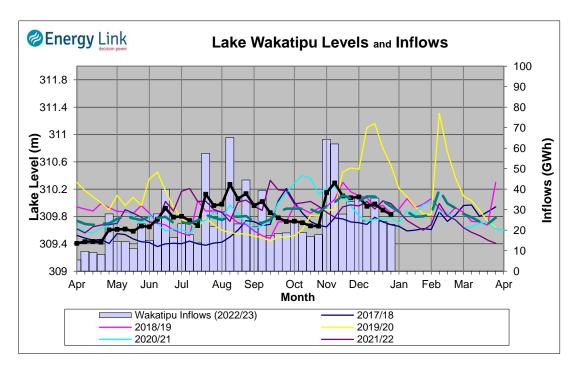
**Generation -** Average generation was 9.3% lower at 439 MW.

Hydro Spill - Estimate Spill is 6.4 cumecs.

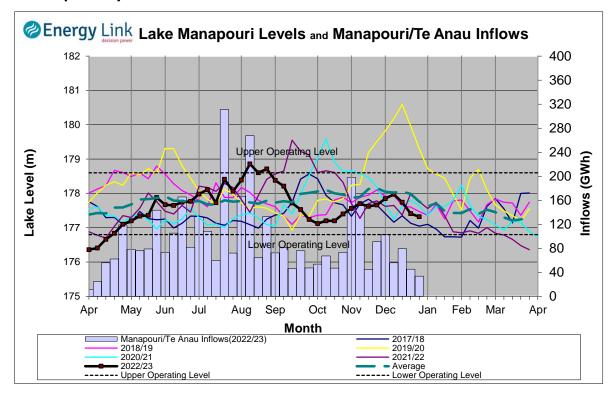
River Flows - Total outflows from the lakes and Shotover River fell to 495.3 cumecs.

This comprised of 61 cumecs from Lake Hawea, 214 cumecs from
Lake Wanaka, 177 cumecs from Lake Wakatipu and 42 cumecs from
the Shotover River.





### **Manapouri System**



Lake Levels - Total storage for the Manapouri System decreased 11.9% to 228 GWh with Lake Manapouri ending the week 53% nominally full and Lake Te Anau ending the week 51.6% nominally full.

**Inflows** - Total inflows into the Manapouri System decreased 26.1% to 34 GWh.

**Generation -** Average generation was 31.2% lower at 383 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'.

