

HydroWatch

Thursday, 07 February 2019

Issue: 1138

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)	2289	390	2679	295	2973
Storage Change (GWh)	-3	-57	-60	-35	-95

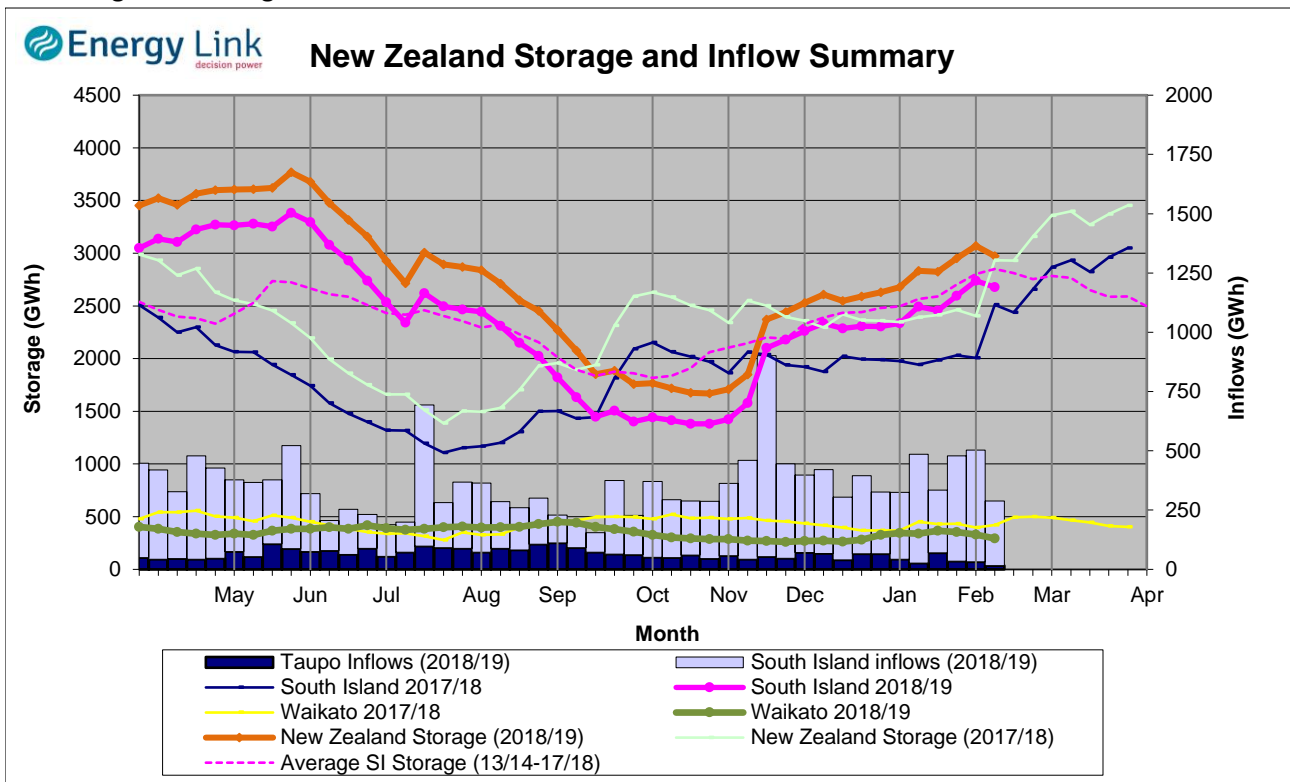
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	2573	295	2868

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 95.1 GWh over the last week. South Island controlled storage decreased 0.1% to 2289 GWh; South Island uncontrolled storage decreased 12.8% to 390 GWh; with Taupo storage decreasing 10.7% to 295 GWh.



Thursday, 07 February 2019					
Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	285	297	2097	295	2973
Last Week	320	321	2097	330	3069
% Change	-11.1%	-7.4%	0.0%	-10.7%	-3.1%
Inflow (GWh)	Manapouri	Clutha	Waitaki	Waikato	NZ
This Week	54	48	170	16	288
Last Week	110	79	281	32	502
% Change	-50.8%	-39.8%	-39.5%	-50.2%	-42.7%

Subscribe at www.energylink.co.nz/publications

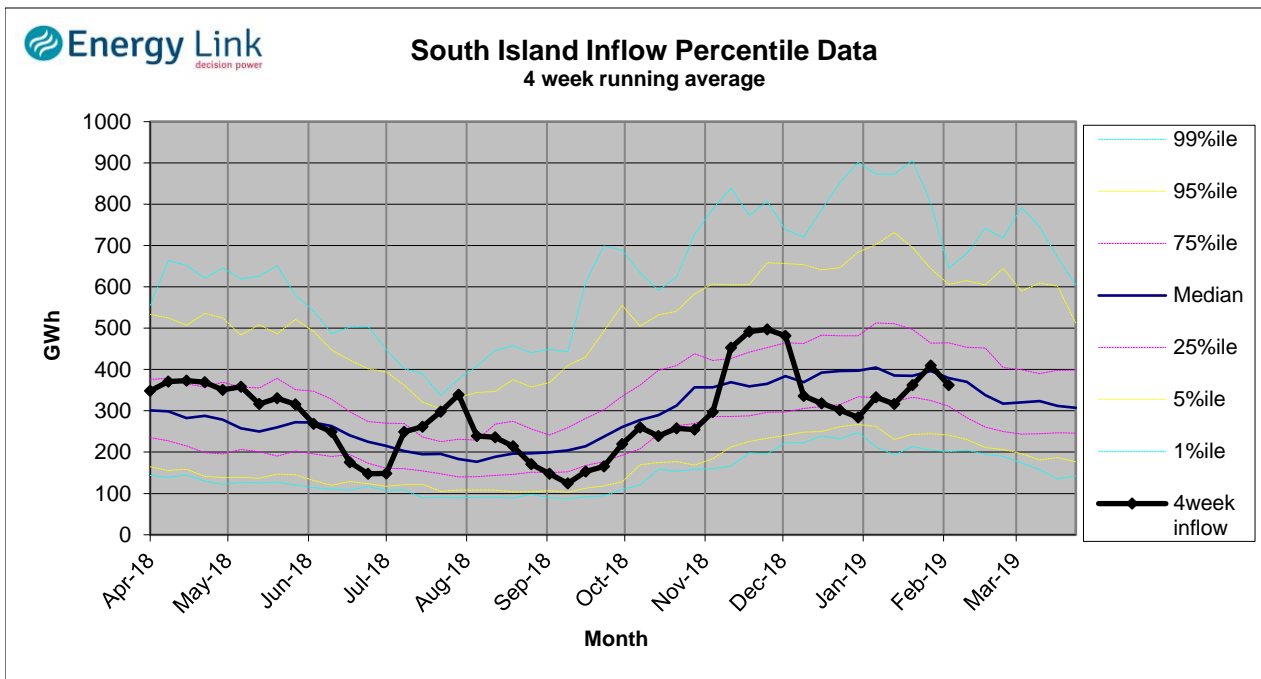
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.49	96	37	16
	Te Anau	202.12	189		
Clutha	Wakatipu	309.92	51	199	12
	Wanaka	277.18	55	214	
	Hawea	343.25	192	44	
Waitaki	Tekapo	706.78	457		-12
	Pukaki	530.99	1640		
Waikato	Taupo	356.57	295		29

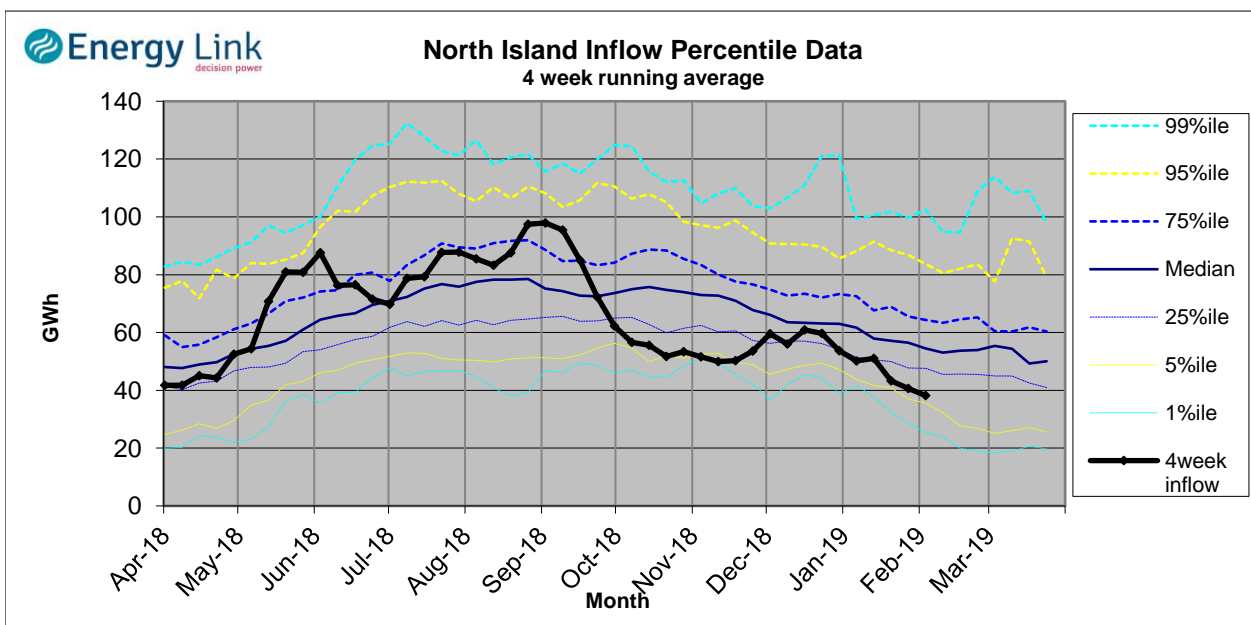
Inflow Summary

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.

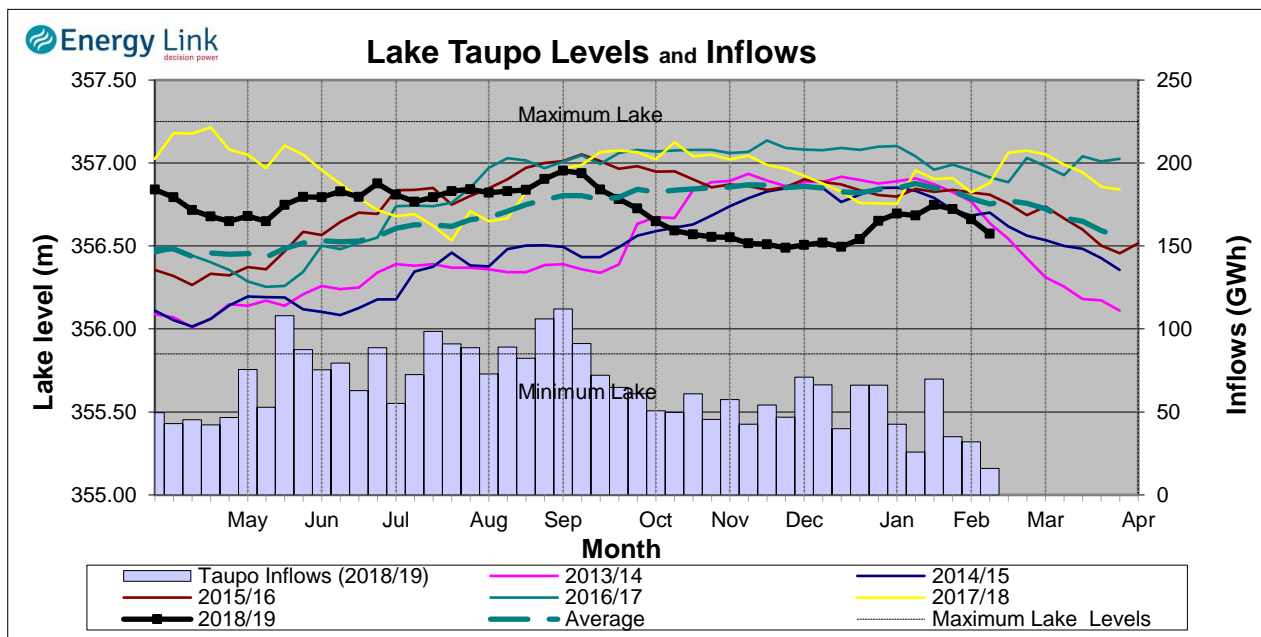
South Island Inflows - The past four weeks of S. I. inflows rank as the 39th driest on record.



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



Waikato System

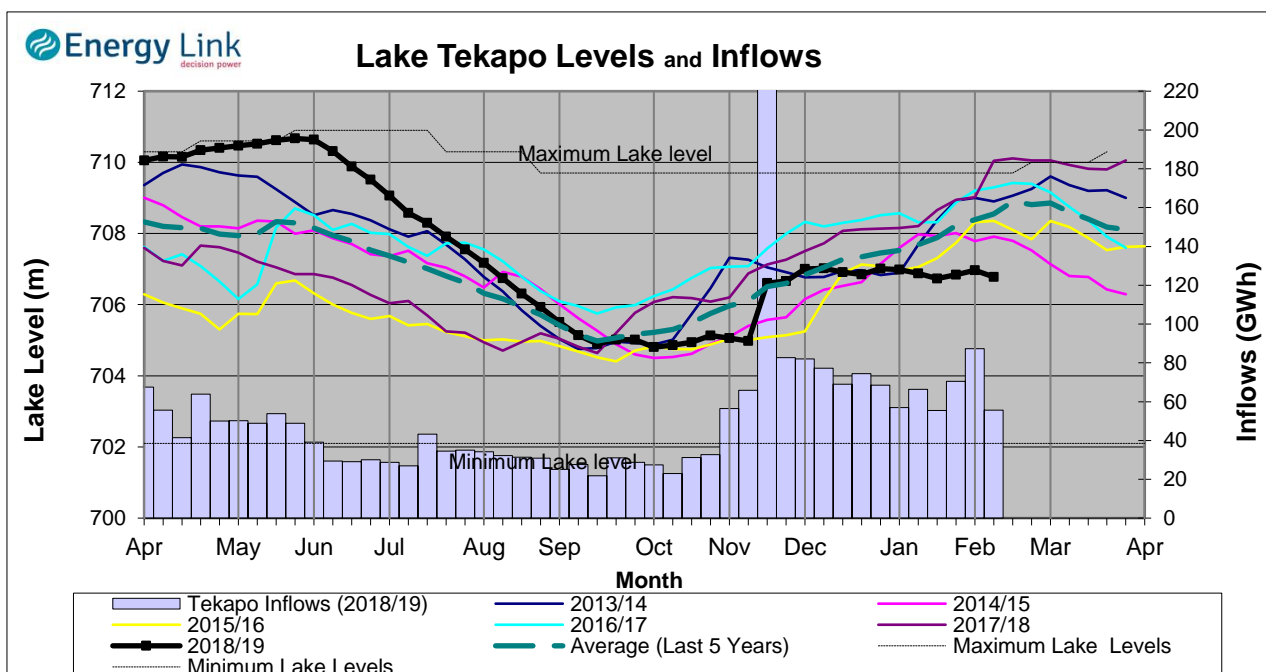


Lake Levels - Lake Taupo storage fell to 51.6% of nominal full at 295 GWh.

Inflows - Inflows decreased 50.2% to 16 GWh.

Generation - Average generation decreased 5% to 364.6 MW.

Tekapo



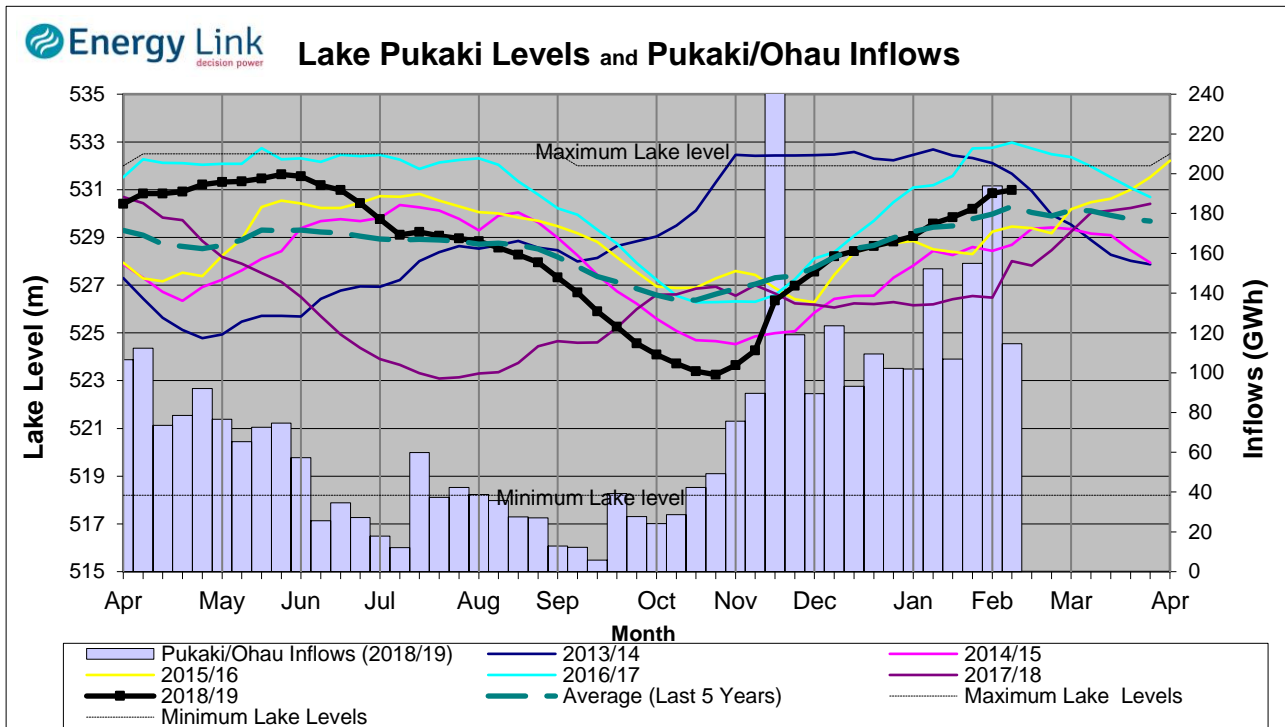
Lake Levels - Lake Tekapo ended the week 63% nominally full with storage falling to 457 GWh.

Inflows - Inflows into tekapo decreased 36.3% to 56 GWh.

Generation - Average Tekapo generation increased 1.1% to 158.3 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 92% nominally full with storage increasing to 1640 GWh.

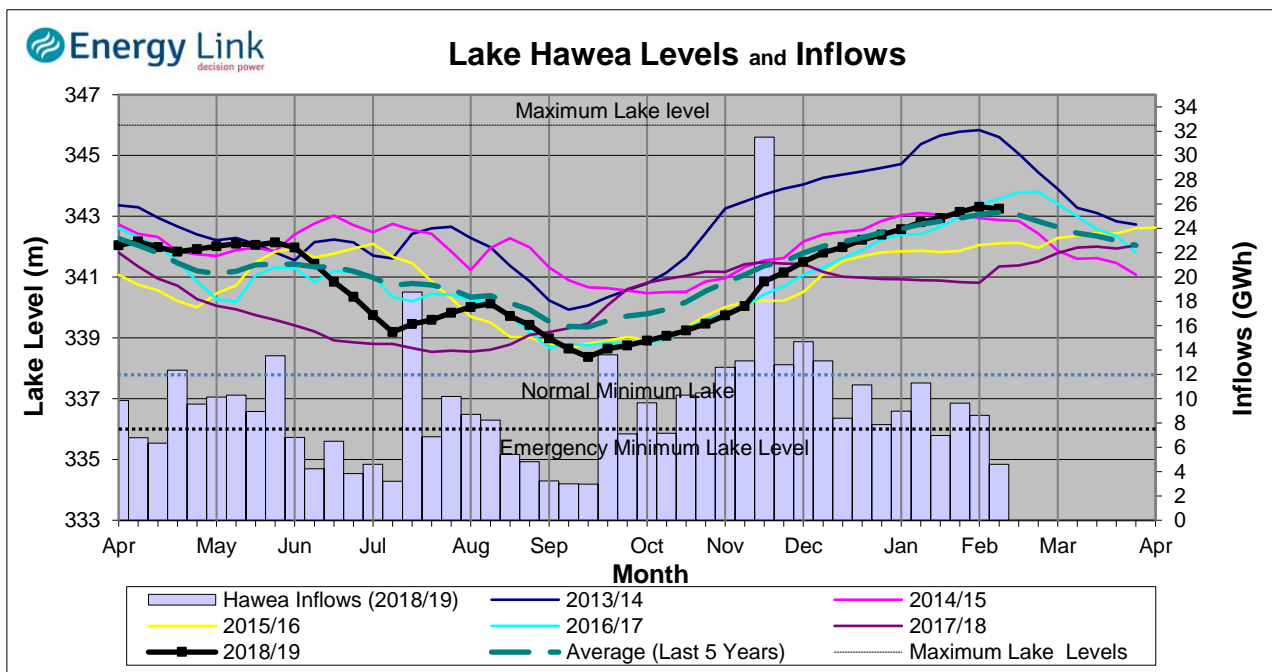
Inflows - Inflows into the Waitaki System decreased 40.9% to 115 GWh.

Generation - Average Waikati generation decreased 2.7% to 948.7 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 16.6 cumecs while Waitaki River flows were higher than last week averaging 387.6 cumecs.

Clutha System



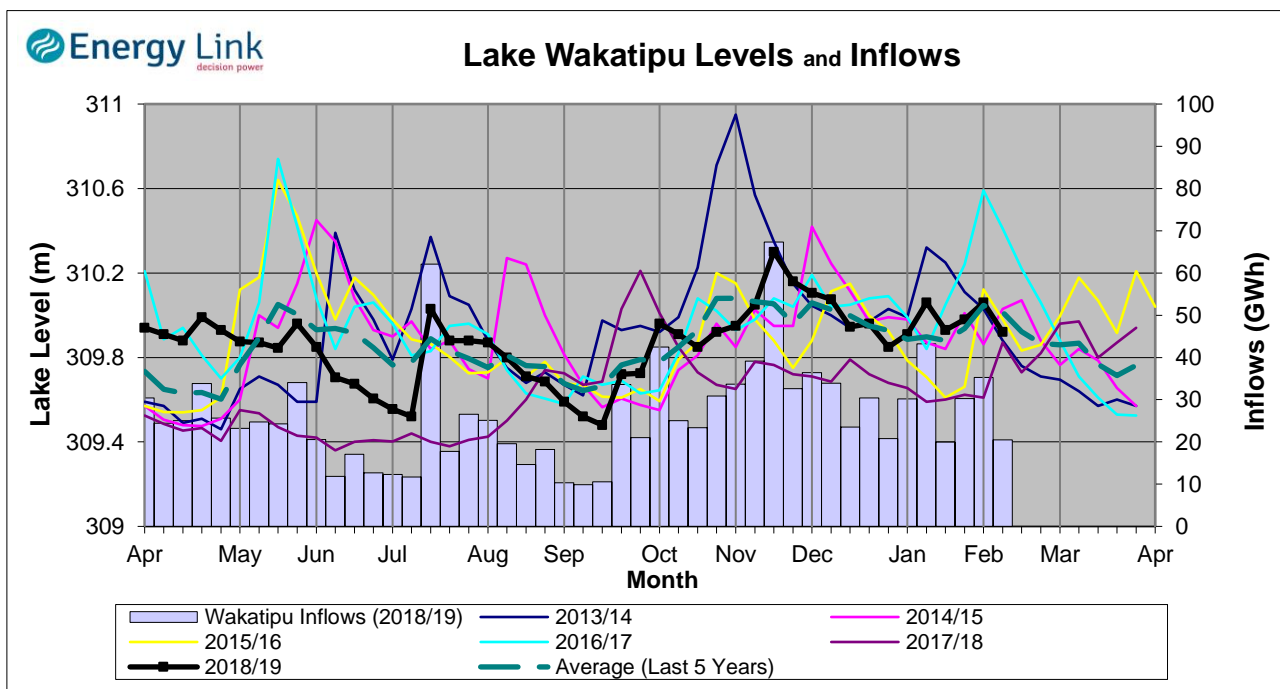
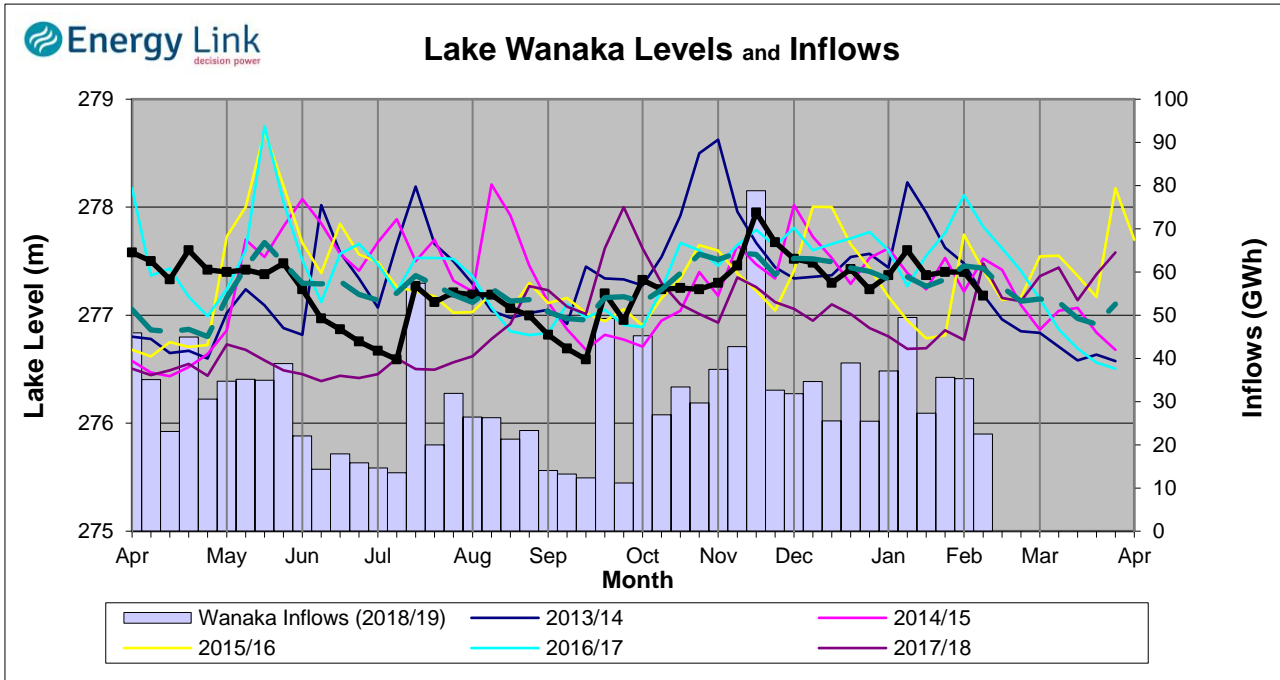
Lake Levels - Total storage for the Clutha System decreased 7.4% to 297 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 64.9%, 47.7% and 47.9% nominally full respectively.

Inflows - Total Inflows into the Clutha System 39.8% lower at 48 GWh.

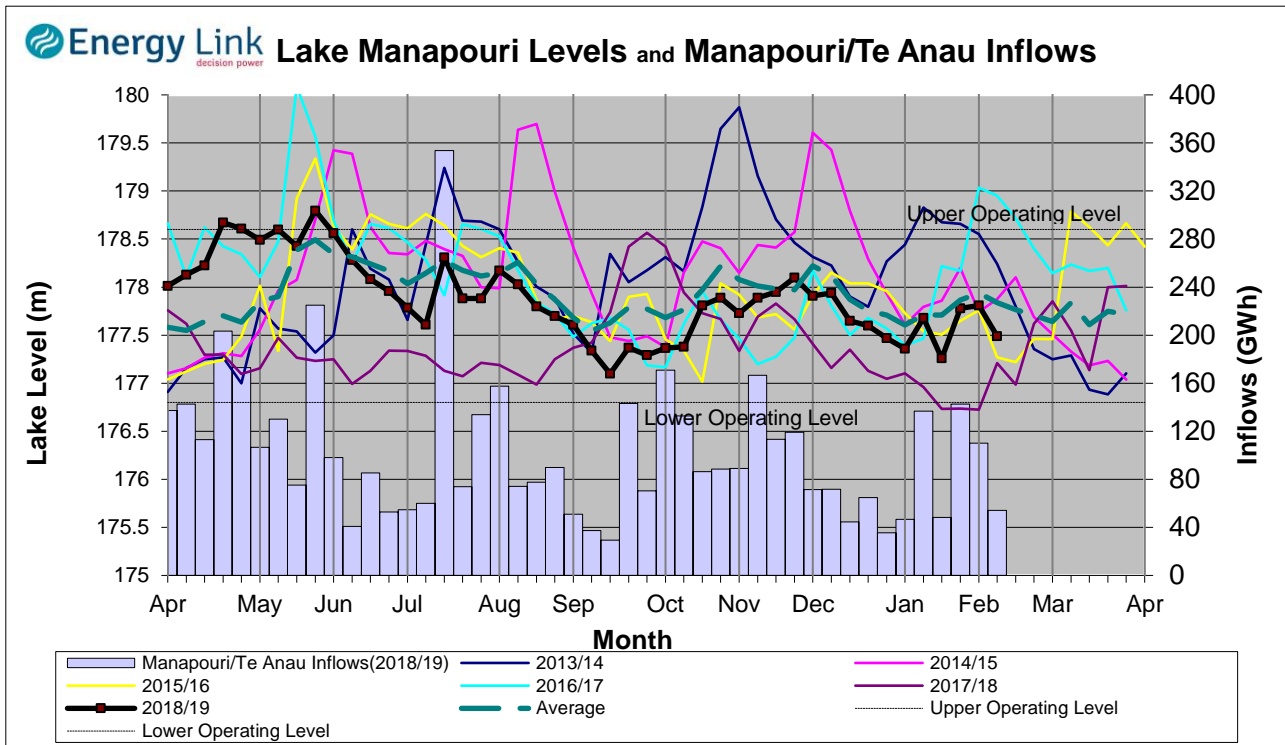
Generation - Average generation was 2.6% higher at 457 MW.

Hydro Spill - There was no estimated spill

River Flows - Total outflows from the lakes and Shotover River increased to 489.6 cumecs. This comprised of 44 cumecs from Lake Hawea, 214 cumecs from Lake Wanaka, 199 cumecs from Lake Wakatipu and 32 cumecs from the Shotover River.



Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 11.1% to 285 GWh with Lake Manapouri ending the week 59.2% nominally full and Lake Te Anau ending the week 68.5% nominally full.

Inflows - Total inflows into the Manapouri System decreased 50.8% to 54 GWh.

Generation - Average generation was 6.3% higher at 534 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 36.6 cumecs.

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

