Beyond the Flood Levels Heritage Walk Reference List

The following pages provide a transcript of all written collateral provided in the 'Beyond the Flood Levels' brochure, and referenced sourced.



1. Maitland's 'dry island'

Discover an interactive aerial map that contrasts our city's current landscape alongside historical flood waters.

You are standing on the edge of Maitland's 'dry island', a two hectare area in Central Maitland that remained unflooded during the catastrophic 1955 flood. While much of the city was submerged under floodwaters, reaching 12.10 metres at the Belmore Bridge gauge, ¹ this area including High Street from Elgin and Church Street to Olive Street,² stayed above water.

This stop includes a replica of Maitland based on current satellite imagery, depicting a scenario similar to the 1955 flood, before modern flood mitigation measures were in place. The animated display illustrates the floodwaters reaching their peak in the 1955 flood, submerging iconic modern landmarks.

Take a moment to imagine the surrounding city submerged by floodwaters.

Disclaimer: Maitland City Council does not guarantee the accuracy of the depicted flood model to the 1955 flood, and it does not claim that the model is an accurate prediction of a present day flood, which has many variables.³

¹ Flood height data – <u>Link</u>

² Two historical maps indicate 'Extent to Maitland flood waters' and 'Maitland dry island' - supplied by Maitland Library from physical copy of City of Maitland Planning Scheme Report, 1968

³ Video of simulated modelling for flood management factoring in the existing mitigation scheme by Land and Water Conservation/DPWS

2. Belmore Bridge

Discover a then and now image gallery of the Belmore Bridge showing its vital role in capturing flood level records

The original Belmore Bridge opened on 4 October 1869.⁴ In 1870, the installation of an official measuring gauge using whole feet measurements was installed on the bridge pylon, standardising flood records. Prior to this, data came from the Maitland Mercury's gauge located at Horseshoe Bend,⁵ a gauge located at the stores of Wolfe & Gorrick comparing the floods of 1857 and 1867,⁶ in addition to private observations.

During the 1955 flood, the water rose above the deck of the original Belmore Bridge leaving only the handrail visible. Traffic was stopped, and no assistance could be provided from the Maitland side of the bridge to Lorn. ⁷

The current Belmore Bridge cost £300,000 at the time it was built in 1964. It's made of concrete and steel and was designed to withstand floods. The deck sits well above the record flood levels, supported by rounded columns engineered deflect flood water and debris, keeping it safe during floods. The bridge spans 198 meters (650 feet) across eight sections.⁸

The images at this stop show how the Belmore Bridge has been important for measuring flood levels up to the present day.

⁴ Belmore Bridge Open Date - Link

 $^{^{\}scriptscriptstyle 5}$ 'Out of the Closest Maitland Water Stories' by Cynthia Hunter - Page 14

⁶ Flood gauge at Wolfe & Gorrick - Maitland Mercury & Hunter River General Advertiser, Page 2, 22 June 1867

⁷ 'A Report on The Flood of February 1955 in the Hunter Valley of New South Wales' by W. C. Hawke, LL. B, Secretary, Hunter Valley Conservation Trust - Link

⁸ Maitland City Library website – bridge reference notes

3. Bananas, Bread, and Unexpected Heroes

View an image gallery demonstrating the types of scenes that survivors recall.

Countless stories detail the generosity, resilience and courage of the Maitland community during historic flood events. A series of interviews were conducted by the Hunter-Central Rivers Catchment Management Authority (now Local Land Services) for a special documentary series, focusing on several survivors and rescuers invited to share their memories.

Dorothy Crouch recalled a train from Sydney delivering boxes of bananas. She said wherever you went in High Street, there were hundreds of open boxes and boxes of bananas. For the free community meals that evening, they decided to make banana fritters. After cooking countless fritters, Dorothy's husband became so nauseated by the smell that he couldn't eat dinner.

Frank Morris shared a memory of two brothers who filled their boat with bread from the local bakery. They navigated through High Street, floating the boat up to the building awnings to deliver bread to stranded people. Once the boat was empty, Frank returned home to find 15-18 inches of mud inside, which he and a friend tried to clear with garden spades. Just as they were about to give up, a group of coal miners arrived with large pitch shovels and cleared the house in two hours. Frank was so grateful and never forgot their help.

When speaking of the deliveries of supplies and food, Vince Brooks remembered the planes flying so low over Bulwer Street, that you could almost touch them. He described the crew inside pushing out large boxes of supplies, a couple of which accidentally landed on people's cars. Before the next round of deliveries, residents moved their cars onto the footpath for protection. Thankfully, the delivery guys quickly improved their aim.

All stories referenced from 'Memories come flooding back [DVD] : stories of survival and rescue from the 1955 flood in Maitland' published by Hunter-Central Rivers Catchment Management Authority, 2010.



4. Changing course

Explore a gallery of historical images and maps showing how floods have contributed to the shape of the Hunter River and its impact on Maitland as we see today.

Since Maitland's founding, the course of the Hunter River has changed significantly. This stop highlights the transformation and reshaping of the river and The Levee precinct, showcasing the dynamic interaction between natural forces and human activities.

Recurring floods, urban development, forest degradation, intensive farming, extreme weather events and flood mitigation efforts have all played a role in reshaping the river, its floodplains and the city itself. This is illustrated in historic maps of Horseshoe Bend, evolving flood maps and the development of the Hunter Valley Flood Mitigation Scheme.

The Hunter Valley Flood Mitigation Scheme remains the key structural measure introduced to alleviate flood risks. Early flood mitigation efforts faced challenges, including disagreements among landowners, disputes over the installation and maintenance of flood gates, other flood control measures, associated costs and underestimations of the impact of major floods. After much debate, including the suggestion to potentially relocate the city following the 1955 flood, the current flood mitigation scheme was implemented.⁹

This scheme is comprised of an integrated system of levees, floodgates and drains, operated by the Department of Climate Change, Energy, the Environment and Water with support from Hunter Local Land Services.¹⁰ It is designed to reduce flood damage but does not provide complete flood protection or prevent the river from changing the course. For Maitland to remain resilient, ongoing flood awareness and preparedness are essential. The city must adapt to the changing river course, the emergence of new floods, extreme rainfall events, and the impact of human activities such as urban development and change in land use.



⁹ 'Maitland – Our Place, Our Stories (Maitland & District Historical Society)' - Article by Chas Keys - Link

¹⁰ Department of Planning and Environment website – Link

5. DUKW

Step in to explore the interior and exterior of a life sized DUKW vehicle recreation with your own eyes.

Army vehicles were essential to the evacuation and rescue efforts during the 1949 and 1955 floods. The term 'DUKW' (pronounced 'duck') is an acronym for the manufacturer's code: D indicating the model year, U referring to the body style and utility, K for all wheel drive and W for dual rear axles.¹¹ The amphibious DUKW, a 2.5 ton truck with a boat built around it, was used as military transport during WWII and for emergency evacuations. ¹²

These vehicles were essential, though dangerous, for flood rescue operations. Tragically, one DUKW crew sadly died when their radio aerial struck a 66,000 volt power line.¹³ Despite being able to transport over 30 people at a time through floodwaters, these vehicles were powerless in high currents and challenging to manoeuvre.¹⁴

Explore the inside and outside of a life size recreation of a DUKW with your own eyes.

Disclaimer: Maitland City Council does not guarantee the accuracy of the DUWK replica.



¹¹ DUKW, Britannica – <u>Link</u>

¹² 'Trucks, DUKWs and Surfboards were the heroes of the floods at Maitland in 1995' – Article by Greg Ray - Link. Trove Image Number MELJ0714 – Link ¹³ 'Flood of '55 unforgettable' Newcastle Herald – Link

¹⁴ 'Trucks, DUKWs and Surfboards were the heroes of the floods at Maitland in 1995' – Article by Greg Ray - Link

6. Flood rescue boat

Step aboard and explore a life sized recreation of a flood rescue boat firsthand.

On Friday 25 February 1955, Mayor Alexander McDonald made an announcement requesting urgent assistance from any surf clubs or other organisations in possession of surf boats to assist with rescue efforts in Maitland.¹⁵ Local flood boat crews, along with crews from at least 15 Surf Life Saving Clubs from the Newcastle and Central Coast area responded.¹⁶ Flood rescue and surf boats were able to be manned in fast moving water, unlike other rescue vehicles such as the DUKWs.

An estimated 1,800 people were rescued and 600 ferried to safety across Maitland and the Lower Hunter areas by surf boat crews alone.¹⁷ The boats also delivered supplies to flood survivors and helped rescue small personal belongings, including pets.¹⁸ As documented in the minutes of a special council meeting on 2 March 1955, 'The work of flood and surf boat crews was an inspiration, and one which will leave a lasting impression on our minds.' ¹⁹

This recreation represents 'Phoebe Dunbar', a district flood boat built by the King family, which was later donated to Maitland City Council by the Kirkwood family.²⁰ Many of the photos included here also show the flood levels throughout our city centre.



¹⁵ 'A Report on The Flood of February 1955 in the Hunter Valley of New South Wales' W. C. Hawke, LL. B, Secretary, Hunter Valley Conservation Trust, Pg 18 – Link ¹⁶ 'Out of the Closest Maitland Water Stories' by Cynthia Hunter - Page 63

¹⁷ 'Trucks, DUKWs and Surfboards were the heroes of the floods at Maitland in 1995' – Article by Greg Ray - Link

¹⁸ 'Trucks, DUKWs and Surfboards were the heroes of the floods at Maitland in 1995' – Article by Greg Ray - Link

¹⁹ Maitland Mercury, emergency edition, issued GRATIS, Sunday 6 March 1955 – Sourced by Maitland and District Historical Society

²⁰ 'Out of the Closest Maitland Water Stories' by Cynthia Hunter - Page 63

7. Deep and raging water

View a 3D scene depicting the depth and devastation of the 1955 flood.

When flood waters broke the banks of the Cummins (Comerford's) Dam at Oakhampton, a roaring torrent swept about 20 homes from Mt. Pleasant Street, smashing them into the Long Bridge connecting Telarah and the hospital to the city. Reports described people clinging to their roofs as houses were washed away.²¹ Live power lines dangled dangerously close to the water as floodwaters tilted power poles, and the raging current, filled with debris including livestock, trees and even heavy machinery, added to the danger

At its peak, floodwaters reached more than four metres above ground level,²² sweeping away or wrecking over 30 and leaving others damaged beyond repair. Farms suffered significant losses during the floods, with livestock, structures and crops destroyed. The smell of decay, compounded by layers of sand deposited over once fertile land, lingered in people's memories long after the floodwaters subsided. ²³

A reporter for the Sun Herald wrote: 'Here and there the tops of motorcars can be seen in streets that were considered safe. I look again and the motorcars are now invisible beneath the thick chocolate coloured water.'²⁴ This stop recreates such scenes for you to experience.



²¹ 'The Great Flood of 1955' - Article by Greg Ray - Link

²² 'MAITLAND, THE CITY OF LEVEES - DO THEY HELP OR HINDER?' - R W Dewar, R Hardwick-Jones - Link

 $^{^{\}rm 23}$ 'The Great Flood of 1955' - Article by Greg Ray - $\underline{\rm Link}$

 $^{^{\}rm 24}$ 'The Great Flood of 1955' - Article by Greg Ray - $\underline{\rm Link}$

8. International news

Explore a collection of flood related international media excerpts, original newspaper articles and historical photographs.

The 1949 and 1955 floods were the first Australian natural disasters to be captured on newsreel and broadcasted to international audiences.²⁵ Since television wasn't introduced in Australia until 1956, this footage was screened in movie theatres and later featured in the award winning classic 1978 film, Newsfront.

On Thursday 24 February 1955, the Maitland Mercury published a final edition warning of the impending flood. Soon after, floodwaters damaged the printing press, halting publication until 6 March. When publishing resumed nine days later, ²⁶ the Mercury headlined with 'Courage and Faith Needed Now'.²⁷

This stop includes a collection of international media excerpts, original newspaper articles and historical photos.



²⁵ 'Maitland Flood Films 1949 and 1955 in Colour' - University of Newcastle, Special Collections, UON Library – Link

 $^{^{\}rm 26}$ 'The Great Flood of 1955' - Article by Greg Ray - $\underline{\rm Link}$

²⁷ 'A Report on The Flood of February 1955 in the Hunter Valley of New South Wales' by W. C. Hawke, LL. B, Secretary, Hunter Valley Conservation Trust, Pg 33 - Link

9. Flood Markers

Explore the city's historical flood markers and the impact of floods on this area of High Street through an image gallery.

Visible flood height markers and gauges have been used in various towns to record peak flood levels.

Maitland Railway Station features iconic flood markers etched into its wall,²⁸ indicating the water levels from the 1893, 1949 and 1955 floods. In 1982, more than 100 flood height markers indicating water heights from the 1955 floods were fixed to power poles across Maitland by the Department of Public Works, builder of the Lower Hunter Flood Mitigation Scheme. These heights were guided by maps that were made in the immediate aftermath of the flood and were accurate to within 150mm. Some markers showed a height of more than four metres above ground level, with blue lines marking the 1949 flood peak in some locations. ²⁹

In 2015, the Office of Environment and Heritage installed additional flood markers to commemorate the 60th anniversary of the 1955 flood.³⁰ One of these signs is preserved in the Maitland Library collection and another can be seen in the foyer of the Maitland Regional Art Gallery.

At this stop, you can view a series of historical images relating to Maitland's flood markers and the impact of the floods in this area of High Street. Look up to see one of Maitland's remaining flood markers.

You can also find a link to historian Peter Bogan's walking tour of Maitland's flood markers at mait.city/BeyondTheFloodLevels



 $^{^{\}rm 28}$ 'Where are the city's flood markers' - Maitland Mercury - $\underline{\sf Link}$

²⁹ 'Flood Markers and Signs lacking in Maitland flood' - Maitland Mercury – Link

³⁰ 'Flood Sign' – Maitland City Council collections – Link

10. Maitland Town Hall

Step into history with a life sized recreation of reported flood scenes at Maitland Town Hall.

The iconic Maitland Town Hall, located opposite the Maitland Regional Art Gallery on High Street, has seen its fair share of stories throughout the years. It has been used as a refuge for stranded residents, a coordination centre for supplies and goods, and a central point for emergency communications and discussions relating to Maitland's flood management.

At the peak of the 1955 flood, the water reached the awning of Town Hall's main entrance. Stories describe chairs floating down High Street and rowboats manoeuvring through the double doors of Maitland Town Hall to deliver essential supplies, while the water level was just low enough to clear the awning. ³¹

Experience these scenes in a life sized recreation of Maitland Town Hall at this stop. To view one of the original markers from the 1955 floods, visit the foyer of the Maitland Regional Art Gallery.



³¹ 'Scenes of Desolation' - Maitland Mercury, 21 June 1949, Page 1 - Sourced by Maitland and District Historical Society