HydroWatch

Thursday, 30 March 2023 Issue: 1354

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

Compiled by Energy Link Ltd.

Storage Summary	South Island Controlled	South Island Uncontrolled	South Island Total	North Island Taupo		Total Storage
Current Storage (GWh)	**2758**	**441**	**3199**	**469**		**3669**
Storage Change (GWh)	54	-17	37	-26		11

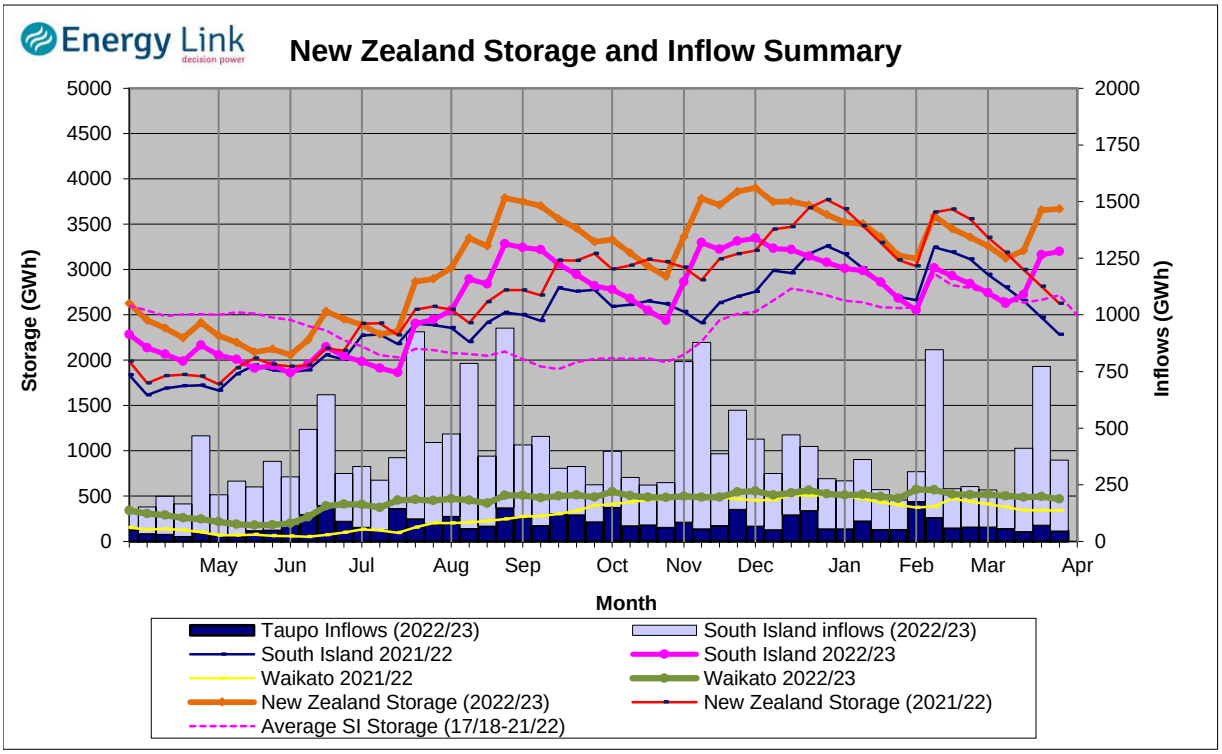
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	**3089**	**469**	**3559**

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 11.3 GWh over the last week. South Island controlled storage increased 2% to 2758 GWh; South Island uncontrolled storage decreased 3.7% to 441 GWh; with Taupo storage decreasing 5.2% to 469 GWh.



Thursday, 30 March 2023						
Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato		NZ
This Week	**331**	**310**	**2558**	**469**		**3669**
Last Week	325	327	2510	495		3658
% Change	1.8%	-5.3%	1.9%	-5.2%		0.3%
Inflow (GWh)						
This Week	**76**	**52**	**185**	**46**		**359**
Last Week	172	130	397	72		772
% Change	-56.0%	-60.5%	-53.5%	-35.9%		-53.6%

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Lake Levels and Outflows

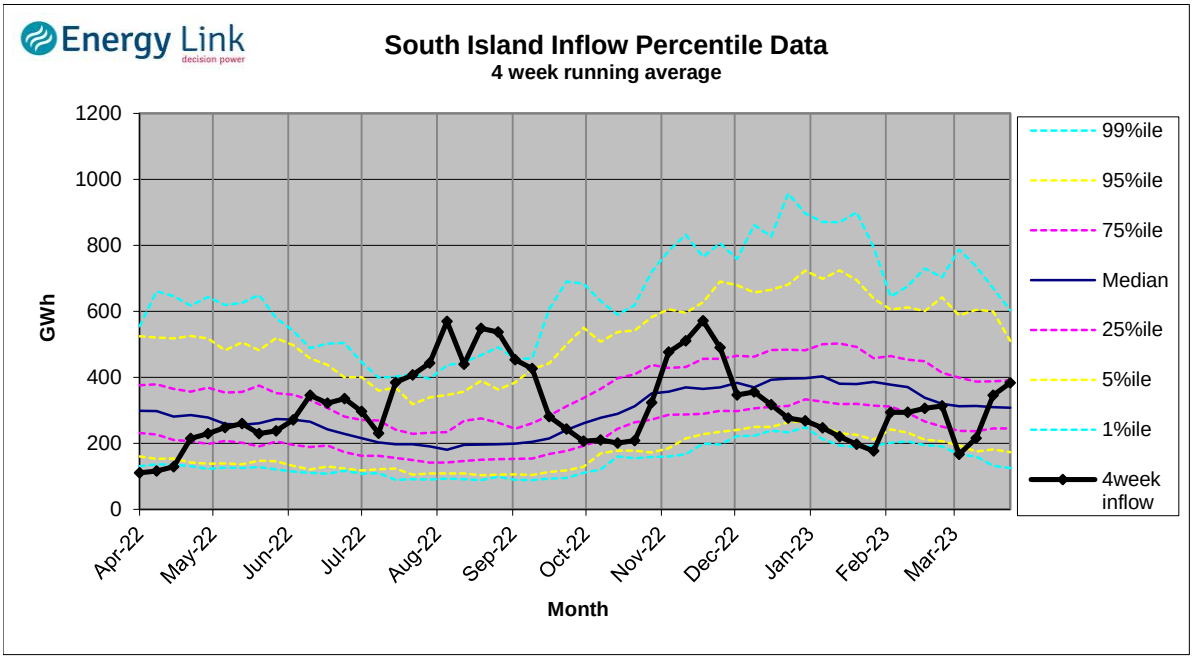
Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)
Manapouri	Manapouri	**177.99**	**126**	**40**
	Te Anau	**202.23**	**205**	
Clutha	Wakatipu	**309.83**	**43**	**173**
	Wanaka	**277.42**	**67**	**259**
	Hawea	**343.47**	**200**	**11**
Waitaki	Tekapo	**709.76**	**774**	
	Pukaki	**532.04**	**1784**	
Waikato	Taupo	**357.00**	**469**	

Outflow Change
13
31
26
-59

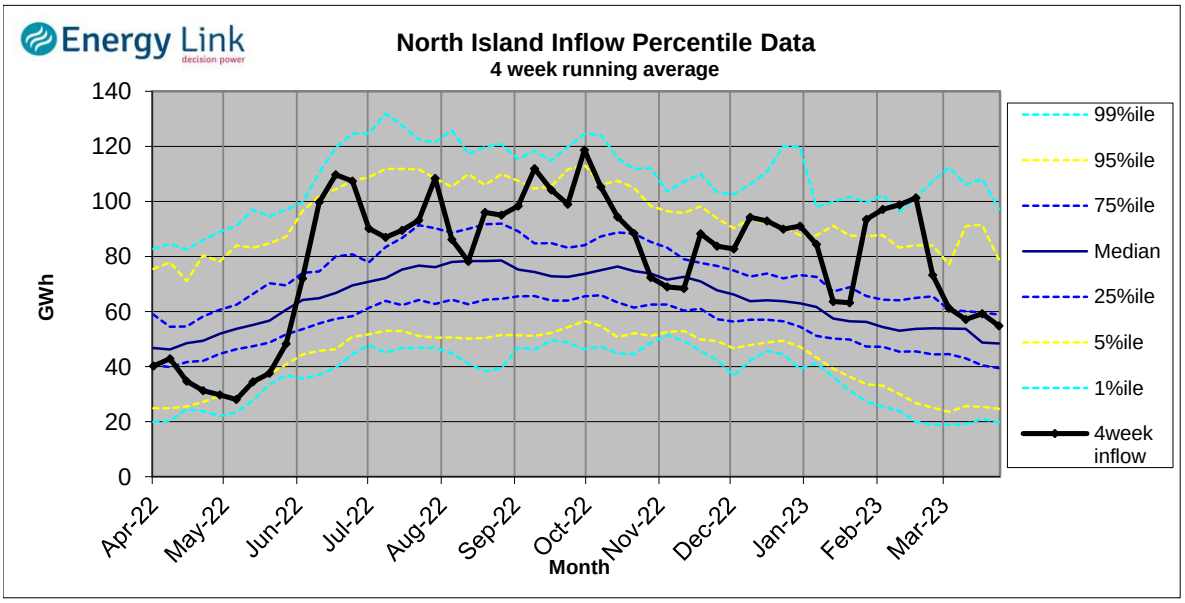
Inflow Summary

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.

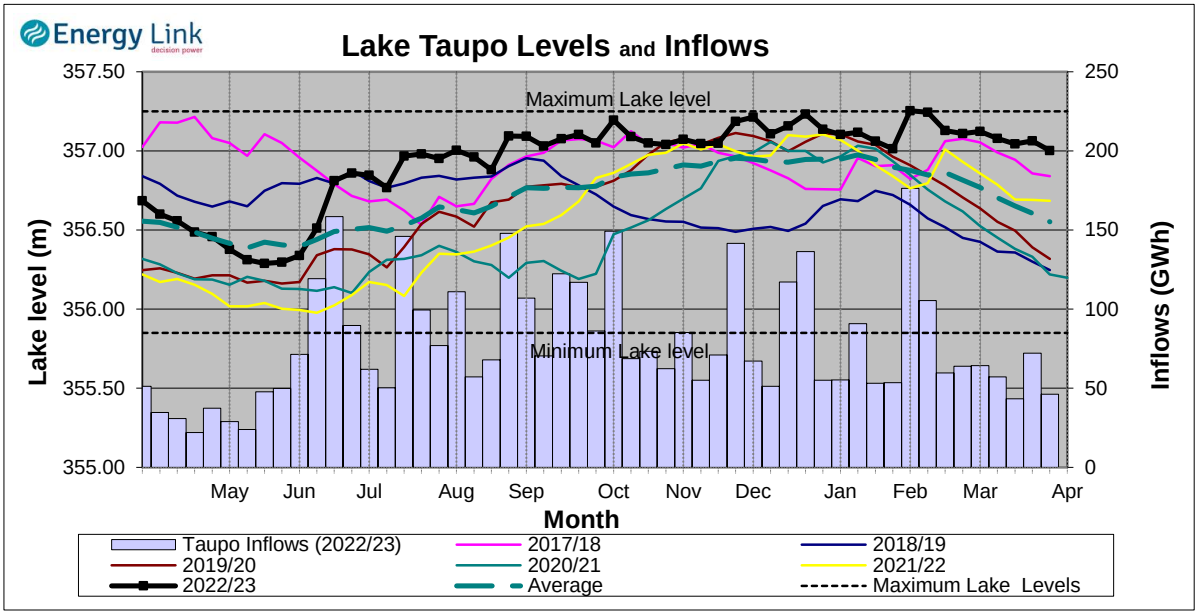
South Island Inflows - The past four weeks of S. I. inflows rank as the 25th wettest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 31st wettest on record.



Waikato System

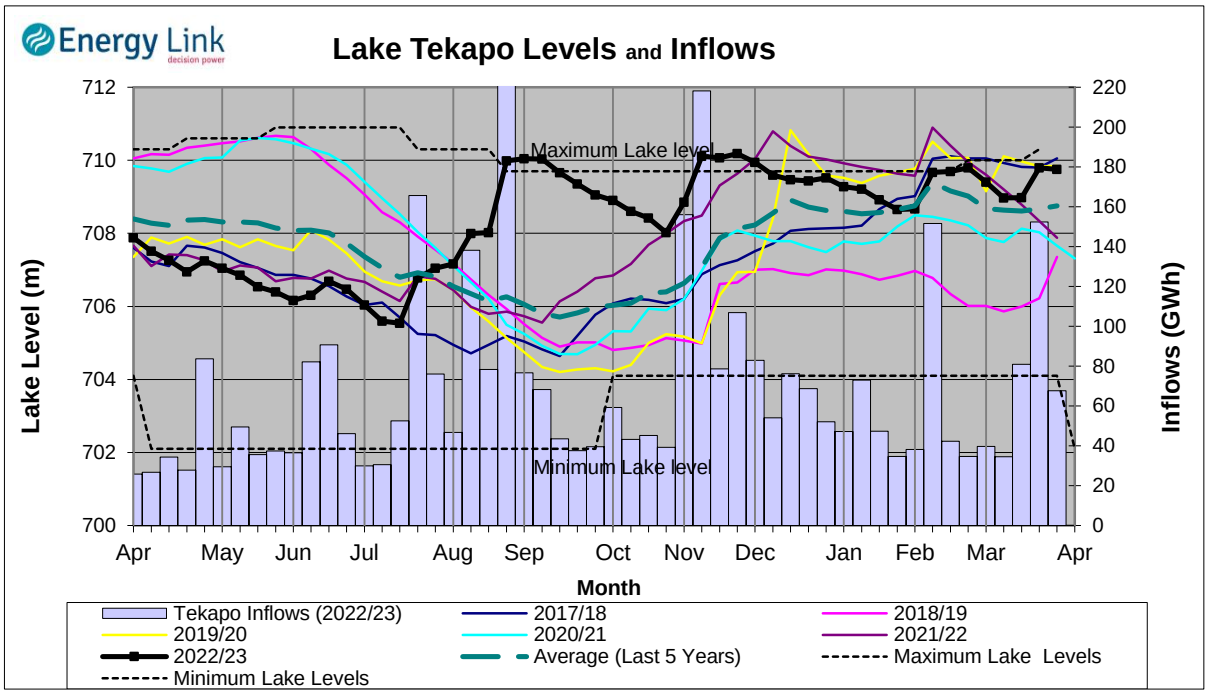


Lake Levels - Lake Taupo storage fell to 82.2% of nominal full at 469 GWh.

Inflows - Inflows decreased 35.9% to 46 GWh.

Generation - Average generation increased 6.9% to 472.4 MW.

Tekapo



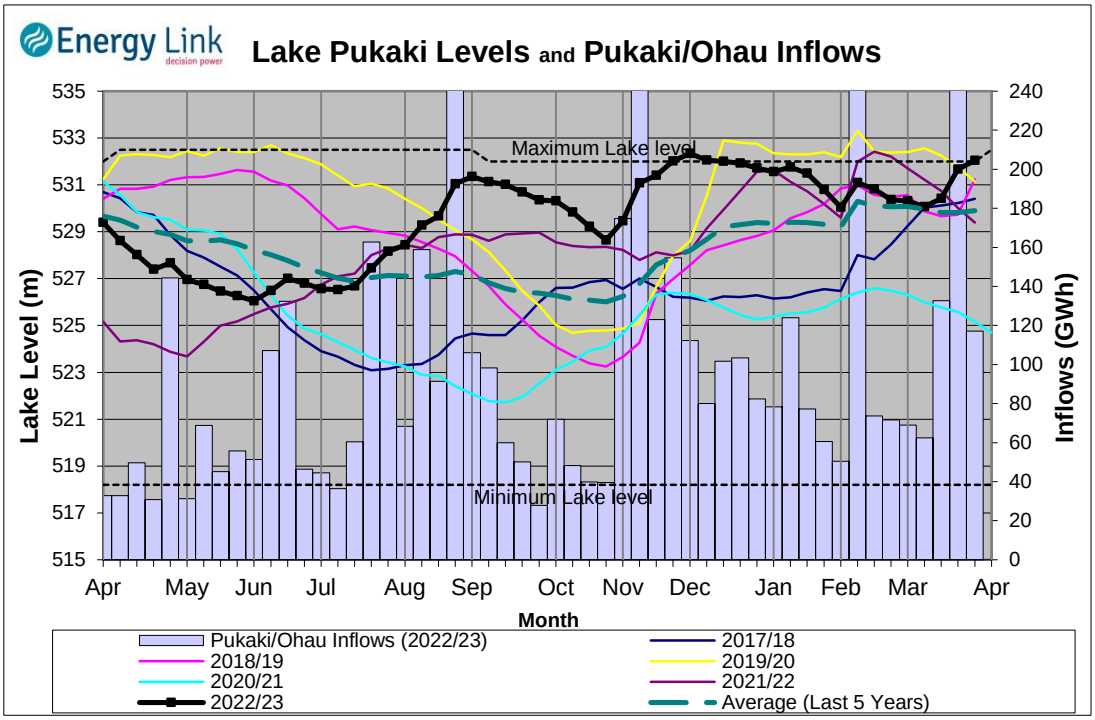
Lake Levels - Lake Tekapo ended the week 103% nominally full with storage falling to 774 GWh.

Inflows - Inflows into tekapo decreased 55.5% to 68 GWh.

Generation - Average Tekapo generation increased 12.3% to 153 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

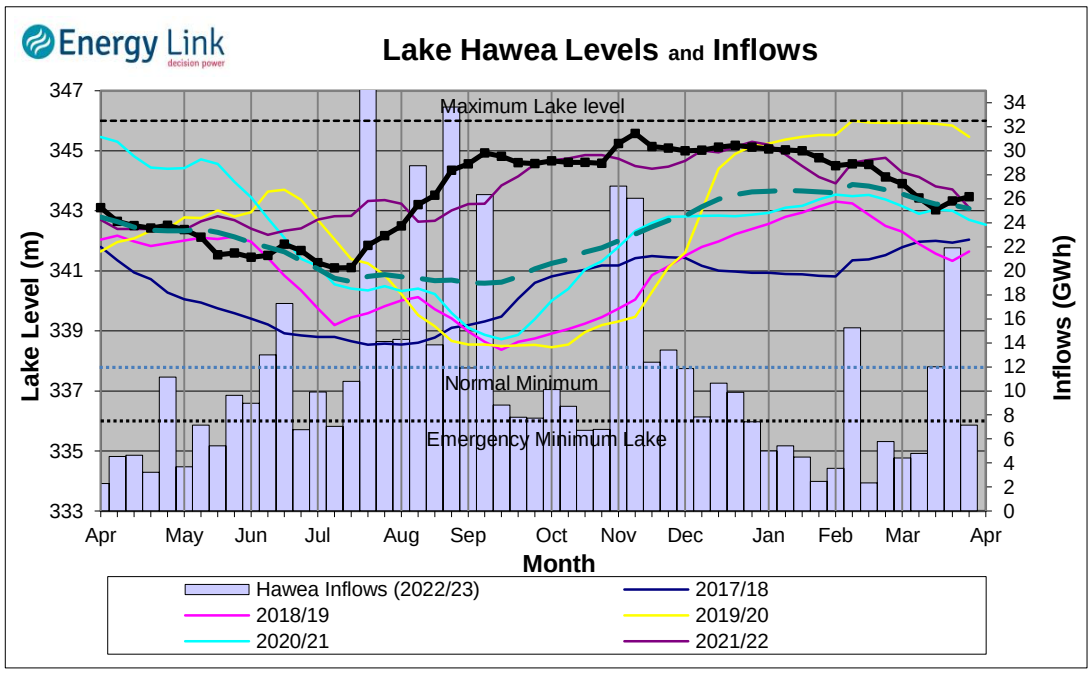
Inflows - Inflows into the Waitaki System decreased 52.2% to 117 GWh.

Generation - Average Waitaki generation decreased 4.7% to 816.9 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 38.5 cumecs while Waitaki River flows were lower than last week averaging 374.2 cumecs.

Clutha System



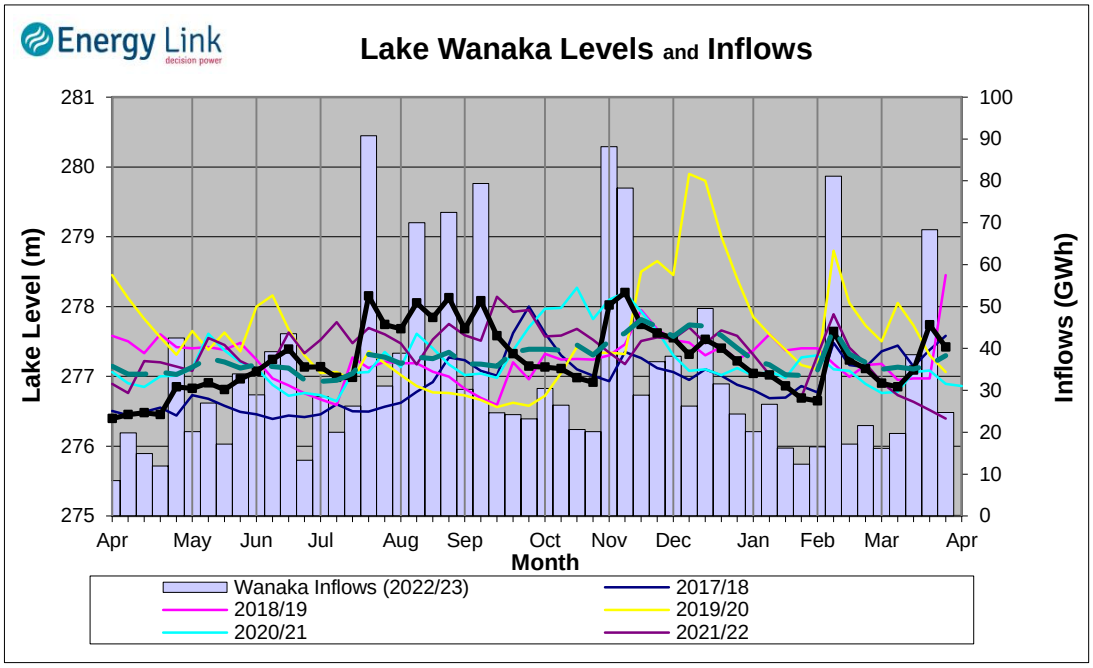
Lake Levels - Total storage for the Clutha System decreased 5.3% to 310 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 67.7%, 58.2% and 41.1% nominally full respectively.

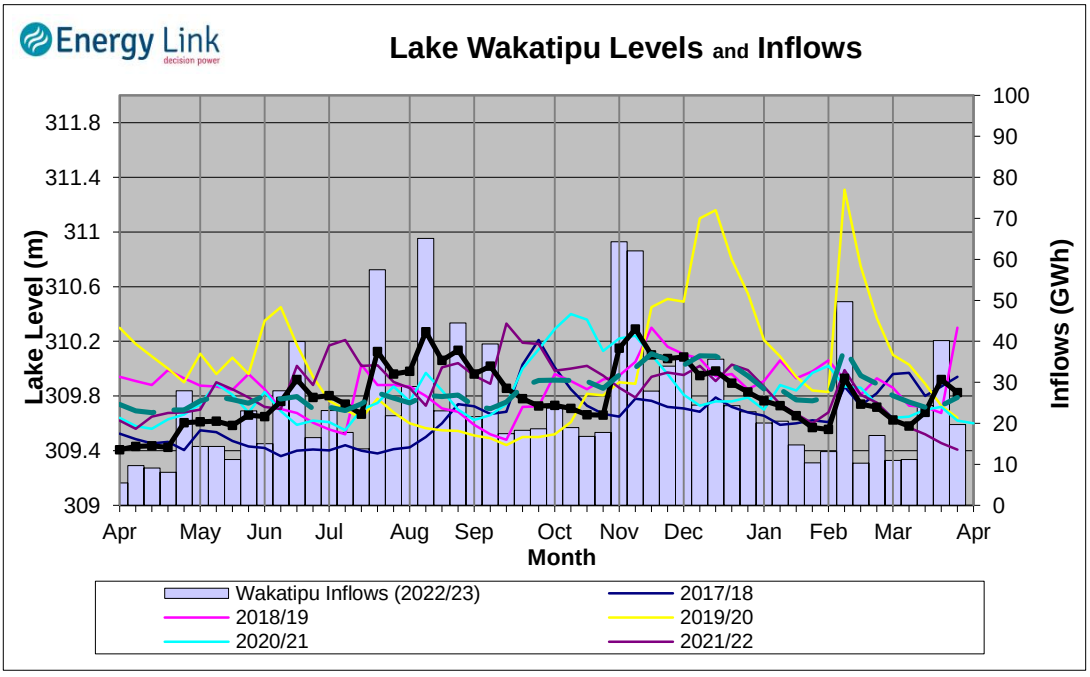
Inflows - Total Inflows into the Clutha System 60.5% lower at 52 GWh.

Generation - Average generation was 2.7% higher at 446 MW.

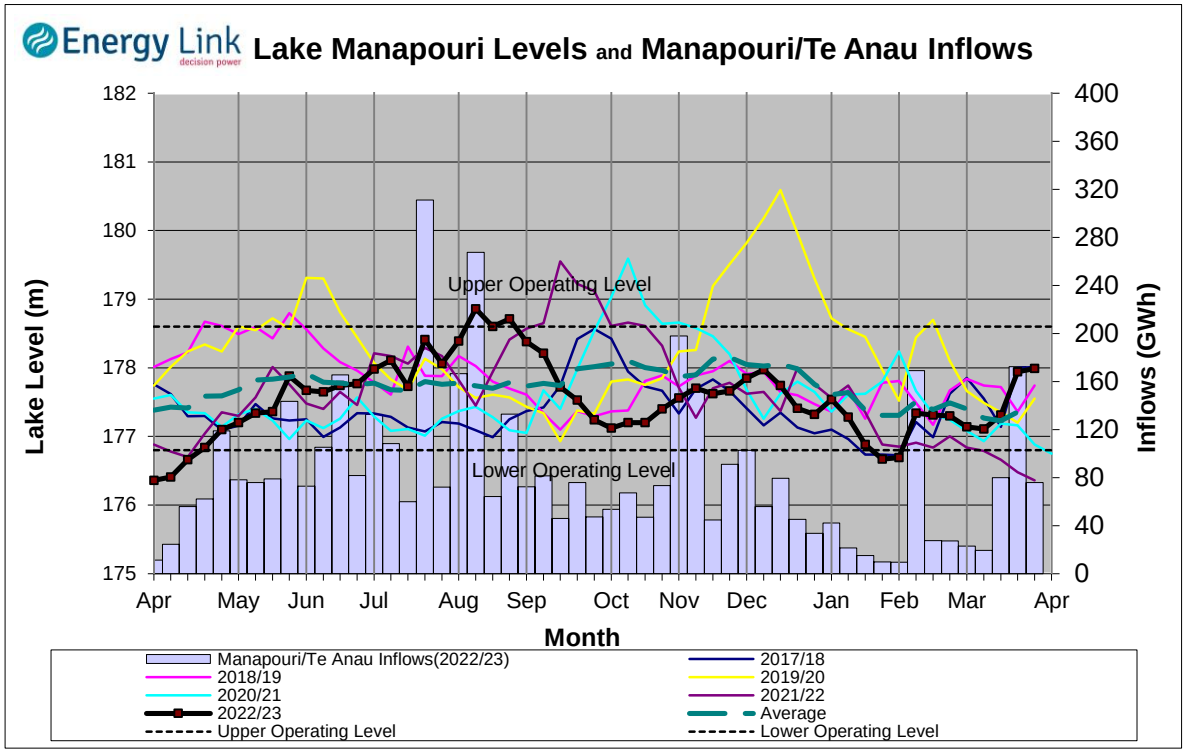
Hydro Spill - The was no estimated spill

River Flows - Total outflows from the lakes and Shotover River fell to 478.9 cumecs. This comprised of 11 cumecs from Lake Hawea, 259 cumecs from Lake Wanaka, 173 cumecs from Lake Wakatipu and 37 cumecs from the Shotover River.





Manapouri System



Lake Levels - Total storage for the Manapouri System increased by 1.8% to 331 GWh with Lake Manapouri ending the week 77.5% nominally full and Lake Te Anau ending the week 74.5% nominally full.

Inflows - Total inflows into the Manapouri System decreased 56% to 76 GWh.

Generation - Average generation was 32.6% higher at 416 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 39.5 cumecs.

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