Clyde River Water Quality Report

Foreword

Funding

This work has been produced by the NSW Primary Industries Climate Change Research Strategy funded by the NSW Climate Change Fund.

NSW Department of Primary Industries Disclaimer

This is a research trial and pilot project, and you should not rely solely on the information or advice provided in these reports.

Feedback and Questions

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1   Salinity

1.1   Weekly

Weekly Minimum and Maximum Salinity

These values represent the absolute minimum and maximum recorded values from Buoys within each harvest area.
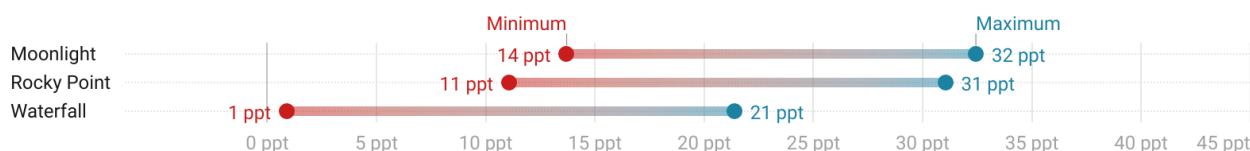
Units represent parts per thousand (ppt). This is equivalent to both g/kg and g/L.
Source: FarmDecisionTECH • Created with Datawrapper

Figure 1: These values represent the highest and lowest salinity reading a buoy has recorded in each of the harvest areas in the past week.

7-Day Salinity Average Trend

Average daily salinity at each buoy throughout the Clyde River.

■ Waterfall   ■ Moonlight   ■ Rocky Point

Rocky Point

	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Rocky Point	19.8 ppt	20.0 ppt	21.0 ppt	22.3 ppt	23.7 ppt	24.1 ppt	23.1 ppt
Waterfall Creek	18.6 ppt	19.0 ppt	19.8 ppt	21.3 ppt	23.0 ppt	23.4 ppt	22.7 ppt
Chinamans Point	15.0 ppt	15.2 ppt	16.3 ppt	17.9 ppt	19.4 ppt	19.7 ppt	19.2 ppt
Angry Man Point							

Waterfall

	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Buckenbowra Creek	13.1 ppt	14.2 ppt	14.3 ppt	15.3 ppt	16.7 ppt	17.3 ppt	17.3 ppt
Big Island West	10.6 ppt	11.1 ppt	11.7 ppt	13.0 ppt	14.4 ppt	15.1 ppt	15.1 ppt
Double Bay	9.5 ppt	10.0 ppt	11.0 ppt	12.3 ppt	12.9 ppt	13.7 ppt	13.9 ppt

Moonlight

	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Wray Street	20.5 ppt	20.8 ppt	21.8 ppt	23.1 ppt	24.7 ppt	25.4 ppt	24.6 ppt
Moonlight	19.7 ppt	20.3 ppt	21.6 ppt	22.9 ppt	24.8 ppt	25.5 ppt	24.5 ppt
Budd Island North	18.8 ppt	19.5 ppt	20.5 ppt	21.9 ppt	23.8 ppt	24.3 ppt	24.0 ppt
Snapper Point							

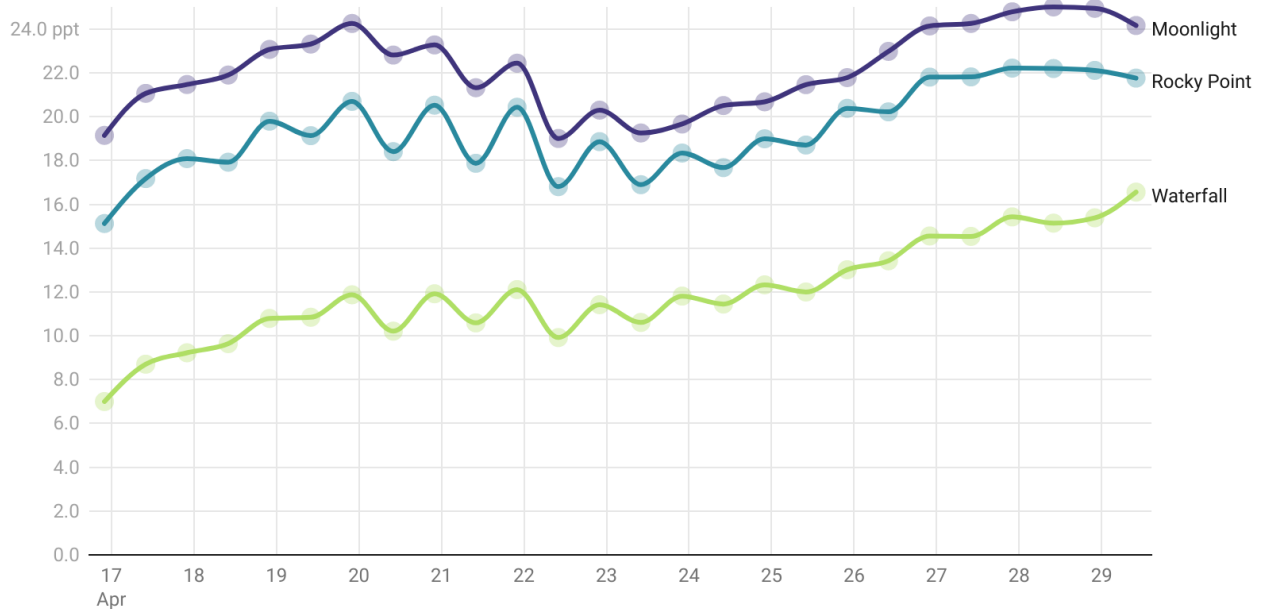*Units represent parts per thousand (ppt). This is equivalent to both g/kg and g/L.*
Source: FarmDecisionTECH • Created with Datawrapper

Figure 2: This figure represents the daily average salinity of each of the buoys contained within a harvest area. Its designed to reduce the impact of tides and provide the general trend of salinity over the past week for specific locations within harvest areas.

1.2   Fortnightly

Fortnightly Salinity Average Trend

12-hourly average salinity for each harvest area.

Units represent parts per thousand (ppt). This is equivalent to both g/kg and g/L.
Source: FarmDecisionTECH • Created with Datawrapper

Figure 3: This figure represents the daily average salinity of all buoys contained within a harvest area. Its designed to reduce the impact of tides and provide the general trend of salinity over the past week.

Fortnightly Average Salinity Trend

Comparison between this weeks average salinity and the average salinity last week. Left pointing arrow means salinity is decreasing, right pointing means salinity is increasing.
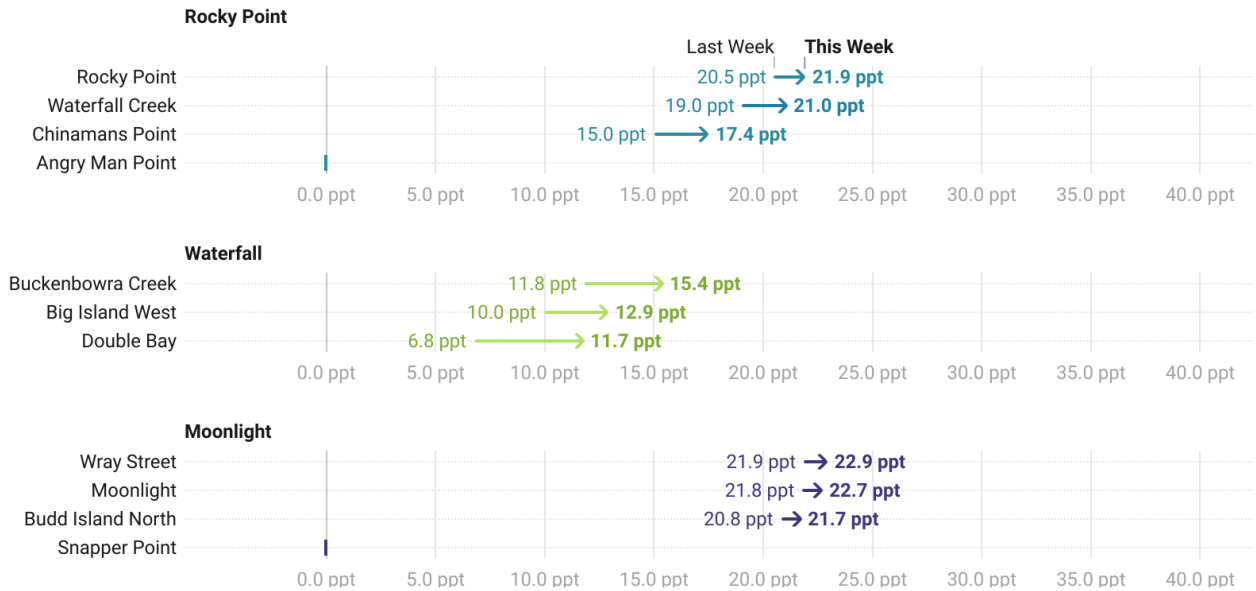

Units represent parts per thousand (ppt). This is equivalent to both g/kg and g/L.
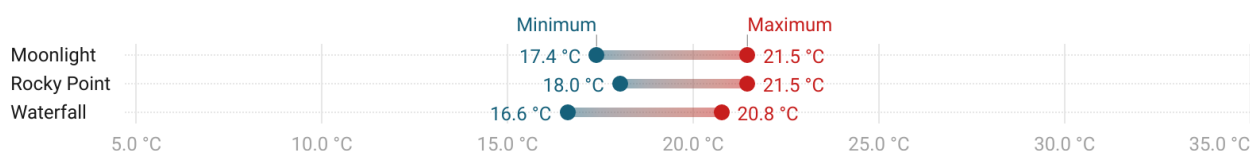Source: FarmDecisionTECH • Created with Datawrapper

Figure 4: This figure demonstrates the average difference in salinity for this week compared with the prior week. It displays a longer term, general trend to see if salinity is increasing, stabilising or decreasing.

2   Water Temperature

2.1   Weekly

Weekly Minimum and Maximum Water Temperature

These values represent the absolute minimum and maximum recorded values from Buoys within each harvest area.

	Minimum	Maximum
Moonlight	17.4 °C	21.5 °C
Rocky Point	18.0 °C	21.5 °C
Waterfall	16.6 °C	20.8 °C

Source: FarmDecisionTECH • Created with Datawrapper

Figure 5: These values represent the highest and lowest temperature reading a buoy has recorded in each of the harvest areas in the past week.

7-Day Temperature Average Trend

Average daily temperature at each buoy throughout the Clyde River.

■ Waterfall   ■ Moonlight   ■ Rocky Point

Rocky Point

	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Rocky Point	19.2 °C	19.3 °C	19.5 °C	19.7 °C	19.9 °C	20.1 °C	20.2 °C
Chinamans Point	19.0 °C	19.1 °C	19.2 °C	19.5 °C	19.6 °C	19.9 °C	19.9 °C
Waterfall Creek	19.1 °C	19.1 °C	19.1 °C	19.5 °C	19.6 °C	19.9 °C	20.2 °C
Angry Man Point							

Waterfall

	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Buckenbowra Creek	18.8 °C	18.9 °C	19.0 °C	19.3 °C	19.3 °C	19.7 °C	19.7 °C
Big Island West	18.9 °C	18.9 °C	18.8 °C	19.1 °C	19.1 °C	19.5 °C	19.5 °C
Double Bay	18.8 °C	18.9 °C	18.8 °C	18.9 °C	19.0 °C	19.3 °C	19.4 °C

Moonlight

	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Moonlight	19.3 °C	19.3 °C	19.5 °C	19.8 °C	20.0 °C	20.2 °C	20.1 °C
Wray Street	19.2 °C	19.3 °C	19.5 °C	19.8 °C	19.9 °C	20.2 °C	20.2 °C
Budd Island North	19.2 °C	19.3 °C	19.4 °C	19.7 °C	19.9 °C	20.2 °C	20.2 °C
Snapper Point							

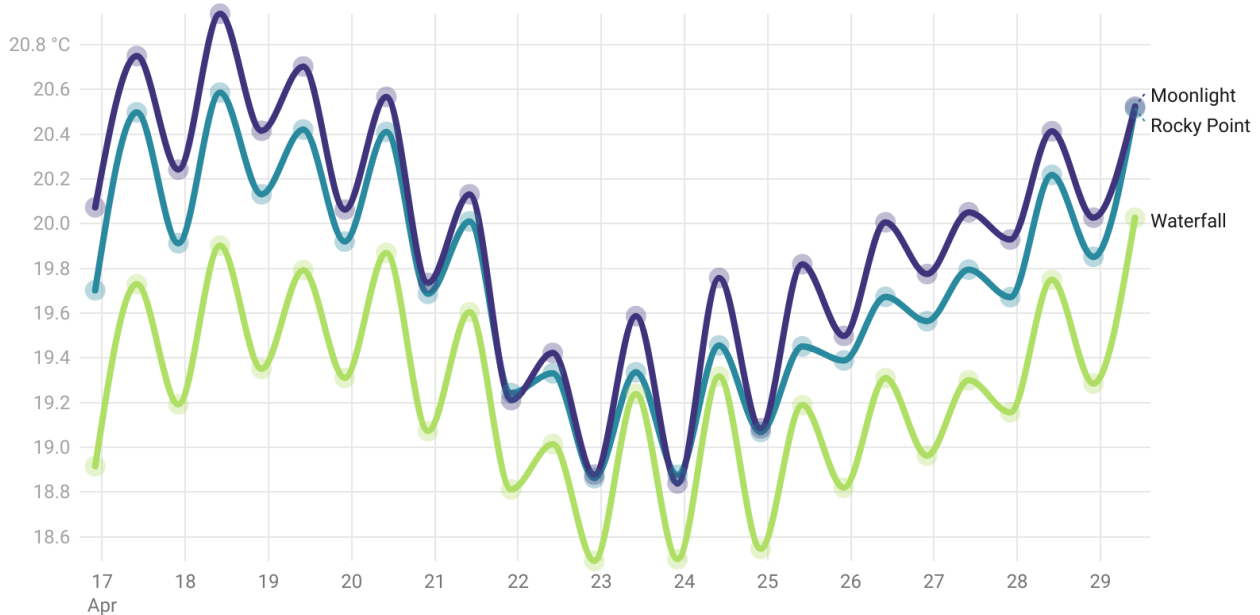*Temperature is displayed in degrees Celsius (°C)*
Source: FarmDecisionTECH • Created with Datawrapper

Figure 6: This figure represents the daily average temperature of each of the buoys contained within a harvest area. Its designed to reduce the impact of tides and provide the general trend of temperature over the past week for specific locations within harvest areas.

2.2   Fortnightly

Fortnightly Average Temperature Trend

12-hourly average temperature for each harvest area.

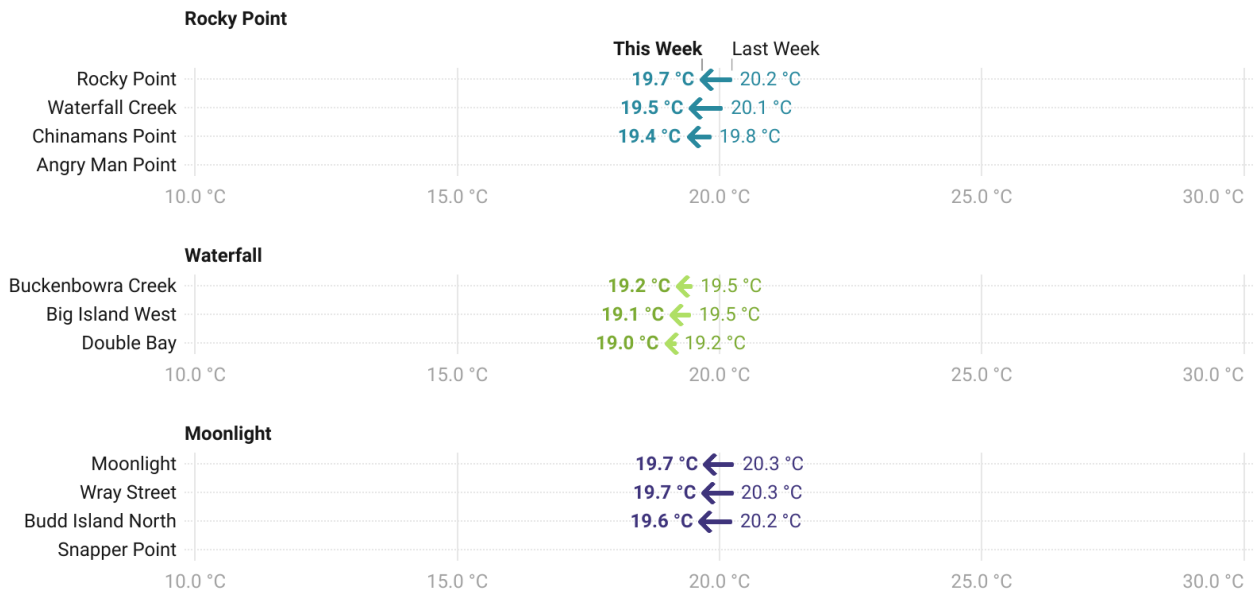*Temperature is displayed in degrees Celsius (°C).*
Source: FarmDecisionTECH • Created with Datawrapper

Figure 7: This figure represents the daily average temperature of all buoys contained within a harvest area. Its designed to reduce the impact of tides and provide the general trend of temperature over the past week.

Fortnightly Average Temperature Trend

Comparison between this weeks average temperature and the average temperature last week.

Rocky Point

	This Week	Last Week
Rocky Point	**19.7 °C** ←	20.2 °C
Waterfall Creek	**19.5 °C** ←	20.1 °C
Chinamans Point	**19.4 °C** ←	19.8 °C
Angry Man Point		

10.0 °C   15.0 °C   20.0 °C   25.0 °C   30.0 °C

Waterfall

Buckenbowra Creek	**19.2 °C** ←	19.5 °C
Big Island West	**19.1 °C** ←	19.5 °C
Double Bay	**19.0 °C** ←	19.2 °C

10.0 °C   15.0 °C   20.0 °C   25.0 °C   30.0 °C

Moonlight

Moonlight	**19.7 °C** ←	20.3 °C
Wray Street	**19.7 °C** ←	20.3 °C
Budd Island North	**19.6 °C** ←	20.2 °C
Snapper Point		

10.0 °C   15.0 °C   20.0 °C   25.0 °C   30.0 °C

Temperature is displayed in degrees Celsius (°C)
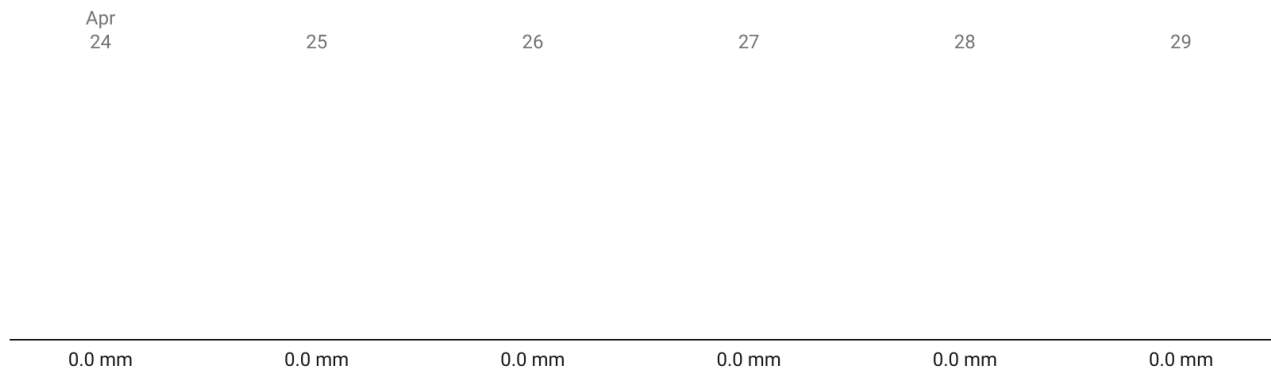
Source: FarmDecisionTECH • Created with Datawrapper

Figure 8: This figure demonstrates the average difference in temperature for this week compared with the prior week. It displays a longer term, general trend to see if temperature is increasing, stabilising or decreasing.

3 Precipitation

3.1 Weekly

7-Day Clyde River Precipitation

Daily total precipitation. Weather station is located on Budd Island.

| Apr 24	25	26	27	28	29
0.0 mm	0.0 mm	0.0 mm	0.0 mm	0.0 mm	0.0 mm

Precipitation is measured in millimeters (mm). 1 mm of rainfall is equal to 1 litre of water per meter squared.

Source: FarmDecisionTECH • Created with Datawrapper

Figure 9: Daily total precipitation at Budd Island for the past week.

3.2   Yearly

Year-to-Date Precipitation

Accumulation of rainfall since the start of the year. Other years are shown in reference to this year.
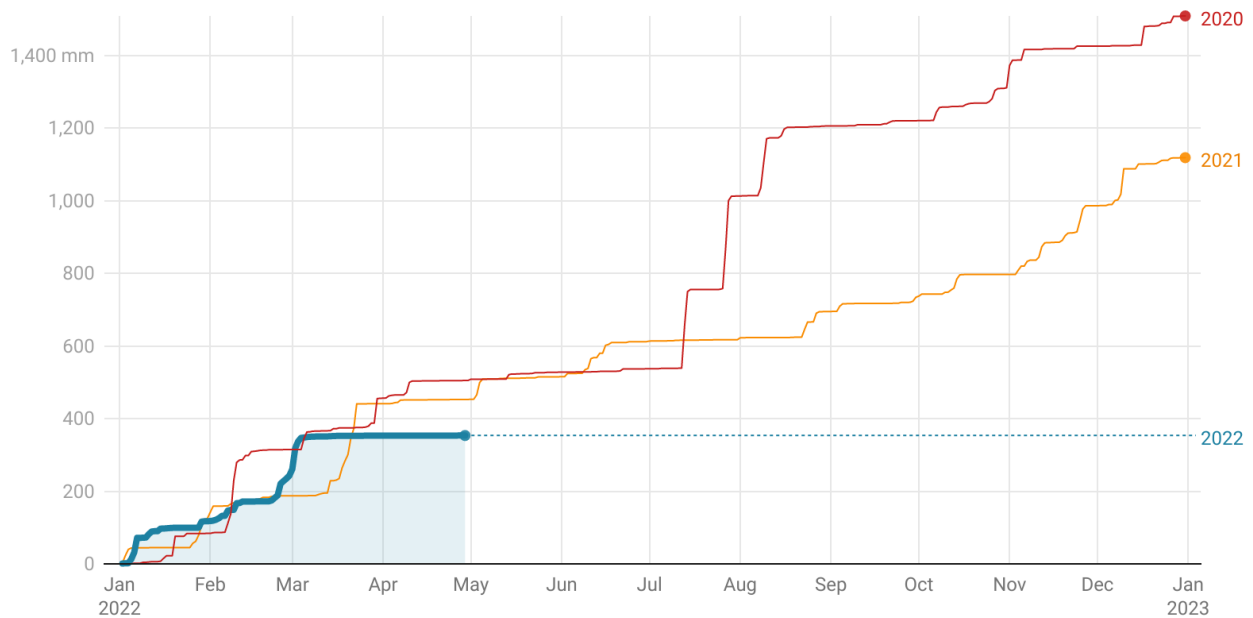
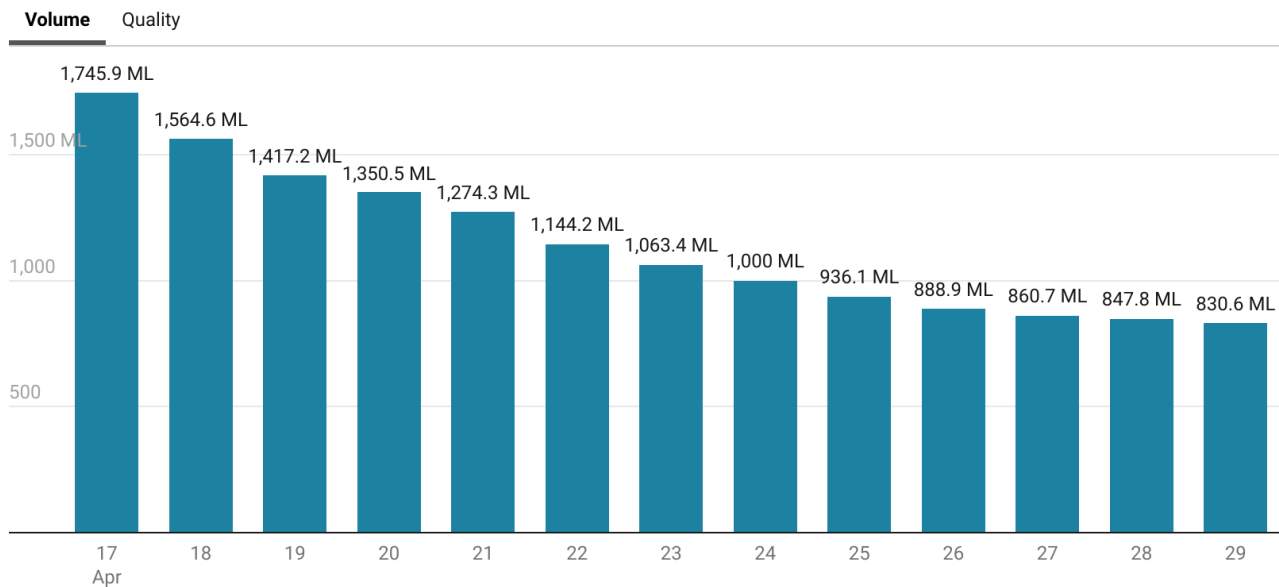*Rainfall is displayed in millimetres (mm).*
Created with Datawrapper

Figure 10: Compares this years total precipitation against previous years.

4   Flow Rate from Tributaries

4.1   Fortnightly

Brooman Tributary Fortnightly Discharge rate

Daily discharge rate totals for Brooman Tributary. This station is roughly 20 km North of the Clyde River.
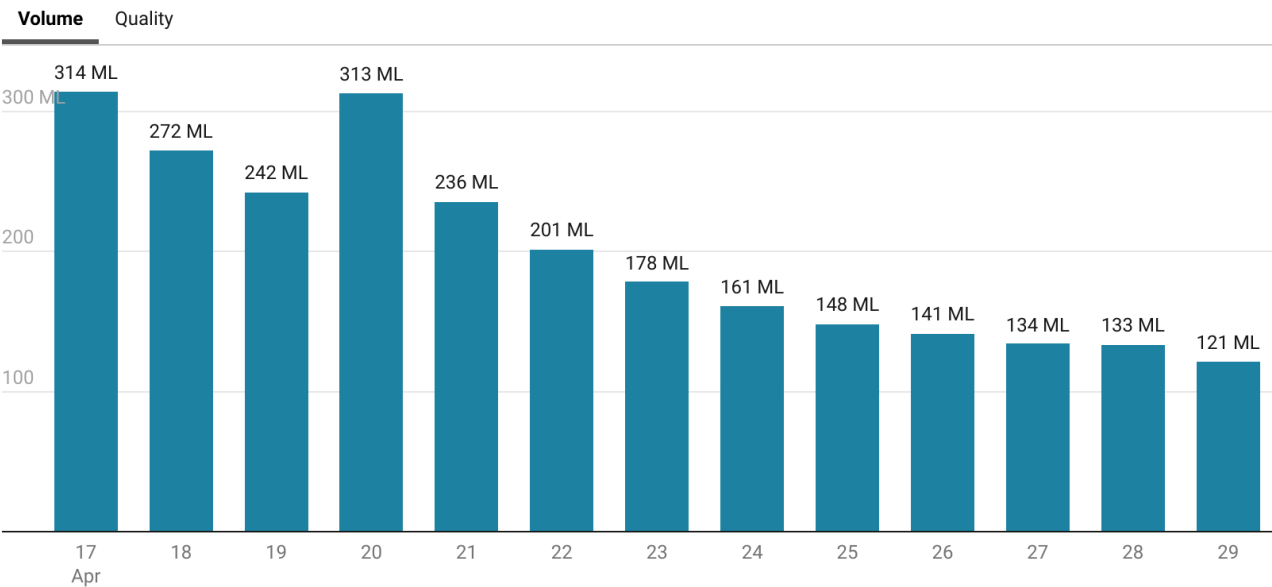
Volume   Quality

Values represent megalitres per day (ML/day). A mega litre is equal to 1 million litres. Data: © State of New South Wales through WaterNSW. Quality Codes: 140 = Current rating - may be subject to change, 145 = Telemetry system added point, 255 = Dataset not complete

Source: FarmDecisionTECH • Created with Datawrapper

Figure 11: Fortnightly (daily total) water discharge from Brooman.

Buckenbowra Tributary Fortnightly Discharge rate

Daily discharge rate totals for Buckenbowra Tributary. This station is roughly 8 km West of the Clyde River.

Volume   Quality

Values represent megalitres per day (ML/day). A mega litre is equal to 1 million litres. Quality Codes: 140 = Best available data, 145 = Data under review, 255 = Dataset not complete
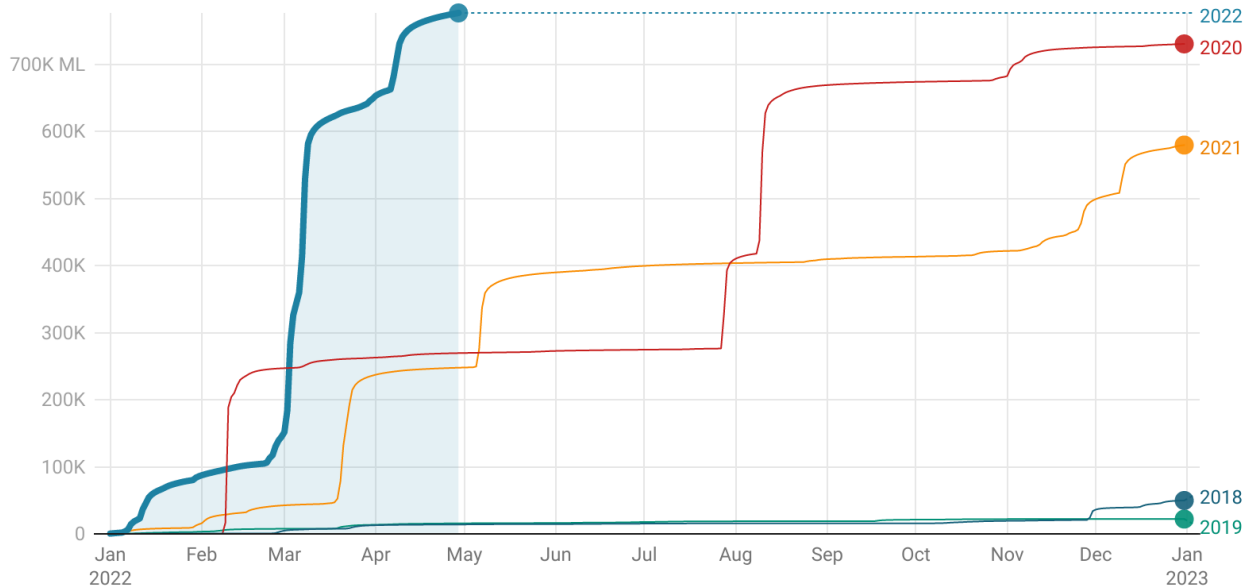
Chart: © State of New South Wales through WaterNSW • Created with Datawrapper

Figure 12: Fortnightly (daily total) water discharge from Buckenbowra.

4.2   Yearly

Cumulative Daily Discharge-Rate Brooman

Cumulative daily water flow for each year from Brooman into the Clyde River. Units represent mega litres (ML). One ML is equal to 1 million litres.

Data: © State of New South Wales through WaterNSW

Chart: FarmDecisionTECH • Created with Datawrapper

Figure 13: Compares this years total water discharge against previous years. Drought years (2018 and 2019) are shown for comparison.