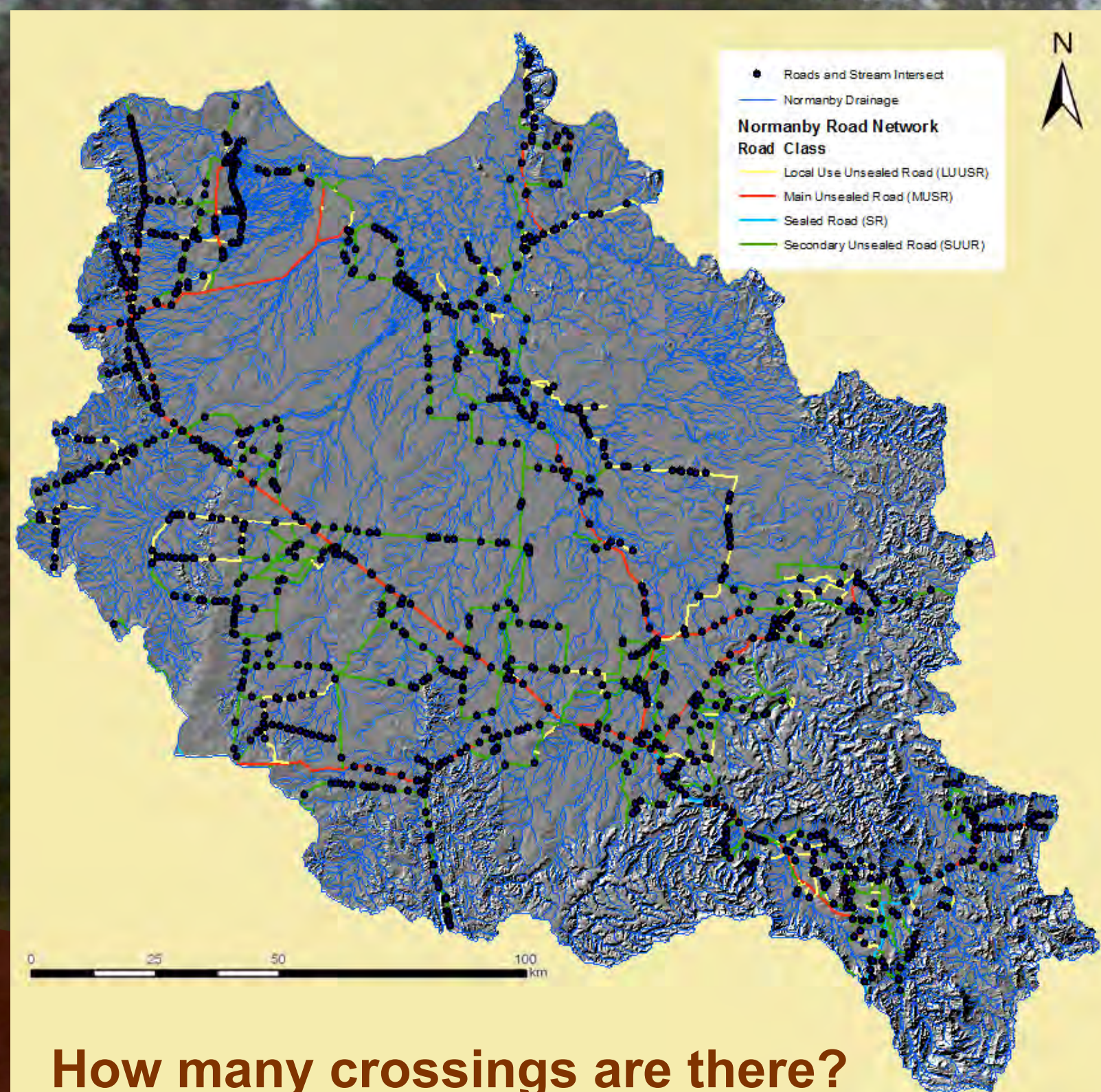


Roads send sediment straight into the streams



How many crossings are there?

No one actually knows: water crossings have never been completely surveyed.

We did a preliminary mapping using Google Earth and 1:100K stream network data (Gleeson, 2012).

Roughly, we can estimate there are over 1,200 places where unsealed roads cross a stream line.

The map shows different road classes and the stream intersection points (black dots).

Many older farm tracks are not visible through GoogleEarth and the real stream network is more extensive than the 1:100K network resolution. So we're certain that the estimated number here is far lower than the actual figure.

*Direct road runoff is bad enough, but there's another problem. A study on secondary unsealed roads showed that **42% of drains had initiated gullies** such as these.*

Bare, unsealed road surface in the Normanby Basin is at least 5676 ha.

This makes roads the largest intensive landuse in the Basin (around 2000 ha more than the horticulture area around Lakeland).

The road network crosses the stream network at least 1,200 times, creating direct pathways for the input of sediment to streams.



Roads may be responsible for as much sediment as horticulture.



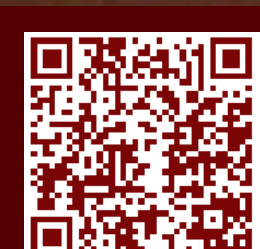
Sediment runoff from roads at stream crossings is a significant problem. Better road design and improved maintenance are urgently needed.



A researcher collects and measures fine sediment deposited in a small channel downstream of a road crossing.



Research team gathering unplanned observation data on bogged vehicle at unsealed road crossing.



Sediment Sources, Sinks & Drivers on the Cape York Savannah

Roads as Sediment Sources in the Normanby Basin

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