

Thursday, 13 October 2022

A weekly summary relating to New Zealand hydro storage and inflows.

Compiled by Energy Link Ltd.

| Storage Summary | South Island | South Island | South Island | North Island |
|-----------------------|--------------|--------------|--------------|--------------|
| | Controlled | Uncontrolled | Total | Taupo |
| Current Storage (GWh) | 2374 | 304 | 2678 | 506 |
| Storage Change (GWh) | -101 | -2 | -103 | -42 |

Total Storage

3184

-146

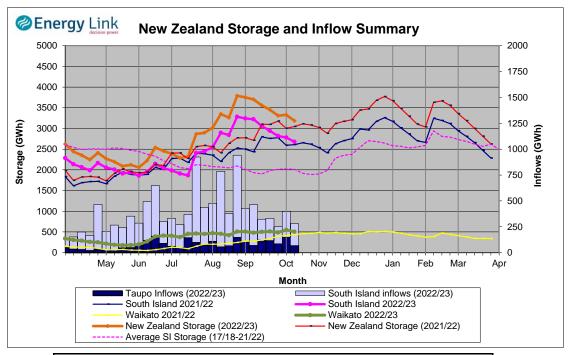
Issue: 1330

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) | 2592 | 506 | | 3098 |
| 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 145.6 GWh over the last week. South Island controlled storage decreased 4.1% to 2374 GWh; South Island uncontrolled storage decreased 0.8% to 304 GWh; with Taupo storage decreasing 7.7% to 506 GWh.



| Thursday, 13 October 2022 | | | | | |
|---------------------------|-----------|--------|---------|---------|--------|
| | Manapouri | Clutha | Waitaki | Waikato | NZ |
| Storage (GWh) | | | | | |
| This Week | 218 | 329 | 2131 | 506 | 3184 |
| Last Week | 218 | 334 | 2230 | 548 | 3330 |
| % Change | 0.1% | -1.4% | -4.4% | -7.7% | -4.4% |
| Inflow (GWh) | | | | | |
| , , | | | | | |
| This Week | 67 | 54 | 92 | 69 | 282 |
| Last Week | 54 | 64 | 131 | 149 | 398 |
| % Change | 25.5% | -15.6% | -30.3% | -53.9% | -29.2% |

Subscribe at www.energylink.co.nz/publications

Lake Levels and Outflows

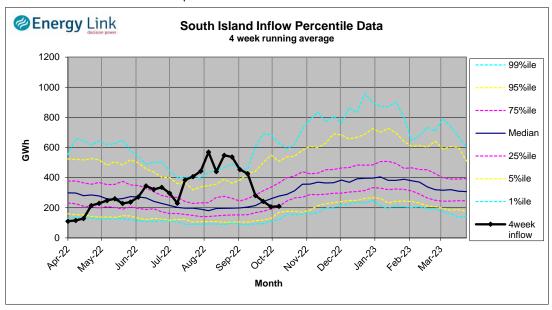
| Catchment | Lake | Level | Storage | Outflow |
|-----------|-----------|----------|---------|----------|
| | | (m. asl) | (GWh) | (cumecs) |
| Manapouri | Manapouri | 177.20 | 79 | 15 |
| | Te Anau | 201.79 | 139 | |
| Clutha | Wakatipu | 309.71 | 35 | 133 |
| | Wanaka | 277.11 | 51 | 176 |
| | Hawea | 344.61 | 243 | 70 |
| Waitaki | Tekapo | 708.60 | 649 | |
| | Pukaki | 529.83 | 1483 | |
| Waikato | Taupo | 357.09 | 506 | |

| Outflow Change |
|-------------------|
| 1 |
| -16 |
| -24 |
| 28 |

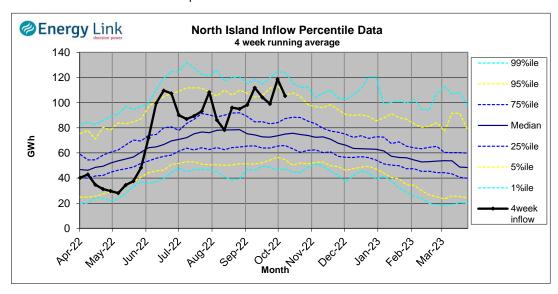
Inflow Summary

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.

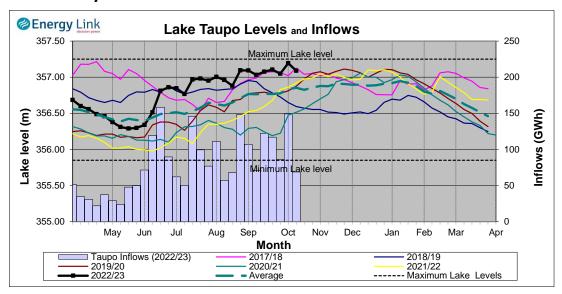
South Island Inflows - The past four weeks of S. I. inflows rank as the 24th driest on record.



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



Waikato System

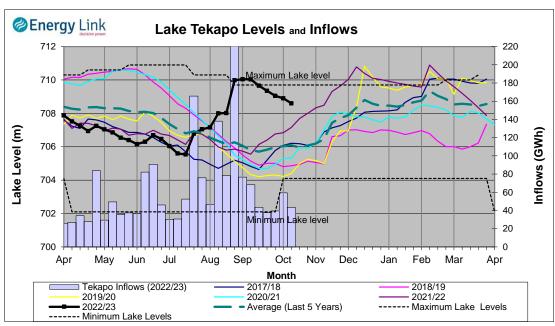


Lake Levels - Lake Taupo storage fell to 88.6% of nominal full at 506 GWh.

Inflows - Inflows decreased 53.9% to 69 GWh.

Generation - Average generation decreased 0.2% to 607.2 MW.

Tekapo



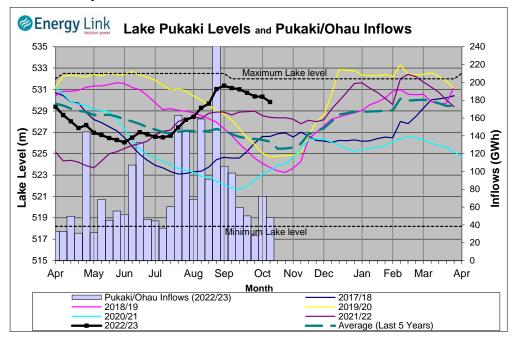
Lake Levels - Lake Tekapo ended the week 90% nominally full with storage falling to 649 GWh.

Inflows - Inflows into tekapo decreased 27% to 43 GWh.

Generation - Average Tekapo generation remained steady at 160.8 MW.

Hydro Spill - Lake Tekapo did not spill.

Waitaki System



Lake Levels - Lake Pukaki ended the week 83% nominally full with storage falling to 1483 GW

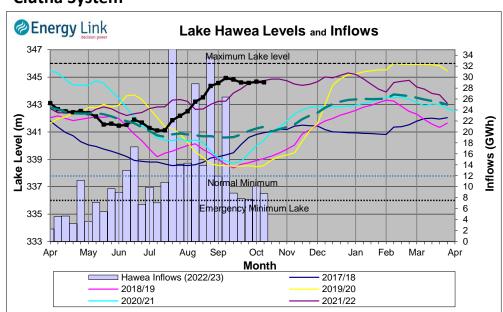
Inflows - Inflows into the Waitaki System decreased 32.9% to 48 GWh.

Generation - Average Waitaki generation increased 19.5% to 1080.8 MW.

Hydro Spill - Lake Pukaki did not spill.

River Flows - Flows from the Ahuriri River fell to 24 cumecs while Waitaki River flows were higher than last week averaging 456.4 cumecs.

Clutha System



Lake Levels - Total storage for the Clutha System decreased 1.4% to 329 GWh.

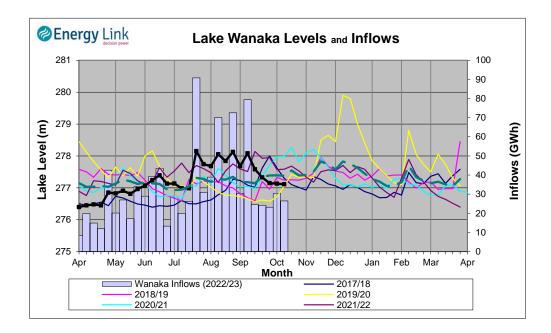
Lakes Hawea, Wanaka and Wakatipu ended the week 82.2%, 44.7% and 32.9% nominally full respectively.

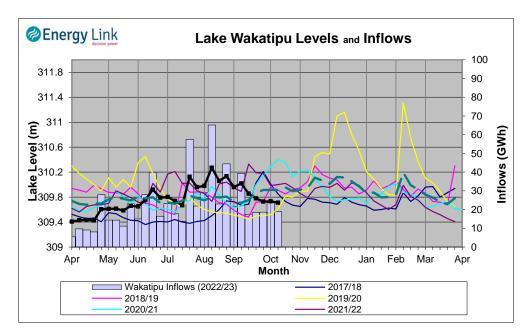
Inflows - Total Inflows into the Clutha System 15.6% lower at 54 GWh.

Generation - Average generation was 7.2% lower at 402 MW.

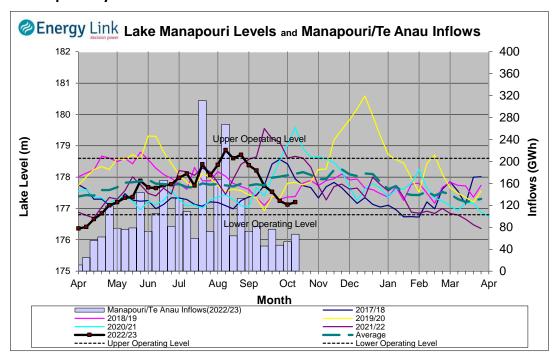
Hydro Spill - The was no estimated spill

River Flows - Total outflows from the lakes and Shotover River fell to 428.5 cumecs. This comprised of 70 cumecs from Lake Hawea, 176 cumecs from Lake Wanaka, 133 cumecs from Lake Wakatipu and 50 cumecs from the Shotover River.





Manapouri System



Lake Levels - Total storage for the Manapouri System remained steady at 218 GWh with Lake Manapouri ending the week 48.6% nominally full and Lake Te Anau ending the week 50.5% nominally full.

Inflows - Total inflows into the Manapouri System increased 25.5% to 67 GWh.

Generation - Average generation was 9.7% lower at 399 MW.

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

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

