HydroWatch

Thursday, 26 January 2023 Issue: 1345

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)	**2516**	**166**	**2682**	**474**		**3156**
Storage Change (GWh)	-133	-47	-180	-20		-200

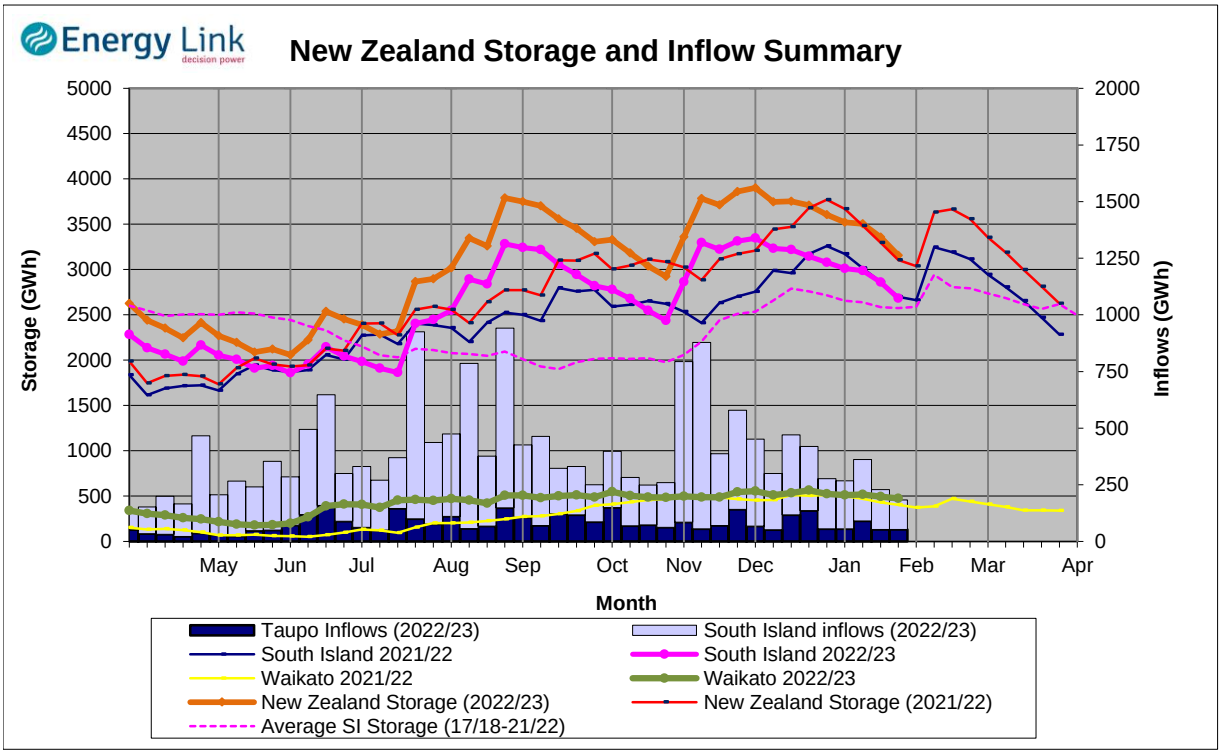
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	**2628**	**474**	**3102**

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 199.5 GWh over the last week. South Island controlled storage decreased 5% to 2516 GWh; South Island uncontrolled storage decreased 22% to 166 GWh; with Taupo storage decreasing 4% to 474 GWh.



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Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato		NZ
This Week	**112**	**303**	**2267**	**474**		**3156**
Last Week	144	327	2392	494		3356
% Change	-22.2%	-7.2%	-5.2%	-4.0%		-5.9%
Inflow (GWh)						
This Week	**10**	**25**	**95**	**54**		**184**
Last Week	15	35	125	53		228
% Change	-35.0%	-29.1%	-23.6%	0.7%		-19.5%

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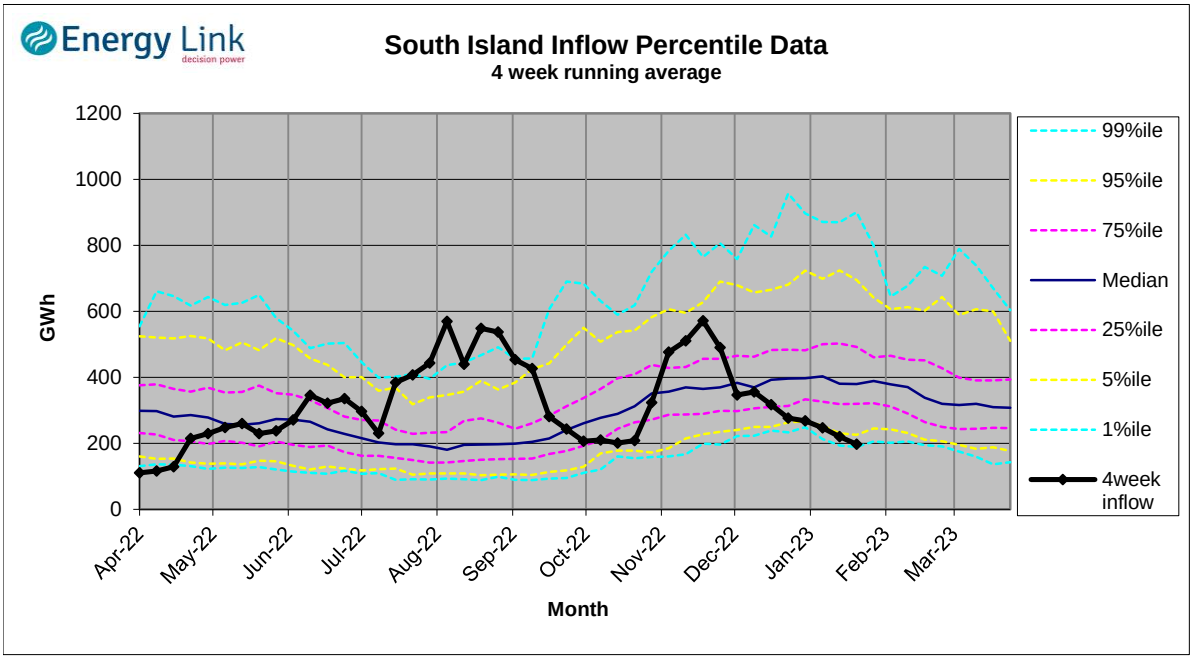
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	**176.67**	**48**	**19**	**3**
	Te Anau	**201.29**	**64**		
Clutha	Wakatipu	**309.57**	**24**	**107**	**-23**
	Wanaka	**276.69**	**30**	**135**	**-20**
	Hawea	**344.77**	**249**	**70**	**34**
Waitaki	Tekapo	**708.65**	**654**		
	Pukaki	**530.79**	**1613**		
Waikato	Taupo	**357.01**	**474**		

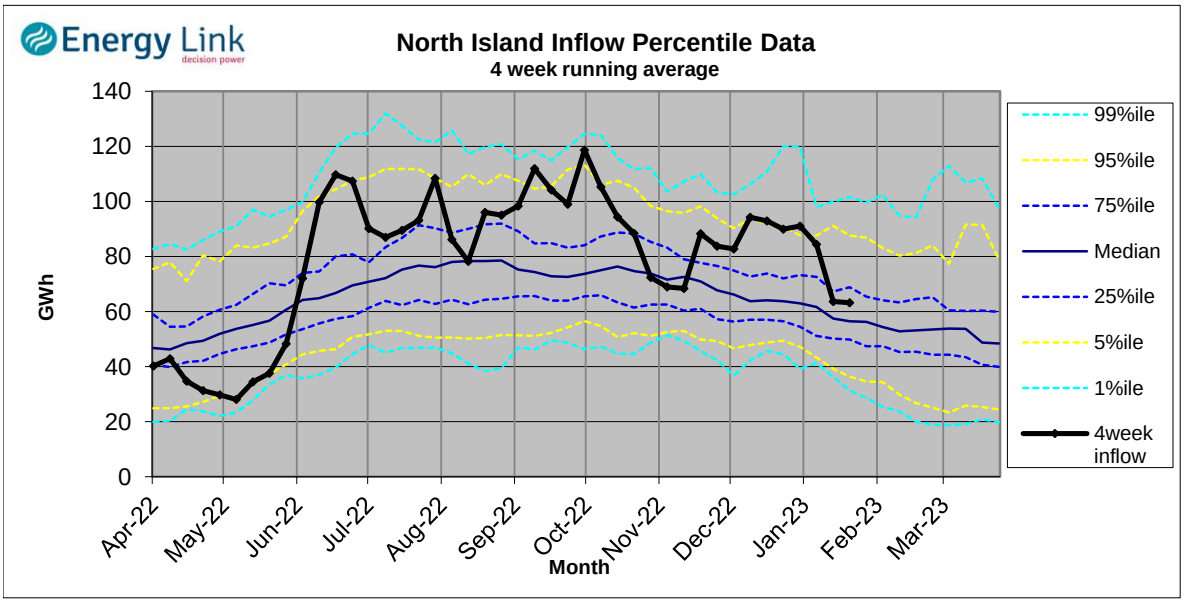
Inflow Summary

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.

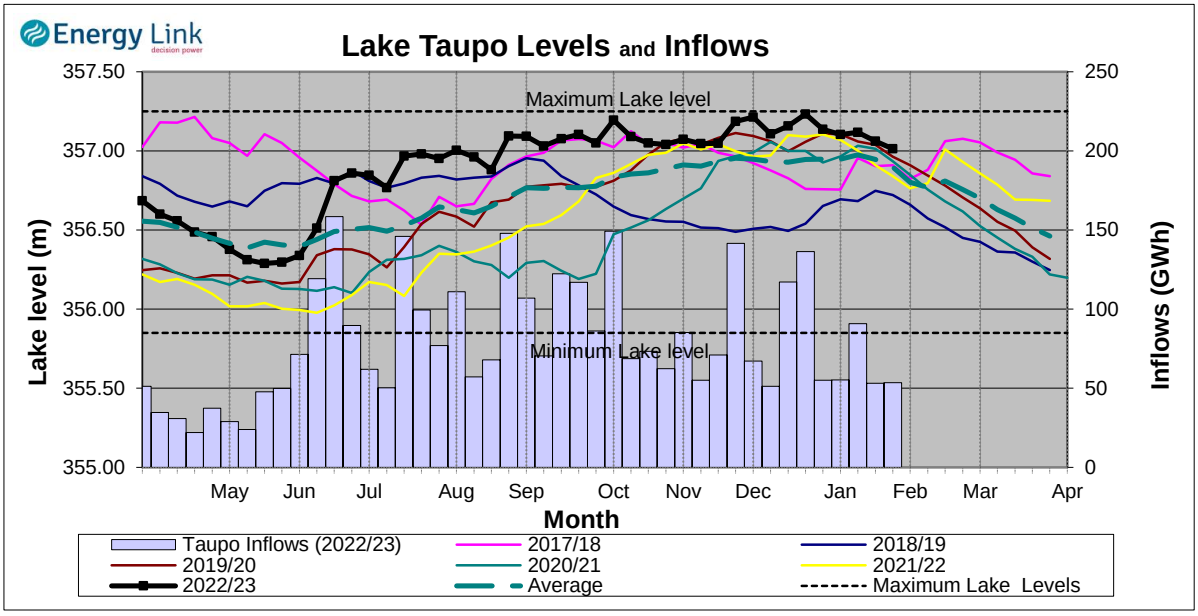
South Island Inflows - The past four weeks of S. I. inflows rank as the 3rd driest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 33rd wettest on record.



Waikato System

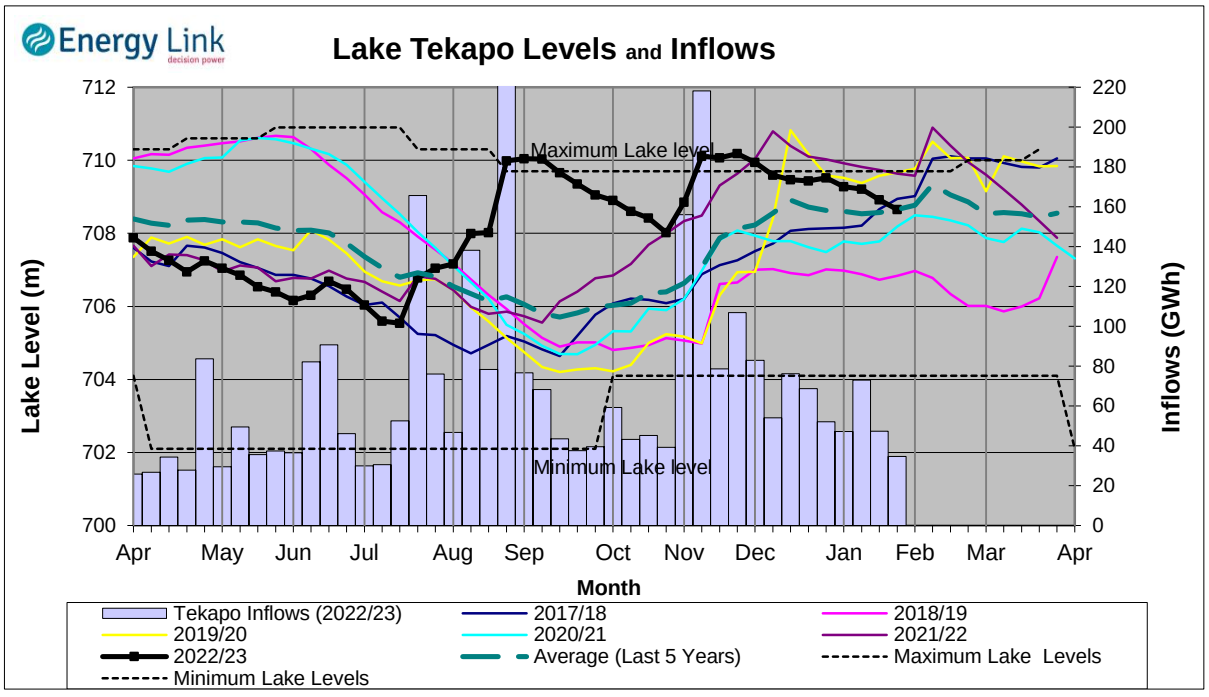


Lake Levels - Lake Taupo storage fell to 83.1% of nominal full at 474 GWh.

Inflows - Inflows increased 0.7% to 54 GWh.

Generation - Average generation increased 1.4% to 501.5 MW.

Tekapo



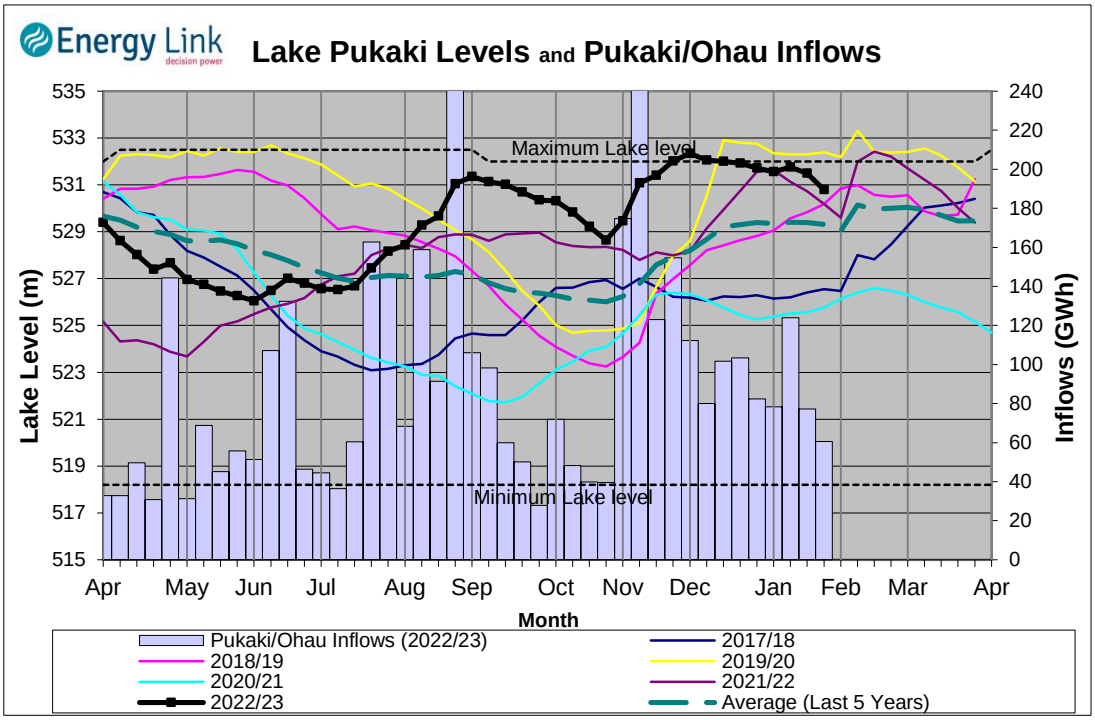
Lake Levels - Lake Tekapo ended the week 90% nominally full with storage falling to 654 GWh.

Inflows - Inflows into tekapo decreased 26.8% to 35 GWh.

Generation - Average Tekapo generation decreased 19.7% to 135.7 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 91% nominally full with storage falling to 1613 GW

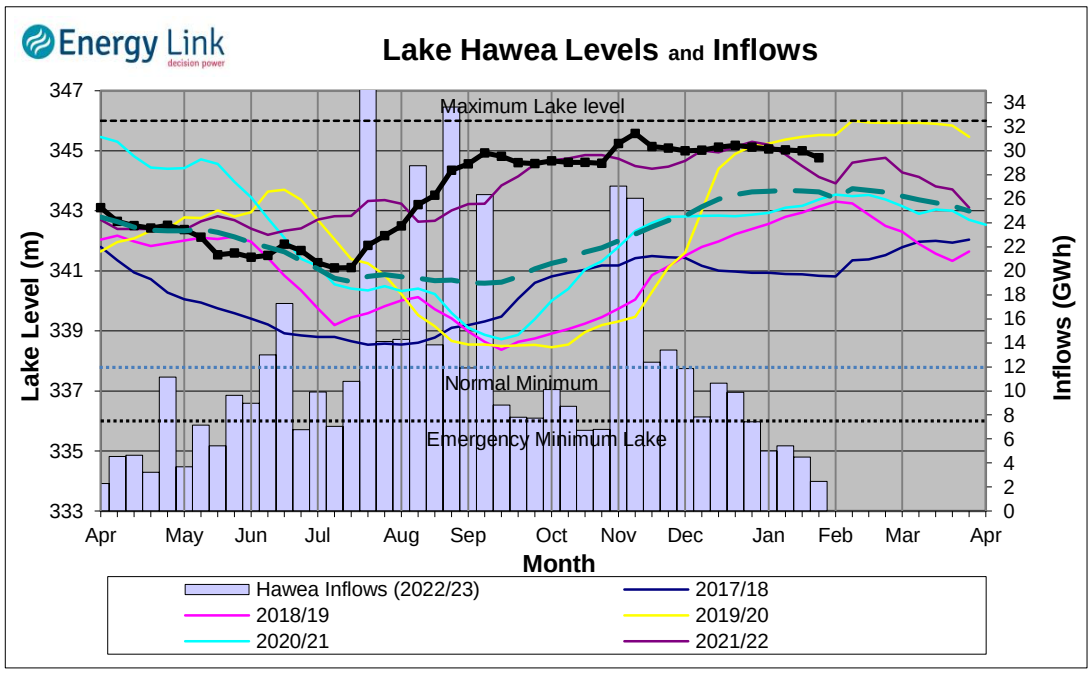
Inflows - Inflows into the Waitaki System decreased 21.7% to 61 GWh.

Generation - Average Waitaki generation increased 6.9% to 1196.2 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 13.5 cumecs while Waitaki River flows were lower than last week averaging 450.1 cumecs.

Clutha System



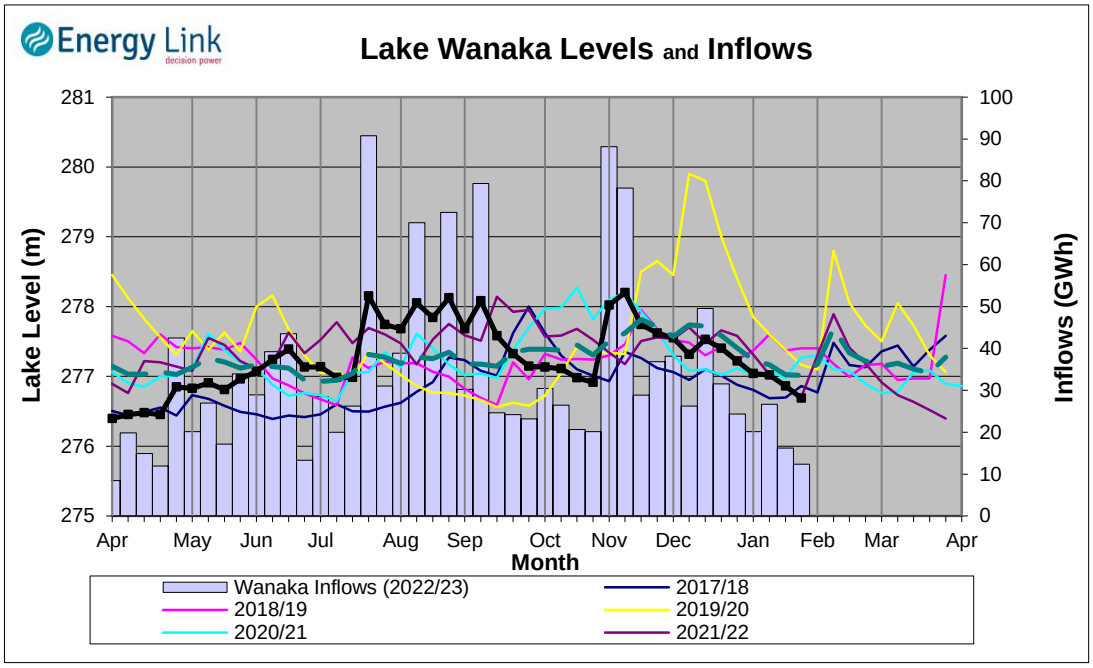
Lake Levels - Total storage for the Clutha System decreased 7.2% to 303 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 84.2%, 26.2% and 22.9% nominally full respectively.

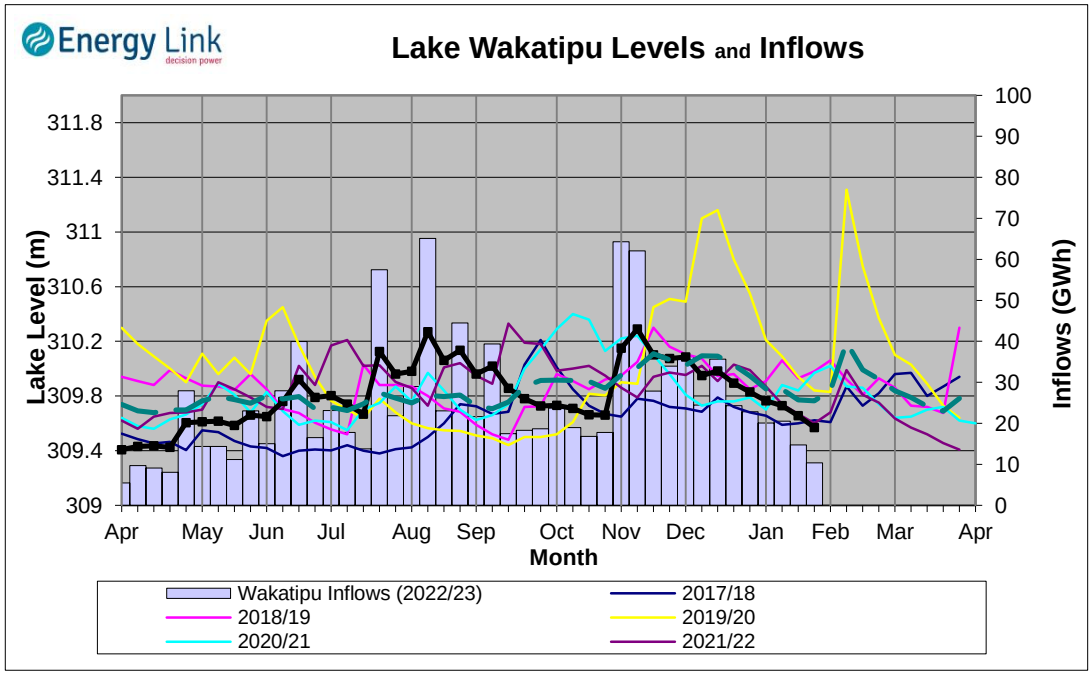
Inflows - Total Inflows into the Clutha System 29.1% lower at 25 GWh.

Generation - Average generation was 7.7% lower at 294 MW.

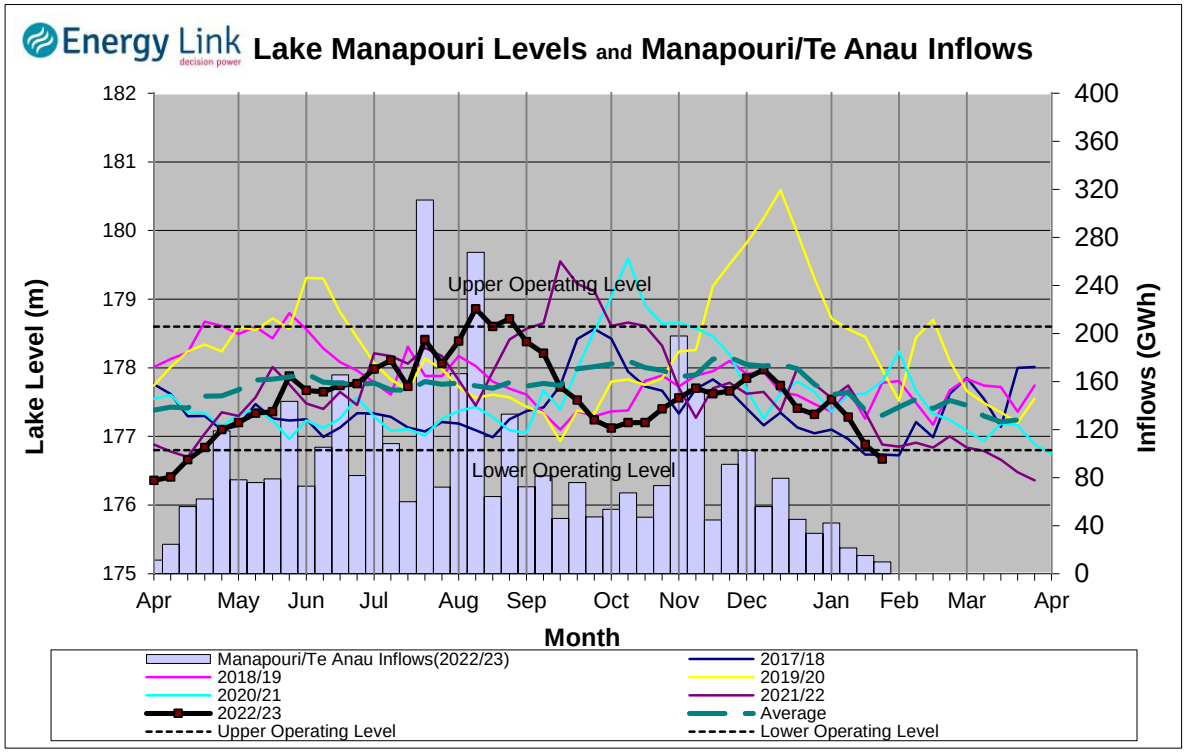
Hydro Spill - The was no estimated spill

River Flows - Total outflows from the lakes and Shotover River fell to 333.7 cumecs. This comprised of 70 cumecs from Lake Hawea, 135 cumecs from Lake Wanaka, 107 cumecs from Lake Wakatipu and 21 cumecs from the Shotover River.





Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 22.2% to 112 GWh with Lake Manapouri ending the week 29.3% nominally full and Lake Te Anau ending the week 23.4% nominally full.

Inflows - Total inflows into the Manapouri System decreased 35% to 10 GWh.

Generation - Average generation was 26.6% lower at 248 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 19.5 cumecs.

Operating Range - Lake Manapouri is operating in the upper end of its 'Low operating range' while Lake Te Anau is operating in the middle of its 'Low operating range'.