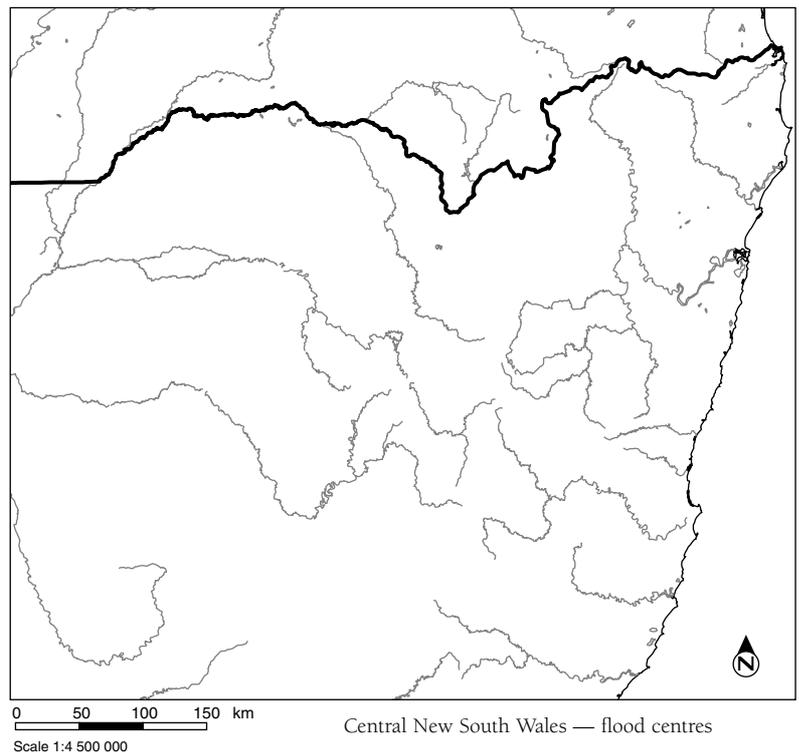


DATELINE: November 2000. The worst floods in half a century have devastated almost a third of New South Wales. 215 000 square kilometres of New South Wales around the towns of Gunnedah, Narrabri and Wee Waa have been isolated by rising flood waters from the Namoi, Castlereagh and MacIntyre rivers. The Namoi River is expected to peak at 8.9 metres. Gunnedah has been the centre of other major floods this century: in 1955 when the Namoi River reached a peak of 9.6 metres and again in 1971 when the peak was 8.97 metres.. This has been the wettest November on record for New South Wales, with rainfall in the flood affected areas being recorded at up to 300 mm by late November. Damage to cotton and wheat crops in these rural areas will cost the economy \$600 million.

- Using the outline map of Central New South Wales at right and page 68 of the *Jacaranda Atlas*, mark in the following place names: **Gunnedah, Narrabri, Wee Waa, Namoi River, MacIntyre River, Castlereagh River, Queensland, New South Wales.**
- On the graph outline below mark the three flood years this century in the Namoi River on the horizontal axis and the heights reached by the river for each flood year on the vertical axis. Use bars to display the data.



- On the blank graph on the right, using bars, plot the mean monthly rainfall for Gunnedah. (Mean rainfall is an average calculation of Gunnedah's rainfall based on data collected over a 60 year period)

Gunnedah
Mean rainfall (mm)

J	F	M	A	M	J	J	A	S	O	N	D	Annual
90.9	72.3	40.9	41.6	49.8	37.8	43.2	36.4	39.7	61.0	64.0	64.8	642.5

- In another colour plot the rainfall for the Gunnedah area in November 2000 (see Dateline) on the graph.
 - What is the difference in rainfall between that of November 2000 and the mean monthly rainfall?
 - The highest monthly rainfall recorded previously at Gunnedah in November was 228.5mm. By how much does the November 2000 total exceed this measurement?
 - What percentage of Gunnedah's mean annual rainfall has fallen in November 2000?

GUNNEDAH
Mean monthly rainfall (mm)

