

## The big flood: will it happen again?

Future climate change predictions indicate increased frequency of extreme flood events. Twenty-two lives were lost in the catastrophic Lockyer Creek floods in southeast Queensland (SEQ) in the summer of 2011. Based on river discharge records the event has been described as a 'one-off' but our preliminary dates suggest the recurrence interval is much shorter; less than 200 yrs. This project will deliver a detailed record of the frequency and causes of extreme flood activity for the SEQ region extending back several millennia that will aid future climate change predictions and identify areas of high risk to extreme flood events.

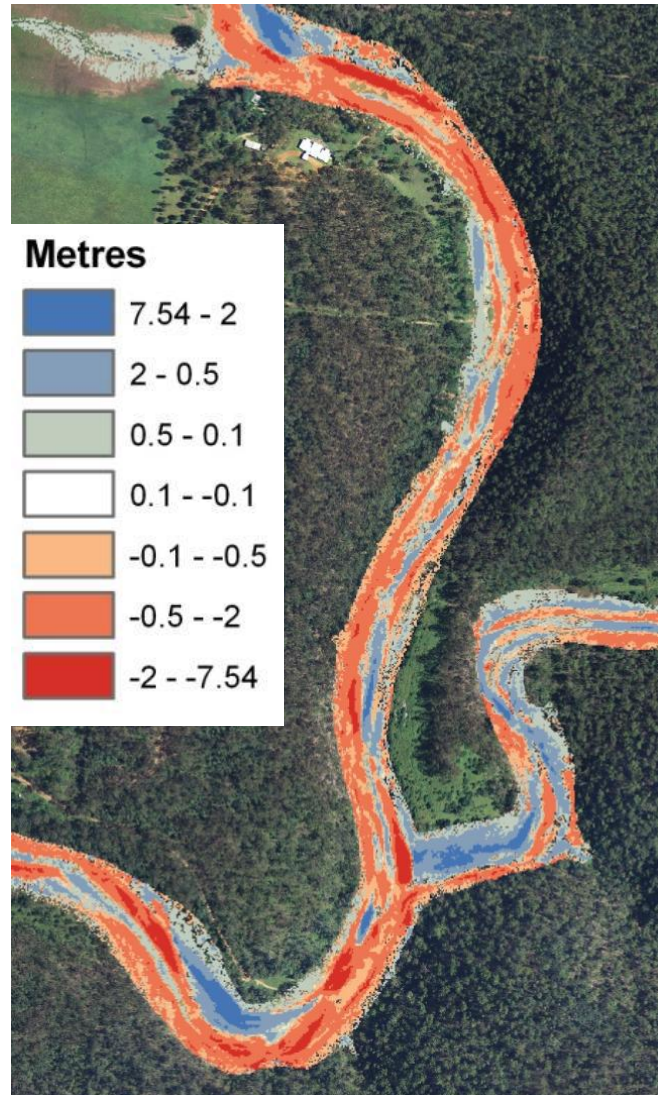
University of Wollongong researchers are contributing by investigating the response of the steep bedrock channels to the high magnitude 2011 floods, by assessing the role of vegetation in modifying or determining the severity of erosion and determining how rivers like the Lockyer have changed since Europeans settled the valley.

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Digital elevation model of difference based on LIDAR before and after the 2011 floods from Thompson and Croke (2013).