HydroWatch

Thursday, 23 February 2023 Issue: 1349

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)	**2559**	**284**	**2843**	**514**		**3356**
Storage Change (GWh)	-65	-22	-87	-8		-95

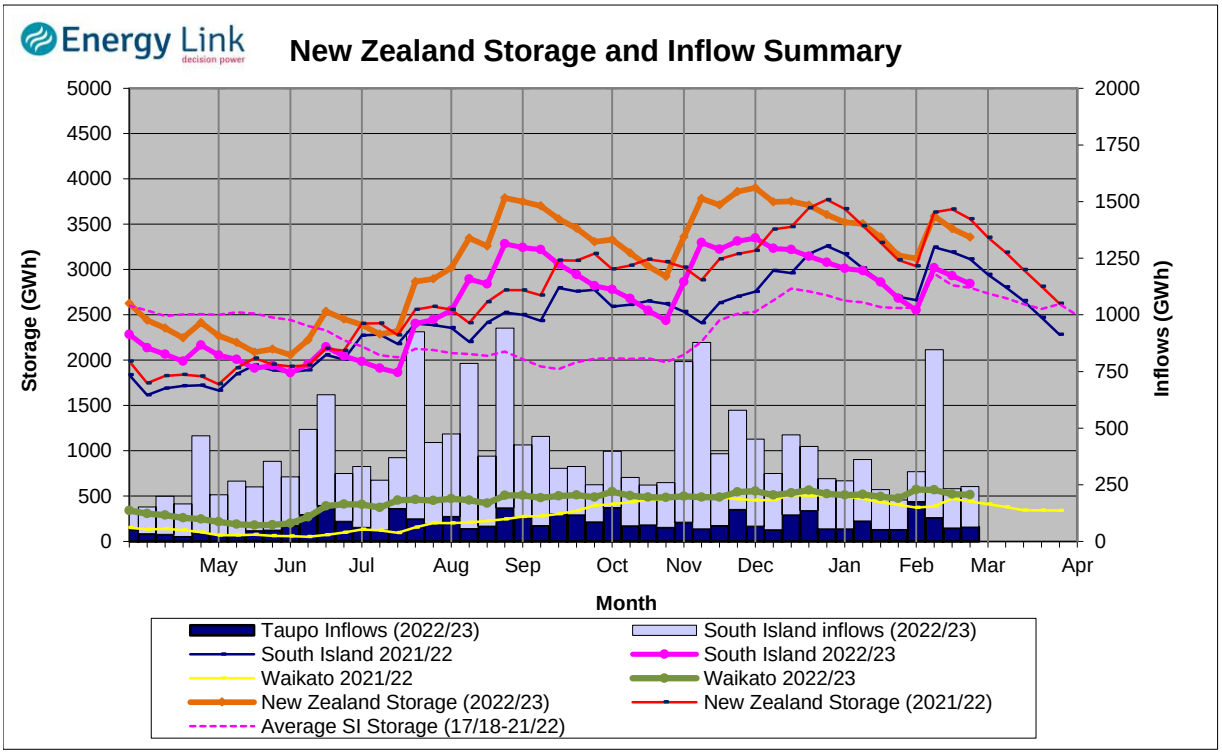
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	**2756**	**514**	**3270**

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 94.8 GWh over the last week. South Island controlled storage decreased 2.5% to 2559 GWh; South Island uncontrolled storage decreased 7.1% to 284 GWh; with Taupo storage decreasing 1.6% to 514 GWh.



Thursday, 23 February 2023	Manapouri	Clutha	Waitaki	Waikato		NZ
Storage (GWh)						
This Week	**197**	**311**	**2335**	**514**		**3356**
Last Week	211	334	2384	522		3451
% Change	-6.7%	-6.9%	-2.1%	-1.6%		-2.7%
Inflow (GWh)						
This Week	**27**	**44**	**106**	**64**		**242**
Last Week	28	30	116	60		233
% Change	-1.3%	49.1%	-8.4%	7.1%		3.8%

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Lake Levels and Outflows

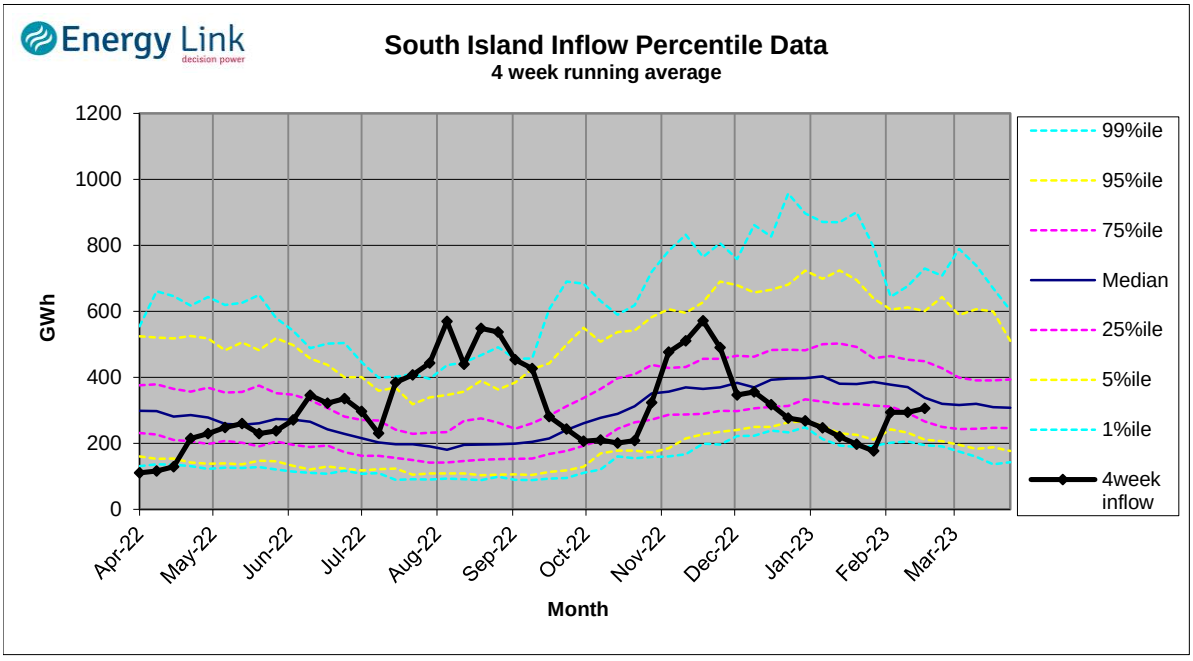
Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)
Manapouri	Manapouri	**177.30**	**85**	**17**
	Te Anau	**201.61**	**112**	
Clutha	Wakatipu	**309.72**	**35**	**120**
	Wanaka	**277.11**	**51**	**177**
	Hawea	**344.13**	**225**	**136**
Waitaki	Tekapo	**709.80**	**779**	
	Pukaki	**530.37**	**1556**	
Waikato	Taupo	**357.11**	**514**	

Outflow Change
-10
-38
-64
114

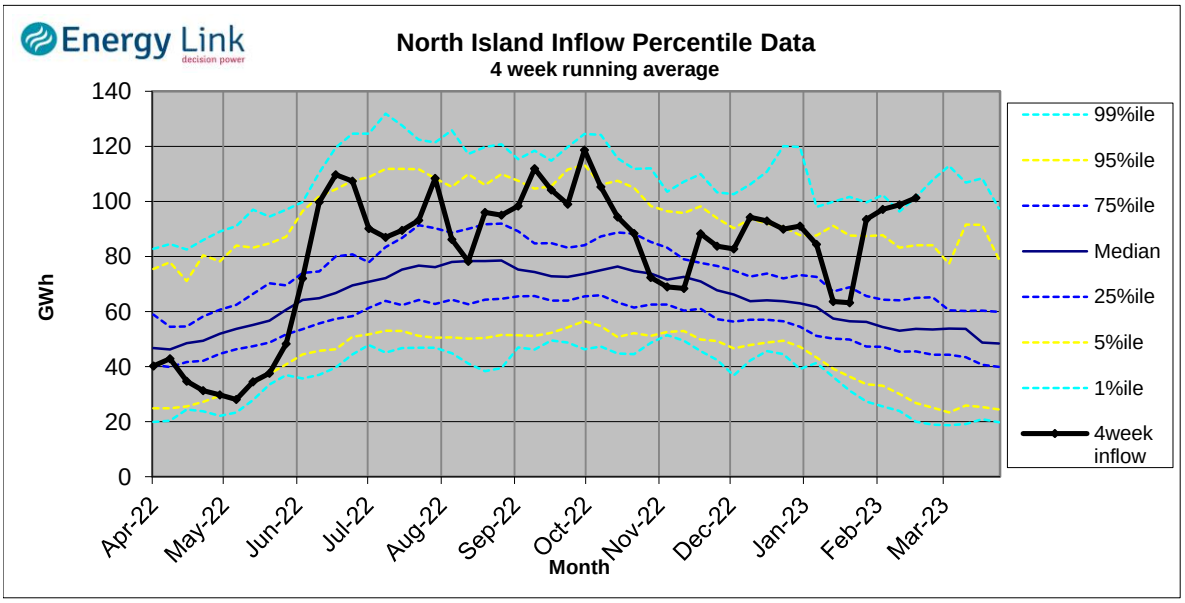
Inflow Summary

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.

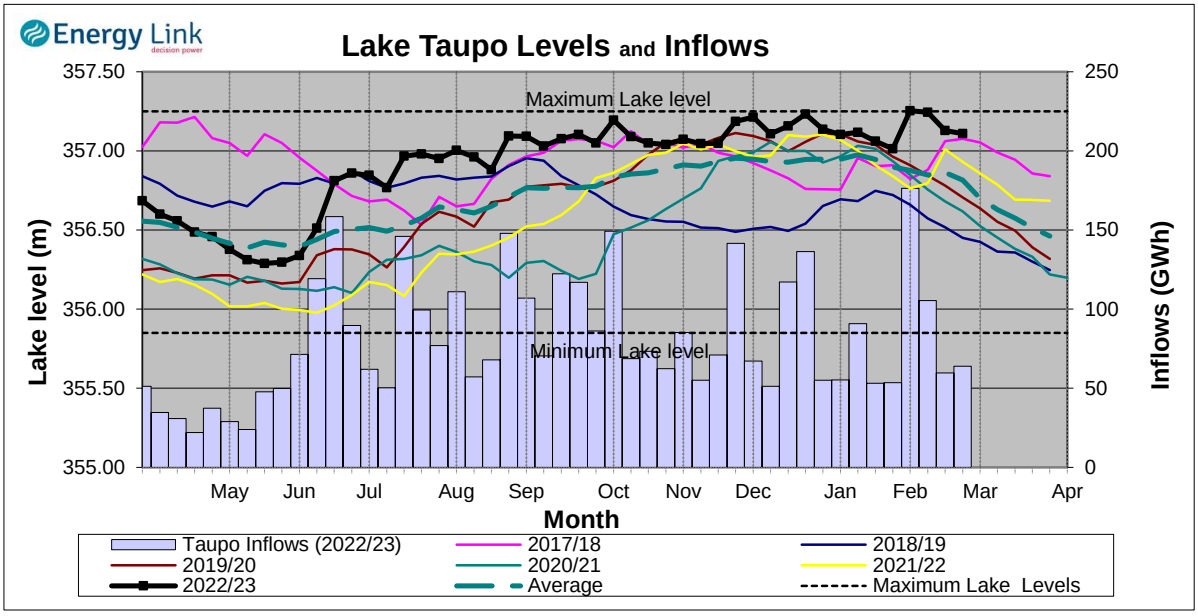
South Island Inflows - The past four weeks of S. I. inflows rank as the 33rd driest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 2nd wettest on record.



Waikato System

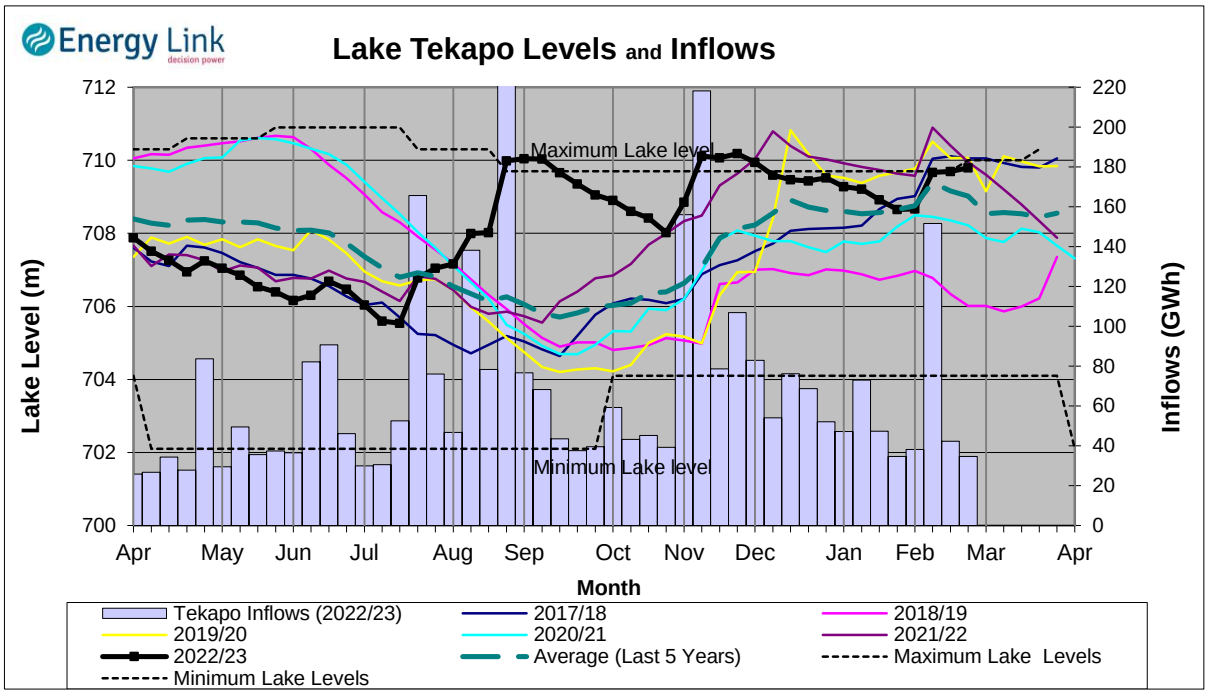


Lake Levels - Lake Taupo storage fell to 89.9% of nominal full at 514 GWh.

Inflows - Inflows increased 7.1% to 64 GWh.

Generation - Average generation decreased 16.6% to 506.2 MW.

Tekapo



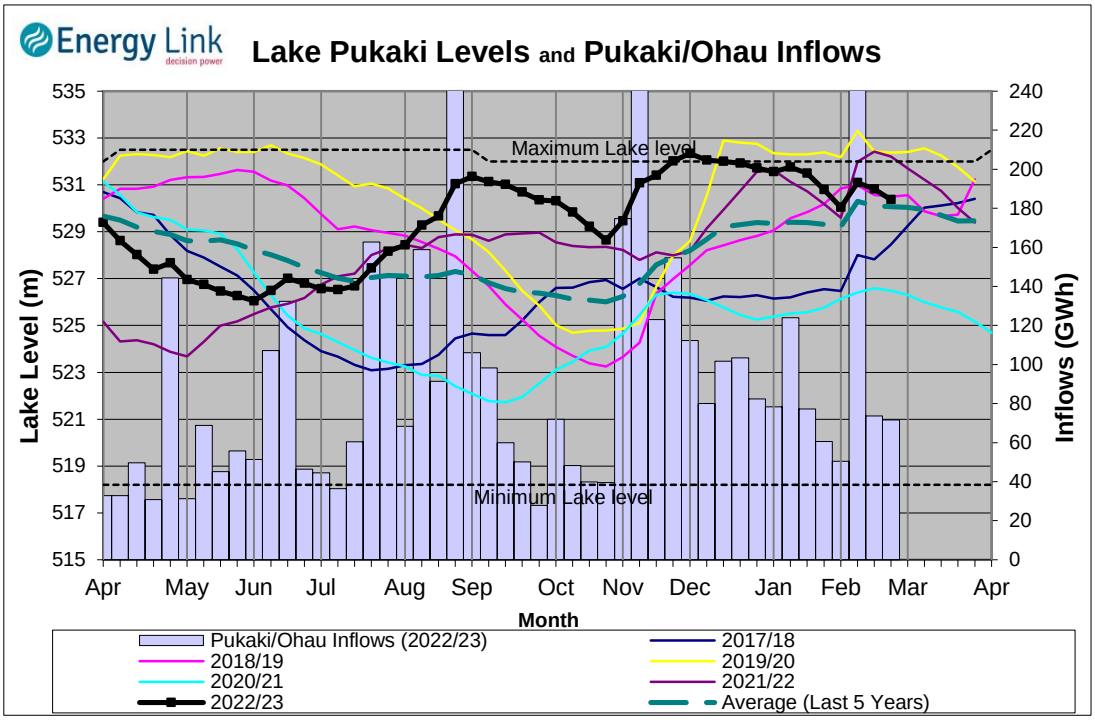
Lake Levels - Lake Tekapo ended the week 108% nominally full with storage increasing to 779 GWh.

Inflows - Inflows into tekapo decreased 18.1% to 35 GWh.

Generation - Average Tekapo generation decreased 43% to 49.7 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 87% nominally full with storage falling to 1556 GW

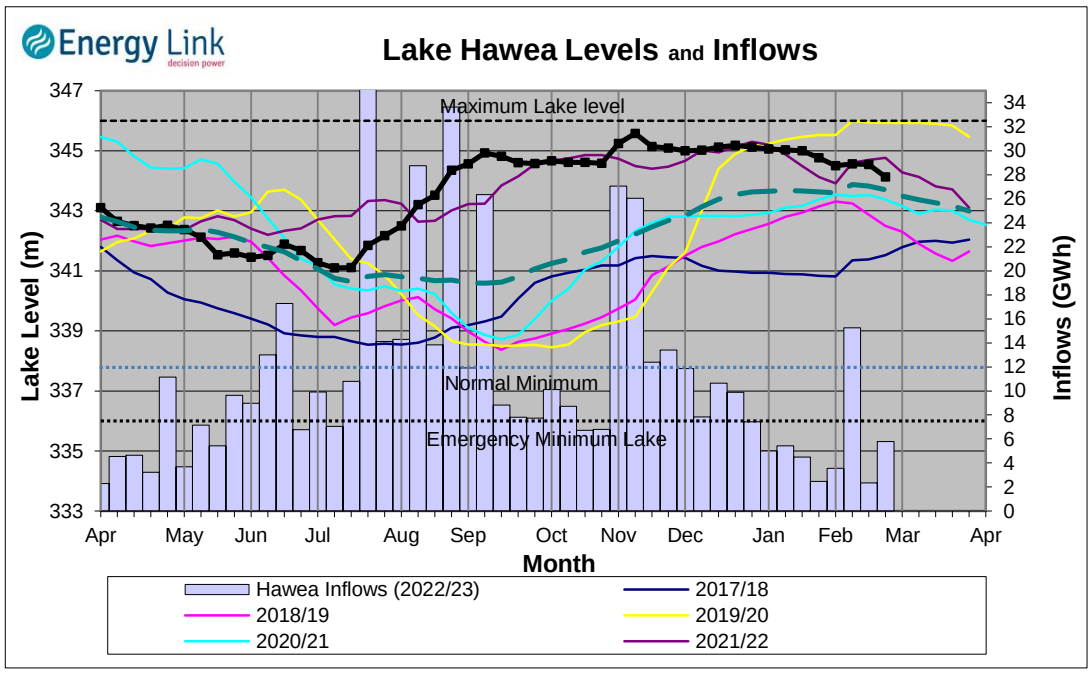
Inflows - Inflows into the Waitaki System decreased 2.8% to 72 GWh.

Generation - Average Waitaki generation increased 3.8% to 946.5 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 12.5 cumecs while Waitaki River flows were higher than last week averaging 390.6 cumecs.

Clutha System



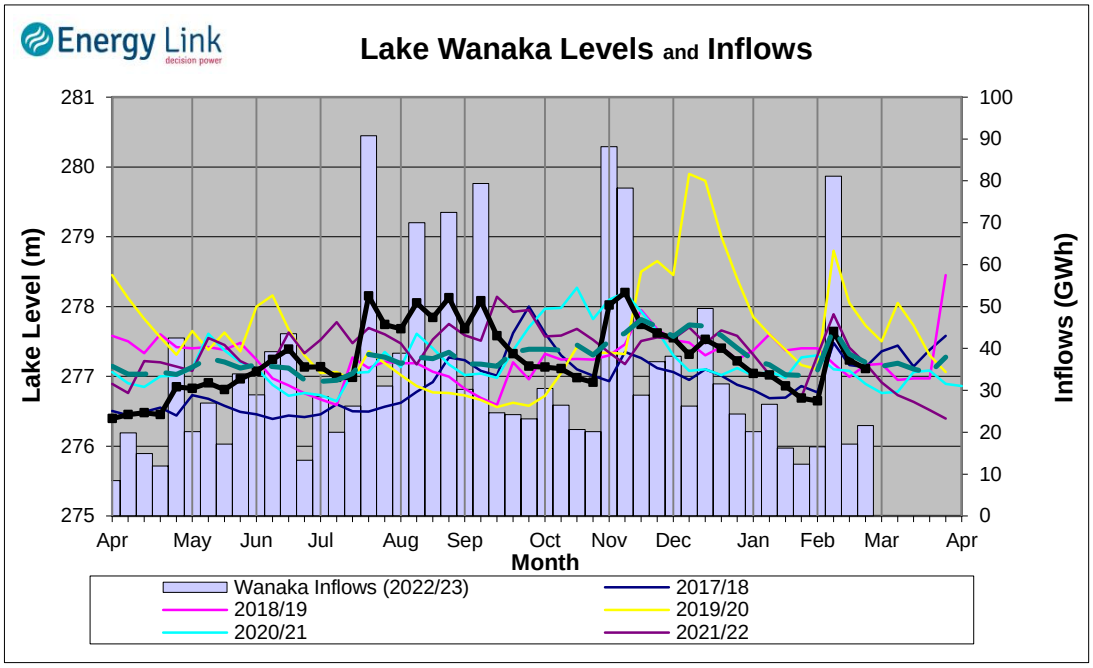
Lake Levels - Total storage for the Clutha System decreased 6.9% to 311 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 76.1%, 44.7% and 33.4% nominally full respectively.

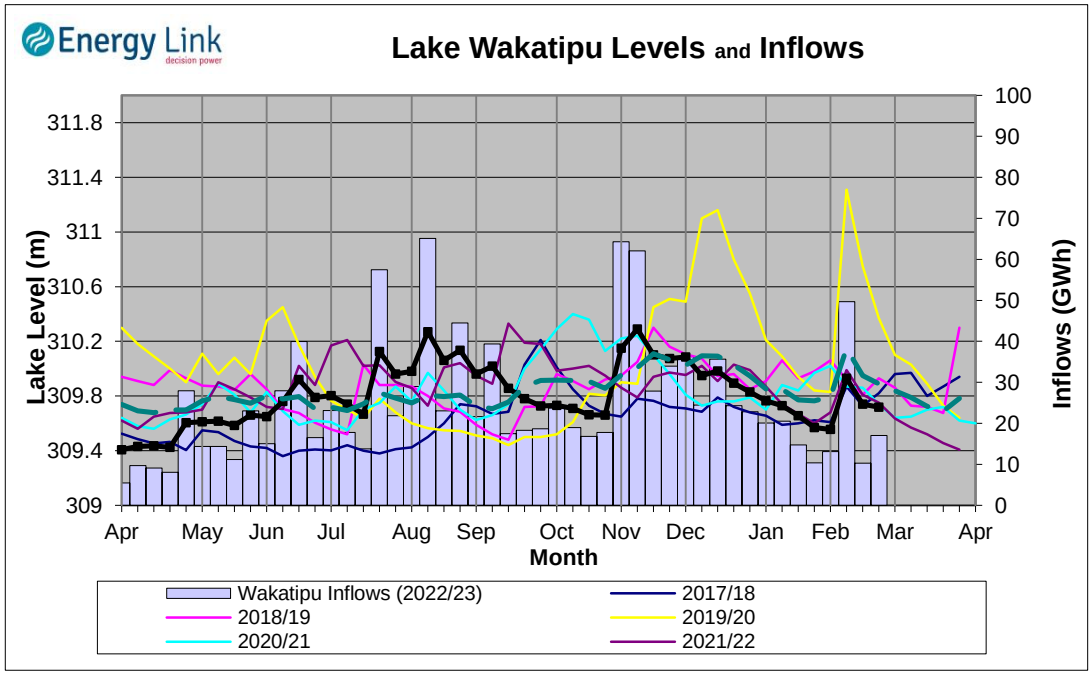
Inflows - Total Inflows into the Clutha System 49.1% higher at 44 GWh.

Generation - Average generation was remained steady at 406 MW.

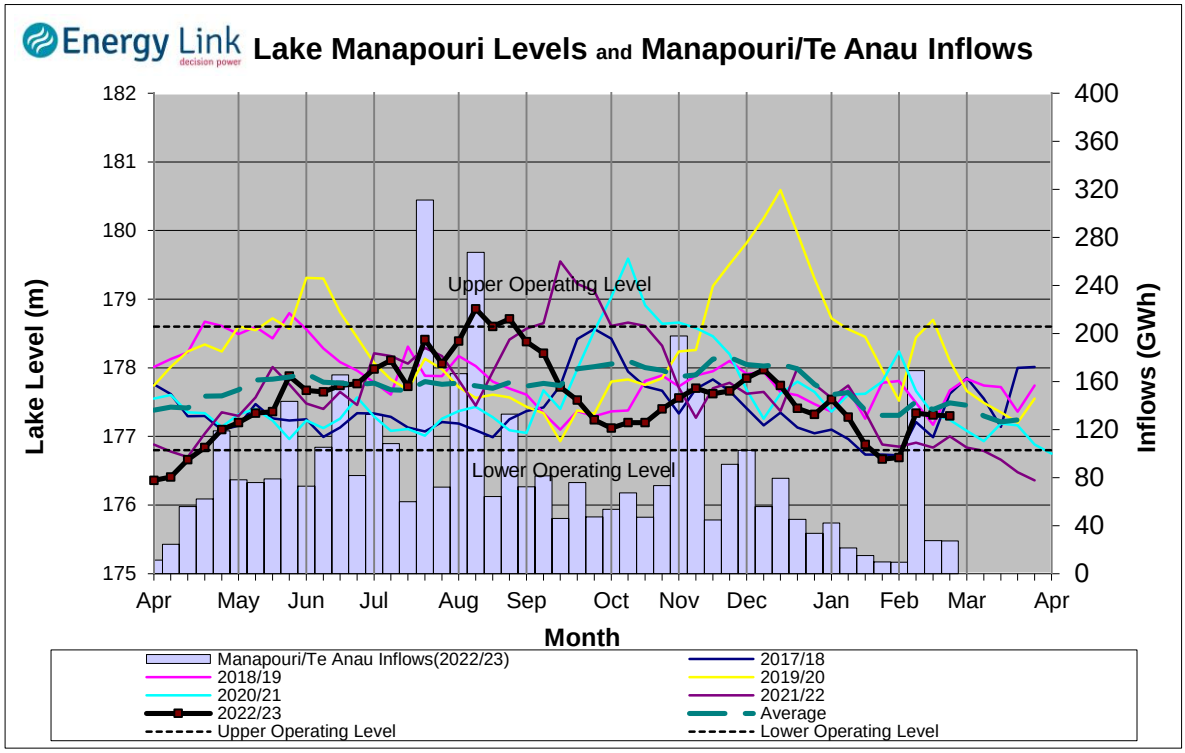
Hydro Spill - The was no estimated spill

River Flows - Total outflows from the lakes and Shotover River increased to 453 cumecs. This comprised of 136 cumecs from Lake Hawea, 177 cumecs from Lake Wanaka, 120 cumecs from Lake Wakatipu and 20 cumecs from the Shotover River.





Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 6.7% to 197 GWh with Lake Manapouri ending the week 52.2% nominally full and Lake Te Anau ending the week 40.8% nominally full.

Inflows - Total inflows into the Manapouri System decreased 1.3% to 27 GWh.

Generation - Average generation was 12.8% lower at 246 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 17.4 cumecs.

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