

Cyclone Gabrielle Submission

Waimatā Catchment Group

1. Tell us about your experience during Cyclones Hale and Gabrielle? What effects have you experienced?

Our catchment group represents 12,000 hectares of forestry, farmland, lifestyle blocks and urban residents within the Waimatā Catchment. The forestry blocks at the headwaters of the catchment - Wakaroa and Mangarara Forests suffered significant land failure. In Wakaroa forest in particular, up to 50% of the land area has slipped in widespread areas. This land held 8-12 year old trees.

Alongside this, hundreds of thousands of tonnes of slash and debris held in the gullies and birds nests within the catchment - caused by the harvest over 2012-2015 - also moved. The consequence was devastating for landowners and the river.

Land has also slipped on the farms bringing sediment, but the majority of damage has been caused by the substantial land failure in the forestry areas in the top of the catchment. Landowners have had tens of thousands of tonnes of logging debris, whole pine trees and entrained sediment and other vegetation flow onto their properties.

Landowners were cut off - in some cases for many weeks, unable to leave their property or get stock out. Two landowners were cut off in Cyclone Hale, and were further severed by Cyclone Gabrielle. Several metres of debris covered farm tracks and land.

One landowner had massive quantities of sediment flow through his yards, dog kennels and manager's house. Another landowner has had 5 or 6 of these events across his property (he is in the main debris flow from Wakaroa forest) - a 50,000 tonne birds nest that has been there for at least 5 years collapsed in Gabrielle and flowed across his property.

The culvert at the 18 km mark at Waimatā Valley Road was overwhelmed and the whole area flooded. Downstream of the 18m marks forestry slash and whole trees have covered farms and lifestyle blocks. Native plantings undertaken by landowners and the catchment group have been covered in sediment ranging from 30cm to 1.5m deep. Slash and trees - overwhelmingly pine, has been deposited in many locations along the river and on properties.

The heavy weight of material flowing down the river (now a "slash way" rather than a river) has scoured the banks and led to wide scale erosion and collapse. Some lifestyle properties have their entire property covered in sediment and debris. Sediment and debris covers the lower catchment terraces and erosion is widespread.

Further downstream in the urban area, properties were flooded. The town bridges, which carry power, water and communication cables for Gisborne City, were blocked by slash, threatening their stability and raising the height of the water so that upstream properties were flooded.

Sediment contaminated with sewage was deposited in many areas used by the public, presenting a health risk. As it dried, the contaminated sediment turned to dust, another risk to public health and safety.

Sediment and slash was deposited on the bed of the river, raising it along with the flood risk for Gisborne City, which is built on a floodplain. Slash was deposited on the beaches, causing a major risk to public safety. Sediment and slash also flowed out into the bay, causing a risk to marine ecosystems and the safety of shipping in the bay.

2. What is it about the way we use land, and how land use has changed over time that led to the effects being so severe?

Wakarua and Mangara Forests were planted post Cyclone Bola as "protection forests" by the forest service - farms were purchased and planted for this purpose. This was because of the widespread devastation and flooding in the catchment as a result of Bola. Much of the catchment was identified as priority areas by the East Coast Forestry Project, so large areas of farmland in the mid catchment were purchased and planted with forestry, often with government subsidies. Most of this has not yet been harvested, so we are yet to see what that will deliver.

Wakarua and Mangara Forests are very steep lands - with thin skeletal soils. Over 2012-2015, Hikurangi Forest Farms harvested these areas using very poor practices, for which it was successfully prosecuted by Gisborne City Council. There were several "small scale" slash events (washing out the 18km culvert on Waimatā Valley Road) before the 2018 winter storms.

In this event there was very widespread failure in Wakarua forest and hundreds of thousands of tonnes of slash and debris was moved off slopes and from failed landings. Hikurangi Forest Farms were prosecuted for this but no remedial work was undertaken. In no instance has any compensation been paid to affected landowners.

In 2018 Aratu Forests bought the Hikurangi Forest Farms estate including Wakarua and Mangarara. Being aware of the risk of slash mobilisation they attempted to get approval from the Council to install a very large slash catching net. This was not approved. A 50,000 tonne birdsnest was identified as a high risk to one farmer's property, which the Council was aware of. No action was taken to reduce the risk of this birdsnest after the Aratu proposal was declined. This birds nest failed in Cyclone Gabrielle.

When the steep lands were harvested a very large amount of sediment was mobilised from the slopes. Analysis of water quality data (reports are available

but we haven't attached them to this submission since you have a lot to read) shows a step change in the declining health of the Waimatā River when the forestry harvest started. The frequent slash events since 2012 have scoured the banks and draped sediment across the catchment. Erosion of the riverbank has increased as slash events damage the remaining riparian vegetation in each event.

In Wakaroa and Mangarara forests the loss of soil during the First Rotation harvest has had another effect - there is now insufficient soil to hold the weight of the trees, leading to whole tree failures. Despite the age of the 2nd Rotation forest canopy coverage is poor, and rain is easily able to reach the soil.

In the many severe weather events we have had over the last year, culminating in Cyclone Gabrielle we have seen increased incidents of whole tree failure. It is now no longer just slash. Landsliding is now so widespread that bare rock is now exposed in Wakaroa Forest. We can see another Tarndale Slip in the making.

The land is not able to take the weight of the trees. The soil is too thin (or gone now) and with it's shallow roots and heavy timber *Pinus radiata* are a terrible choice of tree for steep lands.

3. Are there specific practices or ways in which we use the land that have caused more harm than others? Which of these practices are most important? Why?

Clearfell of pine forestry at the scale undertaken by Hikurangi Forest Farms (and all other forestry companies in Tairāwhiti) is the problem. This is not the Kaingaroa Plateau. Land at 35 degree slopes should not be clear felled - with thousands of hectares being felled each year in this kind of terrain.

The poor practice by HFF no doubt aggravated the situation - and meant that failure of the slopes was inevitable. Fundamentally, however, this land is unsuitable for clearfell forestry. And *Pinus radiata* is an inappropriate species for these areas also.

Now that we have lost so much soil, we expect the 2nd Rotation forest will continue to fail, canopy closure will never be achieved and land will continue to be unable to hold the trees. So this is our new normal.

There also appears to be no requirement for anybody to do anything about the cleanup. Ironically of all the forestry companies Aratu Forests has generally been the best company for helping clearing logging debris on farms - including the problems created by HFF.

But there remains overwhelming volumes slash and trees on the farmers' properties -and past clean up efforts have left piles of slash in the flood plain so it gets picked up in the next storm.

Aside from that the work Aratu has done with the worst affected farmers, most properties receive no cleanup assistance. No remedial work has been done, or anything put in place to lessen the risk of future failure. Now we have very widespread landsliding in the forests, there is a need for urgent soil conservation work (using more appropriate species such as poplars and willows) to repair the slips before the land is transitioned to long term permanent native forest.

4. Is there anything else we should know about that has contributed to the damage from severe weather?

There appears to be no legal obligation for anybody to do anything about the cleanup. This needs to change, so that forest owners are legally liable for damage they cause to the property of other landowners; and the removal of slash is required. If fines are paid for successful prosecutions, these funds should be dedicated to restoration work in the affected catchments.

5. How do the current laws, policies and rules influence the way we use our land? What works well? What is unhelpful? Think about the current legislation, market drivers and conditions, regulations, rules, and the way in which requirements are enforced.

The current NES – Plantation Forestry does not support sustainable management of forestry in Te Tairāwhiti. It has been developed on the premise that all land in Tairāwhiti is suitable for clearfell forestry. That is simply not the case. We need to have the ability to have rules that reflect the realities of doing forestry in the most severely eroding landscape in New Zealand. There needs to be the ability to exclude highly erodible land from clearfell pine forestry uses.

The Tairāwhiti Resource Management Plan also needs significant improvement. As well as identifying land that is generally not very suitable for farming (Overlay 3A) it needs to identify land that is unsuitable for forestry – and Wakaroa Forest is clearly in this category.

The ETS is particularly unsuitable as a means of supporting the transition to sustainable land uses. It incentivises pine forests on land that is totally unsuitable for production forestry or carbon farming.

Pine forests are not permanent forests and should be excluded from this category in the ETS. At present up to 70% of a plantation in the Permanent Forest Category can be legally harvested. This is incompatible with the intention of establishing a category in the ETS for long-term carbon sequestration. This category should be reserved for native forests.

Pine forests planted for carbon are not subject to the NES – Plantation Forestry but can be converted to commercial forestry after 15 years – so there is a huge incentive to plant “permanent forests with pine” – without any of the (inadequate) restrictions of the NES –PF – and then in 15 years time convert

these to harvestable forests, completely circumventing the already weak regulation. This is just another timebomb for our land, rivers and community.

The ETS also creates a punitive situation whereby even if forest owners recognise that pine forestry is not appropriate, and want to do things like establishing wider riparian setbacks (with indigenous or conservation poplars/willows) or retiring the land to indigenous forest completely, they have to pay back the carbon credits. This is just stupid.

The ETS should be supporting sustainable management of steeplands, not creating an even worse problem and preventing their retirement to proper permanent forest (ie indigenous – not fake permanent forest using pine trees). We constantly hear MPI and government ministers talking about “right tree in right place,” and yet the ETS settings that they create are forever putting the “wrong tree in wrong place”.

There appears to be no regulations that require forest owners to remedy the significant adverse effects of forestry slash, whole trees and all the sediment and debris entrained in debris flows from forestry blocks or to require the companies to take measures to prevent such events.

The Council is also behaving inadequately – no remedial work has been undertaken by the Council, despite receiving \$1million in fines from the 2018 event prosecutions. They have been aware of the timebomb of birdsnests and debris in this catchment and others, yet no effort to undertake or require remedial work has been made.

In summary the entire regulatory environment is a failure to the environment and our community. This is a government responsibility, and these failures should be recognised by the payment of reparation funding to affected communities and landowners, to help fund the restoration work that is desperately needed.

6. Anything else you would like to say about the current policy framework?

There is an absence of responsibility being taken by central government agencies for aggravating this situation. MPI reviews of the NES – PF have been a white wash, with a persistent pretence that there are no issues. This is despite frequent and ongoing submissions to the draft and final NES and its reviews, highlighting the concerns and facts on the ground by the Gisborne District Council and the community.

In 2015 the then Minister of Forestry told our community we had to “suck it up” when the impacts of ongoing slash events were raised.

The fact that this is a Ministerial Inquiry – and that one of the members has already had to step down due to a conflict of interest (not to mention the

continued denial of issues by the former Minister of Forestry) highlights how poor the independence of this inquiry really is.

Despite the efforts of our community to input to the inquiry, we expect this to be a whitewash.

7. What is your vision for the future of land use in the region?

We would like to see that Waimatā River – and other rivers in our region returned to a state of ora and wellbeing. That requires some fundamental shifts of land use, and restorative projects in the catchment. This means at least the steeplands at highest risk from landsliding (about 150,000 ha of land in our region) must be retired from unsustainable land use – and in particular need to immediately be retired from clearfell forestry.

An immediate moratorium is needed to prevent the granting of new consents for establishing new production or carbon pine plantations on steep, highly erodible land, along with an immediate moratorium on clearfell harvesting on the highest risk steeplands in the region.

These areas should be returned to indigenous forest – though that is not to say that couldn't be a forest with productive uses. This will be assisted by restricting the Permanent Forest category in the ETS to native forests, along with reparation payments.

In addition to the biodiversity benefits, there is definitely a place for high value, carefully managed indigenous forestry – with helicopter harvest and continuous cover forestry methods.

We also strongly support the continued use of land in our region for farming – including hill country sheep and beef farming. More money is needed to support the indigenous reversion on farms where appropriate, and the planting of conservation trees where farming continues.

We do not want to see our region turned into the carbon sink for the country. We need land uses that support our community to continue to live on the East Coast – but that don't result in horrific environmental destruction and damage to land.

We also support continued forestry activity in our region – but it must be well regulated by fit-for-purpose East Coast-specific regulation. Forestry is an appropriate land use in some locations and also provides an important employer for our region.

8. What do we need to do to achieve this vision?

[Please think about:](#)

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- Immediately? (in the next 12 months)
- In the short term? (next 1- 2 years)
- In the medium term? (3-5 years)
- In the long term? (10+ years)
- Far into the future? (30 - 100 years)
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Immediately

1. Place a moratorium on consenting new production or carbon pine plantations on steep, highly erodible land in the region, along with an immediate moratorium on clearfell harvesting on the highest risk steeplands.
2. Amend the ETS to support the conversion of land to indigenous permanent forest, and exclude pine forestry from the permanent forest category
3. Amend the ETS to allow the conversion of steepland pine forestry to permanent forest without any carbon credit penalty
4. Provide reparation funding to support the recovery/restoration of affected catchments
5. Provide reparation funding to support the recovery/ restoration of forests such as Wakaroa to permanent forest – including the remediation of the extensive landslides and management of the large amount of slash and debris in birds nests and in gullies so that it doesn't continue to cause havoc in every significant rain event.
6. Require those forestry companies that are responsible for the release of slash and sediment from their plantations to clean up all slash piles in the catchments, and repair the damage to roads and bridges.
7. GDC to undertake a plan change to identify land within Te Tairāwhiti where clearfell pine forestry is inappropriate and identify in the Tairāwhiti Resource Management Plan that this needs to be converted to permanent forest.
8. Amend the Tairāwhiti Resource Management Plan to have East Coast-specific controls for better management of forestry and risks of landsliding and debris flow. Allow the Council to progress these Plan Changes on a Fast Track approach.

In the Short Term

1. Provide reparation funding to support the short term recovery/restoration of forests such as Wakaroa to permanent forest – including the remediation of the extensive landslides and management of the large amount of slash and debris in birds nests and in gullies so that it doesn't continue to cause havoc in every significant rain event.
2. Provide reparation funding to support the conversion of other high risk steepland areas to permanent indigenous forest. LEARN from the FAILURE of the East Coast Forestry Project/ Erosion Control Funding Programme (and the Billion Trees Programme), and work with local experts to design a support scheme that genuinely supports landowners to be able to retire land to permanent indigenous forest.

3. Fund research into indigenous forestry, and ways that it can be used to support a Just Transition for landowners of high landslide risk steeplands.
4. Amend the ETS so that existing carbon forestry planted as permanent forest cannot be converted to commercial harvest
5. Amend the NES – PF to create a specific carve out for the East Coast/Te Tairāwhiti so that more stringent rules can be immediately put in place.

In the Medium Term

1. KEEP providing reparation funding to support the recovery/restoration of forests such as Wakaroa to permanent forest – including the remediation of the extensive landslides and management of the large amount of slash and debris in birds nests and in gullies so that it doesn't continue to cause havoc in every significant rain event. This is a long-term requirement.
2. KEEP providing a large amount of money to support conversion of other high risk steepland areas to permanent indigenous forest. LEARN from the FAILURE of the East Coast Forestry Project/ Erosion Control Funding Programme (and the Billion Trees Programme) to design a support scheme that genuinely supports landowners to be able to retire land to permanent indigenous forest.
3. KEEP funding research into indigenous forestry and ways that it can be used to support a Just Transition for landowners of high landslide risk steeplands.

9. Is there anything that shouldn't be changed, for example, things that if changed would make it worse?

Do not in any way encourage carbon farming with pine plantations on the steep, erodible landscapes in Tairāwhiti, including allowing pine trees to qualify for the Permanent Forest category of the ETS.

Pinus radiata is a relatively short-lived, shallow rooting and highly flammable exotic species, a very high risk and inappropriate land cover in a time of climate change. As we have seen in recent projects, the wholesale spraying of land for carbon farms creates a radical risk of ecosystem failure and structural collapse.

These monocultures only worsen the biodiversity crisis, fail to provide employment and offer no benefits to local communities. Instead, they are likely to leave a legacy of degraded landscapes, biodiversity losses and extreme fire risk for local people.

10. In your view, which groups need to be involved in developing solutions and what is the best way for these groups to be involved?

It is critical that decisions about sustainable land use and best approaches in Tairāwhiti are made in Tairāwhiti by people that understand the land. We need

outside expertise to help (and outside money), but we do not need regulations driven from Wellington.

Over the past century, a series of land use changes initiated by central government have proved disastrous for the region. These include the Marginal Lands Act 1950, the privatisation of conservation forests in Tairāwhiti in the 1980s, the NES – PF (2017) which is completely unsuitable in our region, and the ETS, which is incentivising highly unsuitable land uses in Tairāwhiti, with outcomes that are devastating families and communities, the land, waterways and the ocean..

It is time for central government to show some humility, and to encourage strong community input into local land use decisions. The communities who are downstream of the steeplands need to be able to have a major influence on what happens on those lands – as they are the ones who keep paying the price for past and present mistakes.