

Thursday, 06 April 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)	2736	424	3161	450
Storage Change (GWh)	-22	-17	-39	-19

Total Storage

3611

-58

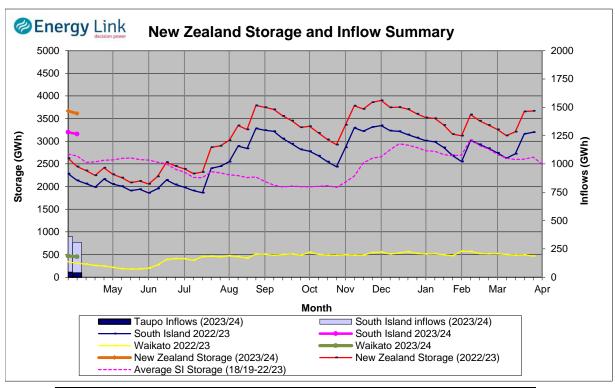
Issue: 1355

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)	3052	450		3503
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 57.9 GWh over the last week. South Island controlled storage decreased 0.8% to 2736 GWh; South Island uncontrolled storage decreased 3.8% to 424 GWh; with Taupo storage decreasing 4.1% to 450 GWh.



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	Manapouri	Clutha	Waitaki	Waikato	NZ
Storage (GWh)					
This Week	316	308	2537	450	3611
Last Week	331	310	2558	469	3669
% Change	-4.6%	-0.8%	-0.8%	-4.1%	-1.6%
Inflow (GWh)					
This Week	78	62	128	41	308
Last Week	76	52	185	46	359
% Change	3.0%	19.9%	-30.9%	-11.7%	-14.0%

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Lake Levels and Outflows

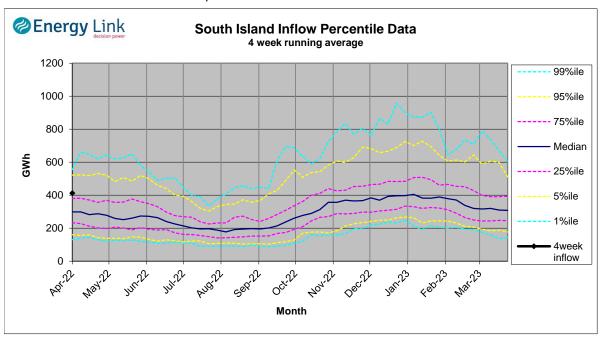
Catchment	Lake	Level	Storage	Outflow
		(m. asl)	(GWh)	(cumecs)
Manapouri	Manapouri	177.71	109	17
	Te Anau	202.24	206	
Clutha	Wakatipu	309.87	47	144
	Wanaka	277.32	62	210
	Hawea	343.45	199	57
Waitaki	Tekapo	709.55	752	
	Pukaki	532.05	1786	
Waikato	Taupo	356.95	450	

Outflow Change
-23
-29
-48
46

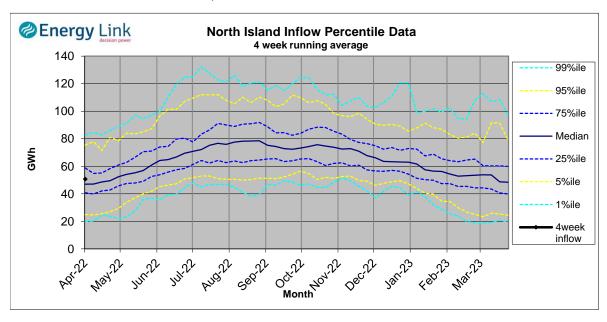
Inflow Summary

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.

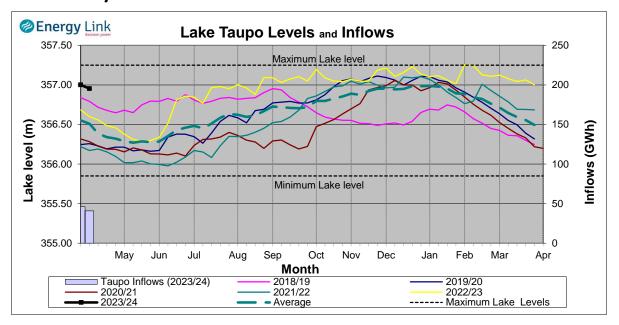
South Island Inflows - #N/A



North Island Inflows - #N/A



Waikato System

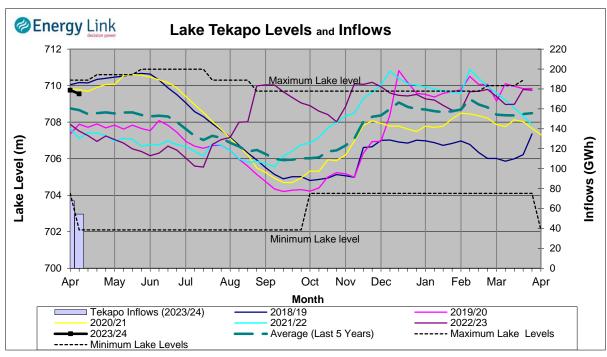


Lake Levels - Lake Taupo storage fell to 78.9% of nominal full at 450 GWh.

Inflows - Inflows decreased 11.7% to 41 GWh.

Generation - Average generation decreased 4.1% to 453.3 MW.

Tekapo



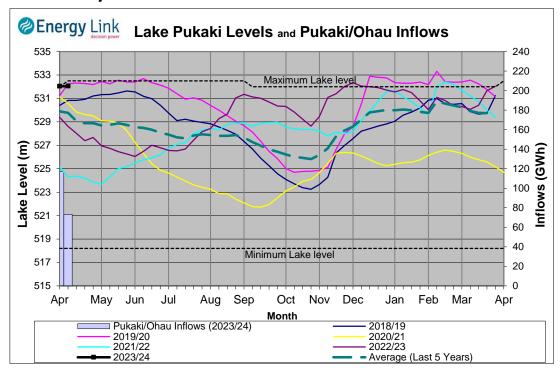
Lake Levels - Lake Tekapo ended the week 100% nominally full with storage falling to 752 GWh.

Inflows - Inflows into tekapo decreased 19.7% to 54 GWh.

Generation - Average Tekapo generation increased 7.1% to 163.9 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



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

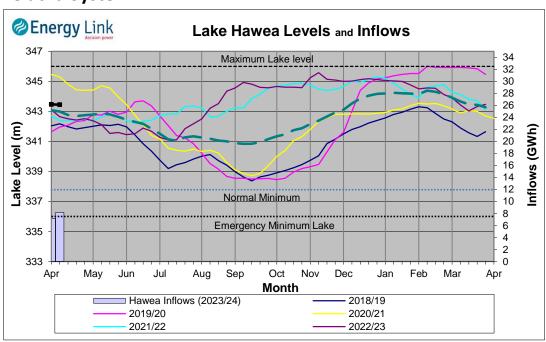
Inflows - Inflows into the Waitaki System decreased 37.4% to 73 GWh.

Generation - Average Waitaki generation increased 1.1% to 826 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 21.8 cumecs while Waitaki River flows were lower than last week averaging 359.6 cumecs.

Clutha System



Lake Levels - Total storage for the Clutha System decreased 0.8% to 308 GWh.
Lakes Hawea, Wanaka and Wakatipu ended the week 67.4%, 53.8% and 44.3% nominally full respectively.

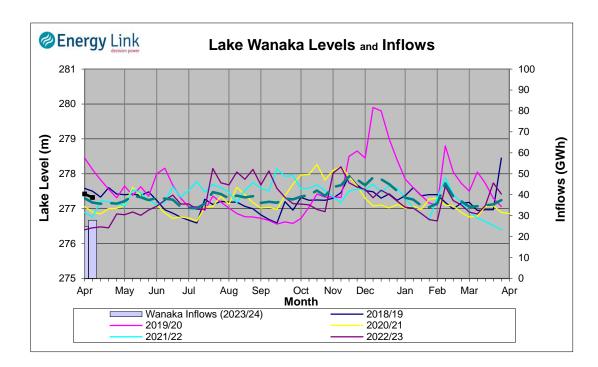
Inflows - Total Inflows into the Clutha System 19.9% higher at 62 GWh.

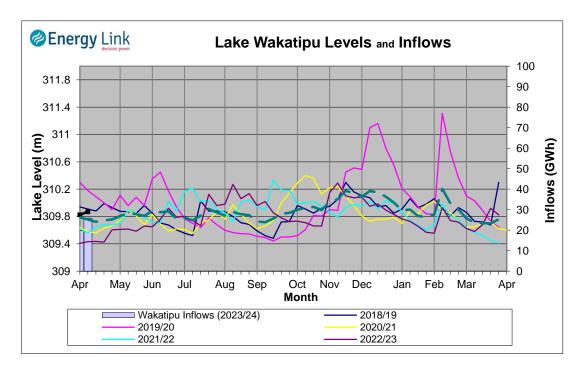
Generation - Average generation was 4.4% lower at 427 MW.

Hydro Spill - The was no estimated spill

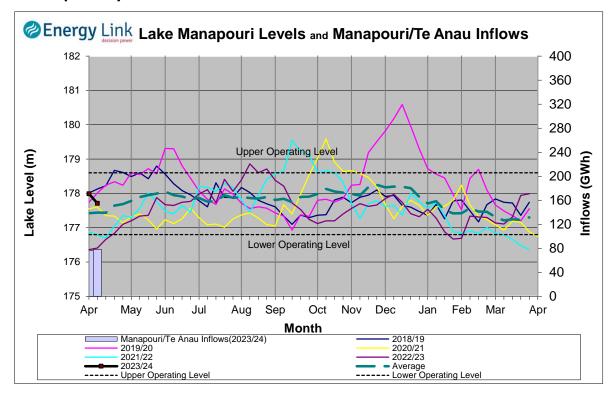
River Flows - Total outflows from the lakes and Shotover River fell to 448.3 cumecs.

This comprised of 57 cumecs from Lake Hawea, 210 cumecs from
Lake Wanaka, 144 cumecs from Lake Wakatipu and 37 cumecs from
the Shotover River.





Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 4.6% to 316 GWh with Lake Manapouri ending the week 67.2% nominally full and Lake Te Anau ending the week 75% nominally full.

Inflows - Total inflows into the Manapouri System increased 3% to 78 GWh.

Generation - Average generation was 33.5% higher at 555 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 16.7 cumecs.

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

