

Clyde River Water Quality Report

Climate Smart Pilots March 24, 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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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

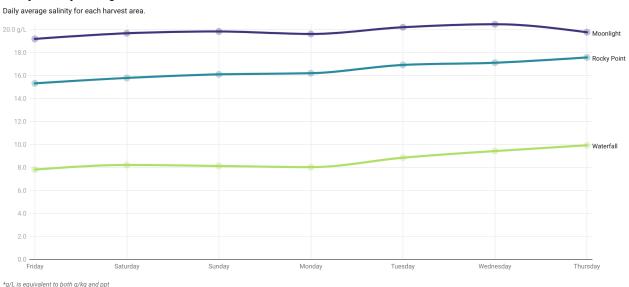


Figure 2: This figure represents the daily average salinity of all buoys contained within a harvest area. Its designed to reduce the impact of tides and provide the general trend of salinity over the past week.

7-Day Salinity Average Trend

Units represent grams of salt per litre (g/L). This is equivalent to both g/kg and ppt.

for specific locations within harvest areas.

Source: FarmDecisionTECH • Created with Datawrapper

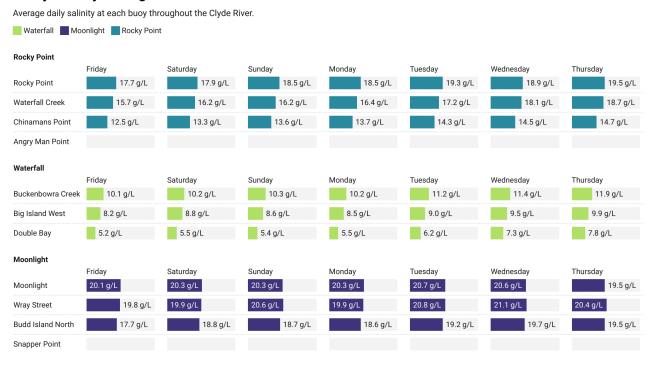
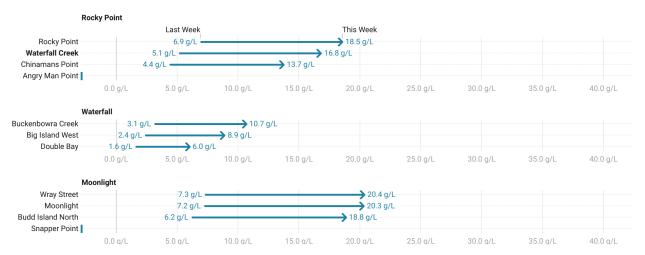


Figure 3: This figure represents the daily average salinity of each of the buoys contained within a harvest area. Its designed to reduce the impact of tides and provide the general trend of salinity over the past week

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

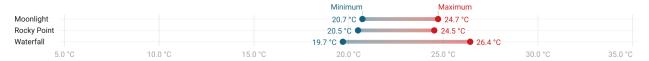
Figure 4: This figure demonstrates the average difference in salinity for this week compared with the prior week. It displays a longer term, general trend to see if salinity is increasing, stabilising or decreasing.

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

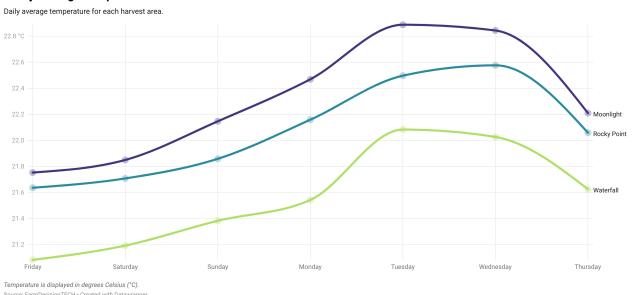


Figure 6: This figure represents the daily average temperature of all buoys contained within a harvest area. Its designed to reduce the impact of tides and provide the general trend of temperature over the past week.

7-Day Temperature Average Trend

Average daily temperature at each buoy throughout the Clyde River. Waterfall Moonlight Rocky Point **Rocky Point** Friday Saturday Sunday Monday Tuesday Wednesday Thursday Waterfall Creek Rocky Point 22.6 °C 22.0 °C Chinamans Point Angry Man Point Waterfall Friday Saturday Sunday Monday Tuesday Wednesday Thursday Buckenbowra Creek 21.8 °C Big Island West 21.0 °C 21.9 °C 22.1 °C 21.7 °C 21.3 °C Double Bay 21.8 °C Moonlight Friday Saturday Sunday Monday Tuesday Wednesday Thursday Moonlight Wray Street Budd Island North 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.

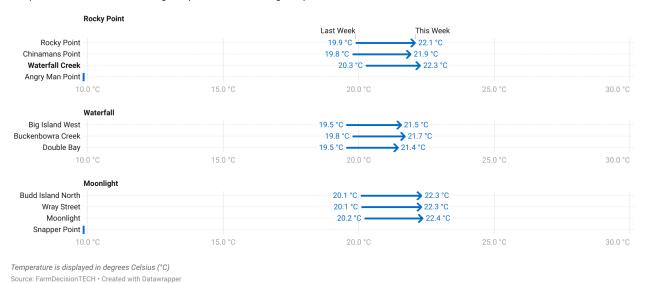


Figure 8: This figure demonstrates the average difference in temperature for this week compared with the prior week. It displays a longer term, general trend to see if temperature is increasing, stabilising or decreasing.

3 Precipitation

3.1 Weekly

7-Day Clyde River Precipitation Daily total precipitation. Weather station is located on Budd Island. Mar 19 20 21 22 23 24 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.

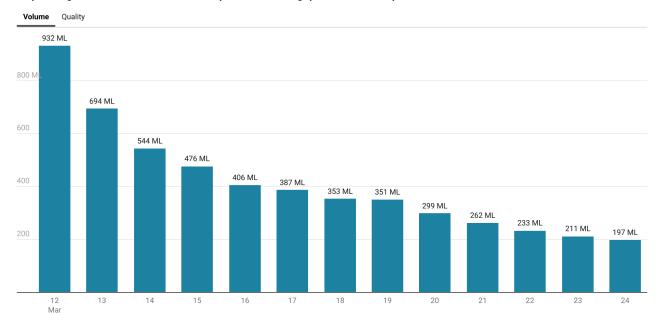


Values represent megalitres per day (ML/day). A mega litre is equal to 1 million litres. Quality Codes: 140 = Best available data, 145 = Data under review, 255 = Dataset not complete Chart: © State of New South Wales through WaterNSW • Created with Datawrapper

Figure 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.



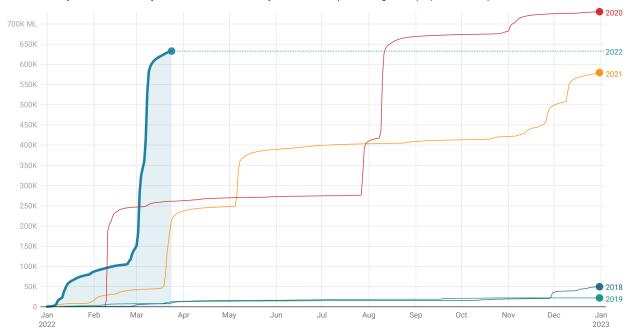
Values represent megalitres per day (ML/day). A mega litre is equal to 1 million litres. Quality Codes: 140 = Best available data, 145 = Data under review, 255 = Dataset not complete Chart: © State of New South Wales through WaterNSW • Created with Datawrapper

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.