

# Thursday, 11 May 2023

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)	2816	541	3357	505
Storage Change (GWh)	281	225	506	69

Total Storage

3862

575

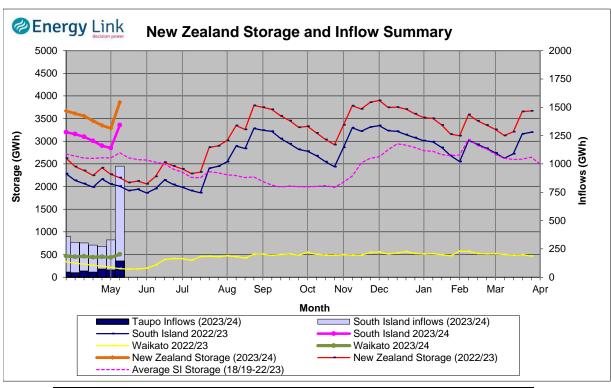
Issue: 1360

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)	3203	505		3708
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 575 GWh over the last week. South Island controlled storage increased 11.1% to 2816 GWh; South Island uncontrolled storage increased 71.1% to 541 GWh; with Taupo storage increasing 15.9% to 505 GWh.



Thursday, 11 May 2023					
	Manapouri	Clutha	Waitaki	Waikato	NZ
Storage (GWh)					
This Week	386	321	2649	505	3862
Last Week	231	237	2384	436	3287
% Change	67.4%	35.7%	11.1%	15.9%	17.5%
Inflow (GWh)					
This Week	227	157	452	145	981
Last Week	83	60	121	65	329
% Change	172.5%	159.7%	274.4%	123.7%	197.9%

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

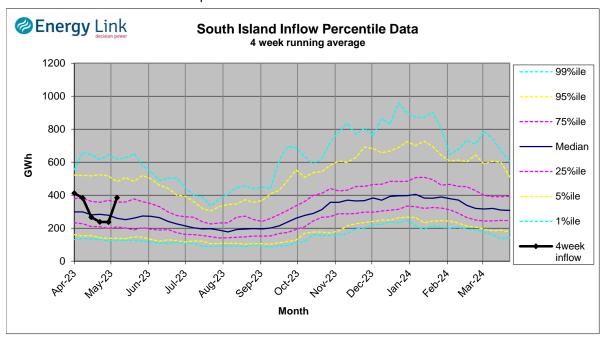
Catchment	Lake	Level	Storage	Outflow
		(m. asl)	(GWh)	(cumecs)
Manapouri	Manapouri	178.44	153	34
	Te Anau	202.42	233	
Clutha	Wakatipu	310.05	60	155
	Wanaka	277.97	94	248
	Hawea	342.59	167	59
Waitaki	Tekapo	710.35	840	
	Pukaki	532.22	1809	
Waikato	Taupo	357.09	505	

Outflow Change
20
56
117
-136

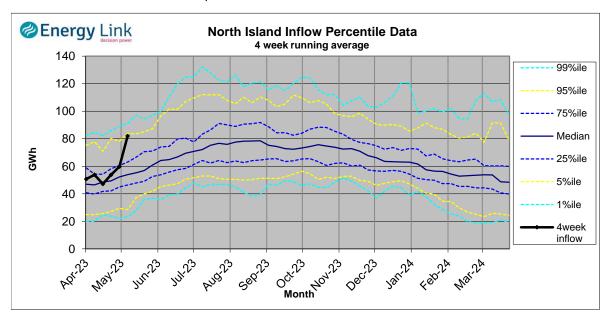
#### **Inflow Summary**

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.

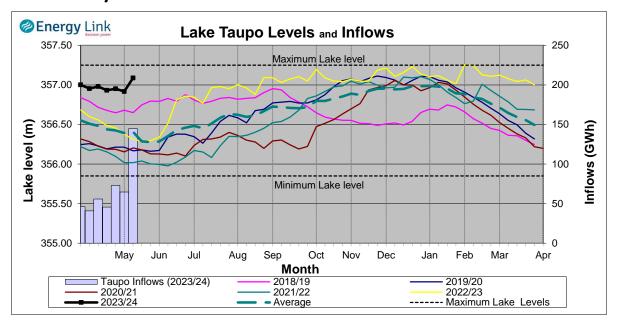
**South Island Inflows -** The past four weeks of S. I. inflows rank as the 14th wettest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 7th wettest on record.



## **Waikato System**

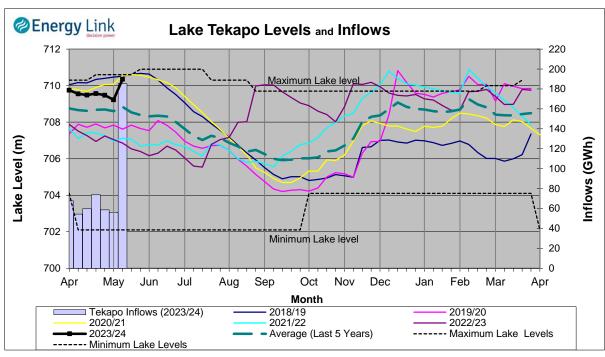


Lake Levels - Lake Taupo storage increased to 88.4% of nominal full at 505 GWh.

Inflows - Inflows increased 123.7% to 145 GWh.

Generation - Average generation decreased 5.2% to 498.6 MW.

# Tekapo



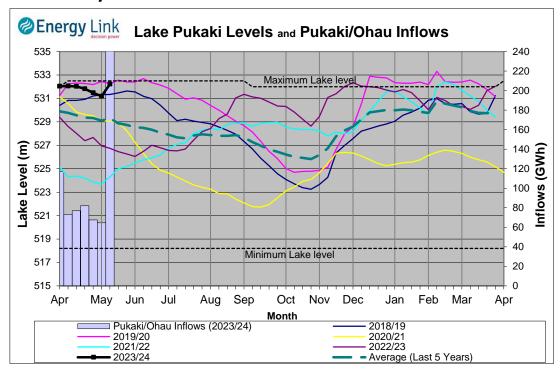
Lake Levels - Lake Tekapo ended the week 103% nominally full with storage increasing to 840 GWh.

Inflows - Inflows into tekapo increased 230.6% to 185 GWh.

Generation - Average Tekapo generation decreased 26.2% to 130.9 MW.

Hydro Spill - Lake Tekapo did not spill.

### Waitaki System



Lake Levels - Lake Pukaki ended the week 98% nominally full with storage increasing to 1809

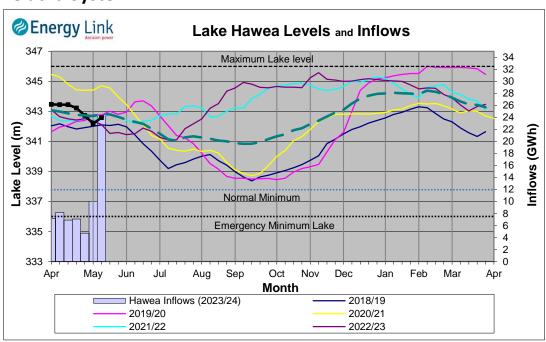
Inflows - Inflows into the Waitaki System increased 312.3% to 267 GWh.

Generation - Average Waitaki generation decreased 3.9% to 1045.2 MW.

Hydro Spill - Lake Pukaki did not spill.

**River Flows -** Flows from the Ahuriri River increased to 47.2 cumecs while Waitaki River flows were lower than last week averaging 423.1 cumecs.

# **Clutha System**



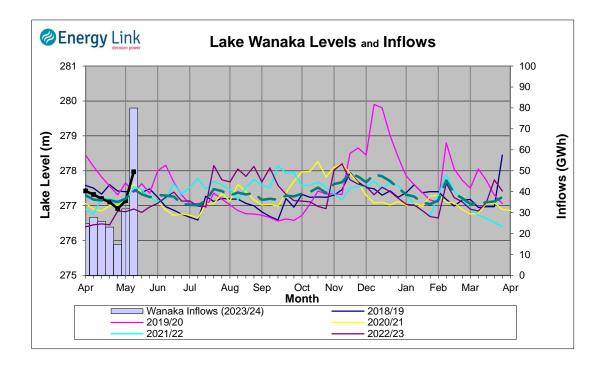
Lake Levels - Total storage for the Clutha System increased by 35.7% to 321 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 56.6%, 82.1% and 57.1% nominally full respectively.

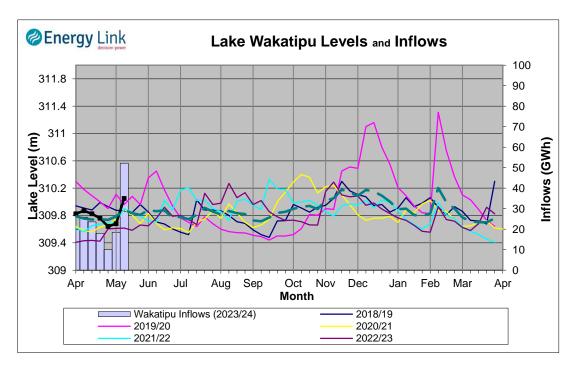
Inflows - Total Inflows into the Clutha System 159.7% higher at 157 GWh.

**Generation -** Average generation was 12.1% higher at 485 MW.

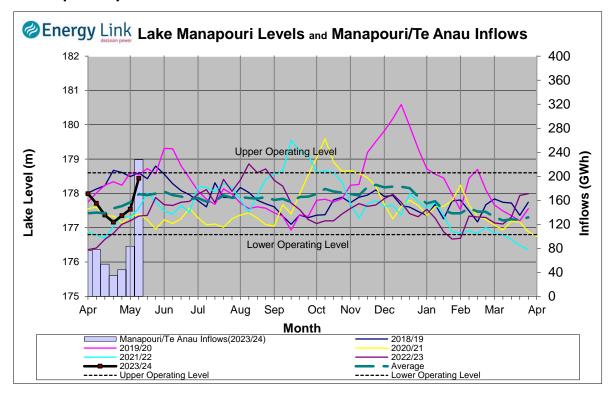
Hydro Spill - The was no estimated spill

**River Flows -** Total outflows from the lakes and Shotover River increased to 532.7 cumecs. This comprised of 59 cumecs from Lake Hawea, 248 cumecs from Lake Wanaka, 155 cumecs from Lake Wakatipu and 71 cumecs from the Shotover River.





### **Manapouri System**



**Lake Levels -** Total storage for the Manapouri System increased by 67.4% to 386 GWh with Lake Manapouri ending the week 94.1% nominally full and Lake Te Anau ending the week 84.8% nominally full.

Inflows - Total inflows into the Manapouri System increased 172.5% to 227 GWh.

Generation - Average generation was 12.9% higher at 395 MW.

**Hydro Spill -** Estimated spill at the Mararoa Weir was 34.1 cumecs.

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

