

**Portfolio Committee No. 5 regarding its inquiry into the
augmentation of water supply in rural and regional NSW.**

NSW Upper House Inquiry into Water Augmentation

Re: Proposal for a dam on the Belubula River, south of Blayney, NSW.

Reply to Question on Notice

Question:

The Hon. RICK COLLESS: Thank you for coming here today. Ms Paul, the submission from the Daroo Orange Urban Landcare Group says:

We believe such a dam built at the Cranky Rock site the water level at Needles Gap would be raised by up to 50 metres, i.e. more than 380m. ASL, inevitably flooding Cliefden Caves.

What is the threshold level for the Cliefden Caves to become flooded? At what level of water inundation does that occur?

Ms PAUL: I do not actually know that but I know it is available and I would like to take the question on notice.

Dear Portfolio Committee

I made enquiries regarding this question. Below is the reply I received from a local geologist (I have not asked permission to disclose this person's name, sorry)

Reply

...See attached map which is a section of the Bathurst 1:250,000 scale geology map (this is downloadable from <http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/geoscience-information/products-and-data/maps/geological-maps>). I have marked the proposed dam sites in red. The thickest blackist lines are the faults - there are many of them, mostly running roughly north-south. .

The Lachlan Fold Belt is the major geological province covering much of NSW. The caves are in a very small part of the Belt, but the area is certainly well-faulted. From an engineering perspective the dam wall should not be on a fault zone.

I have tried to attach this map to my reply. But due to a 'disk error' I am unable to do so.

The replies from Harry Burkett and Ian Curtis given on the day of the inquiry 17th May, corresponded to the opinions of the two geologists I spoke to.

Yours sincerely

Jane Paul

14 June 2017