

BEFORE THE HEARING PANEL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the hearing of submissions and further submissions on the Proposed Waimakariri District Plan – Hearing Stream 6 - Rural & Open Space Zone.

**EVIDENCE IN CHIEF OF TIMOTHY ALISTAIR DEANS ENSOR ON BEHALF OF
Fulton Hogan Limited**

Dated: 25 September 2023

INTRODUCTION

1. My full name is Timothy Alistair Deans Ensor.
 2. I hold a Bachelor of Science and a Bachelor of Arts with honours majoring in Geography, obtained from the University of Canterbury in 2002. In 2012 I graduated with a Post Graduate Diploma in Planning from Massey University. I am an associate member of the New Zealand Planning Institute.
 3. I am currently a Principal Planner with Tonkin & Taylor Limited having previously been employed by AECOM New Zealand Limited and its predecessor, URS New Zealand Limited. I have been a consultant planner for approximately 15 years. Prior to consulting I was employed by Environment Canterbury for approximately two and a half years as a consents planner.
 4. I have worked throughout the South Island assisting private and public sector clients with obtaining statutory approvals, undertaking environmental impact assessment and policy analysis for projects, and providing expert planning evidence at plan and consent hearings. These clients include the Department of Conservation, Waka Kotahi the NZ Transport Agency, Environment Canterbury, the Canterbury Aggregate Producers Group, Opuha Water Limited and the Ministry for the Environment.
 5. I am authorised to provide expert planning evidence in relation to the proposed Waimakariri District Plan (**pWDP**) on behalf of Fulton Hogan Limited (**Fulton Hogan**).
 6. I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2022. I agree to comply with this Code of Conduct. This evidence is within my expertise, except where I state I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.
 7. In preparing my evidence I have reviewed:
 - 7.1. the pWDP; and
 - 7.2. the Section 42A Report for Stream 6 – Proposed Waimakariri District Plan: Whaitua Taiwhenua – Rural Zones (**42A Report**).
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Scope of evidence

8. Fulton Hogan lodged submissions on rural provisions focused on recognising quarrying activities as activities that necessarily (due to the location of the aggregate resource) occur in rural environments. This included submissions on the overall objectives for Rural Zones, activities that occur in Rural Zones and how these shape rural character, reverse sensitivity and the fragmentation of rural land.
9. Previously, Fulton Hogan has commented on interactions between the pWDP and the National Policy Statement for Highly Productive Land (NPSHPL). While this has been discussed elsewhere, Rural Zones are where this issue comes to the fore for Fulton Hogan, and I provide some commentary on this in this evidence.
10. A further issue that has been discussed in other hearing streams is the role aggregate plays in providing for infrastructure and housing. Due to comments from the s42A officer for Hearing Stream 5, I also discuss this issue.
11. Accordingly, my evidence focuses on:
 - 11.1. The recognition of Quarrying Activities within the rural environment,
 - 11.2. Primary Production (including Quarrying Activities) and how this shapes rural character,
 - 11.3. Rules addressing the deposition of inert fill and setbacks for new quarries from Residential Zones,
 - 11.4. Quarrying Activities and the NPSHPL, and
 - 11.5. The appropriate place in the pWDP to address the link between aggregate and infrastructure.

QUARRYING ACTIVITIES IN THE RURAL ENVIRONMENT

Objective RURZ-O1 and RURZ-O2

12. Fulton Hogan submitted in support of the Objectives for all the Rural Zones. The key reasons for this support are the explicit recognition of the need for Primary Production activities (that include Quarrying Activities) to be located in the Rural Environment, and that these activities are supported. The s42A
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officer has recommended that Objective RURZ-O1 and RURZ-O2 are retained as notified. Other submitters¹ have sought that 'support' is substituted for 'enabled' in Objective RURZ-O2. I agree with the s42A officer's reasons for rejecting this submission. I would also add that as Primary Production activities include a range of activities that would require resource consent (Quarrying Activities being one), utilising 'enabling', a term that is often used to support permitted activities, may make the objective too narrow.

Policy RURZ-P2

13. Fulton Hogan also submitted in support of RURZ-P2 Rural Land as notified as 'providing for Primary Production'. In response to a submission by Hort NZ,² the s42A officer is recommending that 'providing for' is substituted for 'enabling'. I hold a neutral view of the change from 'providing' to 'enabling' as Quarrying Activities will require resource consent regardless of the term used. However, this view is only held if 'enabling' does not result in a dissection of Primary Production activities based on whether they are appropriate as a permitted activity or not. As mentioned above, the term 'enabling' can indicate an anticipation that an activity might be permitted.

14. As discussed in previous evidence, I am supportive of utilising the term Primary Production and relying on this when describing activities that are anticipated to occur in rural environments, as opposed to defining a sub-set of Primary Production activities that exclude Quarrying Activities (and potentially others). Consequently, my neutrality on 'enabling' only remains if it does not impact the use of the term Primary Production within the policy, otherwise I support RURZ-P2 as notified.

Objective GRUZ-O1 and Policy GRUZ-P2

15. Fulton Hogan submitted in support of GRUZ-O1 that describes the purpose of the General Rural Zone and seeks to restrict land fragmentation, and GRUZ-P2 that focuses on limiting the fragmentation of land. As with the objectives for all rural zones, Fulton Hogan is supportive of how these provisions clearly describe the role Primary Production plays in the General Rural Zone. I am also supportive of this clear description.

¹ 414.180

² 295.125

16. The s42A Officer has rejected Fulton Hogan's submission on GRUZ-O1 based on a recommendation to rearrange the phraseology of the objective. My view is the notified version and the recommended changes do not materially impact the reasons for Fulton Hogan's submission in support or my view on the matter. On this basis I am comfortable with either option being included.
17. The fragmentation of land is an issue for Quarrying Activities amongst other Primary Production activities, as it can limit the viable land available to undertake Quarrying while appropriately managing effects. Effects management for Quarrying Activities will often be achieved through achieving separation to sensitive receivers. Where rural land is broken up into small lots and combined with sensitive activities such as rural residential, the ability to manage effects quickly diminishes. The s42A Officer has recommended that GRUZ-P2 is retained as notified and I am supportive of this given the challenges outlined above.

Deposition of inert fill – new rule

18. The National Planning Standards definition (**NPS definition**) of Quarrying Activity includes extraction activities and ancillary activities including rehabilitation and cleanfilling. "Cleanfill Material" is a definition also contained in the NPS definitions, and only extends to filling using virgin material, not inert material³. Consequently, relying on rules for Quarrying Activities alone, means that the material available to quarry operators for rehabilitation is limited. It also has implications for diverting waste that is inert but is not virgin that might otherwise go to landfill. In reality, the only virgin material that is likely to be used for quarry rehabilitation in any quantity is site won topsoil. Most other virgin material has some commercial use and therefore is likely to be used elsewhere for higher value.
19. The s42A officer appears to have misunderstood the reasons for Fulton Hogan's relief when stating: "*there is no need to have two rules covering the same activity and the rehabilitation of a quarry site should be part of the normal quarrying operation...*"⁴

³ Collins dictionary: An inert substance is one that does not react with other substances.
Cambridge dictionary: Inert substances do not produce a chemical reaction when another substance is added.

Oxford dictionary: without active chemical or other properties.

⁴ S42A Report, Proposed Waimakariri District Plan: Waitua Taiwhenua – Rural Zones, paragraph 243.

20. While rehabilitation is part of a normal quarrying operation, the NPS definition of Quarrying Activity has the potential to limit the materials used. Without specific recognition via the rules in the pWDP, the deposition of inert material will either be addressed through general earthworks rules, or default to a discretionary activity status as an otherwise undescribed activity (in the General Rural Zone for example). As discussed in previous evidence, I am of the opinion that Quarrying Activities should be addressed comprehensively within the zone rules. To assist with the s42A officer's concerns about having two rules, rather than a standalone rule for inert filling as submitted, inert filling activity could be addressed as part of the Quarrying Activity rule as follows:

GRUZ-R30 Quarrying Activities and the deposition of inert fill

This rule does not apply to any farm quarry provided for under GRUZ-R12

Activity status: DIS

Where:

1. the quarry shall be set back a minimum of ~~4000m~~ 500m⁵ from a Residential Zone
2. any fill deposited in the quarry that is not cleanfill is either
 - (i) inert material from construction or demolition activities; or
 - (ii) inert material from earthworks or site remediation

21. The proposed clause (2)(i) and (ii) draws on language from the Waste Minimisation (Calculation and Payment of Waste Disposal Levy) Amendment Regulations 2021 for Class 3 and 4 fill disposal facilities.

GRUZ-R30 Set back from Residential Zones.

22. Rule GRUZ-R30 as notified has a 1000 m setback for new quarrying activities from residential zones. This is far in excess of the separation distance required to manage the potential effects of quarrying activities. As a comparison, the Christchurch District Plan provides for quarrying as a discretionary activity provided it is greater than 250 m from a residential zone. The 500 m set back sought in Fulton Hogan's submission is also consistent with GRUZ-BFS5, relating to managing reverse sensitivity effects from a number of activities including quarrying.

⁵ This amendment relates to submission point 41.50 which has been accepted by the s42A officer at paragraph 447.

23. The s42A officer has agreed with the submission and has recommended a setback of 500 m. I am supportive of this recommendation given its consistency with GRUZ-BFS5.

RURZ-P8 Reverse sensitivity

24. Fulton Hogan sought amendments to RURZ-P8 Reverse sensitivity in order to focus the policy on reverse sensitivity effects only, as opposed to also addressing direct effects.⁶ The s42A Officer has rejected the relief sought on the basis that:

“The amendment requesting the deletion of clause (3) and (4) would have the effect of removing one of the main policy mechanisms to mitigate against reverse sensitivity effects with primary production activities. Deletion of clause (4) could result in adverse effects from the new extractive primary production activities on existing urban environment (sensitive activities).”⁷

25. The intention of Fulton Hogan’s relief is not to remove policy requiring the consideration of direct effects, but to avoid confusion between direct effects and reverse sensitivity. The inclusion of matters regarding direct effects in a policy titled 'Reverse Sensitivity' is confusing and will add to the challenges the community often has understanding reverse sensitivity effects.

26. While not sought directly through Fulton Hogan’s submission, the s42A officer’s concerns could be addressed by reflecting RURZ-P8 clause 3 in a standalone policy. It is worth noting that RURZ-P8 clause 4 is partially covered within the earthworks chapter (based on the s42A officer’s recommendations in Hearing Stream 5) but could also be wrapped into a standalone policy along with clause 3 to ensure that potential effects on urban environments are completely addressed.

RURAL CHARACTER

27. Policy RURZ-P1 addresses amenity values and character across all rural zones, while GRUZ-P1 addresses character in the General Rural Zone. Fulton Hogan submitted on both policies with the overarching theme being that the character of rural environments is shaped by the activities that necessarily occur in rural environments due to the resources that exist, and this needs to

⁶ 41.45

⁷ S42A Report, Proposed Waimakariri District Plan: Whaitua Taiwhenua – Rural Zones, paragraph 178

be recognised in the pWDP.⁸ Primary Production is a key example of a group of activities that necessarily occur in the rural environment, have a strong influence on rural character, but that can also result in effects. Fulton Hogan's submission is that this combination needs to be a key consideration when setting expectations for rural amenity.

28. The s42A officer identifies a key issue relating to these submissions: "*whether the rural activities and how land is managed creates the character, or whether the rural activities should be controlled to be consistent with the character.*"⁹

29. My view is that it is both but given the objective of the rural environment is "*An environment with a predominant land use character comprising primary production activities and natural environment values, where rural openness dominates over built form...*"¹⁰, the starting point for any discussion about amenity needs to be rural activities based. This then sets expectations regarding the potential noise, odour, dust or traffic that might occur in the rural environment, and assist in guiding decision-making regarding activities that might be sensitive to these effects.

30. The s42A officer does not appear to be wholeheartedly opposed to Fulton Hogan's suggestion to amend RURZ-P1 but is concerned that the language is more suited to a description of rural character rather than a policy. My opinion is that the descriptor proposed by Fulton Hogan in its proposed clause 3 is helpful as it clearly sets an expectation that some effects associated with Primary Production activities will be noticeable. However, this descriptor could be combined with the notified RURZ-P1 to satisfy the s42A officer's concern regarding language. In my suggestion below, I have removed the phrase "seasonal, short term, intermittent" from Clause 2(a) as this has the potential to miss-represent the activities that contribute to rural character by suggesting that these are temporary. My view is that it is more appropriate to simply recognise that these effects may be associated with activities that are necessarily located in rural zones given the potential for the temporal nature of these effects to vary significantly.

Recognise the contribution of amenity values to maintaining the character of the zones, and maintain amenity values in Rural Zones by:

⁸ 41.43 and 41.47

⁹ S42A Report, Proposed Waimakariri District Plan: Whaitua Taiwhenua – Rural Zones, paragraph 106

¹⁰ RURZ-O1

1. *requiring separation between buildings on adjoining properties to maintain privacy and a sense of openness;*
2. *retaining generally low levels of signs, noise, traffic, odour, outdoor lighting, and built form from activities while recognising that ~~in association with~~ primary production and rural industry, which are part of the character of each rural zone ~~that~~:*
 - a. *~~there may be seasonal, short term or intermittent~~ can produce odour, noise, dust, traffic and outdoor lighting effects that may be noticeable to residents and visitors; and*
 - b. *may have a functional need to utilise large buildings ~~may have a functional need~~.*
3. *restricting the density of residential units and minor residential units that can be established on a site consistent with the character of each rural zone, unless a development right has been protected through a legacy provision or is associated with a bonus allotment.*

QUARRYING ACTIVITIES AND THE NPSHPL

31. Fulton Hogan has submitted in opposition¹¹ to a submission by Christchurch City Council (**CCC**) seeking that all the objectives and policies for the rural zones protect highly productive land/versatile soils from fragmentation and unsuitable 'primary production' activities such as forestry or quarrying.¹² At previous hearing streams the panel has also asked questions about Quarrying Activities and the NPSHPL.¹³

32. The NPSHPL Clause 3.9 provides a pathway for aggregate extraction on highly productive land:

(2) A use or development of highly productive land is inappropriate except where at least one of the following applies to the use or development, and the measures in subclause (3) are applied:

[...]

¹¹ FS118

¹² 360.20

¹³ For example in relation to Fulton Hogan's submission on Objective SD-O3 (41.14)

(j) it is associated with one of the following, and there is a functional or operational need for the use or development to be on the highly productive land:

[...]

(iv) aggregate extraction that provides significant national or regional public benefit that could not otherwise be achieved using resources within New Zealand.

33. Quarrying Activities have a functional need to be located where the aggregate resource exists at the quality and in quantities required for the end use. This can mean that Quarrying Activities may need to occur on highly productive land.

34. The role aggregate plays in the construction and maintenance of infrastructure and for housing and commercial construction with local, regional and national benefit has been discussed in previous evidence and in several publications including a recent report prepared for Fulton Hogan by Infometrics.¹⁴ As also discussed in previous evidence and explored in the Infometrics report, transportation makes up a significant portion of the cost of aggregate. Based on the fact that aggregate contributes to infrastructure and construction projects that have regional and national benefit in the Waimakariri District (along with local benefit), and sourcing aggregate from outside the district has the potential to reduce the ability to achieve these benefits by increasing cost, my opinion is that aggregate extraction from all but the smallest of quarries would meet the test set out in the NPSHPL Clause 3.9(2)(j)(iv).

35. However, there are two areas where the pWDP may provide some assistance in applying and interpreting the NPSHPL:

35.1. Providing a level of certainty within the pWDP that aggregate extraction from Quarries of a specific scale “provides significant national or regional benefit”, and

¹⁴ Infometrics 2023, Examining aggregates trends in New Zealand for Fulton Hogan, January 2023.

New Zealand Government. (2019). Responsibly Delivering Value – A Minerals and Petroleum Resource Strategy for Aotearoa New Zealand: 2019–2029. MBIE. Retrieved from <https://www.mbie.govt.nz/dmsdocument/7148-responsibly-delivering-value-a-minerals-and-petroleum-strategy-for-aotearoa-new-zealand-2019-2029> (accessed 27 April 2023).

- 35.2. Ensuring that the pathway set out in the NPSHPL is expanded within the PWDP to cover Quarrying Activities, not just 'aggregate extraction' to avoid perverse outcomes such as prohibiting Quarry rehabilitation.
36. Firstly, despite the clear intent within the NPSHPL, there is still the potential for debate regarding whether aggregate extraction should occur on highly productive land as demonstrated by CCC's submission. To provide certainty and avoid a case-by-case discussion regarding whether Quarrying Activities are 'unsuitable' on highly productive land, my opinion is the pWDP should provide direct guidance regarding the 'benefit' it provides, along with strategic direction regarding the link between aggregate and infrastructure (discussed later).
37. The use of aggregate from a particular quarry can vary throughout the quarry's lifetime. A quarry that may start as having mainly local benefit, can quickly change to having regional or national benefit if projects in the area demand it. For example, a quarry serving local needs may need to switch to supply aggregate for a regional flood management programme or state highway upgrade project. Projects that may appear local (for example a subdivision), may be part of a regional urban development strategy and therefore contribute a regional benefit. Given Clause 3.9(2)(j)(iv) of the NPSHPL needs to be applied at the beginning of a quarry's life, the potential multitude of uses of aggregate over its lifetime may make it difficult to be definitive as to the scale of the benefit of the quarry at the outset.
38. In order to account for the varying uses of aggregate over time, to minimise the regulatory cost of implementing Clause 3.9(2)(j)(iv) of the NPSHPL, and to target larger aggregate extraction operations, my view is that the pWDP should clarify that Quarries other than Farm Quarries or quarries established solely for a particular local project, provide significant regional and national benefit. This clarification would increase the efficiency of the rural zone plan provisions by reducing consenting costs associated with protracted debate regarding benefit. There is the potential for some quarries to establish on highly productive land that throughout their life only provide local benefit, and this may lead to increased social or economic costs associated with the loss of highly productive land. However, given the range of activities that rely on aggregate, the significant growth the district has seen in the past few years and the
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presence of regional and national infrastructure within the district, this is a relatively low risk.

39. Secondly, the NPSHPL uses the term ‘aggregate extraction’ rather than Quarrying Activities. This has led to one example I am aware of where the pathway set out in the NPSHPL Clause 3.9(2) was deemed to apply to the extraction activity only, and not subsequent rehabilitation of the excavation. This has the potential to lead to unintended consequences where a Quarry is not rehabilitated, even though the site could have a future productive use post aggregate extraction occurring or the unnecessary transport of aggregate offsite for processing or stockpiling, potentially increasing costs and associated environmental effects. In order to avoid potential unintended consequences, my view is the pWDP should clarify that in the Waimakariri District, Quarrying Activities, as opposed to just aggregate extraction are appropriate on highly productive land where it meets the tests of the NPSHPL Clause 3.9(2)(j)(iv).
40. Scope for this second clarification sits within Fulton Hogan’s submission regarding the definition of Quarrying Activity, where it sought the retention of the definition but amendments to rules so as to create a more integrated rule framework.
41. Both of these clarifications could sit in a stand-alone policy in RURZ – General Objectives and Policies for all Rural Zones. For example:

RURZ-PX Quarrying Activities on Highly Productive Land

(a) When applying Clause 3.9(2)(j)(iv) of the National Policy Statement for Highly Productive Land, any reference to ‘aggregate extraction’ is to be interpreted as being a reference to Quarrying Activity.

(b) Any aggregate extraction occurring from a Quarry other than a Farm Quarry, or a Quarry established for a project with exclusively local benefit, will be interpreted as providing significant national or regional public benefit in terms of Clause 3.9(2)(j)(iv) of the National Policy Statement for Highly Productive Land.

42. Local authorities are required to give effect to any provision in a national policy statement. In the amendment proposed above, aggregate extraction is a sub-activity of Quarrying Activities and therefore has at least the ‘coverage’ of the NPSHPL. Quarrying Activities does include a greater number of activities
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than mentioned in the NPSHPL. However, these activities will have a similar effect on highly productive land as aggregate extraction and may enable actions that may mitigate the potential effect of aggregate extraction.

43. Areas within a quarry used for processing, storage, sale, recycling and quarry buildings will nearly always be subject to aggregate extraction at some point in order to maximise the extractive benefit of the land. Therefore, including these activities is unlikely to significantly alter the area of highly productive land affected. Activities such as deposition of overburden, rehabilitation and landscaping assist with mitigating effects. In relation to deposition of topsoil and rehabilitation may assist in increasing the productive value of land post quarrying. The proposed clarification is therefore unlikely to significantly alter the ability of local authorities to meet the objective of the NPSHPL.
44. On this basis it is my view that the proposed amendment will not diminish the Waimakariri District Council's ability to give effect to the NPSHPL, may assist in improving outcomes for highly productive land (and other outcomes such as amenity) by providing for rehabilitation, and assist in avoiding unintended consequences of a narrow interpretation of the NPSHPL.

AGGREGATE AND INFRASTRUCTURE

45. Fulton Hogan has sought to highlight the link between infrastructure and the materials used in its construction, operation and maintenance, and the advantage that a ready local supply has for infrastructure in a district such as Waimakariri through the Energy and Infrastructure chapter,¹⁵ and a submission on Objective SD-O3 that was discussed in Hearing Stream 1.¹⁶
46. To date the relief sought has been rejected, with the s42A officer for the Energy and Infrastructure chapter stating the issue, should be addressed in the RURZ chapter.¹⁷ The issue of resource sterilisation is somewhat addressed through rural provisions relating to land fragmentation and reverse sensitivity, but aggregate as a key construction material does not appear to have been addressed by the s42A officer for the Rural Chapter.
47. As discussed at the Stream 5 hearing, aggregate extraction as it relates to a construction material for infrastructure is not only a rural issue. After some

¹⁵ 41.18

¹⁶ 41.13

¹⁷ S42A Report, Proposed Waimakariri District Plan: Pūngao me te hanganga hapori - Energy and Infrastructure paragraph 180.

consideration as to the role a rural specific policy on aggregate and infrastructure might play and the need to replicate this policy in other zones, my opinion is that the issue is best addressed at the strategic directions level within the plan. This recognises the benefit at an appropriate 'level' in the plan and allows a coherent link to be drawn between the resource and its use that is independent of location.

CONCLUSION

48. For the most part, Quarrying Activities occur in rural zones and therefore the rural provisions are of significant interest to Fulton Hogan. My evidence contains amendments to key provisions that in my opinion provide clarity to the pWDP, better recognise the role of aggregate and Quarrying Activities and to provide some consistency across the pWDP as it relates to Quarrying.

Tim Ensor

21 September 2023
