Water production and consumption - September 2023

Responsible Officer: Group Manager Operations (Adam Nesbitt)

Recommendation

That the report be received and noted.

Background

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

Council	Sep 2021 (kL)	Sep 2022 (kL)	Sep 2023 (kL)	% of Total Sales
Ballina Shire Council	319,238	266,869	331,648	37.83%
Byron Shire Council	190,209	183,993	229,782	26.21%
Lismore City Council	273,228	215,365	256,254	29.23%
Richmond Valley Council	55,167	49,374	58,944	6.72%
Total monthly consumption by constituent councils	837,842	715,601	876,628	

Water usage - all constituent councils

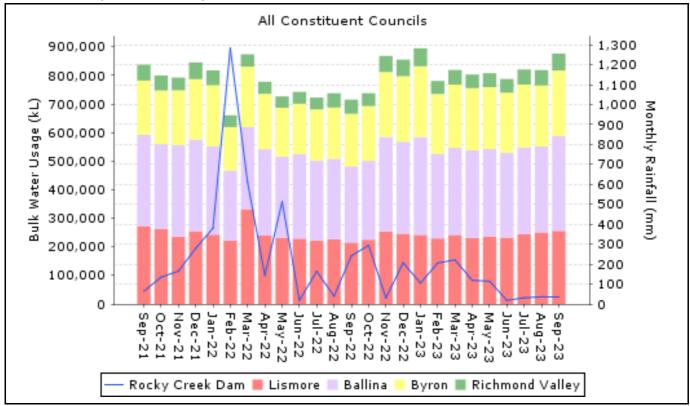


Figure 1 shows the combined monthly bulk water consumption and rainfall at Rocky Creek Dam for the previous two years.

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.

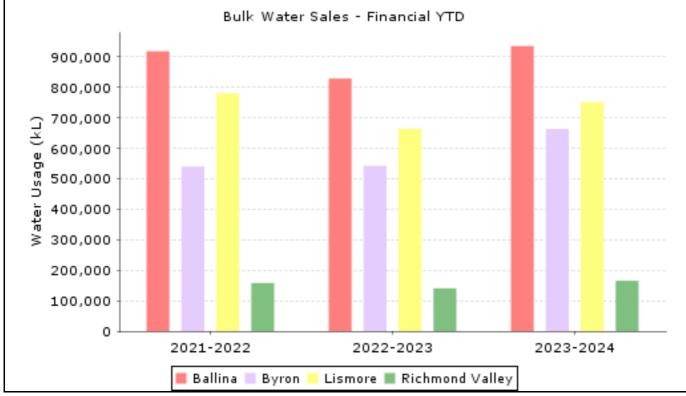


Figure 2: Bulk water sales by constituent council - 1 July to 30 September

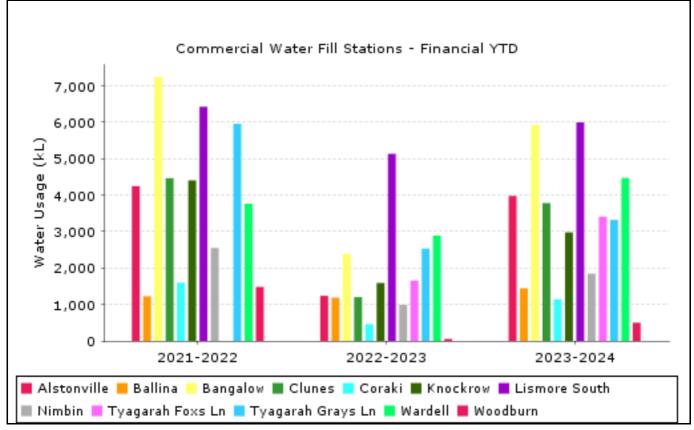




Figure 3: Comparison of commercial water fill stations total consumption - 1 July to 30 September

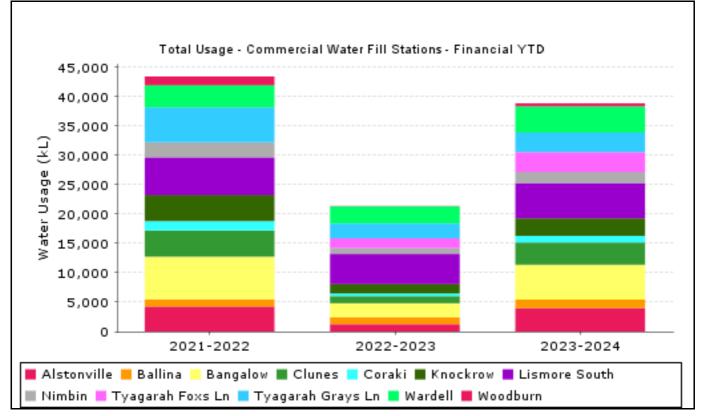


Figure 4: Total usage of commercial water fill stations - 1 July to 30 September

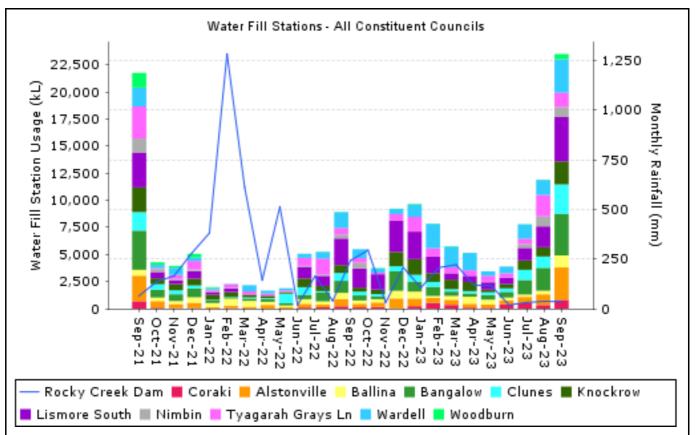


Figure 5 shows the combined water fill station monthly consumption for the previous two years. Rainfall data is from the rain gauge at Rocky Creek Dam.

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

Source Contribution

Rocky Creek Dam capacity as of 30 September 2023 was 83.7% Emigrant Creek Dam capacity as of 30 September 2023 was 103.2%

Source	September 2023 (kL)		Cumulative total 2023-2024 (kL)	
Rocky Creek Dam	1,011,458	99.92%	2,858,956	99.97%
Wilson River	819	0.08%	819	0.03%
Emigrant Creek Dam	21	0.00%	30	0.00%
Alstonville Plateau Bores	0	0.00%	0	0.00%
Coastal Sands	0	0.00%	0	0.00%
	1,012,298		2,859,805	

Rocky Creek Dam

Figure 6 shows 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.

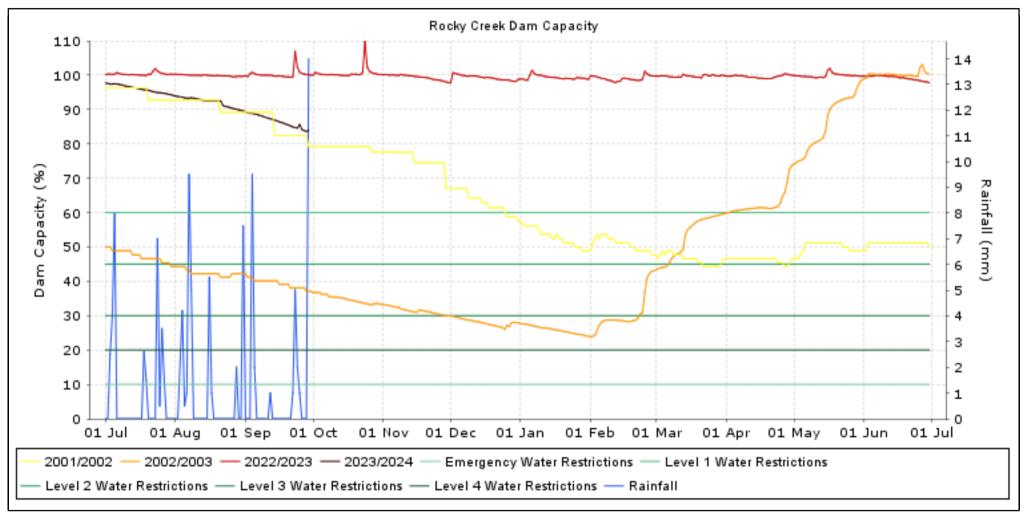
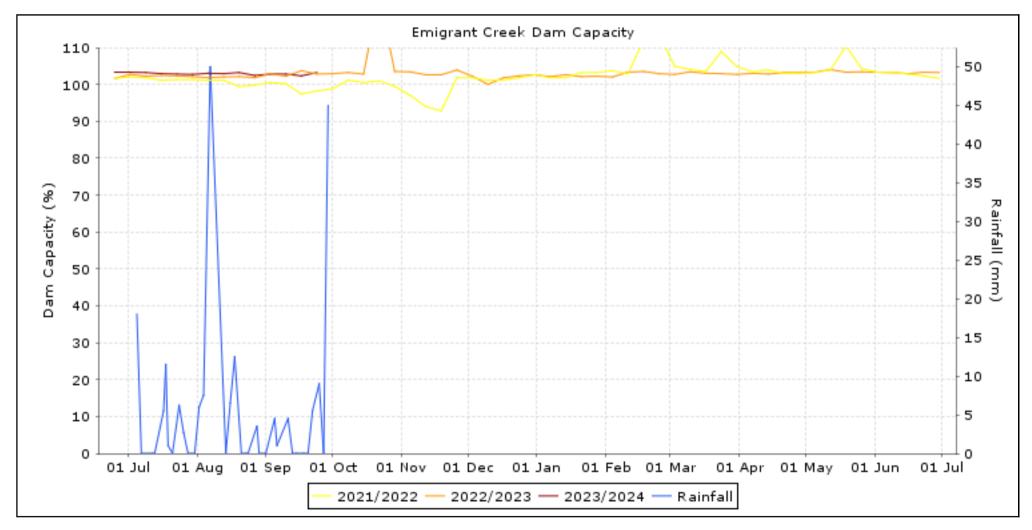


Figure 6: Rocky Creek Dam capacity and rainfall

Emigrant Creek Dam

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





Monthly consumption by constituents - Ballina Shire Council (Figures 8-10)

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.

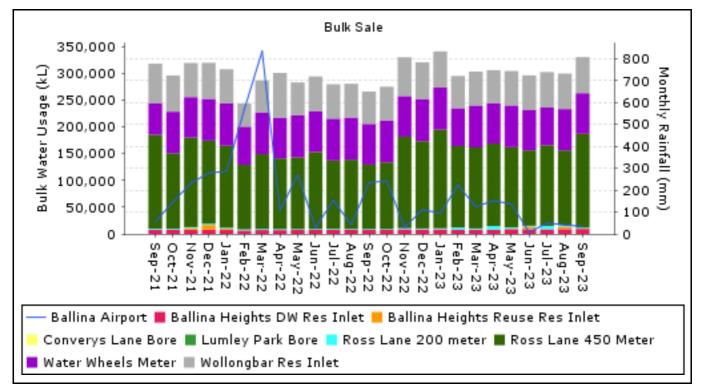


Figure 8: Monthly consumption and rainfall - Ballina Shire Council.

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

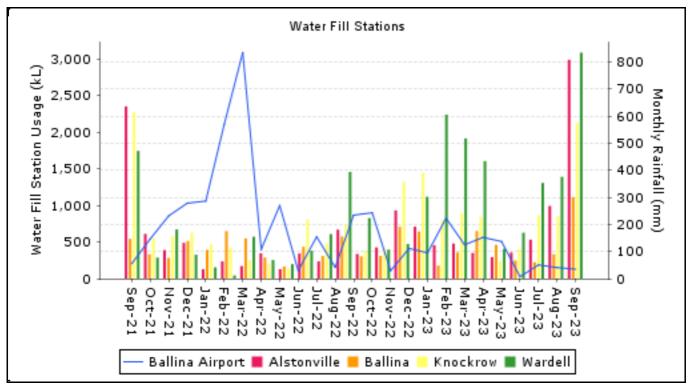


Figure 9: Monthly consumption commercial water fill station and rainfall.

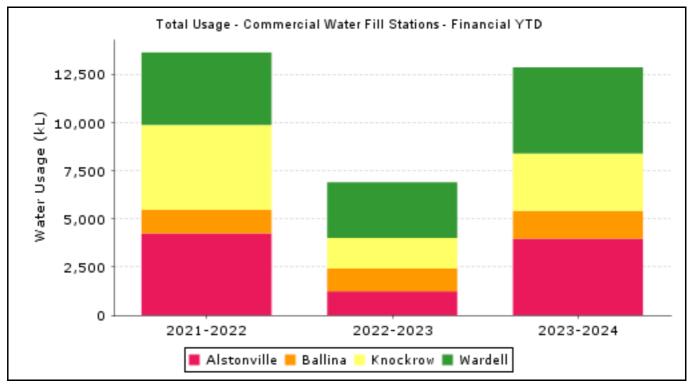


Figure 10 shows the total usage of individual commercial water fill stations for the financial year to date compared with the previous two years.

Figure 10: Total usage of commercial water fill stations. 1 July to 30 September

Monthly consumption by constituents - Byron Shire Council (Figures 11-13)

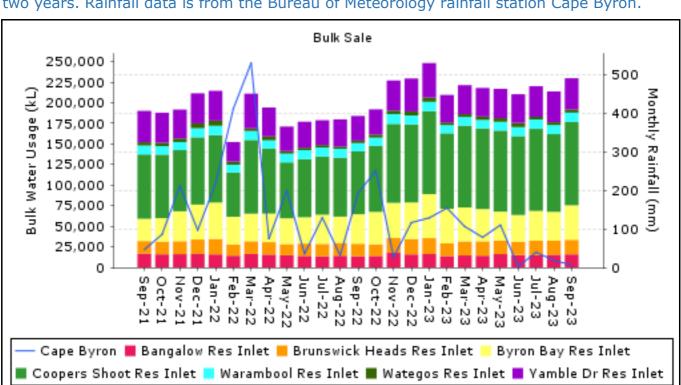


Figure 11 shows the monthly consumption for Byron Shire Council area for the previous two years. Rainfall data is from the Bureau of Meteorology rainfall station Cape Byron.

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.

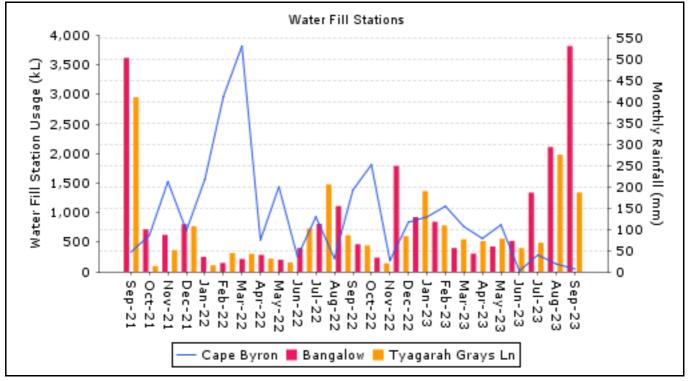


Figure 12: Monthly consumption commercial water fill station and rainfall

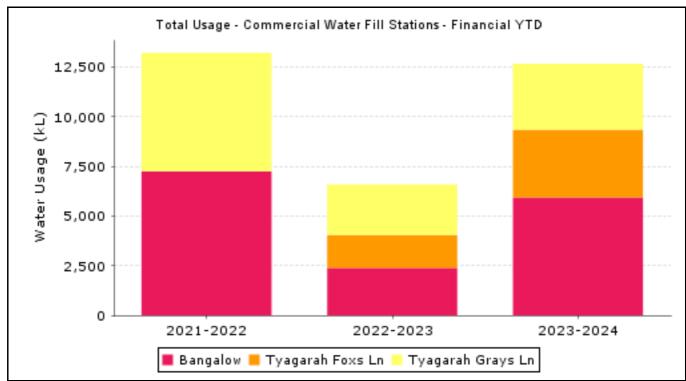


Figure 13 shows the total usage of individual commercial water fill stations for the financial year to date compared with the previous two years.

Figure 13: Total usage of commercial water fill stations. 1 July to 30 September

Monthly consumption by constituents - Lismore City Council (Figures 14-16)

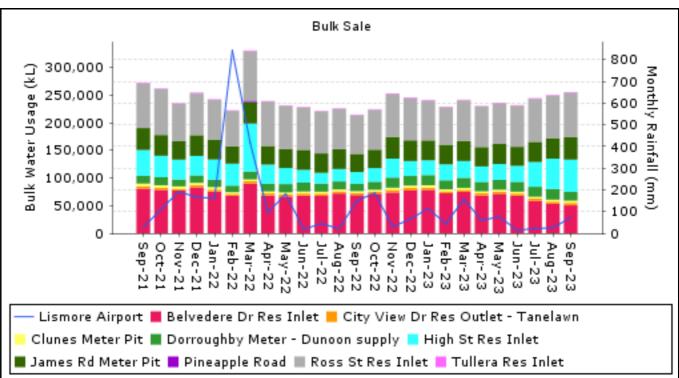


Figure 14 shows the monthly consumption for Lismore City Council area for the previous two years. Rainfall data is from the Bureau of Meteorology rainfall station Lismore Airport.

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

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

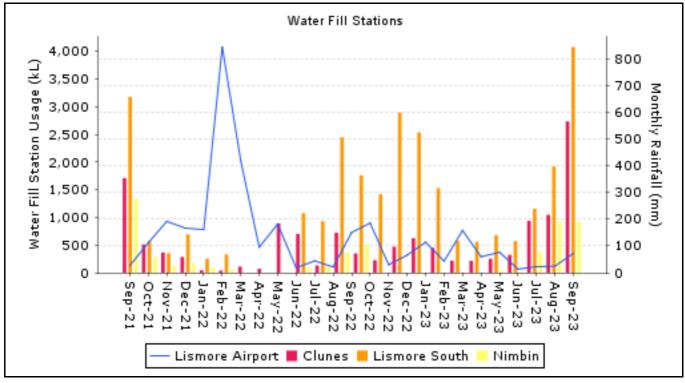


Figure 15: Monthly consumption commercial water fill station and rainfall

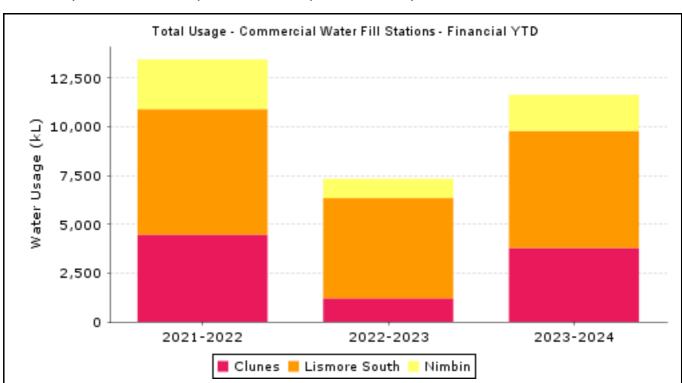


Figure 16 shows the total usage of individual commercial water fill stations for the financial year to date compared with the previous two years.

Figure 16: Total usage of commercial water fill stations. 1 July to 30 September

Monthly consumption by constituents - Richmond Valley Council (RVC) (Figures 17-19)

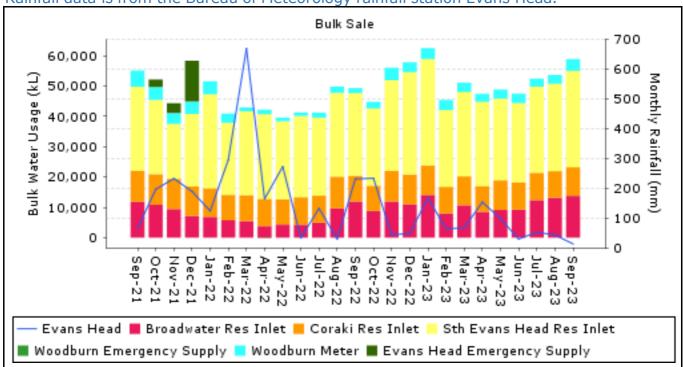


Figure 17 shows the monthly consumption for RVC area for the previous two years. Rainfall data is from the Bureau of Meteorology rainfall station Evans Head.

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.

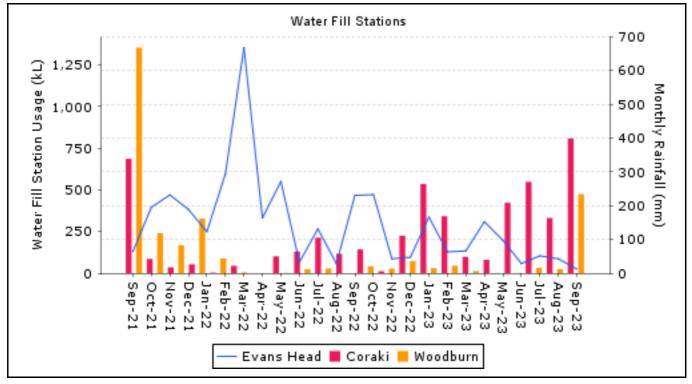


Figure 18: Monthly consumption commercial water fill station and rainfall

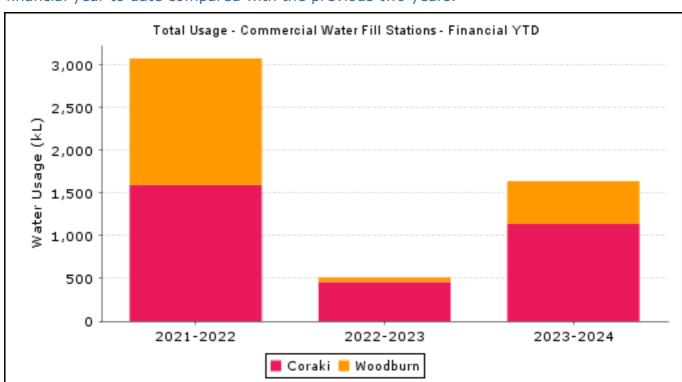


Figure 19 shows the total usage of individual commercial water fill stations for the financial year to date compared with the previous two years.

Figure 19: Total usage of commercial water fill stations. 1 July to 30 September