



Proposed Timaru District Plan

Section 42A Report: Light and Noise

Report on submissions and further submissions

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Appendix 2 – Recommended Responses to Submissions

Appendix 3 – Memorandum from Malcolm Hunt

List of Submitters and Further Submitters Addressed in this Report:

Original Submitters

Submitter Ref	Submitter Name	Abbreviation
14	Gemma Oliver	Oliver, G
36	Peter Bonifacio	Bonifacio, P
38	G.D.M. Offices Ltd	G.D.M.
44	Rangitata Dairies Limited Partnership	Rangitata Dairies
48	Jet Boating New Zealand	Jet Boating
53	Helicopters South Canterbury 2015 Limited	Helicopters Sth Cant.
56	Property Income Fund No. 2 Limited	Property Income
86	Ballance Agri-Nutrients Limited	Ballance
89	Dairy Holdings Limited	Dairy Holdings
100	David J Moore and Judith Moore	Moore, D J and J
105	Peel Forest Estate	Peel Forest
106	Minister / Ministry of Education	MoE
107	Lineage Logistics New Zealand Limited	Lineage Logistics
113	Kerry McArthur	McArthur, K
131	Fire and Emergency New Zealand	FENZ
132	New Zealand Agricultural Aviation Association	NZAAA
140	Southern Proteins Limited	Southern Proteins
143	Waka Kotahi NZ Transport Agency	Waka Kotahi
151	New Zealand Defence Force	NZDF
152	Radio New Zealand	Radio NZ
156	Royal Forest and Bird Protection Society	Forest and Bird
163	Synlait Milk Ltd	Synlait
164	Zolve Environmental Ltd	Zolve
165	Fonterra Limited	Fonterra
166	Penny Nelson, Director-General of Conservation, Tumuaki Ahurei	Dir. General Conservation
168	Hilton Haulage Limited Partnership	Hilton Haulage
169	Road Metals Company Limited	Road Metals
170	Fulton Hogan Limited	Fulton Hogan
171	Fenlea Farms Limited	Fenlea Farms
172	Silver Fern Farms Limited	Silver Fern Farms
173	Alliance Group Limited	Alliance Group
174	Rooney Holdings Limited	Rooney Holdings
175	PrimePort Limited	PrimePort
176	Connexa Limited	Connexa
177	Alastair Joseph Rooney	Rooney, A J
179	Barkers Fruit Processors Limited	Barkers
182	Federated Farmers of New Zealand Inc.	Federated Farmers
183	Environment Canterbury / Canterbury Regional Council	ECan
185	Te Rūnanga o Ngāi Tahu	Te Rūnanga o Ngāi Tahu
186	Timaru District Holdings Ltd	TDHL
187	KiwiRail Holdings Limited	KiwiRail
190	North Meadows 2021 Limited and Thompson Engineering (2002) Limited	North Meadows
191	GJH Rooney	Rooney, GJH
193	Foodstuffs South Island Limited	Foodstuffs
202	22 The Terrace Timaru Limited	22 The Terrace
208	Spark New Zealand Trading Ltd	Spark
209	Chorus New Zealand Ltd	Chorus
210	Vodafone New Zealand Ltd / One.NZ	Vodafone

Submitter Ref	Submitter Name	Abbreviation
213	Southern Wide Helicopters	Southern Wide Helicopters
221	Rangitata Island Dairy Ltd	Rangitata Island Dairy
229	Kāinga Ora - Homes and Communities	Kāinga Ora
234	Rangitata Diversion Race Management Limited	RDRML
241	J R Livestock Limited	J R Livestock
245	Horticulture NZ	Hort NZ
249	Rooney Group Ltd	Rooney Group
250	Rooney Farms Ltd	Rooney Farms
251	Rooney Earthmoving Limited	Rooney Earthmoving
252	Timaru Developments Ltd	TDL
255	NZ Frost Fans Limited	NZ Frost Fans

Further Submitters

Submitter Ref	Further Submitter Name	Abbreviation
45	John Evans	Evans, J
57	Sid McAuley	McAuley, S
60	Milward Finlay Lobb	MFL
89	Dairy Holdings Limited	Dairy Holdings
132	New Zealand Agricultural Aviation Association	NZAAA
143	Waka Kotahi	Waka Kotahi
152	Radio New Zealand Limited	Radio NZ
156	Royal Forest & Bird Protection Society fo New Zealand Inc. (Forest & Bird)	Forest and Bird
165	Fonterra Limited	Fonterra
172	Silver Fern Farms Limited	Silver Fern Farms
173	Alliance Group Limited	Alliance Group
175	PrimePort Limited	PrimePort
185	Te Rūnanga o Ngāi Tahu	Te Rūnanga o Ngāi Tahu
229	Kāinga Ora - Homes and Communities	Kāinga Ora
245	Horticulture New Zealand	Hort NZ
247	NZ Pork Industry Board	NZ Pork
255	NZ Frost Fans Limited	NZ Frost Fans
265	New Zealand Helicopter Association	NZHA
274	South Pacific Sera Limited	South Pacific Sera
262	Catholic Education Office, Catholic Diocese of Christchurch	Catholic Education Office and Diocese
18	Go Media Limited	Go Media
20	Terrence John O'Neill, Aileen Kathryn O'Neill, C and F Trustees 2006 Limited	O'Neill et al
27	Holly Renee Singline and RSM Trust Limited	Singline and RSM Trust
31	Karton and Hollamby Group Limited T/A Stonewood Homes South Canterbury Limited	Karton and Hollamby Group
33	Ford, Pyke, Andrews Talbot, Wilkins & Proudfoot, Craig, Mackenzie	Ford et al
51	OSA Properties Limited	OSA
54	Steve and Anthony Dale	Dale, S and A
60	Milward Finlay Lobb	MFL
89	Dairy Holdings Limited	Dairy Holdings
143	Waka Kotahi	Waka Kotahi
152	Radio New Zealand Limited	Radio NZ
156	Royal Forest & Bird Protection Society fo New Zealand Inc. (Forest & Bird)	Forest and Bird

Submitter Ref	Further Submitter Name	Abbreviation
159	Transpower New Zealand Limited	Transpower
169	Road Metals Company Limited	Road Metals
170	Fulton Hogan Limited	Fulton Hogan
175	PrimePort Limited	PrimePort
181	Opuha Water Limited	OWL
182	Federated Farmers	Federated Farmers
185	Te Rūnanga o Ngāi Tahu	Te Rūnanga o Ngāi Tahu
188	Out of Home Media Association of Aotearoa	Out of Home Media
229	Kāinga Ora - Homes and Communities	Kāinga Ora
245	Horticulture New Zealand	Hort NZ
252	Timaru Developments Limited	TDL
261	Davis Ogilvie (Aoraki) Limited	Davis Ogilvie
265	New Zealand Helicopter Association	NZHA
274	South Pacific Sera Limited	South Pacific Sera
278	Rooney Group Limited, Rooney Holdings Limited, Rooney Earthmoving Limited and Rooney Farms Limited	Rooney Group et al
94	Port Blakely Limited	Port Blakely
132	New Zealand Agricultural Aviation Association	NZAAA
152	Radio New Zealand Limited	Radio NZ
166	Penny Nelson, Director-General of Conservation Tumuaki Ahurei	Dir. General Conservation
229	Kāinga Ora - Homes and Communities	Kāinga Ora
265	New Zealand Helicopter Association	NZHA

Abbreviations Used in this Report:

Abbreviation	Full Text
BPA	Bat Protection Area Overlay ¹
CMA	Coastal Marine Area
Council	Timaru District Council
CRPS	Canterbury Regional Policy Statement
GIZ	General Industrial Zone
GRUZ	General Rural Zone
GRZ	General Residential Zone
LSA	Light Sensitive Areas
MDP	Mackenzie District Plan
MPZ	Māori Purpose Zone
MRZ	Medium Density Residential Zone
NCB	Noise Control Boundary
NESETA	National Environmental Standards for Electricity Transmission Activities 2009
NESCF	National Environmental Standards for Commercial Forestry 2017
NESTF	National Environmental Standards for Telecommunication Facilities 2016
NPSHPL	National Policy Statement for Highly Productive Land 2022
NP Standards	National Planning Standards
ODP	Operative Timaru District Plan
OSRZ	Open Space and Recreation Zones
PC22	Plan Change 22 (PC22) to the Mackenzie District Plan
PDP	Proposed Timaru District Plan
RLZ	Rural Lifestyle Zone
RMA	Resource Management Act 1991
RURZ	Rural Zones

¹ Note that in the Hearing D s42A Report, it has been recommended that this is renamed the 'Long-Tailed Bat Habitat Protection Area' Overlay

1. Introduction

1.1 Experience and Qualifications

1.1.1 My full name is Elizabeth (Liz) Jane White. I am an independent planning consultant, having been self-employed (Liz White Planning) for the last three years. I hold a Master of Resource and Environmental Planning with First Class Honours from Massey University and a Bachelor of Arts with Honours from Canterbury University. I am a full member of the New Zealand Planning Institute.

1.1.2 I have over 18 years of planning experience working in both local government and the private sector. My experience includes both regional and district plan development, including the preparation of plan provisions and accompanying s32 evaluation reports, and preparing and presenting s42A reports, as well as providing planning input in Environment Court processes. I also have experience undertaking policy analysis and preparing submissions for clients on various RMA documents.

1.1.3 I have been assisting the Council with their District Plan Review process since 2019. In relation to this topic, I was engaged to assist in preparing the draft plan provisions and s32 report for the Noise Chapter, but I have had no involvement with the Light Chapter provisions.

1.1.4 Although this is a Council hearing, I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note and that I have complied with it when preparing this report. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person. Having reviewed the submitters and further submitters relevant to this topic I advise there are no conflicts of interest that would impede me from providing independent advice to the Hearings Panel.

1.2 Purpose and Scope of this Report

1.2.1 The purpose of this report is to provide the Hearing Panel with a summary and analysis of the submissions received on this topic and to make recommendations in response to those submissions, to assist the Hearing Panel in evaluating and deciding on the submissions.

1.2.2 This report is prepared under s42A of the RMA in relation to the management of light and noise in the PDP. It covers the following matters:

- Light (LIGHT) chapter
- Noise (NOISE) Chapter
- Definitions relating to the above provisions, including: 'bird scaring device'; 'glare'; 'Light Sensitive Areas'; 'Noise Sensitive Activity'; 'outdoor lighting'; and 'special audible characteristic'

- The Light Sensitive Area Overlay
- Noise Control Boundary Overlays, including the Port Noise Inner Control Boundary, Port Noise Outer Control Boundary, the Airport Noise Control Boundary and the Raceway Noise Control Boundary.

1.2.3 This report considers the submissions and further submissions that were received in relation to the Light and Noise chapters, the Light Sensitive Area Overlay, various Noise Control Boundary Overlays, and related definitions. It includes recommendations to either retain provisions without amendment, delete, add to or amend the provisions, in response to these submissions. All recommended amendments are shown by way of ~~strikeout~~ and underlining in **Appendix 1** to this Report, or, in relation to mapping, through recommended spatial amendments to the mapping. Footnoted references to the relevant submitter(s) identify the scope for each recommended change.

1.2.4 The analysis and recommendations have been informed by technical advice received from Malcolm Hunt, a noise expert, which is contained in **Appendix 3**. Mr Hunt also provided advice to the Council during the background and drafting phases of the District Plan review, in the form of two technical reports – the ‘Stage 1 Report’² and the ‘Stage 2 Report’³, which I have also relied on in my assessment of submissions.

1.2.5 The conclusions reached and recommendations made in this report are not binding on the Hearing Panel. It should not be assumed that the Hearing Panel will reach the same conclusions having considered all the information in the submissions and the evidence to be brought before them, by the submitters.

1.3 Procedural Matters

1.3.1 There have been no pre-hearing meetings or expert witness conferencing in relation to submissions on this topic.

1.3.2 In order to better understand matters raised in their submissions, I have had informal discussions with the following submitters:

- Dep. General Conservation [166] with respect to lighting controls in the Bat Protection Area Overlay
- Fonterra [165] with respect to the request for a Noise Control Boundary to be applied at Clandeboye

² *District Plan Review, Topic 11: Noise and Vibration – Stage 1 Report*, Malcolm Hunt Associates, August 2018 (https://www.timaru.govt.nz/__data/assets/pdf_file/0012/669864/Malcom-Hunt-Associates-2018-Stage-1-Report-Noise-and-Vibration.pdf)

³ *District Plan Review, Topic 11: Noise and Vibration – Stage 2 Report, Recommendations for Managing Reverse Sensitivity Effects*, Malcolm Hunt Associates, October 2018 (https://www.timaru.govt.nz/__data/assets/pdf_file/0011/669863/Malcom-Hunt-Associates-2018-Review-Of-Timaru-District-Plan-Stage-2-Report-FINAL.pdf)

- 1.3.3 I also note that Mr MacLennan has recommended changes to the framework in the General Rural Zone (GRUZ) Chapter relating to non-commercial fixed-wing aircraft, which are related to the Noise Chapter, as they rely on NOISE-S2.

2. Topic Overview

2.1 Summary of Relevant Provisions of the ODP and PDP

- 2.1.1 This report relates to provisions associated with the light and noise provisions in the PDP. This section of the report provides a brief summary of the provisions relevant to this topic.

Operative Plan - Lighting

- 2.1.2 The controls relating to lighting in the ODP are not contained in a separate chapter specific to light. Rather, each zone includes rules controlling lighting, which differ depending on the zone. These generally restrict the level of lighting (lux) that fall on adjoining properties to between 1 and 20 lux, and generally (although not in all zones) require that exterior lighting is directed away from roads. There is, in some cases, limited policy direction supporting these rules.

Zone	Lux on adjoining properties (curfew / non-curfew)	Lux on windows of adjoining households	Direct fixed exterior lighting away from roads	Direct fixed exterior lighting away from roads and properties	Direct fixed exterior lighting away from roads and residentially zoned land	Shield outdoor lighting from above
Rural 1 & 3	20		Yes			
Rural 4A	5	1	Yes (except streetlights)	Yes		Yes
Rural 4B	20					
Rural 5		1				
Residential	10/20			Yes		
Commercial	10/20				Yes	
Industrial	10/20	1/10			Yes	
Recreation	10/20	1/10				

- 2.1.3 In the Rural 4A Zone (Geraldine Downs), all outdoor lighting must also be shielded from above.
- 2.1.4 Additionally, there are general rules, some of which mention lighting. The two main categories where lighting is mentioned is in relation to adverse effects on people and landscape, with no provisions specifically relating to ecology, health or the night sky.

Operative Plan - Noise

- 2.1.5 The ODP contains:
- A specific chapter which provides the broad objective and policy framework for managing noise (Part B, Chapter 12);
 - In zone chapters, noise-related objectives and policies specific to different zones;

- A specific chapter containing noise rules that apply district-wide (Part D, General Rules, Chapter 6.21 Noise), such as those relating to measurement, construction noise, blasting, temporary military training activities and noise from helicopter landing areas; and
- Noise limits for all other activities not covered by the district-wide provisions, within the zone chapter rules.

2.1.6 At an objective level, the ODP seeks to minimise situations where there is conflict between noise emissions from land use activities and other more sensitive land uses (Part B, Chapter 12, Objective 1). The policy direction seeks to avoid or mitigate effects of noise on residential uses and other sensitive areas, by way of limiting noise emissions within residential, rural and natural areas, and discouraging residential and other sensitive uses from locating close to land zoned or used for noisy activities (Policy 1). Further policy direction is to provide rules setting noise limits adequate for the protection of community health and welfare, while enabling control of reasonable noise emissions from activities (Policy 2); and to rely on other statutory provisions in the RMA to address noise problems where there is no suitable standard in the District Plan or imposed by a resource consent condition (Policy 3). These policies are primarily implemented within the Plan through zoning; what activities are provided for in different zones; and the setting of noise levels, as well as through other methods outside the District Plan.

2.1.7 The ODP also contains noise contours for the Timaru Airport and the Timaru Raceway. The related policy direction is to avoid subdivision for activities that are sensitive to aircraft noise within the noise contour, to protect the functioning of the airport. (There is no specific policy direction relating to the noise contour around the Raceway.) Within the noise contours, various land use activities and subdivision are a non-complying activity. The ODP also contains rules specific to noise from aircraft engine testing and aircraft operations at the Timaru Airport.

2.1.8 The limits applying to each zone in the ODP are:

		Noise Receiving Zone			
		Residential 1, 3 or 5	Residential 2 or 4	Commercial Zones	Notional boundary of a household unit on another site
Zone Emitting Noise	Rural 1 & 2	50 dBA L10 between 7am and 10pm 40 dBA L10 & 70 dBA Lmax at all other times	55 dBA L10 between 7am and 10pm 45 dBA L10 & 70 dBA Lmax at all other times		
	Rural 3, 4A, 4B & 5				50 dBA L10 between 7am and 10pm 40 dBA L10 & 70 dBA Lmax at all other times

	Commercial 1, 1A, 1B, 1C, 2 & 2A	50 dBA L10 between 7am and 10pm 40 dBA L10 & 70 dBA Lmax at all other times	55 dBA L10 between 7am and 10pm 45 dBA L10 & 70 dBA Lmax at all other times		
	Industrial L & H	50 dBA L10 between 7am and 10pm 40 dBA L10 & 70 dBA Lmax at all other times	55 dBA L10 between 7am and 10pm 45 dBA L10 & 70 dBA Lmax at all other times	65 dBA L10 45 dBA L10 & 75 dBA Lmax between 10pm and 7am	

2.1.9 There are no specific noise rules / limits applying within residential zones, and no limits applying within, or in relation to the boundaries of, recreation zones.

2.1.10 The Rural Zone chapter also contains rules pertaining to audible bird scaring devices (Part D1 – Rural Zones, Rule 5.25)

PDP – Light Chapter

2.1.11 The PDP contains a standalone chapter for light, as directed by the National Planning Standards (NP Standards). It seeks (LIGHT-O1) that artificial outdoor lighting is designed and located to minimise its adverse effects, be compatible with the character and qualities of the surrounding area and protect the values and characteristics of light sensitive areas (LSAs); as well as recognising the benefits of such lighting are ensuring any adverse effects generated by it do not compromise the health and safety of people and communities (LIGHT-O2).

2.1.12 At a policy level, LIGHT-P1 directs that lighting is provided for appropriate to its environment, and subject to various matters, such as maintenance of the character and qualities of the surrounding area and minimisation of sky glow and light spill. LIGHT-P2 directs the control of the intensity, location and direction of any outdoor lighting in order to meet specified outcomes, including avoidance of adverse effects on existing LSAs, other established uses and the transport network; and on the health and safety of people and communities in the surrounding area. LIGHT-P3 then directs that all artificial outdoor lighting that does not meet the intensity, type, and direction requirements for LSAs is avoided, unless it is critical for health and safety reasons.

2.1.13 A key aspect of the Light Chapter is that it includes defined 'Light Sensitive Areas' (LSAs). Outside these areas, artificial outdoor lighting is permitted (under LIGHT-R1.1), subject to meeting general standards (set out in LIGHT-S1 and LIGHT-S2), which include meeting specific illuminance levels (which are set out in Table 22). There is also a separate rule for the Port Zone (LIGHT-R1.2). Within LSAs, in addition to meeting LIGHT-S1 and LIGHT-S2, outdoor artificial lighting is permitted where: it is for health and safety purposes and is a permitted temporary activity, or any other temporary activity that is less than 6 months in duration (LIGHT-R2). Otherwise, it is required to be fully shielded, have a colour corrected temperature of no greater than 3000K and not be operated between 10pm and 7am.

PDP – Noise Chapter

- 2.1.14 The Noise Chapter seeks to manage noise so that it is compatible with the purpose, character and qualities of each zone and does not compromise the health and well-being of people and communities (NOISE-O1). The policies seek to achieve this through enabling noise of an appropriate type, character and level (NOISE-P1); and limiting the frequency, character, scale and duration of noise generated by temporary events (NOISE-P3). There are also policies specific to activities, including temporary military training activities (NOISE-P2); aircraft operations and engine testing (NOISE-P4); and vibration and blasting (NOISE-P6).
- 2.1.15 NOISE-O2 relates to existing noise-producing activities, and seeks that specified activities are not constrained by reverse sensitivity effects arising from noise sensitive activities. The related policies require noise sensitive activities in identified areas to be located and designed so as to minimise adverse effects on the amenity values and health and safety of occupants and minimise sleep disturbance from noise (NOISE-P5); and for noise sensitive activities within identified noise control boundaries to be avoided unless mitigation measures are implemented which avoid sleep disturbance and minimise other adverse effects on the amenity values of occupants (NOISE-P7).
- 2.1.16 The rules in the PDP apply noise limits in accordance with Table 24, relative to the zone in which noise is received. Noise is permitted when it meets these limits, unless it is an activity specified as being exempt (under NOISE-R1.1-9) or is an activity that is subject to another rule (NOISE-R2 – R8 and NOISE-R10 – R11).
- 2.1.17 Where a new building is proposed for use by a noise sensitive activity in specified zones or other areas, or alterations to existing buildings for use by a noise sensitive activity, the building must be acoustically insulated and ventilated to the standards set out (NOISE-R9 and NOISE-S3 and S4). Within the Port Noise Inner Control Boundary overlay, noise sensitive activities are restricted discretionary (NOISE-R12.1) and within the Airport Noise Control Boundary Overlay and Raceway Noise Control Boundary Overlay they are non-complying (NOISE-R12.2).

2.2 Background to Relevant Provisions

- 2.2.1 As with other chapters of the PDP, the review of provisions relating to the Lighting and Noise topics involved identification of key issues for each, and community consultation was undertaken on these via a discussion document. Feedback on the draft Plan, released in 2020, also informed the final drafting of the PDP provisions.
- 2.2.2 The ‘TDC Lighting District Plan Report’ was prepared by Paul Wilson of Xyst Limited in 2020 to provide advice on lighting standards within the PDP (the Xyst Lighting Report). This report includes recommendations on the approach to managing light in the PDP.
- 2.2.3 The provisions in the Noise Chapter were informed by two technical reports prepared by Malcolm Hunt Associates, one of which provided a general review and recommendations to

the approach to managing noise within the PDP, with the second being specific to the management of reverse sensitivity effects from existing noise generating activities.

- 2.2.4 The noise contour boundaries relating to the Port were also subject to the technical report prepared for the Port by Acoustic Engineering Services, which was reviewed by Malcom Hunt Associates.

3. Overview of Submission and Further Submissions

- 3.1.1 The full list of submission points addressed in this report are set out in **Appendix 2**. The following table provides a brief summary of the key issues raised in submissions, which are discussed in more detail in the 'Analysis and Evaluation of Submissions' section of this report.

ISSUE NAME	SUMMARY OF ISSUE	POSITION OF SUBMITTERS
Light Sensitive Areas	Whether there should be an LSA overlay, and where it should apply	Submissions include: <ul style="list-style-type: none"> - Opposition to the LSA altogether, as it is based on other overlays / zones - Opposition to inclusion of particular overlays in LSA, including SASMs and RLZ - A request to include the Long-Tailed Bat Protection Area Overlay in the LSA
Lighting for primary production	Whether the lighting provisions are too restrictive on primary production activities that require lighting	General concerns raised regarding the impact of the lighting provisions on primary production activities
Noise associated with primary production activities	Recognition that rural areas are working environments NPSHPL requires provision for priority land uses on HPL	Changes sought to provisions to: <ul style="list-style-type: none"> - reflect the nature of the GRUZ - recognise priority land uses on HPL, including avoiding or mitigating reverse sensitivity from non-productive uses
Frost Fans	Whether there should be a specific regime in the PDP associated with frost fans.	The PDP should include specific provisions for frost fans, both in terms of providing a specific noise rule for this type of noise, as well as restricting noise sensitive activities in proximity to frost fans.
Clandeboye site	Whether a Noise Control Boundary and related suite of provisions should be introduced in relation to Fonterra's Clandeboye site.	A NCB should be applied to the area surrounding the Clandeboye site, with specific noise limits applied within the boundary, and restrictions on noise sensitive activities established within the NCB.
Reverse sensitivity	Whether other activities beyond those set out in NOISE-O2 should be protected from potential reverse sensitivity effects.	Submissions seek that protection is also applied to: <ul style="list-style-type: none"> - the development potential of identified zones, not just existing activities - all lawfully established activities - primary production activities in rural zones
Port Zone	<ul style="list-style-type: none"> - The noise limits applied to the Port NCBs should apply outside the Port Zone and not apply an in-zone limit. - There is a gap in the rules applying within the Port 	<ul style="list-style-type: none"> - The noise limits for the Port Zone should only apply to the receiving environment which is outside the Zone - Rules should be added to the PDP to manage noise in the south of the Zone which is not covered by either the Inner or Outer Port NCB

	Zone to areas outside the NCBs.	
State Highway	What area the acoustic insulation requirements should apply to, in respect of the State Highway	Submissions include: <ul style="list-style-type: none"> - The area to which the requirements apply should be either increased, or specific variable noise contours should be applied - The acoustic insulation requirements should not apply in relation to the State Highway
Rail network	What area the acoustic insulation requirements should apply to, in respect of the railway line	Submissions include: <ul style="list-style-type: none"> - Extend the rule to apply to noise sensitive activities within 100m (rather than 40m) of the railway line - Apply a new standard relating to indoor railway vibration - The acoustic insulation requirements should not apply in relation to the railway line
Acoustic Insulation	What acoustic insulation requirements should be applied.	Submissions include: <ul style="list-style-type: none"> - The acoustic insulation provisions should be amended to specify the resulting noise inside of a habitable space instead of specifying the minimum noise reduction the building has to provide. - The requirements relating to ventilation should include temperature controls - The requirements should not apply to alterations to existing buildings
Noise Limits	What noise limits should apply to various zones.	Submissions include: <ul style="list-style-type: none"> - Do not apply an in-zone limit within the GIZ - Increase the daytime noise limit from 50 to 55 dB L_{Aeq} in GRZ, OSRZ, RURZ and MPZ - Increase limit applying to the LCZ, within 40m of boundary with MRZ, at 18A Hobbs Street - Increase the noise limit for the GRUZ to 55dBL_{Aeq}

4. Relevant Statutory Provisions

4.1.1 The assessment for the PDP includes the matters identified in sections 74-76 of the RMA. This includes whether:

- it is in accordance with the Council's functions (s74(1)(a));
- it is in accordance with Part 2 of the RMA (s74(1)(b));
- it will give effect to any national policy statement or operative regional policy statement (s75(3)(a) and (c));
- the objectives of the proposal are the most appropriate way to achieve the purpose of the RMA (s32(1)(a));
- the provisions within the plan change are the most appropriate way to achieve the objectives of the District Plan (s32(1)(b)).

- 4.1.2 In addition, assessment of the PDP must also have regard to:
- any proposed regional policy statement, and management plans and strategies prepared under any other Acts (s74(2));
 - the extent to which the plan is consistent with the plans of adjacent territorial authorities (s74 (2)(c)); and
 - in terms of any proposed rules, the actual or potential effect on the environment of activities including, in particular, any adverse effect.

5. Statutory Instruments

- 5.1.1 The s32 reports for Light and Noise set out the statutory requirements and relevant planning context for this topic in more detail. The section below sets out, in summary, the provisions in planning documents that are considered to be particularly relevant.

5.2 Purpose and Principles of the RMA

- 5.2.1 The RMA's purpose, set out in s5, is to manage the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety. This is to occur while also avoiding, remedying or mitigating any adverse effects of activities on the environment. Lighting is integral to the functioning of communities, including in relation to the vibrancy of urban areas, health and safety, accessibility and security. The generation of noise is often a central and necessary part of the operation and function of activities. However, both lighting and noise can have adverse effects on the surrounding environment, particularly in terms of safety, health and wellbeing. In achieving the purpose of the RMA, the role of light and noise in activities that provide for wellbeing and health and safety must be acknowledged, while ensuring adverse effects arising from lighting and noise are adequately managed.
- 5.2.2 Section 6 sets out matters of national importance that are to be recognised and provided for, such as protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development (s6(b)) and protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. Lighting may have some impact on the values of these areas.
- 5.2.3 Section 7 sets out matters to have particular regard to. This includes the efficient use and development of natural and physical resources (s7(b)); the maintenance and enhancement of amenity values (s7(c)); and the maintenance and enhancement of the quality of the environment (s7(f)). Controlling the use and effects of light and noise can contribute towards the maintenance and enhancement of amenity values and the quality of the environment. However it is important that this is done in a manner that ensures efficient use and development of resources. This is also relevant in relation to managing physical resources of importance to the district, which already produce a higher level of noise, so that they are

able to continue to operate and develop efficiently and without being restricted or compromised due to reverse sensitivity effects arising.

5.3 Section 16 of the RMA

- 5.3.1 Section 16 of the RMA requires occupiers of land, and those carrying out activities in, on or under a water body, to ensure that noise emissions are kept at a reasonable level by adopting the best practicable option (as it is defined in the RMA). This requirement applies regardless of whether the noise emissions meet the standards set out in the PDP.

5.4 Canterbury Regional Policy Statement

- 5.4.1 Chapter 5 of the CRPS relates to land use and infrastructure. Objective 5.2.1 provides direction relating to the design and location of development, seeking that this achieves a number of matters, including that it is compatible with, and will result in the continued safe, efficient and effective use of regionally significant infrastructure and that it *“avoids adverse effects on significant natural and physical resources including regionally significant infrastructure, and where avoidance is impracticable, remedies or mitigates those effects on those resources and infrastructure.”* More broadly, it also seeks that conflict between incompatible activities is avoided. This is supported by policies 5.3.2 and 5.3.9 which similarly seek to ensure that development does not compromise existing, or constrain development of new, regionally significant infrastructure; and that reverse sensitivity effects and conflicts between incompatible activities are avoided. This is relevant to the provisions in the Noise Chapter which seek to ensure that specifically identified infrastructure and activities within higher noise environments are not constrained by reverse sensitivity effects arising from noise sensitive activities.

5.5 National Environmental Standards

- 5.5.1 The NESCF, NESETA and NESTF also contain regulations that apply to noise and vibration associated with the activities managed by these standards. The provisions in the PDP must not duplicate or conflict with these.

5.6 Canterbury Regional Coastal Plan

- 5.6.1 This Plan Controls activities within the Coastal Marine Area (CMA) and includes provisions that apply to port activities undertaken within the CMA, including the emission of noise. The PDP must not be inconsistent with this Plan. Policy 8.8 directs that the Port of Timaru is enabled to operate efficiently and effectively by providing for noise controls that are consistent with national noise port standards. Policy 8.9 directs that in controlling noise-emitting activities in the CMA, the regional council is to ensure that noise control rules are consistent with those of the Timaru District Council. Under Rule 8.21, the RCEP sets noise limits for any activity emitting noise within the CMA, with specific limits for activities within the port area.

6. Analysis and Evaluation of Submissions

6.1 Approach to Analysis

- 6.1.1 The analysis undertaken in this report is separated into the 2 topics – Light and Noise.
- 6.1.2 The approach taken in this report is to assess submissions that relate broadly to each topic first, followed by those relating to mapping. The assessment is then largely undertaken on a provision-by-provision basis, with objectives considered first, then policies, then rules, then standards and finally, related definitions.
- 6.1.3 The assessment of submissions generally follows the following format:
- A brief summary of the relevant submission points.
 - An analysis of those submission points.
 - Recommendations, including any amendments to plan provisions and the related assessment under s32AA.
- 6.1.4 Clause 10(2)(b), Schedule 1 of the RMA provides for consequential changes arising from the submissions to be made where necessary, as well as any other matter relevant to the PDP arising from submissions. Consequential changes recommended under clause 10(2)(b) are footnoted as such.
- 6.1.5 Clause 16(2), Schedule 1 of the RMA allows a local authority to make an amendment to a proposed plan without using a Schedule 1 process, where such an alteration is of minor effect, or may correct any minor errors. Any changes recommended under clause 16(2) are footnoted as such.
- 6.1.6 Further submissions have been considered in the preparation of this report, but in general, they are not specifically mentioned because they are limited to the matters raised in original submissions and therefore the subject matter is canvassed in the analysis of the original submission. Further submissions may however be mentioned where they raise a valid matter not addressed in an original submission. Further submissions are not listed within Appendix 2. Instead, recommendations on the primary submissions indicate whether a further submission is accepted or rejected as follows:
- Where a further submission supports a primary submission and the primary submission is recommended to be accepted, or where a further submission opposes a primary submission and the primary submission is recommended to be rejected, the further submission is recommended to be accepted.
 - Where a further submission supports a primary submission and the primary submission is recommended to be rejected, or where a further submission opposes a primary submission and the primary submission recommended to be accepted, the further submission is recommended to be rejected.
 - Where a further submission supports or opposes a primary submission and the primary submission is recommended to be accepted in part, then the further submission is recommended to be accepted in part.

- 6.1.7 Helicopters Sth Cant. [53.1] and Southern Wide Helicopters [213.1], in a primary submission, support the submission of NZAAA and seek the same relief as sought in that submission. Discussion of the NZAAA submission points and recommendations made in relation to these therefore applies to that of Helicopters Sth Cant. [53.1] and Southern Wide Helicopters [213.1].
- 6.1.8 Moore, D and J [100.2], Peel Forest [105.1] and McArthur, K and J [113.1], in a primary submission, support the submission of Federated Farmers and seek the same relief as sought in that submission. Discussion of the Federated Farmers submission points and recommendations made in relation to these therefore applies to that of Moore, D and J [100.2], Peel Forest [105.1] and McArthur, K and J [113.1].
- 6.1.9 Zolve [164.1], in a primary submission, supports the submission of Port Blakely and seeks the same relief as sought in that submission. Discussion of the Port Blakely submission points and recommendations made in relation to these therefore applies to that of Zolve [164.1].

6.2 Provisions where no Change Sought

- 6.2.1 The following provisions included within the LIGHT and NOISE Chapters were either not submitted on, or any submissions received sought their retention. As such, they are not assessed further in this report, and I recommend that the provisions are retained as notified (unless a cl 16(2) or clause 10(2)(b) change is recommended):
- Definitions of ‘glare’⁴ and ‘special audible characteristic’⁵
 - The Introduction to the LIGHT chapter⁶
 - NOISE-P2⁷
 - NOISE-P3⁸
 - NOISE-P4
 - NOISE-P6
 - NOISE-R6
 - NOISE-R7
 - NOISE-R10
 - NOISE-R11
 - NOISE-S1
 - NOISE-S5

⁴ Supported by Waka Kotahi [143.5]

⁵ Supported by Hort NZ [245.28]

⁶ Supported by TDHL [186.35], Dir. General Conservation [166.119], Primeport [175.59]

⁷ Supported by NZDF [151.12]

⁸ Supported by FENZ [131.13]

- Table 25 - Minimum construction requirements for external building elements of habitable rooms to achieve an advanced level of acoustic insulation⁹
- Table 26 - Minimum construction requirements for external building elements of habitable rooms to achieve a moderate level of acoustic insulation¹⁰

7. Light

7.1 General

7.1.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Waka Kotahi	143.109
Forest and Bird	156.172
Rooney Holdings	174.68
ECan	183.1, 183.4
Rooney, GJH	191.68
Hort NZ	245.86
Rooney Group	249.68
Rooney Farms	250.68
Rooney Earthmoving	251.68
TDL	252.68

Submissions

7.1.2 ECan [183.1] is concerned that various rules in the PDP use variable terminology to define floor areas of buildings, often with the term undefined, so that it is not clear what is being measured. The submitter considers that it is necessary to review all references to size of buildings and consider whether a clear definition is required linking development to either the "*building footprint*" or "*gross floor area*", which are defined NP Standards terms, and then create exclusions from those terms within the rules if necessary.

7.1.3 ECan [183.4] is also concerned that within the PDP, references to "*height*" of buildings or structures do not make reference to where height is measured from, and seek that all references to the height of buildings across the PDP is reviewed to ensure that height is measured from ground level, with consistent expression of height rules.

⁹ Supported by KiwiRail [187.81], NZ Frost Fans [255.15] (noting the broader concerns in NZ Frost Fans submission regarding amendments that may be required to give effect to the NPSHPL).

¹⁰ Supported by NZ Frost Fans [255.16] (noting the broader concerns in NZ Frost Fans submission regarding amendments that may be required to give effect to the NPSHPL).

- 7.1.4 Forest and Bird [156.172] considers that the impact of artificial light on native fauna should be considered in the PDP, and seek that the Chapter is amended to ensure light on indigenous fauna is considered, particularly in relation to the identified Bat Protection Area (BPA) Overlay.
- 7.1.5 Six submitters¹¹ oppose the provisions and seek that they are deleted and replaced with those contained in Plan Change 22 (PC22) to the Mackenzie District Plan (MDP). The submitters consider that the provisions are too extensive and restrictive and will make compliance as a permitted activity difficult. They consider that PC22 provides a more pragmatic framework.
- 7.1.6 Waka Kotahi [143.109] seeks further consideration of the terminology used in the chapter, specifically the use of 'obtrusive light', noting that this is the terminology used in AS/NZS4282:2019, and addresses more types of lighting beyond just spill light, e.g. glare, upward light, luminous intensity and luminance of surface areas.
- 7.1.7 Hort NZ [245.86] considers that artificial lighting is essential for health, safety and security purposes and for practical reasons, some primary production activities will need to occur at time where lighting is required. The submitter is concerned that the PDP approach to managing light will not enable a safe working environment in rural areas.

Analysis

- 7.1.8 With respect to the size of buildings, I have reviewed the rules and standards contained in the Light Chapter, and have not found any instances where these are related to the size of buildings. With respect to height, I note that LIGHT-S1.3.c. is the only provision in this chapter which refers to height, and is explicit that this is to be measured from ground level. I therefore do not consider that the concerns raised by ECan arise in relation to the Light Chapter.
- 7.1.9 It is not clear to me what specific changes are sought to the Light Chapter by Forest and Bird [156.172], in order to manage the impact of artificial light on native fauna. I note however that I have considered the BPA later in this report, which is a specifically identified area of fauna identified and mapped in the PDP. The recommendations I have made in relation to this will, in my view, go some way to addressing Forest and Bird's request.
- 7.1.10 With respect to the broad matters raised by Hort NZ [245.86], I note that the submitter has made more specific submission points in relation to these matters, which are addressed later in this report.
- 7.1.11 I have also considered the provisions contained in PC22 to the MDP – noting that it is now operative. PC22 introduced a Light chapter into that Plan. I do not consider it appropriate or

¹¹ Rooney Holdings [174.68], Rooney, GJH [191.68], Rooney Group [249.68], Rooney Farms [250.68], Rooney Earthmoving [251.68], TDL [252.68]

workable to pick up the MDP provisions and drop them into the PDP, given the different approach taken to drafting, and the context of PC22 – in particular, that the Mackenzie District contains an international dark sky reserve, and the ‘dark sky’ provisions contained in PC22 were based on provisions already existing in that plan. Furthermore, unlike the ODP, the MDP did not previously include general illuminance levels and therefore PC22 did not have a base starting point for these provisions. In considering submissions on the specific provisions in the Light Chapter, I have however taken into account the provisions in the MDP, as a plan of a neighbouring local authority, to the extent that I consider they are relevant.

- 7.1.12 In my view, it is important to consider Waka Kotahi’s request [143.109], in terms of how the chapter might be amended to refer to obtrusive light – and an important consideration of this is how policies and rules would need to be amended to refer to this, and whether that is in fact necessary to achieve the outcomes sought in the Light Chapter. As this submitter has also requested changes to specific provisions, I have addressed this consideration later in this report in response to the specific changes requested.

Conclusions and Recommendations

- 7.1.13 I do not recommend any changes in response to these general submission points, noting that changes are recommended in relation to specific provisions below which may partially address the broader concerns of some of these submitters.

7.2 Objectives

- 7.2.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
MoE	106.13
Waka Kotahi	143.110
Synlait	163.5
Fonterra	165.97, 165.98
Dir. General Conservation	166.120
Silver Fern Farms	172.100
Alliance Group	173.101
Te Rūnanga o Ngāi Tahu	185.50
Hort NZ	245.87

Submissions

- 7.2.2 Te Rūnanga o Ngāi Tahu [185.50] and Fonterra [165.97, 165.98] support both objectives and seek their retention. MoE [106.13] and Hort NZ [245.87] support LIGHT-O1 and seek its retention. Silver Fern Farms [172.100] and Alliance Group [173.101] support LIGHT-O2 and seek its retention.

- 7.2.3 Synlait [163.5] considers that both objectives are confusing. In particular it notes that there are ‘mitigation’ aspects to both objectives which are over-lapping, and that the drafting of Objective 2 does not appropriately capture that one of the primary benefits of artificial lighting is the health and safety of people working within a site, and instead implies that health and safety of people on a site can be compromised by lighting. The submitter seeks changes so that one objective is related to the benefits of providing lighting, which includes the health and safety of people within a site, with the other dealing with the design and management of lighting and its external effects on the character and qualities of the environment, road safety and the wellbeing of people external to the site. The wording sought is:

Artificial outdoor lighting is designed and located to minimise its adverse effects, ~~is compatible with~~ on the character and qualities of the surrounding ~~environment, area and~~ protects the values and characteristics of light sensitive areas, ~~and the health and safety of people external to the site, including road safety.~~

Artificial outdoor lighting ~~The~~ benefits ~~and enables a range of outdoor night-time activities, of artificial lighting are recognised while any adverse effects generated do not compromise~~ including the health and safety of people ~~involved in those activities and communities, including road safety.~~

- 7.2.4 Dir. General Conservation [166.120] seeks consequential amendments required to LIGHT-O1 to reflect their request that LSAs are amended to include the BPA Overlay, so that controls are included for artificial outdoor lighting within areas of bat habitat.
- 7.2.5 Waka Kotahi [143.110] seeks an amendment to LIGHT-O2 to replace “road safety” with “the transport network and public areas”.

Analysis

- 7.2.6 I tend to agree with Synlait [163.5] that there is some confusion between the objectives, because they appear to overlap in relation to the management of adverse effects resulting from artificial outdoor lighting. This occurs because LIGHT-O1 sets out the desired outcome for the management of artificial outdoor lighting (minimising its adverse effects, compatibility with the character and qualities of the surrounding area and protection of the values and characteristics of LSAs), but LIGHT-O2 also addresses this, seeking recognition of the benefits of artificial outdoor lighting, while also seeking that any adverse effects generated do not compromise the health and safety of people and communities, including road safety. In other chapters that I consider are somewhat similar to the Light chapter – earthworks and signage – there is a single objective which combines the ‘benefits’ of identified activities with the outcomes sought from how they are managed. I therefore consider that it is most appropriate to essentially combine the objectives, while ensuring that this combined objective clearly splits out the benefits of the activity from the management of its effects.
- 7.2.7 In terms of the drafting, I consider it preferable to be specific about what the benefits of such lighting are, and therefore prefer drafting along the lines sought by the submitter to

refer to the use of lighting for outdoor night-time activities. However, in considering the specific drafting of the objective, I have also noted the wording of LIGHT-P1.1 which refers to providing for “*the safe and efficient use of the outdoors for a range of activities*”. I consider that this is essentially the outcome sought (rather than being an action taken to achieve the outcome) and therefore recommend that this wording is shifted into the objective. This essentially aligns with Synlait’s request albeit with slightly different wording. I also consider it preferable to retain the original drafting as to how effects of such lighting are to be managed, noting that the drafting proposed by Synlait would change the focus to only minimising adverse effects (rather than the references to compatibility and not compromising).

- 7.2.8 With respect to the reference to “*road safety*” I do not consider that it would work to replace this with “*the transport network and public areas*” as road safety is a subset of the “*health and safety of people and communities*”, whereas “*the transport network and public areas*” are not a subset of the “*health and safety of people and communities*”.
- 7.2.9 With respect to the Dir. General Conservation’s submission [166.120], I note that the substance of this is addressed below.

Conclusions and Recommendations

- 7.2.10 I recommend that LIGHT-O1 and LIGHT-O2 are effectively combined, through the deletion of LIGHT-O2 and the amendment of LIGHT-O1, as follows (noting this incorporates changes relating to LSAs and BPAs which are addressed in the next section):

LIGHT-O1 Artificial Outdoor Lighting

Artificial outdoor lighting provides for the safe and efficient use of the outdoors for a range of night-time activities, while:

- 1. ~~is being~~ designed and located to minimise its adverse effects;*
- 2. ~~is being~~ compatible with the character and qualities of the surrounding area; ~~and~~*
- 3. ~~protects the values and characteristics of light sensitive areas~~ minimising adverse effects on long-tailed bats; and*
- 4. not compromising the health and safety of people and communities, including road safety.*

- 7.2.11 In terms of the changes recommended to clause 3, I note that the s32AA evaluation for this is set out in the next section of this report.
- 7.2.12 In terms of s32AA, I consider that the remaining changes are relatively minor, in that they do not alter the intent of the original drafting. As such, I consider that the original s32 evaluation still applies. However, I consider that the changes provide much clearer direction about the outcomes sought and avoid unnecessary duplication across two objectives, and in doing so, the drafting changes are more appropriate.

7.3 Light Sensitive Area Overlay (and related objectives, policies and rules)

- 7.3.1 This section of the report considers submissions made in relation to the definition of ‘light sensitive areas’ (LSAs), including the mapping, as an overlay, of these areas, as well as LIGHT-

P3, LIGHT-R2 and LIGHT-R3, which are a policy and rules specific to LSAs. It also considers the drafting of LIGHT-O1 as it relates to LSAs. I note that LIGHT-P1 and LIGHT-P2 also include reference to LSAs, but as these are not standalone provisions, the assessment of the submissions on these objective and policy provisions is addressed separately in this report (albeit they are also considered in this section in terms of their application to LSAs).

7.3.2 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Bonifacio, P	36.12, 36.13, 36.14
Rangitata Dairies	44.1
Dairy Holdings	89.4, 89.14
Fonterra	165.15
Dir. General Conservation	166.8, 166.24, 166.123, 166.24
Fenlea Farms	171.2, 171.3, 171.4, 171.8
Silver Fern Farms	172.7
Alliance Group	173.102, 173.103
Rooney Holdings	174.9, 174.70, 174.71
Rooney, A J	177.4, 177.6, 177.7
Barkers	179.5, 179.21
Federated Farmers	182.16
Rooney, GJH	191.9, 191.70, 191.71
Rangitata Island Dairy	221.4
RDRML	234.1
Hort NZ	245.12
Rooney Group	249.9, 249.70, 249.71
Rooney Farms	250.9, 250.70, 250.71
Rooney Earthmoving	251.9, 251.70, 251.71
TDL	252.9, 252.70, 252.71

Submissions

Definition / Mapping and related Objectives and Policy Framework

7.3.3 Fenlea Farms [171.2] opposes all provisions relating to the LSA overlay, particularly as they relate to the submitter's property. Rooney, A J [177.6] similarly opposes the LSAs. Fenlea Farms [171.4] opposes the definition of LSAs being based on overlays, rather than on ecological assessment. For both submitters this is based on the extent of the overlay being defined based on other overlays, rather than on ecological assessment. Fenlea Farms is also concerned that the provisions do not take into account health and safety associated with

- ancillary activities, which in its view is contrary to LIGHT-P1 and LIGHT-P3. The submitters are concerned that the SASM Overlays are expansive and may cover areas where the control of light is unnecessary. The submitters seek that the approach to LSAs is amended so that it is based on ecological evidence, limited accordingly, and that standards are developed to determine what a LSA is.
- 7.3.4 Fenlea Farms [171.3] and Rooney, A J [177.4], in addition to their more general opposition to the definition of LSAs, oppose the specific inclusion of their properties in the LSA, on the same basis as set out above (the extent of the layer being based on overlays (where some are extensive in area), rather than ecological assessment). They consider that the overlay does not account for the critical need for light for health and safety associated with activities within the overlay, and that the rules in this chapter do not allow critical health and safety lighting past 10pm. As such, the submitters seek deletion of the LSA from their properties at 32, 48 and 94 Milford-Clandeboye Road and 158 Prattley Road.
- 7.3.5 Rangitata Dairies [44.1] are concerned that wai taoka sites are included in the definition of LSAs. As an example, they note that dairy sheds within these areas, which operate with artificial lights prior to 7am, would require a resource consent as a non-complying activity. The submitter further notes that the AEC Report¹² referred to disturbance of birds by night lighting, but only within wāhi tapu and wāhi taoka sites, not wai taoka sites. It seeks removal of the wai taoka overlay from the definition.
- 7.3.6 Dairy Holdings [89.4] considers it unnecessary to restrict lighting in areas where it is unlikely for there to be sensitive receivers, and further note that lights are essential in rural areas for health and safety. The submitter considers that lighting should not be unnecessarily restricted where there is no or minimal benefit to others. The submitter seeks deletion of reference to wāhi tapu, wāhi taoka and wai taoka sites from the definition.
- 7.3.7 Fonterra [165.15] considers it is inappropriate that the Rural Lifestyle Zone (RLZ) is included in the definition, as it considers that as a rural zone, it should not be protected from typical rural effects, including light. Hort NZ [245.12] similarly seeks removal of the RLZ from the definition, as it notes that primary production activities can generate light as part of activities such as harvesting.
- 7.3.8 Dir. General Conservation [166.8] seeks that the definition is extended to include the BPA, stating that lighting can negatively affect long-tailed bat activity and behaviour.
- 7.3.9 Silver Ferm Farms [172.7] states that definition lists land affected by the LSA Overlay, but does not explain the meaning for the term. It considers that amendments should be made to specify exactly which land cannot be defined as a “*Light Sensitive Areas*”, or that the definition refers to “*mapped*” LSAs. The submitter seeks that the definition is amended “to

¹² I have assumed this is referring to the report prepared by Aoraki Environmental Consultancy Ltd in relation to the sites and areas of significance to Māori in the Timaru District - Aoraki Environmental Consultancy Ltd (2020). *Timaru District Plan Review: Report on Sites and Areas of Significance to Māori*.

ensure the meaning of the term is expressed clearly and if specified in the definition, the spatial coverage of the overlay is represented more precisely.”

- 7.3.10 Federated Farmers [182.16] considers it appropriate to exclude farms from light sensitivity for the purpose of primary production, stating that farms need light to operate safely and conduct their business (e.g. harvesting). The submitter also opposes the inclusion of SNA in this definition. It seeks the following is added to the stem of the definition:

Includes land in the following areas outside of the Port Zone, unless the land is needed for primary production, including but not limited to dairy sheds, pest control, rural aviation needs, security, harvesting of crops, primary production needs where seen fit, whilst taking into consider the overlays:

...

- 7.3.11 With respect to the mapping of the LSA Overlay, RDRML [234.1] seeks that all district plan layers are removed from the Rangitata River, including LSAs. The submitter is concerned that this overlay covers the bed of the Rangitata River near the Klondyke intake, where it undertakes authorised works to maintain the diversion of water into the Rangitata Diversion Race. The submitter expresses concerns about whether it is lawful for the Council to create district plan provisions in respect of the bed of the Rangitata River, as it considers that this appears to be outside the functions of a territorial authority under s31 of the RMA. Even if lawful, the submitter questions whether it is appropriate, given its concerns about how the District Plan applies, confusion about whether the Plan provisions apply to its activities where within the Rangitata River, and the role of ECan, whose function and jurisdiction cover activities within the river.
- 7.3.12 Barkers [179.5] seeks that the LSA is amended to follow the site boundary of 72 Shaw Road, Geraldine, as it considers this is more practicable for plan implementation purposes.

Analysis

- 7.3.13 The definition for LSAs set out what areas this covers. They are:
- Wāhi tapu, Wāhi taoka and Wai taoka Overlays;
 - Significant Natural Areas Overlay;
 - Outstanding Natural Landscapes Overlay;
 - Visual Amenity Landscape Overlay;
 - the Rural Lifestyle Zone; and
 - the Natural Open Space Zone.
- 7.3.14 This definition is then reflected in the mapping, with the EPlan maps effectively including a layer which outlines where the definition applies.
- 7.3.15 I do not agree with Silver Ferm Farms [172.7] that the definition needs to refer to “mapped” LSAs, as it is the definition itself which determines where the provisions apply, with the mapping simply reflecting the definition. I consider that the uncertainty arising from the

definition is that it reads “**Includes** land in the following areas outside of the Port Zone” (emphasis mine). I consider that this can be easily resolved by replacing “Includes” with “means”. This would ensure greater clarity that the definition applies to all listed areas.

- 7.3.16 I have however, considered the concerns raised by submitters about the extent of the LSAs, and the provisions relating to it. I note that within LSAs, the standards applying in other parts of the district also apply (i.e. LIGHT-S1 and LIGHT-S2, which are requirements of LIGHT-R1, apply outside LSAs, and also to LIGHT-R2 and LIGHT-R3 which apply within LSAs). LIGHT-R2 permits lighting in LSAs where it is for health and safety purposes and it is for either a permitted temporary activity, or any other temporary activity of six months or less. For other purposes, outdoor artificial lighting is only permitted where it is fully shielded, has a colour corrected temperature of no greater than 3000K and is not used between 10pm and 7am. These requirements are similar to those included in the MDP, which also includes similar requirements for shielding and limits the colour corrected temperature of lighting. However, the MDP provisions do not restrict the use of lighting (i.e. do not restrict its use after 10pm) where it meets these standards.¹³ In the MDP, these requirements apply throughout the District and relate to the District containing a Dark Sky Reserve. The related objective in the MDP seeks that use of outdoor lighting protects views of the night sky (LIGHT-O1.1), with policy direction requiring the minimization of the potential for upward light spill that would adversely affect the ability to view the night sky (LIGHT-P2). In essence, the MDP rules seek to restrict light spill that might otherwise affect the ability to view the night sky.
- 7.3.17 In the Timaru District, there are no dark sky reserves. As such, the areas identified in the PDP as LSAs are not within or near a dark sky area. I have also considered the objective and policy direction within the PDP Light Chapter which the LSA controls relate to (noting these provisions are considered further below) and note that these seek to:
- Protect the values and characteristics / qualities of LSAs (LIGHT-O1 and LIGHT-P1.5);
 - Control the intensity, location and direction of any outdoor lighting in order to ensure that such lighting avoids adverse effects on existing LSAs (LIGHT-P2.1); and
 - Avoid all artificial outdoor lighting that does not meet the intensity, type, and direction requirements for LSAs unless it is critical for health and safety reasons (LIGHT-P3).
- 7.3.18 There does not appear to be any Strategic Directions specific to LSAs, albeit the direction relating to areas which are included as LSAs generally seeks that the values of the areas are protected¹⁴, or protected from inappropriate use and development¹⁵.

¹³ LIGHT-R1 in the MDP includes restriction on the use of some forms of outdoor lighting between 10pm and 6am, but only applies to particular types of lighting, such as searchlights and outdoor illumination of buildings, not to outdoor lighting more broadly.

¹⁴ SD-O2.v. in relation to SNAs; and SD-O5.iii in relation to SASMs.

¹⁵ SD-O2.iv. in relation to ONLS and VALs.

- 7.3.19 LIGHT-P1.4 also seeks to provide for lighting appropriate to its environment that, amongst other things, minimises sky glow and light spill; and LIGHT-P2.3 seeks to control the intensity, location and direction of any outdoor lighting in order to minimise adverse effects on views of the night sky and intrinsically dark landscapes.¹⁶ I note that both of these directions are general and not specific to LSAs.
- 7.3.20 I have also reviewed the objective and policy framework for those areas which are included in the LSAs, in order to determine the values and characteristics / qualities of these areas, which are sought (in the notified wording of LIGHT-O1.3) to be “*protected*”. I do not consider that the framework in SASMs, SNAs, ONLs, VALs, RLZ or NOSZ identifies the darkness of the night sky as a value or characteristic/quality of any of these areas. I am aware that in some instances the values of significant habitats of indigenous fauna (which in turn may be part of the values of an SASM) may be adversely affected by lighting, but I am unsure if or how the controls relate to this, i.e. they appear to relate to darkness of the night sky and potential for light spill, rather than the impact of light shining into a habitat area.
- 7.3.21 I have also reviewed the Xyst Lighting Report and note that in the discussion regarding the control of light pollution, it appears to relate to a suggestion or request that Geraldine become a dark sky reserve, and the potential to align the PDP rules with the current requirements for dark sky reserves.¹⁷ I note however, that the area to which the controls are proposed to apply does not include the Geraldine township. There is also a requirement in the ODP, within the Rural 4A Zone (Geraldine Downs) for outdoor lighting to be shielded.¹⁸ The report notes that the area within which additional dark sky protection should apply would require additional research.¹⁹ While the report refers to the ONL and Amenity Landscape areas as a minimum area for such protections,²⁰ it is not clear to me on what basis the author has identified these areas, given the landscape values and characteristics of these areas does not appear to be related to the dark sky.
- 7.3.22 The s32 Report identifies, as an issue with the ODP, that “*The rules do not consider the existing quality of the night sky and the desirability of protecting intrinsically dark areas from light pollution*”.²¹ It also discusses the level of lighting existing in an area as being relevant as “*intrinsically dark areas should be protected to retain the quality of the night sky that already exists*”.²² However, I could find no indication of any assessment being undertaken as to whether the identified LSAs are those areas within the district which are intrinsically dark. The s32 Report also talks about protecting the identified values of certain areas – e.g. natural areas, the coastal environment, landscapes and indigenous biodiversity – but I am unable to

¹⁶ Which is defined as follows: “*Intrinsically dark landscapes are those entirely, or largely, uninterrupted by artificial light.*”

¹⁷ Para 1.9

¹⁸ Rule 6.9(2) in Part D1 – Rural Zones, Rural 4A Zone

¹⁹ Para 4.1.8

²⁰ Para 4.1.9

²¹ Section 1.4.2, page 13

²² Section 2.2, page 22.

find a link between those values identified in the PDP and artificial lighting. i.e. there seems to be an assumption that lighting may have adverse effects on values, but the neither the s32 Report, nor the Xyst Report, explain how this occurs.

- 7.3.23 Overall, the provisions applying within the LSA appear to me to relate to protection of the darkness of the night sky. However, I was unable to find any assessment of whether the areas included in the LSA are intrinsically dark areas; and based on the provisions regarding these areas in the PDP itself, it does not appear that the areas included in the LSA are areas which hold particular dark sky values. On this basis, I recommend that LSAs are removed from the PDP. The suite of changes this results in are set out below. Notwithstanding this recommendation, throughout the rest of this report, I have still provided an assessment of submissions on provisions affected by this recommendation on the basis of the LSAs being retained.
- 7.3.24 In coming to the above recommendation, I have also taken into account that the Xyst Lighting Report discusses the possibility of Geraldine becoming a dark sky reserve, which in my view might make it an appropriate area in which to apply controls on lighting in relation to protecting the darkness of the night sky and views of it. However, the report states that there would be difficulty achieving a dark sky reserve for the Geraldine township in the foreseeable future, because street lighting across the district is being replaced with 4000K LED lights, and to achieve dark sky status, these would need to be replaced with 3000K lights. Therefore, I do not consider that applying dark sky-focussed controls on lighting in Geraldine would make a practical difference in terms of protecting or improving views of the night sky.
- 7.3.25 I note that the recommended removal of the LSAs will also address those submissions seeking that the LSA is not applied to their land or operational areas (RDRML [234.1], Barkers [179.5], Fenlea Farms [171.3] and Rooney, A J [177.4]).
- 7.3.26 With respect to the BPA, I note the submitter's comments that lighting can negatively affect Long-Tailed bat activity and behaviour. The PDP includes a 'Long-tailed Bat Protection Area'²³ Overlay, which identifies areas which contain bat roosts. As these are areas which bats rest in during the day, I understand (from the abstracts provided with the submission) that artificial light at night, resulting from urbanisation, may negatively impact long-tailed bat activity and behaviour, in a peri-urban context; and that impacts of artificial light at night on long-tailed bat activity may be partially mitigated by using light sources with less blue wavelength light, i.e. a reduced colour corrected temperature.
- 7.3.27 Based on the submission, my preliminary view is that controls should be placed on lighting in the BPA. This is because the submission points to research showing that artificial lighting can adversely affect long-tailed bat, and therefore such controls would assist in protection of areas of significant habitats of indigenous fauna in accordance with SD-O2.v and ECO-O1.

²³ Note that in the Hearing D s42A Report, it has been recommended that this is renamed the 'Long-Tailed Bat Habitat Protection Area' Overlay

For completeness I note that through Hearing D, it has been recommended that the BPA is increased in area and therefore any controls would apply to the wider area now recommended. In terms of the specific controls to be applied, it is my view that the LSA provisions should essentially be amended to apply specifically to the BPA. I consider the controls applying below.

- 7.3.28 With respect to LIGHT-P3, I note that this directs that all artificial outdoor lighting that does not meet the intensity, type, and direction requirements for LSAs is to be avoided, unless it is critical for health and safety reasons. I recommend that this policy is deleted (and not amended to refer instead to the BPA). This is because I consider that adequate direction is provided in the drafting recommended in relation to LIGHT-P2 (refer below) to control the intensity, location and direction of any outdoor lighting in order to minimise adverse effects on long-tailed bats. I consider LIGHT-P3 essentially results in unnecessary duplication.

Conclusions and Recommendations

- 7.3.29 I recommend that the definition of 'light sensitive area' is deleted.
- 7.3.30 I recommend that that mapping layer for Light Sensitive Areas is removed from the planning maps.
- 7.3.31 I recommend that the provisions relating to LSAs are deleted, and replaced with reference to the Long-Tail Bat Habitat Protection Area, including as follows.
- Deleting "*protects the values and characteristics of light sensitive areas*" from LIGHT-O1 and replacing it with "*minimising adverse effects on long-tailed bats*";
 - Deleting LIGHT-P1.5 ("*protects the identified values and qualities of light sensitive areas*") and deleting reference to "*existing light sensitive areas*" in LIGHT-P2.1 and adding a new clause in LIGHT-P2 to "*minimise adverse effects on long-tailed bats*"
- 7.3.32 I recommend that LIGHT-P3 is deleted.
- 7.3.33 In terms of s32AA, I have assessed the costs and benefits resulting from the removal of the LSAs as follows:
- There will be a significant reduction in the economic costs that would otherwise be imposed by applying constraints on lighting across large areas of the District. I consider that a reduction in controls will also have some consequential reduction in social costs.
 - There are environmental costs resulting from reduced controls on lighting in LSAs, in terms of potential adverse effects on the views of the night sky. However, as noted above, there does not appear to have been an assessment undertaken of where views of the night sky are highly valued.
 - There may be some environmental costs to the extent that lighting may affect the values of some LSAs. However, as noted above, there does not appear to be a clear link between the values which make these areas significant and the outcomes which the LSA provisions seek to address (i.e. views of the night sky). In addition, as the status quo does not include such controls, any costs will not increase.

- 7.3.34 Taking the above costs and benefits into account, I consider that the removal of the LSAs is a much more efficient approach, as the current approach does not appear to be well-targeted and imposes controls which are largely aimed at protecting views of the night sky, to areas that have been identified as being important or valuable for other reasons. As such, I do not consider that the LSA provisions are necessary to achieve the outcomes sought for these areas and are therefore not effective at assisting to achieve them.
- 7.3.35 With respect to the changes to LIGHT-O1, I consider that removing reference to LSAs is a more appropriate way to achieve the purpose of the RMA, because the values and characteristics of the LSAs are identified in other chapters, and the effects on them managed through other controls. I do not consider that artificial outdoor lighting needs to be managed in order to protect these values and characteristics, and therefore this aspect of LIGHT-O1 is not necessary to achieve sustainable management, nor to recognise and provide for those matters identified in s6 of the RMA.
- 7.3.36 I accept that there may be some areas within the proposed LSAs which have values which may justify such controls. However, I consider there to be insufficient information of these at this time. The risk of acting in the manner recommended (i.e. removing the LSAs) is that such values may be affected by new lighting. However, I consider that there is a greater risk associated with applying controls over such a broad area, beyond what is necessary or justified to protect such values.
- 7.3.37 In terms of amending the provisions to apply controls to the Long-Tail Bat Habitat Protection Area, I consider that the costs and benefits are as follows:
- There will be economic costs arising from applying constraints on lighting in this Area, and some consequential increase in social costs in terms of increased regulation.
 - There will be environmental benefits in terms of minimising adverse effects of lighting on Long-Tail Bats, and similarly cultural benefits because of the cultural values associated with this indigenous species.
- 7.3.38 For completeness, I note that if the Hearing Panel accept the recommendation in Hearing D to increase the area of the BPA, then the costs identified above would apply over a larger area.
- 7.3.39 Taking the above costs and benefits into account, I consider that the benefits of applying controls on lighting in the Long-Tail Bat Habitat Protection Area outweigh the costs, and in broad terms, will be an effective way to assist in protection of areas of these particular significant habitats of indigenous fauna in accordance with SD-O2.v and ECO-O1.
- 7.3.40 With respect to the changes to LIGHT-O1, I consider that seeking to minimise adverse effects on long-tailed bats is a more appropriate way to achieve the purpose of the RMA, as it assists with avoiding, remedying, or mitigating any adverse effects of activities on the environment in accordance with s5(2)(c); and appropriately recognises and provides for the protection of areas of significant habitats of indigenous fauna (s6(c)). I consider that the submitter has

provided information of the potential adverse effects of lighting on long-tailed bats to justify the risks of acting in the manner recommended.

LIGHT-R2 and LIGHT-R3

Submissions

- 7.3.41 Bonifacio, P [36.13] opposes LIGHT-R2, stating that milking is undertaken for longer than 6 months of the year and requires lighting for health and safety purposes. To undergo a resource consent purely because the activity lasts longer than six months is, in the submitter's view, unjustified. The submitter seeks that the time constraints on activities listed in LIGHT-R2 is reconsidered.
- 7.3.42 Fenlea Farms [171.8] and Rooney, A J [177.7] oppose LIGHT-R2 PER-2 as they consider that it does not account for permanent activities or existing uses that require artificial lighting in the ordinary course of business to protect the health and safety of stock/plant/personnel and as such it is at odds with LIGHT-P1. They further consider that PER-3 is at odds with LIGHT-P3. They seek that outdoor artificial light for health and safety is provided for as a permitted activity for an ancillary activity to a permanent activity that occurs on site; and for PER-3 to be amended to not apply to lighting required for health and safety (including for ancillary activities to permanent activities occurring at the site).
- 7.3.43 Six submitters²⁴ seek that LIGHT-R2 PER-2 is amended to provide for any temporary activity.
- 7.3.44 Barkers [179.21] seeks that the LIGHT-R2.2 is amended to exclude the General Industrial zoned site at 72 Shaw Road, Geraldine, or otherwise amended to exclude the site from compliance with the LSA requirements. The submitter considers that health and safety, and site security reasons, it is too restrictive for its site operations to be required to meet the LSA standards as at the boundary of the LSA.
- 7.3.45 Alliance Group [173.102] notes that their Smithfield site is within the LSA, as it is within the Wāhi taoka Overlay. The submitter notes that activities are undertaken on the site that require lighting for health and safety purposes that are not temporary activities and therefore not a permitted activity (PER-2), so lighting on the site for such purposes would require a consent as a non-complying activity. It considers that this is not appropriate for an industrial site with night-time activities. As such, the submitter seeks that LIGHT-R2 PER-1 applies without compliance with PER-2 and PER-3 also being required.
- 7.3.46 With respect to LIGHT-R3, Alliance Group [173.103] notes that activities are undertaken on their Smithfield site which require lighting for health and safety purposes 24 hours per day, and that such lighting on the site would require a consent as a non-complying activity. It considers that this is not appropriate for an industrial site with night-time activities. As such,

²⁴ Rooney Holdings [174.70], Rooney, GJH [191.70], Rooney Group [249.70], Rooney Farms [250.70], Rooney Earthmoving [251.70], TDL [252.70]

the submitter seeks deletion of PER-2.3 which precludes the operation of lighting between 10pm and 7am.

- 7.3.47 Bonifacio, P [36.12, 36.14] opposes LIGHT-R3, as he considers that there is no justification for why outdoor artificial lighting that operates outside of the hours stated should require a resource consent. He further notes that milking occurs prior to 7am and requires outdoor artificial lighting for the safety of the staff and the cows. The submitter considers that the requirement is onerous and unjustified and excessive in relation to any potential adverse effects the light may cause; and that the rule contradicts the LIGHT-P1 Policy for the provision of lighting that *“provides for the safe and efficient use of the outdoors”*. The submitter seeks that the time restriction on outdoor artificial lighting is reconsidered.
- 7.3.48 Six submitters²⁵ oppose LIGHT-R3 PER-2.3 as being too restrictive and not practicable for many activities including primary production activities. These submitters also consider that the rule should provide for sensor lighting. As such, they seek that the rule is amended to provide for lighting that relates to primary production activities; to provide for sensor lighting as a performance standard; and to reduce the time restriction period to recognise that many activities that require artificial light commence before 7am.
- 7.3.49 Dairy Holdings [89.14] notes that the proposed LSAs encompass a large number of existing dairy farms where lights are necessary on irrigators that operate through the night, and for milking sheds, with the lighting being an established and critical aspect of these farming activities. The submitter seeks that PER-2 is extended so that outdoor artificial lighting which is necessary for health and safety purposes is permitted.
- 7.3.50 Rangitata Island Dairy [221.4] state that the rules for LSAs would have a profound effect on the operation of farming business as operation in darkness will not be possible. In its view, this will create animal welfare, logistical and financial issues, and will not work practically for any farming operation. No specific relief is identified.
- 7.3.51 Broadly, the Dir. General Conservation [166.123] seeks that the provisions are amended to include appropriate controls to avoid adverse effects on Long Tailed Bats and their habitats. This is primarily through inclusion of BPA Overlay within the LSA. More specifically, Dir. General Conservation [166.124] supports LIGHT-R3 PER-2 and the requirement to have outdoor artificial lighting fully shielded. As noted earlier, this submitter seeks that the rule is extended to apply to the BPA. The submitter states that artificial lighting can adversely affect the behaviour of Long Tailed Bats reducing the area available to bats for foraging and commuting. The submitter considers that a new rule, or an expansion of LIGHT-R3, should be included to provide appropriate controls for artificial outdoor lighting within the BPA, which require that lighting: only lights the object or area intended, with lights pointing down (emitting zero direct upward light), fully shielded and are close to the ground; minimises lux

²⁵ Rooney Holdings [174.71], Rooney, GJH [191.71], Rooney Group [249.71], Rooney Farms [250.71], Rooney Earthmoving [251.71], TDL [252.71]

levels as much as possible based on ecologist guidance, with the levels in Table 22 & 23 reviewed; and restricts use of lights to those with “*reduced or filtered blue, violet and UV wavelength (lights should emit little in the wavelengths below 540nm and their ‘colour temperature’ is a maximum of 2700K (warm white).*”

Analysis

- 7.3.52 As noted above, I have recommended the removal of LSAs; but inclusion of similar provisions relating to the BPA overlay. The analysis that follows provides recommendations arising from this, i.e. to consider the drafting of the rules if applied only to the BPA. However, to assist the Hearings Panel, it also includes analysis of, and in some cases alternate recommendations in relation to these rules, should the Hearing Panel decide to retain the LSAs.
- 7.3.53 LIGHT-R2, as notified, only permits outdoor artificial lighting which is related to a temporary activity and for health and safety purposes. All other lighting – including that associated with a temporary activity that is not for health and safety purposes – would fall into LIGHT-R3, which would require it to be fully shielded, have a colour corrected temperature of no greater than 3000K, and not be used between 10pm and 7am. Given the effects of lighting associated with a temporary activity will similarly be temporary, I do not consider that it should be limited to lighting for health and safety purposes only. I also agree with submitters that LIGHT-R2 should be amended to apply to any temporary activity, not just those which are permitted. This is because, where a temporary activity is not permitted (i.e. requires a resource consent) under the Temporary Activities Chapter, in most instances, the activity is fully discretionary. This would allow for the effects of any associated lighting to be considered through the consent process. In other cases, the type of temporary activity is narrow (e.g. temporary military training activities) and in my view further scrutiny of lighting is not sufficiently justified. This recommendation applies regardless of whether the rule continues to apply to all LSAs, or is limited to apply only to the BPA.
- 7.3.54 I have also considered whether lighting for all health and safety purposes (not just for temporary activities) should be permitted under LIGHT-R2. A difficulty that I have with this is that I do not consider there to be sufficient certainty as to when lighting would be “*for health and safety purposes*”. For example, any type of lighting that is installed as a security measure would arguably fall within this. Because of this, I am unsure of the extent of lighting that might be permitted under such a condition, and the potential effects of this on Long-tailed bats. In particular, I am concerned that this exemption might permit a large range of outdoor lighting and in doing so undermine the controls otherwise applying. If the rule continues to apply to LSAs, I would have similar concerns about the potential for such an exemption to undermine the controls otherwise applying in terms of interrupting views of the night sky/protecting night sky darkness.
- 7.3.55 In terms of excluding use of any lighting between 10pm and 7am, I note that this is not included in what is sought by the Dir. General Conservation [166.124]. The effect of the notified requirement is that any outdoor lighting operating after 10pm would require a

resource consent, which in my view is highly restrictive, impractical, and would not achieve the outcome sought.²⁶ I consider that if other mitigation measures are applied to lighting, it is not necessary to restrict any lighting in the BPA during these hours.

- 7.3.56 If the Hearing Panel retains the LSAs, then I do not consider this restriction to be appropriate, in terms of effects on night sky darkness. As noted earlier, in the MDP, the provisions include similar requirements to the PDP in relation to shielding and colour corrected temperatures, but do not restrict the timing of the use of lighting.
- 7.3.57 In terms of the specific conditions sought by Dir. General Conservation [166.124], I am not sure that a condition requiring that lighting only lights the object or area intended is realistic, as my understanding is that lighting by its nature will always have some spill beyond the immediate area it is intended for. If shielding is required, then in my view this will already mitigate the majority of upwards light spill, while still allowing for lighting to be used in a practical manner. Similarly, given the requirement to shield lighting, I am not sure that it is necessary to also require that lights point down. I consider that more details would be required on what requirement would be applied to ensure lighting is “close to the ground”, and consideration would need to be given to the practicality of this – particularly in terms of how lights close to the ground and shielded would practically still provide for the safe and efficient use of the outdoors for a range of night-time activities.
- 7.3.58 With respect to the lux levels in Table 22 & 23, I note that these apply illuminance limits at site boundaries, as well as at windows in adjoining residential zones. These, in essence, seek to ensure that light which spills into adjoining sites is of a level that is compatible with the character of the zone in which the receiving site is located. I do not consider these controls to be related to managing effects on long-tailed bats and therefore do not consider that they need to be reviewed by an ecologist. With respect to the colour corrected temperature, I note that the submitter seeks that this is reduced from 3000K to 2700K. I am aware from the submissions and hearings process on PC22 of the MDP that colour temperatures of 3000K are more readily available to consumers, whereas 2700K may not be. From informal discussion with Ms Williams (from Dir. General Conservation), I understand that she considers such lightbulbs are readily available now, and she also noted the evidence of Mr Waugh in Hearing D that the international guidelines for reducing effects of light on bats includes the use of light sources which are 2700K or less. I therefore support a colour corrected temperature of 2700K being applied – noting the rule in the MDP relates to protection of the darkness and views of the night sky, and not to minimising effects of lighting on fauna.
- 7.3.59 With respect to including a condition relating to wavelength, the drafting of such a condition would need to be sufficiently certain and could not include an element of subjective judgement (i.e. what is emitting “little in the wavelengths below 540nm” would need to be

²⁶ I.e. recognising the benefits of artificial lighting (LIGHT-O2 as notified) or sufficiently providing for the safe and efficient use of the outdoors for a range of night-time activities (LIGHT-O1 as recommended above)

specified.) However I have understood from Mr Waugh's evidence from Hearing D, that the colour corrected temperature limit may encompass this aspect in any case, i.e. this limit is sufficient without an additional separate requirement relating to wavelength.

- 7.3.60 Taking the above into account, I support the application of shielding and colour corrected temperature requirements for lighting in the BPA, as generally set out in LIGHT-R3 PER-2.1 and PER-2.2 as notified, but not the limitation on hours of use of lighting (in LIGHT-R3 PER-2.3). I consider that the need for any other additional limitations would not need to be further justified, including consideration of the practicality of any constraints, in order to assess whether they are appropriate to achieve the overall outcomes sought. For completeness, I note my comments above, that the requirements in LIGHT-R3 PER-2 as notified appear to generally relate to minimising sky glow and views of the night sky. However, based on the comments in DOC's submission, they appear to be appropriate, in this instance, to minimise effects on long-tailed bats. If there are controls which better achieve this (i.e. along the lines sought by DOC, but noting my comments above on the specifics of these) then it may be more appropriate to amend or replace these controls.
- 7.3.61 Noting my recommendations that the rule only apply to the BPA and not the LSAs, I have also considered the abstracts included in the Dir. General Conservation's submission regarding the effects of artificial lighting. My understanding of these is that the concern in relation to lighting arises in relation to peri-urban and rural areas, and in particular where these areas become "urbanised", with artificial lighting increasing in such areas. While I understand from informal discussion with Ms Williams that the concern also arises in urban areas, I consider that applying such standards in more built up urban zones (i.e. residential, commercial and mixed use, industrial and special purpose zones) would be ineffective. This is because these areas already have higher levels of lighting, and requiring new lighting to meet the standards will not reduce any impact the existing lighting is already having on bats. I therefore do not consider the costs imposed by restricting lighting in these zones is justified given the limited impact. I therefore consider that the rule should only be applied in rural zones and open space and recreation zones which are within the BPA overlay.
- 7.3.62 With respect to Barkers [179.21], I do not generally consider it appropriate to exempt a specific site from the requirements. However, I note that the effect of my recommendation to remove LSAs would result in it not applying to this site, noting it is outside the BPA.
- 7.3.63 Similar to my concern above about permitting all lighting for health and safety purposes, I have concerns about the effects of amending the rule to permit lighting associated with any primary production activity, as this might permit a large range of outdoor lighting and in doing so, undermine the controls otherwise applying (this applies whether the LSAs are retained, or the rule is just applied in the BPA). My preliminary view is that a narrow exemption for some types of lighting associated with primary production might be appropriate, such as for motion sensor lighting that is for security purposes only, or possibly lighting associated with pivot irrigators. Submitters may therefore wish to advise if there are specific types of lighting, or lighting for specific purposes, which are associated with primary

production activities, where an exemption may be appropriate. The Dir. General Conservation may also then be able to provide advice on the impact of any such exemptions on bat activity.

- 7.3.64 I also agree with the concerns of submitters regarding non-compliance with LIGHT-R2 and LIGHT-R3 defaulting to a non-complying activity status. Firstly, as noted above, the requirement to comply with LIGHT-S1 and LIGHT-S2 seeks to manage the effects of light spill onto adjoining properties. Under LIGHT-R1 (i.e. outside LSAs, or as recommended, outside the BPA), non-compliance with these standards is restricted discretionary. I consider that this site-to-site effects management standard should be applied the same across the district and therefore where an activity is managed under LIGHT-R2 or LIGHT-R3, non-compliance with these standards should still be restricted discretionary. For non-compliance with LIGHT-R3 PER-2, I consider that elevation to a non-complying activity status is overly restrictive. I consider it more appropriate to apply a discretionary activity status. This would still allow for consideration of the effects of any breach, to determine whether any proposed lighting can be managed in a way that still minimises adverse effects on long-tailed bats (in line with the recommended drafting of LIGHT-P2.5); and allows for a more balanced assessment of the need for and benefits of lighting alongside management of its effects on long-tailed bats, i.e. to achieve all aspects of LIGHT-O1.
- 7.3.65 Finally, in considering the drafting of the rule, I consider that it would be more consistent with the drafting used across the PDP to essentially “shift” LIGHT-R2 and LIGHT-R3 into LIGHT-R1. This is because all three rules manage the same activity – artificial outdoor lighting – with the distinction being between how it is managed in different locations.
- 7.3.66 In the recommended drafting below, I have also included changes which are recommended under clause 16(2) to ensure consistent use of terminology across the chapter.

Conclusions and Recommendations

- 7.3.67 I recommend that LIGHT-R2 and LIGHT-R3 are deleted, and a new row is inserted into LIGHT-R1, as follows:

LIGHT-R1	Artificial outdoor lighting outside light sensitive areas	
1. All zones other than Port Zone outside Light Sensitive Areas the Long-tailed Bat Habitat Protection Area Overlay	Activity status: Permitted Where:
2. Port Zone

3. <u>Long-tailed Bat Habitat Protection Area Overlay</u>	<u>Activity status: Permitted</u> <u>Where:</u> <u>PER-1</u> <u>LIGHT-S1 and LIGHT-S2 are complied with; and</u> <u>PER-2</u> <u>The artificial outdoor lighting is for a temporary activity; or</u> <u>PER-3</u> <u>In any Rural Zone or Open Space and Recreation Zone, the exterior artificial outdoor lighting must:</u> <ol style="list-style-type: none"> 1. <u>be fully shielded (see Figure 18 – Lighting Fixtures); and</u> 2. <u>have a colour corrected temperature of no greater than 2700K.</u> 	<u>Activity status when compliance not achieved with PER-1: Restricted Discretionary</u> <u>Matters of discretion are restricted to:</u> <u>1. the matters of discretion of any infringed standard</u>
		<u>Activity status when compliance not achieved with PER-2 or PER-3: Discretionary</u>

- 7.3.68 With respect to removing the application of the rules to LSAs, and instead applying the controls within the BPA, I note that the s32AA assessment set out earlier applies.
- 7.3.69 Under s32AA, I consider that amending LGIHT-R1.3 (previously LIGHT-R2) to apply a permitted activity status to lighting for any temporary activity is a more efficient approach, while still being effective at achieving the objectives of the chapter.
- 7.3.70 I consider that there are economic costs associated with LIGHT-R3 PER-2.3, which will be removed by its deletion (and not including it in LIGHT-R1.3). Conversely, I consider that removal of this restriction will not result in significant environmental costs, as adverse effects of lighting on long-tailed bats will still be appropriately addressed through the other standards. With respect to applying the standards to rural zones and the open space and recreation zones, I consider that this ensures that the rule is targeted to those areas where the control of lighting is warranted, reflecting that urban areas already contain a large amount of artificial light and controlling new lighting within these areas would in my view be ineffective, given the existing effects of lighting in these areas. Overall, I consider that the changes will be more efficient and effective at achieving LIGHT-O1 (as recommended), through providing for the use of light for night-time activities, in a manner that minimises adverse effects on long-tailed bats.
- 7.3.71 In terms of the activity status applying, I consider that it is more equitable to apply the same activity status to a breach of LIGHT-S1 and LIGHT-S2 regardless of whether the lighting is located with the BPA or outside of it. As such, I consider a restricted discretionary status is more efficient. Where the conditions in LIGHT-R3 PER-2 (as notified) / LIGHT-R1.3 PER-3 (as

recommended) are not met, I consider that a fully discretionary status is a more appropriate way to balance the achievement of LIGHT-O1.

7.4 Policies

7.4.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Bonifacio, P	36.11
Waka Kotahi	143.111, 143.112
Fonterra	165.99, 165.11
Dir. General Conservation	166.121, 166.122
Fenlea Farms	171.7
Rooney, A J	177.5
Federated Farmers	182.178
Te Rūnanga o Ngāi Tahu	185.51
Hort NZ	245.88

Submissions

7.4.2 Te Rūnanga o Ngāi Tahu [185.51] support the policies in the Light chapter. Fonterra [165.99] and Bonifacio, P [36.11] support LIGHT-P1.

7.4.3 Dir. General Conservation [166.121, 166.122] seeks any consequential change required to LIGHT-P1 and LIGHT-P2 to reflect their request that LSAs are amended to include the BPA Overlay, so that controls are included for artificial outdoor lighting within areas of bat habitat.

7.4.4 Fenlea Farms [171.7] and Rooney, A J [177.5] oppose LIGHT-P1, stating that it should exempt artificial lighting required for health and safety reasons, and activities that are ancillary to permanent activities. They seek amendment to the policy to ensure that artificial outdoor lighting is not restricted when it is necessary for health and safety.

7.4.5 Waka Kotahi [143.111] seeks an amendment to LIGHT-P1 to replace “road safety” with “the transport network and public areas”, and to change “sky glow and light spill” to “obtrusive light”. The latter change is sought because the submitter considers that sky glow is a cumulative area resultant from a combination of natural sky glow and artificial sky glow from varied light sources. It states that obtrusive light addresses more types of lighting beyond just spill light, e.g. glare, upward light, luminous intensity and luminance of surface areas.

7.4.6 Federated Farmers [182.178] seeks that an additional clause is added to LIGHT-P1 for “activities associated with primary production”, in order to allow use of lighting when it is

required for primary production purposes, such as for harvesting and dairy sheds, to maintain a health and safety for both animals and workers.

- 7.4.7 Hort NZ [245.88] similarly seeks that references to “*primary production*” and “*security*” are added to clause 1 of LIGHT-P1, to note the need for appropriate artificial outdoor lighting for primary production and security.
- 7.4.8 Fonterra [165.100] and Waka Kotahi [143.112] support LIGHT-P3.

Analysis

- 7.4.9 As with similar changes sought to the objective, I do not agree with Waka Kotahi’s request [143.111] to replace “*road safety*” with “*the transport network and public areas*” in LIGHT-P1.2 as I do not consider this works grammatically (as the transport network and public areas are not a sub-set of “*wellbeing and health and safety of people and communities*”). However, I note that for the reasons set out below, I am recommending that LIGHT-P1 and LIGHT-P2 are rationalised, which would result in the removal of reference to road safety from LIGHT-P1.3, and shifting this to LIGHT-P2.1. The latter already refers to “*the transport network*” and the recommended wording would more specifically refer to avoiding adverse effects on the safety of the transport network. I consider that this most appropriately addresses this aspect of the submitter’s request, but the submitter may wish to advise if this is not the case.
- 7.4.10 In terms of changing “*sky glow and light spill*” to “*obtrusive light*”, my understanding is that sky glow arises from artificial (not natural) light sources brightening an area of sky, which reduces the ability to see the night sky. Light spill is light that extends beyond the object or area the lighting is intended to illuminate. I understand from the submission that obtrusive light is considered to extend beyond this (e.g. into luminous intensity and luminance of surface areas), and therefore if the wording was changed, it would then be necessary to amend the rules to ensure that any obtrusive light is minimised. I have considered the rule framework (in particular LIGHT-R1 and standards LIGHT-S1 & LIGHT-S2) and do not consider that these address matters such as luminous intensity and luminance of surface areas. The PDP provisions are also intended to only address direct glare (light shining directly at the receiver), not reflective glare.²⁷ I consider that they do address, or seek to minimise light spill. I therefore consider the notified wording, in terms of focussing on light spill is more appropriate than expanding reference to obtrusive light more broadly. In terms of sky glow, I consider this essentially relates to the controls proposed for LSAs, and therefore this part of LIGHT-P1.4 overlaps with LIGHT-P1.5. I therefore agree with deleting reference to sky glow regardless of whether LSAs are retained to not. For completeness, I note that as I am recommending that LIGHT-P1 and LIGHT-P2 are rationalised, this would result in the deletion of LIGHT-P1.4. This is because light spill is already addressed in LIGHT-P2.
- 7.4.11 With respect to the Dir. General Conservation’s submission [166.121, 166.122], I note that the substance of this is addressed above. As a consequence of my previous

²⁷ Timaru District Council, Section 32 Report – Light Chapter (May 2022), section 1.1, page 4.

recommendations, I recommend that LIGHT-P2 is amended to specifically refer to controlling outdoor lighting in order to minimise adverse effects on long-tailed bats. If the Hearing Panel retains LSAs and the content of the provisions relating to them, and instead includes the BPA within the LSA definition, then I note that changes would not be required to the policies, as they would apply by virtue of the change to the LSA definition.

7.4.12 In considering the requests of Federated Farmers [182.178] and Hort NZ [245.88], I consider that there is a similar lack of clarity between LIGHT-P1 and LIGHT-P2 as raised by Synlait in relation to the wording of the objective. Specifically, LIGHT-P2 provides direction on how aspects of outdoor lighting are to be managed to achieve the outcomes sought in terms of management of its effects. However, LIGHT-P1 also contains components of effects management, alongside the direction to provide for lighting. In some cases, the direction in both policies overlap, e.g. LIGHT-P1.4 refers to minimising light spill, and LIGHT-P2 refers to internalisation of light spill and minimisation of light spill onto adjoining sites. I consider that as a consequence of the changes to the objective, it is appropriate to amend LIGHT-P1 to focus on providing for lighting, including adding reference to primary production activities. I then recommend that the elements of effects management contained in LIGHT-P1 are shifted to LIGHT-P2, and removed where they overlap. I consider that these changes fall within the submission of Synlait [163.5] and can therefore be made under clause 10(2)(b). I do not consider there is a need to specifically refer to “*security*” in LIGHT-P1, as in my view, this falls within clause 3 in terms of supporting health and safety. While primary production would likely fall under “*night-time working*”, I consider that the latter will cover a range of activities, and given the predominance of primary production in rural areas which necessitate lighting, that it is more appropriate to explicitly refer to it.

7.4.13 The specific drafting changes recommended are:

- Removing reference to lighting “*appropriate to its environment*” from the stem of LIGHT-P1, as managing lighting so that it is appropriate to its environment is addressed in LIGHT-P2.
- Adding reference to “*primary production*” in LIGHT-P1.1.
- Shifting LIGHT-P1.2 to LIGHT-P2.
- Removing reference to “*road safety*” in LIGHT-P1.3 as this clause appears to confuse two different matters – specifically the provision of lighting **to support** wellbeing and health and safety, with managing the potential adverse effects **on** safety (emphasis mine). As a consequence of this, I recommend that reference to the “*safety of*” the transport network is added to LIGHT-P2.1.
- Deleting LIGHT-P1.4, noting that the “*light spill*” aspect of this is addressed in LIGHT-P2.2, and the sky glow aspect appears to overlap with the LSA controls.
- Deleting LIGHT-P1.5 and the reference to LSAs in LIGHT-P2.1, as a consequence of my recommendations above in relation to LSAs. If the Hearing Panel determines to retain LSAs, then I consider it best that this clause is deleted from LIGHT-P1.5 in any case, as currently there is conflicting direction between LIGHT-P1.5 and LIGHT-P2.1, the former referring to protecting identified values of LSAs, while the latter refers to avoiding all adverse effects of outdoor lighting on LSAs. If LSAs are retained, my

preference would be for the wording used in LIGHT-P1.5 to be shifted into LIGHT-P2 and reference to LSAs removed from LIGHT-P2.1.

- Rationalising the drafting in LIGHT-P2.1 to provide greater clarity.
- Removing the first part of LIGHT-P2.2, as the clause currently contradicts itself, directing that light spill is internalised to the site emitting the light, while also directing that light spill onto adjoining sites is “minimised”. I consider that the latter aligns better with the outcome sought in LIGHT-O1 (i.e. minimisation of adverse effects and compatibility with surrounding areas) and also note that the rules are aimed at implementing the latter, i.e. minimising light spill onto adjoining properties, rather than avoiding it altogether.
- Deleting LIGHT-P2.3, which relates to minimising adverse effects on views of the night sky and intrinsically dark landscapes, as this appears to me to overlap with the provisions relating to LSAs (which for the reasons outlined earlier, I recommend are deleted). If LSAs are retained, then I consider this clause should be deleted because it appears to duplicate the LSA controls, but in a less clear manner.

7.4.14 With respect to LIGHT-P3, as this applies to LSAs, I have, for the reasons set out above, recommended that the policy be deleted as a consequence of my recommendation to remove LSAs.

Conclusions and Recommendations

7.4.15 I recommend that LIGHT-P1 is amended as follows:

LIGHT-P1 Appropriate artificial outdoor lighting

Provide for artificial outdoor lighting ~~appropriate to its environment~~ that:

- 1. provides for the safe and efficient use of the outdoors for a range of activities, including for night-time working, primary production, recreation and entertainment activities; and*
- 2. ~~maintains the character and qualities of the surrounding area; and~~*
- 3. ~~supports the social, cultural, and economic wellbeing and health and safety of people and communities, including road safety; and~~*
- 4. ~~minimises sky glow and light spill, and~~*
- 5. ~~protects the identified values and qualities of light sensitive areas.~~*

7.4.16 I recommend that LIGHT-P2 is amended as follows (including recommendations above relating to the BPA):

LIGHT-P2 Intensity, location and direction of artificial outdoor lighting

Control the intensity, location and direction of any outdoor lighting in order to:

1A. maintain the character and qualities of the surrounding area;

1. ~~ensure that any artificial outdoor lighting avoids adverse effects on existing light sensitive areas, other established uses and the safety of the transport network; and~~
2. ~~achieve the internalisation of light spill within the site where the artificial outdoor lighting is located, and ^Lminimise any light spill onto adjoining sites; and~~
3. ~~minimise adverse effects on views of the night sky and intrinsically dark landscapes; and~~
4. ~~avoid adverse effects on the health and safety of people and communities in the surrounding area, including sleep disturbance; and~~
5. minimise adverse effects on long-tailed bats.

7.4.17 In terms of s32AA, I consider that these changes are a more appropriate way to achieve the objective, as they avoid the duplication and in some cases conflict between the policy direction as it relates to managing the adverse effects of artificial outdoor lighting. The recommended drafting will separate the policy direction into those aspects of lighting which are to be “provided for”, and those aspects which relate to how the effects of such lighting are to be managed. Collectively, I consider that these changes will provide greater clarity and in doing so, will better assist in achieving the outcome sought. LIGHT-P1 will essentially align with the recommended stem of LIGHT-O1, while LIGHT-P2 will implement the matters set out in the recommended clauses of LIGHT-O1. In my view, this is a much more efficient and effective approach.

7.4.18 With respect to changes to the policies to remove their application to LSAs (and more broadly to sky glow, views of the night sky and intrinsically dark landscapes) and instead add policy direction relating to BPAs, I note that the s32AA assessment set out earlier applies.

7.5 Rules – LIGHT-R1

7.5.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Waka Kotahi	143.113
Fonterra	165.101, 165.102
Dir. General Conservation	166.123
Silver Fern Farms	172.101
Rooney Holdings	174.69
PrimePort	175.60
Barkers	179.20

TDHL	186.36
Rooney, GJH	191.69
Rooney Group	249.69
Rooney Farms	250.69
Rooney Earthmoving	251.69
TDL	252.69

Submissions

- 7.5.2 Fonterra [165.101], as a consequence of their wider request that a Special Purpose Zoning be applied to the Fonterra Clandeboye site, seek that LIGHT-R1.1 is amended to exempt the Strategic Rural Industry Zone from the rule in the same way as the Port Zone is excluded, with a new rule added requiring:
- Exterior lighting to be orientated away from any adjoining or adjacent zone;
 - LIGHT-S2 to be complied with; and
 - A limit of 5 lux for illuminance levels at the notional boundary with the GRUZ and at window level of adjoining properties in the GRUZ.
- 7.5.3 Fonterra [165.102] seek that PER-1 of LIGHT-R1.2 is amended to require that lighting is directed away from adjoining and adjacent “zones” rather than “properties”. It notes that the Port Zone operates 24 hours and that given this, lighting is an important health and safety feature. The submitter considers that the rule should be directed towards ensuring such lighting is directed away from residential properties rather than properties associated with Industrial or Port Activities within the Port Zone.
- 7.5.4 Dir. General Conservation [166.123] seeks that the provisions are amended to include appropriate controls to avoid adverse effects on Long Tailed Bats and their habitats.
- 7.5.5 Silver Fern Farms [172.101] seek that LIGHT-R1 is amended to only require outdoor lighting to comply with the LSA standards to the extent that the artificial light spills into a LSA. This is because it considers that the standard can be interpreted as requiring artificial light to be compliant with the LSA illuminance levels at the source, regardless of whether the illumination actually affects the LSA.
- 7.5.6 Primeport [175.60] and TDHL [186.36] support the exclusion of the Port Zone from LIGHT-R1.1, as they consider Port lighting is more appropriately managed under LIGHT-R1.2, which they, in turn, support as providing appropriate flexibility for night time Port operations whilst ensuring that exterior lighting does not unduly adversely affect adjoining residential zones.
- 7.5.7 Barkers [179.20] seeks that the LIGHT-R1.1 is amended to exclude the General Industrial zoned site at 72 Shaw Road, Geraldine, or otherwise amended to exclude the site from compliance with the LSA requirements. The submitter considers that health and safety, and site security reasons, it is too restrictive for its site operations to be required to meet the LSA standards as at the boundary of the LSA.

- 7.5.8 Waka Kotahi [143.113] seeks further clarification on the criteria contained in PER-2, as it considers that PER-3 sufficiently specifies the requirements of lighting adjoining LSAs and that the use of 'is visible' from a LSA could require assessment from an extended distance.
- 7.5.9 Six submitters²⁸ seek that PER-3 of LIGHT-R1.1 be deleted, as they consider that it is essentially extending the LSA, and that if a site is outside of the LSA, only PER-1 and PER-2 should apply.

Analysis

- 7.5.10 I agree with Silver Fern Farms [172.101], that even if the LSAs are retained, LIGHT-R1 should be amended so that outdoor lighting is only required to comply with the LSA standards to the extent that the artificial light spills into an LSA. I note that PER-1 already requires compliance with LIGHT-S1, which in turn requires compliance with Table 22, which sets horizontal and vertical levels, including in relation to LSAs. Given this, PER-2 appears to conflict with this, as it applies the levels in Table 22 in a different manner (where lighting "is visible from" an LSA). In addition to this conflict, I agree with Waka Kotahi [143.113] that there is a lack of clarification as to what this condition requires in any case. I therefore consider that PER-2 should be deleted, regardless of whether LSAs are retained or not.
- 7.5.11 With respect to LIGHT-R1.1 PER-3, I similarly consider that even if LSAs are retained, this should be deleted. The effect of this condition is that it essentially extends the application of the LSA area beyond the definition of those areas, by applying the same requirement to any adjoining sites. In the rural area, where properties are larger, this will impose costs on a far broader basis. As noted earlier, the LSA standards appear largely related to the ability to view the night sky. I accept that lighting in areas adjoining the LSA may have some impact on the visibility of the night sky from within LSAs, but I consider this is likely to be minimal, will not arise in all cases, and does not outweigh the costs that the standards imposes. I therefore recommend that PER-3 is deleted, even if LSAs are retained (noting that as I have earlier recommended that LSAs be deleted, I recommend that PER-3 is deleted as a consequence of this removal).
- 7.5.12 While I do not agree with amending the provisions with respect to a specific industrial site, I note that the recommended deletion of PER-2 and PER-3 will address the concerns of Barkers [179.20].
- 7.5.13 I note that Fonterra's request for a Special Purpose Zoning is not recommended to be accepted by other s42A report authors. Consequently, I do not recommend that LIGHT-R1.1 is amended to exempt the requested zone. If Fonterra's request for a Special Purpose Zoning is accepted, then I consider that it is appropriate to apply LIGHT-R1.1 in any case, taking into account my recommendation to delete conditions within this rule. This would require compliance with the levels in Table 22 on the same basis as the GRUZ (noting the Special

²⁸ Rooney Holdings [174.69], Rooney, GJH [191.69], Rooney Group [249.69], Rooney Farms [250.69], Rooney Earthmoving [251.69], TDL [252.69]

Purpose Zone would need to be added to Tables 22 and 23). The standard sought by the submitter would apply a 5 lux limit at all times, rather than distinguishing between the day and nighttime periods, and would apply to the “notional boundary” rather than the site boundary (as well as at the window level). Given there are no other instances in the chapter where the limit applies to a “notional boundary”, I do not consider this is appropriate for the Clandeboye site.

- 7.5.14 With respect to the Port Zone, I am comfortable with amending the requirement in relation to orientating lighting so that it is directed away from adjoining and adjacent “zones” rather than “properties” (as sought by Fonterra [165.102]) on the basis that the activities undertaken in this zone, and ultimately its purpose and character, do not necessitate, in my view, control of the effects of lighting within the zone. In particular, I note that PORTZ-O1 seeks to provide for the establishment and operation of the Port of Timaru, including a range of industrial activities and other compatible activities, with the maintenance of the amenity values of adjacent Residential and Open Space and Recreation zones. Similarly, PORTZ-P2 directs that adverse effects of port activities are mitigated as far as practicable on adjoining zones, Council reserves and the coastal environment (i.e. not within the zone).

Conclusions and Recommendations

- 7.5.15 I recommend that LIGHT-R1 is amended as follows (noting this incorporates changes recommended earlier in this report):

LIGHT-R1	Artificial outdoor lighting outside light sensitive areas	
1. All zones other than Port Zone outside Light Sensitive Areas the Long-tailed Bat Habitat Protection Area Overlay	Activity status: Permitted Where: PER-1 LIGHT-S1 and LIGHT-S2 are complied with; and PER-2 Outdoor artificial lighting that is visible from a Light Sensitive Area must not exceed the illuminance limits for the Light Sensitive Areas stated in Table 22; and PER-3 If the outdoor artificial light is located adjoining a Light Sensitive Area, it must: 1. be fully shielded (see Figure 18 – Lighting Fixtures); and 2. have a colour corrected temperature of no greater than 3000K (warm white); and 3. be installed in a manner that precludes operation between 10pm and 7am the following day; and 4. meet the illumination levels set out in Table 22, when measured at boundary of the Light Sensitive Area.	Activity status where compliance is not achieved with PER-1: Restricted Discretionary Matters of discretion are restricted to: 1. the matters of discretion of any infringed standard
		Activity status where compliance not achieved with PER-2 or PER-3: Non-complying

<p>2. Port Zone</p>	<p>Activity status: Permitted</p> <p>Where:</p> <p>PER-1</p> <p>All exterior lighting must be oriented so that light is emitted away from any adjoining and adjacent properties <u>zones</u>; and</p> <p>PER-2</p> <p>LIGHT-S-2 is complied with; and</p> <p>PER-3</p> <p>The horizontal and vertical illuminance levels (above the background level) at the boundary of a residential zone between 10pm — 7am do not exceed 5 lux; and</p> <p>PER-4</p> <p>The vertical illuminance level at a window of an adjoining property in a residential zone between 10pm and 7am does not exceed 5 lux.</p>	<p>Activity status where compliance is not achieved with: Discretionary</p>
<p>3.</p> <p><u>Long-tailed Bat Habitat Protection Area Overlay</u></p>	<p>Activity status: Permitted</p> <p>Where:</p> <p>PER-1</p> <p><u>LIGHT-S1 and LIGHT-S2 are complied with; and</u></p> <p>PER-2</p> <p><u>The artificial outdoor lighting is for a temporary activity; or</u></p> <p>PER-3</p> <p><u>In any Rural Zone or Open Space and Recreation Zone, the exterior artificial outdoor lighting must:</u></p> <ol style="list-style-type: none"> <u>1. be fully shielded (see Figure 18 — Lighting Fixtures); and</u> <u>2. have a colour corrected temperature of no greater than 2700K.</u> 	<p>Activity status when compliance not achieved with PER-1: Restricted Discretionary</p> <p><u>Matters of discretion are restricted to:</u></p> <ol style="list-style-type: none"> <u>1. the matters of discretion of any infringed standard</u> <p>Activity status when compliance not achieved with PER-2 or PER-3: Discretionary</p>

7.5.16 I consider that the deletion of LIGHT-R1.1 PER-2 and PER-3 is a consequence of my recommendation to remove the LSAs, and therefore the s32AA assessment set out earlier applies to these changes. (The assessment of the addition of Row 3 is also set out earlier in this report).

7.5.17 In terms of s32AA, I consider that amending LIGHT-R1.2 PER-1 to apply to adjoining and adjacent zones, rather than properties (which would apply to boundaries within the zone) better aligns with PORTZ-O1 and PORTZ-P2, and therefore better assists with achieving LIGHT-O1.2 with respect to the requirement better aligning with the character and qualities of the surrounding area.

7.6 Standards

7.6.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Waka Kotahi	143.114, 143.115
Fonterra	165.103, 165.104
Dir. General Conservation	166.125
Fenlea Farms	171.9
Rooney, A J	177.8
PrimePort	175.61
Barkers	179.22
Te Rūnanga o Ngāi Tahu	185.52
Hort NZ	245.89

Submissions

7.6.2 Fenlea Farms [171.9] and Rooney, A J [177.8] oppose Table 22 and 23 and Figure 18, along with any other rules and standards relating to lighting standards, illuminance levels, increment and acceptable/unacceptable lighting. This is because the submitter considers that the limitations in these tables and figures are not practical. The submitter seeks removal of illuminance time restrictions from Table 22, or removal of these insofar as they relate to matters of health and safety (including ancillary activities to permanent activities that occur on site). It similarly seeks that limits on acceptable illuminance levels, increment, and acceptable/unacceptable lighting are removed for matters of health and safety for an ancillary activity of a permanent activity that occurs on site.

7.6.3 Te Rūnanga o Ngāi Tahu [185.52] seek that LIGHT-S1 is amended to include two further matters of discretion, in order to give effect to the objectives and policies:

5. the actual and potential effects on values and attributes of light sensitive areas;
6. the potential of any adverse effects on the spiritual and cultural values and beliefs of Kāti Huirapa, including measures to avoid, remedy or mitigate adverse effects.

7.6.4 PrimePort [175.61] supports the Port Zone being excluded from LIGHT-S1, as lighting standards are addressed in the adopted Light Management Plan for the Port.

7.6.5 Fonterra [165.103], who have sought that a Special Purpose Zoning be applied to the Fonterra Clandeboye site, seek that LIGHT-S1 is amended to exempt the Strategic Rural Industry Zone from the rule in the same way as the Port Zone is excluded. Fonterra [165.104] also consider it appropriate to add their proposed Special Purpose Zone to Table 23 to apply the same standards as apply to the General Industrial (GIZ) and Port Zones (amongst others).

- 7.6.6 Barkers [179.22] seeks that the LIGHT-S1 is amended to exclude the GIZ-zoned site at 72 Shaw Road, Geraldine, or otherwise amended to exclude the site from compliance with the LSA requirements. The submitter considers that health and safety, and site security reasons, it is too restrictive for its site operations to be required to meet the LSA standards as at the boundary of the LSA.
- 7.6.7 Dir. General Conservation [166.125] seek that LIGHT-S1 is amended to include appropriate controls to avoid adverse effects on Long Tailed Bats and their habitat.
- 7.6.8 Waka Kotahi [143.114] acknowledges that the standard requires calculations to be made by a person who is professionally qualified and competent in the discipline, but seeks further clarification on the parameters of measurements required in the standard, e.g. 1.5m above finished ground level with no influences such as fences, hedges or trees or moon light, night sky, etc.
- 7.6.9 Hort NZ [245.89] seek that Table 22 is amended so that the RLZ is included in the same column as the GRUZ. The submitter further states that the lux values are reduced below the current provisions and in their view do not take into account the need for light for health and safety for primary production activities, including in the RLZ. It seeks that the limits in GRUZ and RLZ are increased to 10 lux between 7am – 10pm and 5 lux between 10pm and 7am.
- 7.6.10 Waka Kotahi [143.115] support LIGHT-S2 as notified.

Analysis

- 7.6.11 With respect to Fenlea Farms [171.9] and Rooney, A J [177.8], it is not clear to me in what way the requirements in Table 22 and 23 are not practical. Application of horizontal and vertical illuminance levels are, in my experience, commonly applied in district plans, including the provisions in the ODP. I do not consider that permitting lighting which does not meet these standards is appropriate where the lighting is ancillary to a permanent activity. This would allow for a range of new lighting to be established without control, and in my view this would not achieve the outcome sought with respect to ensuring artificial outdoor lighting is designed and located to minimise adverse effects and be compatible with the character and qualities of the surrounding area.
- 7.6.12 In terms of providing an exemption from meeting the standards for matters of health and safety, I consider that there would need to be certainty as to what lighting is required for health and safety reasons. An exemption would also need to be further justified in terms of why such lighting is not able to meet these standards.
- 7.6.13 I do not agree with Te Rūnanga o Ngāi Tahu's request [185.52] to add matters of discretion relating to effects on LSAs, because of my earlier recommendation that these are removed. In terms of adding consideration of the potential of any adverse effects on the spiritual and cultural values and beliefs of Kāti Huirapa, I consider that this matter of discretion is not

related to the matters which are addressed by the rule, which relate to the effects of lighting on adjoining properties.

- 7.6.14 As Fonterra's request for a Special Purpose Zoning has not been recommended to be accepted, I do not recommend that LIGHT-S1 is amended to exempt the requested zone, nor amend Table 23. If Fonterra's request for a Special Purpose Zoning is accepted, then I consider that it is appropriate to add the zone to Table 23 and apply the same limits as apply to the GIZ and Port Zones. For the reasons set out earlier, I consider that even if the Clandeboye site is provided with a Special Purpose Zoning, LIGHT-S1 should still be applied (via LIGHT-R1).
- 7.6.15 While I do not agree with amending the provisions with respect to a specific industrial site, I note that the recommended deletion of LSA's will address the concerns of Barkers [179.22] in terms of removing reference to LSAs within Table 22.
- 7.6.16 With respect to amending LIGHT-S1 to include appropriate controls to avoid adverse effects on Long Tailed Bats and their habitat, I note that I have earlier in this report considered the controls that should be applied with respect to managing the effects of lighting on long-tailed bats. I have not identified any consequential changes to LIGHT-S1 that I consider are required as a consequence of this.
- 7.6.17 With respect to Waka Kotahi [143.114], I am not clear on what amendments are sought to the standard to provide clarification.
- 7.6.18 In terms of the illuminance levels applying in the RLZ, I note that as notified, the RLZ is included in the definition of LSAs, and therefore would already be subject to these limits. As such, if the LSAs, including their application to the RLZ is retained, reference to the RLZ in the table could be removed, albeit this would not change the limits applying. As I have recommended that LSAs be removed, there is a need to consider if these limits should apply, as proposed, to this zone. I note that the RLZ is typically located adjoining townships and therefore areas where higher light levels (e.g. in residential and commercial and mixed use zones) are anticipated.²⁹ Application of the levels proposed would result in higher levels of lighting further away from urban areas (i.e. in the GRUZ) than those in the RLZ, which is closer. I also consider that application of the lowest light levels does not align with the purpose of the RLZ (as set out in RLZ-O1) which anticipates residential activities within a rural setting. I also note that the character and qualities of the RLZ (RLZ-O2) do not specifically reference lower lighting levels.
- 7.6.19 With respect to the specific levels applying, I note that the level applying in the ODP to the Rural 1, 3 & 4B zones is 20 lux. The Xyst Report appears to recommend retention of a 20 lux limit in most rural zones in one place,³⁰ and a reduction to 5 lux (as per the notified

²⁹ One exception to this, is Woodbury, where a small area of RLZ is adjacent to a SETZ, where a lower limit applies.

³⁰ Table 2, under para 6.3.

provisions) in another,³¹ but does not include a discussion on the reason for the latter. The s32 report mentions, as an issue, the application of a 20 lux limit in the Rural Zones as creating a disparity with the application of a 10 lux limit in the residential zones, on the basis that “*rural zones are generally expected to be darker places than urban environments*”. In considering the request from HortNZ, I have also reviewed the limits in other neighbouring district plans:

- Ashburton: no limit with respect to light received in rural zones (with limits only in relation to the level of lighting generated from a rural-zoned property on any adjoining residential zone).
- Waimate: no limit on lighting levels in rural zones.
- Mackenzie: 5 lux limit between 10pm and 6am; and 1 lux limit between 6am and 10pm.

7.6.20 I have also reviewed Christchurch City, Selwyn and the proposed Waimakariri District Plan, noting these plans have more recently been reviewed and generally contain larger urban areas than the districts that adjoin Timaru, which are more rural in nature. The Selwyn District Plan has the same limits as Mackenzie; and Waimakariri has the same daytime limit but a higher nighttime limit of 2 lux, and Christchurch City has a single limit of 10 lux.

7.6.21 I have also considered the outcomes sought in the GRUZ and RLZ in the PDP and note that GRUZ-O2.2 specifically refers to the character and qualities of the GRUZ comprising a working environment, where primary production generates light overspill. The RLZ is intended to provide for residential lifestyle within a rural environment (RLZ-O1). I note that the limits proposed in the PDP to apply to the GRUZ also apply to the SETZ, OSZ and MPZ. The SETZ is intended to have a mixture of activities within a range of amenity levels (SETZ-O1), located in rural areas (SETZ-O1). The OSZ are generally located in urban areas and the MPZ is located in two areas, where development is anticipated (MPZ-O2).

7.6.22 Taking all of the above into account, I consider the changes sought by HortNZ to be reasonable with respect to the GRUZ. While the notified levels are consistent with other more recent district plans (Mackenzie, Selwyn and Waimakariri), other plans (Christchurch, Ashburton and Waimate) have either higher levels, or do not control light spill into rural zones. Importantly, the PDP specifically mentions that light overspill in the GRUZ is anticipated, and the other areas where these limits apply have a mixed character. In none of these zones is low light levels mentioned as a feature. Taking into account the current ODP limit, I consider that increasing the daytime limit to 10 lux and the nighttime limit to 5 lux in the GRUZ, is appropriate. In terms of the RLZ, I note that a greater emphasis in this zone is placed on residential living. This is similar to the SETZ and MPZ where residential living in a rural setting is also anticipated. I therefore consider that it would be more appropriate to apply the limits to the RLZ that apply to the SETZ and MPZ.

³¹ Tables A & B.

Conclusions and Recommendations

- 7.6.23 I recommend that LIGHT-S1 and LIGHT-S2 are retained as notified.
- 7.6.24 I recommend that Table 23 is retained as notified, except for the removal of reference to LSAs, which is a consequence arising from the changes I have recommended earlier.
- 7.6.25 I recommend that Table 22 is amended as follows:

	Zones and Areas				
	Rural Lifestyle Zone; Natural Open Space Zone; Light Sensitive Areas	<u>General Rural Zone</u>	General Rural Lifestyle Zone; Settlement Zone; Open Space Zone; Māori Purpose Zone	General Residential Zone; Medium Density Residential Zone; Neighbourhood Centre Zone	Town Centre Zone; Local Centre Zone; Large Format Retail Zone; City Centre Zone; Sports and Active Recreation Zone; General industrial Zone
Vertical illuminance at a window of an adjoining property in a residential zone Times: 7am — 10pm	2 lux	<u>10 lux</u>	5 lux	10 lux	25 lux
Vertical illuminance at a window of an adjoining property in a residential zone Times: 10pm — 7am	0.5 lux	<u>5 lux</u>	1 lux	2 lux	5 lux
Horizontal and vertical illuminance above the background level at a site boundary Times: 7am — 10pm	1 lux	<u>2 lux</u>	2 lux	5 lux	15 lux
Horizontal and vertical	0 lux	<u>1 lux</u>	1 lux	2 lux	3 lux

illuminance above the background level at a site boundary Times: 10pm – 7am					
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- 7.6.26 In terms of s32AA, I consider that the increased lux limits for the GRUZ better align with, and are therefore more effective at achieving GRUZ-O2.2. Similarly, I consider that increasing the limits applying the RLZ is more consistent with the outcomes sought in RLZ-O1 and RLZ-O2. Taking into account the outcomes sought for these zones, I consider the changes will better assist in ensuring artificial outdoor lighting is compatible with the character and qualities of the surrounding area in accordance with LIGHT-O1. I consider that there are minimal environmental costs arising from the increase, noting that the limits are below those currently applying under the ODP. Conversely I consider that reducing the restrictiveness of the provisions will have economic benefits in terms of providing greater flexibility for lighting in these areas. as such, I consider the changes to be more efficient at achieving the outcomes sought.

7.7 Definitions

- 7.7.1 This section of the report addresses definitions that have not otherwise been addressed earlier in this report.
- 7.7.2 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Fenlea Farms	171.5
Rooney Holdings	174.9
Rooney, A J	177.6
Rooney, GJH	191.9
Rooney Group	249.9
Rooney Farms	250.9
Rooney Earthmoving	251.9
TDL	252.9

Submissions

- 7.7.3 Fenlea Farms [171.5] and Rooney, A J [177.6] oppose the definition of ‘outdoor lighting’, as they consider the definition to be broad and unclear whether it applies to fixed or unfixed lighting.

- 7.7.4 Six submitters³² are opposed to the definition of ‘outdoor lighting’ including the reference to interior lighting that emits directly into the outdoor environment. They seek that the definition is amended to exclude its application to interior lighting, and to exclude artificial light from vehicles.

Analysis

- 7.7.5 The definition of ‘outdoor lighting’ is “*means any exterior or interior lighting that emits directly into the outdoor environment.*” I consider that this would capture any form of lighting, whether fixed or movable. I consider that it should only apply to fixed lighting, given that the light emitting from movable sources would have only temporary effects, and from an efficiency point of view, it will be extremely difficult to monitor and enforce requirements relating to movable sources. This would include lighting from vehicles, which I agree should not be captured by the definition and related provisions for this reason. With respect to interior lighting, I note that this is limited to lighting emitted “*directly*” into the outdoor environment. I consider this reasonable, as if the purpose of the lighting is to light outdoor areas (as opposed to lighting indoor areas), the lighting emitted from within a building and purposely directed outside can have the same effects as that of lighting which is external to a building, for example in terms of light spilling onto adjoining properties and disturbing sleep. I note that the definition (and therefore related rules) will not apply to other interior lighting that is not purposely directed into the outdoor environment.

Conclusions and Recommendations

- 7.7.6 I recommend that the definition of ‘outdoor lighting’ is amended as follows:
means any fixed exterior or interior lighting that emits directly into the outdoor environment.
- 7.7.7 Under s32AA, I consider that exempting application of the outdoor lighting provisions to movable sources is a much more efficient approach, taking into account the difficulties associated with monitoring and enforcement. I consider that due to the temporary or intermittent nature of movable light sources, the approach will still be effective at achieving LIGHT-O1.

8. Noise

8.1 General

- 8.1.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
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³² Rooney Holdings [174.9], Rooney, GJH [191.9], Rooney Group [249.9], Rooney Farms [250.9], Rooney Earthmoving [251.9], TDL [252.9]

Hort NZ	245.90
NZ Frost Fans	255.4

Submissions

- 8.1.2 Hort NZ [245.90] notes that rural environments are working rural production areas and, in its view, should not be portrayed as quiet. The submitter states that noise does occur in rural areas, sometimes on an intermittent basis. It considers that ensuring adequate setbacks of dwellings from horticultural properties is an important part of minimising the potential for reverse sensitivity complaints. The submitter identifies a broad range of matters it considers should be included in the PDP. These include exemptions for rural production activities, higher noise thresholds and standards in rural areas than urban areas, and specific rules for the use of frost fans and audible bird scaring devices. The submitter broadly seeks that the approach within the GRUZ and Noise provisions is reconsidered, to better reflect the working rural production nature of rural areas.
- 8.1.3 NZ Frost Fans [255.4] considers that the Noise Chapter does not appropriately give effect to the NPSHPL, as in its view, it does not provide for the priority land uses on HPL as set out in CI3.9(3), CI3.12 and CI3.13, nor does it avoid or mitigate reverse sensitivity from non-productive uses. This includes NOISE-O1, NOISE-O2, NOISE-P1, NOISE-P5, NOISE-R1, NOISE-R9, NOISE-S2, NOISE-S3 and TABLES 24, 25 and 26. The submitter seeks that the provisions are amended, and/or additional provisions included, to recognise priority land uses on HPL and to generally give effect to the NPSHPL.

Analysis

- 8.1.4 With respect to Hort NZ's [245.90] broad submission, I note that the character and qualities anticipated in this zone are set out in GRUZ-O2. This includes specific identification of the area being a working environment where primary production generates noise. I am therefore unclear what the submitter is referring to, in terms of the PDP portraying rural areas as quiet. With respect to setbacks from horticultural properties, I consider it would be highly inefficient to require such a setback in all instances, given that some horticultural activities are unlikely to generate noise at a level that would create reverse sensitivity effects. With respect to the other matters raised, I note that these are addressed in more detail in terms of the specific changes to provisions in the Noise Chapter sought by the submitter, which are addressed below.
- 8.1.5 In terms of NZ Frost Fans' [255.4] broad submission about the NPSHPL, I note that the submitter has identified specific provisions where it considers that this applies, and these are set out and considered below in respect of those specific provisions. As a general point however, I do not consider that any prioritisation of land uses required under the NPSHPL exempts the need for noise arising from these prioritised activities to be appropriately managed.

Conclusions and Recommendations

8.1.6 I do not recommend any changes in response to these general submission points, noting that changes are recommended in relation to specific provisions below which may partially address the broader concerns of some of these submitters.

8.2 Frost Fans

8.2.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Hort NZ	245.97, 245.98
NZ Frost Fans	255.8, 255.9, 255.10, 255.11, 255.12, 255.27, 255.28

Submissions

8.2.2 NZ Fans [255.8, 255.9, 255.10, 255.11, 255.27, 255.28] seeks changes across the Noise and GRUZ chapters to manage the noise associated with frost fans, alongside controls on the establishment of new noise sensitive activities in proximity to existing or consented fans. The submitter supports priority being given to agricultural noise in NOISE-R1 PER-2, but is concerned about differing interpretations regarding what ‘normal’ seasonal horticultural practice entails. To provide greater certainty, clarity, and to align with best practice, the submitter considers that a frost fan specific suite of provisions – being noise that is seasonal, short-term and intermittent in character - should be included in the noise chapter. The full detail of the rules sought are set out in its submission, but includes:

- Amending the Planning Maps to include the location of frost fans as a non-statutory layer [255.28], to help to support appropriate noise and reverse sensitivity provisions relating to frost fans and implement the NPSHPL.
- Amending GRUZ-S4, which applies setback for sensitive activities, to apply a 300m setback to any new building for a sensitive activity from an existing or consented frost fan [255.27].
- Amending NOISE-P5 (Reverse Sensitivity) to include “*land within 300m of an existing or consented frost fan*” within the description of higher noise environments, to which the policy direction is to be applied [255.8].
- Extending NOISE-R9 to also apply to “*Any noise sensitive activity located in the rural zone and also within 300m of an existing or consented frost fan*” [255.10].
- Consequentially amending NOISE-S2 so that the noise limits in Table 24 do not apply to frost fans, because the more specific rule/standard will apply instead [255.11].
- Extending NOISE-S3 is extended to also apply to “*Any noise sensitive activity located in the rural zone and also within 300m of an existing or consented frost fan*” [255.12].

- 8.2.3 Hort NZ [245.98] notes there is no rule for frost fans in the PDP. The submitters states that there is increasing potential for frost fans to be used on orchards and considers that a specific rule will ensure that the effects are appropriately managed. The submitter states that the rule they seek has been developed based on case law and best practice for frost fans. The detail of the rule is set out in full in the submission. In combination with a rule relating to the operation of frost fans, Hort NZ [245.97] seeks the inclusion of a rule applying to residential activity within 300m of a frost fan, stating that such activity can lead to reverse sensitivity effects. The submitter states that best practice is that any new residential activity locating adjacent to a frost fan should have to provide acoustic insulation to avoid adverse effects, including reverse sensitivity effects. A rule is sought to provide for this, or in the alternate, inclusion of “*Residential activity within 300m of a frost fan*” within NOISE-R9 and NOISE-S3.

Analysis

- 8.2.4 I note that the request pertaining to frost fans was partially considered in Mr MacLennan’s s42A report for Hearing B,³³ in terms of the changes sought to amend GRUZ-S4 to require noise sensitive activities to be setback 300m from any existing or consented frost fan. Mr MacLennan’s preliminary view was that such an amendment would be appropriate, on the basis that the establishment of new sensitive activities near existing or consented frost fans can create considerable reverse sensitivity effects; and setbacks from frost fans are common in other district plans where viticulture is prominent. However, Mr MacLennan was of the view that a converse standard would also be required for new frost fans to be setback from existing sensitive activities. He ultimately recommended that his preliminary recommendation on GRUZ-S4 be revisited as part of this hearing topic, i.e. considering the GRUZ and Noise provisions relating to this on an integrated basis.
- 8.2.5 Mr Hunt notes that it is difficult for noise from frost fans to comply with the nighttime noise limits applying in the rural zones. He notes that the inclusion of frost fan specific rules in other district plans is in order to provide a conditional exemption from the nighttime noise limit that would otherwise apply. However, Mr Hunt recommends that such a rule only be included in the PDP if the Hearing Panel considers that frost fans are already used, or likely to be installed, in this district. In terms of the specific rule, he generally agrees with the wording requested by submitters for a new rule applying to frost fans, with some changes. This includes, consistent with other district plans, that the noise limit is applied to the notional boundary of noise sensitive activities (or zone boundary), or at a distance of 300m (whichever is the lesser distance). If such a rule is included, he also agrees that a corresponding rule should apply to the establishment of noise sensitive activities within 100-300m of an existing frost fan, requiring the level of acoustic insulation set out in NOISE-S3.1. For frost fans within 100m, a resource consent requirement should apply.
- 8.2.6 The Council has advised me that six resource consents and one certificate of compliance have been issued for frost fans within the District. I note that if there are not specific

³³ Section 42A Report: Rural Zones, 19 June 2024, paras 10.37.12-10.37.14.

provisions for frost fans in the PDP, then they would be likely to require resource consent under the standard noise rules, which in my view is a less efficient approach than having a specific rule. For existing frost fans, as well as new frost fans that may be established in future, I consider that there is a risk of reverse sensitivity effects arising if there is no control over noise sensitive activities establishing in proximity to them. I therefore support the following suite of controls being applied:

- Inclusion of a new rule for the operation of frost fans in the GRUZ, applying a permitted status, generally on the basis set out in Mr Hunt's advice, and with similar matters of discretion applying as included in NOISE-R1, where a consent requirement is triggered. I do not support the rule applying in the RLZ or SETZ, given the higher focus in these particular rural zones on residential activities.
- A requirement for new noise sensitive activities within:
 - 100-300m of an existing or consented frost fan to meet NOISE-S3.1; and
 - 100m of an existing or consented frost fan to obtain a resource consent.

8.2.7 For completeness, I note that NZ Fans have sought that a 300m setback is applied to any new noise sensitive activity (under GRUZ-S4), as well as seeking that NOISE-R9 and NOISE-S3 area amended to apply acoustic insulation requirements within this distance. I do not consider that both are required, as this could result in the insulation requirements of NOISE-S3 being met, but a resource consent still being triggered under GRUZ-S4. Based on Mr Hunt's advice, I consider that it is more efficient to apply the insulation requirements (between 100-300m) and that this will still be effective at managing the potential reverse sensitivity issues. Within 100m, I consider it appropriate to require a setback (under GRUZ-S4), triggering a resource consent requirement, with site-specific assessment of the appropriateness of any insulation and other mitigation measures proposed. I have discussed this with Mr MacLennan and he is comfortable with my recommendation and the reasons for it.

8.2.8 I note that Mr Hunt considers that where acoustic insulation for noise sensitive activities is required due to the proximity of frost fans, that the ventilation requirements in NOISE-S4 need not be applied. To address this, I recommended that NOISE-S4 is amended to list out where the requirements apply, i.e. to apply to the areas identified in NOISE-R9 (being the only rule to which NOISE-S4 applies) except within 300m of a frost fan.

8.2.9 With respect to amending the Planning Maps to include the location of frost fans as a non-statutory layer, I agree with the submitter and with Mr MacLennan, that mapping these, on a non-statutory basis, is a helpful tool to assist with compliance. I note that there are already various layers contained in a "Non-District Plan Layers" label in the ePlan maps that this could be added to. However, as this layer is not part of the District Plan itself, I do not think this is a matter that the Hearings Panel can make a decision on, and instead it would need to be a recommendation to the Council.

Conclusions and Recommendations

8.2.10 I recommend that NOISE-P5 is amended to refer to “land within 300m of an existing or consented frost fan” within the description of ‘higher noise environments’.

8.2.11 I recommend that a new rule is included in the Noise Chapter as follows:

<u>NOISE-RX</u>	<u>Installation and operation of frost fans</u>	
<u>General Rural Zone</u>	<p><u>Activity Status: Permitted</u></p> <p><u>Where:</u></p> <p><u>PER-1</u> <u>Noise from the frost fan must not exceed 55dB L_{Aeq} (15mins) when measured at a distance of 300m, or within the notional boundary of any existing building used for a noise sensitive activity on a site in different ownership, or at any zone boundary; and</u></p> <p><u>PER-2</u> <u>Frost fans are only used for:</u></p> <ol style="list-style-type: none"> <u>1. the protection of crops from frost from bud break to harvest; or</u> <u>2. maintenance purposes, undertaken only between 8am and 6pm Monday to Friday.</u> <p><u>PER-3</u> <u>Frost fans are only operated when the air at canopy height is 2°C or less</u></p> <p><u>PER-4</u> <u>Evidence of installation of a frost fan meeting this standard shall be provided to Council including certification from an appropriately qualified and experienced acoustic engineer that the noise limits in PER-1 are met and providing the location of the frost fan.</u></p> <p><u>PER-5</u> <u>Records shall be kept stating the date, temperature, times and length of use of each frost fan and made available to Council on request. Records may include telemetry records.</u></p>	<p><u>Activity status when compliance not achieved: Restricted Discretionary</u></p> <p><u>Matters of discretion are restricted to:</u></p> <ol style="list-style-type: none"> <u>1. the level, duration, frequency and character of the noise; and</u> <u>2. the proximity and nature of nearby noise sensitive activities and the adverse effects they may experience from the noise; and</u> <u>3. the existing noise environment; and</u> <u>4. effects on amenity values and anticipated character of the receiving environment; and</u> <u>5. effects on health and well-being of people; and</u> <u>6. any noise mitigation measures; and</u> <u>7. operational requirements of frost fans; and</u> <u>8. monitoring and reporting</u>

8.2.12 I recommend that NOISE-R9 is amended as follows:

NOISE-R9	Any new building for use by a noise sensitive activity and alterations to existing buildings for use by a noise sensitive activity (not listed in NOISE-R12)	
...	Activity Status: Permitted	...
<u>General Rural Zone within 300m of any frost fan (including any frost fan for which a resource or building consent has been issued)</u>	Where: PER-1 ...	

8.2.13 I recommend that NOISE-S3.1 is amended as follows:

NOISE-S3	Acoustic insulation	
1.
<u>General Rural Zone within 300m of any frost fan (including any frost fan for which a resource or building consent has been issued)</u>		

8.2.14 I recommend that NOISE-S4 is amended as follows:

NOISE-S4	Ventilation requirements	
<u>All zones</u>
<u>Within 40m of a State Highway with a posted speed limit of 50 km/hr or less</u>		
<u>Within 80m of a State Highway with a posted speed limit greater than 50 km/hr</u>		
<u>Within 40m of the railway line</u>		
<u>Neighbourhood Centre Zone</u>		
<u>Local Centre Zone</u>		
<u>Large Format Retail Zone</u>		
<u>Mixed Use Zone</u>		
<u>Town Centre Zone</u>		
<u>City Centre Zone</u>		
<u>General Residential zone within 20m of the boundary with an Industrial zone</u>		
<u>Medium Residential zone within 20m of the boundary with an Industrial zone</u>		

<u>Outer Control boundary of the Port Noise Control Overlay</u>		
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8.2.15 I recommend that the following clause is added to GRUZ-S4, as follows:

X. No new noise sensitive activity may be established within 100m of an existing or consented frost fan.

8.2.16 Under s32AA, I consider having a specific rule for frost fans which is targeted to their nature, is a more efficient approach than relying on the general noise limits otherwise applying to noise-generating activities. I consider that the suite of controls will still be effective at ensuring the noise effects generated by frost fans are compatible with the purpose, character and qualities of the GRUZ, and avoid the health and well-being of people being compromised (NOISE-O1).

8.2.17 I consider that the requirement for acoustic insulation for new noise sensitive activities within the GRUZ within 100-300m of frost fans, and introducing a minimum 100m setback from frost fans will assist in ensuring that primary production is protected from sensitive activities (as sought in GRUZ-O3) and will help implement GRUZ-P2.3 and GRUZ-P5 by ensuring noise sensitive activities are appropriately setback from a noise-producing activity that is used to support primary production, and requiring mitigation of noise so that the potential for adverse effects on a noise sensitive activity from this type of primary production is minimised.

8.3 Noise Control Boundary (NCB) Overlay

8.3.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
G. D. M	38.2
Fonterra	165.5, 165.109, 165.110, 165.111, 165.113
PrimePort	175.8
TDHL	186.4
22 The Terrace	202.3

Submissions

8.3.2 PrimePort [175.8] and TDHL [186.4] supports the Port Inner NCB and the Port Outer NCB as notified.

8.3.3 G. D. M. [38.2] seeks that the Port Outer NCB overlay is removed from 12 and 14 The Terrace. The submitter considers that the NCB appears to be based on property boundaries rather

than being based on scientific acoustic modelling and that the overlay “*will create an unnecessary consent burden that may not exist*”.

- 8.3.4 22 The Terrace [202.3] seeks that the Port Outer NCB overlay is removed from 22 The Terrace, stating that the boundary of the overlay appears to have been fixed along property boundaries and in an otherwise ad hoc manner, rather than being based on scientific acoustic modelling (noting that 20 The Terrace is not included in the overlay). The submitter considers that this approach will create an unnecessary consent burden, and considers that the topography and the presence of structures on the north side of The Terrace also act as a noise barrier between the site and the Port.
- 8.3.5 Fonterra [165.5] seek that a new NCB Overlay is included in the PDP for the Fonterra Clandeboye site. The extent of the overlay sought is set out in the submission. The intent of the NCB is to allow effective management of noise sensitive activities in close proximity to the Clandeboye site, including expectations around the noise associated with the site. In addition to the application of a new NCB, the submitter also seeks:
- That reference to the new Clandeboye NCB is added to NOISE-P5 [165.109];
 - That reference to the new Clandeboye NCB is added to NOISE-P7 [165.110];
 - That NOISE-R9 is amended to apply to the new Clandeboye NCB, and that a non-complying activity status is applied to any non-compliance with the rule [165.113].
 - The inclusion of a new rule within the Noise Chapter, setting out noise emission standards applying to the site, which it considers is appropriate to the operational requirements and the environmental factors of Clandeboye [165.111].

Analysis

- 8.3.6 In relation to the submissions seeking removal of the Port Outer NCB overlay, Mr Hunt notes that the contours have been predicted using NZS6809:1999, with the contours in some areas having been snapped to property boundaries. He states that this is a widely accepted practice to ensure the plan provisions relating to port noise are efficiently applied with certainty and clarity in urban areas. In particular, he notes that having contour lines passing through small sites can lead to uncertainty and difficulty in establishing where acoustic protection measures need to be applied. Aligning the contour with property boundaries ensures clarity on when the acoustic mitigation measures apply to any given site.
- 8.3.7 In response to the request for 20 The Terrace to be removed from the contour due to acoustic screening by terrain and the presence of structures on the north side of The Terrace, Mr Hunt has reviewed the background acoustic report which sets out how port noise levels have been predicted. He considers there to be no reason to suggest the usual algorithms used in the modelling to predict acoustic screening are faulty. In relation to 12, 14 and 22 The Terrace, Mr Hunt states that the submitter provides no justifiable, noise-related reasons for why the Port Outer NCB overlay should be removed from these properties.
- 8.3.8 In regard to the new NCB Overlay sought for the Fonterra Clandeboye site, I note that this is considered in detail by Mr Hunt. I also note that I have had a preliminary discussion with the

submitter's planner (Ms Susannah Tait) on this matter, and that it is likely that further discussions between the submitter's noise expert and Mr Hunt will occur before the hearing. While, at this stage, Mr Hunt is generally supportive of the requested NCB and associated planning amendments, he considers that further information is needed to confirm this position, which he sets out in his memo. This includes:

- Comparing the permitted levels of noise that the NCB would allow with the current resource consent conditions;
- Outlining the noise levels experienced beyond the NCB, to demonstrate the extent of the area within which noise levels higher than those otherwise permitted by the OPD and PDP would occur;
- Information about the noise effects from Clandeboye's operations on people in the outdoor areas surrounding their dwellings in the evening period (7pm to 10pm), compared to in other rural areas; and
- Confirmation of which insulation standard (i.e. NOISE-S3.1 or NOISE-S3.2) is proposed to be applied to noise sensitive activities within the NCB.

8.3.9 Taking into account Mr Hunt's comments, I agree in principle that it would likely be appropriate to apply a NCB to Clandeboye, particularly to protect the site's operations from reverse sensitivity effects. However, I consider that the further information identified by Mr Hunt is required in order to undertake a full assessment of the costs and benefits of the proposed approach, along with the efficiency and effectiveness of the particular approach at achieving the relevant objectives of the PDP, in accordance with s32 of the RMA. I therefore have not included any recommendations, at this stage, to include the specific NCB Overlay and related suite of provisions. However, I will update the Hearing Panel on the outcome of any further discussions with the submitter that occur.

8.3.10 For completeness, I note that if the request for a NCB is accepted, then I broadly consider that:

- The Planning Maps should be amended to include the new Noise Control Boundary Overlay;
- NOISE-O2 should be amended to refer to the Clandeboye NCB, to ensure that the outcome sought (not being constrained by reverse sensitivity effects arising from noise sensitive activities) is extended to Clandeboye's operations;
- NOISE-P5 should be amended to refer to the Clandeboye NCB within the list of higher noise environments, because it is appropriate for noise sensitive activities within the NCB to be located and designed to minimise adverse effects on the amenity values and health and safety of occupants and minimise sleep disturbance from noise. I do not agree that NOISE-P7 requires amendment to refer to the Clandeboye NCB, as the effect of applying this policy is that noise sensitive activities would need to be avoided, and in my view, this is a more restrictive approach than is necessary to ensure that the operations on the Clandeboye site are not constrained by reverse sensitivity effects arising from noise sensitive activities;
- NOISE-R9 should be amended to include reference to the NCB, but I consider that a restricted discretionary (not non-complying) status should be applied to non-compliance, consistent with the other areas managed under that rule;

- NOISE-S3 should also be amended to apply within the NCB, noting the request from Mr Hunt, to confirm which part of the standard should be applied; and
- A new rule should be included in the Noise Chapter, setting out the noise limits applying to the NCB (and therefore exempting operations at Clandeboye from compliance with NOISE-S2).

Conclusions and Recommendations

8.3.11 I do not recommend any changes in response to these general submission points at this time. However, I have noted above support in principle for a NCB to be applied to Clandeboye, and the likely changes that would need to be made to the Noise Chapter as a consequence of this.

8.4 Objectives

8.4.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Helicopters Sth Cant.	53.14, 53.15
Ballance	86.5, 86.6
Lineage Logistics	107.15
NZAAA	132.18, 132.19
Waka Kotahi	143.116
Synlait	163.6
Fonterra	165.106, 165.107
Road Metals	169.34
Fulton Hogan	170.34
Silver Fern Farms	172.102, 172.103
Alliance Group	173.104, 173.105
KiwiRail	187.75
Foodstuffs	193.4, 193.5
Hort NZ	245.91, 245.92
NZ Frost Fans	255.5, 255.6

Submissions

8.4.2 Ballance [86.5], Fonterra [165.106], Foodstuffs [193.4] and Hort NZ [245.91] support NOISE-O1 and seek its retention.

8.4.3 Silver Fern Farms [172.102] and Alliance Group [173.104] considers that NOISE-O1 should clarify that noise need only be managed to the extent that it is received in a zone, via the addition of reference to “each receiving zone”.

- 8.4.4 Helicopters Sth Cant. [53.14] and NZAAA [132.18] consider, in relation to the objective, that noise effects being compatible with the zone is appropriate, but that it needs to be recognised that the rural zone is not a 'quiet' area. They seek that the PDP is amended to ensure that rural zones are not described as 'quiet' and that noise associated with primary production activities is anticipated.
- 8.4.5 NZ Frost Fans [255.5], due to its concerns set out above regarding the NPSHPL, seek that NOISE-O1 is amended to add "*and do not compromise the health and well-being of people and communities where sensitive activities are prioritised in a location*". It considers this necessary to prioritise land based primary production on highly productive soils and avoid reverse sensitivity effects.
- 8.4.6 Lineage Logistics [107.15], Silver Fern Farms [172.103], Alliance Group [173.105], PrimePort [175.62], KiwiRail [187.75] and Foodstuffs [193.5] support NOISE-O2 and seek its retention.
- 8.4.7 Synlait [163.6] supports the intent of NOISE-O2, but considers that the objective should not be limited to existing industrial activities, but also the potential future development capacity of land within industrial zones. The submitter also considers that the word 'constrained' should be further qualified with reference to the possible loss of development rights, which is a more significant outcome than a hampering or restraint on activities and development which is implied in 'constraint'. The specific drafting changes sought are:
- The Airport, Raceway, State Highway, railway lines, ~~and~~ the Port and activities and development potential located within commercial, mixed use and industrial zones are not constrained or lost as a consequence of ~~by~~ reverse sensitivity effects arising from noise sensitive activities.*
- 8.4.8 Fonterra [165.107] seeks that the Strategic Rural Industry Zone is explicitly recognised in this objective, and consider it more appropriate for reverse sensitivity effects to be avoided. The specific drafting changes sought are:
- The Airport, Raceway, State Highway, railway lines, ~~and~~ the Port, the Strategic Rural Industry Zone and activities located within commercial, mixed use and Industrial zones are protected from not constrained by reverse sensitivity effects arising from noise sensitive activities.*
- 8.4.9 Road Metals [169.34] and Fulton Hogan [170.34] seek amendments to NOISE-O2 to address lawfully established activities, as follows:
- The Airport, Raceway, State Highway, railway lines and the Port and activities located within commercial, mixed use, rural and Industrial zones, and other lawfully established activities are not constrained by reverse sensitivity effects arising from noise sensitive activities.*
- 8.4.10 Helicopters Sth Cant. [53.15], Ballance [86.6], NZAAA [132.19] and Hort NZ [245.92] consider that primary production activities in rural zones should not be constrained by reverse sensitivity effects arising from noise sensitive activities. As such they seek that "*or primary production activities in rural zones*" are added to NOISE-O2.

- 8.4.11 NZ Frost Fans [255.6] similarly considers that primary production activities in general should be included in the objective, by adding “...railway lines, ~~and the Port,~~ land based primary production activities on the rural land resource, and activities...”. It states that the objective fails to give effect to the NPSHPL insofar as the protection from reverse sensitivity effects does not include primary production activities in the rural land resource.
- 8.4.12 Waka Kotahi [143.116] supports the intent of NOISE-O2 in terms of the state highway not being constrained by reverse sensitivity effects, but considers that protecting human health should be the primary approach for managing reverse sensitivity effects. The specific drafting changes sought are:
- Noise sensitive activities shall avoid reverse sensitivity effects to protect human health from noise generating activities such as ~~the Airport, Raceway, State Highway, railway lines and the Port and activities located within commercial, mixed use and Industrial zones are not constrained by reverse sensitivity effects~~ arising from noise sensitive activities.

Analysis

- 8.4.13 I consider it helpful to clarify in NOISE-O1 that it is the purpose, character and qualities of the zone *receiving* the noise that it is intended that the noise effects are compatible with. This is reflected in the wording of NOISE-P1 and the way the rule framework is set out to apply limits relative to the environment receiving, rather than generating, the noise.
- 8.4.14 With respect to Helicopters Sth Cant. [53.14] and NZAAA [132.18], I consider that changes to the Noise Chapter itself are not required, because the Noise Chapter does not describe the character and qualities of the rural zones, which are instead set out in the relevant zone chapters. With respect to the GRUZ, I note that GRUZ-O2.2 is already explicit that its character and qualities include that it is a working environment where primary production generates noise. I therefore consider that the outcome sought by these submitters is already provided for, when the GRUZ and Noise chapter provisions are read together.
- 8.4.15 I do not agree with NZ Frost Fans [255.5] that noise effects should be anticipated to compromise the health and well-being of people and communities simply because an area may not “prioritise” sensitive activities. While the NPSHPL directs that reverse sensitivity effects are to be managed so as not to constrain land-based primary production activities on highly productive land (Policy 9), I consider that the change sought by the submitter is well beyond this. I do not consider that the NPSHPL can be read as saying that in order to prioritise land based primary production on highly productive soils, that noise should not be managed in relation to its effect on the health and well-being of people.
- 8.4.16 NOISE-O2 sets out those activities and areas where the noise provisions are intended to manage reverse sensitivity effects so as not to constrain those activities / areas. In effect, the objective refers to existing activities or areas where there is already a high level of noise, or within which high levels of noise are anticipated, and where the establishment of noise sensitive activities requires management in order to ensure these activities can continue to operate. The objective is implemented through policies and rules that either require acoustic

insulation for noise sensitive activities, or restrict the establishment of such activities. They are therefore focussed on known noise-producing activities / areas where intervention is considered necessary to ensure that noise does not result in reverse sensitivity effects.

- 8.4.17 When considering if other activities/areas should be added to the objective, I consider that it is necessary to consider if intervention is needed in relation to these other activities with respect to noise, and how the outcome would be achieved in relation to these. I note, in terms of primary production, that GRUZ-O3 already seeks, more broadly, that primary production is protected from sensitive activities. This is managed through controls on residential units, including minimum lot sizes, and the application of setbacks from identified areas, including site boundaries, and from lawfully established quarries and mines (under GRUZ-S4). If primary production activities are added to NOISE-O2, I have concerns that this would go beyond GRUZ-O3 and necessitate all noise sensitive activities, including dwellings, being required to install acoustic insulation, or require some sort of case-by-case assessment of existing noise before any noise sensitive activities are established in these areas. Given the direction and controls in GRUZ, I do not consider this to be necessary or appropriate. I therefore do not agree with extending the objective to refer to rural zones, or to primary production activities in rural areas.
- 8.4.18 With respect to adding reference to “*other lawfully established activities*” I consider this far too broad, and therefore unclear as to how it would be achieved. I consider that if there are other lawfully established activities with high noise levels where some measure of intervention is required to address potential reverse sensitivity effects arising from their noise, that the activities would need to be specifically identified in the PDP. To establish whether intervention is required, I consider that the existing or anticipated noise would need to be quantified, along with areas within which noise sensitive activities should be regulated. This is the same approach that has been taken with the other activities identified in the objective, such as the Airport, Raceway, State Highway, railway lines and the Port.
- 8.4.19 I note that Fonterra’s request for a Special Purpose Zoning is not recommended to be accepted by other s42A report authors. Consequently, I do not recommend that this zone is referred to in the objective. For completeness I note that if the submitter’s request for a new NCB for the Clandeboye site is accepted, then in my view the objective should be amended to refer to this site, even if the requested zone change is not accepted.
- 8.4.20 With respect to Synlait’s request [163.6] that the objective be extended to encompass the potential future development capacity of land within industrial zones, not just existing industrial activities, I consider that this is the intent of the provision, when considered in conjunction with the provisions intended to implement it. More specially, NOISE-P5 applies to residential zones in proximity to industrial *zones* (not industrial activities); with the acoustic insulation requirements in NOISE-R9 similarly applying in the GRZ & MRZ where within 20m of the boundary of an industrial zone. (Similarly, the provisions relating to the CMUZ apply throughout these zones and not only in relation to established activities.) I agree with the submitter that the objective could however be read as implying that it is only

activities already existing within the listed zones that are encompassed by the objective. However, my preference, rather than referring to “*development potential*” is to refer to activities that are “*existing or anticipated*” within these zones, as I consider this more accurately aligns with the drafting of the PDP which describes the purpose of each zone in each zone chapter.

- 8.4.21 I consider it appropriate to refer to these as not being “*constrained*” as I consider that this is what the provisions seek to address. Conversely, referring to these activities not being “*lost*” might allow for a greater level of impact on these activities (i.e. it might allow for constraints on these activities, insofar as the constraints did not amount to the activities ceasing to occur or be established at all). I also consider “*constrained*” to be preferable to “*protected*”. As noted by Fonterra [165.107], protection would likely require the avoidance of any reverse sensitivity effects and I consider there to be more nuance in what is sought through the provisions. In some cases, avoidance is directed (e.g. in the circumstances in NOISE-P7); whereas in other cases, minimisation is sought (e.g. in NOISE-P5). I consider that “*constrained*” better reflects this nuance.
- 8.4.22 With respect to the changes sought by Waka Kotahi [143.116], I consider that this alters the drafting from stating the outcome sought, to a policy direction. I also consider that the outcome sought is not restricted to protecting human health, but also to minimising adverse effects on amenity values (as referred to in NOISE-P5 and NOISE-P7).

Conclusions and Recommendations

- 8.4.23 I recommend that NOISE-O1 is amended as follows:
- Noise effects generated by activities are compatible with the purpose, character and qualities of each receiving zone and do not compromise the health and well-being of people and communities.*
- 8.4.24 Under s32AA I consider that referring to the receiving zone ensures consistency across the PDP provisions and provides greater clarity on the intended outcome. I consider that being clear that noise effects are to be managed relative to the purpose, character and qualities of the area in which the sound is received is more well aligned with s(7)(c) in terms of the maintenance and enhancement of the amenity values anticipated in different zones. I therefore consider that the amended objective is more appropriate for achieving the purpose of the RMA.
- 8.4.25 I recommend that NOISE-O2 is amended as follows:
- The Airport, Raceway, State Highway, railway lines and the Port and existing and anticipated activities ~~located~~ within commercial, mixed use and Industrial zones are not constrained by reverse sensitivity effects arising from noise sensitive activities.*
- 8.4.26 In terms of s32AA, I consider that the change is clearer that the outcome sought relates to not only exiting activities established in CMUZ and industrial zones, but also to those activities that are anticipated under the zone framework. I consider that this better aligns the outcome which is sought in NOISE-O2 with the implementing provisions. I also consider

that this change will assist in achieving the outcomes sought in those zones (i.e. the purpose-related objectives), which in my view will ensure that the objectives across the PDP align and in doing so better achieve the purpose of the RMA.

8.5 New Policies

8.5.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Forest and Bird	156.173
Hort NZ	245.94

Submissions

8.5.2 Forest and Bird [156.173] considers that that the impacts of noise on native fauna should be considered, and seek inclusion of a policy that ensures that the impact of noise on native species is avoided or minimised.

8.5.3 Hort NZ [245.94] seeks the inclusion of a policy that provides for noise from primary production activities, to ensure that there is recognition and awareness of the noise environment of the rural area, as follows:

To recognise that noise associated with primary production activities is appropriate for the working nature of the rural environment by exempting it from the noise limits. The operation of noisy equipment (in particular rural airstrips, audible bird scaring devices and frost fans) is provided for subject to appropriate controls.

Analysis

8.5.4 It is my view that the policy sought by Forest & Bird does not relate to the outcomes sought in NOISE-O1 or NOISE-O2. To the extent that such a provision might be justified to achieve outcomes sought in another chapter (e.g. ECO), I consider that more detail would be necessary to assess the appropriateness of such a provision. In particular, it would need to be identified in what way and where noise may impact native species such that additional controls are justified.

8.5.5 With respect to the additional policy sought by Hort NZ [245.94], I do not consider the additional policy to be necessary. I note that NOISE-P1 already seeks to enable the generation of noise which is of a type, character and level that is appropriate, having regard to the purpose, character and qualities of the zone that the activity is located in. The purpose, character and qualities of each of the respective rural zones is set out in each zone chapters and therefore in my view already provides direction in relation to noise when the noise and zone chapter provisions are read together. From a drafting perspective, it is not clear to me how the two different aspects of the submitter's requested policy set out are intended to work together in any case.

Conclusions and Recommendations

8.5.6 I do not recommend that any additional policies are added to the Noise Chapter in response to these submissions.

8.6 NOISE-P1

8.6.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Helicopters Sth Cant.	53.16
Ballance	86.7
NZAAA	132.20
Radio NZ	152.50
Fonterra	165.108
Silver Fern Farms	172.104
Alliance Group	173.106
Foodstuffs	193.6
Hort NZ	245.95
NZ Frost Fans	255.7

Submissions

8.6.2 Ballance [86.7], Fonterra [165.108], Silver Fern Farms [172.104], Alliance Group [173.106] and Foodstuffs [193.6] support NOISE-P1 and seek its retention.

8.6.3 Helicopters Sth Cant. [53.16] and NZAAA [132.20] consider, in relation to the policy, that noise effects being compatible with the zone is appropriate, but that it needs to be recognised that the rural zone is not a 'quiet' area. They seek that the PDP is amended to ensure that rural zones are not described as 'quiet' and that noise associated with primary production activities is anticipated.

8.6.4 Radio NZ [152.50] considers the policy should also recognise circumstances where Lifeline Utilities are required to undertake activities that generate noise. The submitter states that it is critical that such utilities can continue to maintain and operate generators to ensure uninterrupted operations during emergencies and consider an enabling policy is therefore appropriate. The submitter seeks that NOISE-P1 is amended to enable noise generation at appropriate levels.

8.6.5 Hort NZ [245.95] supports the enabling of noise generation but considers that it should be where enabled where it is consistent with the nature of the zone, rather than referring to appropriateness. They seek that clauses 1 and 4 of the policy are deleted, and the stem of the policy is amended to read:

Enable the generation of noise ~~when it is of a type, character and level that is appropriate that is consistent with the purpose, character and qualities of the zone that the activity is located in~~, having regard to: ...

- 8.6.6 NZ Frost Fans [255.7], due to its concerns set out above regarding the NPSHPL, seek that NOISE-P1 is amended to add an additional clause, reading: "*the priority given to land based primary production activities on highly productive land.*"

Analysis

- 8.6.7 As set out above, I note that the Noise chapter itself does not describe the character and qualities of the rural zones, which are instead set out in the relevant zone chapters, including in respect to the character and qualities of the GRUZ, that it is a working environment where primary production generates noise. I therefore do not consider that any changes to NOISE-P1 are required in response to Helicopters Sth Cant. [53.16] and NZAAA [132.20]. For the same reason, I do not consider it appropriate to add reference to the priority of land based primary production activities on highly productive land, as, to the extent that this priority is relevant when considering the management of noise, I consider it is already adequately addressed through reference to the purpose of zones.
- 8.6.8 With respect to Lifeline Utilities, I consider that the policy already allows for the nature of the noise generating activity to be taken into account under clause 2, with consideration of the frequency and duration of the noise also being relevant in an emergency situation. I therefore do not consider additional changes are required to the policy to specifically refer to Lifeline Utilities.
- 8.6.9 I consider that the change sought by Hort NZ [245.95] would narrow the policy, directing that noise generation is only enabled where consistent with the purpose, character and qualities of the zone. As notified the drafting is broader, allowing for noise to be enabled when it is of a type, character and level that is appropriate. In some instances, the level of noise may not be consistent with the purpose, character or qualities of a zone, but may still be appropriate to enable because it is an infrequent or short-duration noise.

Conclusions and Recommendations

- 8.6.10 I recommend that NOISE-P1 is retained as notified.

8.7 NOISE-P5

- 8.7.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Helicopters Sth Cant.	53.17
Ballance	86.8
Lineage Logistics	107.16

NZAAA	132.21
Waka Kotahi	143.117
Synlait	163.7
Fonterra	165.109
Fulton Hogan	170.35
Silver Fern Farms	172.105
Alliance Group	173.107
PrimePort	175.63
KiwiRail	187.76
Foodstuffs	193.7
Kāinga Ora	229.57
Hort NZ	245.96
NZ Frost Fans	255.8

Submissions

- 8.7.2 Lineage Logistics [107.16], Waka Kotahi [143.117], Synlait [163.7], Silver Fern Farms [172.105], Alliance Group [173.107], PrimePort [175.63] and Kāinga Ora [229.57] support NOISE-P5 and seek its retention.
- 8.7.3 Ballance [86.8], Helicopters Sth Cant. [53.17], NZAAA [132.21] and Hort NZ [245.96] consider that reverse sensitivity effects are not limited to the 'higher noise environments' listed in the policy, and seek to have noise sensitive activities managed in rural zones to ensure that reverse sensitivity effects on primary production is avoided. As such, they seek reference to "*higher noise environments*" is deleted from the policy; or that a separate specific policy is included for reverse sensitivity from noise sensitive activities in rural zones.
- 8.7.4 Fonterra [165.109] states that the policy does not relate to reverse sensitivity, but rather that it relates to effects on incompatible activities. As such, it seeks that the policy title is amended to "**Effects on incompatible activities**".
- 8.7.5 Fulton Hogan [170.35] seeks that an additional clause is added to the policy to address lawfully established activities, as follows: "**in close proximity to lawfully established activities.**"
- 8.7.6 KiwiRail [187.76] seeks deletion of the clauses set out in the policy, as it considers that they are not necessary and weaken the intent of the policy to meet NOISE-O2 and protect railway lines from reverse sensitivity effects. Further, while supportive of recognising higher noise environments within close proximity to a railway line, amendments are sought to specify that noise and vibration effects are felt "*within 100m of*", rather than "*in close proximity to*" a railway line.

- 8.7.7 Foodstuffs [193.7] considers that the policy does not fully implement NOISE-O2 because it does not provide for the protection of existing noisy activities from noise sensitive activities, located in a different zone immediately adjacent to the zone containing the existing higher noise environment. The change sought is to add reference to noise sensitive activities “located in or adjacent to higher noise environments...”
- 8.7.8 NZ Frost Fans [255.8], due to its concerns set out above regarding the NPSHPL, seek that NOISE-P5 is amended to add the “land deemed highly productive pursuant to the National Policy Statement for Highly Productive Land” to the description of “higher noise environments” within the policy.

Analysis

- 8.7.9 With respect to submitters’ requests to manage all noise sensitive activities in rural zones, I note that the policy currently targets particular areas where there are high noise levels, which were identified as part of acoustic advice provided by Mr Hunt during the development stages of the PDP. To apply the policy to any noise sensitive activities in the rural area would in my view be an extremely inefficient approach. As noted earlier, there are provisions, including setbacks contained in the GRUZ chapter which seek to manage sensitive activities in the GRUZ more broadly than just in terms of noise, and I do not consider there to be sufficient justification to apply such a stringent approach to the entire rural area. With respect to highly productive land, the same applies – it does not follow that all activities undertaken on highly productive land will be higher noise producing activities which result in noise effects that justify application of acoustic insulation to every single noise sensitive activity established on HPL.
- 8.7.10 I do not consider it appropriate to extend the policy to refer to lawfully established activities. The purpose of the policy is to direct how noise sensitive activities are to be located and designed where they are in higher noise environments, and to identify those environments. The district is full of lawfully established activities, many of which do not generate levels of noise that might give rise to reverse sensitivity effects. To direct that the requirements apply in close proximity to any lawfully established activity would apply in almost every situation and require a level of mitigation that is not needed to achieve the outcomes sought. Instead, those particular lawfully established activities with higher noise levels, that are likely to give rise to reverse sensitivity effects arising, have already been specifically identified within the policy already.
- 8.7.11 I disagree with Fonterra [165.109] that the policy does not relate to reverse sensitivity. The policy is aimed at managing noise sensitive activities in higher noise areas, so that those activities do not give rise to reverse sensitivity effects. I do not agree that the focus is on managing effects on incompatible activities.
- 8.7.12 In considering whether it is appropriate to delete the clauses in the policy, as sought by KiwiRail [187.76], I note that the stem of the policy directs that noise sensitive activities in the specified environments are to be located and designed to minimise adverse effects on

the amenity values and health and safety of occupants and minimise sleep disturbance from noise. The clauses in the policy allow for consideration of various factors, when considering the location and design. I consider that these clauses are appropriate, because they allow for various relevant matters to be considered. For example, an activity which does not meet the specified standards, but which demonstrates through the process that mitigation measures have been applied to appropriately minimise adverse effects on the amenity values and health and safety of occupants and minimise sleep disturbance from noise, would find support at the policy level. Similarly, a very infrequently occupied noise sensitive activity could be considered under this policy. I consider this to be appropriate and do not agree that these considerations undermine the achievement of NOISE-O2. Instead, I consider that they allow for an appropriate case-by-case assessment to be made of whether NOISE-O2 will still be achieved by any given proposal.

- 8.7.13 I do not support Foodstuffs' request [193.7] that the policy refer to noise sensitive activities located in or *adjacent to* higher environments. The effect of the amendment sought, is that changes would be required to the rule framework to expand the acoustic insulation requirements to all areas adjacent to the defined higher noise environments. I consider this to be beyond what is required to achieve NOISE-O2. I note that the change sought by the submitter is likely to relate to their broader request – addressed elsewhere in this report - to extend the requirements in a particular location. Even if this broader request is accepted, I consider that the appropriate change at the policy level would be to amend the description of higher noise environments to refer to the particular “adjacent” location.

Conclusions and Recommendations

- 8.7.14 I do not recommend any changes to NOISE-P5 in response to these submissions (noting, for completeness, that I have earlier recommended changes to this policy in relation to frost fans).

8.8 NOISE-P7

- 8.8.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Lineage Logistics	107.17
Fonterra	165.110
Primeport	175.64
Kāinga Ora	229.58

Submissions

- 8.8.2 PrimePort [175.64] and Lineage Logistics [107.17] support NOISE-P7 and seeks its retention.
- 8.8.3 Fonterra [165.110] supports the reference to the Port Inner NCB Overlay in the policy.

- 8.8.4 Kāinga Ora [229.58] opposes this ‘avoid’ policy, as it sends a very strong policy signal that specific activities are not to occur within the noise sensitive overlays. The submitter also considers that the drafting of the policy is confusing given the various exclusions/ exceptions, and seeks that it be redrafted to focus on managing the effects of noise. The submitter seeks deletion of the policy and its replacement with the following:

Manage subdivision and the establishment of noise sensitive activities to minimise adverse effects on the amenity values of occupants.

Analysis

- 8.8.5 I agree with Kāinga Ora [229.58] that the use of ‘avoid’ in this policy it sends a very strong policy signal that specific activities are not to occur within the noise sensitive overlays. This is intentional, is supported by a non-complying activity status, and reflects the existing controls in the ODP relating to the airport and raceway. The key change in the PDP is the extension of this approach to the Port Inner NCB. This NCB is based on a technical report commissioned by PrimePort to develop noise contours in accordance with NZS 6809:1999 Acoustics – Port Noise Management and Land Use Planning, and which was provided to the Council as part of the development of the PDP.³⁴ This report which was in turn reviewed by Malcolm Hunt Associates.³⁵ I consider that this approach is appropriate, taking into account the high level of noise associated with these activities, the impact that this would have on people undertaking noise sensitive activities in these areas, and the established higher level of risk that reverse sensitivity effects would arise, resulting in constraints on the established activities. I do not consider the policy drafting to be confusing – it provides clear direction in each clause on what is to be avoided, and the circumstances in which an exception may be applied.

Conclusions and Recommendations

- 8.8.6 I recommend that NOISE-P7 be retained as notified.

8.9 NOISE-R1

- 8.9.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Jet Boating	48.14
Helicopters Sth Cant.	53.18

³⁴ *Port Noise Contours*, Acoustic Engineering Services, February 2022

(https://www.timaru.govt.nz/__data/assets/pdf_file/0005/669866/Primeport-AES-2022-Noise-Report.pdf)

³⁵ *Proposed Timaru District Noise Provisions: Review of Port Noise Report and Noise Contour Recommendations*, Malcom Hunt Associates, February 2022

(https://www.timaru.govt.nz/__data/assets/pdf_file/0004/669865/Malcom-Hunt-Associates-2022-Review-of-Port-Noise-Predictions.pdf)

Ballance	86.9
FENZ	131.14
NZAAA	132.22
Radio NZ	152.51
PrimePort	175.65
Federated Farmers	182.179
TDHL	186.37
Hort NZ	245.99

Submissions

- 8.9.2 Ballance [86.9], FENZ [131.14] and PrimePort [175.65], TDHL [186.37] support NOISE-R1 and seek its retention. Generally, these submitters support one or more of the exemptions provided in this rule.
- 8.9.3 Radio NZ [152.51] supports NOISE-R1, on the basis of its understanding that the list of activities exempted under the rule do not have to comply with any of the other rules.
- 8.9.4 Hort NZ [245.99] conditionally supports NOISE-R1, subject to its relief sought in relation to GRUZ-R14 (relating to use of airstrips and helicopter landing areas) being granted.
- 8.9.5 Jet Boating [48.14] states that noise from recreational jet boating activities is not excessive, is intermittent and of short duration and that the noise source is ever moving. In these circumstances, the submitter considers that the effect of the generated noise is acceptable and comparable to other noise generating activities such as vehicles using the road network, trains operating on their rail network and aircraft flying in the vicinity. The submitter further states that other Districts provide an exception for noise from recreational jet boating activities. The submitter therefore seeks that additional exception is added to the rule to exclude recreational jetboating from the rule, as follows:
- Activities of a limited duration by non-commercial motorised watercraft operating on the surface of waterbodies.*
- 8.9.6 Helicopters Sth Cant. [53.18] and NZAAA [132.22] support the exemption for aircraft using airstrips and helicopter landing sites for activities in the rural zone that complies with GRUZ-R14, but seek an exemption to the provisions of NOISE-R1 for aircraft using airstrips and helicopter landing sites for activities in the Natural Open Space zone that complies with the rule proposed by NZAAA in its submission, as follows:
- Aircraft using airstrips and helicopter landing sites for activities in the Natural Open Space zone that complies with NOSZ-XX.*
- 8.9.7 Federated Farmers [182.179] supports the intent of NOISE-R1, but seeks clarification on the exceptions listed in performance standard PER-2. The submitter notes that the exceptions do not apply to various farming activities in listed areas which are undertaken on a seasonal,

temporary, or intermittent basis, for up to 30 days a year. The submitter considers that the exception is broad and “*does not say what state what scale is applicable*”, for example if it applies only to a single certificate of title, or across a wider farming unit run by one person but involving multiple titles. The submitter also states that the PDP needs to provide for the continuance of existing, lawfully established activities such as farming. It also considers that the rule as currently drafted is confusing, particularly when regard is had to the text under the heading ‘Rules’ and before the rules themselves. As such, the submitter seeks clarification of the application of the third exception under PER-2 and how the Council intends to apply and enforce this exception; and amendment of the definition of farming to include aircraft and helicopter movements where these are being used for operations as a part of farming on rural airstrips and landing areas.

Analysis

- 8.9.8 I note that Hort NZ’s [245.99] support for NOISE-R1 is conditional on changes sought to GRUZ-R14 (with those changes considered in Hearing B by Mr Maclennan.)³⁶ However, I consider that the key aspect of the exemption in NOISE-R1.5 is that it aligns with GRUZ-R14, i.e. it ensures that an activity that meets the permitted requirements in the zone rules is not captured by the Noise chapter rules. I consider this to be appropriate to achieve integrated management, regardless of the final form that GRUZ-R14 takes.
- 8.9.9 I note that the request from Helicopters Sth Cant. [53.18] and NZAAA [132.22] to include an exemption to the provisions of NOISE-R1 for aircraft using airstrips and helicopter landing sites for activities in the Natural Open Space zone, is linked to their submissions seeking a rule for these activities in the NOSZ Chapter. In the s42A Report relating to the NOSZ, Mr Boyes did not recommend that the rule sought by submitters was included in the zone provisions. However, this was on the basis that such a rule was not required, as where these activities are undertaken by DOC, the exemption under s4(3) of the RMA would apply (which would include noise) and where undertaken by someone else they would be permitted in the zone rules as a ‘Park Management Activity’ (under NOSZ-R2).³⁷ Mr Hunt also notes the exemption provided under s4(3) of the RMA. He considers that due to the dispersed and therefore low nature of the overall noise effect from aircraft operating as a park management activity in the NOSZ, that these activities (where not undertaken by DOC) should also be exempt from the PDP controls. He considers that noise related to other types of aircraft and helicopters activities undertaken at airstrips or helicopter landing sites in the NOSZ (such as noise associated with commercial passenger flights or sightseeing) should continue to be controlled by the requirements of the Noise Chapter.
- 8.9.10 With respect to jet boating, the advice from Mr Hunt is that because recreational jet boating activities are generally intermittent and of short duration, they will generally be able to comply with the limits set out in Table 24. This includes noting that the noise limits applying

³⁶ Section 42A Report: Rural Zones, 19 June 2024, Section 10.25

³⁷ Section 42A Report: Natural Open Space Zone, Open Space Zone, and Sport and Active Recreation Zone, 11 October 2024, paras 7.4.13-7.4.14

do not include an L_{AFmax} noise limit during the daytime (up to 10pm) and that in rural areas, noise limits apply at notional boundaries (which will not typically be at the edge of a waterbody). Mr Hunt therefore questions the need for an exemption to apply given this activity is generally expected to comply with the noise limits. In cases where compliance may not be achieved, Mr Hunt considers it reasonable for mitigation to have to be applied to achieve compliance, so as to control effects on amenity values within the receiving environment and potential effects on health and well-being of people. Mr Hunt therefore does not consider there to be a need for recreational jet boating activities to be exempted in NOISE-R1. I agree with Mr Hunt, for the reasons he has given.

- 8.9.11 With respect to existing, lawfully established activities such as farming, I note that these are provided existing use rights under s10 of the RMA. I do not consider that an exemption for these is therefore required in NOISE-R1.
- 8.9.12 In terms of the third exception, this allows for noise associated with light passenger vehicles (as that is defined by the Ministry of Transport categorisations) on a site that has a residential use. Although enforcement is a separate matter, I expect the Council would determine compliance based on whether the site has an established residential unit.
- 8.9.13 With respect to amending the definition of farming, I note that there is no definition proposed for “farming” in the PDP, and in any case, NOISE-R1 does not refer to farming.
- 8.9.14 With respect to the other comments made by Federated Farmers [182.179], I am not clear on what part of the rule they are referring to. The exceptions listed apply across the board to all listed activities, and are not linked to individual sites, i.e. they apply to any “*activities of a limited duration required for normal seasonal agricultural, horticultural and forestry activities, such as harvesting*”. I am also unclear what the submitter is referring to when stating that a limitation applies to activities undertaken on seasonal, temporary, or intermittent basis, for up to 30 days a year as this does appear to be included in the rule. I also note that the Note which appears under the ‘Rules’ heading and ahead of the rules section is consistent across the PDP and in my view is clear.

Conclusions and Recommendations

- 8.9.15 I recommend that NOISE-R1 is amended as follows:

NOISE-R1	Activities generating noise not otherwise specified in the Rules section	
All zones	<p>Activity Status: Permitted</p> <p>Where:</p> <p>PER-1 <i>NOISE-S1 is complied with; and</i></p> <p>PER-2 <i>NOISE-S2 is complied with.</i></p>	<p>Activity status when compliance not achieved with PER-2: Restricted Discretionary</p> <p>Where:</p> <p>RDIS-1 <i>The noise limit in Table 24 — Noise Performance Standards is not exceeded by more than 10dB.</i></p>

	<i>This rule does not apply to noise generated by:</i>	Matters of discretion are restricted to:
	<ol style="list-style-type: none"> 1. ... 9. <i>testing of fixed plant that is solely used for emergency purposes providing such testing occurs only for periods not exceeding 2 hours within any 30 day period, and only during the hours of 7am to 7pm; and</i> 10. <i>aircraft used for park management activities, using airstrips and helicopter landing sites in the NOSZ.</i> 	<ol style="list-style-type: none"> 1. <i>the matters of discretion of any infringed standard</i> Activity status when compliance not achieved with PER-1 or RDIS-1: Non-complying

8.9.16 In terms of s32AA of the RMA, I consider, based on the advice of Mr Hunt, that the noise associated with aircraft used for park management activities are compatible with the purpose, character and qualities of the NOSZ and will not compromise the health and well-being of people and communities. As such, the exemption for these activities will not compromise achievement of NOISE-O1. The exemption will avoid the cost of resource consent needing to be obtained for these activities (which are otherwise permitted under the zone framework for the NOSZ) on account of the noise associated with them. As such I consider that the recommended exemption is a more efficient approach.

8.10 Temporary Activities: NOISE-R2, NOISE-R3 and NOISE-R4

8.10.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Jet Boating	48.15
NZDF	151.13
Fulton Hogan	170.36

Submissions

8.10.2 Jet Boating [48.15], in relation to NOISE-R2, consider that jet boating is a Temporary Event and therefore a temporary activity, stating that there is no practical difference in noise generation between individual activities and an organised event. As such, it seeks that the following is added to the rule:

This rule does not apply to noise generated by:
1. Non-commercial temporary event motorised watercraft operating on the surface of waterbodies.

8.10.3 NZDF [151.13] supports aspects of NOISE-R3, but opposes PER-2, stating that noise standards specific to TMTA have been included in several District Plans and for consistency across the country, should be included in the PDP. The submitter also seeks the addition of

a note to PER-3 to clarify the application of this standard, and questions the need for two RDIS and one NC activity status where compliance is not achieved with PER-1 to PER-5, instead preferring one RDIS status. The submitter also considers that PER-1 should be amended, so that it does not require noise from weapons firing and use of explosives to be assessed in accordance with NZS6802:2008, stating that this standard is not designed to assess impulse sound such as gunfire. The specific changes sought are set out in full in the submission.

- 8.10.4 Fulton Hogan [170.36] seek that NOISE-R4, pertaining to construction noise, is amended to align with the Auckland Unitary Plan, to allow for construction in the road to exceed the noise limits in NZS6803:1999, provided that the works are for less than three nights at any one receiver and a noise management is in place. The submitter requests this approach be taken to provide for necessary road works without the need for a resource consent. The specific drafting sought is set out in full in the submission, but essentially provides an exemption to comply with PER-1 for unplanned repair or maintenance works; or planned works in the road between the hours of 10pm and 7am where specific matters are met.

Analysis

- 8.10.5 In terms of noise from organised recreational jet boating events, Mr Hunt and I both consider that this would fall within the definition of a temporary event and therefore be subject to NOISE-R2. I note that under this rule, the noise limits in Table 24 are only applied overnight (10pm to 10am) or when the duration of an event exceeds 6 hours. Instead, the noise limits otherwise applying to these activities are set out in PER-2, which only apply in respect to noise received within any site in the residential zone. Given the sensitivity of residential zones, Mr Hunt considers that the noise limits set out in PER-2 for temporary events are reasonably necessary to control noise received in any residential zone. He therefore considers that an exemption to NOISE-R2 for noise from jet boating activities is not necessary. I agree with Mr Hunt, noting that NOISE-R2 already provides a more permissive noise regime for temporary events, and in my view, exempting organised recreational jet boating events from compliance with any noise limits would not be consistent with NOISE-O1.
- 8.10.6 With respect to NZDF [151.13], Mr Hunt notes that the noise limits which are sought to be applied to fixed (stationary) noise sources are in many cases 5dB higher in some zones – including the GRZ, RLZ and GRUZ - than otherwise applying under Table 24 (but lower in the CMUZ and GIZ zones). He considers that fixed noise sources can be located, and if necessary screened or enclosed so as to meet the Table 2 noise limits, such that it is not unreasonable for PER-2 to require compliance with those limits for fixed noise sources. He further notes that this will ensure that the noise outcomes arising from such fixed plant will be more consistent with the PDP's objectives and policies for each receiving zone, and therefore he does not support the requested amendments to PER-2. I agree with Mr Hunt for the reasons he has given, and further note that there does not appear to be a compelling reason as to why it is appropriate to standardise noise limits across the country for fixed noise sources

associated with temporary military training activities, given this would lead to inconsistency with the noise environment anticipated in each zone in the Timaru District.

- 8.10.7 In terms of PER-1, Mr Hunt agrees that impulse sounds such as gunfire fall outside the scope of NZS6802:2008 and therefore agrees with amending PER-1 to provide this as an exemption.
- 8.10.8 With respect to activity status, for non-compliance with PER-1, I note that this relates to compliance with NOISE-S1, which requires measurement and assessment of sound to be undertaken in accordance with specified New Zealand Standards (except where otherwise stated in a rule). The non-complying activity status is applied consistently across the rules, and I do not consider this should differ where the activity is managed under NOISE-R3.
- 8.10.9 In terms of Fulton Hogan's submission [170.36] on NOISE-R4, Mr Hunt acknowledges that some types of construction noise associated with road repairs or planned works on busy roads, such as state highways, may reasonably need to take place during nighttime hours. He accepts that nighttime road works may be necessary to provide an acceptable level of safety for both road users and road workers, and that some of these works may not be able to comply with the nighttime noise limits of NZS6803:1999. He therefore generally agrees with the submitter's proposed approach to add a new PER-2, but has recommended amendments to the proposed wording. The reasons for the alternate wording are set out in Mr Hunt's memo.
- 8.10.10 While I accept Mr Hunt's recommendations and the reasons for them, I note that his ultimate recommendation is for the exemption to only apply to any state highway designation. My understanding is that under the designation, the maintenance and repair of the road, which would fall within the designated purpose, is not subject to compliance with the rules in the district plan, including the noise rules. Therefore, the recommended exemption is not required (and its inclusion might inappropriately imply that such works are subject to the noise limits). I therefore do not recommend any changes to NOISE-R4, on the basis that the exemption supported by Mr Hunt is already provided for under the designation for the state highway.

Conclusions and Recommendations

- 8.10.11 I recommend that NOISE-R3 PER-1 is amended as follows:

PER-1

NOISE-S1 is complied with excluding the requirement to assess noise from weapons firing and/or the use of explosives using NZS 6802:2008 Acoustics – Environmental noise; and ...

- 8.10.12 In terms of s32AA, I consider that this change better reflects that gunfire falls outside the scope of NZS6802:2008, and applying it to this type of noise would therefore result in an inefficient approach.

- 8.10.13 I recommend that NOISE-R4 is retained as notified.

8.11 NOISE-R5

8.11.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Hort NZ	245.93

Submissions

8.11.2 Hort NZ [245.93] supports the inclusion in the PDP of a permitted activity for audible bird scaring devices (with a RDIS status where the standards cannot be met), but states that the rules are more limiting than the ODP and not discussed in/supported by the background reports. The submitter considers that a peak measure is not the most appropriate measure for enabling mitigations of noise effects and that 65dBSEL should be used as it is the more common measure for bird scaring devices. It further considers that PER-3 is not effects based, and that the limitations of 7am - 8pm do not recognise that bird activity occurs from before sunrise to just after sunset. Therefore, it considers that the times do not provide for adequate protection of crops. It seeks that PER-4 is amended to restrict use of bird scarers to half an hour before sunrise and half an hour after sunset; and that PER-2 and PER-3 are deleted and replaced by the following; and that RDIS status applies to non-compliance with PER-1:

Noise from any bird scaring device must not exceed 65dB at any point within the notional boundary of any habitable room on another site in the Rural Zone or at any point within a Residential Zone (excluding any dwelling/s located on the same site as the device is being operated), unless the adjacent landowner has provided written approval to the activity and a copy has been provided to the Council.

Discrete sound events of a bird scaring device including shots or audible sound must not exceed 3 events within a 1-minute period and must be limited to a total of 12 individual events per hour.

Analysis

8.11.3 Mr Hunt has considered the changes requested by HortNZ in his memo. He agrees that the use of Single Event Level (SEL) noise unit as defined with NZS6801:2008 is the most appropriate measure for noise associated with bird scarers, given their characteristics, and recommends a limit which he considers to be the equivalent to the dBC (peak) level proposed. Mr Hunt does not agree with deleting PER-3 – relating to the orientation of devices – in its entirety, because of the nature (sharpness) of sound from these devices, when located near to a sensitive noise receiver. However, he does agree that it is not necessary where the device is located at distances exceeding 500m from any noise sensitive activity, where the sound is lesser and the does not have a sharp quality to it at that distance. In terms of timing, Mr Hunt does not support permitting devices 30 minutes before sunrise, as in his view, this would lead to potentially adverse sleep impacts. However, he considers that noise 30 minutes after sunset is acceptable, as this is not during the sensitive nighttime

period. Mr Hunt does not support increasing the firing rate, as this would in his view will potentially cause a far greater degree of adverse noise effects.

- 8.11.4 I note that the submitter has also requested that where the noise level is exceeded, that the activity is still permitted, where adjacent landowners and occupiers provide their written approval to the activity. I consider that this approach essentially seeks to extend the 'boundary activity' approach provided for in s87BA of the RMA to this activity. However, the activity managed by this rule falls outside the definition of a 'boundary activity' under s87AAB of the RMA. Where the boundary activity provisions do not apply, I note that consideration of effects on adjoining landowners are provided for in s95E of the RMA, which includes disregarding adverse effects on a party assessed as being an affected party, if they have provided written approval to the activity for which resource consent is sought. In my view, there is no reason to take a different approach to that normally applying under the RMA, in respect of bird scarers.
- 8.11.5 With respect to the activity status for non-compliance with PER-1, I note that this relates to compliance with NOISE-S1, which requires measurement and assessment of sound to be undertaken in accordance with specified New Zealand Standards (except where otherwise stated in a rule). The non-complying activity status is applied consistently across the rules, and I do not consider this should differ where the activity is managed under NOISE-R5. However, in considering the submissions on NOISE-R3, Mr Hunt has noted that there is an issue with PER-1, in that impulse noise arising from the operation of bird scaring devices falls outside the scope of NZS6802:2008. He therefore recommends that a similar change is made to this rule as recommended to NOISE-R3 PER-1. I consider that this change can be made under clause 10(2)(b) of the RMA as it arises from the earlier submission of NZDF on NOISE-R3. This change may also partially address the concerns of the HortNZ in relation to this condition.

Conclusions and Recommendations

- 8.11.6 I recommend that NOISE-R5 is amended as follows:

NOISE-R5	Noise from bird scaring devices	
All zones	<p>Activity Status: Permitted</p> <p>Where:</p> <p>PER-1 <i>NOISE-S1 is complied with <u>excluding the requirement to assess impulsive noise from bird scaring devices using NZS 6802:2008 Acoustics – Environmental noise</u>; and</i></p> <p>PER-2</p>	<p>Activity status when compliance not achieved with PER-2, PER-3 or PER-4: Restricted Discretionary</p> <p>Matters of discretion are restricted to:</p> <ol style="list-style-type: none"> 1. the level, hours of operation, duration and characteristics of the noise; and 2. proximity and nature of nearby activities and the adverse effects they may experience from the noise; and 3. the existing noise environment; and

	<p>Noise from any bird scaring device either:</p> <ol style="list-style-type: none"> 1. must not exceed a 70dBC peak or un-weighted level <u>weighted SEL 55dB measured within the notional boundary of any noise sensitive activity on any adjoining site under different ownership, and the device must not be used at a frequency of more than 12 times per hour; or</u> 2. must not exceed an 85dBC peak or un-weighted level <u>a weighted SEL 65dB within the notional boundary of any adjoining noise sensitive activity on any site under different ownership, and the device must not be used at a frequency of more than 6 times per hour; and</u> <p>PER-3 <u>Unless located at least 500m from any building housing a noise sensitive activity on an adjoining site under different ownership</u> B <u>Bird scaring devices must be oriented with the direction of fire facing away from any noise sensitive activity on any adjoining site under different ownership; and</u></p> <p>PER-4 <u>Bird scaring devices must only be used between 7am and 8pm half an hour after sunset on any calendar day.</u></p>	<p>4. effects on amenity values and anticipated character of the receiving environment; and</p> <p>5. effects on health and well-being of people; and</p> <p>6. any noise reduction measures; and</p> <p>7. the practicality of mitigating noise.</p>
		<p>Activity status when compliance not achieved with PER-1: Non-complying</p>

8.11.7 Under s32AA, I consider that the changes to PER-1, and use of the SEL noise unit will result in a more efficient approach, as it better takes into account the characteristics of noise from bird scarers. I also consider that amending PER-3 is a more efficient approach, as it does not apply the orientation requirements in circumstances where it is not necessary. I consider that extending the noise limit in the evening as appropriate, taking into account that this is a less sensitive period for noise. Collectively I consider that these changes will reduce economic costs, ensure a more targeted rule framework, while still being effective at achieving NOISE-O1.

8.12 Port Zone Noise (NOISE-R8)

8.12.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Property Income	56.1

Lineage Logistics	107.18
Fonterra	165.112
PrimePort	175.66
ECan	183.143
TDHL	186.38

Submissions

8.12.2 Lineage Logistics [107.18] supports NOISE-R8 and seeks that it is retained as notified.

8.12.3 Property Income [56.1] and Fonterra [165.112] supports this rule but notes that part of the Port Zone (to the south) is not covered by either of the noise control boundaries and therefore no rule appears to apply. The submitters consider that a further permitted standard is required to address this, as follows:

For any activity within the Port zone but outside of the Port Noise Control Boundaries shown on the planning maps, the following noise limit applies:

on any day between 10pm to 7am the following day, noise generated must not exceed 45 dB LAeq (9 hours) when measured at or within any residentially zoned site, provided that any single 15 minute sound measurement level must not exceed 50 dB LAeq and 75 dB LMax.

8.12.4 PrimePort [175.66] and TDHL [186.38] support the noise from activities within the Port Zone being managed via a specific rule. However, the submitters consider that there are several issues with the rule, being that the Port NCBs (both Inner and Outer) are only intended to apply outside the Port Zone and therefore should not apply to activities within the Port Zone; and these NCBs were modelled based on Port noise generation from within Precinct 7 only and therefore have not accounted for industrial activity that may be happening outside Precinct 7. Further, they are concerned that there appears to be no noise rule applying to Port Zone activities that sit outside the Port NCBs, but inside the Port Zone. The submitters also consider that the measurement of industrial and other noise within the Port Zone (i.e. non-Port industrial and other activity occurring outside Precinct 7) is more appropriately measured under NZS 6801:2008 Acoustics - Measurement of environmental sound, and assessed in accordance with NZS 6802:2008 Acoustics - Environmental noise. The changes sought are:

- PER-1 is amended to apply within Precinct 7 only;
- PER-2 and PER-3 are amended to apply to measurement at any point outside the Port Zone, and apply only within Precinct 7;
- A new PER is added to require compliance with NOISE-S1 anywhere other than Precinct 7
- A new PER is added to require that other than Precinct 7, compliance with NOISE-S2 is required within the GRZ, MRZ, MUZ and CCZ.

8.12.5 ECan [183.143] notes that the Regional Coastal Environment Plan (RCEP) also includes noise provisions for the Port Activity Area and seeks to obtain a better understanding of the

integration of the proposed rules with the provisions in the RCEP Rule 8.21. It seeks that amendments to NOISE-R8 are considered to, where possible, ensure alignment with the RCEP rule.

Analysis

- 8.12.6 Mr Hunt agrees with the various submitters that there is a gap regarding noise generated within the southern part of the Port Zone and that this should be addressed along the lines suggested by submitters. Taking into account Mr Hunt's advice, I agree with the submitters that the rule requires amendment to ensure that noise in the southern part of the Port Zone is appropriately managed. The changes supported by Mr Hunt also ensure that the noise limits applying to activities undertaken in the Port Zone (within Precinct 7) are not applied as an "in-zone" limit, and only apply to noise received at sites outside the Zone.
- 8.12.7 With respect to the RCEP, Mr Hunt considers that the port noise limits set out in Rule 8.21 of the RCEP cannot be aligned with NOISE-R8 due the requirements of the NP Standards, which requires port noise to be assessed using the applicable port noise standard, being NZS 6809:1999 *Acoustics Port Noise Management and Land Use Planning*. He notes that Rule 8.21 of the RCEP refers to older 1991 versions of NZS6801 and NZS6802, and therefore aligning with these would be contrary to the NP Standards requirements. I further note that within the RCEP itself, Policy 8.9 directs that in controlling noise-emitting activities in the CMA, the regional council is to ensure that noise control rules are consistent with those of the Timaru District Council (rather than the other way around). As a result, I do not recommend any changes to NOISE-R8 in relation to alignment with the RCEP.

Conclusions and Recommendations

- 8.12.8 I recommend that NOISE-R8 is amended as follows:

NOISE-R8	Noise from activities within the Port Zone
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<p><u>1. Port Zone within Precinct Z</u></p>	<p>Activity Status: Permitted</p> <p>Where:</p> <p>PER-1 The maximum noise generated from activities is measured <u>and assessed in accordance with NZS 6809:1999 Acoustics Port Noise Management and Land Use Planning; and</u></p> <p>PER-2 When measured at any point at or on <u>any site not located within the Port Zone and landward of the Port Noise Inner control boundary shown on the planning maps, the following noise limits apply:</u></p> <ol style="list-style-type: none"> 1. the 5 day Ldn noise limit must not exceed 65 dB Ldn; 2. LAeq 'night' (10pm to 7am) must not exceed 60 dB LAeq (9hours) provided that no single 15 minute measurement will exceed 65 dB LAeq and 85dBA LAmx <p>PER-3 When measured at any point at or on <u>any site not located within the Port Zone and landward of the Port noise outer control boundary shown on the planning maps, the following noise limit applies:</u></p> <ol style="list-style-type: none"> 1. on any day between 10pm to 7am the following day, noise generated must not exceed 52 dB LAeq (9hours) provided that no single 15 minute sound measurement level must not exceed 57 dB LAeq and 77 dB LAmx; <p>Note: For the purpose of Port Noise, daytime is defined as 7am to 10pm on any day, and night time is defined as 10pm to 7am the following day.</p>	<p>Activity status when compliance not achieved: Discretionary</p>
<p><u>2. Port Zone outside Precinct Z</u></p>	<p>Activity Status: Permitted</p> <p>Where:</p> <p>PER-1 <u>NOISE-S1 is complied with; and</u></p>	<p>Activity status when compliance not achieved with PER-2: Discretionary</p>

<p><u>PER-2</u> <u>On any day between 10pm to 7am the following day, noise generated must not exceed 45 dB LAeq (9 hours) when measured at or within any residentially zoned site, provided that any single 15 minute sound measurement level must not exceed 50 dB LAeq and 75 dB LAmx.</u></p> <p><u>Note: For the purpose of Port Noise, daytime is defined as 7am to 10pm on any day, and night time is defined as 10pm to 7am the following day.</u></p>	<p><u>Activity status when compliance not achieved with PER-1: Non-complying</u></p>
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8.12.9 Under s32AA I consider that these changes address various gaps in the rule framework and ensure that the rule better aligns with the background technical work undertaken in relation to the Port NCBs. I consider that the changes will better implement NOISE-P1 in terms of enabling noise that is of a type, character and level appropriate for the Port Zone, taking into account the purpose, character and qualities of that zone.

8.13 NOISE-R9

8.13.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Waka Kotahi	143.118
Silver Fern Farms	172.106
Alliance Group	173.108
Rooney Holdings	174.72
PrimePort	175.67
Te Rūnanga o Ngāi Tahu	185.53
KiwiRail	187.77
Rooney, GJH	191.72
Foodstuffs	193.8
Kāinga Ora	229.59
Rooney Group	249.72
Rooney Farms	250.72
Rooney Earthmoving	251.72
TDL	252.72
NZ Frost Fans	255.10

Submissions

- 8.13.2 Silver Fern Farms [172.106], Alliance Group [173.108] and PrimePort [175.67] supports NOISE-R9 and seeks that it is retained as notified.
- 8.13.3 Six submitters³⁸ consider that NOISE-R9 should only apply to new buildings, and seek that it is amended so that it does not apply to alterations to existing buildings. They consider that a minor alteration of an existing building should not trigger an extensive upgrade to the building, which may not be viable long term, and that the rule as drafted may result in alterations to existing buildings not being undertaken. These submitters further consider that the rule should also recognise that some existing residential buildings are occupied by staff of industrial or commercial businesses and such occupants may not be sensitive to those activities.
- 8.13.4 Waka Kotahi [143.118] seeks amendments to address reverse sensitivity concerns with the state highway distances, PER-1, and parts of PER-2 to ensure human health is protected from noise effects from the state highway. With respect to state highway distances, it considers that the rule (which contains 40m and 80m distances) is not appropriate for State Highway 1, where the speed limit is greater than 50 km/hour, and that a 100m distance would provide better control to ensure human health is protected from noise effects from the state highway. The submitter states that an alternative option to consider is variable noise contours which could be implemented as a state highway noise control overlay. The submission states that it is anticipated that these will be available by the further submission stage, but I note that they were not included in a further submission. With respect to PER-1, Waka Kotahi consider that the proposed approach – which specifies how much noise reduction the building has to provide - can result in a deficiency in sound insulation in some houses (and parts of houses) and some with too much insulation due to the variable external traffic noise. The submitter's preference is to specify the resulting noise inside a habitable space, as it considers that this is a more effects-based approach. In relation to PER-2, the submitter states that the standard appears to provide alternative pathways for compliance, but is concerned that PER-2.b does not provide for an equivalent standard to the other pathways in PER-2.a and in PER-1. The specific changes sought are:
- Amend the spatial area the rule applies to (in relation to State highway) to either: increase the distance from the state highway in posted speeds of greater than 50km/h to 100m for State Highway 1; or use the variable noise contour approach which the submitter expects to introduce to Council as part of the further submission process.
 - To exclude road noise from PER-1.2.
 - To replace '20m' with '50m' in PER-2.b.

³⁸ Rooney Holdings [174.72], Rooney, GJH [191.72], Rooney Group [249.72], Rooney Farms [250.72], Rooney Earthmoving [251.72], TDL [252.72]

- 8.13.5 Te Rūnanga o Ngāi Tahu [185.53] considers the potential noise risk could be much lower than indicated in the Background Report and therefore the rules could be excessive. The submitter states that there is limited land that is suitable for buildings and ‘noise sensitive activities’ within the Māori Purpose Zone (MPZ), and increased costs with running services to buildings further away from the road, as well as the costs of insulating or bringing an acoustic expert into the district for an assessment. The submitter seeks that the rule is reviewed by engaging an acoustic expert to assess the generated noise, vehicle speeds and times it is generated on the state highway and railway networks and based on that assessment re- assess if the rules are protecting human health at their current setbacks. The submitter also considers that the Council should re-assess if the State Highway at the MPZ has the correct speed limit as iwi have asked for the speed to be reduced.
- 8.13.6 KiwiRail [187.77] seeks that the rule is amended to apply within 100m (rather than 40m) of the railway line, because noise and vibration can create adverse health and amenity effects, and an impact on the amenity of residents of a building. The submitter also seeks that PER-1 is amended to apply to an alteration to an existing building, PER-1.2 amended to add *“excluding acoustic insulation installed to address rail noise”*; and PER-2.b amended to require a 50m rather than 20m setback. The submitter also seeks the inclusion of the following new condition:
- Any new building or alteration to existing building containing an activity sensitive to noise, closer than 60 metres from the boundary of a railway network is designed, constructed and maintained in accordance with NOISE-S7.*
- 8.13.7 The submitter states that these controls are important to ensure new development is undertaken in a way that achieves a healthy living environment for people locating within proximity to the railway corridor, minimising the potential for complaints about the effects of the railway network.
- 8.13.8 Foodstuffs [193.8] considers that the rule does not implement NOISE-O2 as it does not provide protection for existing noisy activities, on the zone boundary. Specifically, it considers that the rule should apply to residential dwellings adjacent to the existing Pak ‘n Save supermarket within the Local Centre Zone. The submitter states that an acoustic assessment commissioned by the Council displays that the supermarket creates a high noise environment and the establishment of residential dwellings adjacent to the supermarket causes potential for reverse sensitivity effects on the supermarket if the dwellings are not adequately insulated. It therefore seeks that the rule is extended to apply to *“Any site within the Medium Density Residential Zone at 18A Hobbs Street within 40m of the boundary of the adjacent Local Centre Zone.”*
- 8.13.9 Kāinga Ora [229.59] considers that the rule is broad and may unnecessarily restrict activities where effects can be appropriately managed. It seeks deletion of the application of the rule to sites within specified distances from the railway line and State Highways.

Analysis

- 8.13.10 With respect to only applying NOISE-R9 to new buildings, Mr Hunt does not agree with amending NOISE-R9 and NOISE-S3 so that they only apply to habitable rooms within new buildings used for noise sensitive activities, as he considers that alternations to existing buildings provide a practical opportunity to cost-effectively incorporate the necessary acoustic insulation and ventilation (where needed) when the building is altered. However, he agrees with making some changes to address the submitters' concerns, so that the requirements only apply where a significant alteration is proposed to a habitable room within an existing building. Mr Hunt's recommendation is that this apply where the floor area in a habitable room within an existing building is increased by 20% or more.
- 8.13.11 With respect to existing residential buildings that are occupied by staff of industrial or commercial businesses I note that the rule will not require retrospective insulation of existing residential buildings.
- 8.13.12 In terms of Waka Kotahi's request [143.118] to apply the rule to variable noise contours, rather than to fixed setback distances from the state highway, I am aware that this is becoming more commonplace across the country. However, the contours for this district were not provided with the submission (or further submission) and potentially affected parties have not therefore had the opportunity to consider them and make a further submission. Even if they are now supplied by the submitter through evidence, I have concerns about potential natural justice issues with doing so, as there may be landowners who are not affected by the 40m or 80m setbacks, but who would be affected by the variable noise contour. However, as the area this would apply to has not been provided in submissions, landowners have not been able to understand how they would be affected by the change.
- 8.13.13 With respect to the alternate request to increase the distance (from 80m to 100m from the State Highway) where the rule applies, Mr Hunt states that *"There is no evidence or reasoning provided to offset the additional compliance costs that may be experienced at such locations distant from the highway (where often the highway noise are minimal (being at least partially screened by the built environment))."* I note that Mr Hunt has further considered this request by using the NZTA road noise calculator tool, and considers that this supports the use of an 80m distance, given that the future traffic noise levels which are predicted in the Timaru district, (as opposed to other areas in the country). In particular, Mr Hunt states that alongside the 100km parts of State Highway 1 appear unlikely to exceed 57 dB $L_{Aeq(24\text{ hours})}$ at distances beyond 80m.
- 8.13.14 With respect to excluding road noise from PER-1.2, this has been considered below in the discussion on NOISE-S3.
- 8.13.15 PER-2.b. essentially provides for certification by an expert that a new building/alteration is 'blocked' from a road or railway by another building/landform/fence etc. I understand from Mr Hunt that such features essentially provide acoustic screening from railway and road

noise, and therefore consider it appropriate to allow for reliance on these to block noise. In absence of this, buildings for noise sensitive activities might otherwise be required to install acoustic insulation that is not necessary to mitigate the effects of road or rail noise. With respect to changing this from 20m to 50m (i.e. only allowing for an exemption from the requirements of PER-2a where the building is setback this distance and line of sight is blocked), Mr Hunt notes that the reason for seeking this increase have not been provided by the submitter. In his view, the screening requirements within PER-2b indicate road noise effects would be reduced to acceptable levels at these screened locations, and therefore there seems to be no rationale to increase the setback to 50m based on received noise. Based on his advice, I consider increasing the requirement so that it only applies where noise sensitive activities are more than 50m setback would not change the effectiveness of the rule at addressing reverse sensitivity, but it would be inefficient where such activities are within 20m and 50m from the road and required to install further acoustic insulation which is not necessary due to the blocking already provided.

- 8.13.16 In terms of Te Rūnanga o Ngāi Tahu's submission [185.53], I note that the potential noise risk was considered extensively in the Mr Hunt's Stage 2 Report. Mr Hunt also refers to this, and further states that he continues to consider that the controls are reasonably necessary to both protect people from adverse effects, as well as to help ensure the long-term sustainability of the road and rail network. With respect to assessing noise, vehicle speeds and times on specific parts of the state highway, I consider that this is what would essentially be provided if the variable noise contour requested by Waka Kotahi was applied. In absence of this, I consider it appropriate to apply a fixed setback as proposed. I accept that there are costs associated with either setting building back from this setback, or in meeting the acoustic insulation requirements, but I do not consider that these costs are unreasonable, nor that they will conflict with MPZ-O1 being achieved. With respect to speed limits, I note that this is a matter that sits outside the District Plan.
- 8.13.17 Mr Hunt has also considered KiwiRail's [187.77] request to apply the rule within 100m, rather than 40m of the railway line. He considers that transportation noise effects should be assessed on a 24-hour basis, rather than average noise levels over an hourly period. He therefore supports the 40m setback, as this reflects the area which is considered likely to receive "*whole-day noise exposure levels beyond those normally acceptable for noise sensitive uses*". He also notes that while a larger setback might be appropriate for some busy rail routes with frequent daily train movements, the relevant railway line through this district - the South Island Main Trunk railway line - is not a busy line with few movements per day. Overall, he considers that given the limited number of daily rail movements, there is no indication that rail noise levels received beyond 40m from the railway line would be sufficiently high to necessitate the application of the acoustic protection required by NOISE-R9. Taking into account Mr Hunt's advice, I do not recommend increasing the area to which the acoustic insulation requirements in NOISE-R9 apply, on the basis that this is not necessary to achieve the outcomes sought, and it would therefore be an inefficient approach, as it would require acoustic insulation in more instances, despite this not being necessary to address the noise effects from the railway line in this district.

8.13.18 In terms of Foodstuffs' request [193.8], Mr Hunt notes that he has previously provided assessment and advice to the Council in relation to the Hobbs Street site. While accepting that the residential development of 18, 18A and 20 Hobbs Street and subsequent rezoning of this (as proposed through the PDP) to MRZ increases the risk of reverse sensitivity effects arising in relation to noise from the supermarket operations, he considers that this is already appropriately managed through the noise-related conditions attached to the land use consent applying to the residential development. He therefore does not consider there to be a need to duplicate this requirement through an addition to NOISE-R9. I accept Mr Hunt's reasoning and agree that it is not necessary to apply NOISE-R9 to the MRZ at 18A Hobbs Street within 40m of the boundary with the LCZ, as this is already achieved through consent conditions applying to the residential development of this area.

8.13.19 I do not agree with Kāinga Ora's [229.59] request to delete application of the rule to areas within specified proximity to the railway line and State Highways. In absence of this control applying, the amenity values, health and sleep of occupants of noise sensitive activities may be compromised, and there is a risk that reverse sensitivity effects will arise in relation to noise sensitive activities in these areas. It is also commonplace in recent district plans to include requirements for acoustic insulation for noise sensitive activities in close proximity to these transport corridors. This is further supported by Mr Hunt, who considers that the requirements provide an "an important and necessary function" in the PDP to not only ensure adequate acoustic protection for future residents in areas affected by significant road and rail noise, but also provide a key mechanism to protect the functioning of the state highway and rail network from potential reverse sensitivity effects arising.

Conclusions and Recommendations

8.13.20 I do not recommend any changes to NOISE-R9 as a result of these submissions.

8.13.21 I recommend that NOISE-S3 is amended as follows (noting this includes changes recommended earlier in this report):

NOISE-S3	Acoustic insulation	
<p>1. Within 40m of a State Highway with a posted speed limit of 50 km/hr or less</p> <p>Within 80m of a State Highway with a posted speed limit greater than 50 km/hr</p> <p>Within 40m of a railway line</p> <p>Large Format Retail Zone</p>	<p>1. Any habitable room in a new building used for a noise sensitive activity, or an alteration to an existing building that changes its use to a noise sensitive activity, <u>or where the floor area of a habitable room within an existing building is increased by 20% or more, must be designed, constructed and maintained to achieve a minimum external to internal noise reduction for habitable rooms of not less than 35 dB</u> $D_{tr,2m,nT,w} + C_{tr}$.</p>	<p>Matters of discretion are restricted to:</p> <ol style="list-style-type: none"> 1. effects on the ability of existing or permitted activities to operate or establish without undue constraint; and 2. any legal instrument proposed; and 3. mitigation of noise achieved through other means; and 4. the amenity of present and future residents of the site.

<p>Town Centre Zone</p> <p>City Centre Zone</p> <p><u>General Rural Zone within 300m of any frost fan (including any frost fan for which a resource or building consent has been issued)</u></p>	<p>2. Compliance with this standard must be achieved by ensuring habitable rooms are designed and constructed in a manner that accords with:</p> <ol style="list-style-type: none"> 1. Table 25 — Minimum construction requirements for external building elements of habitable rooms to achieve an advanced level of acoustic insulation; or 2. an acoustic design certificate signed by a suitably qualified acoustic engineer stating the design proposed will achieve compliance with this standard. <p>Note: This standard applies in addition to, and does not affect the requirements of, the Building Act 2004.</p>	
<p>2.</p> <p>General Residential zone within 20m of the boundary with an Industrial zone</p> <p>Medium Residential Zone within 20m of the boundary with an Industrial zone</p> <p>Neighbourhood Centre Zone</p> <p>Local Centre Zone</p> <p>Mixed Use Zone</p> <p>All zones within the Outer Control boundary of the Port Noise Control Overlay</p>	<ol style="list-style-type: none"> 1. Any habitable room in a new building used for a noise sensitive activity, or an alteration to an existing building that changes its use to a noise sensitive activity, <u>or where the floor area of a habitable room within an existing building is increased by 20% or more,</u> must be designed, constructed and maintained to achieve a minimum external to internal noise reduction for habitable rooms of not less than 30 dB $D_{tr,2m,nT,w} + C_{tr}$. 2. Compliance with this standard must be achieved by ensuring habitable rooms are designed and constructed in a manner that accords with: <ol style="list-style-type: none"> 1. Table 26 — Minimum construction requirements for external building elements of habitable rooms to achieve a moderate level of acoustic insulation; or 	<p>Matters of discretion are restricted to:</p> <ol style="list-style-type: none"> 1. effects on the ability of existing or permitted activities to operate or establish without undue constraint; and 2. any legal instrument proposed; and 3. mitigation of noise achieved through other means; and 4. the amenity of present and future residents of the site.

	<p>2. <i>an acoustic design certificate signed by a suitably qualified acoustic engineer stating the design proposed will achieve compliance with this standard.</i></p> <p>Note: <i>This standard applies in addition to, and does not affect the requirements of, the Building Act 2004.</i></p>	
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8.13.22 Under s32AA, I consider that applying the acoustic insulation requirements to alterations above a specified threshold is a more efficient approach, and takes into account that smaller alterations are unlikely to significantly alter the noise already experienced in the building. As such, I do consider that the change will not compromise the achievement of NOISE-O2.

8.14 NOISE-R12

8.14.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Road Metals	169.35
Fulton Hogan	170.37
PrimePort	175.68

Submissions

8.14.2 PrimePort [175.68] support NOISE-R12.1 and seeks its retention.

8.14.3 Road Metals [169.35] and Fulton Hogan [170.37] considers that a new rule is necessary to address new sensitive activities in proximity to lawfully established quarries. As such, the submitters seek that NOISE-R12 is amended to include the following:

3. Within

- a. 200m of any lawfully established excavation area
- b. 500m of any lawfully established processing area
- c. 500m of any activity that involves blasting.

Activity status when compliance not achieved: Discretionary

Analysis

8.14.4 As noted earlier, GRUZ-S4 already applies setbacks to sensitive activities. This includes a requirement for such activities to be setback 500m from a lawfully established quarry or

mine. Given this will also address noise effects, I do not consider there to be a need to duplicate the requirement in the noise chapter provisions.

Conclusions and Recommendations

8.14.5 I recommend that NOISE-R12 is retained as notified.

8.15 New Standards

8.15.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
KiwiRail	187.80

Submissions

8.15.2 KiwiRail [187.80] seeks that a new standard relating to indoor railway vibration is added to the Noise Chapter in the PDP. The submitter states that the standard sought is designed to protect the rail corridor from reverse sensitivity effects and provide an appropriate level of amenity for occupants that neighbour the rail corridor. The standard is set out in full in the submission, but would apply to any new buildings, or alterations to existing buildings containing an activity sensitive to noise, which are closer than 60 metres from the boundary of a railway network, and require that these be designed, constructed and maintained to not exceed specified rail vibration levels, or to meet minimum construction requirements.

Analysis

8.15.3 Mr Hunt has considered this request and does not support such a standard being included. This is for a number of reasons set out in his memo, which include that:

- there is no evidence provided to show that there are rail-related vibration issues currently causing adverse effects to activities sensitive to noise in the Timaru district that would justify the proposed vibration standard.
- what is sought would require building owners and developers to mitigate vibration experienced in buildings from passing rail traffic, in order to meet a standard that is intended to be used to ensure the design and construction of new rail tracks does not cause vibration problems for nearby sensitive uses.
- anti-vibration measures are costly, and could lead to 'sterilising' land adjacent to the rail corridor due to these costs.
- in order for such a standard to be effective and equitable, there would need to be a corresponding vibration control and/or maintenance policy for the rail operator.

8.15.4 I accept Mr Hunt's advice, noting that the application of a vibration standard is likely to have a high level of costs associated with it, and if, as suggested by Mr Hunt, this results in land adjacent to the railway corridor being too costly to develop, then I consider that the

approach would result in the outcomes sought in the zones adjoining the rail corridor being compromised.

Conclusions and Recommendations

8.15.5 I do not recommend that a new standard relating to indoor railway vibration is added to the Noise Chapter in the PDP.

8.16 NOISE-S3

8.16.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Waka Kotahi	143.119
Fonterra	165.114
PrimePort	175.70
KiwiRail	187.78
Kāinga Ora	229.60

Submissions

8.16.2 PrimePort [175.70] supports NOISE-S3.2 and seeks that it is retained as notified.

8.16.3 Fonterra [165.114] seek that the matters of discretion are deleted from NOISE-S3. This is a consequential change arising from their request that non-compliance with NOISE-S3 (in NOISE-R9) is made a non-complying activity.

8.16.4 Waka Kotahi [143.119] is concerned with the approach proposed and seek that the standard is amended to relate to the resulting noise inside of a habitable space, as the submitter considers that this is a more effects-based approach. The submitter is also concerned that the matters of discretion provide allowance for non-compliance without addressing the adverse effect. Further it states that vibration and outdoor noise have not been recognised within this standard, which are additional factors that could have an impact on human health unless reverse sensitivity is appropriately addressed. The submitter seeks that:

- road-traffic is removed from NOISE-S3.1;
- a new section is inserted requiring:
 1. internal levels in habitable rooms of 40 dB LAeq(24h), external levels of 57 dB LAeq(24h) in outdoor living spaces; and
 2. within 20m of a state highway, a vibration limit of 0.3 mm/s vw95, with compliance to be demonstrated by design certificate; and
- matters of discretion from NOISE-S3.3 are deleted and replaced with a single matter of discretion being the effects of exceedances.

- 8.16.5 KiwiRail [187.78] considers that for rail noise, the requirement to achieve a minimum internal noise level for habitable rooms allows for a more flexible, room-specific approach based on exposure to the noise source. The submitter states that the external to internal noise reduction (which takes a more blanket approach) could result in the over-designing of buildings and under-designing of more exposed buildings. It seeks amendment to provide a specific rule clause for habitable rooms in a new building or altered building within 100m of the rail corridor, requiring that indoor noise levels resulting from the railway not exceeding 35 dB LAeq(1h); or that minimum construction requirements are met.
- 8.16.6 Kāinga Ora [229.60] considers that the standard is broad and may unnecessarily restrict activities where effects can be appropriately managed. It seeks deletion of the application of the standard to sites within specified distances from the State Highway or railway line.

Analysis

- 8.16.7 With respect to Fonterra [165.114], as I have not recommended that that non-compliance with NOISE-S3 (in NOISE-R9) is made a non-complying activity, I do not recommend that the matters of discretion are deleted from NOISE-S3.
- 8.16.8 Mr Hunt does not support Waka Kotahi's [143.119] or KiwiRail's [187.78] requests to amend NOISE-S3 to apply a minimum internal noise level. In his view, the type of 'indoor sound level' standard preferred by the submitter is difficult to assess and therefore enforce; and cannot be checked by the Council against a relevant NZ acoustic standard. Conversely, the requirements in NOISE-S3 can be checked using the widely adopted ISO 140-Part 5 field test method, with Mr Hunt stating that acoustic insulation rules based on ISO standards are now being widely adopted. Mr Hunt accepts that the submitter's proposal is effects based, but considers that the notified standard is also effects based. For the reasons set out above in relation to NOISE-R9, Mr Hunt does not agree with increasing the application of NOISE-S3 to within 100m of the rail corridor.
- 8.16.9 With respect to applying a limit to outdoor living areas sought by Waka Kotahi [143.119], Mr Hunt considers that noise from state highways received within these areas is a daytime amenity issue only, and has little or no consequences for human health. He also notes that it is not a matter usually controlled in district plans, and that there are no recommendations relating to traffic noise received in outdoor living areas contained in NZS6806:2010 or any other NZ Standards dealing with transportation noise. He therefore does not support application of a control to noise received in outdoor living areas.
- 8.16.10 In terms of Waka Kotahi's request [143.119] for a vibration limit to be applied, Mr Hunt states that what the submitter is requesting is for building owners and developers to mitigate vibration experienced in buildings from passing traffic on state highways to meet a standard that is intended to be used to ensure the design and construction of new roads does not cause vibration problems for nearby sensitive uses. He further notes that significant vibration issues arise when there is a defect in the road surface or deterioration in a road's condition, and that where roads are well-maintained, vibration should not be an issue where

dwellings are 2m or more from the traffic lane. On this basis, I do not consider it appropriate for developers to be subject to the costs associated with mitigating vibration, given this does not seem to be necessary to address potential reverse sensitivity effects where roads are maintained in good order.

- 8.16.11 It is my view that Mr Hunt’s advice demonstrates that NOISE-S3 is an appropriate approach, which is both efficient and effective at achieving the outcomes sought in NOISE-O2. With respect to the matters of discretion, I consider that the notified matters provide greater detail to assist an applicant and processing planner in what matters are to be considered. More specifically, they provide guidance on what “*effects of exceedances*” are of concern.
- 8.16.12 I do not agree with Kāinga Ora’s [229.59] request to delete application of the application to areas within specified proximity to the railway line and State Highways. In absence of this control applying, the amenity values, health and sleep of occupants of noise sensitive activities may be compromised, and there is a risk that reverse sensitivity effects will arise in relation to noise sensitive activities in these areas. It is also commonplace in recent district plans to include requirements for acoustic insulation for noise sensitive activities in close proximity to these transport corridors. It is also inconsistent with the advice received from Mr Hunt.

Conclusions and Recommendations

- 8.16.13 I do not recommend any changes to NOISE-S3 as a result of these submissions. For completeness I note that I have earlier recommended some change to NOISE-S3 as a consequence of submissions on frost fans and on NOISE-R9.

8.17 NOISE-S4

- 8.17.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Waka Kotahi	143.120
Fonterra	165.115
KiwiRail	187.79
NZ Frost Fans	255.13

Submissions

- 8.17.2 NZ Frost Fans [255.13] supports NOISE-S4 and seeks that it is retained as notified (noting the broader concerns in its submission regarding amendments that may be required to give effect to the NPSHPL).

- 8.17.3 Fonterra [165.115] seek that the matters of discretion are deleted from NOISE-S4. This is a consequential change arising from their request that non-compliance with NOISE-S4 (in NOISE-R9) is made a non-complying activity.
- 8.17.4 Waka Kotahi [143.120] seeks amendments to recognise and provide for thermal comfort and cooling requirements for all habitable rooms. The submitter is also concerned that the matters of discretion provide allowance for non-compliance without addressing the adverse effects. The changes sought are to amend condition 1 to apply it to "all habitable rooms" rather than "any study or bedroom", to add "sounds levels and temperatures..." to condition 2, and a further sub-clause to condition 2 as follows: "and maintain a temperature that does not exceed 25°C".
- 8.17.5 KiwiRail [187.79] seeks amendments to align the standard with relief sought elsewhere in its submission, and to ensure ventilation provides controllable cooling and heating to maintain an appropriate room temperature. The submitter also seeks to amend the matters of discretion to relate specifically to the required mechanical ventilation and compliance with the standard only. It considers that Matters 1, 3 and 4 are not appropriate and seeks that they are deleted. The other changes sought are:
1. The requirements of minimum external to internal noise reduction levels in NOISE-S3 must be achieved at the same time as the ventilation requirements of the New Zealand Building Code. An alternative means of ventilation must be provided within any habitable room study or bedroom unless ...
 2. Ventilation systems where installed must generate sound levels not exceeding: ...
 - a. provide cooling and heating that is controllable by the occupant and can maintain the inside temperature between 18°C and 25°C;
 - b. not generate more than 35 dB LAeq(30s) when measured 1 metre away from any grille or diffuser;
 - c. provide an adjustable airflow rate of up to at least 6 air changes per hour

Analysis

- 8.17.6 With respect to Fonterra [165.115], as I have not recommended that that non-compliance with NOISE-S4 (in NOISE-R9) is made a non-complying activity, I do not recommend that the matters of discretion are deleted from NOISE-S4.
- 8.17.7 Mr Hunt has considered Waka Kotahi's [143.120] and KiwiRail's [187.79] request to apply NOISE-S4.1 to all habitable rooms, rather than only to "any study or bedroom". He considers that for most types of habitable rooms, open windows during the daytime would not be likely to undermine functions carried out within these rooms, particularly having regard to the moderate Timaru climate and the likely limited periods during which windows are opened for comfort purposes. He therefore supports the ventilation requirements as notified, which relate to rooms within which quiet conditions are needed for study or, during night times, to provide an adequate sleeping environment. Mr Hunt considers that within other habitable rooms (i.e. those not required under NOISE-S4 (as notified) to be fitted with a ventilation system), indoor health and amenity effects of outdoor noise are considered to be likely adequately controlled by methods compliant with the ventilation requirements of

the New Zealand Building Code. Based on this advice, I consider that it is not necessary to expand the ventilation requirements to all types of habitable rooms in order to achieve NOISE-O2.

- 8.17.8 With respect to amending the standard in relation to temperature, to require the ventilation system to include a cooling function, Mr Hunt notes that this relates to the potential for people to open windows when the indoor temperature is over 25°, which would result in outdoor noise entering the space, and undermine the purpose of having acoustic insulation. Mr Hunt considers that the requirement for a cooling function may be appropriate in warmer climates, but not in cooler climates. Having considered the climate in Timaru, he is neutral on whether a requirement should be applied. Based on Mr Hunt's analysis, my view is that the application of such a standard sought by the submitter would impose additional costs that may not be sufficiently necessary in this part of the country, particularly given the submitter's own guidance material indicates such a requirement is not necessary in the coastal and southern parts of the South Island.³⁹ I therefore do not recommend addition of a requirement that the ventilation system must maintain a temperature that does not exceed 25°C.
- 8.17.9 Mr Hunt otherwise considers that the requests by KiwiRail [187.79] improve the drafting of the standard, and I agree, noting in particular that as drafted, clause b. in NOISE-S4.2 does not relate to the stem of NOISE-S4.2.
- 8.17.10 With respect to the matters of discretion, I consider that the notified matters provide greater detail to assist an applicant and processing planner in what matters are to be considered, and therefore do not agree with deleting matters 1, 3 and 4. More specifically, these matters provide guidance on the particular "*effects of the non-compliance*" which are of concern.

Conclusions and Recommendations

- 8.17.11 I recommend that NOISE-S4 is amended as follows (noting this incorporates changes recommended earlier in this report):

³⁹ Referenced in Footnote 12 of Appendix C of Mr Hunt's memo.

NOISE-S4	Ventilation requirements	
<p>All-zones</p> <p><u>Within 40m of a State Highway with a posted speed limit of 50 km/hr or less</u></p> <p><u>Within 80m of a State Highway with a posted speed limit greater than 50 km/hr</u></p> <p><u>Within 40m of the railway line</u></p> <p><u>Neighbourhood Centre Zone</u></p> <p><u>Local Centre Zone</u></p> <p><u>Large Format Retail Zone</u></p> <p><u>Mixed Use Zone</u></p> <p><u>Town Centre Zone</u></p> <p><u>City Centre Zone</u></p> <p><u>General Residential zone within 20m of the boundary with an Industrial zone</u></p> <p><u>Medium Residential zone within 20m of the boundary with an Industrial zone</u></p> <p><u>Outer Control boundary of the Port Noise Control Overlay</u></p>	<p>1. The <u>requirements of minimum external to internal noise reduction levels in NOISE-S3 must be achieved at the same time as the ventilation requirements of the New Zealand Building Code.</u> An alternative means of ventilation must be provided within any study or bedroom unless an acoustic design certificate signed by a suitably qualified acoustic engineer is provided that states the design of any bedroom or any study as proposed will comply with the NOISE-S3 acoustic insulation standards with windows open.</p> <p>2. Ventilation systems where installed must generate sound levels not exceeding:</p> <p>a. <u>generate sound levels not exceeding 35 dB LAeq(30s) when measured 1 metre away from any grille or diffuser; and</u></p> <p>b. <u>provide an adjustable airflow rate of up to at least 6 air changes per hour.</u></p> <p>Note: This standard applies in addition to, and does not affect the requirements of, the Building Act 2004.</p>	<p>Matters of discretion are restricted to:</p> <ol style="list-style-type: none"> 1. effects on the ability of existing or permitted activities to operate or establish without undue constraint; and 2. the effects of the non-compliance; and 3. the ability to provide the appropriate levels of ventilation through other means; and 4. the amenity of present and future residents of the site.

8.17.12 In terms of s32AA, I consider that the changes to the standard are minor, and improve its clarity.

8.18 Noise Limits (Table 24)

8.18.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Oliver, G	14.1
Property Income	56.2
Southern Proteins	140.19
Fonterra	165.116, 165.116A
Hilton Haulage	168.9
PrimePort	175.69
Connexa	176.87
Barkers	179.23
TDHL	186.39
North Meadows	190.13
Foodstuffs	193.9
Spark	208.87
Chorus	209.87
Vodafone	210.87
J R Livestock	241.31
Hort NZ	245.100, 245.101
NZ Frost Fans	255.14

Submissions

8.18.2 Several submitters⁴⁰ support the proposed noise standards set out in Table 24.

8.18.3 Fonterra [165.116] seek that clauses 1b and 2 are amended so that they do not apply to noise generated from within the Port Zone. The submitter states that these clauses “*appear to have missed the fact that the Port Zone extends south to the south where it is opposite but separated from General and Medium Density Residential Zones*”. Property Income [56.2] similarly states that there is no recognition that the Port Zone extends south, where it is opposite but separated from General and Medium Density Residential Zones and seeks the same relief. Fonterra [165.116A] support Clause 4, stating that it indicates that the intention of the Plan is to address noise from the Port Zone separately.

⁴⁰ NZ Frost Fans [255.14], Spark [208.87], Chorus [209.87], Vodafone [210.87], Connexa [176.87] (noting the broader concerns in NZ Frost Fans submission regarding amendments that may be required to give effect to the NPSHPL).

- 8.18.4 TDHL [186.39] seeks deletion of reference to “sites located to the east of the Main South Railway Line and forming part of, or adjoining the Port of Timaru” in the line applying to the GIZ, on the basis that the land referred to is zoned Port Zone, not GIZ. PrimePort [175.69] also seeks this deletion, stating that clause 2 is clear that noise from the Port Zone does not apply to the MRZ between the Terrace and Main South Railway Line, and is instead subject to Rule NOISE-R8 and the Port Noise Boundary contours. It notes that clause 3(d) refers to the GIZ that is located to the east of the Main South Railway Line and forming part of, or adjoining, the Port of Timaru, which is proposed to be zoned Port Zone, not GIZ.
- 8.18.5 Southern Proteins [140.19], Barkers [179.23], Hilton Haulage [168.9], North Meadows [190.13] and J R Livestock [241.31] seek that the GIZ is removed from the table. These submitters oppose an in-zone limit being applied within GIZ, on the basis that noise limits are appropriate along the zone boundary with sensitive zones, or at the notional boundary of noise sensitive activities in other zones, but are not appropriate within the zone itself.
- 8.18.6 Oliver, G. [14.1] seeks that the daytime noise limit for those zones included in Row 1 of Table 24 (General Residential, Open Space and Recreation Zones, Rural Zones and the Māori Purpose Zone) is increased from 50 to 55 dB L_{Aeq} . The submitter questions whether the noise limits proposed are taken from the previous 1999 Standards (NZS 6801:1999 Acoustics - Measurement of Environmental Sound and NZS 6802:1991 Assessment of Environmental Sound), despite NOISE-S1 referring to the 2008 version of the standard. The submitter notes that NZS 6802 suggests a guideline daytime noise limit of 55 dB $L_{Aeq(15 \text{ minute})}$ and a night-time noise limit of 45 dB $L_{Aeq(15 \text{ minute})}$ for “the reasonable protection of health and amenity associated with the use of land for residential purposes”.
- 8.18.7 Foodstuffs [193.9] seeks application of Row 4 in the Table to the MRZ, at 18A Hobbs Street, where within 40m of the boundary of the adjacent LCZ. The submitter considers that the rule does not fully implement NOISE-O2 with respect to the existing Pak ‘n Save supermarket because the noise limits in the rule apply at the zone boundary. It notes that the PDP proposes to change the commercial zoning of 18A Hobbs Street under the ODP, to MRZ, which results in the location of the LCZ/MRZ boundary moving much closer to the supermarket. The submitter is concerned that as a result of the zone change, lower noise limits will now apply closer to supermarket, representing a significant change in the operating environment for the supermarket. It is concerned that this will increase the potential for reverse sensitivity effects to arise, leading to the operator needing to undertake significant noise control, having to constrain activities, or both. The submitter states that an acoustic assessment commissioned by the Council found that the day-to-day operation of supermarket creates a high noise environment due to operation of fixed plant and delivery and service vehicles. It states that these operations cannot comply with the noise limits applicable at the LCZ / MRZ boundary because the boundary between these zones has moved closer to the supermarket. It considers that the amendment sought, which would apply the LCZ limits to the first 40m of the new MRZ, would ensure that existing operations of the supermarket can continue as a permitted activity under the PDP.

8.18.8 Hort NZ [245.100, 245.101] considers that 55dB_{L_{Aeq}} is an appropriate noise limit for the GRUZ, to reflect the nature of the receiving environment, which is different to the Residential Zone. It seeks that the GRUZ is deleted from Row 1 of Table 24, and included instead in Row 2, with the limit applied only to the national boundary of a building used for a noise sensitive activity in the GRUZ. This results in a 5dB increase in the noise limits applying.

Analysis

8.18.9 I do not consider that changes to Table 24 are required in relation to noise generated from the Port Zone. The noise limits in Table 24 apply to activities managed under NOISE-R1 (which requires compliance with NOISE-S2, which in turn requires compliance with the noise limits in Table 24). However, NOISE-R1 applies to activities generating noise that are otherwise specified in the Rules section. NOISE-R8 applies to activities within the Port Zone, and therefore such activities are not subject to NOISE-R1. NOISE-R8 does not require compliance with NOISE-S2 and therefore Table 24 does not come into play for noise generated by activities in the Port Zone. I note that some confusion does arise from clause 2 of the table referring to noise generated from the Port Zone. Because the Table does not in any case apply to such noise, I recommend that this reference is deleted, as a clause 16(2) change.

8.18.10 I agree with those submitters (TDHL [186.39] and PrimePort [175.69]) seeking deletion of reference to “sites located to the east of the Main South Railway Line and forming part of, or adjoining the Port of Timaru” in the line applying to the GIZ. This is for the reason identified by the submitters – that the land referred to is proposed to be zoned Port Zone and not GIZ.

8.18.11 With respect to the in-zone limit applying in the GIZ, Mr Hunt notes that NZS6802:2008 recommends application of inter-zone site-to-site noise limits. He further notes that the GIZ policies anticipate “compatible” activities, as well as industrial activities within the zone. Taking this into account, he considers that applying site-to-site noise limits in GIZ is appropriate, but recommends changes to: increase the in-zone noise limit to 75 dB $L_{Aeq(15 \text{ min})}$, being the maximum recommended in NZS6802:2008; remove the site-to-site L_{Amax} limit, as his view is that compliance with this type of limit is not considered essential for providing site-to-site noise compatibility between sites; and exempting compliance with site-to-site noise limits for boundaries of sites in the same ownership, stating that noise effects in this situation are better managed internally rather than through a district plan.

8.18.12 With respect to the daytime limits in Row 1, I note that the guidance provided in NZS6802:2008 is explicitly set out in the technical report prepared by Mr Hunt during the background and drafting phases of the District Plan review.⁴¹ This notes that in addition to the guidelines, daytime standards across other district plans are commonly set at 50 to 55 dB $L_{Aeq[15 \text{ min}]}$. It also notes that the standard itself sets out that local authorities are able to

⁴¹ District Plan Review, Topic 11: Noise and Vibration – Stage 1 Report, Malcolm Hunt Associates, August 2018, pages 18-19.

consider noise limits that are more or less stringent to suit their particular circumstances and requirements. I consider, as part of this, that it is important to consider the ODP noise limits, which are set at 50 dBA L_{10} . The noise limits contained in Table 24 are consistent with this, and given this, that NZS6802:2008 is only a guideline, and that the PDP is not out of step with other plans, I consider the notified limit to be appropriate.

- 8.18.13 With respect to MRZ land at 18A Hobbs Street (within 40m of the boundary of the adjacent LCZ) I note the earlier discussion above in relation to NOISE-R9 applies here. Mr Hunt has concluded, in relation to the potential for reverse sensitivity effects to arise in relation to the supermarket operations as a result of new residential development, that such effects have been effectively addressed through the conditions of consent applying to the development of the residential subdivision. With respect to the noise limits applying to the supermarket, Mr Hunt considers that the potential adverse noise effects of elevated noise (i.e. application of higher noise limits) being received at residences of the adjacent MRZ site will be adequately mitigated through the consent conditions applying to the residential development, and therefore considers that an acceptable noise outcome will result if the submitter's request for a higher noise limit to be applied within the 40m strip of land within 18A Hobbs Street that lies adjacent to the supermarket site is approved. I also note that the change in zoning of 18A Hobbs Street results in a reduction of the noise limit applying at the boundary of the supermarket site where it adjoins this residential development, and therefore the potential for the supermarket operations to become technically non-compliant with the Table 24 noise limits, without the actual noise levels having altered. Given this, and Mr Hunt's view that an acceptable noise outcome will still be achieved, I recommend that the submitter's request is generally accepted. However, as noted by Mr Hunt, as I have recommended that the boundary between the MRZ and LCZ is amended to extend the current LCZ boundary by 10m, the higher noise limit should only be applied to those parts of the MRZ within 30m of the boundary with the adjacent LCZ (i.e. the first 10m of the 40m sought by the submitter is already included through this area being zoned LCZ).
- 8.18.14 Mr Hunt notes that 50 dB $L_{Aeq(15 \text{ min})}$ is the daytime noise limit proposed for the GRUZ. He considers it important to note that NOISE-R1 already exempts "*activities of a limited duration required for normal seasonal agricultural, horticultural and forestry activities, such as harvesting*". He considers that as a range of activities are permitted in the GRUZ, it is necessary for other permitted activities (i.e. those not already exempted) in the GRUZ to comply with the 50 dB limit within the notional boundary, to provide adequate amenity protection for residential uses that are permitted under GRUZ-R4 and GRUZ-R5. In addition to Mr Hunt's comments, I note that GRUZ-O1 does outline that the zone is intended to be a working environment, where primary production generates noise. However, in GRUZ-O2.3, it also anticipates higher levels of amenity immediately around sensitive activities. Given the noise limit applies at the notional boundary of noise sensitive activities, I consider that the lower noise limit is appropriate to assist in achieving those outcomes, noting that it is ensuring a level of amenity in the immediate vicinity of noise sensitive activities; not in the wider rural environment.

Conclusions and Recommendations

8.18.15 I recommend that Table 24 is amended as follows:

Receiving zone and assessment location	Time period	Noise limit
1. 1. Within the notional boundary of a building used for a noise sensitive activity in the following zones: 1. General Rural Zone 2. Rural Lifestyle Zone 3. Settlement Zone 4. Natural Open Space Zone 5. Open Space Zone 6. Sport and Active Recreation Zone 7. Māori Purpose Zone; and 2. Within any part of a site in the General Residential Zone	7.00am — 7.00pm	50 dB L _{Aeq} (15 min)
	7.00pm — 10.00pm	45 dB L _{Aeq} (15 min)
	10.00pm — 7.00am	40 dB L _{Aeq} (15 min) 70 dB L _{AFmax}
2. Within any part of a site in the Medium Density Residential Zone <u>(except where otherwise specific in 4. below), but, where noise is generated from within the Port Zone, excluding those sites located between the Terrace and the Main South Railway Line.</u>	7.00am — 7.00pm	55 dB L _{Aeq} (15 min)
	7.00pm — 10.00pm	50 dB L _{Aeq} (15 min)
	10.00pm — 7.00am	45 dB L _{Aeq} (15 min) 75 dB L _{AFmax}
3. Within any part of a site in the following zones: 1. Large Format Retail Zone 2. Town Centre Zone 3. City Centre Zone 4. <u>General Industrial Zone, excluding those sites located to the east of the Main South Railway Line and forming part of, or adjoining the Port of Timaru.</u>	7.00am — 10.00pm	65 dB L _{Aeq} (15 min)
	10.00pm — 7.00am	65 dB L _{Aeq} (15 min) 75 dB L _{AFmax}
4. Within any part of a site in the following zones: 1. Neighbourhood Centre Zone 2. Local Centre Zone 3. Mixed Use Zone d. <u>Medium Density Residential Zone at 18A Hobbs Street within 30m of the boundary of the adjacent Local Centre Zone.</u>	7.00am — 10.00pm	60 dB L _{Aeq} (15 min)
	10.00pm — 7.00am	60 dB L _{Aeq} (15 min) 75 dB L _{AFmax}
5. Within any part of a site in the General Industrial Zone, <u>excluding any adjacent site in the General Industrial Zone held under common ownership.</u>	7.00am — 10.00pm	75 dB L _{Aeq} (15 min)
	10.00pm — 7.00am	75 dB L _{Aeq} (15 min)

- 8.18.16 In terms of s32AA, I note that the amendments relating to the Port Zone do not alter the effect of the rules, and therefore I consider that the original s32 assessment still applies. However, these changes will provide greater clarity and avoid potential confusion.
- 8.18.17 In terms of the changes to the GIZ, I consider that the changes will be more efficient and effective at achieving GIZ-O1 and GIZ-O2. This is because they better provide for the type and nature of activities anticipated in the zone, recognising that industrial activities often generate higher levels of noise, while still ensuring a safe and functional working environment.
- 8.18.18 In relation to allowing for a higher limit in the MRZ at 18A Hobbs Street which is within 30m of the LRZ boundary, I consider that this avoids the costs associated with a reduction in noise being required as a result of the zoning of this adjoining area changing. I consider that the potential costs, in terms of adverse effects of noise on occupants of the MRZ have already been taken into account, and appropriately managed, through the consent conditions applying to the development of the MRZ area. Therefore, I consider that the increased noise limit will still achieve NOISE-O1, as it will not compromise the health and well-being of occupants in the MRZ.

8.19 Definitions

- 8.19.1 The following table sets out the submission points covered in this section of the report (which may be individually or more broadly discussed). The decision requested in relation to each point is provided in full in Appendix 2:

SUBMITTER NAME	SUBMISSION POINT NUMBER(S)
Waka Kotahi	143.9
NZDF	151.2
Radio NZ	152.13
Fonterra	165.16
Silver Fern Farms	172.9
Alliance Group	173.8
KiwiRail	187.6
Hort NZ	245.7, 245.16

Submissions

- 8.19.2 Waka Kotahi [143.9], NZDF [151.2], Radio NZ [152.13], Silver Fern Farms [172.9], Alliance Group [173.8] and Hort NZ [245.16] support the definition of 'Noise Sensitive Activity'.
- 8.19.3 Fonterra [165.16] seek that 'community facility' is added to the definition, on the basis that these facilities, which provides generally for the congregation of people, are also sensitive to noise and in its view, likely to give rise to reverse sensitivity effects. The submitter notes that in the alternate, reference to 'place of assembly' would also be acceptable.

- 8.19.4 KiwiRail [187.6] seeks deletion of the definition and its replacement with the following, which in its view lists all noise sensitive activities and will assist with clear interpretation:

Means any lawfully established:

- a. residential activity, including activity in visitor accommodation or retirement accommodation, including boarding houses, residential visitor accommodation and papakāinga;
- b. educational activity;
- c. health care activity, including hospitals;
- d. congregation within any place of worship; and
- e. activity at a marae.

- 8.19.5 Hort NZ [245.7] support the definition of ‘bird scaring device’, subject to a minor amendment to read “...gas guns and avian distress alarms”.

Analysis

- 8.19.6 I note that the definition of community facilities is broad. They are also facilities that tend to be used in the daytime and evening period, rather than overnight. In my view, including all community facilities in the definition of a noise sensitive activity would result in activities being included that are not as sensitive to noise (and which do not house people who are sleeping), which would result in costs being incurred for such activities in terms of the installation of acoustic insulation, or the requirement for a resource consent to be obtained. I therefore do not agree with including community facilities in the definition. With respect to including places of assembly, I note that the definition of these are narrower, and relate to land and buildings where people gather. In my view, the activities falling within the definition are those which would only have people gathered for short periods of time – concerts, churches, community halls etc. Given their limited use, I consider that it would be an inefficient approach to apply the insulation requirements to these. I further note that a number of activities captured in the places of assembly definition are likely to generate high levels of internal noise in any case, e.g. cinemas, concerts, churches etc. I therefore do not consider that these should be added to the noise sensitive activity definition, as I do not consider that the application of the acoustic insulation standards to these types of activities is necessary to achieve the outcome sought in NOISE-O2.

- 8.19.7 I consider that the changes sought by KiwiRail [187.6] would result in inconsistency with the PDP provisions. In particular, adding reference to visitor accommodation as a subset of a residential activity is not consistent with how these terms are defined in the PDP. ‘Boarding houses’ are also not referred to in the PDP at all. Addition of places of worship is addressed above, but in addition to those comments, I am not clear that reference can be made to a “congregation” which is a group of people rather than an activity.

- 8.19.8 I agree with the minor change requested by Hort NZ [245.7] to the definition of ‘bird scaring device’ as this corrects a grammatical error and ensures clarity.

Conclusions and Recommendations

- 8.19.9 I recommend that the definition of ‘noise sensitive activity’ is retained as notified.

8.19.10 I recommend that the definition of 'bird scaring device' is amended as follows:

Means a device used for the purpose of disturbing or scaring birds including gas guns and avian distress alarms when being used specifically for bird scaring.

8.19.11 I consider that the change to the definition is minor and provides greater clarity. As it does not alter the effect of the provisions, I do not consider that further assessment under s32AA is required.

9. Conclusion

9.1.1 This report has considered submissions relating to the lighting and noise provisions in the PDP.

9.1.2 With respect to the lighting provisions, a key change recommended from the notified provisions, is to delete the provisions relating to 'Light Sensitive Areas', as there does not appear to be a connection between the values of these areas (as identified within the PDP) and the potential impact that lighting might have on these. However, I have instead recommended that controls are applied within the Long-tailed Bat Habitat Protection Area Overlay, because of the adverse effects that lighting can have on long-tailed bat activity and behaviour.

9.1.3 At an objective and policy level, changes are recommended to the wording of the Light chapter provisions, which do not alter their underlying intent, but provide much clearer guidance on the outcomes sought and how it is to be achieved. Changes are also recommended to increase the proposed limits applying to lighting in the GRUZ and RLZ, to better reflect the purpose and character of these zones.

9.1.4 With respect to the Noise Chapter, only minor changes are recommended to the objective and policy framework, with changes to the proposed rules being largely related to amendments that better reflect the nature and type of noise associated with particular activities, or improve clarity. However, a specific rule is recommended to be added to manage noise from frost fans, with corresponding controls applying to noise sensitive activities within 300m of existing or consented fans, to address the potential for reverse sensitivity effects to arise.

9.1.5 Overall, I consider that the recommended suite of provisions provides clear guidance on how lighting and noise is to be managed across the district to achieve the purpose of the RMA, with changes to more efficiently and effectively achieve not only the objectives of the Light and Noise Chapters, but other relevant objectives across the PDP.