

**BEFORE THE INDEPENDENT HEARING PANEL
AT GISBORNE**

COUNCIL REF: LR-2026-113441-00

IN THE MATTER OF the Resource Management Act 1991 (**RMA**)

AND

IN THE MATTER OF resource consent applications by **Gisborne District Council – Rivers and Land Drainage** for the construction and upgrading of approximately 4.2 kilometres of stopbanks, associated earthworks, road raising, drainage and stormwater infrastructure, works within and adjacent to the Waipaoa River, temporary water take and discharge activities during construction, vegetation clearance, temporary access works, service relocations, and landscape planting and site reinstatement, referred to as the Te Karaka Stopbank Flood Protection Scheme upgrade.

**STATEMENT OF CHRISTOPHER STEWART COATES –
ON BEHALF OF THE JRD AND PA COATES FAMILY TRUST AND COATES FAMILY**

27th SEPTEMBER 2026

Introduction

1. My name is Chris Stewart Coates. I am a landowner upstream of, and outside, the Te Karaka flood protection scheme. I am a member of the Coates family and a beneficiary of the JRD and PA Coates Family Trust (the **Coates Family**), and I am authorised to give this evidence on their behalf.
2. This statement supports the Coates Family's submission of 7 August 2026 on GDC's application for the Te Karaka Stopbank Flood Protection Scheme upgrade (the **Proposal**). I have read the s 42A report and the Council evidence. Mr Ramon Strong gives expert evidence on the modelling on behalf of the Coates Family; I do not repeat it.

Our position on the Proposal

3. We support Te Karaka being better protected from flooding. Our family knows better than most what a flood does to a community.
4. But the scheme achieves part of that protection by putting more water on properties outside it, upstream and downstream, including ours – and the Application does not properly assess the actual effects on those properties, or set any conditions to mitigate them.
5. We oppose the Proposal in its current form for that reason.

My involvement in the community meetings and steering group and consent process

6. My involvement in the background to the proposal began when Joss Ruifrok, Council's Regional River Manager, told me Council was hoping to form a steering group for Te Karaka through the community meeting process, and thought that with our family's knowledge of the area above the scheme we could bring that perspective to it. I attended most of the community meetings and all of the steering group meetings.
7. I have continued to be involved in this resource consent process as the application for the proposal identifies that it will have adverse effects on our farm by making the flooding issues on the farm worse. The family has invested considerable time, effort and expense in being involved in this process because we are concerned to ensure the increased

flooding effects on our land caused by the proposal are properly understood and addressed.

Background

8. The Coates Family Farm covers approximately 100 hectares across three titles at 48, 62 and 76 Whatatutu Road, Puha (the **Farm**). It sits on the true right bank of the Waipaoa at its confluence with the Waikohu, upstream of the Kanakanaia and Rangatira bridges and outside the area the Proposal protects. Sixty hectares is high-productive land which is leased for summer cropping and then returned to us as pasture, where we fatten roughly 1,200 lambs through the winter. A further 30 hectares of high-productive land is in a long-term lease to the neighbouring nursery. The remainder is farmed by the family. The map below shows the farm.



9. Four generations of my family have farmed this land. Alongside the farm, three generations of family earthmoving businesses have worked across the wider area and in the upper Waipaoa and Mangatū catchments. That has given our family a close, first-hand understanding of how this country and its waterways behave, and of how they have changed over time.

10. The buildings and assets on the Farm are:
- (a) at 48 Whatatutu Road, the workshop and implement sheds, which are the base of Coates Earthmovers;
 - (b) at 76 Whatatutu Road, a cottage occupied by a retired past farm employee, together with the woolshed and stock yards; and
 - (c) at 62 Whatatutu Road, where two dwellings once stood before they were categorised FOSAL Category 3 after Cyclone Gabrielle, acquired by the Crown and demolished. A two-bay pole shed, water tanks and a water system remain at this site.
11. The farm is a key part of our family's livelihood and day to day life. My mother, brother and I all work on the family farm in various capacities.

Flooding on the Farm

12. Our family has watched the flooding here get worse and more frequent over the generations. We have seen floods of every size, and we have a good working knowledge of how the two rivers behave at our place. In Cyclone Bola in 1988, the water reached the front lawn of my grandfather's house and stopped roughly 300 to 500 millimetres below floor level. In Cyclone Gabrielle in 2023, water ran about 1.2 metres deep through the same house, and my father, John Coates, drowned there during the evacuation. What unfolded that night was nothing like anything three generations of our family had seen before. The magnitude and speed of the water overturned everything we thought we knew about how this river floods and how bad it can get in a very short period of time.
13. Flooding is not a new problem for us. Since the conception of the original Te Karaka Flood Protection Scheme, the Farm has taken on flood water earlier than the adjacent properties. The river has reached levels that flood our land at least 28 times since 2000.
14. Currently, at approximately 7.2 metres on the Kanakanaia gauge, the Farm starts to take on water – below the levels of the larger floods that tend to be remembered. In the early stages, the drains and lower-lying ground mean the lower flats quickly become inundated, which limits the options for getting stock out. Soon after that, the road at Coates Corner,

the dip on Whatatutu Road at Puha, goes under – all before any evacuation warning is issued for Te Karaka. Because the two rivers behave differently from each other and rise fast, decisions about stock and people have to be made early: more often than not at night, quickly, and before any warning. The Kanakanaia gauge record alone shows nine floods over 8 metres in that time, four of them over 10 metres – and the Farm starts flooding at 7.2.¹

15. When the Waipaoa is running high it backs up the Waikohu, so the Farm floods from the side as well as from the front. Backwater is a known effect on the Farm, and the Te Karaka scheme adds to it: the stopbanks narrow the river below us, and water that cannot get past the town backs up onto our land. How much, and how it behaves, is hard to model because of the confluence and the aggradation and sediment that come with it. Once Coates Corner is under, the Farm is cut off from Te Karaka. A project is being consented to raise that section of road, but the Farm will still be isolated above 7.5 metres between Te Karaka and Whatatutu Road. Nobody can get in to help, and nobody on the Farm can get out.
16. As the water rises and falls, its velocity changes, and that is what does the real damage: it strips away fences, takes out water systems, damages equipment and buildings, and carries wood debris from the upper catchment that piles up against whatever is in the way. Some of that damage is temporary; some is permanent. It is not just how high the water gets, but how long it sits: pasture and crops are affected by silt and scattered wood debris, standing crops are usually a write-off, and the silt takes a season and a lot of work to get highly productive land back into production. Each flood leaves the drains silted and the ground changed, so the Farm goes into the next one in worse shape than the last – the effects are cumulative. It has got to the point where we no longer fence our lower paddocks, because floods come so often, and do so much damage, that the fences cannot be salvaged or repaired.
17. INSERT: photos – each with a one-line caption: date, location, what it shows.

Key concerns

¹ GDC Kanakanaia gauge record, peak levels 1948–2023.

18. **What the assessment says about the Farm.²**

62 Whatatutu Road (former dwelling sites) – design event +310 mm; depth above ground 1.95 m (north) and 2.08 m (south); hazard H4 → H5 at one building.

48 Whatatutu Road (workshop) – design event +310 mm; 1.63 m above the workshop floor; hazard H4 → H4 (no change).

76 Whatatutu Road (cottage, woolshed and yards) – omitted from the CFA. Council’s hearing evidence now says the cottage floods only in the over-design event: +380 mm, depth 2.34 m → 2.72 m, H5 unchanged. Woolshed and stock yards not assessed.

The land – design event 0.25 to 0.5 m increase across the Farm; “significant parts of the property experience an increase of one hazard class.”³

19. **Calibration.** During the pre-application process I offered to Dean Foote to come to the Farm and survey the known flood heights from Cyclone Gabrielle, so the model could be checked against what actually happened here. That was never taken up, and there are no calibration points in the DHI modelling report for this part of the river. The one place a comparison can be made is the workshop, where the floor has been surveyed. The CFA puts the Gabrielle flood at 0.69 metres above the workshop floor.⁴ It was closer to 0.8 metres from floor level. If the model is 100 millimetres or more short on the one building it can be checked against, the 310-millimetre increase predicted for the Proposal cannot be taken as the full picture.

20. A 310-millimetre increase, or “no change” in hazard class, can be made to sound small or minor. It is not.

21. On the CFA’s own figures the design flood is around 2 metres deep over the ground at the house sites and more than 1.6 metres over the workshop floor. To put that in perspective, these two locations were known to three generations of our family as the high, safe ground on the Farm – the places you went to in a flood. In Cyclone Gabrielle, that is where

² Te Karaka Consequential Flood Risk Assessment, Tonkin + Taylor, 19 March 2026 (Application Appendix 8), Tables 5.8–5.9 and 5.15; Statement of evidence of Mark Hooker on behalf of GDC, 14 September 2026, paras 10.36–10.44 and Tables 4–6.

³ Statement of evidence of Mark Hooker on behalf of GDC, 14 September 2026, paras 10.39 and 10.42.

⁴ Te Karaka Consequential Flood Risk Assessment, Tonkin + Taylor, 19 March 2026 (Application Appendix 8), Table 5.15 (Cyclone Gabrielle scenario, building 4652144); DHI, Te Karaka Flood Resilience hydraulic modelling report (S92 response, Appendix 4), calibration section.

my brother made three attempts to reach our father, and where he recovered his body. This property was catastrophically affected, and in my view, the assessment does not adequately reflect the scale of the effects experienced on the farm. Council's own depth map compares the Farm under the existing scheme with the Farm under the Proposal, in the design event. Four metres of water is above the roofline of a single-storey house. Under the Proposal, nearly 40 per cent of the Farm is under that depth, and almost two-thirds of the Farm is under more than 3 metres.⁵

22. **The hazard rating for the Farm goes up.** Council's own flooding witness says "significant parts of the property experience an increase of one hazard class in the design event",⁶ and Council's planner accepts that the Project "pushes water" onto submitters' land.⁷ Council's own hazard map shows what that means: under the existing scheme about a third of the Farm is in the highest hazard class, H6; under the Proposal it is half, with 13 hectares moving from H5 to H6 and the small area of safe ground shrinking further. Over three-quarters of the Farm is already at H4 or worse.⁸ The assessment does not go on to say what that means for the people, stock and business on the Farm.
23. **Velocity.** Based on what I have seen during floods over many years, the velocities shown in the assessment do not reflect how water actually behaves on the farm in a flood. They are taken at peak depth, which is when the water is deepest but slowest. On the Farm the damaging velocities come as the water rises and as it falls – when it is running across the flats rather than sitting on them – and they change again each time the water finds a new path: over the road at Coates Corner, through a fence line, back out to the Waipaoa. A single peak-depth velocity misses all of that, and the hazard class built on it misses it too. I would ask that the re-assessment look at velocity through the whole event, not at one moment in it.
24. **The wrong baseline, and no cumulative assessment.** The flooding on the Farm today is not its natural state. It is a product of the existing scheme – the 1980s stopbanks and the 2001 upgrade – which already pushed water onto our side of the river, and which was

⁵ The Property Group, Te Karaka Flood Resilience Improvements – Coates Property Flood Depth Plan, ref JO-26-00360, 19 August 2026 (Annexure A).

⁶ Statement of evidence of Mark Hooker on behalf of GDC, 14 September 2026, para 10.42.

⁷ Statement of evidence of Sven Exeter on behalf of GDC, 14 September 2026, para 16.17.

⁸ The Property Group, Te Karaka Flood Resilience Improvements – Coates Property Flood Hazard Plan, ref JO-26-00360, 19 August 2026 (Annexure B).

never assessed, mitigated or compensated for on our land.⁹ The Application treats that engineered condition as the baseline and measures only the additional effect of the Proposal on top of it. That is not a cumulative assessment. The actual effect on the Farm is the existing scheme's effect, plus the Proposal's effect, plus the rising bed, over the life of the scheme – and the past, present and future effects on our land all belong in it. Water kept off Te Karaka has to go somewhere, and our land is where it goes. The Farm has been carrying the scheme's water for forty years; the Proposal adds to that. It is, in effect, part of the flood management of Te Karaka, and it should be assessed as such.

25. While we know that this resource consent application is only for the proposal and the latest increase in the height of the stopbank, we do not think it is fair or reasonable for our family farm to continue to be subject to ever-increasing flooding effects without proper assessment and without any mitigation.
26. **Aggradation.** Every report on this scheme since 1987 identifies aggradation as the reason the stopbanks have to be raised,¹⁰ and Council's consultants give it as the reason Cyclone Gabrielle overtopped the existing scheme.¹¹ In 2001 Council's officer's report put the bed rise at "an average of 3 centimetres per annum", forecast the new capacity "will be reduced to 3,650 cumecs in approximately 30 years", and called the upgrade "the best medium term option available".¹² Gabrielle overtopped that scheme in 2023, eight years early, with a flow at or below its design standard, and Council's consultants put that down to "aggradation trends over the previous two decades".¹³ Yet aggradation has not been considered in the assessment of the effects on our property or the councils latest modelling.¹⁴
27. For this Proposal, Tonkin + Taylor have adopted 14 millimetres a year.¹⁵ Council's own river surveys say otherwise. Council's cross-section archive for the reach from Te Karaka up past the Farm (cross-sections 30.5 to 41, 1950s to 2017/18) shows the bed rising at

⁹ GDC Officer's Report WP201044, 28 November 2001, paras 6.2.4–6.2.8.

¹⁰ Waikohu County District Scheme Review No. 1 (1987), pp 16–17; GDC97/634 (November 1997); GDC Officer's Report WP201044, 28 November 2001, paras 3.4 and 11.3; Tonkin + Taylor, Te Karaka Flood Management Optioneering – Final Option Recommendation, September 2025, s 8.1; Tonkin + Taylor, High Level Geomorphic Assessment – Te Karaka Flood Management Optioneering, September 2025 (v2); Stantec, Technical Review – River Hydrology (s 42A Appendix 6).

¹¹ Tonkin + Taylor, Te Karaka Flood Management Optioneering – Final Option Recommendation, September 2025, s 2.

¹² GDC Officer's Report WP201044, 28 November 2001, paras 3.4, 6.2.2 and 11.5.

¹³ Tonkin + Taylor, Te Karaka Flood Management Optioneering – Final Option Recommendation, September 2025, s 2.

¹⁴ Te Karaka Consequential Flood Risk Assessment, Tonkin + Taylor, 19 March 2026 (Application Appendix 8), s 7.3.

¹⁵ Tonkin + Taylor, Berm Sediment Accretion Assessment (S92 response, Appendix 3).

every section, 11 to 45 millimetres a year, averaging 26 – about 1.5 metres since the 1950s.¹⁶ Along the Farm’s frontage (cross-sections 36 to 41) the bed has risen at 28 millimetres a year and the berms at 46, with berm rise of up to 4.1 metres. The berms are rising faster than the bed at 16 of 22 sections: the channel is narrowing and the floodplain is filling. The Te Karaka sections are the quiet part of the reach; the rates step up from cross-section 34 upstream, which is our end. The record ends before Gabrielle, which Tonkin + Taylor’s own geomorphic assessment says raised the active channel by about half a metre, with heavy deposition on the true right floodplain – our side.¹⁷

28. So overall, the Council’s own record at the farm shows a bed rate double the 14 millimetres the Proposal relies on, and a berm rate more than three times it. Tonkin + Taylor accept that aggradation at Te Karaka “is expected to persist for decades”, that repeated deposition “must be expected”, and that the lowest-risk long-term strategy “may ultimately be a managed retreat”.¹⁸ Yet the 310 millimetres of extra flooding forecast for the farm is measured against the static 2023 bed only. We want to know what the effect on the Farm will be at the start, middle and end of the scheme’s life, not just at the time the modelling is done, years before the scheme is even built.
29. **The emergency warning system.** Warning systems such as Etxt alerts and digital notifications are put forward as mitigation for increased flood hazard.
30. On the night of Cyclone Gabrielle they failed us: the last Etxt warning we received put the river at 8.5 metres, and it peaked at over 12 metres on the Kanakanaia gauge.¹⁹
31. Three years on, on the night of 9 July 2026, only a couple of months ago, the Waipaoa rose through the levels at which the Farm floods. At about 2:00 am on 10 July my brother went into floodwater on the Farm, alone, to get stock out, at one point within about 100 metres of where our father died in Cyclone Gabrielle. A friend came and helped him out. At about 5:54 am the gauge reached 7.791 metres. The river rose past multiple trigger

¹⁶ Waipaoa River cross-sections 30.5–41, bed and berm aggradation 1950s–2017/18, plotted from the GDC river cross-section archive adjusted to the 2013 benchmark datum (Annexure C).

¹⁷ Tonkin + Taylor, High Level Geomorphic Assessment – Te Karaka Flood Management Optioneering, September 2025 (v2), s 4.

¹⁸ Tonkin + Taylor, High Level Geomorphic Assessment – Te Karaka Flood Management Optioneering, September 2025 (v2), ss 2 and 5.

¹⁹ GDC Kanakanaia gauge record: 12.270 m, 14 February 2023.

levels in the Flood Warning Manual that night.²⁰ Not a single warning was issued – no Etxt, no social media post, nothing.

32. I met with Joss Ruifrok and Ben Green of Civil Defence after that event on 19 August 2026 to raise my concerns about flood risk affecting the evacuation routes, and the lack of any review in this consent process of the hazards and emergency procedures for Te Karaka. The Proposal does not identify the points at which the routes in and out of Te Karaka fail. The road north is cut at about 7.5 metres. The road south is estimated to fail at roughly 9 metres – but neither Joss nor I could say with any confidence at what level it actually goes, and that is the concern. I also raised concerns about the warning system itself.
33. What I took away from the meeting was that the Flood Warning Manual is reviewed once a year by a small team as part of its normal process; that the trigger for Coates Corner in the Manual is wrong and would be corrected to about 7 metres; and that the level at which Newman’s Dip – the key point on the road south – goes under is not known, and will not be assessed until after consent. The consent conditions only require the Manual to be updated within 20 working days **after** the scheme is completed.
34. Hawke’s Bay’s schemes included a weak-points and emergency response assessment in their consequential flood assessments; this scheme has none. Very little else came out of the meeting. Both roads are cut well below the level the new stopbank is designed for. If a large flood were to breach the scheme, there would be nothing that could be done to evacuate residents from inside it at Te Karaka.
35. **The Whatatutu Road bridge.** The bridge over the Waikohu at the southern boundary of the Farm was not assessed in the flood modelling. Council’s evidence says the design flood would be about 2.5 metres above the deck, and therefore concludes blockage is not a problem.²¹ That misses how blockages actually happen. Wood debris lodges against the bridge as the river rises through the lower levels and stays there through the peak, so the bridge carries that load through the whole event. It blocked in Gabrielle.²² The road-raising now being consented at Coates Corner adds to it: that dip has been a natural

²⁰ Tairāwhiti Flood Warning Manual – Waipaoa River trigger levels. {INSERT: section / page reference.}

²¹ Te Karaka Consequential Flood Risk Assessment, Tonkin + Taylor, 19 March 2026 (Application Appendix 8), Table 4.8. {INSERT: paragraph of Council evidence stating blockage is not a problem.}

²² Memorandum of Jamie Botes, GDC investigating officer (coronial inquest Exhibit 18).

spillway, and once it is raised, water and debris that used to pass over the road are held back towards the bridge. And Council does not treat the drainage through the culverts across the Farm as a Council drain; it says it is a private asset. So the Farm carries more water, the outlet for it is not Council's responsibility, and the structure that takes the load has not been assessed.

36. **Conclusion on concerns.** For the reasons set out above, we do not have confidence that the modelling and assessment undertaken has accurately identified the full extent of the effects the Proposal may have on our Farm.
37. For Te Karaka, getting the assessment a wee bit wrong might mean the scheme provides a few less years of flood protection than anticipated. For our family, getting the assessment wrong has real consequences. It affects decisions about the safety of our family, how we manage stock and operate the Farm, whether we invest in infrastructure, our ability to obtain insurance, and ultimately the long-term future of the Farm.
38. These are not theoretical concerns for us. They affect the safety of our family, how we farm the land, and the future of a property that has been in our family for four generations.

What we want

39. **A fair, true-effects assessment.** A re-assessment of the Farm that:
 - (a) is checked on the ground;
 - (b) accounts for every building, structure and asset on the property;
 - (c) factors in the berm accretion and bed aggradation Council's own consultants project, over the design life of the scheme, including when the freeboard and design capacity are used up;
 - (d) includes a debris-blockage scenario at the Whatatutu Road bridge; and
 - (e) says what the effects mean for our livelihood, for the safety of the people on the Farm, and for the financial and emotional burden on our family.
40. Going forward, bed and berm levels should be surveyed three-yearly and after every significant event, so the assessment stays current.

41. **Mitigation agreed before a decision, not after.** Council's evidence says mitigation will be worked out after consent, property by property.²³ For the Farm, nothing has been identified. The compensation process Council relies on runs off the CFA, and the CFA is what is wrong; it cannot sensibly proceed on the current figures. The Applicant should show, as part of the Application and before a decision, that the effects on each property in the CFA have been avoided, remedied or mitigated.
42. If consent is granted, I support the kinds of conditions sought by Mrs Eriksson, counsel for the Coates Family: property-specific assessment of the Farm; mitigation identified, agreed and in place before the scheme operates; monitoring and review if actual effects exceed those predicted; and a process for what cannot be mitigated. Updating the flood warning arrangements for properties upstream should also be part of that mitigation.
43. **Emergency procedure risk review.** A full review of the hazards and risks the scheme poses to Te Karaka: the early isolation of the township once the roads north and south are cut; the potential for catastrophic failure of the stopbank, by overtopping or by the bank itself failing; and the levels and flood risk of the Mahaki Tiaki Tangata emergency evacuation centre, so that the people inside the scheme know whether the place they are told to go to will be above the water.
44. We are not asking for the town to be less safe. We are asking not to be left carrying the difference, without anyone having properly looked at what that difference is.

Conclusion

45. In summary, I do not believe the Coates family are acting unreasonably or asking too much through this process. We have been open minded and supportive of the purpose of the proposal, despite the fact it will adversely affect our farm. We accept that Te Karaka needs better flood protection. However, if that protection comes at an increased cost to properties outside the scheme, those effects should be properly understood and addressed.

²³ Statement of evidence of Sven Exeter on behalf of GDC, 14 September 2026, paras 17.16 and 18.13.

46. What we want is a fair assessment of the actual effects on our farm, a clear understanding of what those effects will mean for our family and livelihood, and appropriate mitigation of those effects before further flood risk is imposed on our land.
47. Thank you for your time.

Annexures

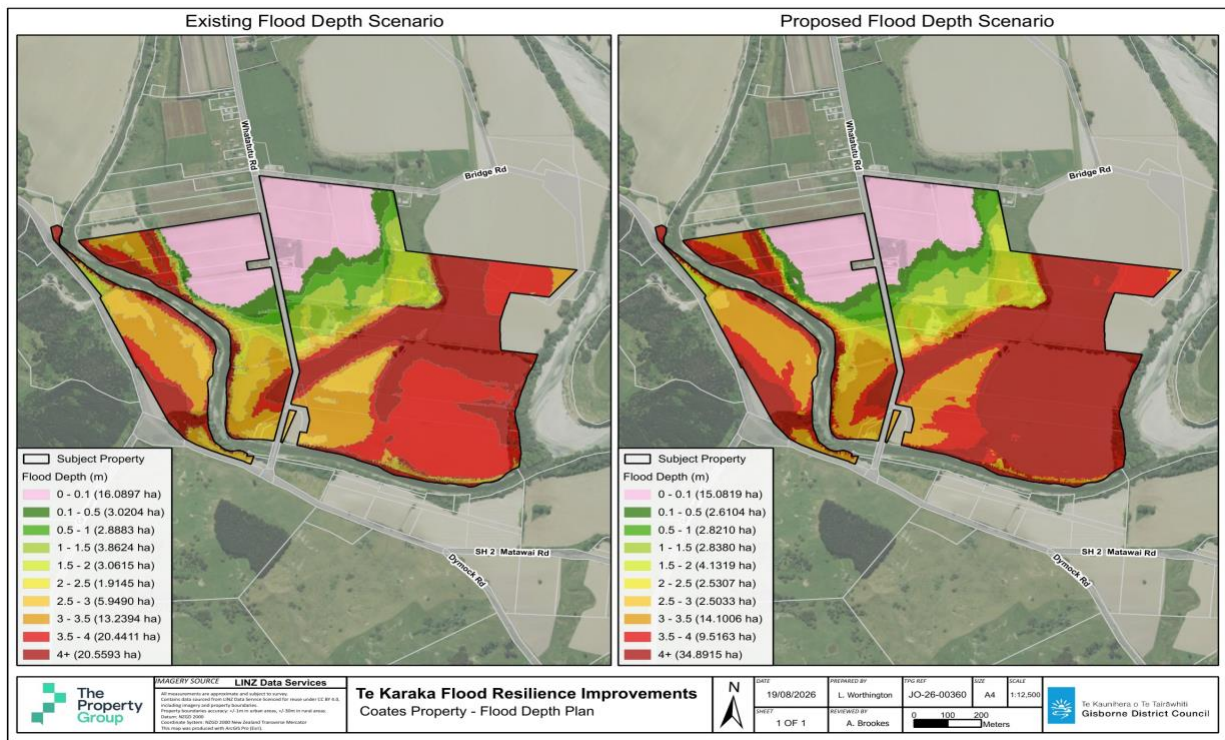
A – TPG Coates Property Flood Depth Plan, JO-26-00360, 19 August 2026

B – TPG Coates Property Flood Hazard Plan, JO-26-00360, 19 August 2026

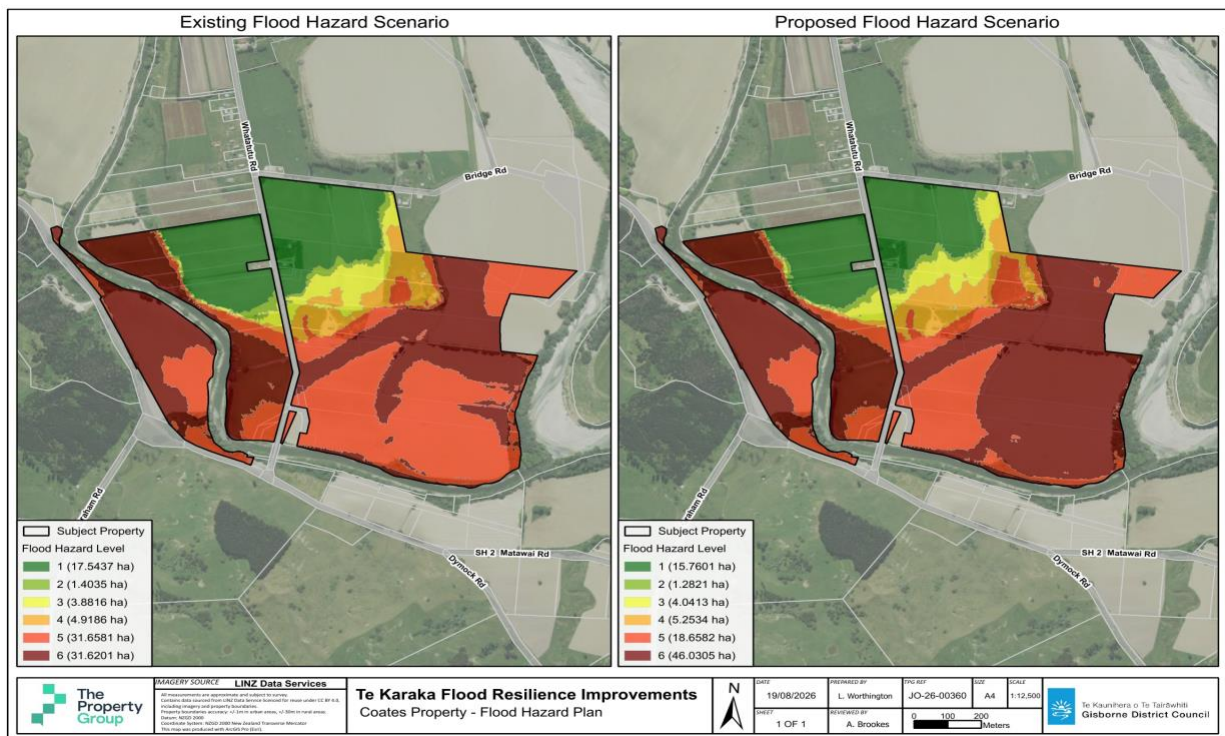
C – Waipaoa River cross-sections 30.5–41, bed and berm aggradation 1950s–2017/18
(plotted from the GDC cross-section archive)

D – Photographs

E – GDC Kanakanaia gauge record, peak levels 1948–2023



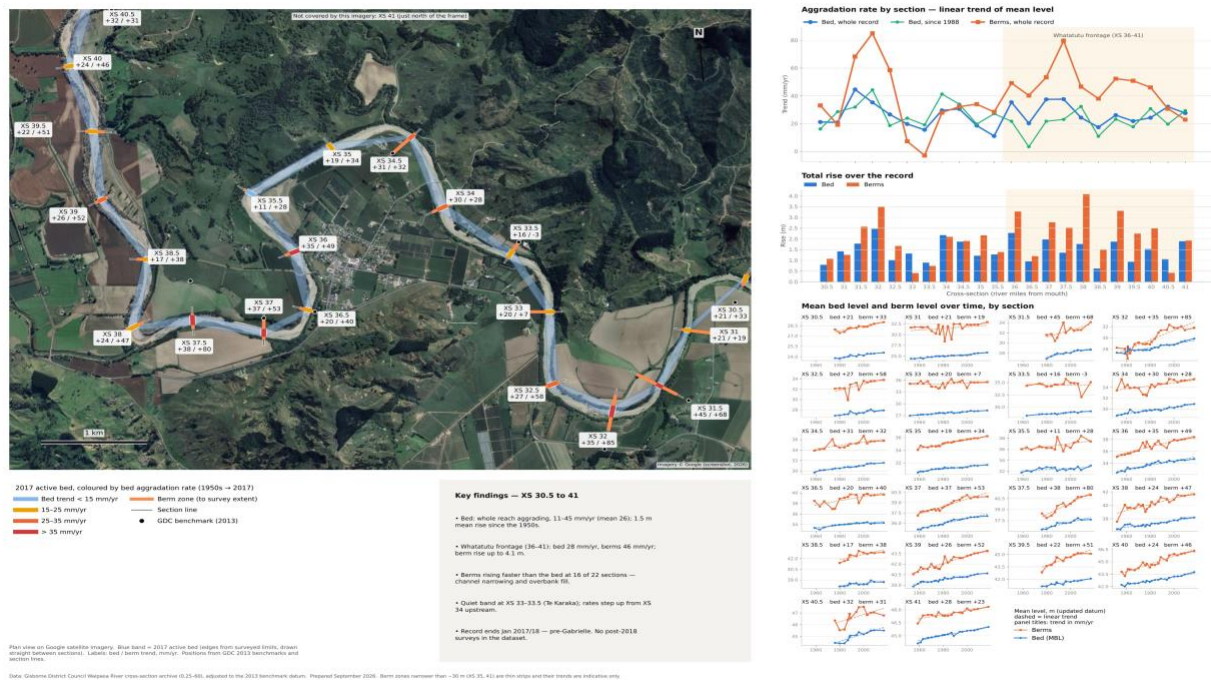
Annexure A – The Property Group, Coates Property Flood Depth Plan, JO-26-00360, 19 August 2026 (existing vs proposed, design event)



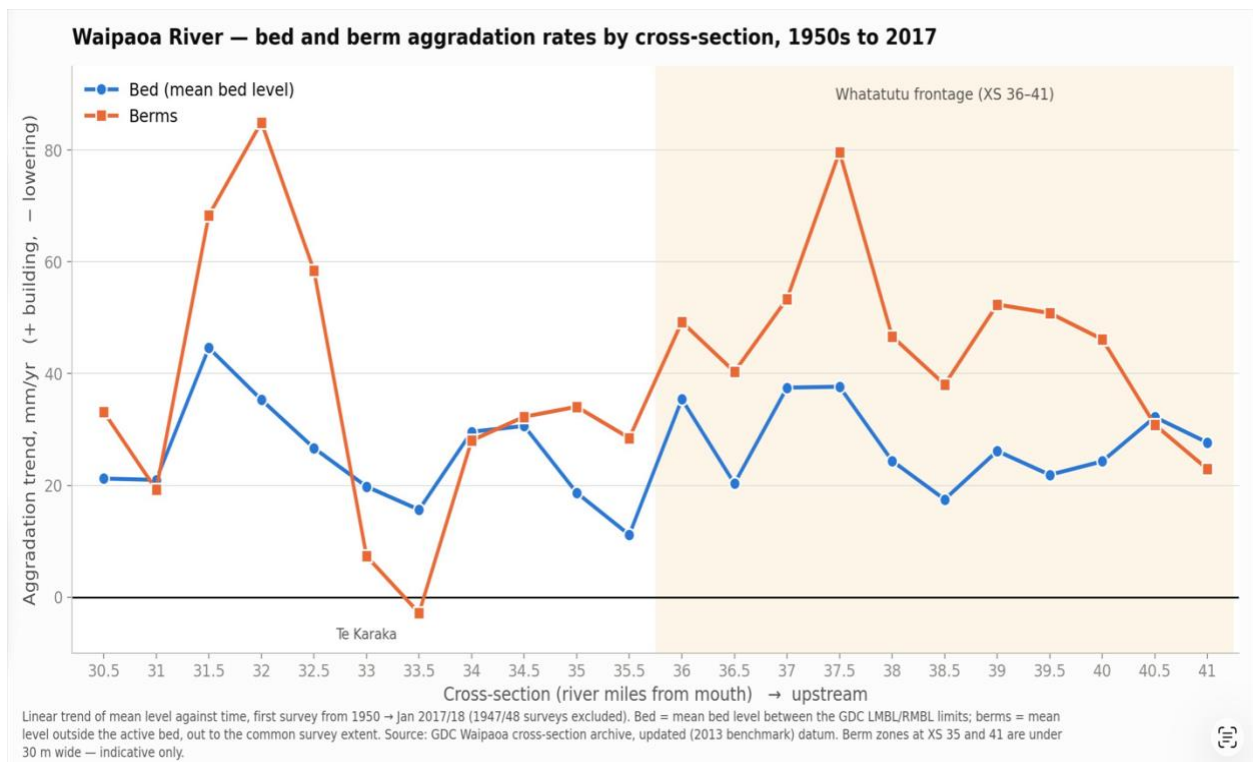
Annexure B – The Property Group, Coates Property Flood Hazard Plan, JO-26-00360, 19 August 2026 (existing vs proposed, design event)

Waipaoa River cross-sections 30.5-41 — bed and berm aggradation, 1950s to 2017/18

Gabrielle District Council river cross-section surveys (updated 2013 benchmarks datum). Bed = mean bed level between the fixed GDC LMBL/RMBL limits. Berms = mean level of the section outside the active bed, out to the common survey extent. Trends are linear regressions of mean level against time; whole-record rates start at the first survey from 1950 (1947/48 surveys excluded — offsets do not align). Latest survey Jan 2017 (Jan 2018 at XS 41); no post-Gabrielle data.



Annexure C – Waipaoa River cross-sections 30.5–41, bed and berm aggradation 1950s–2017/18, plotted from the GDC river cross-section archive (2013 benchmark datum). Record ends Jan 2017/18; no post-Gabrielle surveys.



Annexure D – Photographs



1. Whatatutu bridge, debris blockage. 22nd June 2023



2. Debris raft against the Whatatutu Road bridge with the river still up. 23rd July 2023



3. Whatatutu Road after the floodwater receded. Gabrielle



4. Wood debris piled against the bridge and bank as the water dropped. 23rd June 2023



5. Contractors clearing wood debris from the Whatatutu Road bridge, 23 June 2023



6. The Waikohu river in flood from the bridge, wood debris floating; flats under water on the left. 23rd June 2023



7. Whatatutu Road cut by floodwater. Cyclone Gabrielle, retreating water



8. The workshop at 48 Whatatutu Road with floodwater across the yard and stock yards.
Cyclone Gabrielle



9. Coates's corner, Whatatutu road. Fences under flood waters with higher flood velocity than assessed. Gabrielle



10. Lower flats under water, corn crop going under. Retreating floodwaters, Gabrielle



11. Lower flats taking on flood waters. 22nd June 2023



12. Stock pushed onto the last dry ground with floodwater behind. 22nd June 2023



13. Silt through the garden at 62 Whatatutu Road after cyclone Gabrielle

Annexure E – GDC Kanakanaia gauge record, peak levels 1948-2023

Date	Water Level Max (m)	Flow Max (cumecs)
14-May-1948	9.649	3,915.7
19-Nov-1960	8.138	2,841.3
27-Dec-1980	8.970	2,762.0
10-Apr-1982	8.396	2,416.3
07-Mar-1988	10.774	4,943.0
08-Mar-		
1988 BOLA	11.030	5,272.7
09-Mar-1988	10.690	4,849.2
01-Sep-1988	9.529	3,412.2
31-Mar-1996	8.251	2,035.7
21-Oct-2005		
OWNING		
LAND	10.681	4,161.1
22-Oct-2005	10.851	4,307.9
28-Nov-2005	8.308	2,441.9
29-Nov-2005	8.301	2,437.8
31-Jan-2010	8.277	2,382.2
14-Oct-2010	8.060	2,099.2
21-Sep-2015	8.697	3,109.4
12-Jun-2018	10.578	4,707.1
24-Mar-2022	8.328	1,650.8
13-Feb-2023	9.157	2,024.2
14-Feb-2023		
GABRIEL	12.270	3,977.9
22-Jun-2023	8.575	1,757.3

Christopher Stewart Coates

27th September 2026