CLIMATE JOURNAL

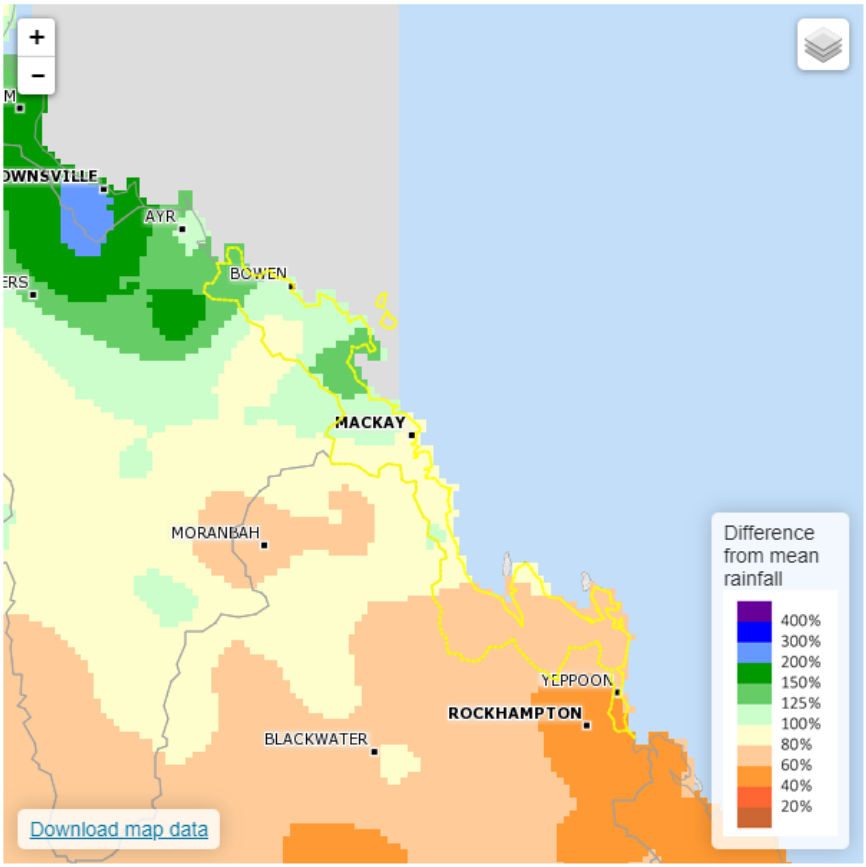
Climate project for 2019 report card

- For the 2019 report card, Wet Tropics and Mackay-Whitsunday-Isaac report Technical Officers worked together over 2019 and 2020 to compile/explore products that would be useful/suitable to report on rainfall (predominately) across regional report cards and streamline technical reports to be similar for this section
- This came about as a recommendation and action from a 2019 ISP who suggested regional report cards align their climate section better, as all reported something different in terms of structure and products used to derive data
- The 2019 technical report, climate section, is the finalised products used, after considerable work undertaken with BOM.
- The exploration for the project went through both the TWG and ISP in 2019 and 2020, and was endorsed at both levels.

Where is the data sourced from?

- Data/products used for the 2019 report card are predominantly from the Regional Water Information Portal.
- To derive the map for the MWI region, follow the following steps:
    - In the assessment type box
        - Topic: Rainfall
        - Analysis: Percentage difference from the mean
    - In the where box:
        - Region: National Water Accounts and other management regions
        - Subregion- Mackay-Whitsunday
    - In the When box
        - Year: the reporting year you need.
- To copy the map into the technical document, at this stage using the snipping tool on your computer.
- To note: Work will continue with BOM to streamline the process further including downloading functions and making sure NRM layers align (It does appear to be aligned).
- Use the graph and statistics tabs along the top of each product to obtain further information needed for technical documents.

Example:



Monthly historic rainfall

- Monthly historic rainfall was requested through BOM, to Jannatun Nahar Jannatun.Nahar@bom.gov.au. Other useful BOM contacts are located in the data contacts folder.
- Follow the steps through from the 2019 MWI long term rainfall monthly historic rainfall for future report cards.

Next steps:

- The 2019 report card is the first year to align climate reporting across northern regional report cards. Further refinements are likely to be expected
- Work with Wet Tropics and Dry Tropics report cards to ensure similar terminology is used in climate section (similar graphs and headings, long-term average vs mean). This would be a useful exercise to incorporate at a strategic TWG session coupled with other alignments across regional report cards
- The work conducted to this point also brought about a great relationship with BOM moving forward who are very willing to assist with climate products and flow tools for regional report cards. A service request letter was sent to BOM and GBRF which was well received. Further work will be done with BOM relating to climate products, led in collaboration with Technical Officers of the WT, DT and MWI.

2020 Data Request:

- Rainfall data was requested by Richard from BoM on behalf of MWI on 05/03/21 using the method described by Alysha above
- request was uploaded into the comms folder for this project

Data Request Meeting with BoM 10/11/21:

BoM staff reviewed the implications on updates from BoM to Richard, Tegan and Talen (including Urooj Khan and Richard Laugesson).

Bureau update (to tech officers):
Alex (in meeting) is the new project lead for eReefs

- eReefs as a whole has tightened up on scope and projects, so the flexibility that we had in the past has been reduced.
    - Bureau is trying to become 'more business-like' and less research-focused.
    - Want to formalise the customer relationship
- The regional water information product (where we can pull graphs etc) on the website has been discontinued for BoM. One of the reasons that this has been discontinued is that the dataset that that product was based on is being replaced with a better dataset ADCG. So all of the bureau's services are going to be transferring to this new system.
- BoM was successful in the next phase of funding for eReefs phase 5

What RRC's need from BoM:
1. Rainfall anomaly data, including guidance on the best ways to display those data
2. Flow data, including issues with sites that don't have modelled flow yet.

Discussing G2G modelling:

- Due to the function of the G2G model, we won't have new data for 2022 RC, but 2023 RC will have new gauging data and location-based modelling.
- However, right now there are new locations (60) in marine environment that have flow data, but no inland locations until 2023.
- For next year, they will have data for the new inshore sites in time for next report card (they'll put a table together with dates for when each dataset will be available)

Regional water product (basin-level product) is no longer available – but the figures that we've used in the past no longer exist.

- They can provide standard maps and figures for Queensland, but can not provide a catchment-level product.

Options going forward:
1. We can use our GIS specialists to do a cookie-cutter figures based on data
2. Request data from Bureau (either time series or figures themselves)

So, no problem with accessing those data, but need to figure out how to make figures out of it.

What does that mean for getting these products in the RRCs for this report card?
We can either…
1. Contract the bureau to do the work, or
2. Get those products internally (with rainfall mapping), or
3. Get a consultant to do the work

Result: based on the meeting and discussions afterwards, it is likely that the RRC's will attempt to make climate products in-house for the 2022 RC due to the short timeframe and the fact that G2G gauging data will be available the following year. Next year, we will re-assess and likely consider hiring a consultant to make standardised products across the Northern 3 partnerships.

2022/2023
As of the 2022/2023 Technical Report the climate section of all regional reports (DT, WT, MWI) is now handled by the Dry Tropics Technical Officer- Adam Shand. This Climate Journal will no longer be updated and is marked as closed.