HydroWatch

Thursday, 15 September 2016 Issue: 1013

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)	**1791**	**392**	**2182**	**467**	**2649**
Storage Change (GWh)	-108	-15	-123	-21	-144

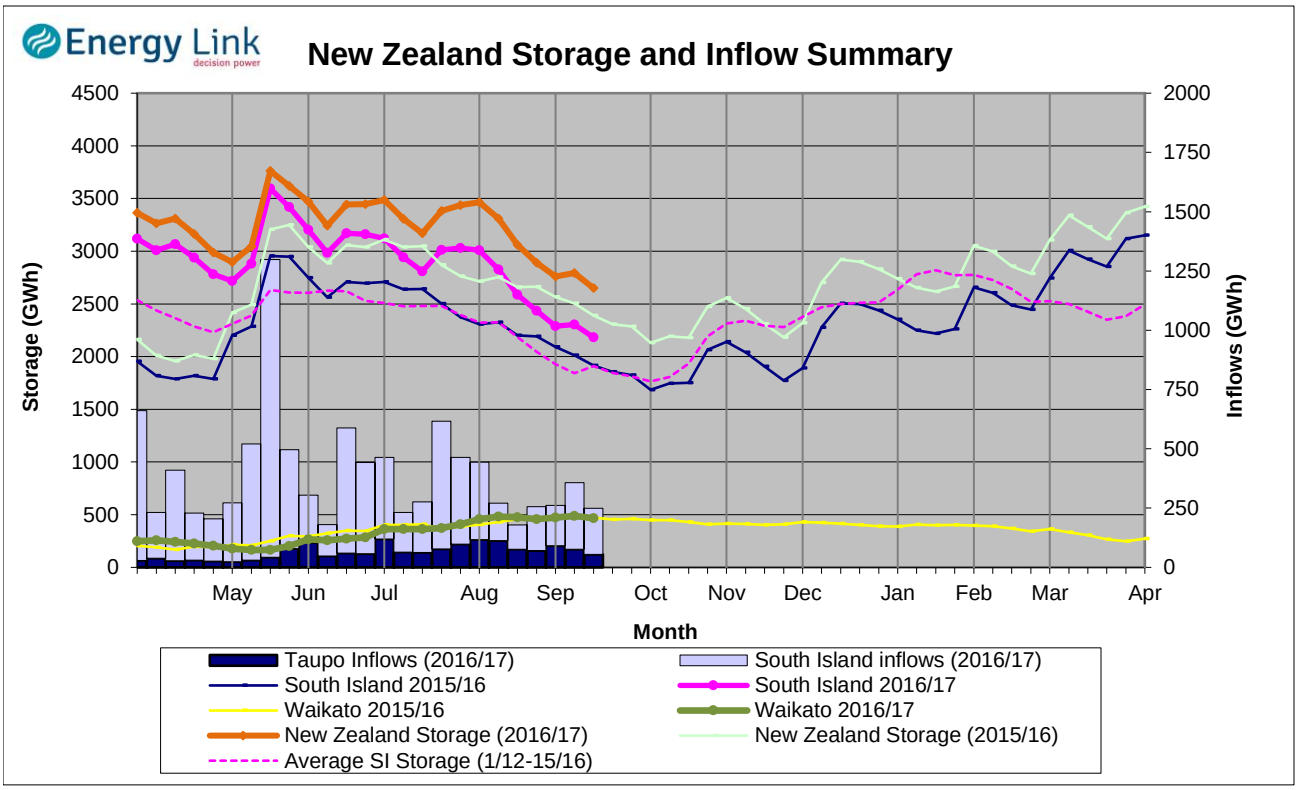
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

Transpower Security of Supply	South Island	North Island	New Zealand
Current Storage (GWh)	**2106**	**467**	**2573**

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 143.6 GWh over the last week. South Island controlled storage decreased 5.7% to 1791 GWh; South Island uncontrolled storage decreased 3.6% to 392 GWh; with Taupo storage decreasing 4.3% to 467 GWh.



Thursday, 15 September 2016						
Storage (GWh)	Manapouri	Clutha	Waitaki	Waikato		NZ
This Week	**315**	**102**	**1765**	**467**		**2649**
Last Week	321	113	1872	488		2793
% Change	-1.7%	-9.6%	-5.7%	-4.3%		-5.1%
Inflow (GWh)						
This Week	**90**	**42**	**62**	**55**		**249**
Last Week	135	74	72	76		357
% Change	-33.5%	-43.9%	-13.9%	-27.4%		-30.4%

Subscribe at ***www.energylink.co.nz/publications***

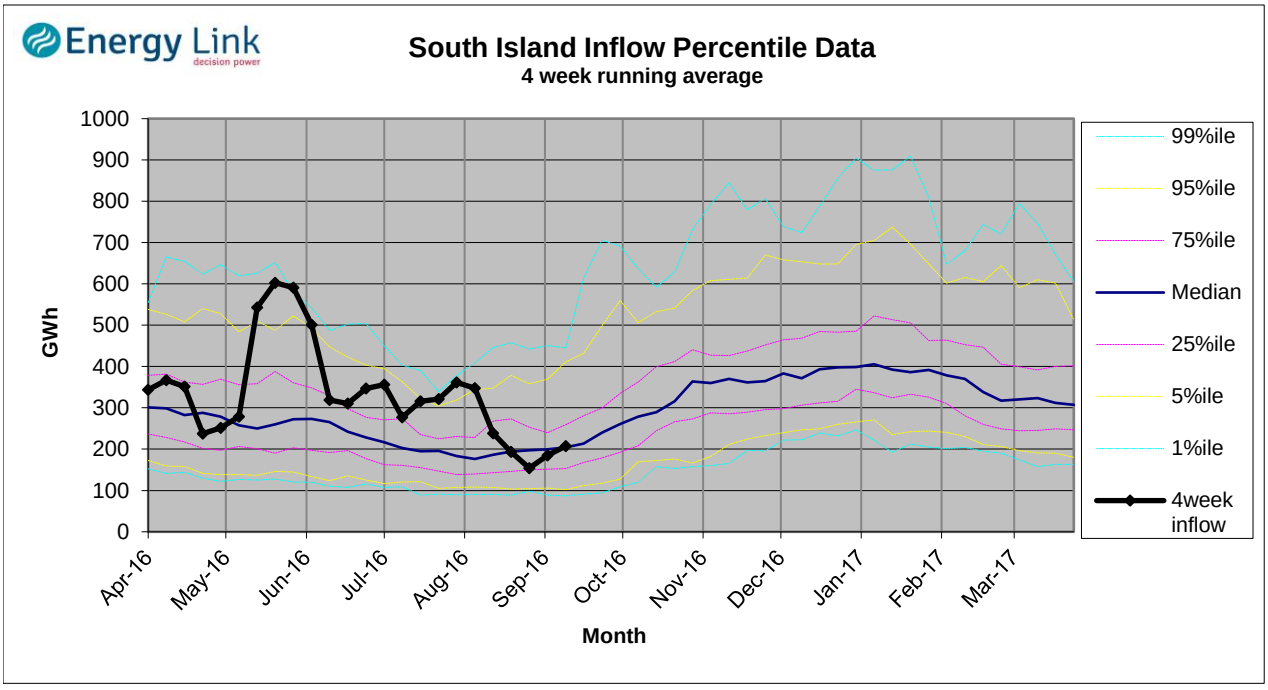
Lake Levels and Outflows

Catchment	Lake	Level (m. asl)	Storage (GWh)	Outflow (cumecs)	Outflow Change
Manapouri	Manapouri	177.68	107	16	-2
	Te Anau	202.25	208		
Clutha	Wakatipu	309.67	32	123	13
	Wanaka	276.98	45	166	16
	Hawea	338.75	26	46	10
Waitaki	Tekapo	705.75	352		
	Pukaki	529.32	1413		
Waikato	Taupo	357.00	467		

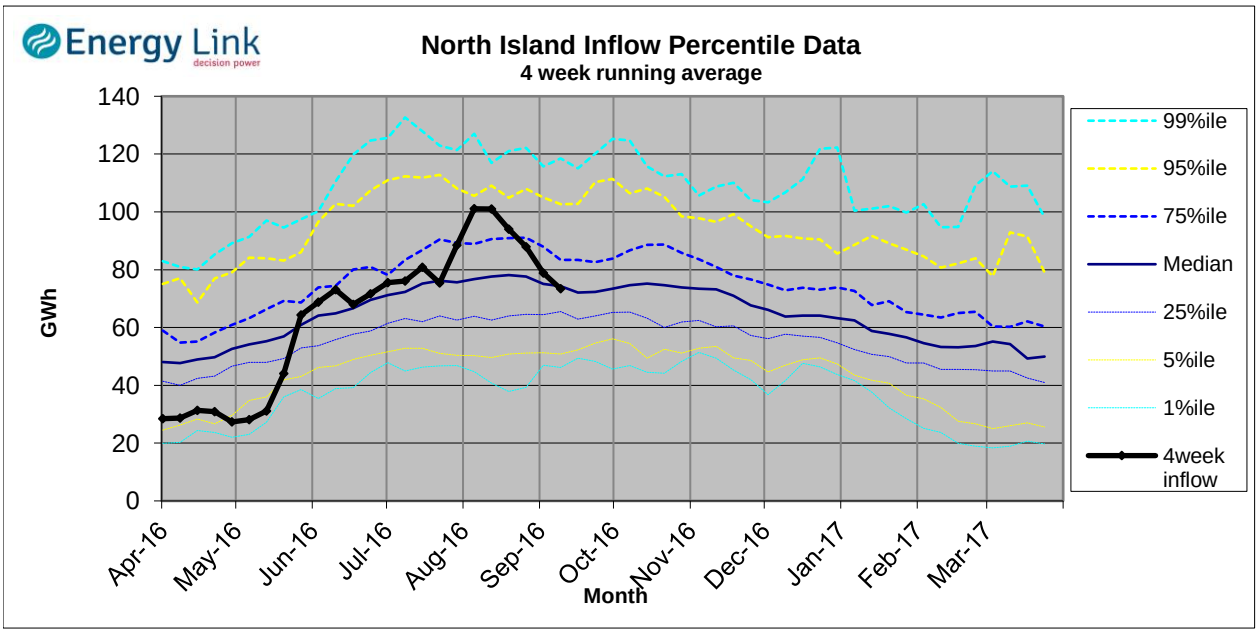
Inflow Summary

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.

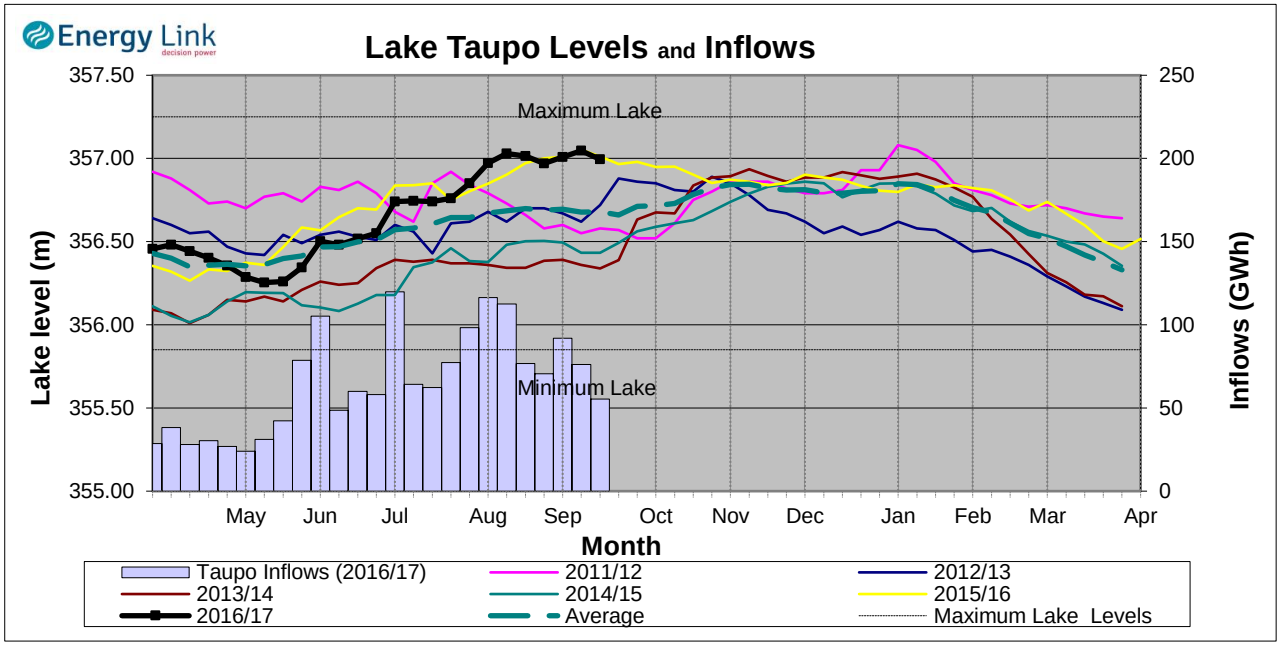
South Island Inflows - The past four weeks of S. I. inflows rank as the 43rd wettest on record.



North Island Inflows - The past four weeks of N. I. inflows rank as the 42nd driest on record.



Waikato System

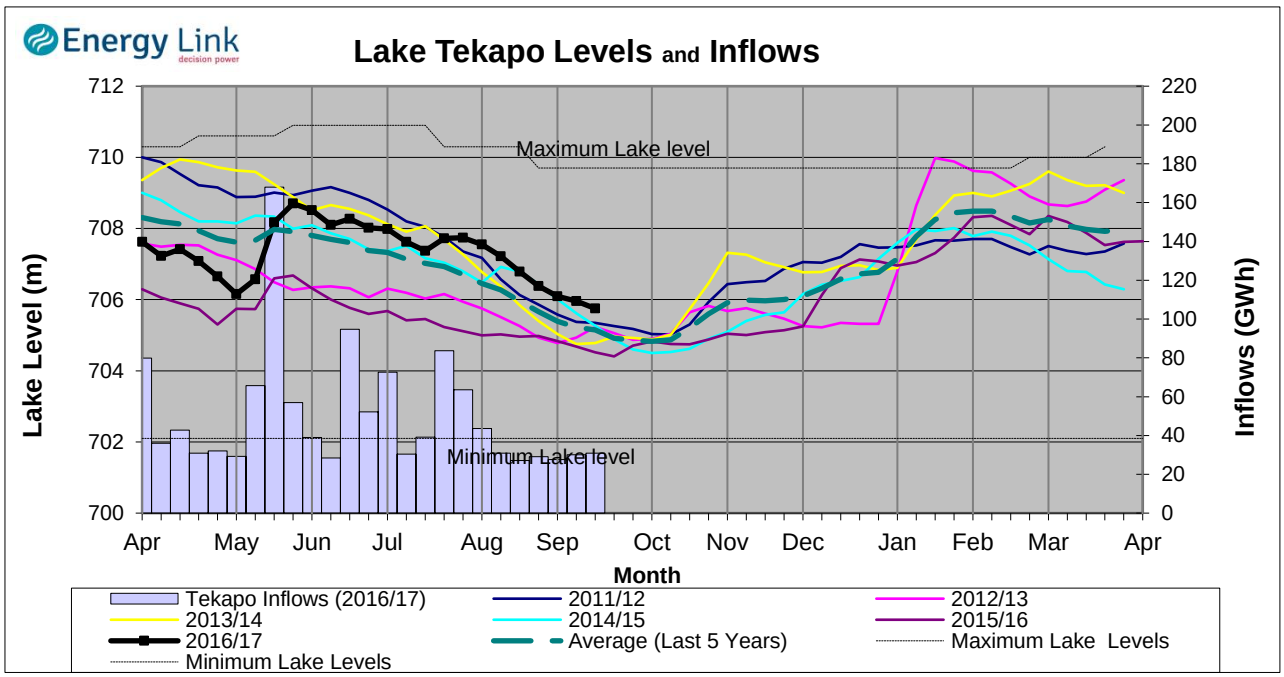


Lake Levels - Lake Taupo storage fell to 81.8% of nominal full at 467 GWh.

Inflows - Inflows decreased 27.4% to 55 GWh.

Generation - Average generation increased 17.7% to 491.2 MW.

Tekapo



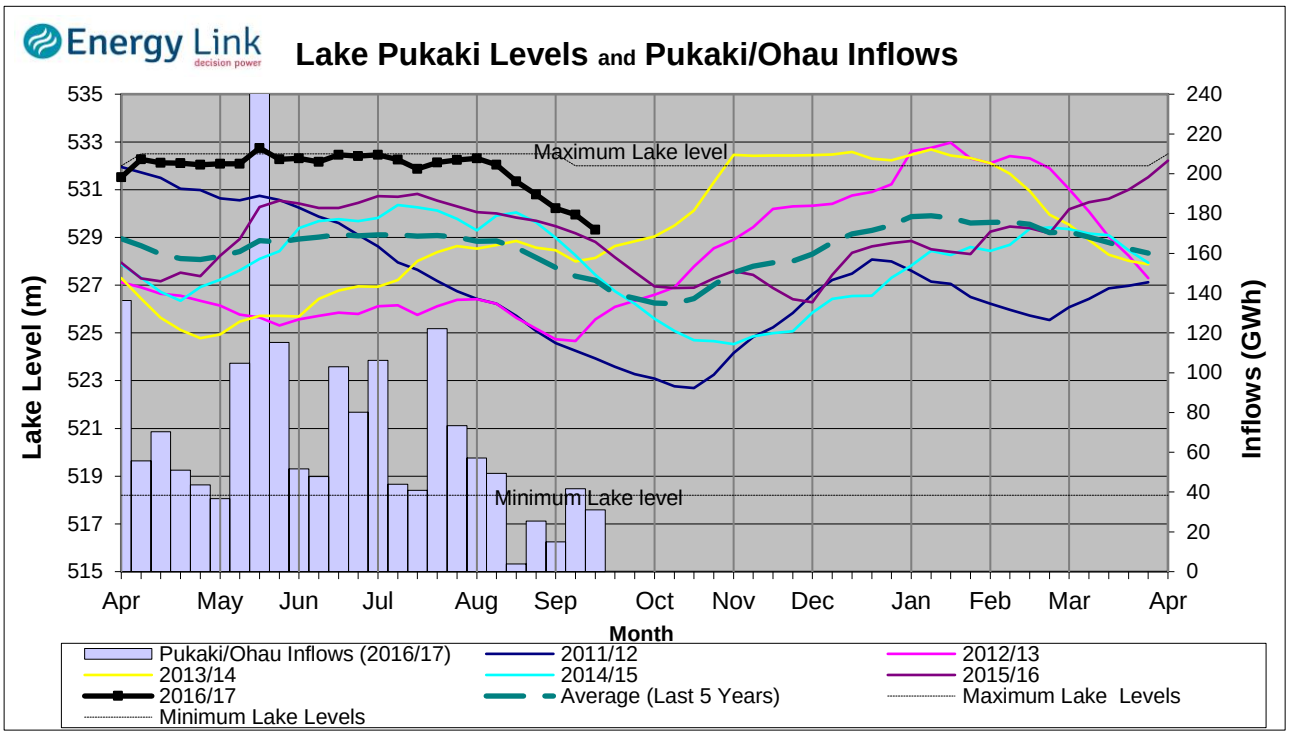
Lake Levels - Lake Tekapo ended the week 48.6% nominally full with storage falling to 352 GWh.

Inflows - Inflows into tekapo increased 2.4% to 31 GWh.

Generation - Average Tekapo generation increased 17.1% to 108.6 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 79.4% nominally full with storage falling to 1413 GWh.

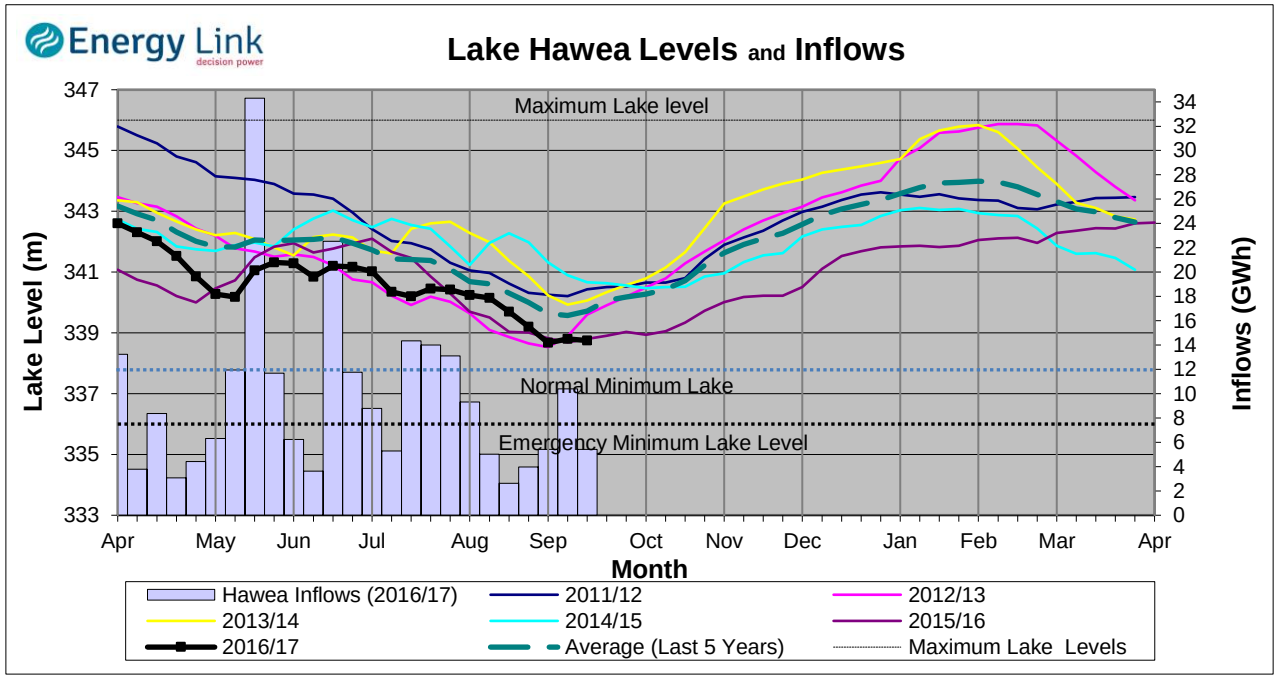
Inflows - Inflows into the Waitaki System decreased 25.6% to 31 GWh.

Generation - Average Waikati generation increased 36.5% to 982.6 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River increased to 19.8 cumecs while Waitaki River flows were higher than last week averaging 418.2 cumecs.

Clutha System



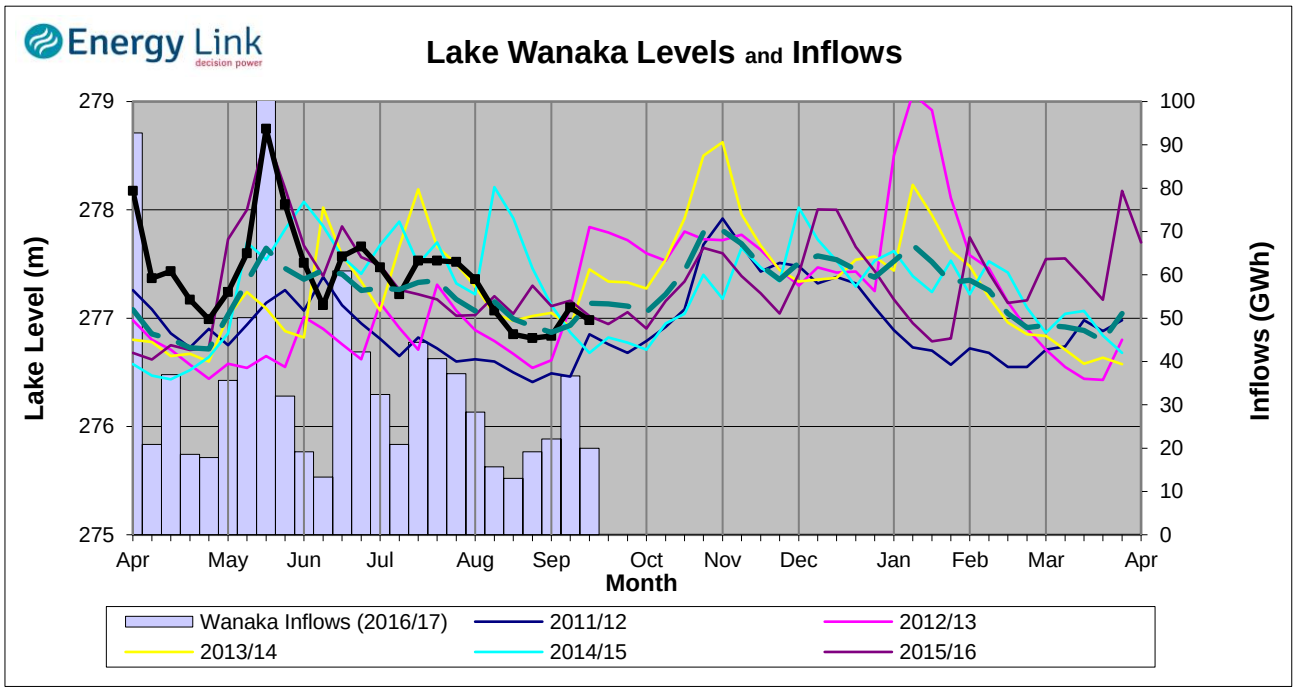
Lake Levels - Total storage for the Clutha System decreased 9.6% to 102 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 8.7%, 39% and 30% nominally full respectively.

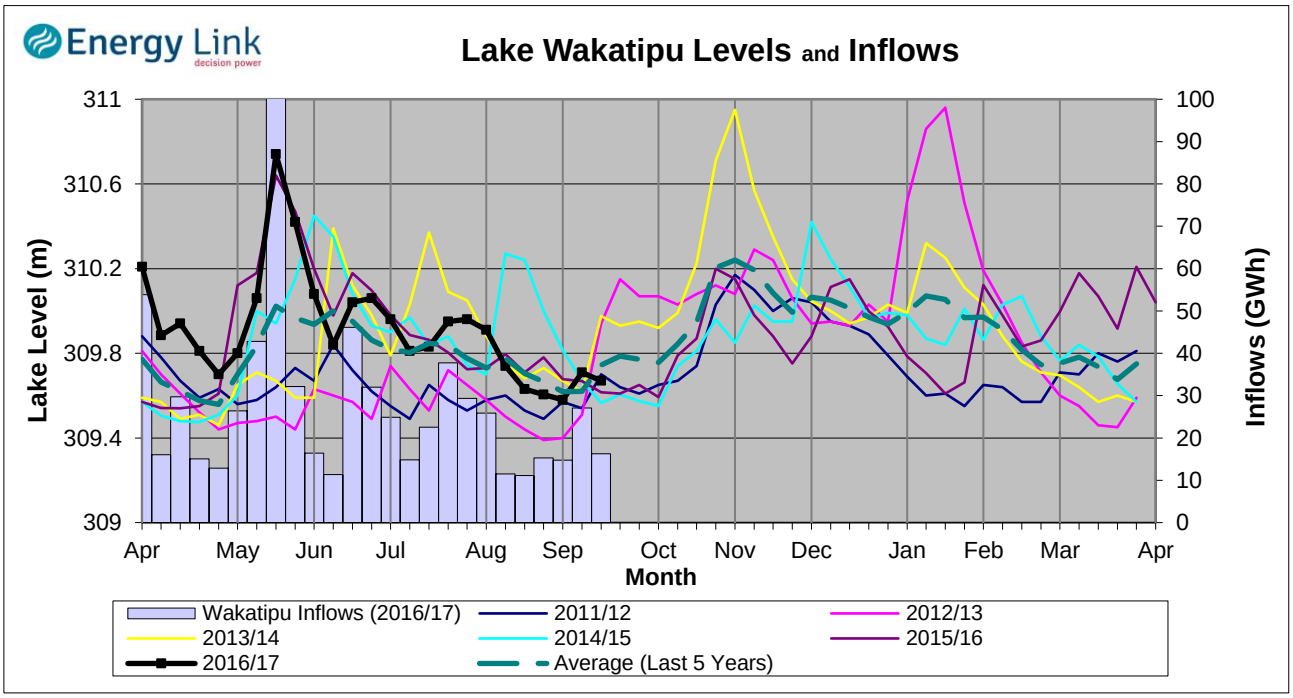
Inflows - Total Inflows into the Clutha System 43.9% lower at 42 GWh.

Generation - Average generation was 8.3% higher at 378 MW.

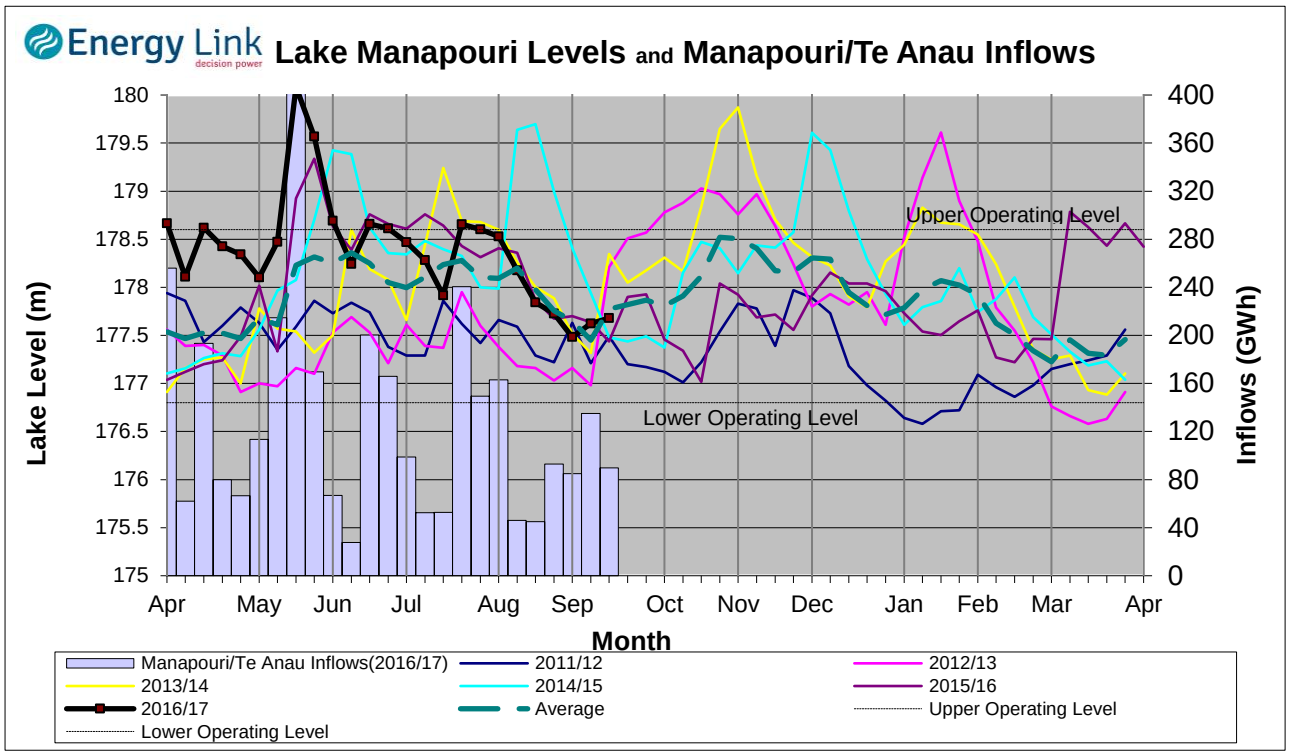
Hydro Spill - The was no estimated spill

River Flows - Total outflows from the lakes and Shotover River increased to 385.4 cumecs. This comprised of 46 cumecs from Lake Hawea, 166 cumecs from Lake Wanaka, 123 cumecs from Lake Wakatipu and 49 cumecs from the Shotover River.





Manapouri System



Lake Levels - Total storage for the Manapouri System decreased 1.7% to 315 GWh with Lake Manapouri ending the week 66.1% nominally full and Lake Te Anau ending the week 75.5% nominally full.

Inflows - Total inflows into the Manapouri System decreased 33.5% to 90 GWh.

Generation - Average generation was 0.5% lower at 568 MW.

Hydro Spill - Estimated spill at the Mararoa Weir was 15.6 cumecs.

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