

Oral Submission of Mangawhai Matters Inc to PPC84 Hearing

Presented by Joel Cayford 29 May 2024

1. I'm here as a layperson (albeit highly experienced and educated), and member of Mangawhai Matters Inc Ctte. Mangawhai Matters Inc (MMI) came into being when Private Plan Change 78 (Mangawhai Central) was notified in the time of COVID. We sought to defend Mangawhai's future from adverse amenity, economic, and environmental effects of a high-density development within metres of the Mangawhai Estuary, and with unquantified and uncertain network infrastructure costs. Since that time, MMI has undertaken research, made submissions on the KDC's Long Term and Annual Plans and Rating Systems; the health and future of the Mangawhai Estuary; PPC83 (The Rise); Development Contribution levels and infrastructure provision.
2. These submissions primarily focus on the sediment risks to the Mangawhai Estuary that we understand are likely to increase due to the lack of protection against new sediment flows, in the planning controls proposed for the development and urbanisation of Frecklington Farm.
3. Before I get into those submissions there's a couple of things to say.
4. I acknowledge that the applicant has responded to other specific MMI submissions, namely: that only one house is permitted per allotment (not two); that permitted allotment site earthworks are 100 cubic metres (not 500); and that a Landscape Zone is proposed with a 5 metre height control and associated plantings to mitigate the adverse visual effects of houses built on the ridgeline and visible from much of Mangawhai.
5. I also acknowledge the efforts made by the developer to engage with Mangawhai Matters Inc regarding issues and to respond, and also with Mangawhai Trackies to design and label the route of a walking track network in the large regenerating bush area of the site. Through my involvement in this work I was able to gain an intimate knowledge of the subject land, particularly how it was affected by the wind and rain of cyclone events early last year.
6. I note the legal submissions for KDC, prepared by Warren Bangma, particularly those relating to the weight that should be given to the KDC Spatial Plan 2020. This document was adopted by the previous Council under the LGA after minimal publicity and consultation. The Spatial Plan supported further urban growth in rural areas around Mangawhai, but without commensurate public funding or regulatory methods in place to manage that growth – particularly infrastructure. It has been used to support this application and others since PPC78 for Mangawhai Central.
7. I note that the Spatial Plan does advocate a staging of development densities, from greater densities near existing urban Mangawhai, to more life-style like densities further away. This was a clear signal to indicate an edge for urban Mangawhai. I note that many submissions re PPC83 (The Rise) called for a transition in densities across that land, so that its urban boundary with the Bream Tail development for example, was consistent or similar.
8. I acknowledge in passing the discussion given yesterday to the effect of the NPS UD in this case, and I note the frequent questions relating to staging, sequencing, triggers for this and for that, particularly in relation to the significant roading projects required for the development to proceed. I digress briefly to remind Commissioners that PPC78 (Mangawhai Central) was enabled from a roading access point of view, by the owner building on its own land, a half kilometre of double-laned

roading and two roundabouts, connecting that infrastructure to the existing Molesworth Drive, and then passing the rebuilt road to Council ownership.

9. In my time as an ARC and NSCC councillor the Structure Plan tool that usually accompanied a private plan change, didn't just consist of maps. It contained agreements between developer and council on staging, timing, sequencing, and triggers for the provision of infrastructure, and most important of all, who would pay for these infrastructure projects, where the money would come from. The public parts of which needed to be provided for in relevant Council Long Term Plans.

10. While I have not been party to discussions between the applicant in this case, and KDC, about such matters, the absence of any such infrastructure provision and funding agreements is a huge concern, leaves questions open, and of course is fundamental to the concerns of Mr Boonham in relation to wastewater infrastructure.

11. About the estuary

- Receiving environment for stormwater flows from surrounding catchment
- Inland sea especially vulnerable, due to lack of tidal flushing, growth of mangroves
- KDC installed Ecocare to manage sewage inflows
- Mangawhai Harbour Restoration Society has obtained consent to dredge sections of estuary to enable better tidal flushing, and also to clear sections of Mangroves also to enable flushing and to protect sandy areas from sedimentation
- Gabrielle and other heavy rainfall events have focussed attention on vulnerability of estuary. Sediment deposits 1 to 2 centimetres thick remain around coastal edges and some previously sandy areas of the estuary, covering shellfish beds

12. Toward the end of last year MMI raised funds and commissioned Terry Hulme to begin a major piece of research into the health of the estuary, including the vulnerability of the containing spit to weather and climate changes. That was the major focus of the preliminary study, but other risks were highlighted. This expert evidence was included with MMI's further submission to this hearing. I note that it is not listed as expert evidence to this hearing, and I note also that submissions relating to the matter of sediment discharge into the Mangawhai Estuary were not included in the revised S42A report in accordance with Commissioner directions.

13. Quoting from pgs 5 and 6...

- Mangawhai Harbour is shallow, with two thirds exposed at low tide. As a "permanently open lagoon" it would be expected to infill over the long term. Today, it remains open because of a balance between sedimentation, wind and wave action, and tidal movement.
- Water quality and the clarity of the middle and lower harbour remain good and generally recover quickly from siltation following heavy rain. Small, wind-generated waves lift sediment from the shallow floor so that strong currents flush it from the harbour, leaving clear water and a sandy floor. In contrast, the upper reaches comprise mangrove-covered, soft, muddy flats from the build-up of sediment because here there is less wave action and flushing. More frequent storms and intensive rain in an increasingly developed catchment could still overwhelm the capacity of the harbour to clear itself, with progressive loss of water quality and extension of the muddy substrate down harbour.
- The catchment is just 12km² in area. The main land use impacts on the harbour have occurred with historical logging, clearance, and grazing. The change from forest to pasture

increased the velocity, volume, and channelling of runoff, with additional sediment washed into the harbour as a result. This is evident in today's turbid waters and siltation of the upper harbour. The urban area covers around 3% of the catchment, although this is increasing. While expansion is subject to the regulation of stormwater within subdivisions, the current council consent is for direct discharge into the harbour. Any inadequacy in stormwater management in these areas can therefore pose a significant risk to water quality. In addition, much of the rural area is transitioning from pasture to low density residential development and small-scale horticulture. More intensive rural land use inevitably increases hard surfaces, increasing run-off, sedimentation, and contamination in the harbour.

14. Mangawhai Matters has shared this report with DOC, NIWA, KDC, NRC and lately with Auckland University experts. Feedback has been universally positive, and participation and funding has been sought for related detailed and specific reports. In particular we have asked NIWA to prepare a formal brief on land use and sediment and contaminant supply in which they have experience and models, based on this report. We are concerned that this issue has not been explored properly for the current application.

The application and its stormwater management plan

15. The nub of the PPC84 SMP is in the Flood Risk Assessment ("FRA") completed by Chester which concludes that there is an increase in stormwater depths and velocities post development. The FRA states that "the details for future mitigation measures will be assessed by KDC as part of the resource consent process for the individual developments at the time of their respective applications for resource consent." (Section 4.3.1.4, page 9). 8. The objectives of the SMP appear to focus on flooding, chemical contaminants, and not sediments.

16. The S42A report mentions sediment in the context of the Cultural Impact Assessment prepared by Te Uri o Hau, and goes on to indicate that these matters (primarily flooding) can be dealt with at resource consent stage. This approach is echoed in the subdivision provisions of PPC84 (eg DEV1 – REQ1) which presume that a subdivision by subdivision approach will be good enough.

17. I note the Stormwater evidence provided by Farley for Berggren Trustee Co Ltd (which I understand is withdrawn, but which the Chair has directed is still part of the hearing). This evidence opposes the consent by consent approach to SW and sediment management and argues for online ponds and associated "bottom of the cliff" infrastructure to manage events which overwhelm allotment by allotment devices and erode previously settled and landscaped areas.

18. We observe that the various channels, culverts and pipes that make up the KDC stormwater network in the area, are where overland flows of sediments gradually accumulate in low rainfall events, only to be washed out in bulk into the estuary when there's a big rain, where they settle out in the mangroves and onto the estuary sands. The subject land contains a number of streams and ephemeral flow paths which will collect sediments, which can be mobilised by flood flows and also washed into the headwaters of the estuary. We understand some of these sediments get swept by the tide out to sea, but we know, and the Hume report underlines, that some of these sediments settle and accumulate on the estuary floor. And that is our chief concern here.

19. We see a sort of flush and forget attitude in the evidence that accompanies this application. Like when a loo is flushed. Out of sight out of mind. As if somehow managing sediment at allotment level, then directing overland flows across downstream PPC84 land, through overland flowpaths and ephemeral streams, to combine with other similar flows, and discharging the whole lot into a Council

network, avoiding flooding along the way, is consistent with best practice, avoids downstream risks, and complies with the overall purposes the Act.

Best Practice

20. It is always a challenge to unpick exactly the stormwater decision tree proposed in the PPC84 provisions. When an application is permitted, restricted discretionary, restricted etc. However, it appears that consent applications are to be accompanied by a stormwater assessment which must be in accord with KDC's engineering standards dated 2011, or "relevant performance standards". While the texts of the application and evidence to this hearing do mention Auckland Region standards for management devices (GD01), it does not make reference to Auckland Council's updated code of practice for land development and subdivision (2022) which accounts for changed rainfall patterns and is an update of stormwater management and planning practice taking account of the receiving marine environment.

21. We support the planning approach now adopted in Auckland for new development (as set out in The Auckland Code of Practice for Land Development and Subdivision: Stormwater – January 2022) , which includes:

- The stormwater system shall be designed for the maximum probable development of the entire upstream catchment and in accordance with TP108, with allowances for climate change...
- Primary stormwater systems include both open and closed conduits and shall be designed to cater for the flows generated by the event specified in the design standards in Section 4.3.5.2. As far as possible, the location of primary systems should be aligned with natural flow paths....
- A secondary stormwater system consists of ponding areas and overland flow paths with sufficient capacity to transfer the flows generated by the event is specified in the design standards in Section 4.3.5.2. As far as possible, the location of secondary systems should be aligned with natural flow paths. The existing constructed or natural flow paths shall be retained as far as practical....

22. While this Auckland Code of Practice relates to infrastructure that might be transferred to Auckland Council ownership and management, this does not negate their applicability here, because their purpose is the protection of the receiving environment of floodwaters AND sediments.

23. It is not our job to design the stormwater approach and system for PPC84. However we do see examples in Mangawhai where freshwater overland flows, during and post development, are directed to wetland areas and ponds where sediments in particular can settle out, so that discharges from whole developments are managed in terms of discharge rates and sediment loading.

24. The approach is retention of sediment (ie containment) and detention of stormwater of flows (to slow it and moderate peak flows).

25. It is our submission that Commissioners have not been presented with sufficient information about the sensitivity of the receiving environment to increased sediment loadings, about the amounts of sediments that will be discharged by this development itself, or/and from the channels in the public stormwater network that the increased flows from this development will inevitably mobilise. Our expert evidence has not been given the weight it merits.

Statutory Framework - NZ Coastal Policy Statement

26. It is of concern, that Chester's SWMP, in Section 6, Planning Context, makes no mention of the NZ Coastal Policy Statement, despite its first objective being: To safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems, **including marine and intertidal areas, estuaries.... by maintaining coastal water quality**, and enhancing it where it has deteriorated from what would otherwise be its natural condition, with significant adverse effects on ecology and habitat, **because of discharges associated with human activity**.

27. We submit that the Mangawhai Estuary, and sediment discharges from development enabled by PPC84, falls within this objective.

28. NZCPS Policy 22 Sedimentation

- (1) Assess and monitor sedimentation levels and impacts on the coastal environment.
- (2) Require that subdivision, use, or development will not result in a significant increase in sedimentation in the coastal marine area, or other coastal water.
- (3) Control the impacts of vegetation removal on sedimentation including the impacts of harvesting plantation forestry.
- (4) Reduce sediment loadings in runoff and in stormwater systems through controls on land use activities.

29. We submit that this policy is relevant in this application, and we see no information that compliance with either Policy 22.1 or 22.4 has been demonstrated. In addition there is insufficient information to demonstrate compliance with Policy 22.2.

30. NZCPS Policy 23 Discharge of contaminants

- (1) In managing discharges to water in the coastal environment, have particular regard to:
 - (a) the sensitivity of the receiving environment;
 - (b) the nature of the contaminants to be discharged, the particular concentration of contaminants needed to achieve the required water quality in the receiving environment, and the risks if that concentration of contaminants is exceeded; and
 - (c) the capacity of the receiving environment to assimilate the contaminants;

And

- (4) In managing discharges of stormwater take steps to avoid adverse effects of stormwater discharge to water in the coastal environment, on a catchment by catchment basis, by:
 - (a) avoiding where practicable and otherwise remedying cross contamination of sewage and stormwater systems;
 - (b) reducing contaminant and sediment loadings in stormwater at source, through contaminant treatment and by controls on land use activities;
 - (c) promoting integrated management of catchments and stormwater networks; and
 - (d) promoting design options that reduce flows to stormwater reticulation systems at source.

31. For Policy 23.1, there is no evidence of any assessment of the sensitivity of the receiving environment (the estuary – especially the upstream areas) to increases in sediment loadings – let alone the higher standard of “paying particular regard to”. For Policy 23.4, emphasis is put in the application on allotment by allotment approaches, rather than catchment wide approaches which are integrated with stormwater networks in ways which reduce flow intensities from very large storms and which function to retain sediments.

Concluding remarks

32. Mangawhai Matters’ outstanding concern in PPC84 is the health of the estuary from increased sediment flows from this development. Our contention is that insufficient information about this issue and how to reliably manage it, has been placed in front of commissioners. The NZCPS imposes a duty to assess and monitor sedimentation levels and impacts on the coastal environment. No evidence has been presented at this hearing, as far as I am aware, that this duty has been complied with. KDC’s current stormwater discharge consent from NRC cannot be treated as a blank cheque to permit more and more sediment to be discharged into the estuary.

33. We seek a practical commitment from the applicant to install online ponds or equivalent infrastructure whose function and purpose is to trap, contain and manage sediments which flow during and post development, so that they don’t enter the Estuary.

ENDS