



Thursday, 09 April 2020

Issue: 1199

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)	2500	238	2738	154	2892
Storage Change (GWh)	-129	-30	-158	-22	-181

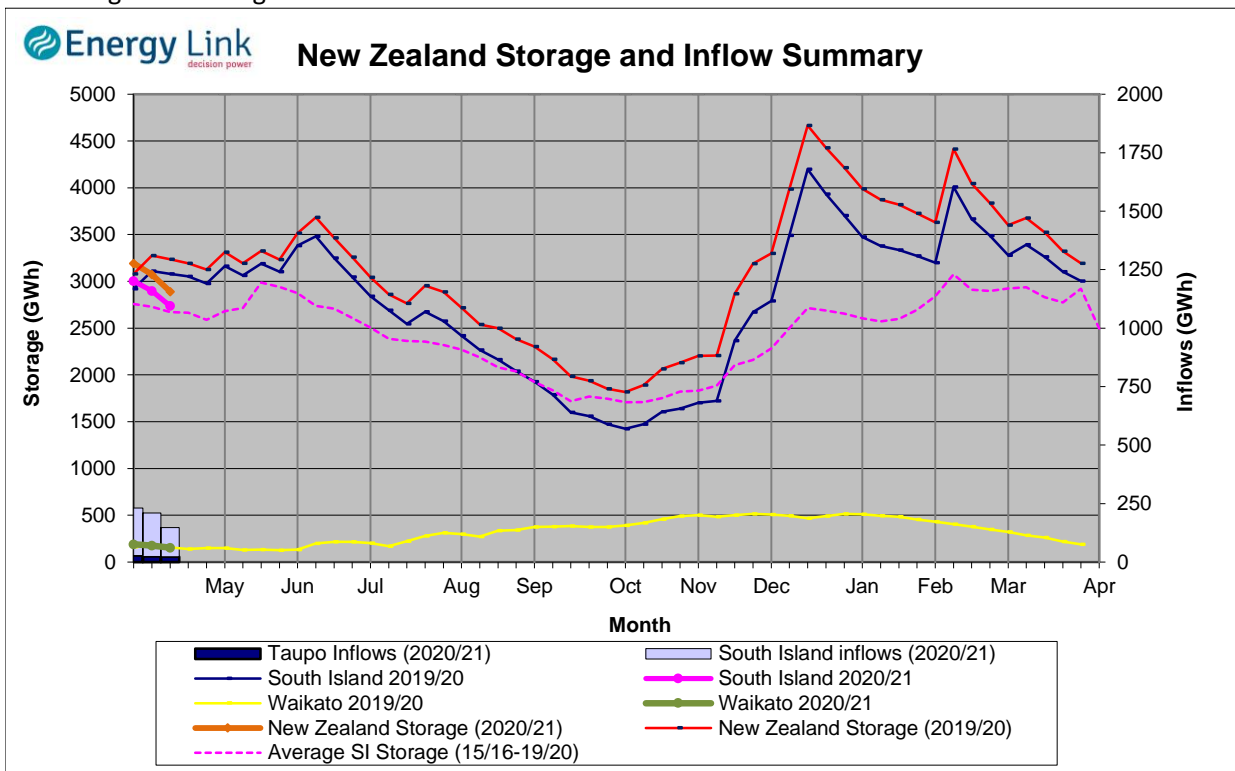
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	2676	154	2830

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 180.9 GWh over the last week. South Island controlled storage decreased 4.9% to 2500 GWh; South Island uncontrolled storage decreased 11.2% to 238 GWh; with Taupo storage decreasing 12.7% to 154 GWh.



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Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	176	312	2249	154	2892
Last Week	202	335	2360	177	3073
% Change	-12.8%	-6.6%	-4.7%	-12.7%	-5.9%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	33	36	55	23	147
Last Week	56	34	96	25	210
% Change	-41.3%	8.1%	-42.7%	-7.4%	-30.0%

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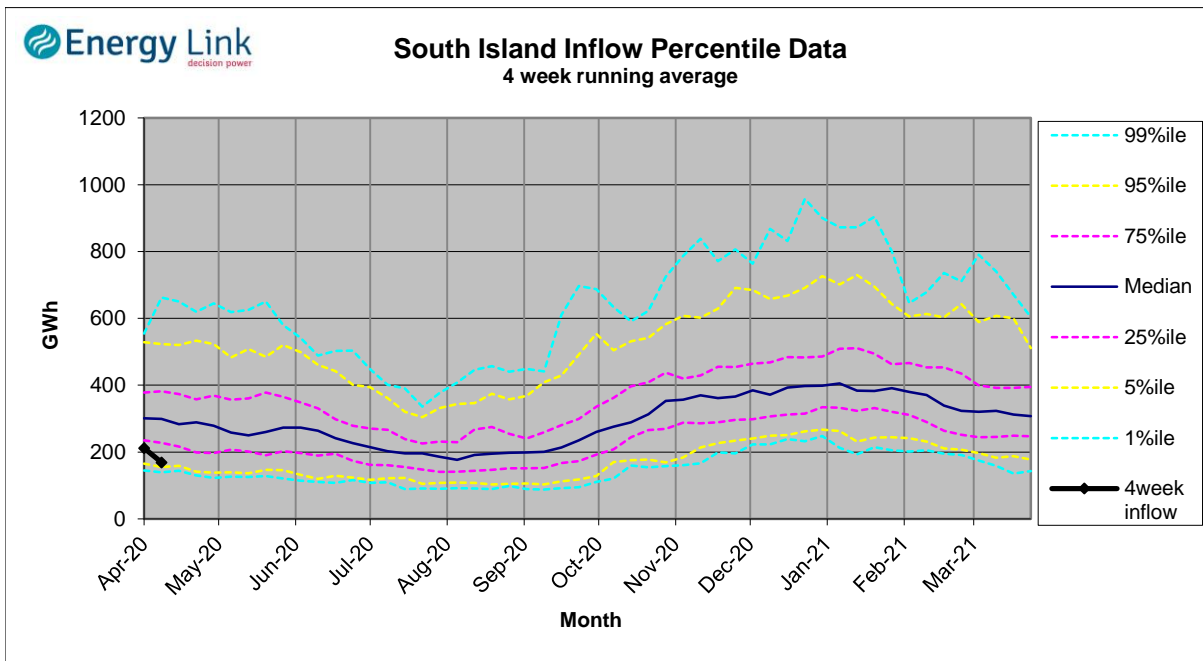
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.35	88	15	-2
	Te Anau	201.45	88		
Clutha	Wakatipu	309.56	23	91	-14
	Wanaka	276.85	38	141	-26
	Hawea	344.82	251	144	81
Waitaki	Tekapo	709.68	766		
	Pukaki	529.83	1483		
Waikato	Taupo	356.23	154		

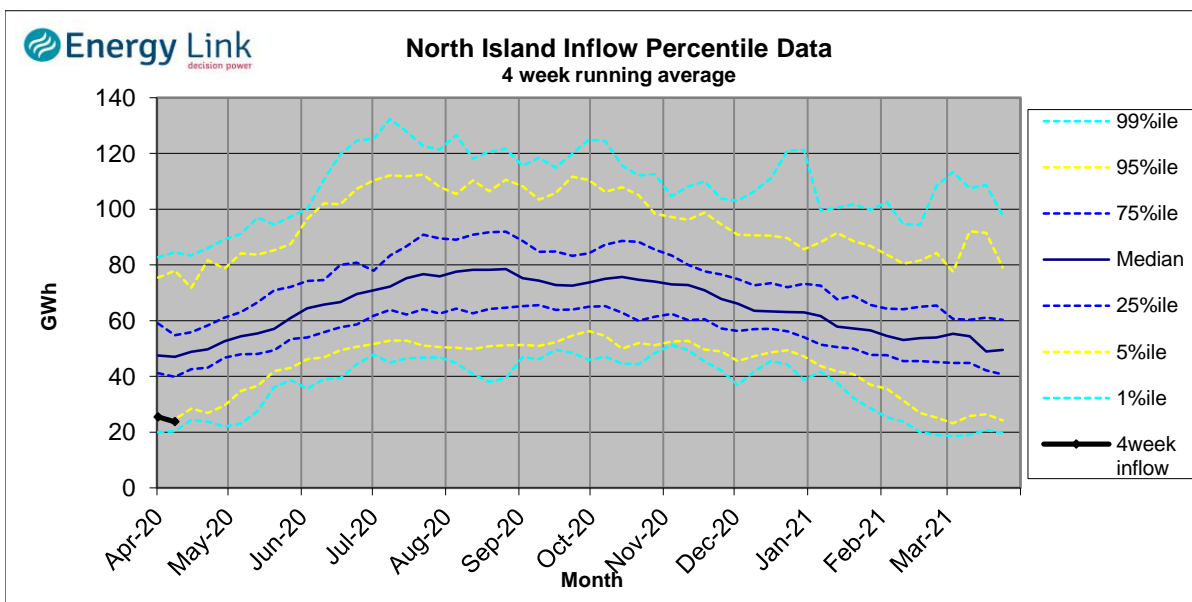
Inflow Summary

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.

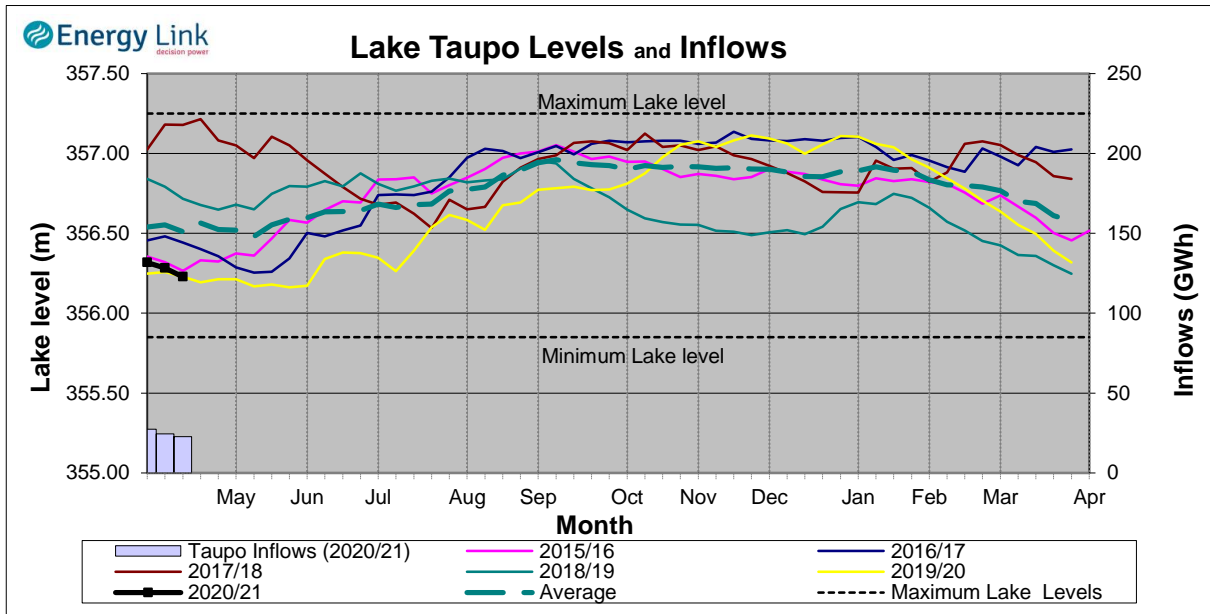
South Island Inflows - The past four weeks of S. I. inflows rank as the 7th driest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 4th driest on record.



Waikato System

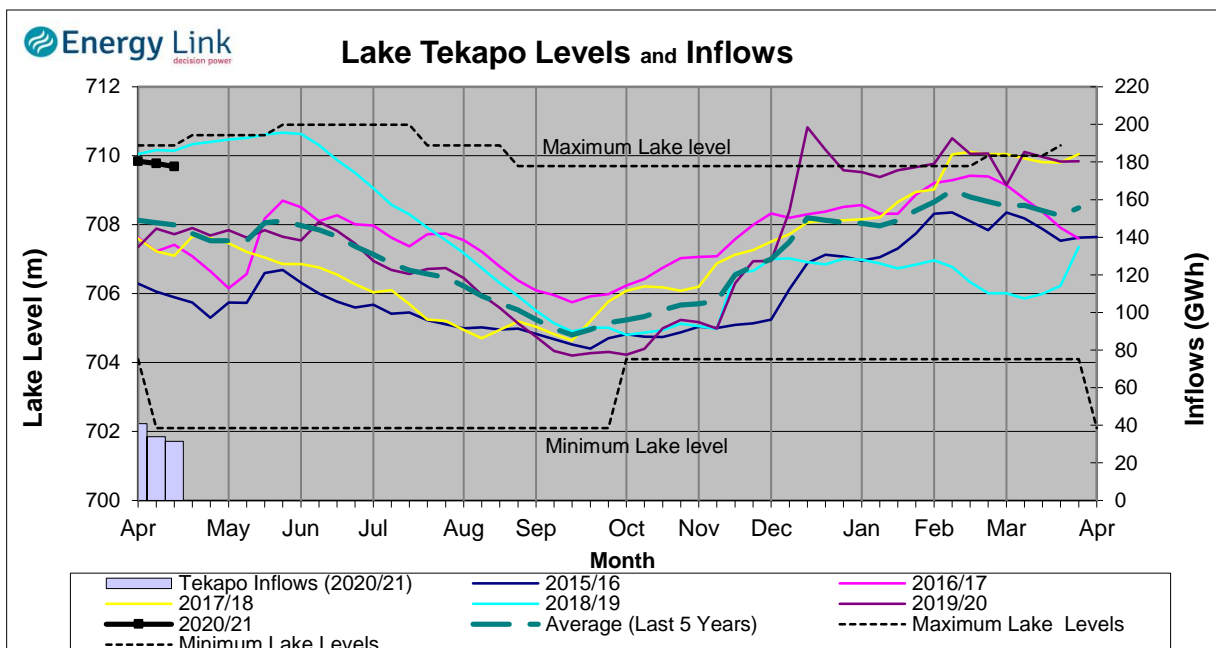


Lake Levels - Lake Taupo storage fell to 27% of nominal full at 154 GWh.

Inflows - Inflows decreased 7.4% to 23 GWh.

Generation - Average generation increased 2.3% to 296.9 MW.

Tekapo



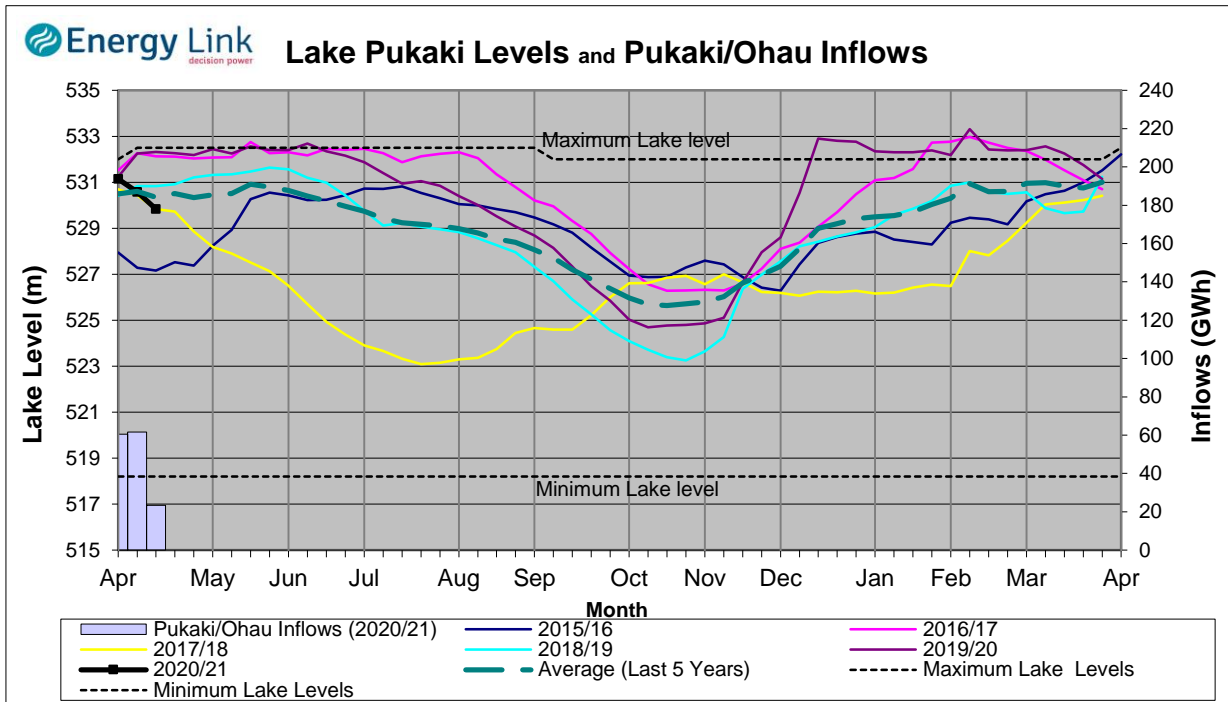
Lake Levels - Lake Tekapo ended the week 96% nominally full with storage falling to 766 GWh.

Inflows - Inflows into tekapo decreased 7.4% to 31 GWh.

Generation - Average Tekapo generation remained steady at 74.4 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 80% nominally full with storage falling to 1483 GWh.

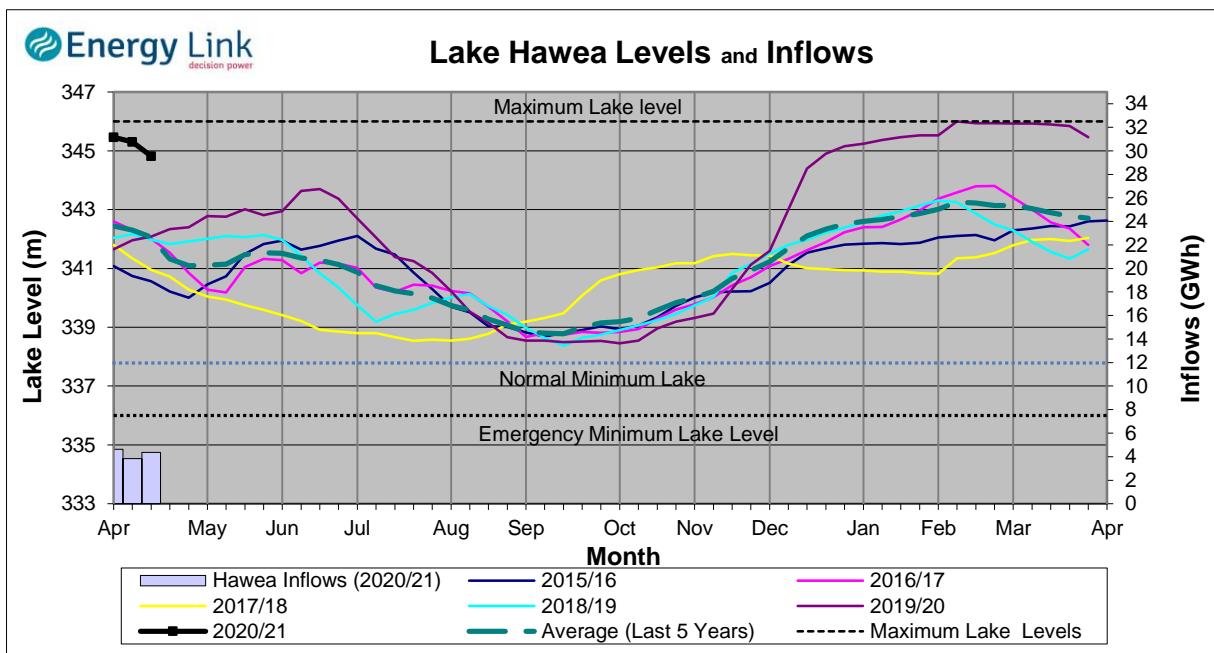
Inflows - Inflows into the Waitaki System decreased 62.1% to 23 GWh.

Generation - Average Waikati generation decreased 4.6% to 985.1 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 11.6 cumecs while Waitaki River flows were higher than last week averaging 405.8 cumecs.

Clutha System



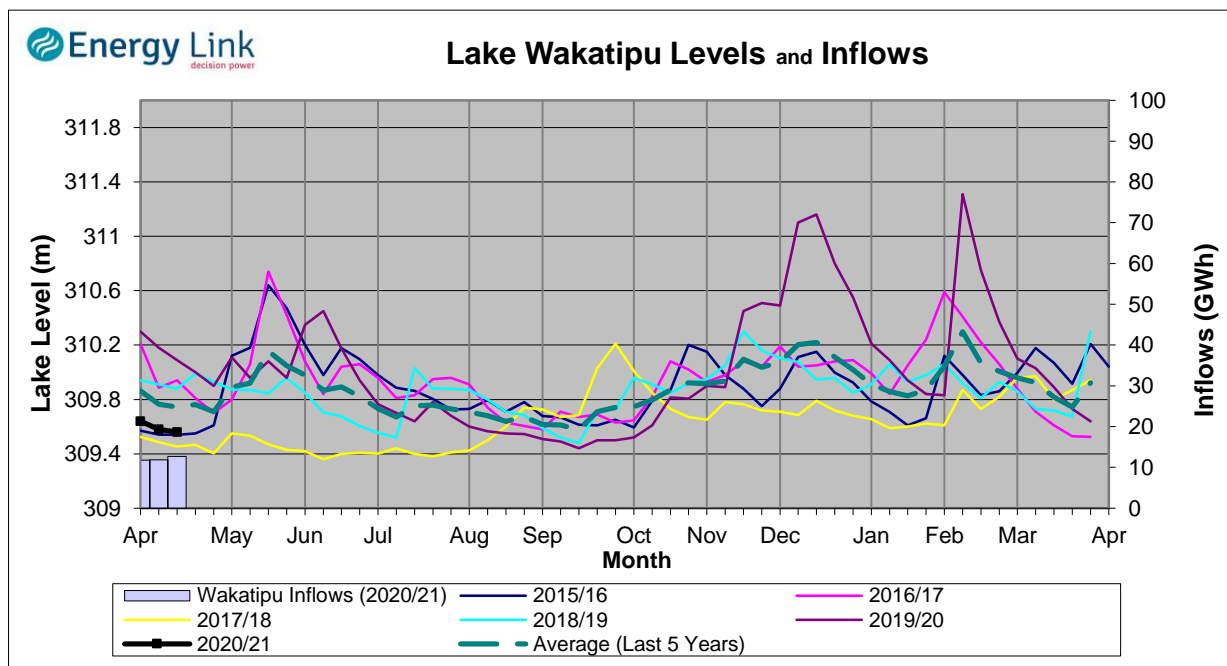
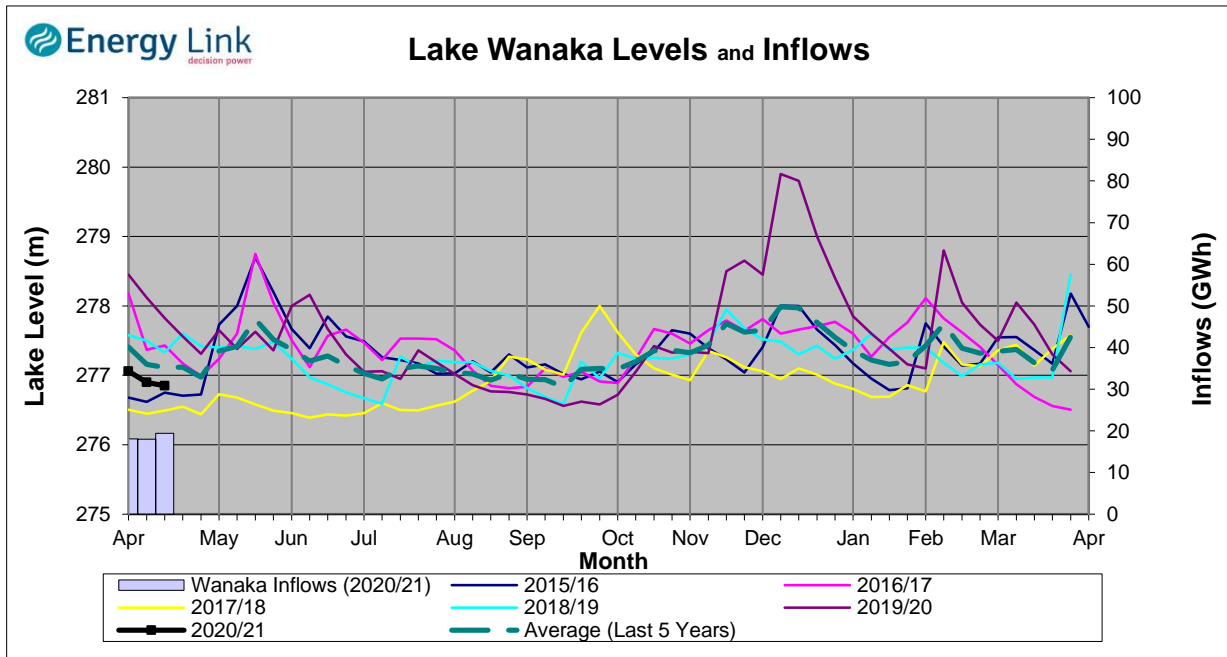
Lake Levels - Total storage for the Clutha System decreased 6.6% to 312 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 84.9%, 33.4% and 22.1% nominally full respectively.

Inflows - Total Inflows into the Clutha System 8.1% higher at 36 GWh.

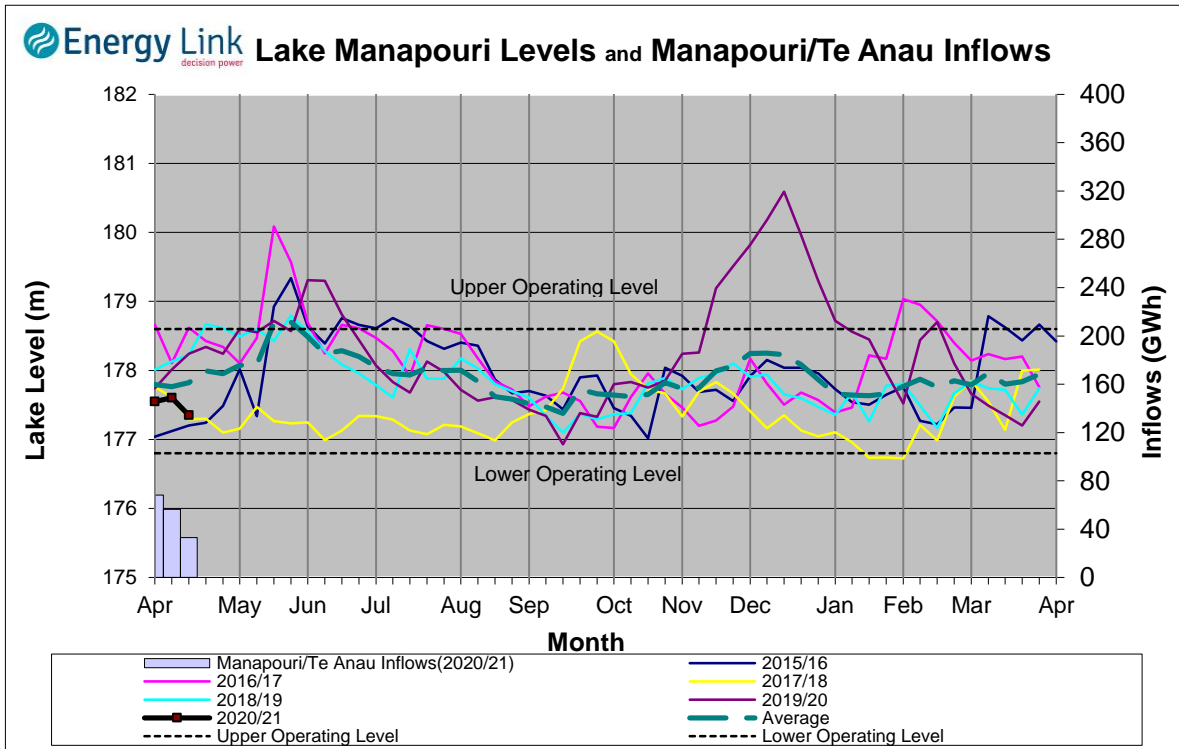
Generation - Average generation was 9.4% higher at 351 MW.

Hydro Spill - There was no estimated spill

River Flows - Total outflows from the lakes and Shotover River increased to 394.9 cumecs. This comprised of 144 cumecs from Lake Hawea, 141 cumecs from Lake Wanaka, 91 cumecs from Lake Wakatipu and 19 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 12.8% to 176 GWh with Lake Manapouri ending the week 54.1% nominally full and Lake Te Anau ending the week 32.1% nominally full.

Inflows - Total inflows into the Manapouri System decreased 41.3% to 33 GWh.

Generation - Average generation was 2.3% lower at 351 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 14.7 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'.

