## Your details

Title	Mr	
First name	Neale	
Last name	Tweedie	
Email		
Postcode	2154	
Submission details		

l am making this submission as	A business owner
Submission type	I am submitting on behalf of my organisation
Organisation making the submission (if applicable)	Turf Australia
Your position in the organisation (if applicable)	treasurer
Consent to make submission public	I give my consent for this submission to be made public

Your story	I have lived in the Hawkesbury since 1982.
	In the past two years we have been flooded
	three times. The main reason we are getting
	flooded is that Sydney Water hold back water
	until the dam is full and then release it. The dam
	holds four years supply of water which is 2400
	gigalitres and it can spill a years worth of water
	in one day. 660 gigalitres. Sydney Water hold
	back the water because it is free and they make
	a lot of money out of it. However in these
	modern times with the technology from the BON
	we can make predictions that we will get a lot of
	rain which they did in the last two years. When
	they have that information they can release the
	water earlier and allow the dam to be topped up
	by the ensuing rain and create a buffer called
	flood mitigation.
	However, they don't. This has cost my business
	\$600,000.00 in lost turf crop on one farm alone.
	This has cost my business about \$2 million
	dollars over the last two years with loss of crop,
	damage to infrastructure, earthworks to rectify
	flood damage and replanting costs.
	The conservative estimate by Turf Australia is
	that the cost in loss of crop in March 2021 was
	\$84 million and over \$100 million in the higher
	13.8 metre flood of March 2022.
	The turf industry is a large employer inn the
	Hawkesbury / Nepean catchment.
	One of my turf growing neighbours has had to
	lay off 20 staff due to the damage to his property and loss of income.
	Use a multiplier of 6 x those figures for loss of sponding that monoy in the community and the
	spending that money in the community and the
	loss of generated sales from the floods is \$504 million in 2021 and \$600 million in 2022
	million in 2021 and \$600 million in 2022.

The Inquiry welcomes submissions that address the particular matters identified in its <u>Terms of Reference</u>

**1.1 Causes and**No doubt Sydney Water with their lack of floodcontributingmitigation.

factors	Couple that we urbanisation in the catchment which creates increased and rapid runoff from house rooves, driveways and roads. In addition government has allowed developers to move soil from the higher areas in the flood plain to lower areas in the flood plain to create elevated building platforms to meet the 1 in 100 year flood height of 17.5 metres. This creates less area for flood water to push up into and thus creates more pressure on the Hawkesbury / Nepean riverbanks which washes oit and erodes the river banks.
1.2 Preparation and planning	<ul> <li>Preparation for future.</li> <li>Build more desalination plants and drop the levels of the Sydney Catchment dams to create a buffer for when heavy, flooding rain is expected.</li> <li>The millenium drought of 2010 and the drought with bush fires of 2019-2020 has shown us that we can't totally rely on the dams for water supply. We have a population at present of some 5 million people in Sydney and we can't keep up with that in dry times. We are expecting the population to increase to 15 million people by 2050 in 28 years. Where is the water going to come from. It will come from better recycling but also from desalination plants powered by green energy. So why not act now and build desalination plants and create a buffer for flood mitigation by dropping the dam levels before the storms hit us.</li> <li>The maximum flood from computer modelling is 26m which is over the highest point in Windsor at St Matthews church which stands at about 22 metres from memory.</li> <li>There needs to be a central web site which people can access by phone to see when an accurate prediction of flooding will occur.</li> </ul>
1.3 Response to floods	People have been complacent during the dry times about the urgency of evacuation. Most will hang on to the last minute and if we get a 19.6m flood in Windsor as experienced in 1867 you won't have enough flood boats to get people off

their roofs and you will need lots of body bags. No one will be prepared for a 19.6m flood especially the people who have moved into the area in the last 30 years and are naive as to the sheer devastation that can happen. A bit like the reader if this document, unless you have seen the disaster left by a massive food. And it will happen.

Communication will be lost and the roads will be gridlocked. If you think people are going to evacuate early you need to think again. In the March 2022 flood I rang a lady who bought my property at Freemans Reach which is fortunately at 60m in height and will not flood. However the road between Freemans Reach and Windsor is only 10 m in height and as we know the bridge gets flooded and the areas of Wilberforce, Glossodia and Freemans Reach become isolated. I rang the lady to warn her of the dangers and to make sure she was calm and had enough supplies to get through the isolation period. It had been bucketing down, the dam water was being released and she said she had to go into Windsor to pick up her daughter from the train station. I was alarmed as the daughter could have been isolated at the Windsor Railway Station and the mother at the Freemans reach side of Windsor Bridge. To try to assist I rang the Windsor Police Station to see if they had an idea when the bridge was going to be closed. They were useless and not what I expected. They said no, we don't know, you will need to ring the SES. If this is the calibre of how we repond to an ensuing disaster then heads need to roll. There is no excuse for no communication between all authorities, Police, SES, Council, RMS, RFS, Emergency Services etc. There needs to be a central web site which people can access by phone to see when an accurate prediction of flooding will occur.

1.4 Transition from incident response to recovery People need to know when it is safe for them to return to their homes after being evacuated. There needs to be a central web site which people can access by phone to see when an

	accurate notification of safe return to their homes can occur.
1.5 Recovery from floods	Recovery from a flood in the farming industry takes two years. So that's one year loss of the crop and another two years of rebuilding the farm to produce a crop so essentially a totally damaged paddock has a loss of crop for three years. In our case on one farm that is \$600k x 3 years which is \$1.8 million loss of crop on one thirty acre farm. For your interest we farm 120 acres. Fortunately not all farms were totally devastated and we could salvage some crop but it takes twelve months to recover. If Sydney Water and the NSW government insist on not using the dams as flood mitigation then they need to provide Flood Assistance Grants to cover loss of crops.
1.6 Any other matters	Flooding in the Hawkesbury / Nepean is not a new thing. However urbanisation and climate change has produced a whole new set of parameters. Flooding is controllable to a large degree by flood mitigation Flooding causes a huge cost to Primary Producers, mums and dads, home owners, home renters, business houses, landlords, transport companies etc etx. The costs rin into the million for private individuals and government. Proposals for flood mitigation has been placed before consecutive State Governments for 50 years with NO action. The cost of doing nothing is a lot higher than the cost of doing something. Its time to act and stop the haemorrhaging.

## Supporting documents or images

Attach files

<u>Cornwallis Flood letter to Robyn Preston</u>
 <u>2022.pdf</u>

## **Neale Tweedie**

From: Sent: To: Cc: Subject: Neale Tweedie Wednesday, 30 March 2022 4:14 PM hawkesbury@parliament.nsw.gov.au Jenny Zadro FW: Cornwallis 2022

## Hi Robyn,

Thank you for inviting the Minister for Agriculture and Western New South Wales, Dugald Saunders to Freemans Reach on Friday to view and address some of our flood issues in the Hawkesbury, particularly the loss of crop and river bank erosion.

Freemans Reach, Wilberforce, Cornwallis and Pitt Town river banks certainly have major issues with subsidence as you have witnessed but they are obviously a lesser issue (but certainly potentially a greater issue) than the gorge created at the Council flood gates of Cornwallis at present. Please see photographs below.

I attended a meeting yesterday, 29<sup>th</sup> March 2022, in Richmond with a number of Cornwallis farmers hosted by Hawkesbury City Council and presentations were heard from the Director of Infrastructure, Will Barton and the General Manager Elizabeth Richardson. I will give them full credit to stand up in front of about thirty very stressed and angry farmers especially when Will and Elizabeth have only been at Council for a very short period of time. Your presence did not go un-noticed by the attendees of the meeting, but Elizabeth Richardson explained that council had not sent invitations to State and Federal members of parliament. The meeting did request in the open forum to have State and Federal members attend the next meeting.

Will Barton explained that there was basically a process of remediation of the Cornwallis Flood Gates river bank similar to the following :

- Isolate and protect the channel from the river in which Public Works would need to be involved. Engage Environmental Scientists to carry out an environmental impact assessment and the existence of PFAS from the RAAF base and the existence of Acid Sulphate soils.
- 2. Communication with the public, Advisory Meetings, Engagement Plan, Updates on Web sites.
- 3. Permanent Remediation Design, Environmental Approvals
- 4. Calls for Tenders, Procurement and Construction.

Will also explained that there is a process of funding the remediation.

My understanding is that the Federal Government has an agreement with the State Governments to re-instate services. Council forms part of the conduit for communication and managing the project.

I believe that approval has been given for \$10 million to provide like for like re instatement with concrete pipes. There have been concrete pipes sitting on the river bank since May last year.

Since this last flood of 3<sup>rd</sup> march 2022, twenty three of those pipes are now in the river and unbelievably a few of those pipes have been washed inland onto the lowlands some distance from the river bank. That's how forceful the raging river can be in times of flood.

As you can see from the photos below the problem is 10 times larger than the damage caused in the 2021 flood. In 2021 the flood the level was about 13 metres and this flood of 2022 the height reached was about 14 metres. The highest flood on record was in 1867 which was 19 metres which I explained at Anthony farm at Freemans Reach on Monday where on the shed it would be 5 metres higher. That's over the shed we stood next to.

What will happen if we get another flood ?

If it's a large and damaging flood it could re route the river to behind the Richmond RAAF base and cut into the bend on the Hawkesbury River at Macquarie Park near Rickabys Creek outlet.

The Sewer Treatment Plant for the RAAF base sits right behind the gorge created by the floods.

The ponds at the STP plant sit at 5m elevation and the infrastructure sits at 12m elevation. If the river is re routed then it could take out the Sewer Treatment Plant for the RAAF base so the base I would imagine would have to be shut down.

That re-routing of the river would remove large tracts of valuable farmland in which case farmers would mount a class action in court to claim compensation and you could imagine the cost of lawyers alone without asset compensation.

That would isolate some of the high producing turf, vegetable, orchard farms and the tourist B&B destinations dotted along the river so there would be a dramatic loss of income for the Hawkesbury region.

The solution to that problem would be a new bridge to access this new "Cornwallis" island which would come at a ridiculous cost not to mention the enormous loss of business while the bridge was being built.

So you have probably gauged some of my anxiety already as to the lack of progress on fixing the flood pipes which is now a gorge.

We were told last year by a representative of Hawkesbury Council that the Cornwallis Road failed due to the corrugated iron pipes collapsing in the first flood of 2020.

Yes, we have actually had three floods in two years. We were saved in the first flood in 2020 by the catchment dams being at low levels after the drought.

The council representative went on to say that the existing corrugated iron pipes through the river bank were also weak and needed to be replaced as well as fix the collapsed pipes under the Cornwallis Road.

Obviously nothing happened about possibly relining the pipes through the river bank or any other structural solution.

Obviously nothing with any form of urgency has happened in the time between the flood of 30 March 2021 and now which is a period of 12 months to the day.

I don't like a lot of the things that the Chinese Government do, but to their credit they would have this rectification done already. We seem to waste a lot of time in our country.

In Summary of the situation.

- 1. We have a massive problem looming.
- 2. We need Environmental Impact assessments done on PFAS and Acid Sulphate soils. Why the hold up ? The Richmond RAAF have already done PFAS studies.

You can get a soil scientist to report on Acid Sulphate soils in two days. I know, I did a soil report which was provided in two days to submit a DA with Hawkesbury Council which took them 3 months to approve so that I could just re- level my farm after the 2021 flood.

- 3. There are no trees of significance on site as they have been washed away if they even existed in the first place. So no environmental issue there.
- 4. We need Community Engagement. My guess after yesterday's meeting we don't need much more as the meeting attendees were very motivated in support of re construction.
- 5. We need a drone to fly across the gorge and take Light Distancing Ranging images.( LIDAR)
- 6. We need RAAF approval to fly the area with a drone. My local surveyor tells me that they are getting approvals from RAAF in two days at present for drone access.

So at this stage there should not be any hold up for temporary remediation apart from funding which should already be available.

We need Hawkesbury Council to accelerate their processes and your assistance there would be greatly appreciated.

- 7. A new design needs to be done for an upgraded system compared to last year. I assume Council already has Engineers selected for re designs so the selection process of engineers is done.
- 8. Ask the Engineers for a new cost budget for the job to be submitted to State Government asap so that funds can be set aside.
- 9. Engage with Federal Government for funding.
- 10. Look at Options for improvement on design considering increased run off from urban sprawl and climate change impacts. Engage Public Works with accelerated action.
- 11. Call tenders and award tender.
- 12. Construct asap.

Robyn, as you can see, I believe the real problem is the lack of action. I hope you can accelerate the process as we are in need of urgent remediation of our services and river banks to avoid a further disaster.

Please provide by the end of April 2022 what the NSW State Government is going to do about this situation line by line.

Could you also forward this letter to the Minister for Infrastructure and the Minister for Agriculture please and copy me in on your email and their replies as this has become a matter of urgency.

Kind Regards

Neale Tweedie Dipl. Applied Science (Agriculture)

Director of Grechs Turf Supplies Director of Hawkesbury Valley Irrigation Board Member of Turf Australia Board Member of Turf NSW Mobile :

Photos below :

Lack of doing rectification work has now made the task at least 10x bigger.

This is about 1.5km down the road from our farm and behind the Richmond RAAF base at the flood gates..

Cornwallis March 2022. Now instead of 40m wide after the 2021 flood it is now about 130m wide. This could mean a redirection of the river if not rectified soon and loss of valuable farm land making parts of Cornwallis an Island. The photos don't really show how serious the problem could be.





Sent from my iPhone