

THE HUNTER RIVER 2022

A precious water resource for
the Upper Hunter community



Upper Hunter
Mining Dialogue

2022 was a much wetter
than average year. That
year

3,554,000

MEGALITRES

entered the river system
in the Upper Hunter.

98%

of that water stayed
in the river.

The amount of water
extracted and used by
farmers, residents and
businesses was

1.4%

MINING

used just

0.2%

of the water in the system.

The Upper Hunter Mining Dialogue developed this resource using the best available information, supplied by industry data. Since water accounting is a complex task that relies on estimates and computer models, there are corresponding limits to the accuracy of the information.
Sources: Bureau of Meteorology; DPI Water; NSW Minerals Council data.

For more information:

miningdialogue.com.au

UPPER HUNTER WATER BALANCE 2022



Upper Hunter Mining Dialogue

Mining's water use

The Upper Hunter Mining Dialogue assessed water use by the mining industry in the Upper Hunter in 2022. Using a common accounting framework, mining companies have reported their water inflows and outflows from operations. This has helped them to manage their water use and embark on water saving and reuse opportunities.



MORE THAN 5x

as much water evaporated from the Hunter River System storage dams as was extracted from the Hunter River System by mining companies

The mining industry used **JUST 0.2%** of water in the Upper Hunter River System

5%

of mine water came from rivers and alluvial aquifers

75% of mine water was sourced from onsite rainfall and runoff

18%

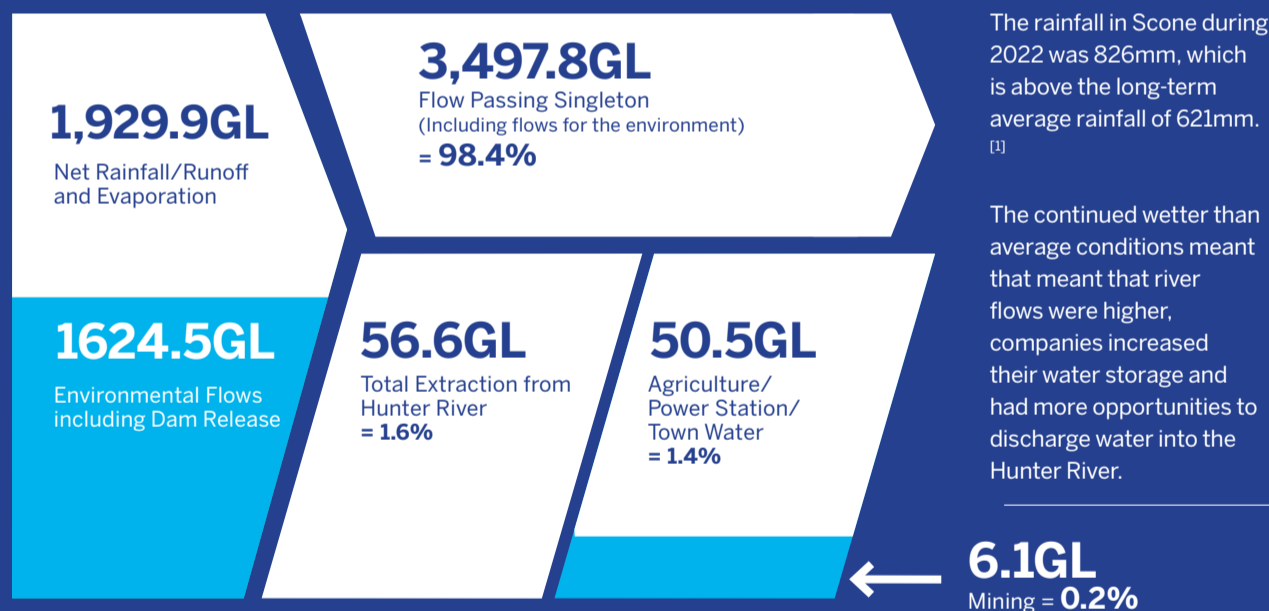
of water was sourced from deep aquifers that are of limited use to other water users due to their high salinity

The mining industry **REUSED 48%** of its water onsite

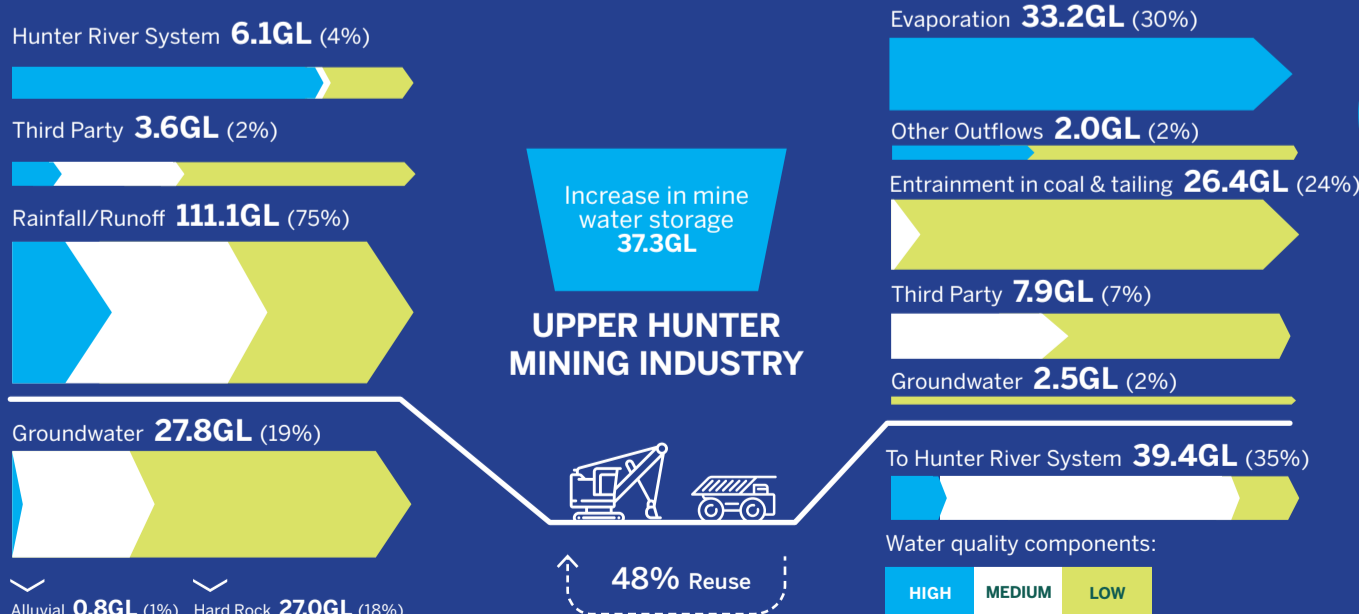
35%

of mine water was discharged into the Hunter River^[2]

Hunter River System Extraction



Mining Industry Water Use Balance



The Upper Hunter Mining Dialogue developed this resource using the best available information, supplied by industry data. Since water accounting is a complex task that relies on estimates and computer models, there are corresponding limits to the accuracy of the information. Sources: Bureau of Meteorology; DPI Water; NSW Minerals Council data. Notes: [1] The source for contextual rainfall data was updated in 2019 due to the closure of the Scone SCS station. Scone Airport AWS was selected due to its nearby location, however long-term data for this site is limited to 1994 onwards. [2] Mine water discharges were permitted given the high flow conditions. To provide context, the 39.4 GL of mine water was discharged in 2022 to a river system carrying nearly 3,500 GL in total, representing just over 1% of the total water amount.

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UPPER HUNTER WATER BALANCE 2022



Upper Hunter
Mining Dialogue

Summary of Key Findings

The Upper Hunter Mining Dialogue assessed water use by the mining industry in the Upper Hunter in the 2022 water year. Using a common accounting framework, the mining industry has since 2014, reported their water inflows and outflows from operations. This has helped them manage their water use and embark on water saving and reuse opportunities. Below is a summary of key findings on water use in the Upper Hunter for 2022:

-  2022 was a significantly wetter than average year, which allowed 3,554 gigalitres (or 3,554,000 megalitres) to enter the river system in the Upper Hunter.
-  98% (or 3,498 gigalitres) of the water stayed in the river.
-  Farmers, residents and businesses extracted just over 1% (or 50.5 gigalitres) of the water in the system.
-  Mining used less than 0.2% (or 6.1 gigalitres) of the water in the system.
-  1% (or 32.0 gigalitres) of the available water evaporated from the Hunter River System storage dams.
-  4% (or 6.9 gigalitres) of the water inflow to mines came from rivers and alluvial aquifers.
-  75% (or 111.1 gigalitres) of the water inflow to mines was sourced from onsite rainfall and runoff.
-  19% (or 27.8 gigalitres) of the water inflow to mines was sourced from deep aquifers that are of limited use to other water users due to their high salinity.
-  The mining industry reused 48% of its water onsite.
-  35% (or 39.4 gigalitres) of the water outflow from mines was discharged into the Hunter River, which was permitted given the high flow volume of water.
-  The rainfall in Scone during 2022 was 826mm, which is significantly higher than the long-term average of 621mm. The wetter conditions meant that river flows were higher, companies increased their water storage, and had more opportunities to discharge water into the Hunter River.

Several figures are included over the page, which provide a snapshot of the long-term annual water use figures for the Upper Hunter and demonstrate mining's water use in the context of other Hunter River water users.



UPPER HUNTER WATER BALANCE 2022



Upper Hunter Mining Dialogue

Summary of Key Findings

Figure 1: Annual Upper Hunter Water Use Figures (2014-2022)

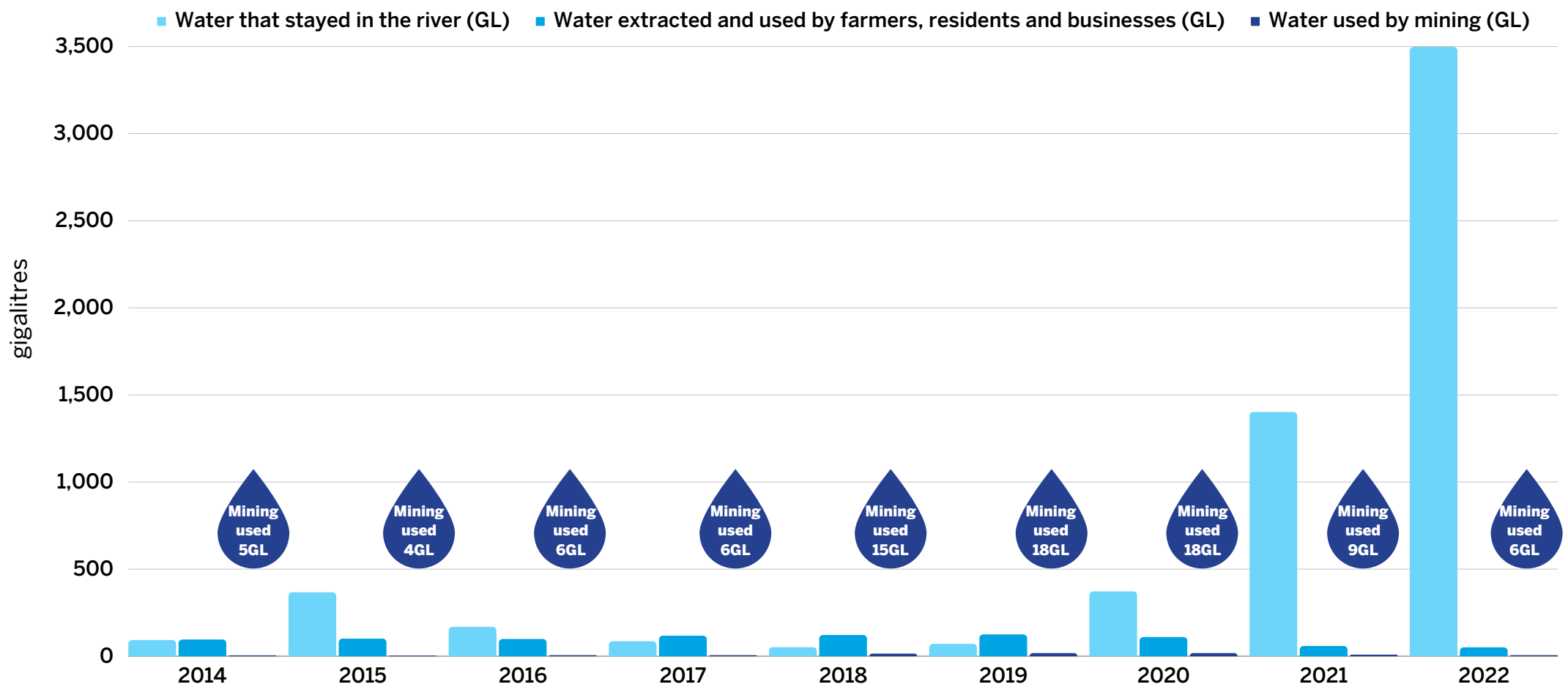
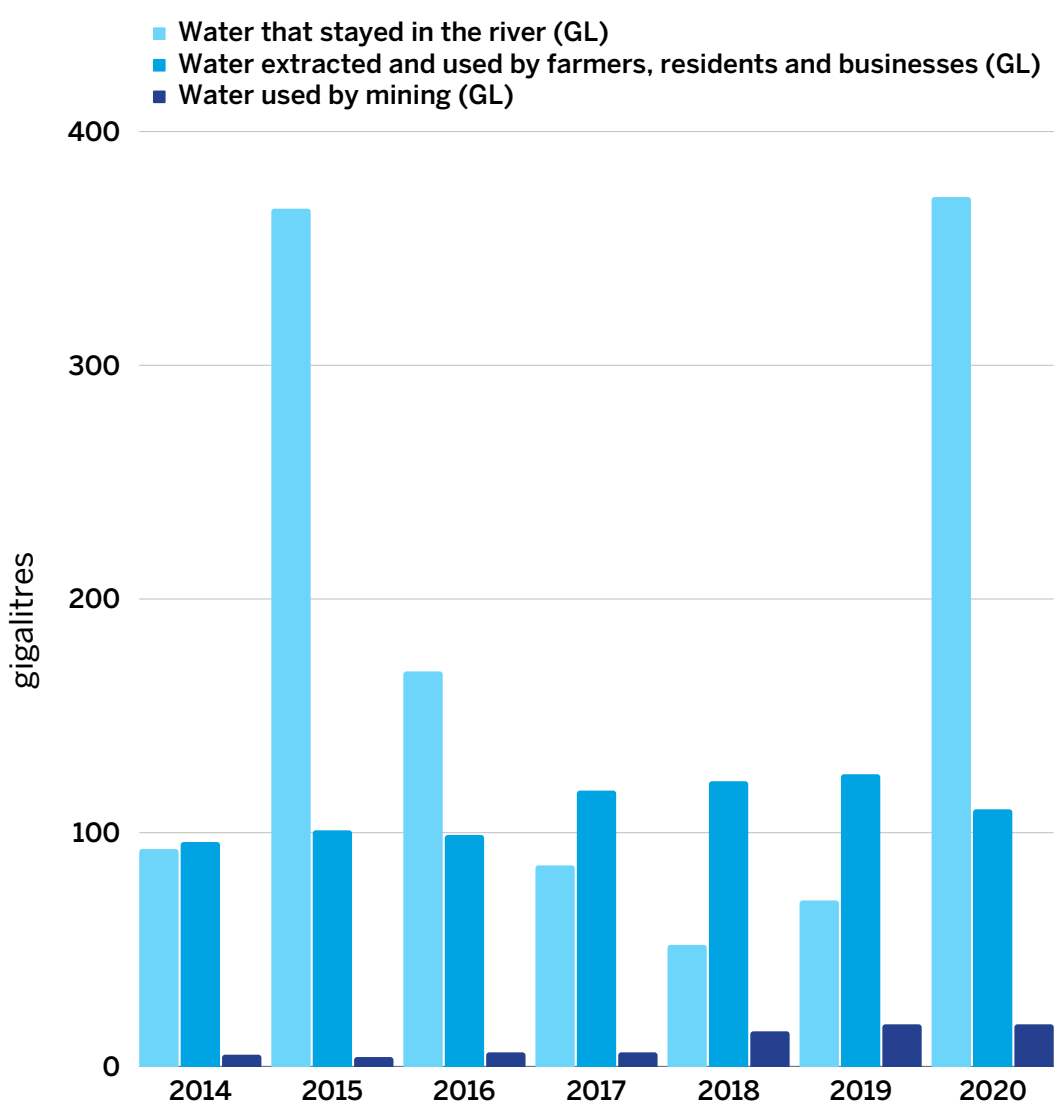
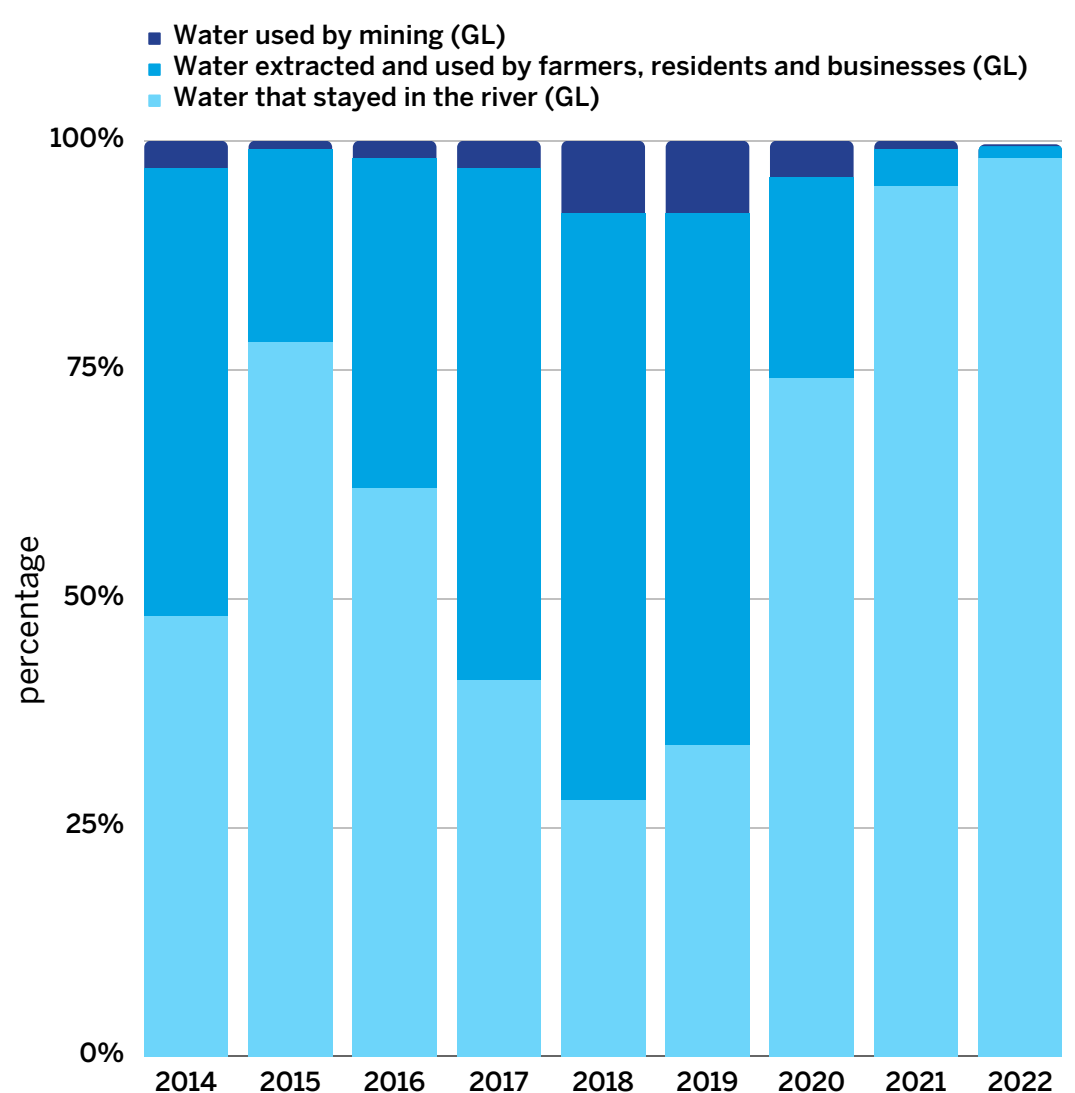


Figure 2: Annual Upper Hunter Water Use Figures (2014-2020)*



* Note: Fig. 2 contains the same information as Fig. 1, but with the 2021 and 2022 years removed to better differentiate pre-2021 figures.

Figure 3: Annual Percentages of Water Use (2014-2022)



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