

Clyde River Water Quality Report

Climate Smart Pilots March 30, 2022

www.farmdecisiontech.net.au

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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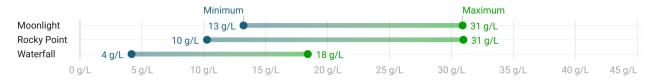
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1 Salinity

1.1 Weekly

Weekly Minimum and Maximum Salinity

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



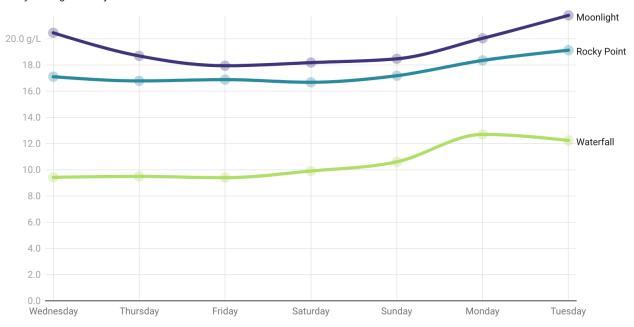
g/L is equivalent to g/kg and ppt.

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

Daily average salinity for each harvest area.

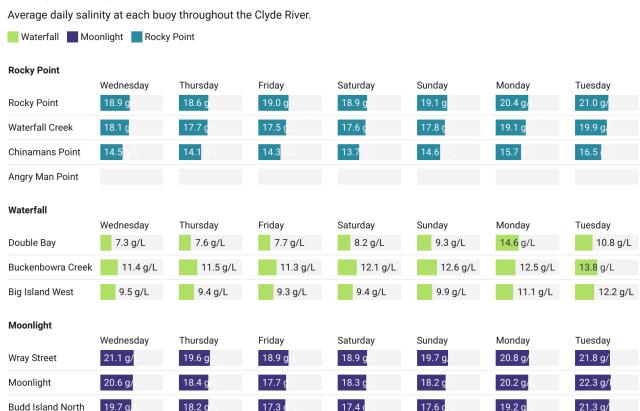


g/L is equivalent to both g/kg and ppt

Source: FarmDecisionTECH • Created with Datawrapper

Figure 2: 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.

7-Day Salinity Average Trend



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

Budd Island North

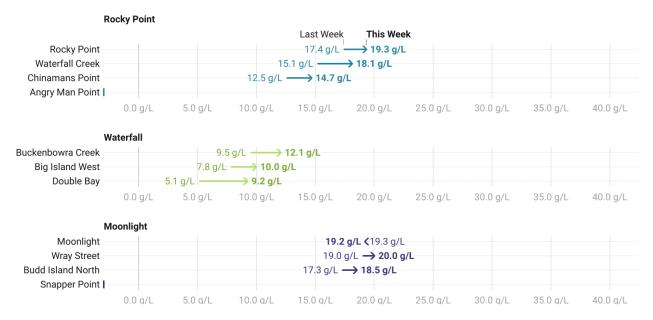
Snapper Point

Figure 3: 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 Average Salinity Trend

Comparison between this weeks average salinity and the average salinity last week. Units represent grams of salt per litre (g/L).



Units represent grams of salt per litre (g/L). This is equivalent to both g/kg and ppt. Source: FarmDecisionTECH \cdot Created with Datawrapper

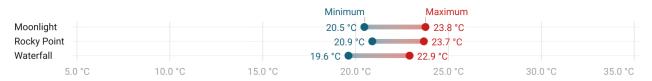
Figure 4: This figure demonstrates the average difference in salinity for this week compared with the prior week. It displays a longer term, general trend to see if salinity is increasing, stabilising or decreasing.

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.

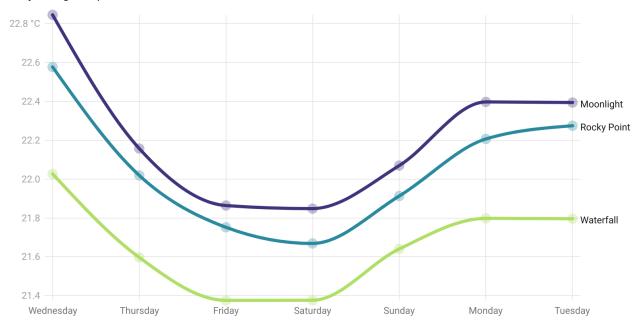


Source: FarmDecisionTECH • Created with Datawrapper

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 Average Temperature Trend

Daily average temperature for each harvest area.



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

Figure 6: 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.

7-Day Temperature Average Trend

Average daily temperature at each buoy throughout the Clyde River.

Waterfall Moonlight Rocky Point									
Rocky Point	Wednesday	Thomas	Friday	Caturday	Sunday	Manday	Tuesday		
Rocky Point	22.6 °C	Thursday 22.0 °C	Friday 21.8 °C	Saturday 21.7 °C	22.0 °C	Monday 22.3 °C	Tuesday 22.3 °C		
Waterfall Creek	22.7 °C	22.1 °C	21.7 °C	21.7 °C	21.9 °C	22.2 °C	22.4 °C		
Chinamans Point	22.5 °C	22.0 °C	21.7 °C	21.6 °C	21.9 °C	22.1 °C	22.1 °C		
Angry Man Point									
Waterfall									
	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday		
Buckenbowra Creek	22.2 °C	21.7 °C	21.5 °C	21.4 °C	21.7 °C	21.9 °C	21.9 °C		
Big Island West	22.1 °C	21.7 °C	21.4 °C	21.4 °C	21.6 °C	21.8 °C	21.8 °C		
Double Bay	21.8 °C	21.4 °C	21.3 °C	21.3 °C	21.6 °C	21.7 °C	21.7 °C		
Moonlight									
•	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday		
Moonlight	22.9 °C	22.2 °C	21.9 °C	21.9 °C	22.1 °C	22.4 °C	22.4 °C		
Wray Street	22.8 °C	22.2 °C	21.9 °C	21.9 °C	22.1 °C	22.4 °C	22.4 °C		
Budd Island North	22.8 °C	22.1 °C	21.8 °C	21.8 °C	22.0 °C	22.3 °C	22.4 °C		
Snapper Point									

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

Figure 7: 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

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

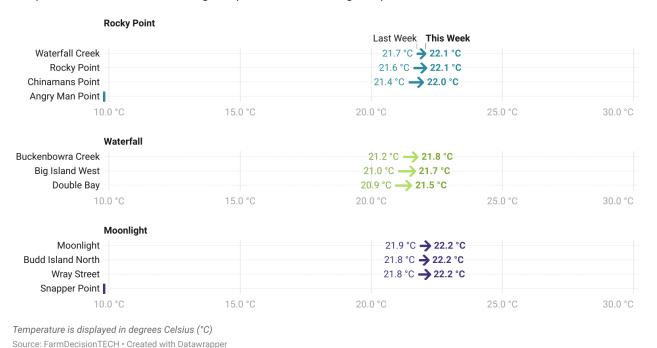


Figure 8: This figure demonstrates the average difference in temperature for this week compared with the prior week. It displays a longer term, general trend to see if temperature is increasing, stabilising or decreasing.

3 Precipitation

3.1 Weekly

7-Day Clyde River Precipitation

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

24	25	26	27	28	29
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

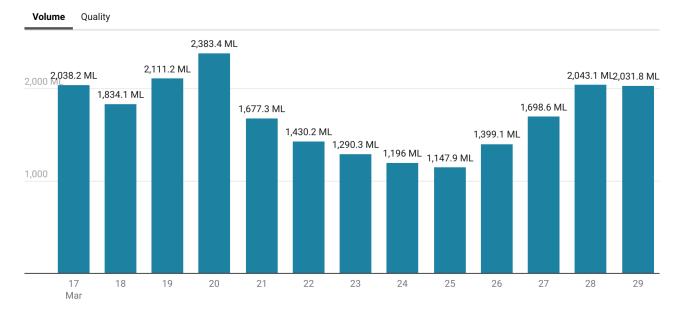
Figure 10: Compares this years total precipitation against previous years.

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.



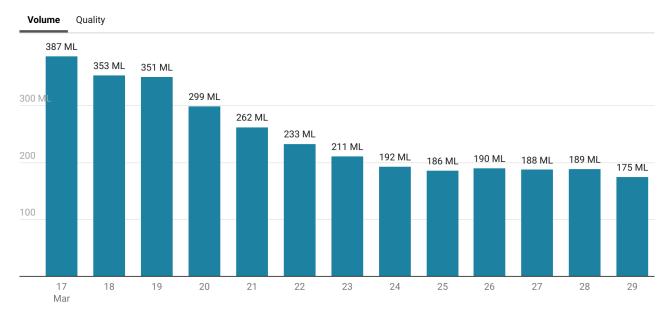
Values represent megalitres per day (ML/day). A mega litre is equal to 1 million litres. Data: © State of New South Wales through WaterNSW. Quality Codes: 140 = Current rating - may be subject to change, 145 = Telemetry system added point, 255 = Dataset not complete

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.



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

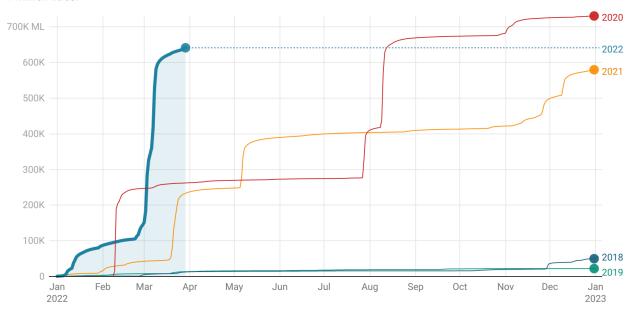
Chart: © State of New South Wales through WaterNSW \bullet Created with Datawrapper

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.