

## Thursday, 24 November 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)	2862	452	3314	545
Storage Change (GWh)	94	-4	90	57

Total Storage				
3859				
147				

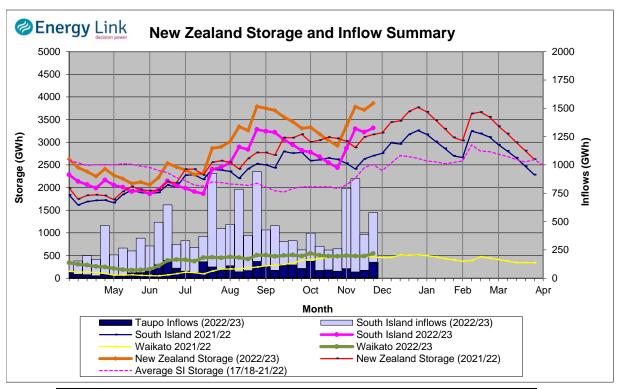
Issue: 1336

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)	3175	545		3720	
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 146.8 GWh over the last week. South Island controlled storage increased 3.4% to 2862 GWh; South Island uncontrolled storage decreased 0.9% to 452 GWh; with Taupo storage increasing 11.7% to 545 GWh.



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	Manapouri	Clutha	Waitaki	Waikato		NZ
Storage (GWh)						
This Week	313	400	2601	545		3859
Last Week	309	410	2506	488		3712
% Change	1.3%	-2.5%	3.8%	11.7%		4.0%
Inflow (GWh)						
This Week	91	84	262	142		579
Last Week	45	69	202	71		386
% Change	104.0%	21.8%	29.7%	99.4%		49.7%

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

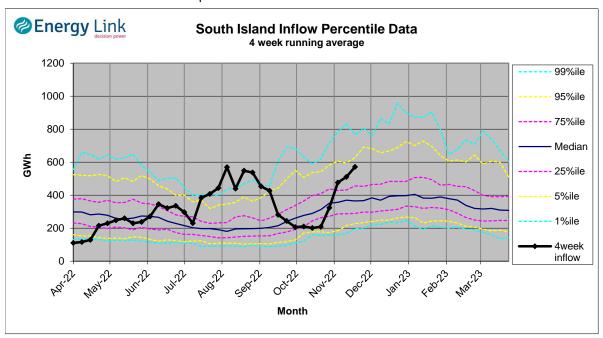
Catchment	Lake	Level	Storage	Outflow
		(m. asl)	(GWh)	(cumecs)
Manapouri	Manapouri	177.66	106	39
	Te Anau	202.24	206	
Clutha	Wakatipu	310.08	62	230
	Wanaka	277.62	77	275
	Hawea	345.09	261	100
Waitaki	Tekapo	710.18	821	
	Pukaki	532.01	1780	
Waikato	Taupo	357.19	545	

Outflow Change	
22	
-41	_
-57	
-85	

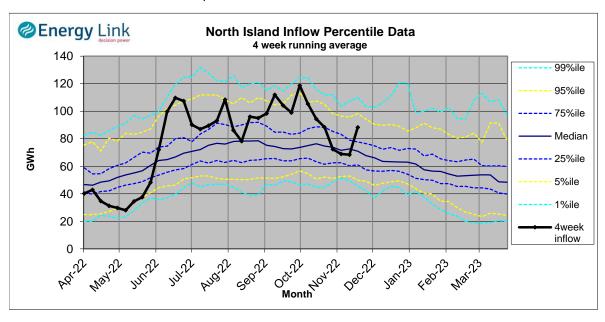
#### **Inflow Summary**

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.

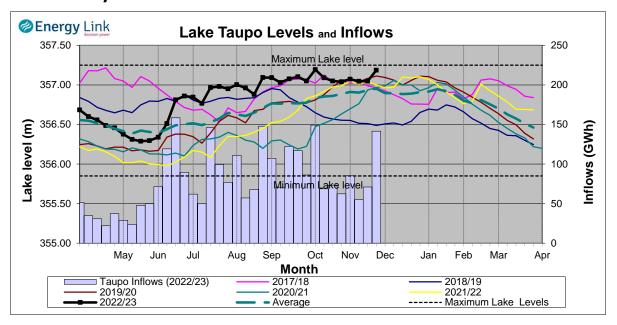
**South Island Inflows** - The past four weeks of S. I. inflows rank as the 7th wettest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 10th wettest on record.



## **Waikato System**

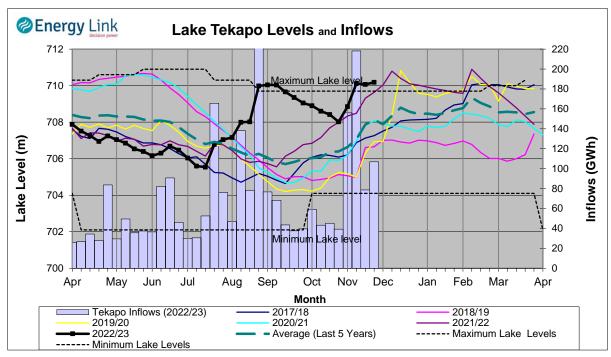


Lake Levels - Lake Taupo storage increased to 95.5% of nominal full at 545 GWh.

Inflows - Inflows increased 99.4% to 142 GWh.

**Generation -** Average generation increased 7.7% to 517.3 MW.

## Tekapo



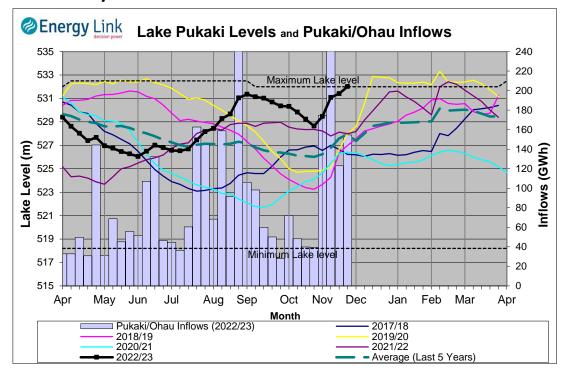
Lake Levels - Lake Tekapo ended the week 113% nominally full with storage increasing to 821 GWh.

**Inflows** - Inflows into tekapo increased 35.9% to 107 GWh.

**Generation -** Average Tekapo generation increased 0.9% to 170.6 MW.

**Hydro Spill** - Lake Tekapo spill was 18.1 cumecs.

### Waitaki System



Lake Levels - Lake Pukaki ended the week 100% nominally full with storage increasing to 178

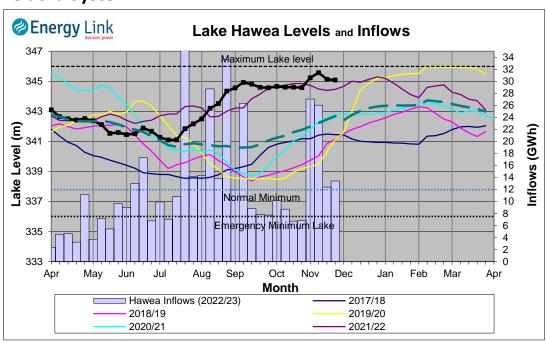
Inflows - Inflows into the Waitaki System increased 25.8% to 155 GWh.

Generation - Average Waitaki generation decreased 3.9% to 928.5 MW.

Hydro Spill - Lake Pukaki did not spill.

**River Flows -** Flows from the Ahuriri River increased to 38.7 cumecs while Waitaki River flows were higher than last week averaging 441.2 cumecs.

# **Clutha System**



Lake Levels - Total storage for the Clutha System decreased 2.5% to 400 GWh.
Lakes Hawea, Wanaka and Wakatipu ended the week 88.3%, 66.9% and 58.9% nominally full respectively.

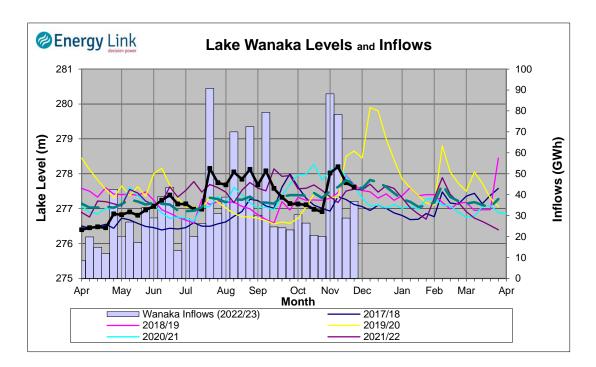
Inflows - Total Inflows into the Clutha System 21.8% higher at 84 GWh.

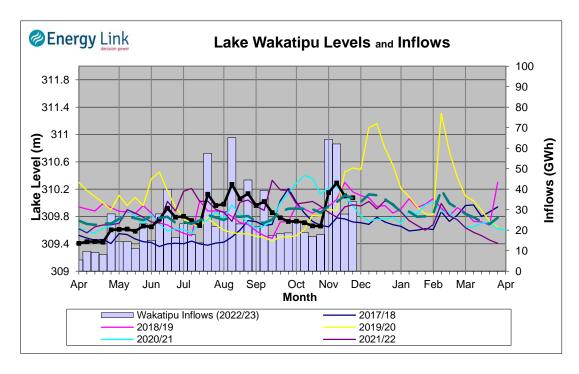
**Generation -** Average generation was 9.6% lower at 575 MW.

**Hydro Spill -** Estimate Spill is 45.8 cumecs.

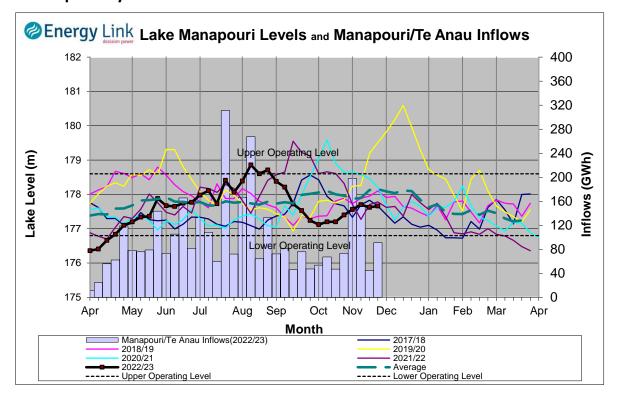
River Flows - Total outflows from the lakes and Shotover River fell to 670.6 cumecs.

This comprised of 100 cumecs from Lake Hawea, 275 cumecs from
Lake Wanaka, 230 cumecs from Lake Wakatipu and 66 cumecs from
the Shotover River.





#### **Manapouri System**



Lake Levels - Total storage for the Manapouri System increased by 1.3% to 313 GWh with Lake Manapouri ending the week 65.4% nominally full and Lake Te Anau ending the week 75% nominally full.

Inflows - Total inflows into the Manapouri System increased 104% to 91 GWh.

**Generation -** Average generation was 15.5% lower at 519 MW.

**Hydro Spill -** Estimated spill at the Mararoa Weir was 38.5 cumecs.

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

