



Thursday, 16 September 2021

Issue: 1274

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) | 1961                    | 836                       | 2797               | 303                | 3101          |
| Storage Change (GWh)  | 118                     | 246                       | 364                | 22                 | 386           |

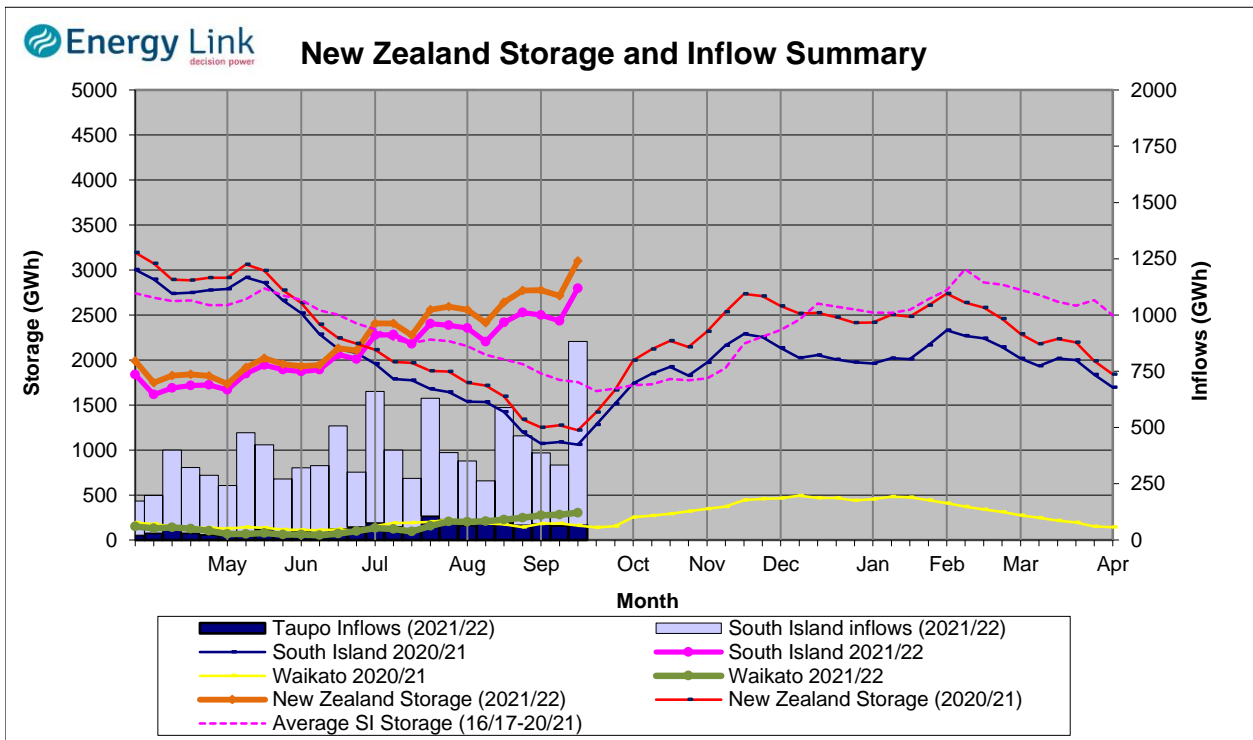
Note: SI Controlled; Tekapo, Pukaki and Hawea: SI Uncontrolled; Manapouri, Te Anau, Wanaka, Wakatipu

| Transpower Security of Supply | South Island | North Island | New Zealand |
|-------------------------------|--------------|--------------|-------------|
| Current Storage (GWh)         | 2613         | 303          | 2917        |

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 increased 386.1 GWh over the last week. South Island controlled storage increased 6.4% to 1961 GWh; South Island uncontrolled storage increased 41.7% to 836 GWh; with Taupo storage increasing 8% to 303 GWh.



| Thursday, 16 September 2021 |           |        |         |         |        |
|-----------------------------|-----------|--------|---------|---------|--------|
| Storage (GWh)               | Manapouri | Clutha | Waitaki | Waikato | NZ     |
| <b>This Week</b>            | 652       | 398    | 1747    | 303     | 3101   |
| Last Week                   | 471       | 311    | 1652    | 281     | 2715   |
| % Change                    | 38.5%     | 28.0%  | 5.8%    | 8.0%    | 14.2%  |
| Inflow (GWh)                | Manapouri | Clutha | Waitaki | Waikato | NZ     |
| <b>This Week</b>            | 411       | 176    | 228     | 67      | 883    |
| Last Week                   | 122       | 63     | 84      | 64      | 334    |
| % Change                    | 235.9%    | 179.0% | 172.0%  | 4.6%    | 164.5% |

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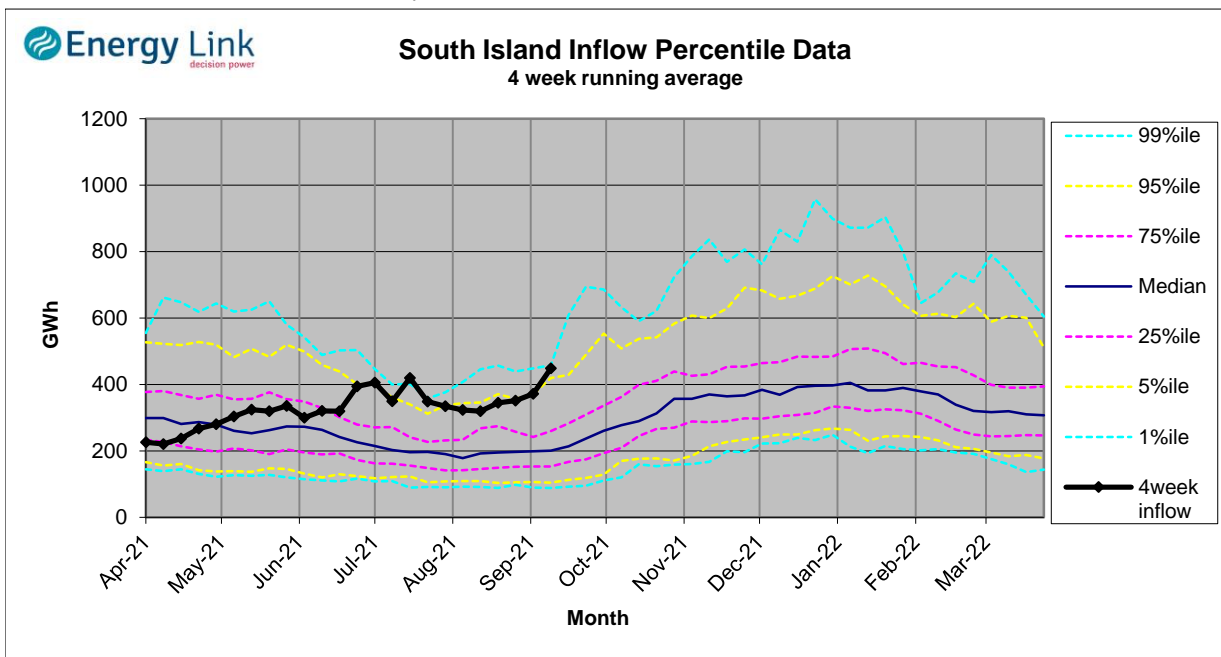
Lake Levels and Outflows

| Catchment | Lake      | Level<br>(m. asl) | Storage<br>(GWh) | Outflow<br>(cumecs) | Outflow<br>Change |
|-----------|-----------|-------------------|------------------|---------------------|-------------------|
| Manapouri | Manapouri | 179.55            | 220              | 460                 | 430               |
|           | Te Anau   | 203.75            | 432              |                     |                   |
| Clutha    | Wakatipu  | 310.33            | 82               | 242                 | 79                |
|           | Wanaka    | 278.14            | 102              | 314                 |                   |
|           | Hawea     | 343.84            | 214              | 15                  |                   |
| Waitaki   | Tekapo    | 706.14            | 391              |                     | 77                |
|           | Pukaki    | 528.89            | 1356             |                     |                   |
| Waikato   | Taupo     | 356.59            | 303              |                     | -41               |

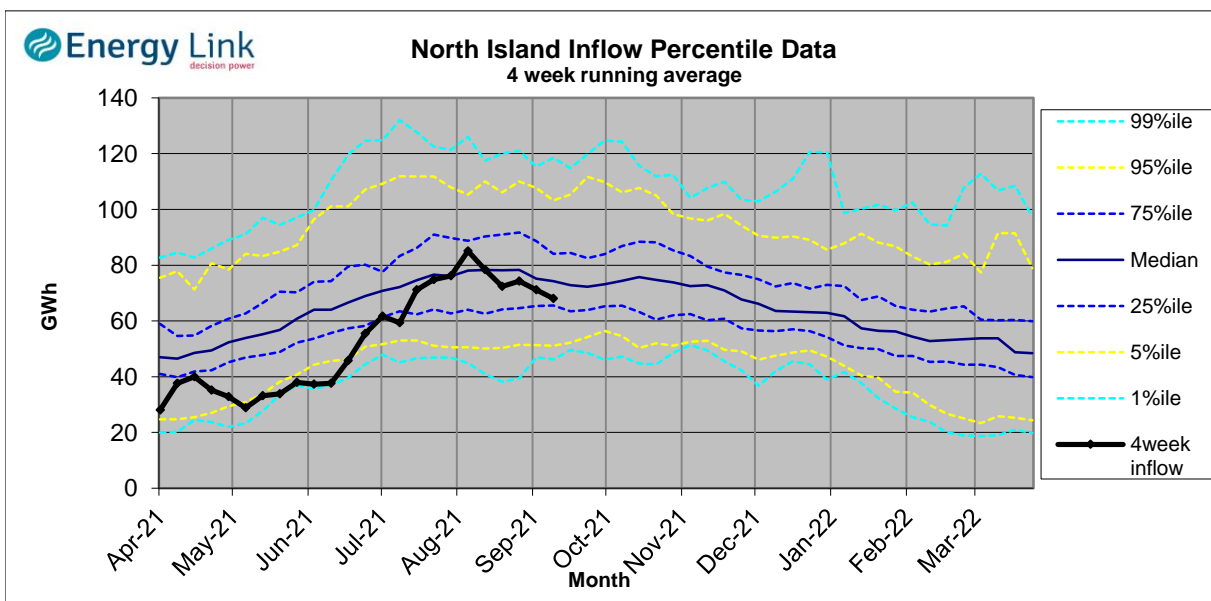
Inflow Summary

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.

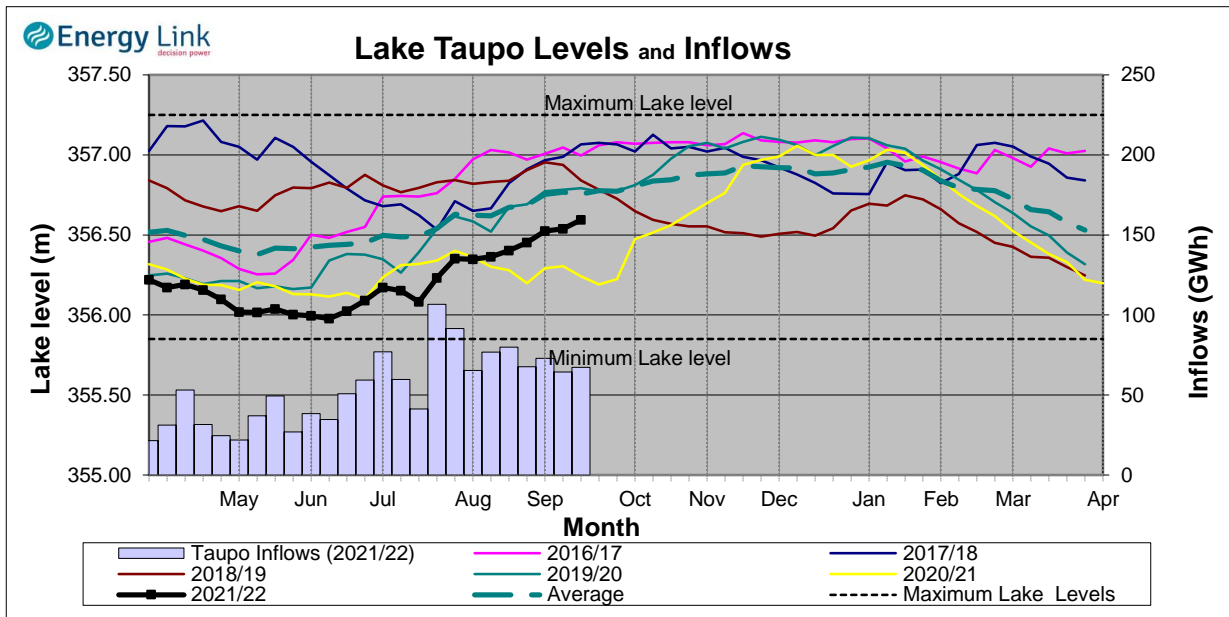
**South Island Inflows** - The past four weeks of S. I. inflows rank as the 2nd wettest on record.



**North Island Inflows** - The past four weeks of N. I. inflows rank as the 32nd driest on record.



# Waikato System

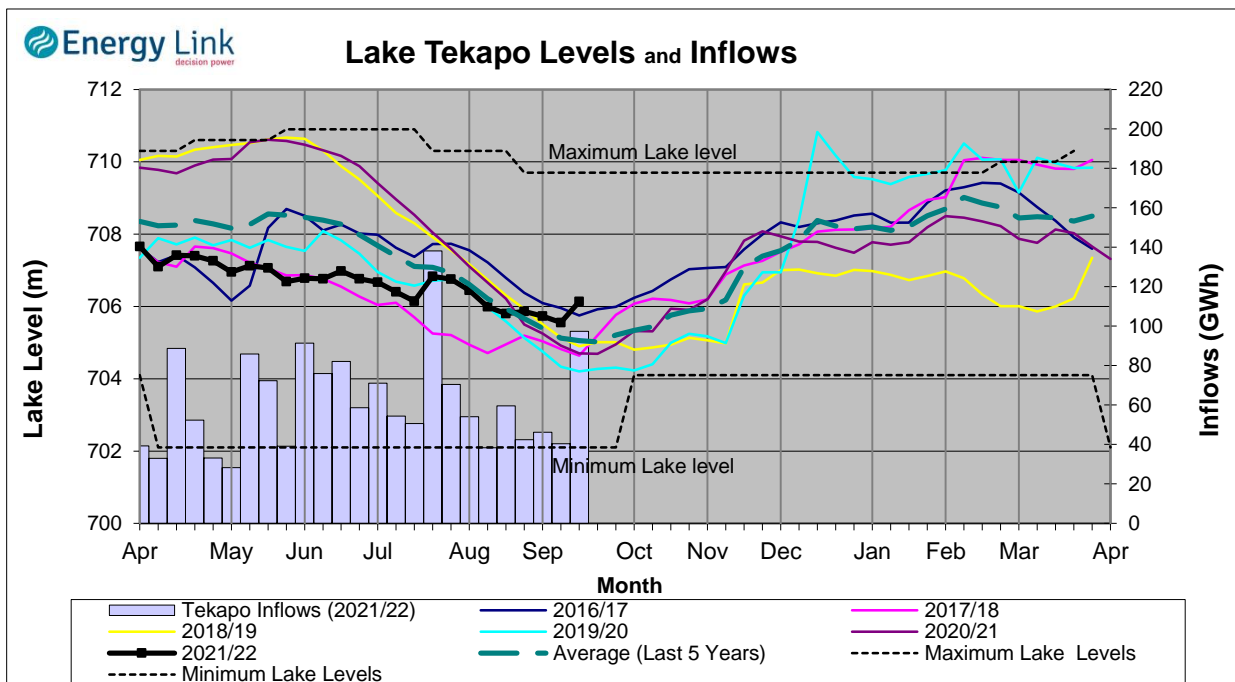


**Lake Levels** - Lake Taupo storage increased to 53.1% of nominal full at 303 GWh.

**Inflows** - Inflows increased 4.6% to 67 GWh.

**Generation** - Average generation decreased 16.9% to 344 MW.

# Tekapo



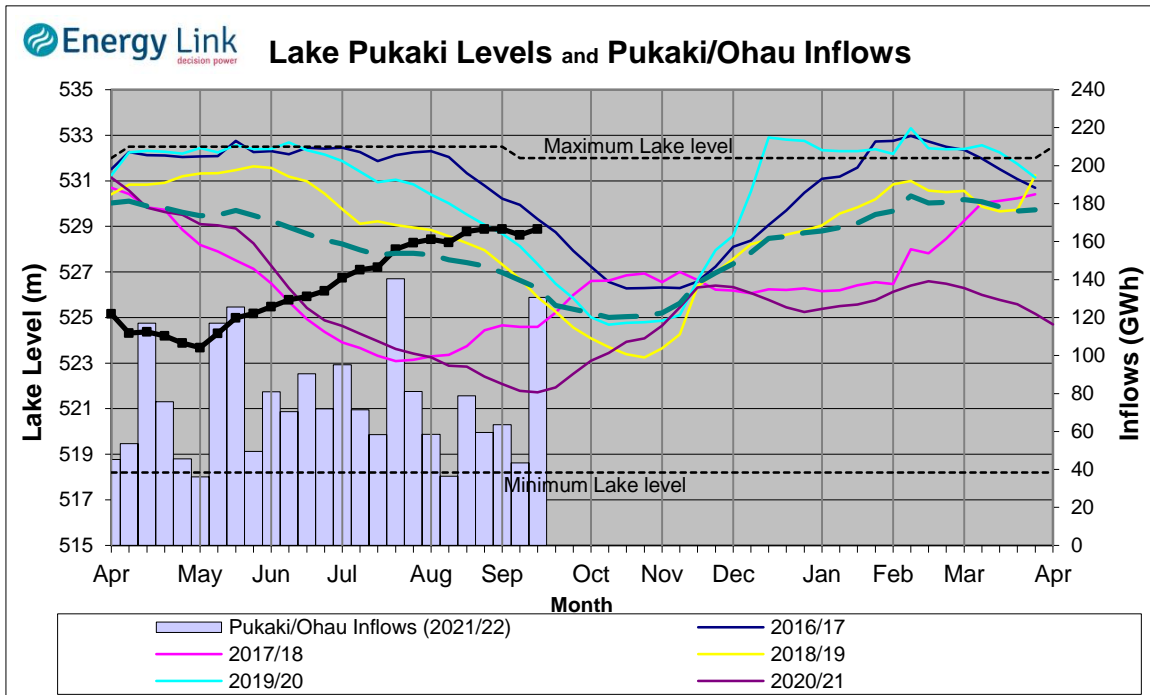
**Lake Levels** - Lake Tekapo ended the week 54% nominally full with storage increasing to 391 GWh.

**Inflows** - Inflows into tekapo increased 141.3% to 97 GWh.

**Generation** - Average Tekapo generation decreased 36.3% to 77.4 MW.

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

## Waitaki System



**Lake Levels** - Lake Pukaki ended the week 76% nominally full with storage increasing to 1356 GW

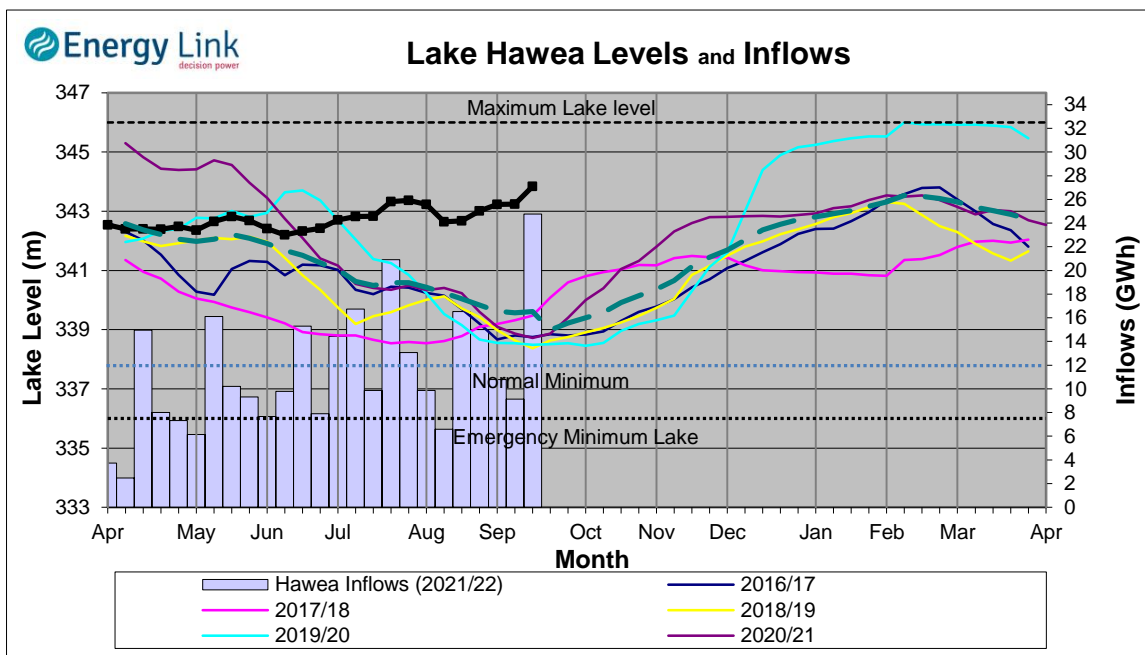
**Inflows** - Inflows into the Waitaki System increased 200.5% to 131 GWh.

**Generation** - Average Waikati generation increased 5.5% to 842.7 MW.

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

**River Flows** - Flows from the Ahuriri River increased to 66.4 cumecs while Waitaki River flows were higher than last week averaging 373 cumecs.

## Clutha System



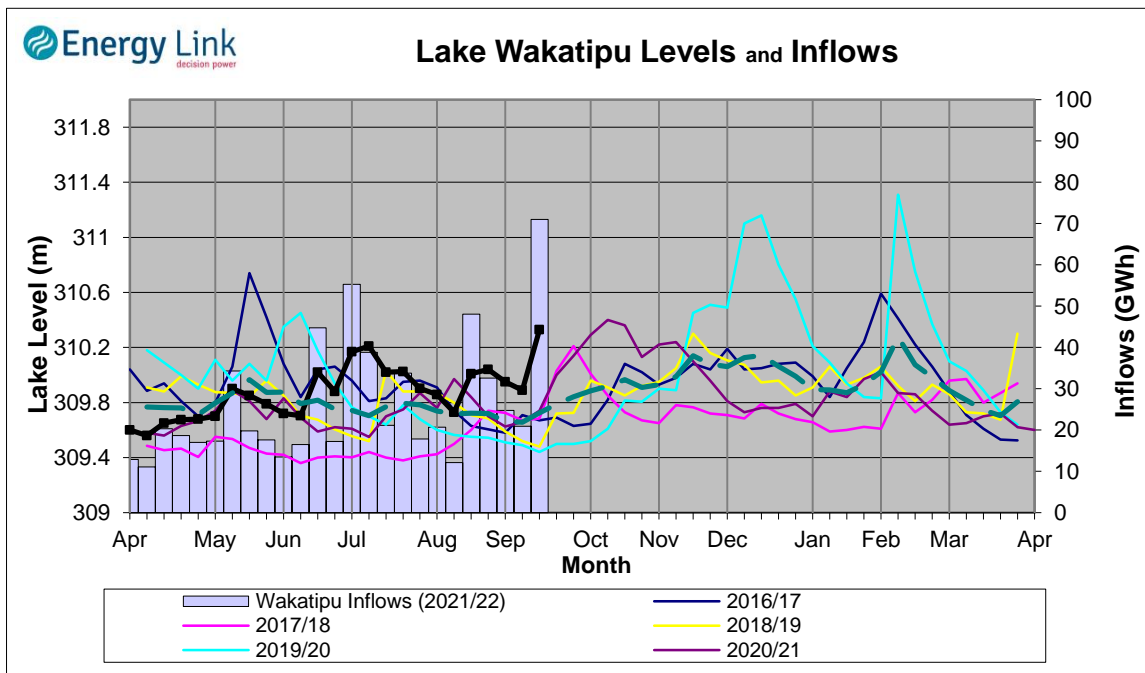
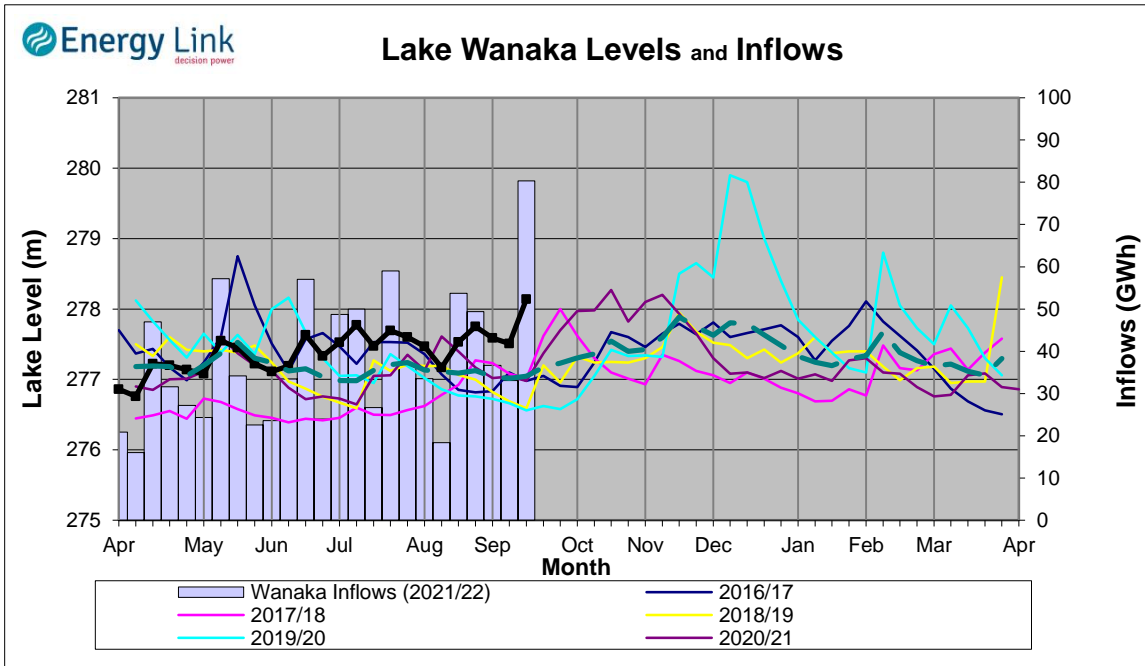
**Lake Levels** - Total storage for the Clutha System increased by 28% to 398 GWh. Lakes Hawea, Wanaka and Wakatipu ended the week 72.4%, 89.5% and 77.1% nominally full respectively.

**Inflows** - Total Inflows into the Clutha System 179% higher at 176 GWh.

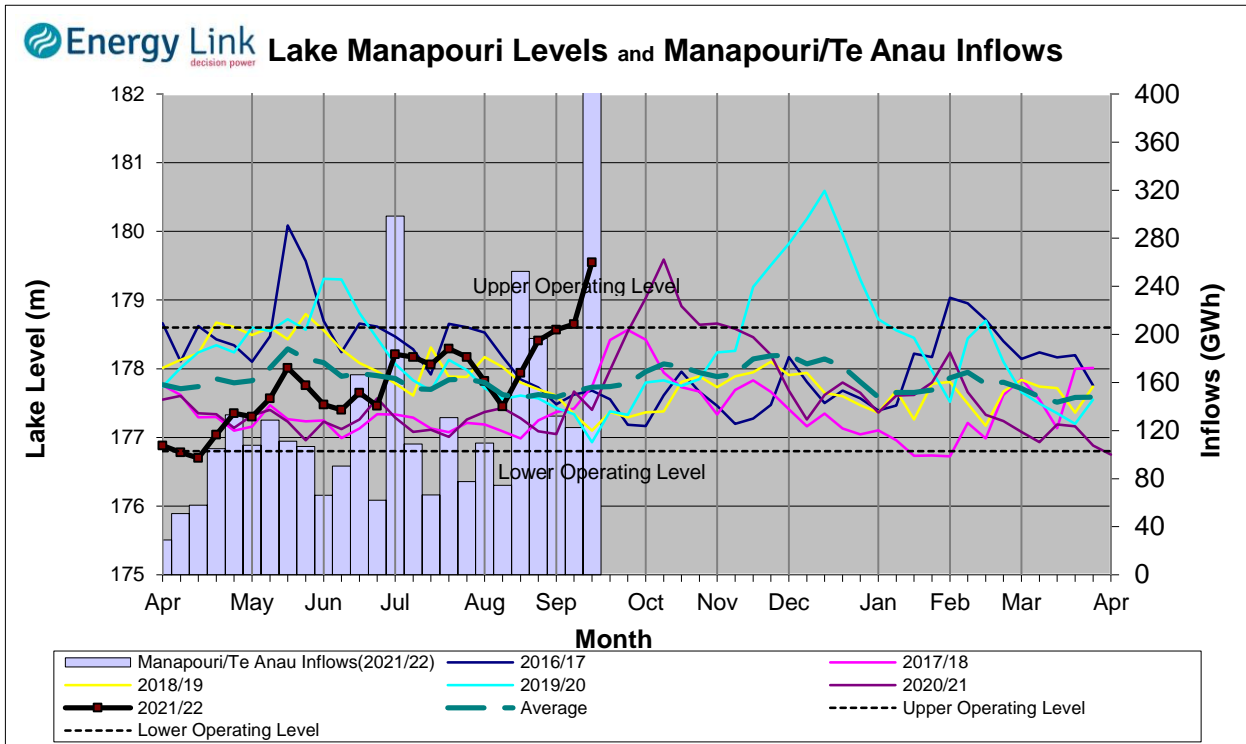
**Generation** - Average generation was 15.2% higher at 575 MW.

**Hydro Spill** - Estimate Spill is 64.9 cumecs.

**River Flows** - Total outflows from the lakes and Shotover River increased to 690 cumecs. This comprised of 15 cumecs from Lake Hawea, 314 cumecs from Lake Wanaka, 242 cumecs from Lake Wakatipu and 119 cumecs from the Shotover River.



## Manapouri System



**Lake Levels** - Total storage for the Manapouri System increased by 38.5% to 652 GWh with Lake Manapouri ending the week 135.2% nominally full and Lake Te Anau ending the week 157.1% nominally full.

**Inflows** - Total inflows into the Manapouri System increased 235.9% to 411 GWh.

**Generation** - Average generation was 7.1% lower at 683 MW.

**Hydro Spill** - Estimated spill at the Mararoa Weir was 460 cumecs.

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

