HydroWatch

Thursday, 09 March 2023 Issue: 1351

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)	**2402**	**224**	**2626**	**501**	**3127**
Storage Change (GWh)	-97	-20	-117	-18	-135

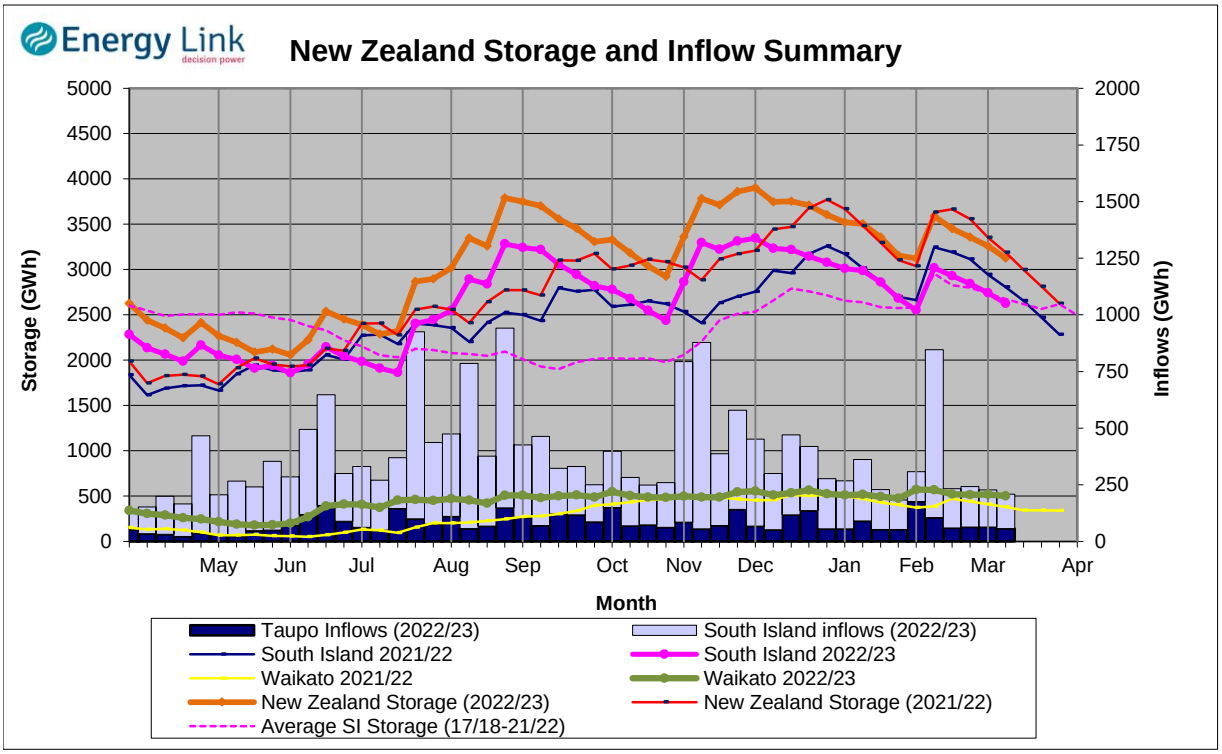
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	**2562**	**501**	**3064**

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 134.5 GWh over the last week. South Island controlled storage decreased 3.9% to 2402 GWh; South Island uncontrolled storage decreased 8.1% to 224 GWh; with Taupo storage decreasing 3.5% to 501 GWh.



Thursday, 09 March 2023					
Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	**160**	**262**	**2203**	**501**	**3127**
Last Week	174	285	2283	519	3261
% Change	-7.9%	-8.2%	-3.5%	-3.5%	-4.1%
Inflow (GWh)					
This Week	**19**	**36**	**97**	**57**	**209**
Last Week	23	31	109	64	228
% Change	-16.0%	13.3%	-10.8%	-11.1%	-8.1%

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Lake Levels and Outflows

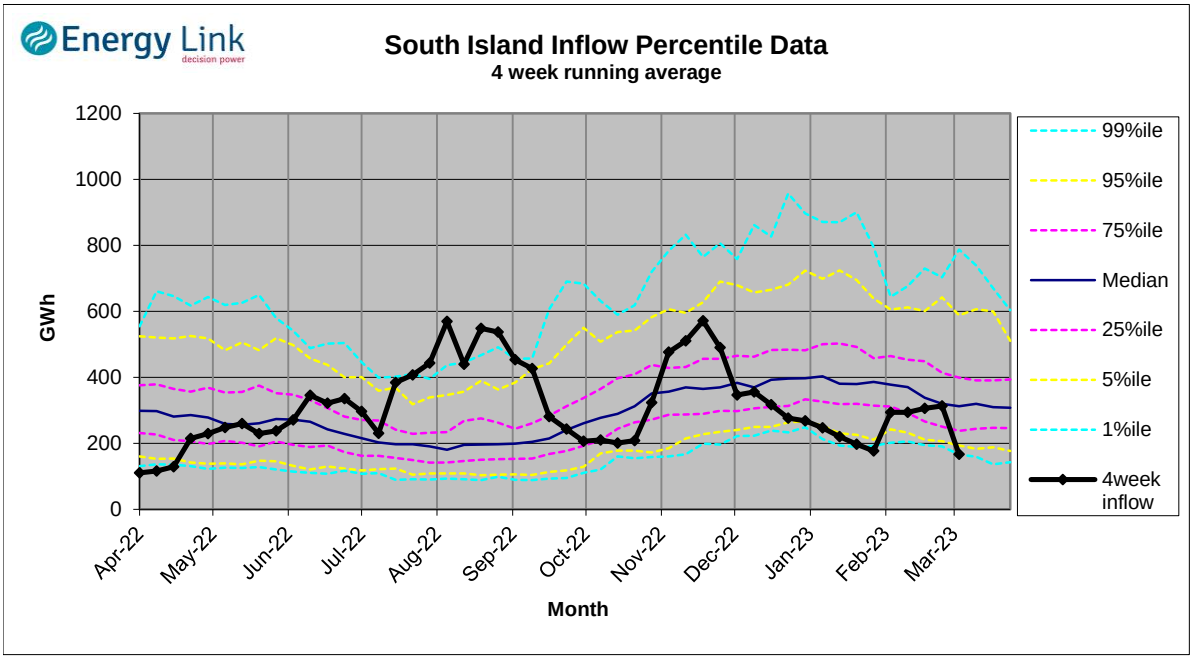
Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)
Manapouri	Manapouri	177.11	74	17
	Te Anau	201.44	87	
Clutha	Wakatipu	309.58	25	94
	Wanaka	276.85	38	142
	Hawea	343.43	198	144
Waitaki	Tekapo	708.97	689	
	Pukaki	530.07	1515	
Waikato	Taupo	357.08	501	

Outflow Change
-3
-22
-28
60

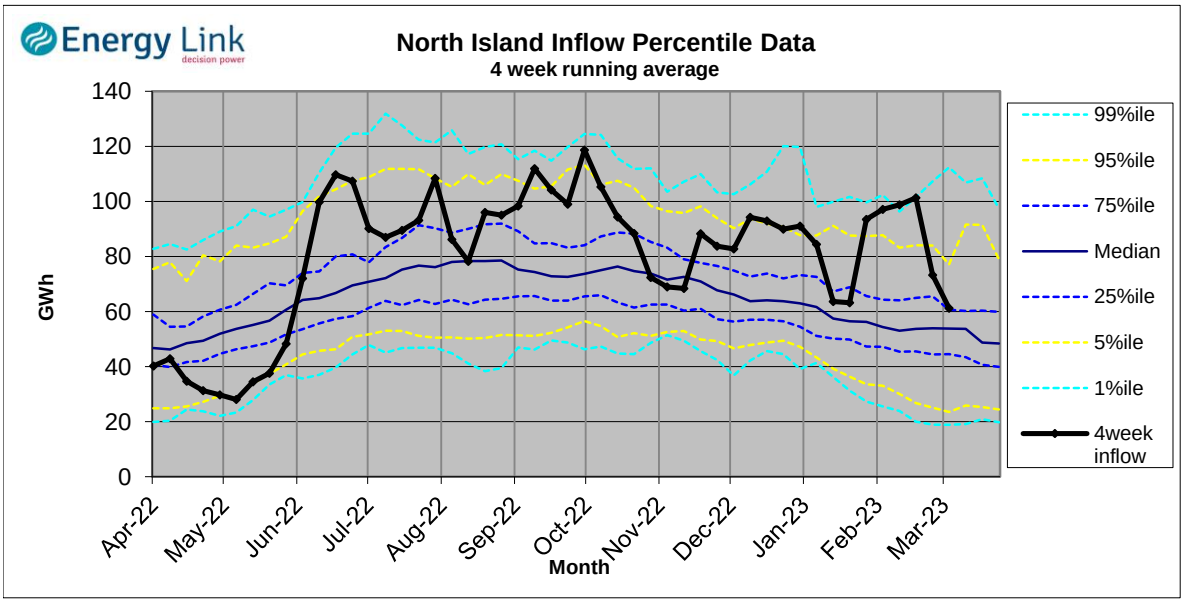
Inflow Summary

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.

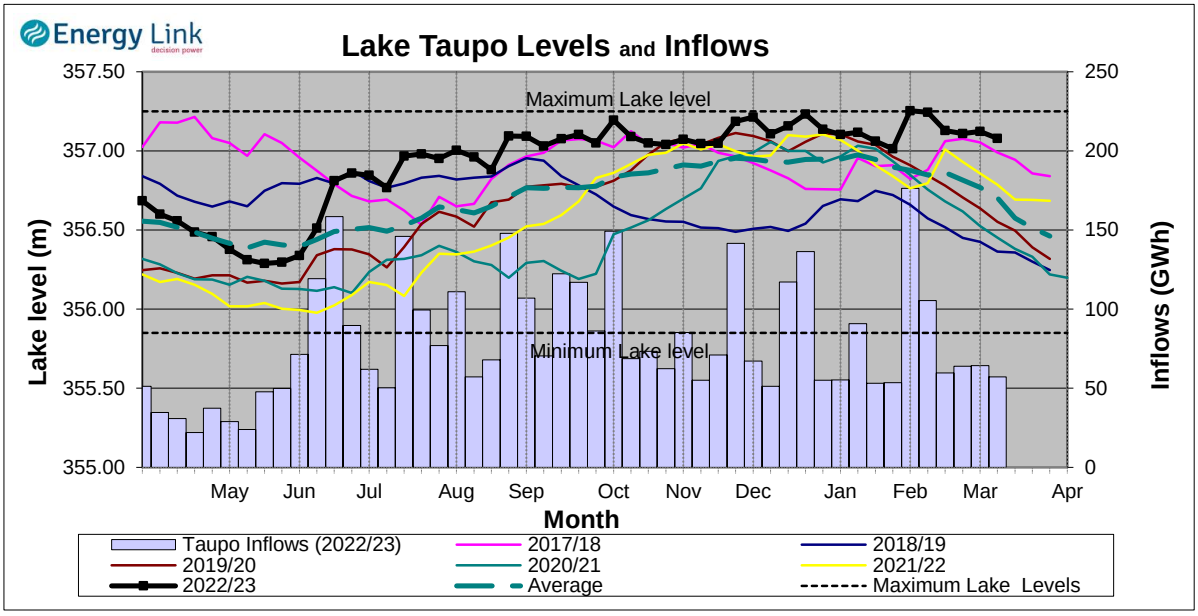
South Island Inflows - The past four weeks of S. I. inflows rank as the 2nd driest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 23rd wettest on record.



Waikato System

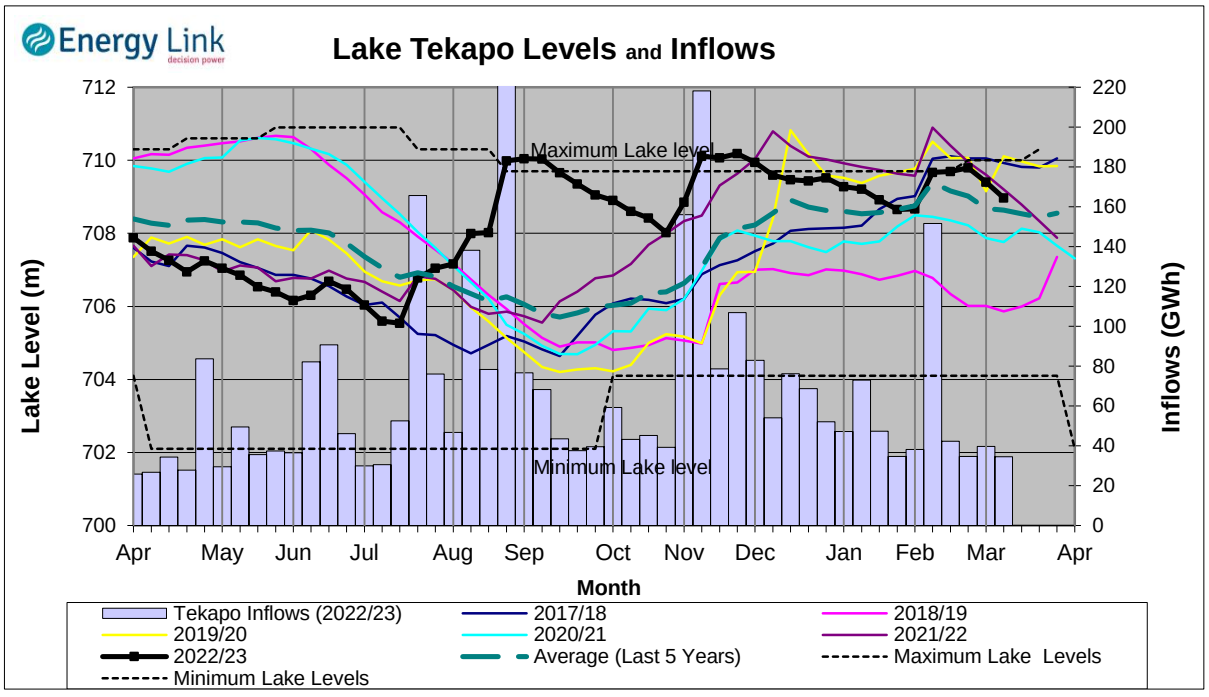


Lake Levels - Lake Taupo storage fell to 87.8% of nominal full at 501 GWh.

Inflows - Inflows decreased 11.1% to 57 GWh.

Generation - Average generation increased 11.9% to 499.8 MW.

Tekapo



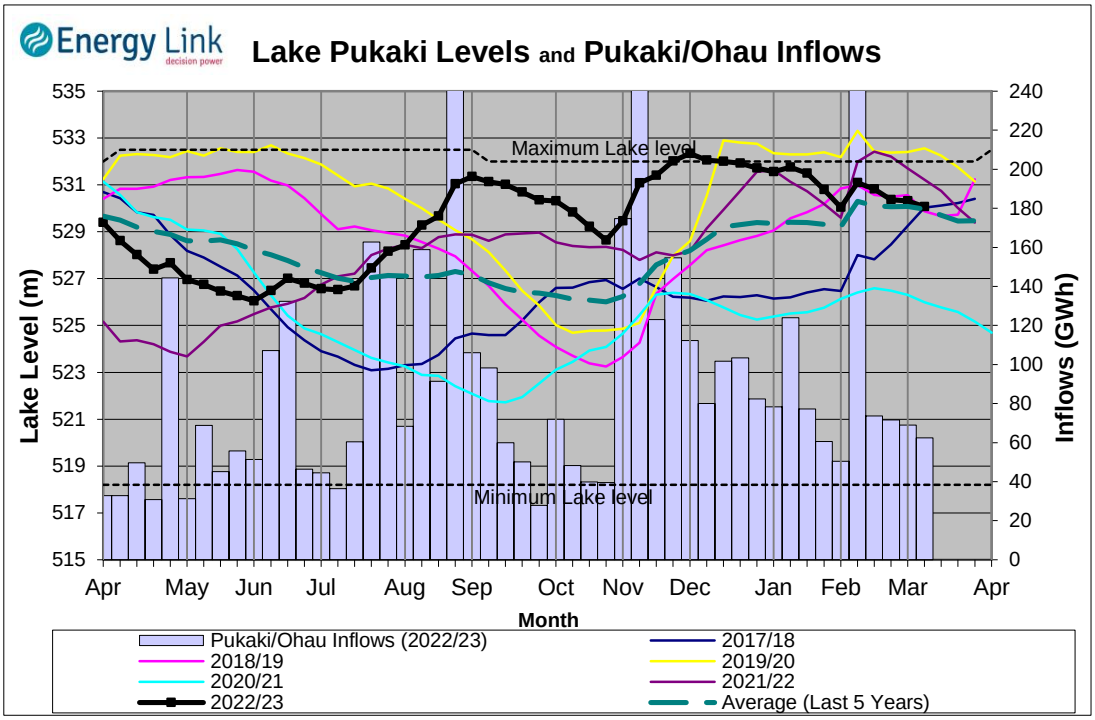
Lake Levels - Lake Tekapo ended the week 95% nominally full with storage falling to 689 GWh.

Inflows - Inflows into tekapo decreased 13.2% to 35 GWh.

Generation - Average Tekapo generation decreased 2.6% to 173.2 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 85% nominally full with storage falling to 1515 GW

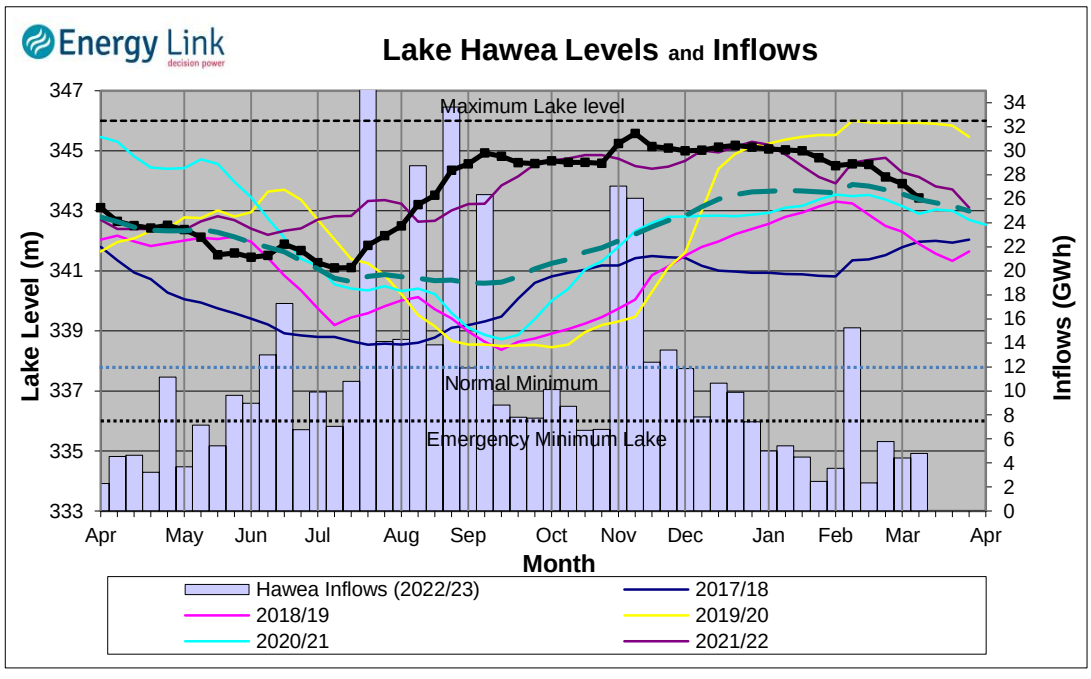
Inflows - Inflows into the Waitaki System decreased 9.5% to 62 GWh.

Generation - Average Waitaki generation increased 9.9% to 938.9 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 14.8 cumecs while Waitaki River flows were higher than last week averaging 377.9 cumecs.

Clutha System



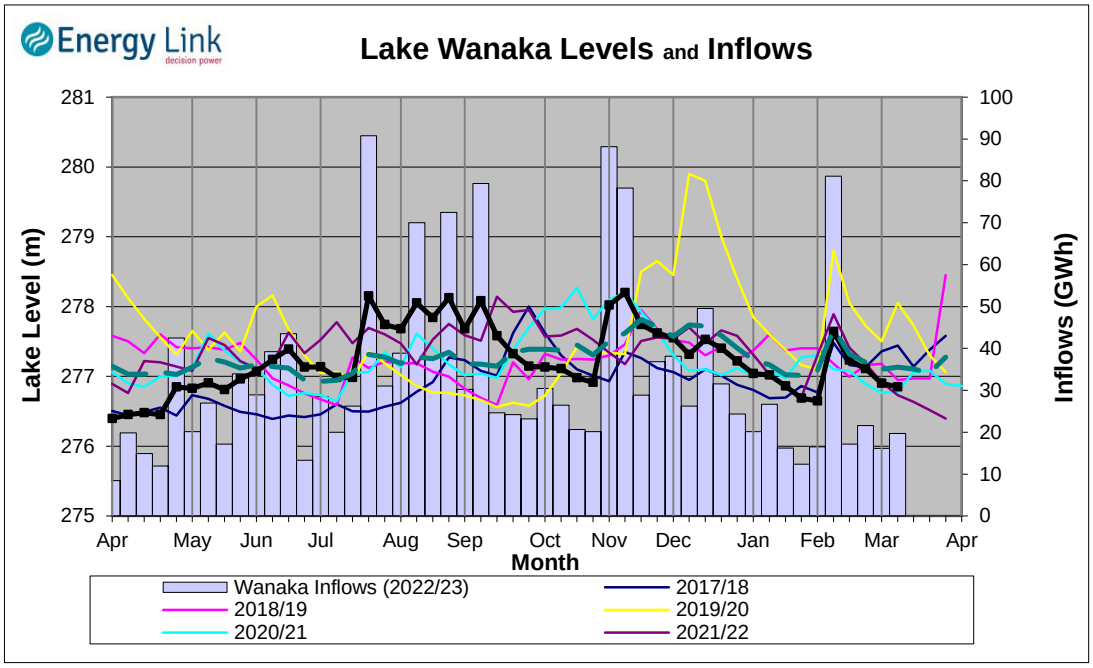
Lake Levels - Total storage for the Clutha System decreased 8.2% to 262 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 67.2%, 33.4% and 23.6% nominally full respectively.

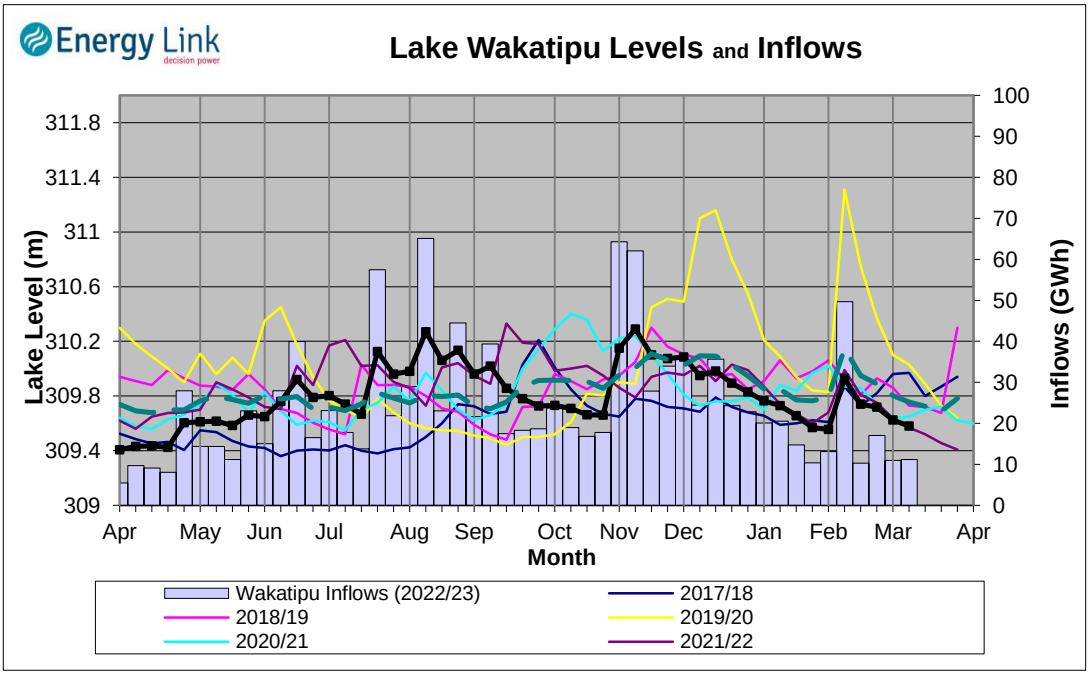
Inflows - Total Inflows into the Clutha System 13.3% higher at 36 GWh.

Generation - Average generation was 10.6% higher at 380 MW.

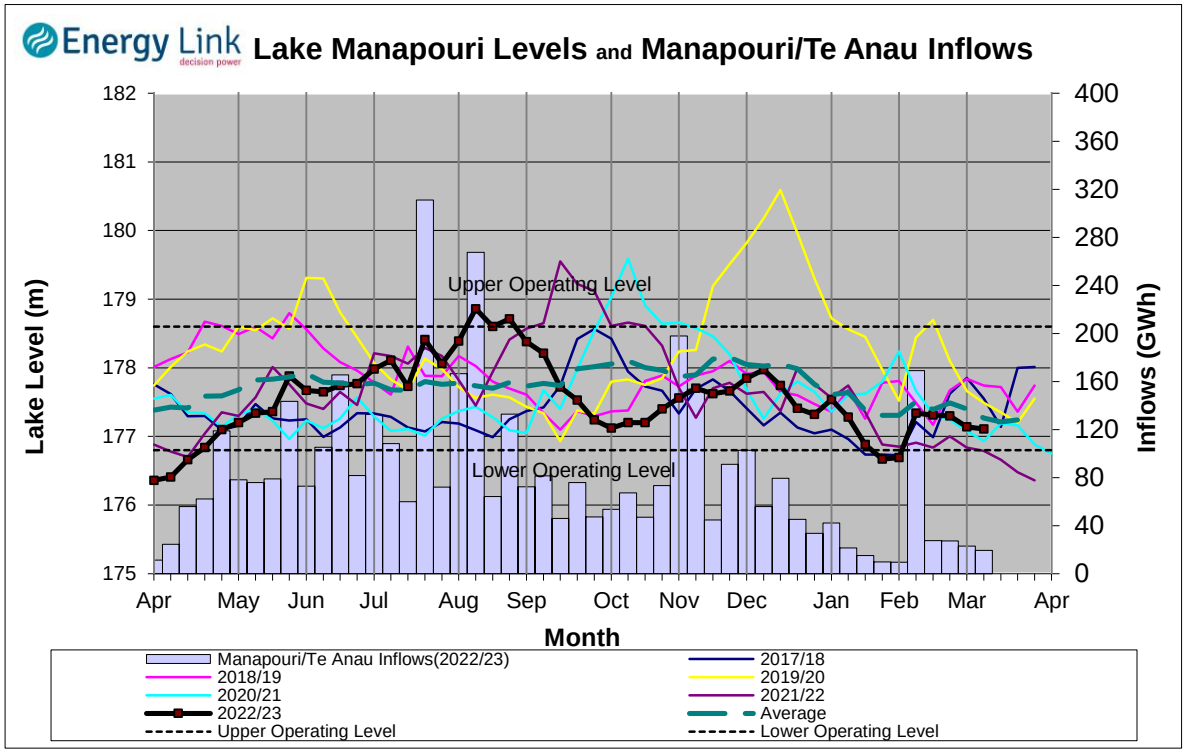
Hydro Spill - The was no estimated spill

River Flows - Total outflows from the lakes and Shotover River increased to 398.1 cumecs. This comprised of 144 cumecs from Lake Hawea, 142 cumecs from Lake Wanaka, 94 cumecs from Lake Wakatipu and 18 cumecs from the Shotover River.





Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 7.9% to 160 GWh with Lake Manapouri ending the week 45.3% nominally full and Lake Te Anau ending the week 31.5% nominally full.

Inflows - Total inflows into the Manapouri System decreased 16% to 19 GWh.

Generation - Average generation was 28% lower at 197 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 16.8 cumecs.

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