



Thursday, 02 April 2020

Issue: 1198

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)	2628	268	2896	177	3073
Storage Change (GWh)	-91	-16	-107	-14	-121

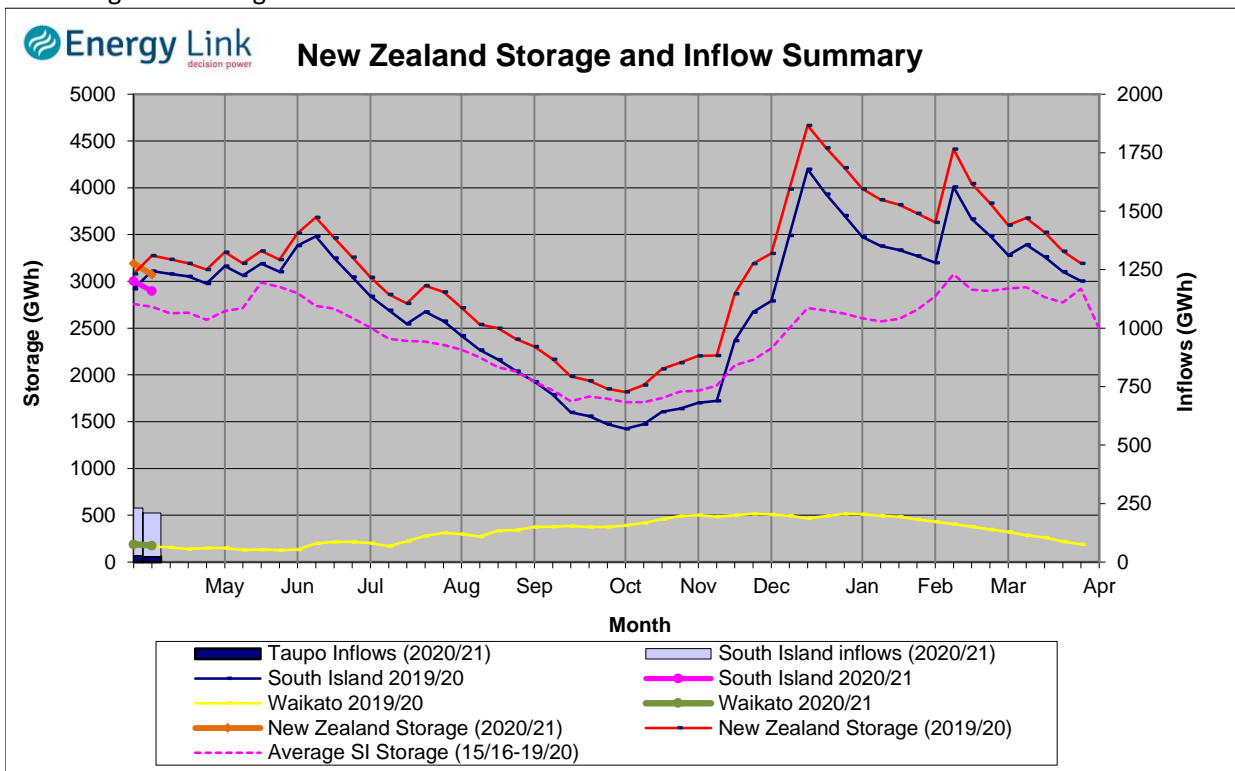
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	2830	177	3007

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 121.1 GWh over the last week. South Island controlled storage decreased 3.3% to 2628 GWh; South Island uncontrolled storage decreased 5.8% to 268 GWh; with Taupo storage decreasing 7.3% to 177 GWh.



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Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato		NZ
<b>This Week</b>	202	335	2360	177		3073
Last Week	206	353	2444	190		3194
% Change	-1.9%	-5.3%	-3.5%	-7.3%		-3.8%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato		NZ
<b>This Week</b>	56	34	96	25		210
Last Week	68	35	101	27		231
% Change	-17.3%	-2.2%	-5.7%	-10.2%		-9.2%

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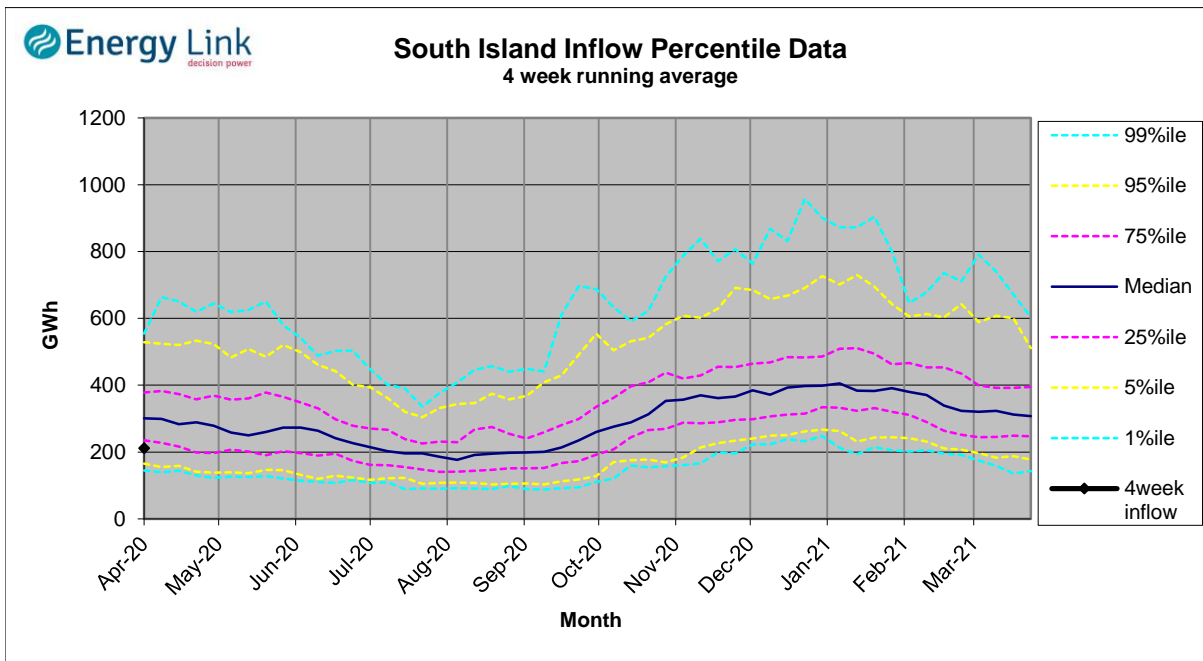
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.60	103	17	-4
	Te Anau	201.52	99		
Clutha	Wakatipu	309.58	25	105	-14
	Wanaka	276.90	41	167	-26
	Hawea	345.30	269	63	-59
Waitaki	Tekapo	709.77	776		
	Pukaki	530.57	1583		
Waikato	Taupo	356.28	177		

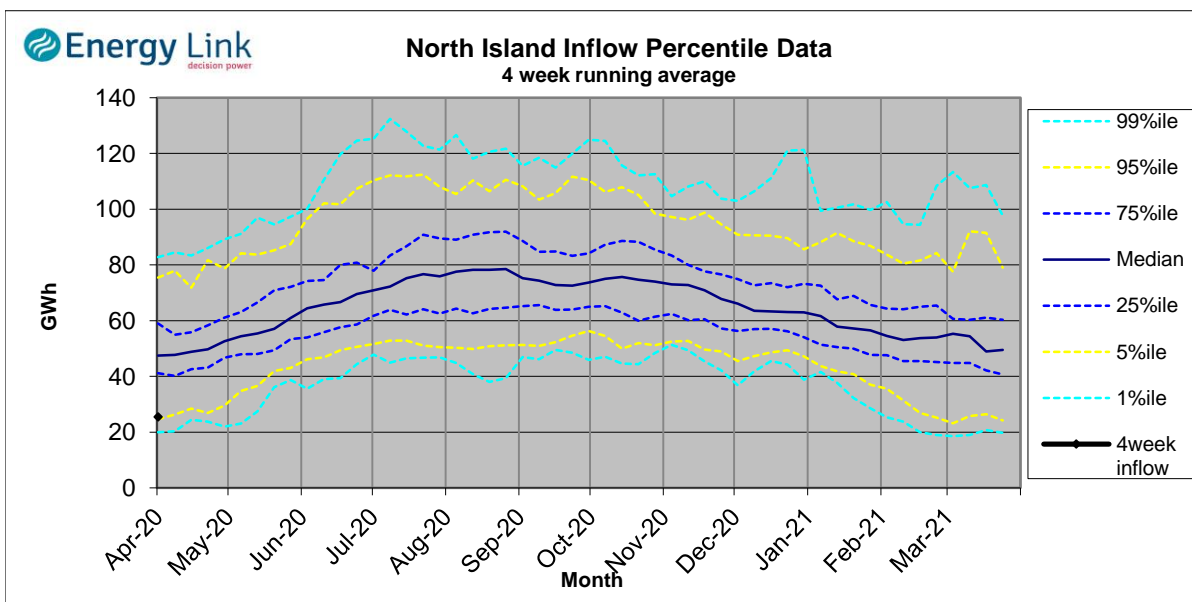
Inflow Summary

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.

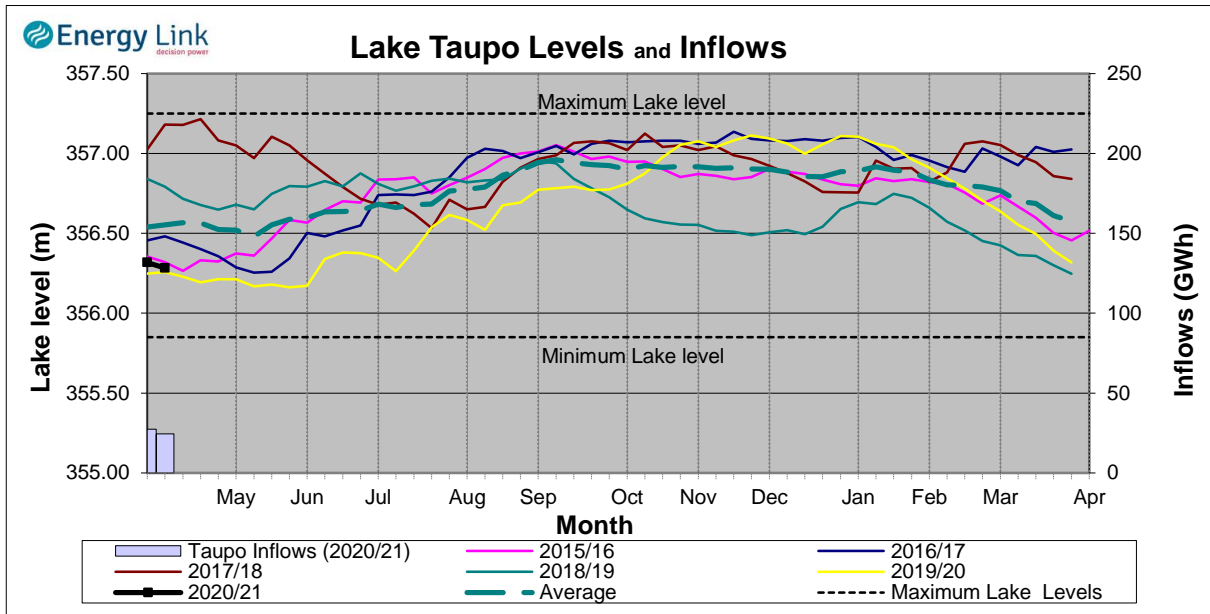
**South Island Inflows** - The past four weeks of S. I. inflows rank as the 19th driest on record.



**North Island Inflows** - The past four weeks of N. I. inflows rank as the 6th driest on record.



# Waikato System

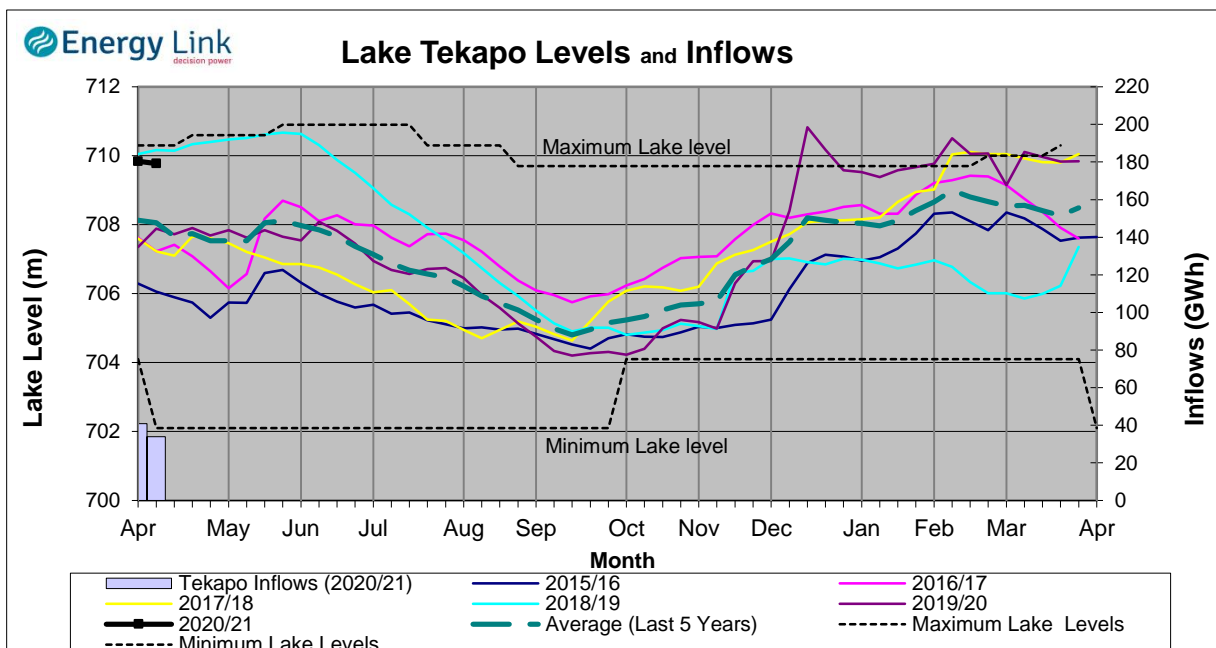


**Lake Levels** - Lake Taupo storage fell to 30.9% of nominal full at 177 GWh.

**Inflows** - Inflows decreased 10.2% to 25 GWh.

**Generation** - Average generation decreased 22.7% to 290.1 MW.

# Tekapo



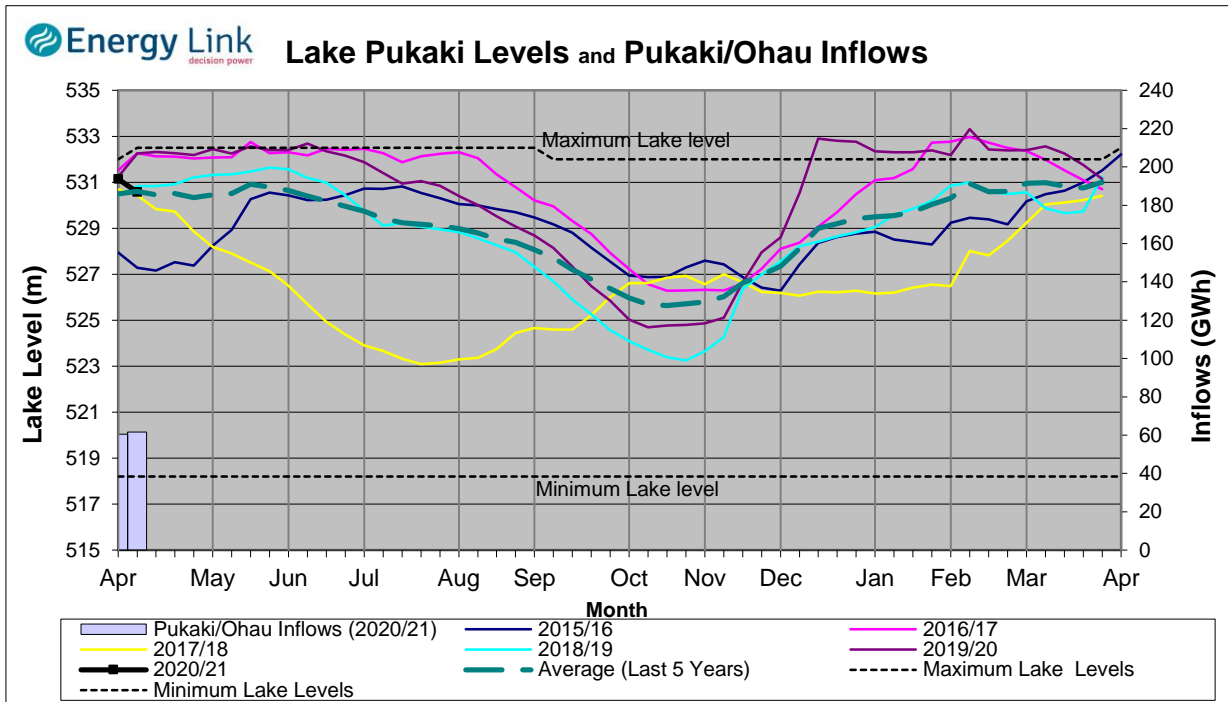
**Lake Levels** - Lake Tekapo ended the week 103% nominally full with storage falling to 776 GWh.

**Inflows** - Inflows into tekapo decreased 16.9% to 34 GWh.

**Generation** - Average Tekapo generation increased 3.1% to 74.2 MW.

**Hydro Spill** - Lake Tekapo did not spill.

# Waitaki System



**Lake Levels** - Lake Pukaki ended the week 89% nominally full with storage falling to 1583 GWh.

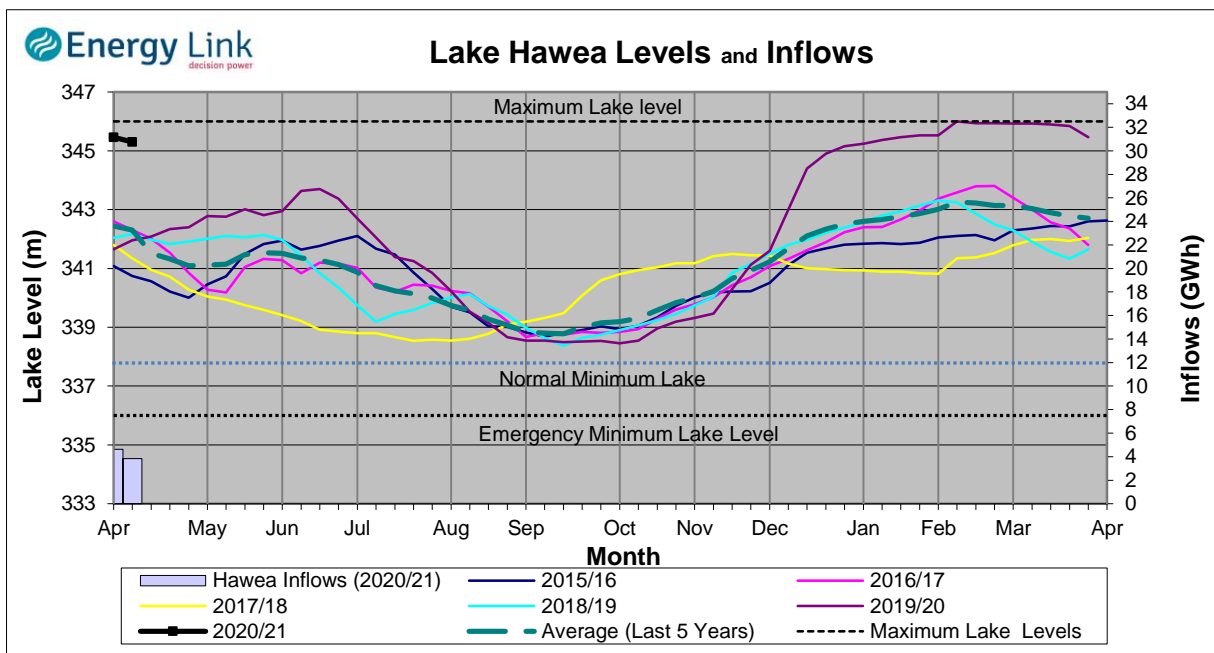
**Inflows** - Inflows into the Waitaki System increased 1.9% to 62 GWh.

**Generation** - Average Waikati generation decreased 7.5% to 1032.2 MW.

**Hydro Spill** - Lake Pukaki did not spill.

**River Flows** - Flows from the Ahuriri River fell to 13.4 cumecs while Waitaki River flows were lower than last week averaging 395.9 cumecs.

# Clutha System



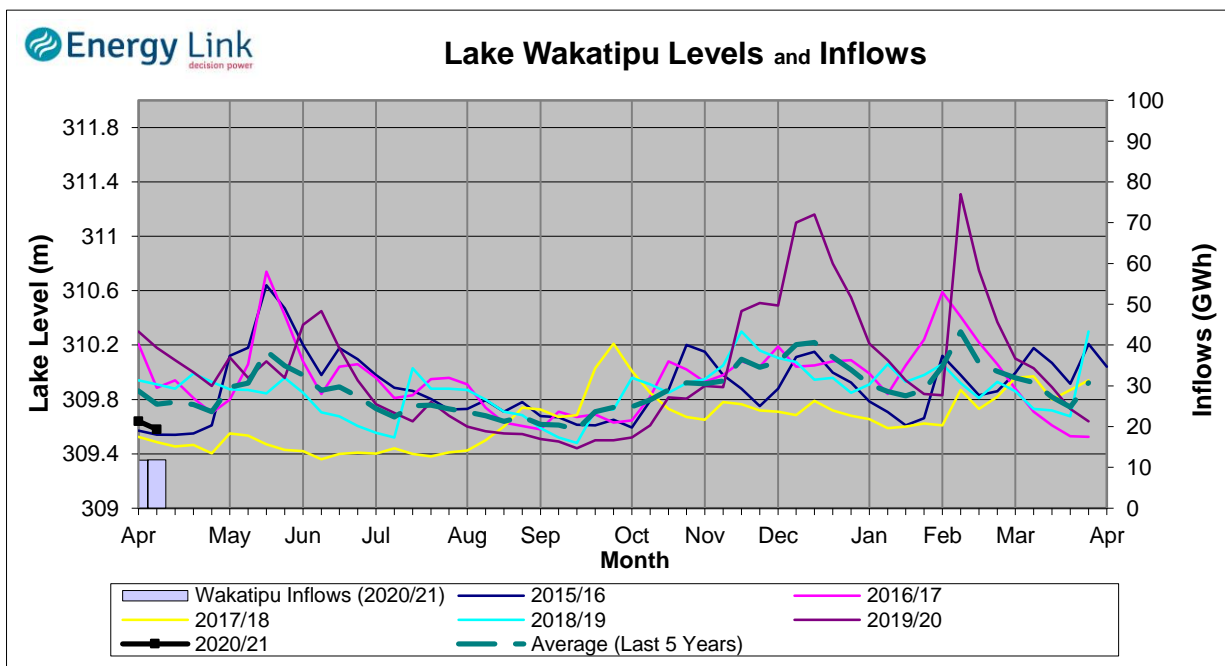
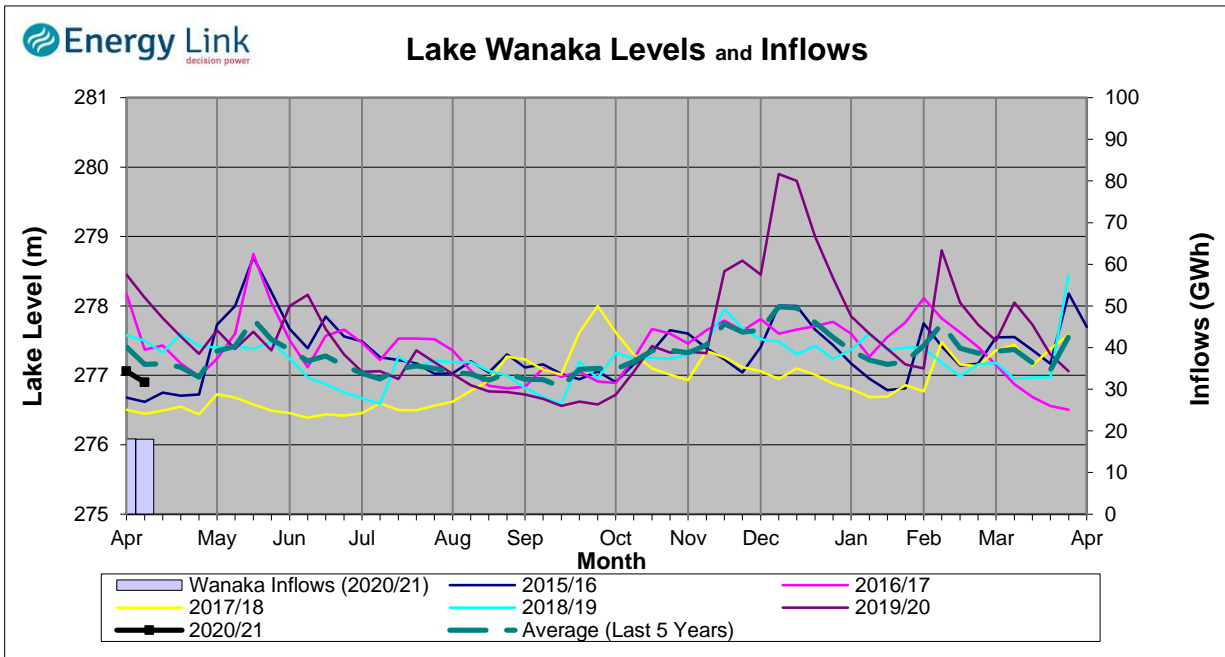
**Lake Levels** - Total storage for the Clutha System decreased 5.3% to 335 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 91%, 35.6% and 23.6% nominally full respectively.

**Inflows** - Total Inflows into the Clutha System 2.2% lower at 34 GWh.

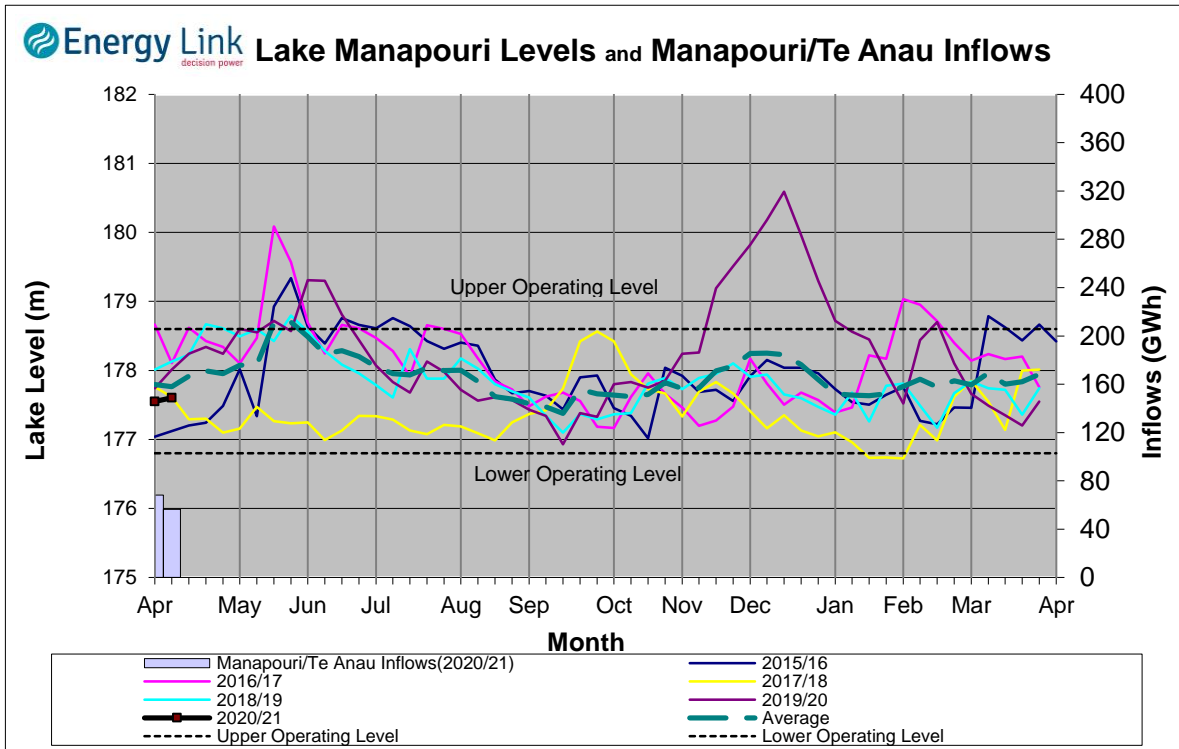
**Generation** - Average generation was 22.2% lower at 321 MW.

**Hydro Spill** - There was no estimated spill

**River Flows** - Total outflows from the lakes and Shotover River fell to 357.1 cumecs. This comprised of 63 cumecs from Lake Hawea, 167 cumecs from Lake Wanaka, 105 cumecs from Lake Wakatipu and 22 cumecs from the Shotover River.



### Manapouri System



**Lake Levels** - Total storage for the Manapouri System decreased 1.9% to 202 GWh with Lake Manapouri ending the week 63.4% nominally full and Lake Te Anau ending the week 36% nominally full.

**Inflows** - Total inflows into the Manapouri System decreased 17.3% to 56 GWh.

**Generation** - Average generation was 16.2% higher at 359 MW.

**Hydro Spill** - Estimated spill at the Mararoa Weir was 16.5 cumecs.

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

