

### Item 3.3

## Devastating Impacts of Floods and Climate Change

File No: S051491

### Minute by the Lord Mayor

To Council:

It is less than 12 months since Council considered a Lord Mayoral Minute relating to serious flooding. During mid-March 2021 large areas of New South Wales were severely impacted, the result of an extreme weather event. Multiple weather systems had combined to produce hundreds of millimetres of rain in short periods of time, as well as gale force winds and dangerous surf.

Many of the communities suffering the worst impacts had been devastated by record bushfires the previous summer and by many years of drought.

At the time, these were described as 1 in 100-year floods, but we have now seen extreme flooding over again. I am asking Council for the City to again stand ready to support these communities – both through a \$250,000 donation to flood appeals and through support from City staff and services in the clean-up. In recent weeks Australia's east coast from the Mary River 255 kms north of Brisbane to the Nepean River in South-Western Sydney has experienced an extreme weather event. Gympie suffered its worst flooding since 1893, with the Mary River peaking at 22.8 metres. Maryborough, also on the Mary River, suffered flooding in parts of its CBD. Heavy rainfall falling south-east Queensland over three days equalled 80 per cent of the region's average annual rainfall. Brisbane received more rain in one week than London typically does over an entire year.

The Northern Rivers area of NSW suffered devastating impacts. The Wilsons River peaked at 14.37 metres in Lismore, breaking the previous flood level record by more than 2 metres. Further south, the Richmond River at Bungawalbin peaked at 7.32 metres, greater than its previous high of 6.1 metres. Downstream at Woodburn, the river topped 7.18 metres, nearly 50 per cent higher than its previous record of 4.92 metres. Other towns, such as Casino which had not previously experienced major flooding were inundated.

Lismore suffered its worst flood in history. Over 3,000 homes were affected, with many being all but submerged. People were forced to seek refuge on their roofs for several hours until they were rescued, in many cases by private citizens using their own boats. Once rescued, those who could not be accommodated in the town's two evacuation centres joined thousands of others who had to rely on family and friends for shelter.

Lismore's CBD was inundated causing severe damage to most businesses. The shopping mall Lismore Square, purpose-built and designed to be flood-proof did not escape. St Carthage's Cathedral built more than 100 years ago on a hill was swamped.

Beyond the immediate impacts, northern NSW residents were faced with a shortage of groceries and essential supplies due to floodwaters cutting off highways from the north and south. The flood's impacts will continue long after the waters have subsided. As of 14 March 2022, more than 3300 homes in the Northern Rivers are now deemed uninhabitable and nearly 7000 remain inundated.

On 3 March 2022, thousands of residents were told to evacuate as the Hawkesbury, Nepean and Georges Rivers began to rise after 100 millimetre of rain fell over parts of Western Sydney, potentially threatening areas from Camden to North Richmond and Windsor. Five days later heavy rain fell on much of Sydney, from Liverpool and Bankstown to Wiseman's Ferry. Areas near the Georges River and Manly Dam were placed under an evacuation order as floodwaters began to rise, with 2000 people evacuating in Manly. Floodwaters exceeded 2021 levels, with playgrounds and caravan parks being submerged on parts of the Northern Beaches.

Total Sydney rainfall for the year to date was already over 800 millimetres. This total would not usually be reached before July.

These extreme weather events can no longer be dismissed as rare occurrences given their severity and frequency. Earlier this month the Climate Council published its report, 'A Supercharged Climate: Rain Bombs, Flash Flooding and Destruction' available at <https://bit.ly/3KCblf4> which explains how climate change is intensifying extreme rainfall.

While La Niña and a particular combination of weather systems has been an influence, these events are taking place in an atmosphere made warmer and wetter by climate change. It notes that the pattern of more frequent, intense rainfall events is now well established in Australia. CSIRO and Bureau of Meteorology data shows that the intensity of short duration (hourly) extreme rainfall events has increased by around 10 percent in some regions in recent decades, with larger increases observed in the north of Australia.

Globally, the frequency of intense rainfall events is likely to almost double with each degree of further warming.

The cost of weather-related disasters in Australia has significantly increased according to the Centre for Research on the Epidemiology of Disasters. After adjusting for inflation, these costs have more than doubled since the 1970s.

Floods are our nation's most expensive extreme weather event, accounting for 29 per cent of economic damages in Australia over the past decade. Between 2010 and 2019, floods caused more than \$10 billion in damages. Annual damages from extreme weather, along with sea-level rise and other impacts of climate change upon Australia, could exceed \$100 billion by 2038. By 2060 floods could cost our national economy an estimated \$40 billion each year according to a Deloitte Access Economics analysis in 2021.

Heavy rainfall and flooding causes loss of life and injury. As of 13 March 2022, 22 people had died in the 2022 floods. Floods can also contaminate food and water supplies and cut off access to emergency services, as has happened along the east coast. Contact with floodwater can cause skin diseases and gastroenteritis. Emotional and psychological distress and mental health issues affecting flood victims can last for many years after a flood event has passed.

The devastating floods and other extreme weather events are evidence of accelerating global warming and the urgent need to take action.

This is why the City of Sydney has had such a strong focus on investing in climate change mitigation and adaption, as well as strengthening the resilience of our community and assets through the Resilient Sydney Strategy.

Recovery from the floods and other extreme weather will take months, if not years, requiring the coordinated efforts of all levels of government.

The City has been in contact with the Office of Local Government and the Local Government Emergency Recovery Support Group and has confirmed we are ready and able to respond to help affected Councils.

Earlier this month we activated the Inner City Emergency Response Protocol for People Sleeping Rough, formalised by the City and the NSW Government in 2015 after Sydney was hit by cyclonic winds, hail and severe thunderstorms and the highest rainfall then registered in over a decade. Under the Protocol our Public Space Liaison Officers patrol the streets and work with the Department of Communities and Justice and NSW Health through St Vincent's Health Network to make sure vulnerable people are looked after, including ensuring safe and dry accommodation for the homeless.

I request that Council continue its longstanding practice of supporting communities impacted by natural disasters.

These donations comply with the City of Sydney Humanitarian Emergency Response Guidelines, adopted by Council in August 2010, the Support for Charities Guidelines which were approved by the Chief Executive Officer in May 2018, and are in line with previous donations.

## **Recommendation**

It is resolved that:

(A) Council note:

- (i) the impacts of the extreme weather event and resulting flooding that has devastated many communities in Eastern Australia;
- (ii) the findings of the Climate Council Report 'A Supercharged Climate: Rain Bombs, Flash Flooding and Destruction'; and
- (iii) the City stands ready to provide practical support to impacted communities through the Office of Local Government and the Local Government Emergency Recovery Support Group;

(B) Council approve a donation of \$250,000 to be sourced from the 2021/22 General Contingency Fund, to the Australian Red Cross Society to support community recovery in flood affected zones.

- (C) the Chief Executive Officer be requested to:
- (i) use City of Sydney online communication channels to encourage additional support to the Australian Red Cross Society from City communities; and
  - (ii) arrange a program for staff donations to the Australian Red Cross Society and for Council to match dollar for dollar any contributions until the end of May 2022 from the 2021/22 General Contingency Fund, with Council to be advised of final amounts contributed via the CEO Update.

**COUNCILLOR CLOVER MOORE**

Lord Mayor