

6.5. UPDATE ON CYLONE JASPER AND FOLLOWING RAIN EVENT FEBRUARY 2024

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RECOMMENDATION

That Council note the information about disaster response and community recovery following Cyclone Jasper in December 2023.

EXECUTIVE SUMMARY

Tropical Cyclone Jasper was the wettest tropical cyclone in Australian history, surpassing Cyclone Peter in 1979. Some parts of the Douglas Shire area have received over 4,200 mm of rain since 12 December 2023. Jasper has caused extensive damage to the landscape and left communities devastated in its wake.

BACKGROUND

Jasper made landfall on 13 December 2023 as a Category 2 tropical cyclone off the eastern coast of the Cape York Peninsula near Wujal Wujal. Jasper then weakened into an ex-tropical low and remained traceable overland as it moved southeast. The Bureau of Meteorology (BoM) forecast 350 mm of rain would accompany the cyclone.

However, Jasper took almost five days to move west, and its slow speed produced torrential rain as it remained static. The flooding was historic, breaking all records according to the BoM. The Daintree River peaked at 15.85M – more than 2 metres above the previous record set in 2019. The highest daily rainfall total during this event of 714 mm was recorded at Mossman South Alchera Drive in the 24 hours to 9 am on 18 December (Australia's highest December rainfall total).

Rainfall in December was above average for much of northern, eastern and south-western Queensland. Multiple sites in North Queensland observed 5-day rainfall accumulations (14 to 18 December) of more than 1000 mm. The highest 5-day total (at the BoM station) of 1933.8 mm was recorded at Whyanbeel Valley station. Several non-Bureau sites recorded 5-day rainfall totals of more than 2000 mm, with the Rex Creek Intake recording 2991mm over 6 days. By 19 December, the system weakened and shifted northward, with heavy rainfall easing. Catchment areas remain saturated leading to flash flooding and landslips after smaller rainfall events.

COMMENTS

Under Queensland's *Disaster Management Act 2003*, local governments are responsible for managing and coordinating disaster management activities. Douglas Shire Council stood up the Local Disaster Management Group (LDMG) on 12 December 2023. Since then, the LDMG has been operational for more than 77 days and to date has logged more than 65,000 staff hours.

Jasper has caused extensive damage to the landscape and left communities devastated in its wake. It has different impacts across the Shire, with Degarra severely impacted. Significant landslips have caused major damage to several roads north of the Daintree River, including Alexandra Range and Noah's Range along Cape Tribulation Road and the Bloomfield Track. The landslips also caused major damage to both Whyanbeel water intake and Rex Creek water intake, which is used as the raw water supply for Mossman/Port Douglas water scheme.

The immediate response actions undertaken by Council in partnership with the Queensland Government included:

- Issuing 13 Emergency Alerts
- Resupply of 66,000L of fuel
- Resupply of 5,400L of drinking water to isolated residents
- 10 bulk food drops
- Emergency water deliveries to the communities of Port Douglas, Mossman and Wonga
- Removal of over 1,000 tonnes of green waste and flood waste from properties
- Securing 11 caravans for Degarra residents
- Kept the community informed with 96 water updates and 63 road updates, and
- 22 community recovery and 7 small business pop-up hubs across the Shire.

Road network

The road network within the Shire has been impacted by a variety of differing damage types, including pavement failure (potholes, loss of surfaces), drainage (blocked drains, bridges destroyed) and road structures (debris on roads, landslips and roads washed away completely).

Road damage generally increases from south to north within the Shire, with the Degarra region along the Bloomfield River being impacted the greatest.

Preservation of life, along with safe road access to isolated communities has been Council's key priority. The safety of contractors, staff and the community remains Council's paramount concern whilst obtaining access.

Road access across the Shire continues to be at a much lower road service levels than pre-event. High risk landslips, roads that are now creeks and other significant damage have resulted in single lane only road sections, limited vehicle load and configuration types, limited public opening hours that impact the public.

Specialist engineering advice has been and continues to be sourced to provide safe and effective input into immediate repairs and restoration activities and includes structural, geotechnical and disaster repair specialists.

The impact of damage from ex-TC Jasper has been so significant to the Bloomfield Track and Cape Tribulation Road, that the State Government, through TMR, is onsite providing engineering expertise and staff to ensure the repairs of these roads as quickly as is safely possible to achieve. Council is working with its own teams, specialists, local and regional contractors to continually improve road user safety. However it is anticipated that road impacts will extend into 2026 in some locations, due to the severity of the damage incurred to portions of the road network.

Significant resources each day such as traffic control, road safety inspectors, on-call engineering specialists and strategically located equipment and operators are required on certain roads such as the Cape Tribulation Road to remain open and suitable for the public. Such resources are anticipated to be required for the short to medium term until permanent repairs are finalised.



Image – Noah's Range Landslip



Image – Debris on Cape Tribulation Road



Image – Tension crack on Cape Tribulation Road

Water network

The Queensland Department of Regional Development, Manufacturing and Water stood up the Mutual Aid Coordination Cell (MACC) to assist Douglas Shire during the disaster event. This is a group of water sector experts from local councils and water service providers in Queensland who agree to help each other when the need arises. Through this arrangement, the Coordination Cell supplied equipment and technical expertise to Douglas Shire to help the Council's team manage issues with the water treatment plant and repair the water supply network following heavy rainfall from Cyclone Jasper.

There are approximately 25 new landslips in the Rex Creek catchment, dislodging rocks and boulders, removing vegetation and making the land unstable. Rocks and sand have blocked the water intake, preventing normal water flow into the raw water pipeline. Due to the unstable soil at and above the water intakes, sand and mud are causing high turbidity in the raw water. Turbidity is the measurement of particles of silt, mud, debris etc contained in the water.

High raw water turbidity has affected the water treatment processes by blocking filtration membranes, resulting in more frequent backwashing (cleaning). Although water treatment processes have been effective, water production rates are reduced from normal operational quantities.

The production issues have been exacerbated by increased breaks within the water network, contributing to high water losses. Network breaks have been caused by debris moved by

flood waters, pressure fluctuations and ground movement due to high water tables and soil saturation differences.

The flooding event (ground movement) and the reduced throughput from our treatment plants (pressure changes) has accelerated the natural deterioration of the pipes in the network. This is expected to continue until the end of the wet season and may continue throughout 2024. Until the turbidity reduces, water restrictions will remain in place to ensure there is a continuous supply of water.

Filtration systems and water quality are being regularly monitored. Council's water teams monitor the Shire's reservoir levels and water quality daily, and swiftly work to mend any breakages in the pipeline network as they are reported or identified and clean and repair filters.

Council is continuing to determine the exact technical water source changes. Fundamentally our natural water catchments have changed but to what extent is yet to be exactly understood. This is a priority and once it is better understood, the course of remediation can be determined.

The Department is continuing to support the longer-term recovery and resilience of Douglas Shire Council and other local governments in the region through a cross State agency, local government and water sector group known as the North Queensland Water Sector Recovery Coordination Group. The Department and a range of specialist water consultants and engineers are engaged in looking at a range of short, medium and longer-term solutions to mitigate the turbidity issue and make the water network more resilient in future.



Image – Silt and mud in the water treatment plant at Mossman



Image – treatment filters full of mud

Community recovery

While Council is still responding to urgent infrastructure and operational issues, Council is also focusing on community recovery. Community recovery from disasters can be a complex and often lengthy process, and different parts of the community will recover at different speeds.

A community recovery action plan has been developed as a coordinated approach to:

- support disaster-affected communities' psychosocial (emotional and social) and physical well-being
- reconstruction of physical infrastructure and facilities, and
- economic and environmental restoration, including restoring the natural environment, associated infrastructure and heritage sites and structures, and the management of pollution and contamination).

Council's community recovery actions will be guided by the principles outlined in the Queensland Recovery Plan June 2023. The following four functional recovery groups have been established to coordinate efforts by all government agencies involved in recovery.

1. Human and Social
2. Economic
3. Infrastructure
4. Environment and Building

Each group is responsible for coordination, management, assessment of needs and impacts, and stakeholder engagement. Membership of each group includes relevant representation from Council, Queensland Government agencies, industry representative organisations, the not-for profit sector, and the private sector.

There are a number of relief and recovery programs available for individuals, not-for-profit organisations, small business, primary producers administered by both the Queensland Government and the Australian Government.

Currently 24 Emergency Housing Assistance Requests are active due to flooding or landslide impact on their place of residence. Post-event, there was 76 Emergency Housing Requests activated with Mossman and Degarra the most affected areas.

Residents in Degarra, China Camp, Cape Tribulation, Cow Bay/Diwan, Upper Daintree and Stewart Creek Valley remain at risk of isolation due to land slip and rain events/flooding. Measures are in place for resupply of essential items to these communities if required.

Environmental Recovery

Council and contractors have completed removal of over 1000 tonnes of green and flood waste as part of residential kerbside collections. Collection of flood waste from Degarra is ongoing and Cape Tribulation is the final phase of the kerbside flood waste collection with this programmed to occur in late February. Over 290 mattresses have been collected to date.

Unfortunately, most of the green waste has been contaminated with electric ants and green waste piles will need to be cleared before any further movement of current stockpiles. Green waste will need to be monitored and cleared before any further transportation to prevent the movement of electric ants.

The natural environment in the Douglas Shire has been severely impacted by Cyclone Jasper, including significant impact on the Two World Heritage areas. Funding is becoming available to assist in addressing environmental waste. Environmental waste is particularly evident in the Degarra area and the Bloomfield Valley including household contents, cars, water tanks, boats etc strewn through riverside vegetation and in the creeks and Bloomfield River.

PROPOSAL

That Council note the information about disaster response and community recovery following Cyclone Jasper in December 2023.

FINANCIAL/RESOURCE IMPLICATIONS

The results at the end of January 2024 have started to reveal the impact of Tropical Cyclone Jasper and the associated flooding event. Although it is too early to determine to any full extent, it is to be noted that there could be severe impacts to the Financial Year 2024 result. This will be due to the loss of income from areas such as Daintree Ferry, Van Parks, and other areas impacted by tourism and the cost of emergency rectifications to get essential damaged infrastructure back to a minimum operational level.

The longer-term rebuilding of the damaged assets will be subject to full assessments. The timing of works, and subsequent reimbursement from the disaster funding bodies may also impact the result. Council cashflow will need to be closely monitored to ensure that receipts from the funding bodies are received in a timely manner. At time of writing, Council has committed to spend approx. \$20M in the response and recovery work in the wake of TC Jasper. This is a combination of monies invoiced for forward commitments in the short term. With ongoing road restoration, it is expected this figure will continue to increase.

Disaster recovery funding

Council is working closely with the Queensland Reconstruction Authority (QRA) in relation to accessing funding through Australia's Disaster Recovery Funding Arrangements (DRFA).

The DRFA funding split is:

- Categories A and B – up to 75% Commonwealth and 25% State

- Category C – 50% Commonwealth and 50% State funding
- Category D – funding split is agreed to when the measure is approved.

Council will also seek to access funding available through the \$100 million Queensland Betterment Fund to restore essential public assets damaged in Jasper to a more resilient standard.

More information about Council's funding applications through the various categories of DRFA funding will be discussed at future Council Meetings.

RISK MANAGEMENT IMPLICATIONS

The Cyclone Jasper flood disaster has and will continue to negatively impact Council Operating Results.

The Chief Executive Officer, the Chief Financial Officer and Management Team will continue to monitor and manage financial risks as they are identified.

Activities through DRFA require Council to claim eligible expenses back through the Queensland Reconstruction Authority. Council must follow the eligibility of activities to ensure these costs do not become a cost to Council. Damage has occurred to road, water, ferry, waste and building assets owned by Council and Council must try and restore those assets within the QRA process or via insurances. Restoration of assets is subject to stringent timeframes and eligibility, procurement processes and resourcing. There is a financial and reputational risk to Council that needs to be managed along with community expectation.

Water and road issues will continue to have a significant effect on tourism in the Douglas Shire for a considerable time and will possibly cause financial stress to many businesses. This continues to pose a threat to Douglas Shire's stature as a preferred place to travel in the domestic and international markets.

Council resources have been focussed on responding to the disaster event and as such business-as-usual activities have suffered and the delivery of one off and regular Council activities will be negatively impacted across multiple departments.

SUSTAINABILITY IMPLICATIONS

Economic: The Cyclone Jasper flood disaster will have a negative impact on the economic sustainability of Douglas Shire Council and may impact sustainability ratios. This will be closely managed by Council and mitigated where possible.

Environmental: The natural environment in the Douglas Shire has been severely impacted by Cyclone Jasper. Hundreds of landslips, flood waters and environmental waste have impacted the Two World Heritage areas. Thousands of trees have been destroyed and watercourses have been severely impacted and altered in many cases. Impacts to the natural environment will be ongoing for many years.

Social: It is the intention of the proposed Disaster Recovery and approved financial relief measures to provide some assistance in social sustainability for affected ratepayers.

CORPORATE/OPERATIONAL PLAN, POLICY REFERENCE

This report has been prepared in accordance with the following:

Corporate Plan 2019-2024 Initiatives:

Theme 5 - Robust Governance and Efficient Service Delivery

Strong governance and financial management are the foundations of the way in which Council will conduct its business and implement the initiatives of the Corporate Plan.

Goal 4 - *We will work with our communities to ensure they are informed, empowered and supported so that they are resilient to the impacts of disaster events. Through our leadership and capabilities we will plan, prepare, respond and recover from events so as to minimise the impact on people, property, the environment, and our economic stability.*

Operational Plan 2023-2024 Actions:

Enhance disaster management capacity - Pursue funding opportunities for a Local Disaster Coordination Centre and Training facility.

COUNCIL'S ROLE

Council can play a number of different roles in certain circumstances, and it is important to be clear about which role is appropriate for a specific purpose or circumstance. The implementation of actions will be a collective effort and Council's involvement will vary from information only through to full responsibility for delivery.

The following areas outline where Council has a clear responsibility to act:

Advocate	Council makes representation on behalf of the community on important issues, funding opportunities, projects and programs. Council will use its influence to seek the best outcomes for the community.
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CONSULTATION

Internal:	Management Team
External:	Council2Council support network, North Queensland Water Sector Mutual Aid Coordination Cell (MACC), specialist contractors and consultants.

COMMUNITY ENGAGEMENT

Council has kept the community up to date via a number of methods. The primary method has been online, via Council's website and Facebook with 96 water updates and 63 road updates published since 14th December. Additionally, different community groups, such as Cape Tribulation and Daintree are kept up to date with targeted emails.

Council and State partners continue to operate pop-up community hubs in disaster impacted communities and hold community meetings, where appropriate, to gather and disseminate information. Frequently Asked Question Guides for roads and water have been developed to allow staff to better answer questions from the community.

Representatives on the Disaster Recovery Committees bring community concerns to the group and provide feedback and information back into the businesses and community members.

ATTACHMENTS

Nil