

= 2010 Gascoyne River flood =

The 2010 Gascoyne River flood was regarded as the most severe flood to take place along the Gascoyne River in Western Australia on record . Triggered by record @-@ breaking rainfall , amounting to over 6 @,@ 000 percent of the monthly mean , 313 @.@ 6 mm ( 12 @.@ 35 in ) and 5 mm ( 0 @.@ 20 in ) respectively , in just four days , the floods caused widespread damage in the region . By 17 December , the river began to rise in response to the heavy rains , eventually exceeding its banks within two days . Water levels reached record values at three stations along the river , cresting at 15 @.@ 53 m ( 51 @.@ 0 ft ) near Fishy Pool . Evacuation orders were issued for several towns affected by rising waters . The most substantial impact was felt in Carnarvon where entire homes were washed away . Following the disaster , emergency supplies and funds were distributed to affected residents to aid them in restoring their livelihoods . Though no people died in the event , an estimated two thousand head of cattle perished and damage was estimated at A \$ 100 million .

= = Background = =

On 11 December 2010 , a monsoon trough developed northwest of Western Australia . Slowly tracking to the south , the system spawned a low pressure system ( Tropical Low 03U ) by 15 December . Turning southeastward , the low later made landfall near Coral Bay on 18 December . Within hours of moving inland , the system turned to the southwest and moved back over water the following morning . The storm was last noted on 20 December well off the coast of Western Australia .

Climatologically , the region affected by the floods is a dry area , with annual rainfall in most areas averaging between 200 and 300 mm ( 7 @.@ 9 and 11 @.@ 8 in ) . December is regarded as the third @-@ driest month of the year , with a mean rainfall of just 5 mm ( 0 @.@ 20 in ) . Prior to the event , much of the Gascoyne River catchment was suffering from a drought and many places abruptly shifted from drought conditions to record floods in less than 24 hours . Additionally , the river had no water flow before the floods , being a dry riverbed .

Between 16 and 20 December , the low produced heavy rains over much of the area around Shark Bay . These rains reached record amounts in numerous locations and greatly surpassed the monthly mean December rainfall ; some areas reached levels of more than 6 @,@ 000 percent above this value due to the storm . During a 24 ? hour span on 17 December , a record @-@ shattering 247 @.@ 6 mm ( 9 @.@ 75 in ) of rain fell in Carnarvon . This value greatly exceeded both the previous record of 119 @.@ 4 mm ( 4 @.@ 70 in ) , set in 1923 , and the city 's annual average of 228 @.@ 8 mm ( 9 @.@ 01 in ) . Several other locations recorded similar rainfall in the region , also surpassing their annual rainfall totals in under two days . During the five @-@ day span in which there was rainfall , a maximum of 313 @.@ 6 mm ( 12 @.@ 35 in ) was measured in Carnarvon . A total of 23 stations and towns recorded record 24 ? hour rainfall for the month of December in relation to the storm . According to the Bureau of Meteorology , Carnarvon Airport measured its wettest month on record , with 255 mm ( 10 @.@ 0 in ) of rain falling in just four days . The previous record was set in June 1895 at 219 @.@ 7 mm ( 8 @.@ 65 in ) .

= = Impact = =

Prior to the arrival of the monsoon low , the Bureau of Meteorology issued a flood watch for the Gascoyne River catchment on 15 December , stating that 150 to 200 mm ( 5 @.@ 9 to 7 @.@ 9 in ) of rain could fall over the following 72 hours . This was later upgraded to a flood warning as the situation worsened on 18 December . Once the rains ceased on 21 December , the warning was discontinued . During the torrential downpours , the Gascoyne River began to rise on 17 December , threatening to flood several towns along its banks . Water levels continuously rose through the morning of 19 December , at which time the floods attained their peak . In Fishy Pool , the river reached a record crest of 15 @.@ 53 m ( 51 @.@ 0 ft ) , surpassing the previous peak of 12 @.@

23 m ( 40 @. @ 1 ft ) in 1980 . The floods subsided relatively quickly as the river dropped below flood stage on 21 December .

Once the river overflowed its banks , flood waters spread through vast agricultural and grazing areas , severely damaging crops and killing an estimated two thousand head of cattle . By 19 December , evacuations had taken place in rural parts of Carnarvon , with 200 residents residing in emergency shelters . The entire town was isolated from surrounding areas as flood waters cut off all roads ; however , the main centre of the town remained untouched due to levees that were constructed in 1960 . One person had to be rescued by a police helicopter after he was swept away by strong currents . Large portions of the North West Coastal Highway were shut down due to flooding for several days , hindering travel in the region . In Yalgoo , six residents required an airlift after becoming stranded in their home . A total of 30 people were rescued by helicopter on 20 December in Gascoyne Junction . Two days later , the entire town was evacuated and displaced residents sought refuge in Carnarvon . The most severe losses took place in the horticultural plantations which flank both sides of the river in Carnarvon , and in small communities and stations upriver . Several homesteads near Gascoyne Junction were washed away in the floods. and the center of the Gascoyne Junction township was referred to as an , " obliterated ghost town . " Additionally , one person stated that he lost 50 percent of his banana crop . Throughout the affected area , preliminary assessments placed damage at A \$ 100 million .

= = Response = =

By 20 December , arrangements for the delivery of emergency food and water supplies were made and expected to reach Carnarvon later that day . Supplies were also sent to outlying Aboriginal communities affected by the floods . After evacuating on 20 December , residents were allowed to return to their homes two days later in Carnarvon . However , most were left without power and clean water and required assistance from local agencies . Following the disaster , there were concerns that the Australian government could have prevented at least some of the floods by following through with a flood mitigation program . Dudley Maslen , the President of The Shire of Carnarvon stated that he did not want to place blame on any agency , though hoped for improvement during the future . More than 100 local government areas and regions were declared natural disaster areas on 21 December , encompassing areas from central Western Australia to the Pilbara coastline .

By January 2011 , much of the nation 's attention had shifted from the Gascoyne flood to the devastating floods in Queensland . Many residents struggling to get their lives back together were frustrated with the government and demanded aid . Though people affected by the floods were to be given A \$ 15 @, @ 000 in funds , they expressed further anger after hearing that residents in Queensland would receive A \$ 25 @, @ 000 . On 11 January , Prime Minister Julia Gillard stated that the imbalance in funds was to be corrected and residents of Western Australia would receive equal amounts to those in Queensland . By 20 January , donations for flood victims from the Lord Mayor 's Distress Relief Fund exceeded A \$ 1 million . Power restoration , especially in Gascoyne Junction , was unusually sluggish . Dozens of residents were without power for eight weeks , as electricity was finally restored between 12 and 13 February . This coincided with the arrival of replacement furniture from Paraburdoo ; however , heavy rains renewed flooding and prevented most residents from picking up the supplies .