Water production and consumption - May 2023

Responsible Officer: Group Manager Operations (Adam Nesbitt)

Recommendation

That the report be received and noted.

Background

The table below is the May 2023 bulk water sales to the constituent councils in kilolitres compared to the corresponding March sales for 2022 and 2021.

| Council | May 2021 (kL) | May 2022 (kL) | May 2023 (kL) | % of Total Sales |
|--|------------------|------------------|------------------|---------------------|
| Ballina Shire Council | 297,070 | 284,140 | 305,501 | 37.8% |
| Byron Shire Council | 187,394 | 171,100 | 216,971 | 26.84% |
| Lismore City Council | 241,395 | 232,026 | 236,930 | 29.31% |
| Richmond Valley Council | 44,392 | 39,627 | 48,881 | 6.05% |
| TOTAL MONTHLY CONSUMPTION BY CONSTITUENT COUNCILS | 770,251 | 726,893 | 808,283 | |

Water usage - all constituent councils

Figure 1 shows the combined monthly bulk water consumption and rainfall at Rocky Creek Dam for the previous two years.

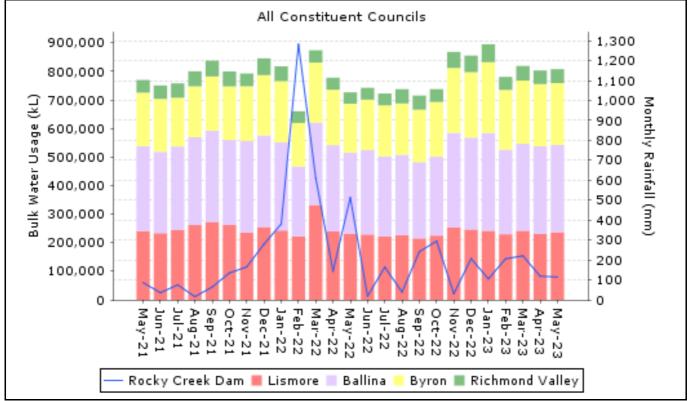
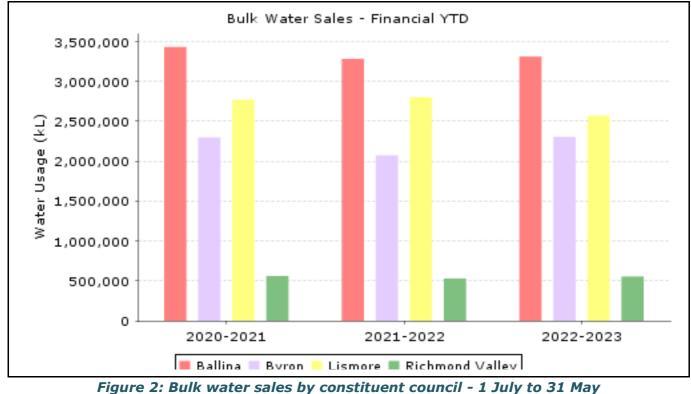


Figure 1: Total monthly consumption by constituent council and rainfall.

Figure 2 shows the total bulk water sales for the financial year to date compared with the previous two years.



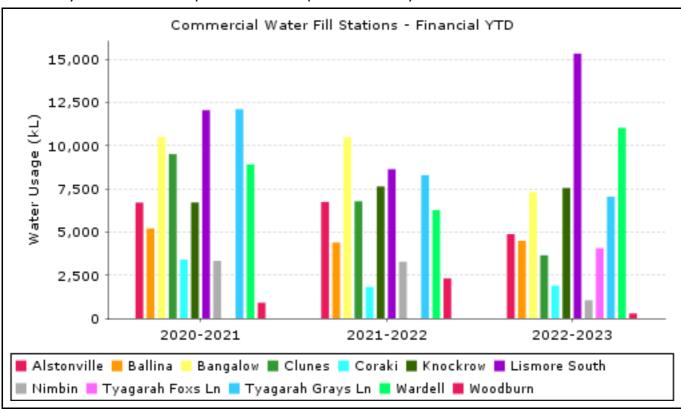


Figure 3 and 4 shows the total usage of individual commercial water fill stations for the financial year to date compared with the previous two years.

Figure 3: Comparison of commercial water fill stations total consumption - 1 July to 31 May

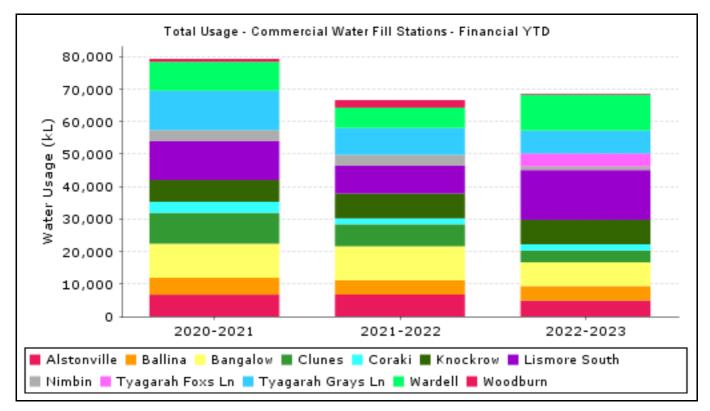


Figure 4: Total usage of commercial water fill stations - 1 July to 31 May

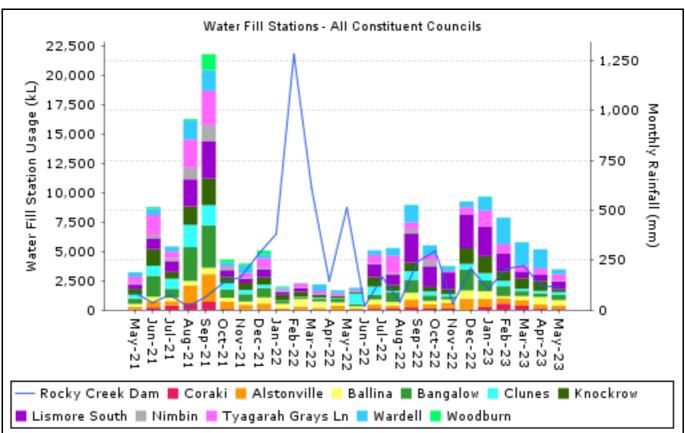


Figure 5 shows the combined water fill station monthly consumption for the previous two years. Rainfall data is from the rain gauge at Rocky Creek Dam.

Figure 5: Total monthly consumption for commercial water fill stations and rainfall.

Source Contribution

Rocky Creek Dam capacity as of 31 May 2023 was 99.7%

Emigrant Creek Dam capacity as of 31 May 2023 was 103.4%

| Source | May 20 | May 2023 (kL) | | Cumulative total 2022-2023 (kL) | |
|---------------------------|---------|---------------|-----------|------------------------------------|--|
| Rocky Creek Dam | 894,131 | 99.99% | 9,732,645 | 99.41% | |
| Wilson River | 1 | 0.00% | 16 | 0.00% | |
| Emigrant Creek Dam | 92 | 0.01% | 57,629 | 0.59% | |
| Alstonville Plateau Bores | 0 | 0.00% | 0 | 0.00% | |
| Coastal Sands | 0 | 0.00% | 0 | 0.00% | |
| | 894,224 | | 9,790,290 | | |

Rocky Creek Dam

Figure 6 show Rocky Creek dam current water level and compares to previous years when levels reached lowest recorded dam level. Rainfall data is for the current financial year only.

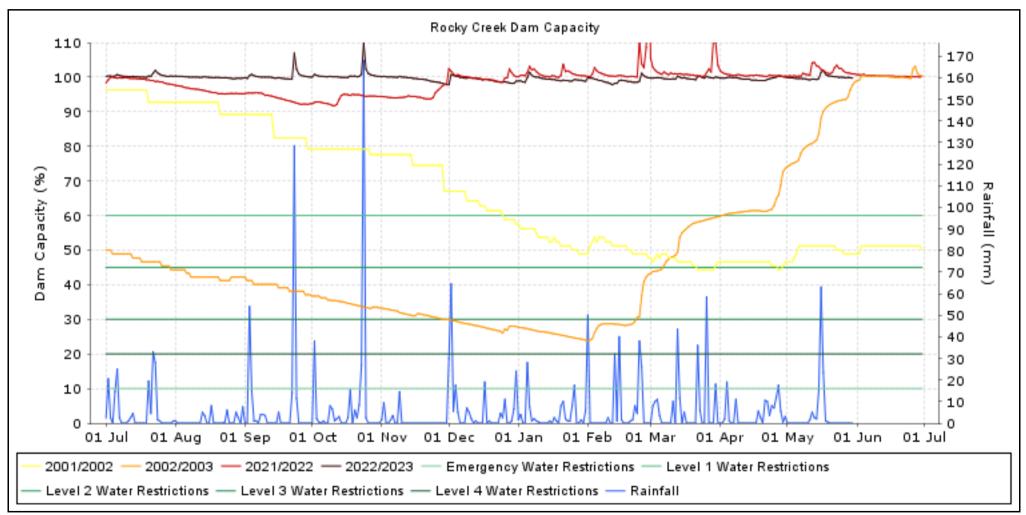


Figure 6: Rocky Creek Dam capacity and rainfall

Emigrant Creek Dam

Figure 7 show Emigrant Creek dam current water level and compares to previous two years. Rainfall data is for the current financial year only.

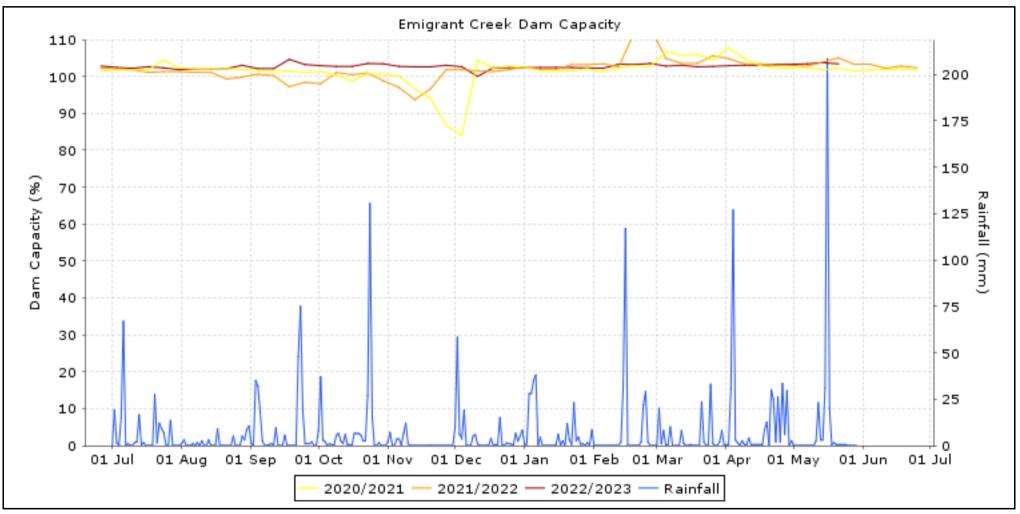


Figure 7: Emigrant Creek Dam capacity and rainfall

Monthly consumption by constituents - Ballina Shire Council

Figure 8 shows the monthly consumption for Ballina Shire Council area for the previous two years. Rainfall data is from the Bureau of Meteorology rainfall station Ballina Airport.

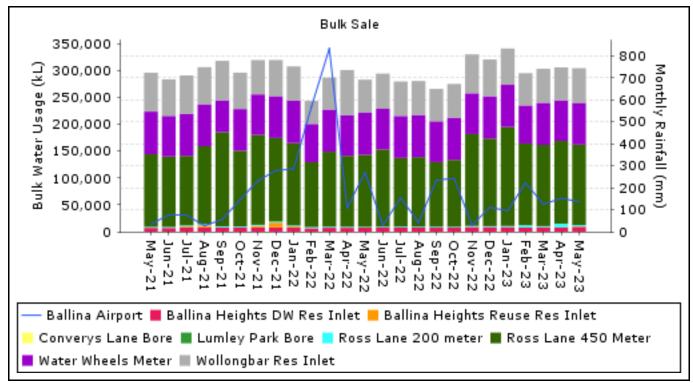


Figure 8: Monthly consumption and rainfall - Ballina Shire Council.

Figure 9 shows the monthly consumption for water fill stations for Ballina Shire Council and the rainfall for the previous two years.

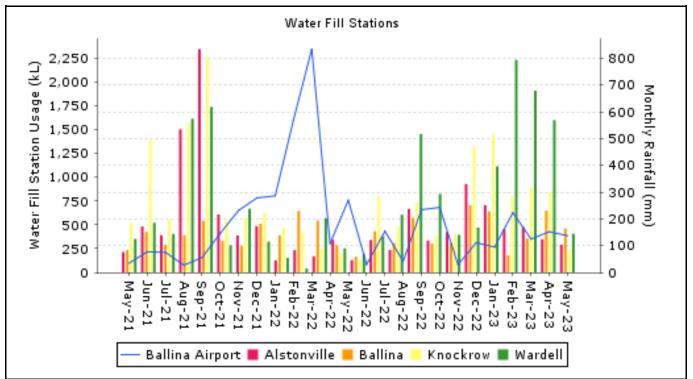


Figure 9: Monthly consumption commercial water fill station and rainfall.

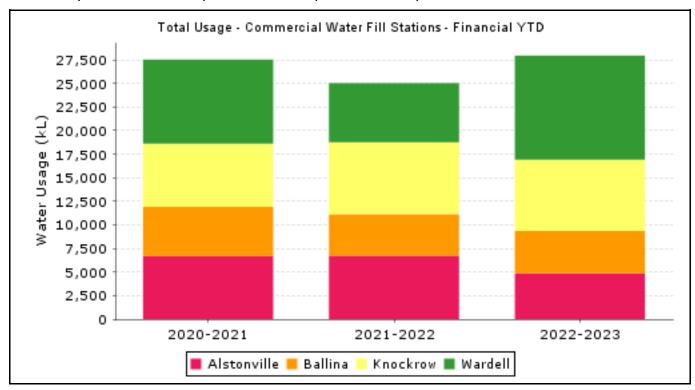


Figure 10 shows the total usage of individual commercial water fill stations for the financial year to date compared with the previous two years.

Figure 10: Total usage of commercial water fill stations. 1 July to 31 May

Monthly consumption by constituents - Byron Shire Council

Figure 11 shows the monthly consumption for Byron Shire Council area for the previous two years. Rainfall data is from the Bureau of Meteorology rainfall station Cape Byron.

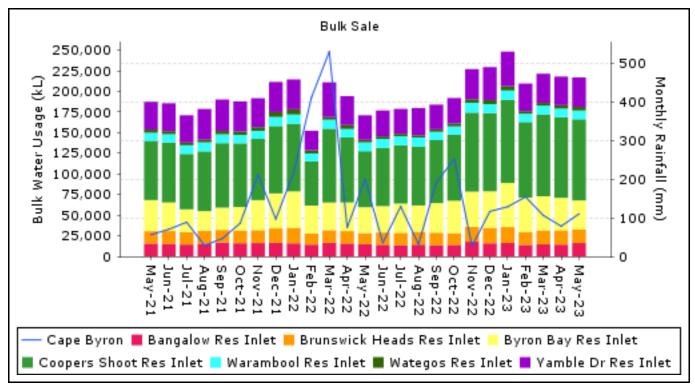


Figure 11: Monthly consumption and rainfall - Byron Shire Council.

Figure 12 shows the monthly consumption for water fill stations for Byron Shire Council and the rainfall for the previous two years.

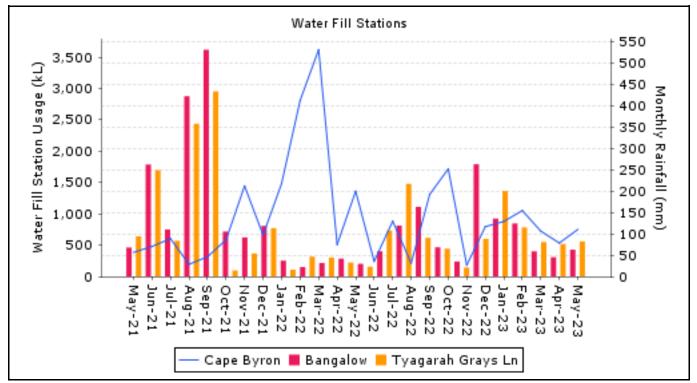


Figure 12: Monthly consumption commercial water fill station and rainfall.

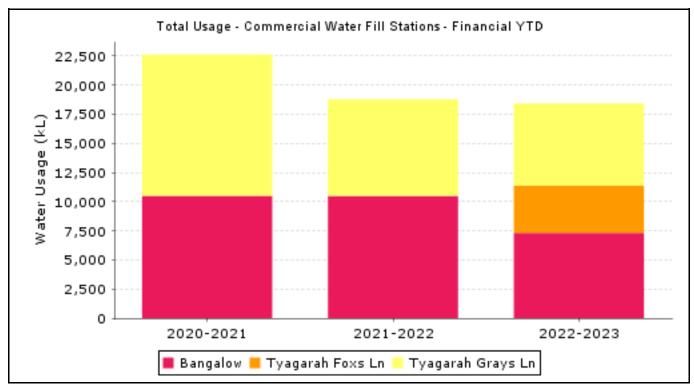


Figure 13 shows the total usage of individual commercial water fill stations for the financial year to date compared with the previous two years.

Figure 13: Total usage of commercial water fill stations. 1 July to 31 May

Monthly consumption by constituents - Lismore City Council

Figure 14 shows the monthly consumption for Lismore City Council area for the previous two years. Rainfall data is from the Bureau of Meteorology rainfall station Lismore Airport.

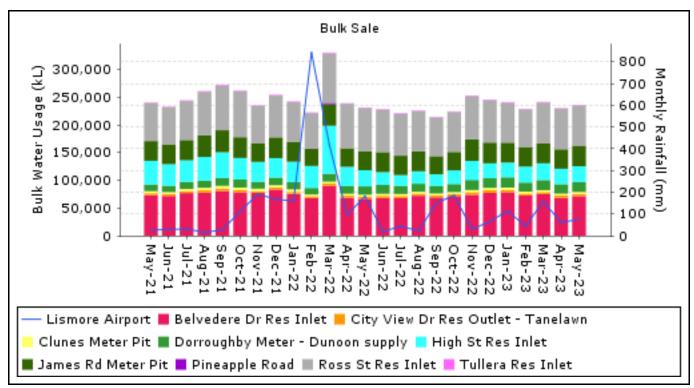


Figure 14: Monthly consumption and rainfall - Lismore City Council.

Figure 15 shows the monthly consumption for water fill stations for Lismore City Council and the rainfall for the previous two years.

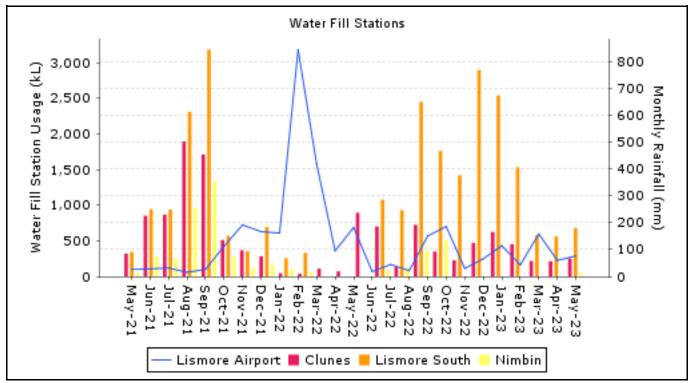


Figure 15: Monthly consumption commercial water fill station and rainfall.

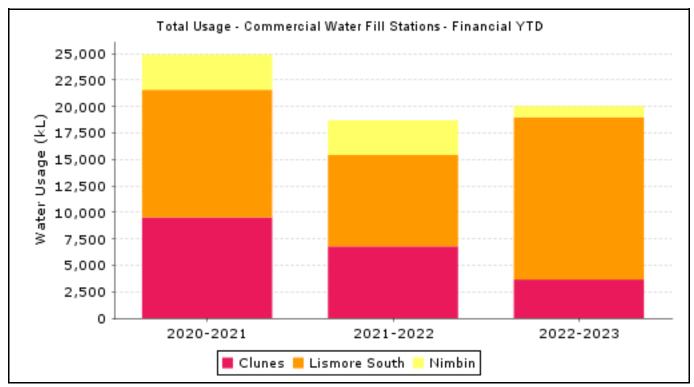


Figure 16 shows the total usage of individual commercial water fill stations for the financial year to date compared with the previous two years.

Figure 16: Total usage of commercial water fill stations. 1 July to 31 May

Monthly consumption by constituents - Richmond Valley Council

Figure 17 shows the monthly consumption for Richmond Valley Council area for the previous two years. Rainfall data is from the Bureau of Meteorology rainfall station Evans Head.

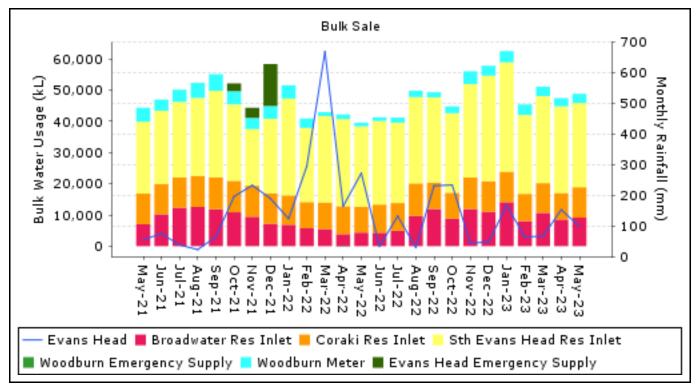


Figure 17: Monthly consumption and rainfall - Richmond Valley Council.

Figure 18 shows the monthly consumption for water fill stations for Richmond Valley Council and the rainfall for the previous two years.

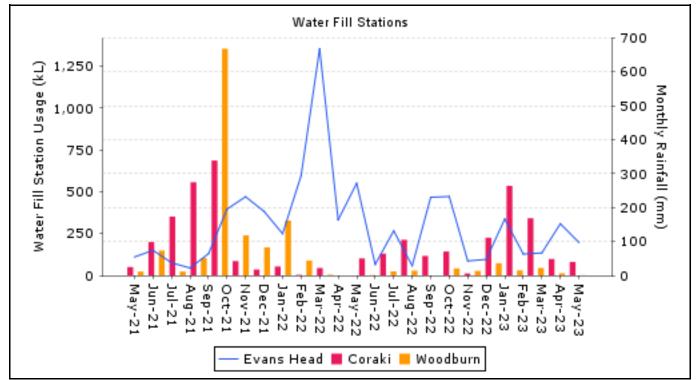


Figure 18: Monthly consumption commercial water fill station and rainfall.

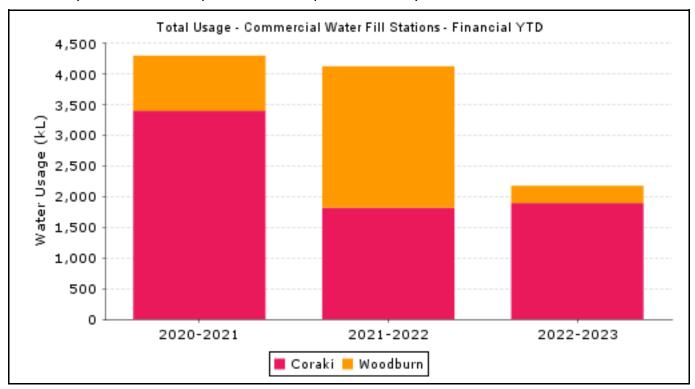


Figure 19 shows the total usage of individual commercial water fill stations for the financial year to date compared with the previous two years.

Figure 19: Total usage of commercial water fill stations. 1 July to 31 May