FLOOD PREVENTION STATEGY MANDALAY, FTP UPDATE AFTER MON 28 FEB 2022 EVENT

The recent river level at cnr Mandalay St and Ormsby St peaked at 8.74 metres, just below the lowest point at 53/55 Mandalay St of 8.75 metres when the bank could break, the Back Flow Prevention valve (B.P.V.) stopped storm water coming to 89 properties surrounding Biami Yumba Park to that height. Unfortunately, due to the river pressure, the B.P.V. would not open to let local rain drain out for two days which caused minor flooding to a height of 7.2 metres and stopped the area exit at the FTP Rd Ormsby Rd junction for 2wheel drive vehicles (and some larger).

The area of flood was the properties backing on to the river and would have impacted those protected by the B.P.V. by an additional 1.54 metres. These 89 properties are in the Michelangelo, Fig Tree Pocket, Kenny, Goya, Ribot, Ormesby, Donatello, Mandalay Sts and Biami Yumba Park. For validation of above, refer addendum below. Remember the 2011 flood level was 10.8 metres so the river bank breach was exceeded by an additional 2.05 m.

The only body with the power to advise people to evacuate or monitor their need to evacuate is the SES, part of state government, not local government. As these 89 properties are unique it is unlikely SES would have the expertise to advise these people specifically as flooding conditions worsen, so property owner's personal assessment is vital when there is another flood event.

There are two computer sites that could help Mandalay residents:-

The Jindalee Boat Ramp Park has an unmanned, automatic equipment to measure river height regularly during flood. The reference is http://www.bom.gov.au/fwo/IDQ65389/IDQ65389.540682.plt.shtml

For the Feb/March 2022 flood it read the top graph height as 10 metres (major flood level) at the time cnr Mandalay St and Ormsby St this river point reached its highest level of 8.74 metres **and is a reasonably reliable correlation**, if it looks to be exceeding 10 metres people in the B.P.V. area residents aught to consider what action they should be taking for their safety and the removal of their treasured effects to higher ground inside Mandalay if the escape route at the cnr of FTP Rd and Ormsby St is impassable.

The attached graph also shows that at 8 metres (moderate flood level)was when the pressure from the river at the BPV kept that valve shut from outflow and the lagoon catchment area began to fill, causing some minor street and property flooding and caused Mandalay resident exit to become practicably impassable for about 2 days, but when the graphed river level dropped to 8 metres at Jindalee Boat Ramp Park, the captured water drained out within an hour and the exit was then available for all vehicles.

The second most helpful computer reference is https://www.brisbane.qld.gov.au/community-and-safety/community-safety/february-2022-severe-weather-event-council-updates-and-impacts/brisbane-river-flood-forecast
This gives the properties in your street likely to be adversely affected by the flood.

Addendum:- Max Beckitt's interview with Patrick Murphy, engineering surveyor with Brisbane City Council who spent most of Wed, 2nd March collating these stats using GPS plus other equipment. You can verify this with a report from BCC, but it will cost a small amount of money to get.

There is a river height monitor under the Centenary Bridge which is 2km closer to Mandalay than the one at Boat Ramp Park. It appeared to not work during the Feb/March 2022 flood. It is now operating but its readings are not quite as easy for lay people to interpret as the words "Moderate" and "Major" are not on it. It is owned by SEQ Water who do not consider it their job to have this information added, this makes it, in my opinion less useful to use from a correlation point of view for people in Mandalay. Its reference is :-

http://www.bom.gov.au/fwo/IDQ65389/IDQ65389.540192.plt.shtml

If a similar device was installed near the Mandalay boat ramp that would be more accurate real time but this currently is not available.

The below graph from Jindalee Boat Ramp Park should be used when there is another flood event.

- A. If it reaches "Moderate Flood", the BPV will stop letting water out of the lagoon area and minor flooding will commence and gradually get worse if local rain persists as the graph level heads higher to "Major Flood" level and won't drain away (particularly at the corner of FTP Rd and Ormsby St) until the river level on the graph drops back to the "Moderate Flood" level. The recent flood in Feb/March 2022 had a substantial amount of local rain in our catchment and may not be repeated.
- B. If it looks to exceed the "Major Flood" level then at 53 Mandalay St the river will rise above the bank level and would cause the properties in the streets near the park to suddenly receive a lot more water, as their property will be lower than the river bank. People should consider evacuation and removing their effects to higher ground.
- C. Reference: http://www.bom.gov.au/fwo/IDQ65389/IDQ65389.540682.plt.shtml

I have been prompted to write this as best I can as, at the time of the Feb 22 flood, I spoke to six families living in the Biami Yumba Park precinct only to find four of them had moved in since the Jan 2011 flood and the four had little idea about how to assess their property risk. PLEASE KEEP INCASE NEEDED

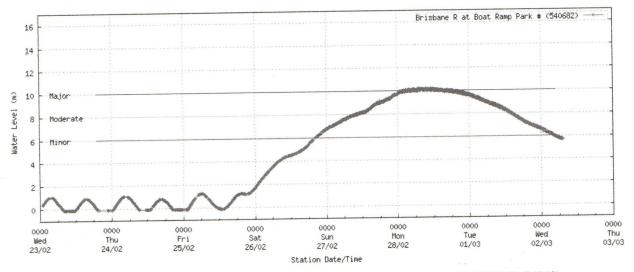
Max Beckitt, B.Bus (Accounting), CPA Ph 33789674 29 June 2022

E&OE

02/03/2022, 08:30

Station details: Station Number: 540682 Name: Brisbane R at Boat Ramp Park # Owner: BCC: Flood levels: Minor: 6.00 Moderate: 8.00 Major: 10.00

Data from the previous 7 days.



Australian Government Bureau of Meteorology

(Generated: 02/03/2022 07:13:18)

<u>Data as Table</u> | <u>Previous Station</u> | <u>Next Station</u> | <u>Back to Bulletin</u>

About this plot

The river height data is the latest available operational data provided for flood warning purposes and has not been quality controlled.
 Stations marked with * or # indicate that the data is provided from automatic equipment.
 Stations marked with * are Telephone Telemetry Devices and are nominally polled once a day and more often during floods.
 Stations marked with # are ALERT Radio Telemetry and report every 3 hours and more often when the water level changes.

5. All river height reports are in metres and are shown in local time.
6. Heights or depths above/below roads, bridges, dam spillways and weirs are given as a guide only. For road open/closed information, see the RACQ website.

the RACU website.

7. This product includes data made available to the Bureau by other agencies. Separate approval may be required to use the data for other purposes. Refer to Listing of Operating Agencies for Station Ownership.

8. Where data is supplied from a Queensland Department of Natural Resources and Mines (DNRM) monitoring site, please refer to advice on data use and copyright.

9. For other Station details: Flood Classifications, Road Crossings, Survey/AHD Details, Maps