

Your details

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Submission details

I am making this submission as	A resident in a flood-affected area
Submission type	I am making a personal submission
Consent to make submission public	I give my consent for this submission to be made public

Share your experience or tell your story

Your story I live with my husband Hugh at The Channon, a small village 15km north of Lismore, on a property of 8 ha. We run a few beef cattle, and also a publishing business selling the books that we produce about rainforest. We are located at the junction of Terania Creek and Rocky Creek and are about 1km below the wall of the proposed Dunoon Dam. (See attached map) These creeks flow on down to Lismore.

Until 2017, floods had never come closer than 4 m below the house and had only ever covered the lowest 1/3 of the farm. The 2017 flood changed that by coming to 1m below the house.

Then on 27th Feb 2022, after weeks of rain, we prepared for what looked like a bigger flood. Although not expecting the water to come in to the house we raised many things. In the shed we lifted our book stockpile to a "safe" height.

Late at night we prepared to evacuate and at 11.05 pm I rang SES to tell them that the website info about Terania Creek being 'steady' was wrong. The creek was in fact rising rapidly and was higher than anyone had experienced before at this place. The person I spoke to couldn't work out why I had rung him, and was clearly trying to get me off the phone. I was worried that Lismore would not know what was about to hit.

We moved the tractor off the property and rigged a yard with an electric fence on the main road (now blocked in both directions) for the cattle. Fortunately they come when called, even in the dark and through fast water. We stayed in the car near the cattle as the whole farm went underwater.

We left our house at 2 am on the 28th and at 2.58 am I received a call from Rous County Council, warning me to evacuate. I told them that we already had. We drove higher up the hill but were unsure where was safe.

At 6.06 am on 28th I received the following text message from the SES :
"NSWSES DAM FAILURE EVACUATION ORDER. ROCKY CREEK DAM. People at your home address BELOW ROCKY CREEK DAM should evacuate now to a higher ground. www.ses.nsw.gov.au or Tel 132 500."

This was very alarming but there was no further information. The morning local ABC radio ran a short interview with Phil Rudd, GM of Rous County Council, assuring people that the warning was an automatic alarm triggered by high water levels in the Rocky Creek spillway. We figured if it had really failed we would have found out by then.

We went back to our house in daylight 5 hours after we had left, and discovered that the water had come up rapidly and already gone down. It had clearly been very fast-moving and had risen to 1 m into the house, and 1.5 m into the 6-bay shed. The house was trashed and \$60,000 worth of book stocks and 10,000 transparencies from Hugh's library of slides were lost. Machinery, tools and materials were washed away or destroyed. We did not have flood insurance since we had believed it was unnecessary.

Extensive rainforest regeneration works that we have been involved in for 8 years at our property and at the adjoining Coronation Park were largely washed away, killed or covered in logs and branches. The surviving trees are mostly horizontal now. This compares with the older creek-side trees upstream in The Channon Gorge and elsewhere which are all erect. The fact that the older trees appear not to have experienced a flood of such ferocity seems to add to the evidence that this flood was exceptional.

Our mobiles still worked during the flood but soon after all connections failed – mobiles, landline and internet – and remained intermittent or non-existent for some weeks. This made early recovery very difficult.

Terms of Reference (optional)

The Inquiry welcomes submissions that address the particular matters identified in its [Terms of Reference](#)

1.1 Causes and contributing factors The causes and contributing factors that I refer to below are those affecting us at The Channon.

1. Climate change
Given that this flood was much larger than other documented events it is reasonable to assume that global heating was one of the contributing factors. This changes everything since we no longer have any idea what the upper limits might be. The evidence from climate scientists tells us that floods like this will become larger and more frequent. We can no longer ignore this and must tackle the cause at the root, ie political decisions that allow fossil fuels to continue to be burnt.

2. Landclearing and deforestation

Landclearing for the last 130 years must have had a contributing effect on the speed of flood water but is difficult to quantify. We need to look at revegetation as one of the strategies to reduce flood damage in the future.

Fortunately, a preliminary plan already exists. This was developed by Rous County Council in conjunction with several LGAs but has never been funded. A discussion paper can be seen here: <https://www.dropbox.com/s/jevzmfyopc8c7ns/Northern%20Rivers%20Watershed%20Initiative%20DISCUSSION%20PAPER.pdf?dl=0>

I would like to see this plan developed, funded and implemented.

3. The proposed Dunoon Dam.

There is another threat that would come into play if the Dunoon Dam (locally called the DuD) were ever built, as explained in the 2012 Environmental Flows Assessment (EFA), commissioned by Rous County Council. <https://rous.nsw.gov.au/page.asp?f=RES-XLS-67-52-33>

This assessment states that the most extreme floods may be exacerbated in the 3 km immediately below the dam wall down to the junction of Terania and Rocky Creeks (where we live).

"Modelling shows that the magnitude of the largest floods may be increased, with the largest flows in the natural regime of 17,280 ML per day shifting to 20,456 ML per day with Dunoon Dam operating".

This is an increase of 18.3% on the largest flood if the DuD were built.

The additional impact is explained by the surface area of a large dam. "When full, the dam acts to increase catchment runoff efficiency, with all rain that falls directly onto the water surface delivered directly into downstream flow when the dam is spilling. This phenomenon results in increased peak magnitude of the modelled flood events when these conditions are met."

The attached map shows our property in relation to the proposed DuD, and Rocky Creek Dam upstream. Our house is within the 3km danger zone, as are four other houses. Two of them were affected by this flood, though not as badly as ours.

We raised this concern in 2020 with Rous County Council but were given the standard assurances that this is "just modelling". However, this overspill phenomenon is well-known amongst flood hydrologists, which is why it was mentioned in the EFA.

If the peak of the 2022 flood had indeed been increased by 18% then the consequences would have been much worse for us and for our neighbours. The overspill effect obviously does not increase the amount of floodwater heading downstream but it increases the magnitude of the flood peak. In our case the peak lasted only a few hours, possibly only one hour, but that is when all the damage occurred.

We believe that this grave threat to residents immediately downstream of the proposed DuD has not been taken seriously by Rous County Council and needs to be taken into account by the inquiry.

Of course the threat of actual dam failure is too awful to contemplate but is nonetheless real. The threat of the overspill effect explained above, and the threat of dam failure would be ongoing sources of anxiety as future flood events will probably continue on an "unprecedented" trajectory.

1.2 Preparation and planning

On a personal level we learnt a lot about planning and we have now implemented many simple precautions, built some high-level storage structures, and have a comprehensive, detailed plan for what to do if threatened again.

On a community level, the outstanding failure in preparation and planning was the inadequacy of the warning system. The rain gauge at The Channon was not working properly, the flood heights were inaccurate and there was no simple system for locals to tell others of the massive falls that they were experiencing. My brother at the top end of Terania Creek recorded 930 mm over 18 hours (and twice in the night the gauge was overflowing when he got up to check). He had no communications and even if he had tried to ring this through to the SES he would have been fobbed off as I was.

This is unforgivable: people drowned, many others spent hours of terror, and 1000's of animals died because there was insufficient warning of the enormity of the flood. Critical rainfall and creek data from upstream did not get through to those trying to estimate the timing and height of water arriving in Lismore.

Fixing and maintaining rainfall gauges and creek height gauges, and ensuring communications, is just a matter of money and commitment. It should not be beyond us as a society to make sure this failure cannot happen. Indeed ensuring that the system was fail-safe should have been implemented after the 2017 flood. There were 5 years to rectify problems but Lismore was caught short again.

This inquiry needs to show how warning systems using accurate, up-to the second data, local knowledge, and extensive redundancies (in case one system fails) can be sent through communication systems that will not go down in a crisis.

I won't comment on the failure of communications that prevented terrified people from ringing 000 or SES. That is another scandal of epic proportions but others can probably discuss that in a more informed way.

1.3 Response to floods

There are numerous comments to be made on the responses made by (a) the ordinary citizens and (b) the local government, state and federal agencies.

However, I will confine myself to a subject that other people may not have mentioned: the false evacuation order given by Rous County Council early on the morning of the 8th Feb:

"NSWSES DAM FAILURE EVACUATION ORDER. ROCKY CREEK DAM. People at your home address BELOW ROCKY CREEK DAM should evacuate now to a higher ground. www.ses.nsw.gov.au or Tel 132 500."

This incorrect information caused unnecessary alarm and, even worse, has now caused a widespread lack of belief in warnings that issue from authorities in general and from Rous County Council and the SES in particular. It sounds like text-book "crying wolf".

In the event of a real dam failure it is difficult to see what Rous and the SES could say to convince potential victims that this time it is a real emergency.

I suggest that in future an alert is issued that reflects the facts, ie that Rocky Creek Dam spillway is now overflowing at a rate which triggers an automatic warning.

We also need accurate information on what this warning means. The spillway might fail, ie gouge out and deepen? The wall might fail? The high level of overflow will cause unprecedented damage downstream? The overspill effect is now in operation and will magnify the flood peak?

An improved warning system for residents below Rocky Creek dam could be incorporated into a drastically improved warning system for the region as a whole.

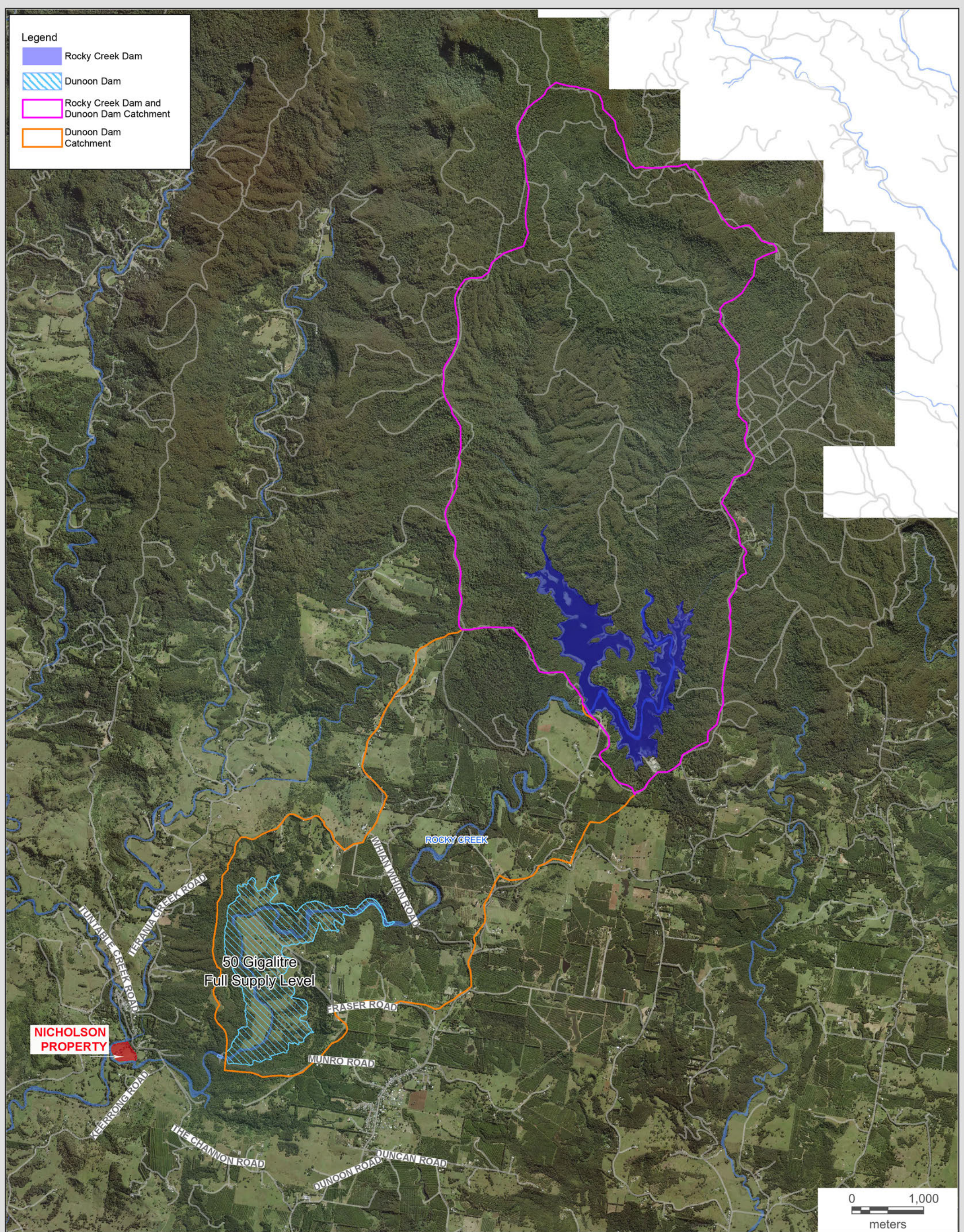
Supporting documents or images

Attach files

- [DunoonDamCatchment_OurPlace.jpg](#)

Legend


-  Rocky Creek Dam
-  Dunoon Dam
-  Rocky Creek Dam and Dunoon Dam Catchment
-  Dunoon Dam Catchment



Dunoon Dam Drinking Water Catchment

THE INFORMATION ON THIS MAP MAY NOT BE ACCURATE.

Disclaimer: The material contained on this map is made available on the understanding that Rous County Council is not hereby engaged in rendering professional advice. While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, no warranty is given that the information contained on this map is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of the information prior to using it.



Printed Date: 12/11/2020
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