

Thursday, 15 June 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)	2888	631	3518	395
Storage Change (GWh)	-101	-202	-303	-49

Total Storage		
3914		
-352	1	

New Zealand

3772

Issue: 1365

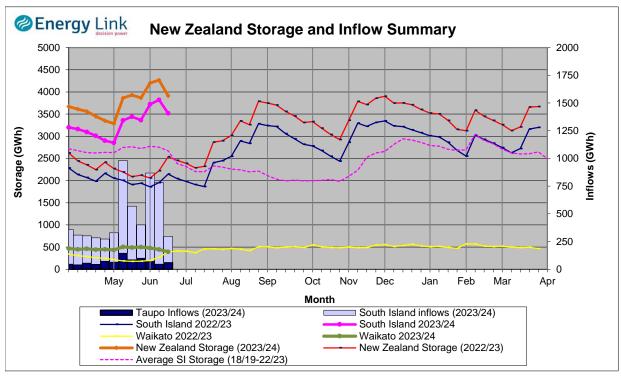
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	
Current Storage (GWh)	3377	395	
Note: Those figures are provided to align with Transpower	or's Socurity of	Supply inform	

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 352.5 GWh over the last week. South Island controlled storage decreased 3.4% to 2888 GWh; South Island uncontrolled storage decreased 24.3% to 631 GWh; with Taupo storage decreasing 11.1% to 395 GWh.



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	Manapouri	Clutha	Waitaki	Waikato		NZ
Storage (GWh)						
This Week	489	375	2654	395		3914
Last Week	640	421	2760	445		4266
% Change	-23.6%	-10.9%	-3.8%	-11.1%		-8.3%
Inflow (GWh)						
This Week	76	53	108	61		298
Last Week	301	160	274	47		782
% Change	-74.9%	-66.9%	-60.8%	31.7%		-61.9%

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Lake Levels and Outflows

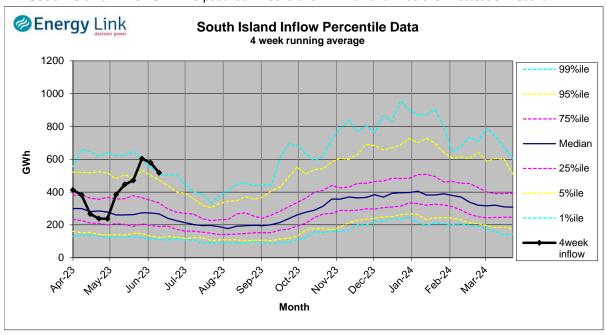
Catchment	Lake	Level	Storage	Outflow
		(m. asl)	(GWh)	(cumecs)
Manapouri	Manapouri	178.71	169	413
	Te Anau	203.00	320	
Clutha	Wakatipu	310.02	58	255
	Wanaka	277.75	83	364
	Hawea	344.38	234	15
Waitaki	Tekapo	710.60	868	
	Pukaki	532.05	1786	
Waikato	Taupo	356.82	395	

Outflow Change		
-157		
-54		
-116		
2		

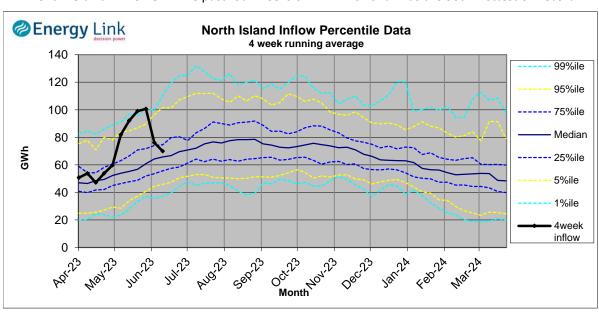
Inflow Summary

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.

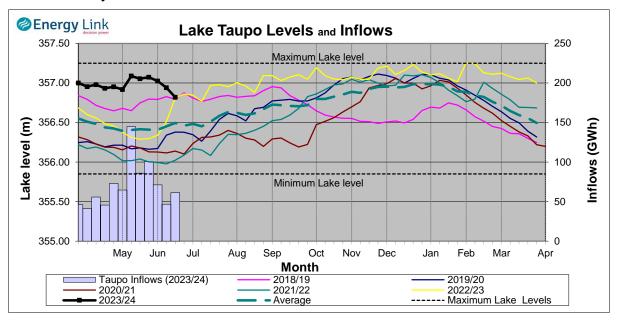
South Island Inflows - The past four weeks of S. I. inflows rank as the wettest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 36th wettest on record.



Waikato System

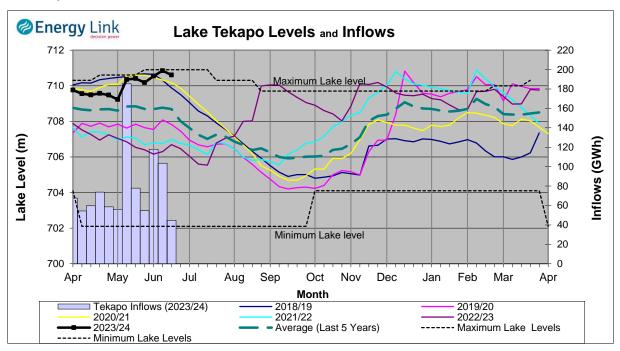


Lake Levels - Lake Taupo storage fell to 69.2% of nominal full at 395 GWh.

Inflows - Inflows increased 31.7% to 61 GWh.

Generation - Average generation increased 35.7% to 647.4 MW.

Tekapo



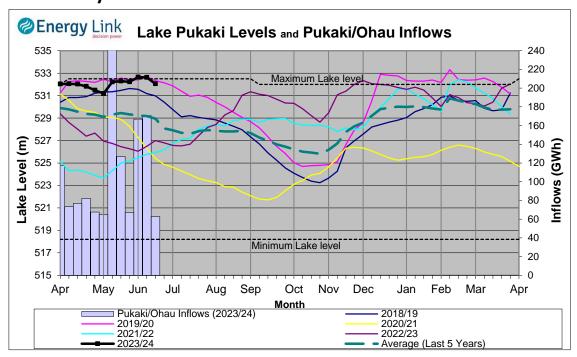
Lake Levels - Lake Tekapo ended the week 102% nominally full with storage falling to 868 GWh.

Inflows - Inflows into tekapo decreased 56.7% to 45 GWh.

Generation - Average Tekapo generation increased 0.9% to 152.1 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 97% nominally full with storage falling to 1786 GWh.

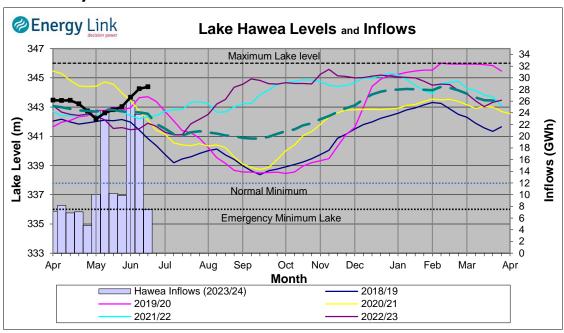
Inflows - Inflows into the Waitaki System decreased 63.3% to 63 GWh.

Generation - Average Waitaki generation increased 15.3% to 1162.3 MW.

Hydro Spill - Lake Pukaki spill was 59 cumecs.

River Flows - Flows from the Ahuriri River fell to 32 cumecs while Waitaki River flows were lower than last week averaging 555.5 cumecs.

Clutha System



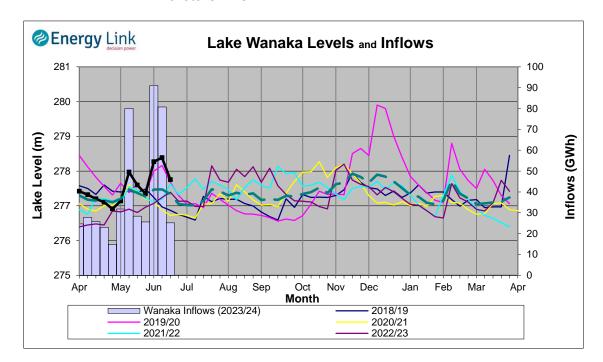
Lake Levels - Total storage for the Clutha System decreased 10.9% to 375 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 79.3%, 72.6% and 55% nominally full respectively.

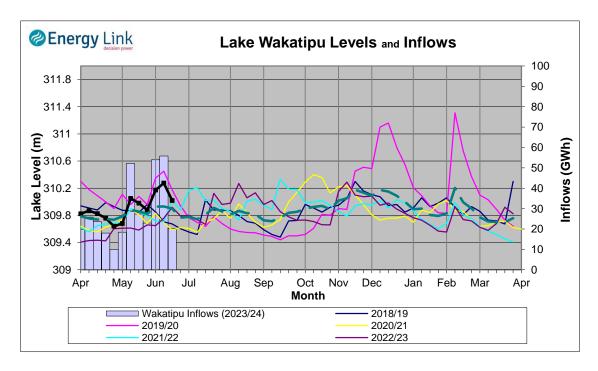
Inflows - Total Inflows into the Clutha System 66.9% lower at 53 GWh.

Generation - Average generation was 24.2% higher at 547 MW.

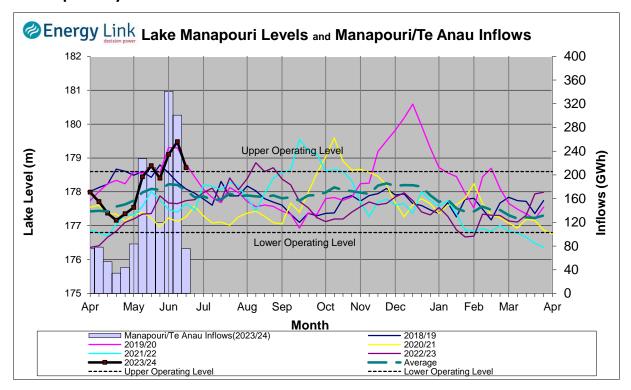
Hydro Spill - Estimate Spill is 83.4 cumecs.

River Flows - Total outflows from the lakes and Shotover River fell to 680.6 cumecs. This comprised of 15 cumecs from Lake Hawea, 364 cumecs from Lake Wanaka, 255 cumecs from Lake Wakatipu and 47 cumecs from the Shotover River.





Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 23.6% to 489 GWh with Lake Manapouri ending the week 104.1% nominally full and Lake Te Anau ending the week 116.3% nominally full.

Inflows - Total inflows into the Manapouri System decreased 74.9% to 76 GWh.

Generation - Average generation was 0.8% higher at 736 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 413 cumecs.

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

