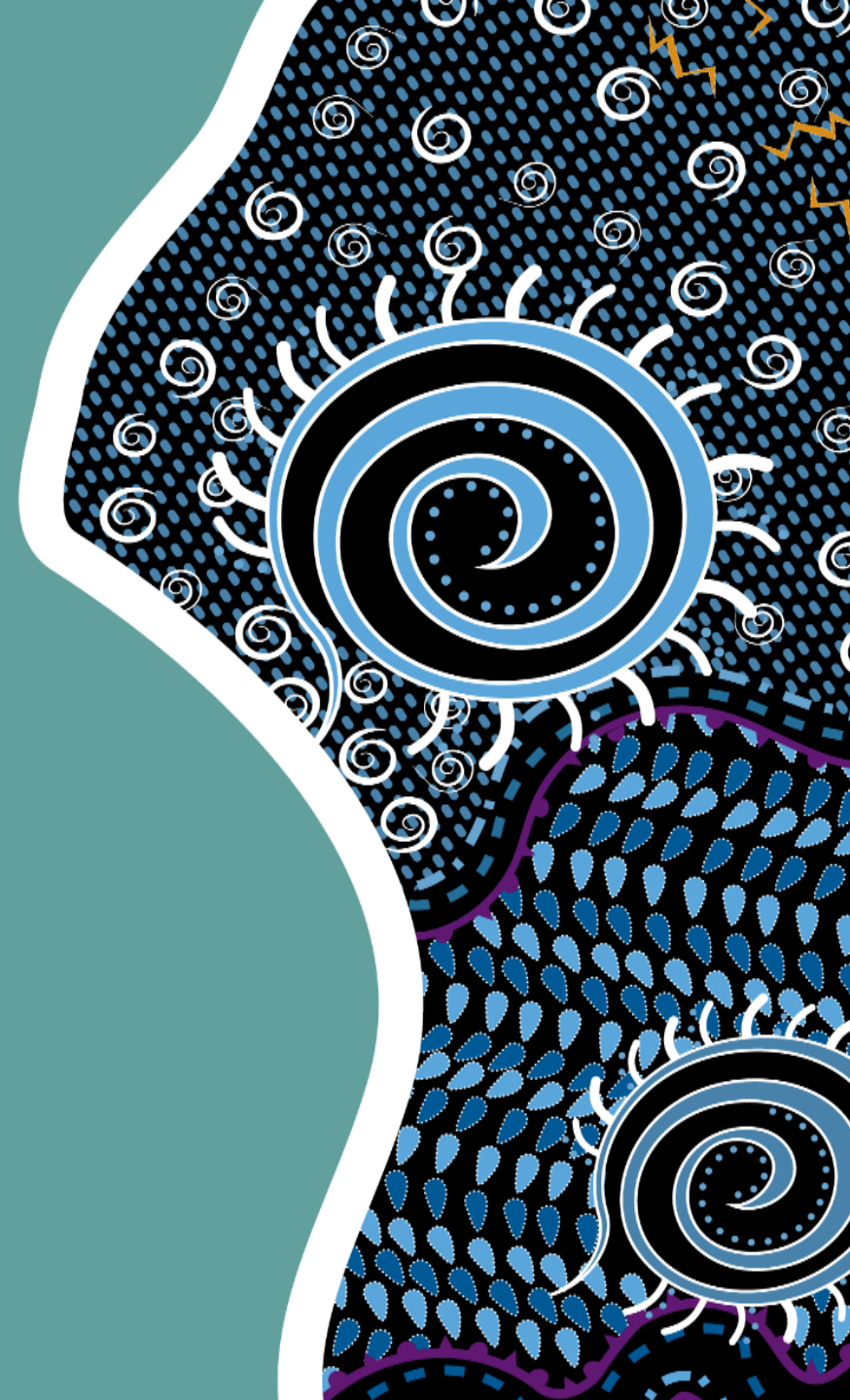




Australian Government

National Emergency Management Agency

Evolution of Emergency Management Data



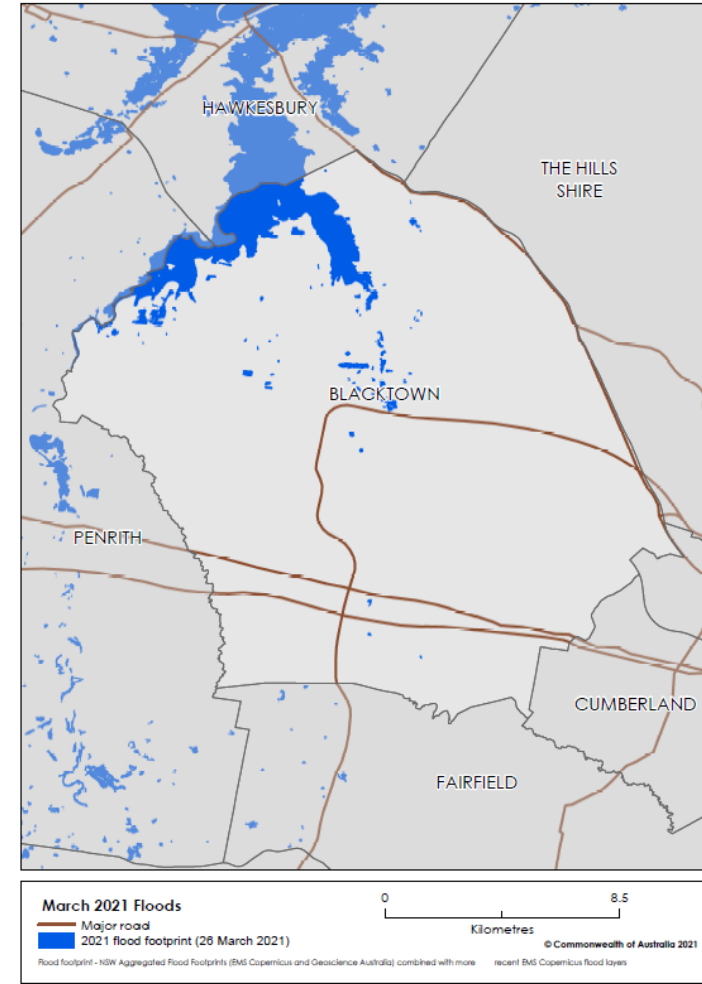
Where's the Hazard?

Flood Extent

- Flood imagery was delivered through optical satellite captured through tasking requests.
- The outputs were impacted by cloud cover but would also present challenges with the capture of water within urban environments.
- Outputs were also limited to the location requested and often did not capture the entire extent of the flooding event.

Flood Footprints March 2021 Floods

FLOOD EXTENT - BLACKTOWN LGA



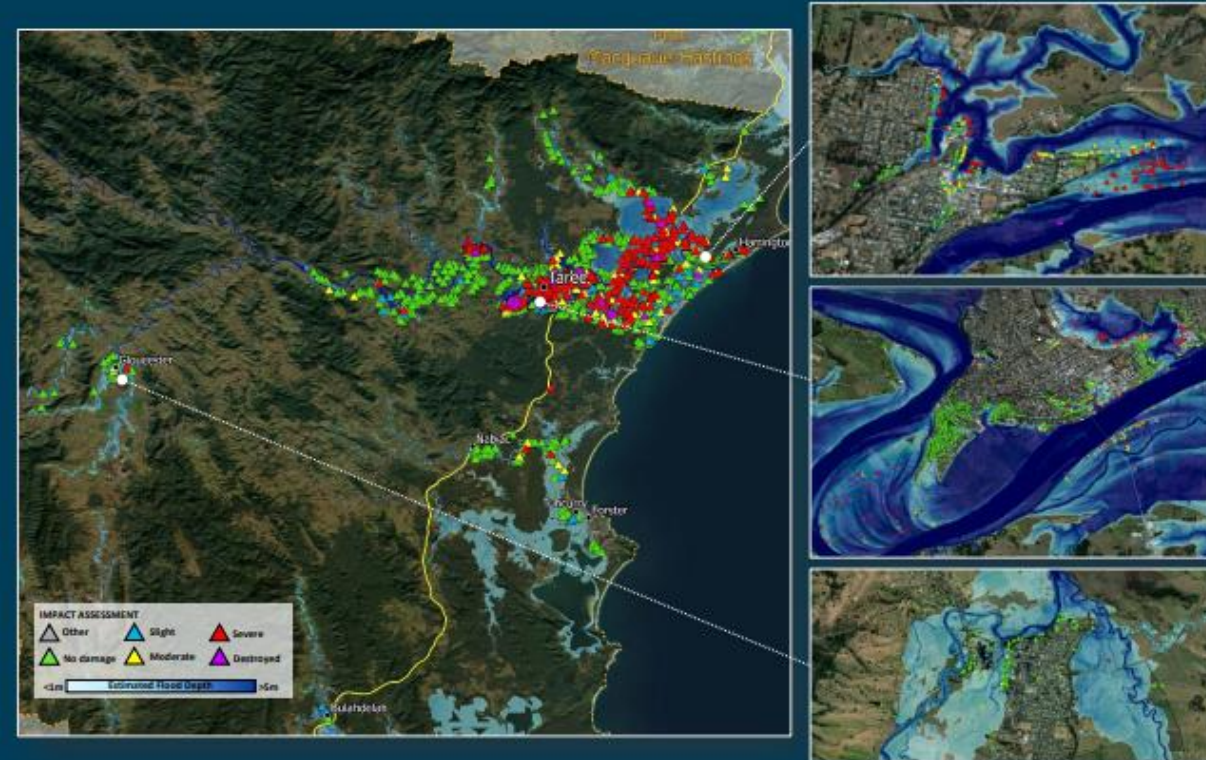
Where's the impact?

Flood Extent

- Synthetic Aperture Radar (SAR) satellite imagery delivers both extent and depth.
- Overcomes the issues of cloud cover and is not challenged by urban environments.

Impact Data

- Intersected with near-real-time state led impact data delivers an impactful product that visually demonstrates impact.



Where is the risk?

National Natural Hazard Disaster Risk Profile - MVP

- NEMA are developing a **National Natural Hazard Risk Profile** Minimum Viable Product (MVP), which will reflect a current point-in-time understanding of natural hazard risks for Bushfire, Tropical Cyclone, Heatwave and Riverine Flood.

Hazard

The *Hazard* profile summarises the 'pure' hazard risk of a region, i.e. the risk irrespective of exposure (or lack thereof) in the region

Exposure (at Risk)

The *Exposure* profile summarises the situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas

Vulnerability

The *Vulnerability* profile summarises the physical, social, economic and environmental factors or processes that increase the susceptibility of the region to hazards

Overall Risk

The *Overall Risk* profile summarises the region's risk, taking into account hazard, exposure and vulnerability

What's Missing?...

Australian Disaster Resilience Index (ADRI)

- The update of ADRI delivers the next evolution in understanding a community's capacity to prepare for, absorb and recover from natural hazards which can be considered independently and in parallel to other inputs, including the National Risk Profile.

