

**BEFORE THE INDEPENDENT HEARING COMMISSIONERS**

**IN THE MATTER** of the Resource Management Act 1991 ('the Act')  
**AND**  
**IN THE MATTER** Of Proposed Plan Change 7 to the Canterbury Land and Water  
Regional Plan

**BETWEEN** **RAYONIER NEW ZEALAND LIMITED AND PORT BLAKELY LIMITED**  
Submitter

**A N D** **CANTERBURY REGIONAL COUNCIL**  
Local Authority

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**SUMMARY OF EVIDENCE IN CHIEF OF DARREN BRUCE MANN ON BEHALF OF RAYONIER  
NEW ZEALAND LIMITED AND PORT BLAKELY LIMITED**

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Presented for filing by:  
**Adderley Head**  
Chris Fowler  
PO Box 1751, Christchurch 8140  
T 021 311 784  
E [chris.fowler@adderleyhead.co.nz](mailto:chris.fowler@adderleyhead.co.nz)

## INTRODUCTION

- 1 My name is Darren Bruce Mann.
- 2 I prepared Evidence in Chief, dated 17 July 2020, for Rayonier New Zealand Limited and Port Blakely Limited in relation to their submission on Proposed Plan Change 7 (PC7) to the Canterbury Land and Water Regional Plan (CLWRP).
- 3 My current role at Rayonier Matariki Forests (RMF) is General Manager Operations for our New Zealand Operations. I am based in the RMF office at Rangiora. My qualifications and experience are as outlined in that Evidence in Chief.
- 4 I repeat the confirmation that I have read the Code of Conduct for expert witnesses and that my evidence has been prepared in compliance with that Code.
- 5 My Evidence in Chief addressed the following:
  - (a) The forestry sector response to the introduction of the National Environmental Standards for Plantation Forestry (NES-PF),
  - (b) RMF's approach to management of sediment discharges under the NES-PF within the Canterbury Region,
  - (c) RMF's costs arising from compliance costs with NES-PF sediment discharge regulations, and
  - (d) Additional costs and uncertainty caused by PC7 sediment discharge rules for forestry companies and related businesses within the Canterbury Region.
- 6 This is a summary of the key issues raised in that Evidence in Chief. There are extensive annexures which set out the breadth of the information, documentation that provides for and supports the implementation of NES-PF.

## SUMMARY OF KEY ISSUES

### The forestry sector response to the NES-PF

- 7 After a six-month lead in time the commencement of the NES-PF on 1 May 2018 introduced a range of new regulations that plantation forestry owners, managers and contractors need to comply with.
- 8 A major platform of the NES-PF is the **mandatory** obligation to produce forestry earthwork management plans and harvest plans. The narrative template for these plans is attached as **Annexure D** to my Evidence in Chief. The extensive requirements range from administrative matters such as location plans to the identification of water run-off and sediment control measures that the forester will implement.

- 9 The New Zealand Forest Owners Association (**NZFOA**), after discussion with MPI, has developed 28 specific Forest Practice Guidelines (**FPGs**) that provide tool boxes of various measures that may be used to meet the regulations. These FPGs are posted on the NZFOA web site. The first FPGs were produced in 2018 and were updated in February 2020. The FPGs have focused guidance on erosion and sediment control and the stabilisation of operational sites. Attached as **Annexure B** to my Evidence in Chief, is NZFOA Forest Practice Guide 2.1 Erosion and Sediment Control Measures-Water Tables.
- 10 In 2020 the NZFOA updated its 2012 documents, the NZ Forest Road Engineering Manual and the Operators Guide. These documents are available on the NZFOA web site. They relate to building roads and landings and deal with health and safety and environmental issues.
- 11 The above documents are all part of the tools available to foresters to meet the new obligations under the NES-PF and in particular the obligation to prepare, implement and comply with harvest and earthwork management plans. These plans are living working documents, relevant to compliance with the NES-PF and certainly cannot be left in a draw. They are an operational blueprint and form the base documents for council compliance monitoring.

#### **RMF's approach to management of sediment discharges under the NES-PF within the Canterbury Region**

- 12 With regard to erosion risk the NES-PF has introduced a land area's classification under the Erosion Susceptibility Classification (**ESC**). There are different regulatory requirements depending on what zone one's forest land is classified. Under the NES-PF there are new considerations that provide further emphasis on sediment control. These provisions impose more control over forestry roading than the provisions of the Ecan's CLWRP.
- 13 My Evidence in Chief in paragraphs 35 to 46 outlines the various new controls that impose different requirements to those under the CLWRP. The differences have recently led to RMF needing to obtain a resource consent from ECan for roading and landing earthworks in Omihi Forest under the NES-PF. The proposal was a restricted discretionary activity under NES-PF Regulation 35(2) due to the non-compliances with Regulation 24(3) and (4). These non-compliances were due to the nature of the earthworks to be undertaken in an orange zone with a land slope of 25 degrees or more which exceeded the permitted volume of 5,000m<sup>3</sup> in any 3-month period.
- 14 The NES-PF earthworks management plan requires identification of the methods used to stabilise batters, sidecast and cut and fill. This specific provision of the NES-PF has led, in Canterbury, to more emphasis being given to site stabilisation with methods such as trialling hydroseeding and oversowing options on sensitive sites.

- 15 Schedule 3 of the NES-PF also requires post-harvest remedial work (timing and methods) (clause 4(e)(v)) and management practices for maintenance and monitoring (clause 6). These provisions are important for checking sediment controls and site stabilisation methods after heavy rain events. RMF has developed a new forest App to record any damage to forest infrastructure when checks after heavy rain events are being undertaken.
- 16 With regard to river crossings Regulation 41 has introduced controls on sedimentation that are different to the ECan requirements. In particular Regulation 41(3) requires surface run-off from roads to be diverted away from water bodies within 10m of the river crossing. In Canterbury, this has led to more cordroying of culvert access points (on extraction tracks) and more installation of appropriately located sediment traps.
- 17 Provisions of the NES-PF that will assist with sediment control but will take some years to be evident in water quality monitoring are those relating to plantation forest setbacks. With regard to afforestation Regulation 14(3) sets out the setbacks from various waterbodies (rivers, wetlands, lakes and the marine area). In effect planting must be either 5m or 10 set back from perennial rivers (depending on the river width). Similar provisions for replanting of existing forests are provided for in Regulation 78.
- 18 The NES-PF has introduced a far more comprehensive and prescriptive regulation of plantation forestry than is set out in the CLWRP. To date compliance monitoring of RMF and Port Blakely Ltd have shown full compliance and no issues.

**RMF's costs arising from compliance with NES-PF sediment discharge regulation**

- 19 Achieving the NES-PF requirements of site stabilisation and the avoidance of sedimentation into waterbodies will involve a number of practices depending on the circumstances. In paragraphs 50 to 53 of my Evidence in Chief I have set out increased costs, to RMF that can be directly attributed to the requirements of the NES-PF.
- 20 One example is that recent new road and upgrade projects have resulted in a significant cost increase over budget of approx. 60% (e.g. \$50K per km to \$80K<sup>1</sup> per km). Whilst not all of that increase is attributable to one particular thing, a significant contributor to the increase is in the underside berming which directs stormwater away from erosion prone fill slopes. Hydroseeding is being examined more closely for those sites that may require further soil stabilisation controls. A recent trial in Omihī cost us approx. \$10,000 for less than a continuous km of road.
- 21 I have included this information as an indication that the NES-PF has introduced very real changes to sediment discharge controls in RMF in Canterbury.

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<sup>1</sup> Note that in my Evidence in Chief, this figure was given as merely "\$80", which was a typographical error.

**Additional costs and uncertainty caused by PC7 sediment discharge rules for forestry companies and related businesses within the Canterbury Region**

- 22 It is of concern to me that PC7 was not discussed with RMF or other forestry companies (to my knowledge) within the Canterbury Region before it was notified. There has also been no discussion with RMF (or other companies to my knowledge) about how the NES-PF has changed forestry operations and in particular the control of erosion and sediment.
- 23 It is unclear to me how PC7 will align with the NES-PF. I am not sure if the NES-PF regime of land use rules will continue or if the only matter that has to be complied with is the PC7 discharge rule.
- 24 I am not sure when, where and how compliance under PC7 is going to be measured or achieved. Of concern is how diffuse discharges of sediment is going to be monitored. It is also of concern that monitoring will have to be undertaken in rain events. What is not clear is if such monitoring could be undertaken safely on every site.
- 25 It appears that RMF forests with no harvesting or earthwork construction occurring will be subject to meeting the proposed discharge rule.
- 26 My greatest concern is the wide scope of application of the suspended sediment standard to all rivers in a forest of any soil type (not just highly erodible soils) and in any rain event. Given the lack of guidance as to where, when and how the suspended sediment standard will be measured I am not clear if RMF can comply with the PC7 sediment discharge rules at all times. This is despite the increased activity controls of the NES-PF and the change in environmental management and operations introduced by RMF (and other forestry companies) since the NES-PF came into force.
- 27 The PC7 suspended sediment standard is not based on consideration of particular catchments and the values, attributes for a catchment. There is no consideration of existing background levels of the various catchments in Canterbury. In my Evidence in Chief I referred to RMF work being undertaken for a sediment discharge consent in the Omihi Forest. As an update, the RMF monitoring is providing the existing bottom line for suspended sediment (as no instream data exists from ECan). The monitoring confirms that catchments in Omihi Forest, where there is no forestry activity, are already very close to and in some cases exceed the suspended sediment standard of PC7. The ecology study which has now cost \$40,000 indicates that the ecological values for the various catchments are highly variable.
- 28 At this moment I'd like to amend a statement in my Evidence in Chief. The statement read that all of Omihi Forest (1334ha) was categorised in the orange zone under the ESC classification system. It is in fact just the Teviotdale block in

Omihi Forest that is in the orange zone comprising 577ha. This affects points 26, 65 and 66 in that evidence.

- 29 At this stage it is not clear what monitoring conditions and operational conditions would be applied (assuming consent is granted). Of concern is if harvesting would have to stop in rain events leading to uncertainty in harvest operations and wood supply in the Canterbury Region.
- 30 Seventy percent of the harvest of RMF forests in Canterbury are supplied to local sawmills and an MDF plant. Just over 50% of the wood received by these local wood processors comes from the RMF estate. Certainty of harvest is therefore very important to the local wood processing facilities.
- 31 Overall, it is difficult to put an exact figure on the additional costs for RMF and other businesses arising from the PC7 sediment discharge rules however for the reasons discussed above it is clear to me that costs would increase under PC7.

### **Conclusion**

- 32 RMF supports the NES-PF even though it imposes greater controls on forestry operations. The NES-PF provides a certainty to RMF's ability to operate.
- 33 The PC7 rules are a significant departure from the NES-PF. The PC7 rules have been produced with little explanation as to why they are necessary after the introduction of the new and extensive provisions of the NES-PF.
- 34 Overall, the outcome I seek is that the PC7 discharge rules are deleted and that ECan works with the forest industry to assess the effectiveness of the NES-PF in protecting waterbody environments in Canterbury.

Darren Mann  
12 November 2020