Shaping Wanganui

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Wanganui District Council
District Plan Review
Phase Six

Section 32AA Report –

Proposed Plan Change 41
(Noise Provisions)
Revised report after submissions

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Dated: October 2015

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1. INTRODUCTION

1.1 PLAN REVIEW PROCESS

Section 79 of the Resource Management Act 1991 (the Act) requires Council to commence a review of its plans at least every 10 years. Recent amendments to the Act clarify that whole plans need not be reviewed. A Council may choose to review plans in part.

The existing provisions have been developed at different times and under different scenarios. There are some provisions that have been in the Plan since it was first developed but others have been operative for a shorter period of time. Others have been included in recent plan changes. The intention of the review is not to meet a specific deadline under section 79 but to ensure the provisions in the plan are efficient and effective in managing the resources in the district and ensuring that Council's obligations under the Act are met.

The Act does not detail how a Council must review its plans. However consideration of the efficiency and effectiveness of existing provisions is considered the first step. Section 32 of the Act requires Council to carry out an evaluation of options before notifying a proposed plan change. These matters are discussed throughout this report. The efficiency and effectiveness of the provisions in achieving the stated objectives is analysed in this report, as are the various options that were considered.

1.2 STATUTORY AND LEGISLATIVE FRAMEWORK FOR THE REVIEW

1.2.1 Resource Management Act 1991

Section 74 of the Act requires the Council to change the District Plan in accordance with its functions under Section 31, the purpose of the Act in section 5 and the other matters under sections 6, 7 and 8.

Territorial authorities have the following functions under the Act:

31 Functions of territorial authorities under this Act

1. *Every territorial authority shall have the following functions for the purpose of giving effect to this Act in its district:*

    a. *The establishment, implementation, and review of objectives, policies and methods to achieve integrated management of the effects of the use, development or protection of land and associated natural and physical resources.*

    …

    d. *the control of the emission of noise and the mitigation of the effects of noise.*

    …

The Council is given these functions for the purpose of promoting the sustainable management of natural and physical resources, which is defined:

5(2) In this Act, "sustainable management" means managing 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 wellbeing and for their health and safety while:

a. *Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*

b. *Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and*

c. *Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

Further guidance and direction on the way in which resources are to be managed is provided in sections 6, 7 and 8 of the Act.

The Council also has a duty under section 16 of the Act to ensure that activities do not produce unreasonable noise.

1.2.2 National Environmental Standards

The act requires that District Plans give effect to any relevant National Environmental Standards (NES). A NES is a document prepared under the act and NPS to ensure that the same standards are enforced by each Council. The national environmental standard relevant to this Plan change is the National Environmental Standard for Telecommunication Facilities (2008)

<u>National Environmental Standard for Telecommunication Facilities</u>

The National Environmental Standard for Telecommunication Facilities (NESTF) was developed in accordance with sections 43 and 44 of the Act. These regulations provide for the establishment and operation of telecommunication facilities, subject to structure standards, noise limits, radiofrequency standards or other protected features in the proximity.

This Plan Change retains the Permitted Activity status for telecommunication facilities (the same as the NESTF) and specifically references the Standard for the matters regarding noise. This is in line with the standard.

1.2.3 Regional Policy Statement

In addition, the Act requires District Plan provisions give effect to the Regional Policy Statement (section 75(3)). The Regional Policy Statement

(RPS) is the main vehicle for interpreting and applying the sustainable management requirements of the Act in a local context, and in this regard, guides the development of lower tier plans, including the District Plan.

The Manawatu-Whanganui Regional Council (Horizons) combined the Regional Policy Statement and six Regional Plans into one document called the One Plan. The One Plan became operative on 19 December 2014.

With regard to the One Plan, there are no provisions which are of particular relevance to noise and which fall under Wanganui District Council's jurisdiction. Therefore, for the purposes of this evaluation, it is considered that the proposed District Plan provisions relating to noise have given regard to the Regional documents.

1.2.4 Other Plans & Strategies

Another matter to which Council must have particular regard is other management plans and strategies. The Noise Control Policy (2009) They has informed the preparation of this section 32 analysis.

This policy sets out how the Act's objectives for noise will be achieved. It refers to the Act and any potential resource consent for definitions for 'unreasonable' and 'excessive' noise. While this policy will need to be updated to refer to the correct sections of the District Plan as a result of this Plan change, the Plan change is consistent with the overall approach of this document as it will allow for more accurate measurements and therefore better management of excessive or unreasonable noise.

2. PART 1 – PROPOSED PLAN CHANGE

2.1 BACKGROUND RESEARCH

Noise is defined as unwanted sound affecting people and their perceptions of the environment, particularly in urban areas where it affects a significant portion of the population. Within rural areas fewer people may be affected, but the generally lower ambient sound levels found there can mean normally acceptable levels of sound are perceived as more intrusive.

Since the District Plan became operative in 2004, there have been significant changes to how noise is measured. It is now standard practice in New Zealand to assess noise against the following New Zealand Standards:

a. New Zealand Standard 6801:2008 Acoustics - Measurement of Environmental Sound.

b. New Zealand Standard 6802:2008 Acoustics - Assessment of Environmental Noise.

c. New Zealand Standard 6803:1999 Acoustics – Construction Noise

d. NZS 6805:1992 Airport Noise Management and Land Use Planning

e. New Zealand Standard 6806:2010 Traffic Noise from New or Altered Roads

f. New Zealand Standard 6807:1994 Noise Management and Landuse Planning for Helicopter Landing Areas

g. New Zealand Standard 6808:2010 Acoustics – Wind Farm Noise

h. New Zealand Standard 6809:1999 Port Noise Management and Land Use Planning

i. AS/NZS1276.1:1999 Acoustics- Rating of sound insulation in buildings and of building elements Part 1: Airborne sound insulation.

j. ISO 140-5:1998 Acoustics – Measurement of Sound Insulation In Buildings And Of Building Elements Part 5: Field Measurements Of Airborne Sound Insulation Of Façade Elements And Facades.

In addition, technology in the rural sector has changed; meaning that provision for wind farms, frost fans, avian distress alarms and gas guns are more common place and need to be provided for. There is also a desire to provide for more mixed use activities within the city centre, meaning that insulation provisions for sensitive noise activities are required.

The requirement to manage noise is set out in the Resource Management Act 1991. There is a need within the District to manage noise as shown by the number of complaints determined to be valid lodged with Council over the past year:

Table 1: Complaints Lodged with Council in relation to excessive noise during 2014

Month	Number received	**Number excessive**	Month	Number received	**Number excessive**
January	179	**48**	**July**	147	**49**
February	160	**47**	**August**	128	**71**
March	209	**63**	**September**	140	**58**
April	171	**46**	**October**	164	**49**
May	178	**39**	**November**	169	**63**
June	125	**44**	***December***	*299*	***99***
			Total	2069	**676 (33%)**

A report prepared by Malcolm Hunt Associates called 'Review of the District Plan Noise and Vibration Provisions' dated July 2014, provides an up to date, quantitative and qualitative, assessment of the current noise and vibration provisions. The report suggests updating the method for measurement of noise to current national standards and the inclusion of provisions for sound insulation, frost fans, bird-scarers and commercial boating activities. It also recommends the removal of the vibration standard NZS2631:1989 which was been superseded in 2003 by an informative standard which contains no vibration limits. Therefore vibration will be handled under the Health Act 1956 and section 16 of the Act.

The results of this report have provided the basis for a decision making process to determine whether adjustments to the current provisions are required.

2.2 CONSULTATION AND OUTCOMES

In 2014 the Wanganui District Council began consultation with the members of the public to discuss potential issues with the current noise provisions.

Date	Location	Comments
02/09/2014	Have your say page, Council Website	A background document and survey on the current District Wide provisions (including noise) was posted online.
6-7/09/2014	Home and Living Show, Springvale Park	Introduced the review of the District Wide rules (including noise) at Council's stall, and promoted the survey. An estimated 9000 people came to the event.
19/09/2014	Letter to stakeholders	A letter was sent to stakeholders (identified based on commentary provided during previous plan changes) advising them of the review and recommending participation in the survey.
22/10/2014	Community Link Page, Online and Midweek paper	Promoted the survey and background information to the general public.
27/03/2015	Shaping Wanganui – Phase 6 Council Website	Draft versions of the proposed provisions and maps went online for comment. Response due 14 April 2015.
28/03/2015	Rivertraders Market	Introduced the proposed District Wide rules at Council's stall and requested feedback. Promoted website to see the draft text and maps.

1/04/2015	Email/Letter to stakeholders and owners	Letters sent to identified stakeholders and owners with link to draft provisions and 14 April 2015 deadline to respond.

Feedback from the community via the survey and the meetings mentioned a range of noise issues which are addressed within this report. Specifically, the noise issues raised are summarised as:

- Reverse sensitivity distances – particularly near Railway and State Highway networks
- Time of day restrictions for noise
- Exemptions for Residential Activities such as lawn mowers
- Increased provisions for specific Rural Activities

2.3 DESCRIPTION OF THE PROPOSED PLAN CHANGE

2.3.1 Proposed Plan Change 41 (Noise) would remove the existing noise provisions which are scattered throughout the zones and Appendix D and combine the new provisions into one chapter. The new standards for each zone would be in accordance with the New Zealand Standards for measuring and assessing noise. The changes would be in accordance with the Malcolm Hunt report on the noise provisions dated July 2014.

Additional provisions are made to reflect the changes in technology, such as provision for bird-scaring and to increase the requirement to insulate for noise sensitive activities.

No additional reserves were added to the specific noise event rules that currently apply only to Cooks Gardens and Springvale Park. These rules were developed in 2010 and incorporated as part of Plan change 19 due to the regular complaints about noise from activities on these sites. No other reserves have been the subject of regular enforcement issues that require specific noise standards.

The specific standard relating to vibration will be removed from each zone, but the general requirement to avoid objectionable and offensive vibration will remain. This will be in accordance with the New Zealand Standard.

Objectives and policies relating directly to the issue of noise are proposed to strengthen the understanding of the effects and the potential for mitigation. The references to noise in the zone policies will remain to help provide context on the ideal noise environment for the areas.

2.3.2 Council is completing a phased review of the District Plan. Section 70 of the Act requires that where provisions have been reviewed and no changes are proposed, the existing provisions must still be publicly notified

as if it were a change. For this reason the existing Plan rules relating to noise form part of Plan Change 41.

2.3.3 The relevant objectives and policies for specific zones were reviewed in 2012-15. A copy of these, are included here for completeness and are not subject to the Plan change process. These provisions are shaded grey. The rules that relate specifically to noise are open to submission as part of proposed Plan Change 41.

3. PART 2 – SECTION 32 EVALUATION

3.1 REQUIREMENT TO MAKE AN EVALUATION

The Resource Management Act 1991 (the Act) requires that when a Council undertakes a plan change it must produce a report evaluating the proposed provisions. This is known as a Section 32 Report. This report contains an evaluation of the proposed Plan change, prepared in accordance with section 32 of the Resource Management Act (as amended 2013).

The evaluation examines:

- *the extent to which the objectives of the proposal are the most appropriate way to achieve the purpose of the Act (to promote the sustainable management of natural and physical resources), and*
- *whether, the provisions are the most appropriate way to achieve the objectives by*
    - *identifying other reasonably practicable options for achieving the objectives; and*
    - *assessing the efficiency and effectiveness of the provisions in achieving the objectives; and*
    - *summarising the reasons for deciding on the provisions; and*
- *contain a level of detail that corresponds to the scale and significance of the environmental, economic, social and cultural effects anticipated from the implementation of the proposal.*

For the purposes of this examination, the evaluation must:

- *Identify and assess the benefits and costs of the environmental, economic, social and cultural effects that are anticipated from the implementation of the provisions including the opportunities for –*
    - *economic growth that are anticipated to be provided or reduced; and*
    - *employment that are anticipated to be provided or reduced; and*
- *if practicable, quantify the benefits and costs referred to above; and*

- *assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.*

3.2 CONSIDERATION OF METHODS

3.2.1 While the use of alternative methods such as enforcement under section 16 (unreasonable noise and vibration) have been taken into account as a primary option, these were not considered to be appropriate standalone options for achieving the objectives of the Plan or the Act.

It is therefore deemed most appropriate to maintain such alternative methods as supplementary to the proposed set of regulatory limits for noise. In exploring the best regulatory method of achieving the objective of the proposed Plan change, three options were identified and considered.

3.2.2 The options considered are as follows:

	Options	Explanation
Option 1	Maintain the Status Quo – Do nothing.	Leave Plan as it is – no substantial changes made apart from formatting to be consistent with the rest of the Plan.
Option 2	Rules emphasize noise mitigation over limits by requiring noise insulated fences and buildings.	This option would result in minimal noise limits and extra cost for owners in the receiving noise environments to deal with the noise.
Option 3	Review current provisions for noise and vibration and update based on best practice and local issues.	Update the provisions to be consistent with national best practice for measuring and controlling noise and its effects.

Each of these identified options is discussed in detail below.

One if the aims of Section 32 analysis is to identify a preferred approach as being more efficient and effective than other options in achieving objectives of the Wanganui District Plan and the Act. The benefits and costs of each option are illustrated below.

	Benefits	Costs
Option 1 – Status Quo/ Do Nothing	Least financial cost in processing the Plan change due to less research. Retain familiarity with the existing objectives, policies and rules.	Cost of Plan change process. Increased risk of legal liability due to noise measurement technique not showing an accurate picture of the issue. Council not fulfilling obligations under the Act.
Option 2 – Rules emphasize noise mitigation over	Statutory obligations of Council fulfilled.	Cost of Plan change process.

limits by requiring noise insulated fences and buildings.	Encourage new businesses due to less regulation.	Discourage new residential activities within the District due to increased noise mitigation costs. Cost of enforcement under section 16 would rise as the District Plan would not state a reasonable noise level.
Option 3 - Review current provisions for noise and vibration and update based on best practice and local issues.	Statutory obligations of Council fulfilled. Creates a better working and living environment. May minimise reserve sensitivity. Recognises the rural zones as an industrial environment. Discourages noise sensitive activities near noisy activities which may reduce complaints. Provides for a range of noise and vibration management methods through the resource consent process. Plan effectiveness and efficiency addressed.	Cost of the Plan change process. Cost to developers and new residents of minimising noise and vibration emissions, at time of development. Cost of education for Council. Cost of compliance with new noise and vibration generating activities with consent conditions requiring ongoing monitoring and enforcement.

3.2.3 Analysis of Options

Option 1: Maintain the Status Quo (Do nothing)

Maintaining the status quo is an option that needs to be considered. This would simply involve the retention of the existing District Plan provisions.

Since the Plan was notified in the 1990s, new technology has been developed to deal with issues. A by-product of some of these technologies is noise at a level not provided for by the Plan. By not providing for the new technology in the Plan, businesses could face operational restrictions or have to relocate out of the District.

Another change since the last full review of the noise and vibration provisions is the relevant New Zealand standards that have been released over the past 20 years.

These documents state the best practice methods for measuring and mitigating noise and vibration. To ignore these documents would open Council up to legal challenge.

As a result of these findings and taking into account the risk of acting or not acting it is considered that maintaining the status quo would not mitigate potential adverse effects from development. Therefore, it is not considered to be the best method available.

Option 2: Rules emphasize noise mitigation over limits by requiring noise insulated fences and buildings.
This option would see the emphasis of noise control moved from the producer to the receiving environment. Provisions requiring sound insulation for fences and buildings would be required in order to establish noise sensitive activities.

If Council was to proceed with this option, there would be increased costs on residential activities. Enforcement costs for Council would also increase as this option operates in the reverse to section 16 of the Act, which places the responsibility on the producer of the noise instead of the receiving environment.

This option is not therefore considered to be an efficient and effective approach for addressing current and future adverse effects generated by development and meeting the statutory obligations of the Act.

Option 3: Review current provisions for noise and vibration and update based on best practice and local issues.
This method would build on option 1 by addressing the shortcomings of the existing provisions by updating the ways of measuring and assessing noise and vibration and providing for technological changes since the current rules were developed. It also incorporates parts of option 2 by requiring noise insulation when a new sensitive noise activity chooses to be located in a high noise environment.

This option will give a range of protection to all users. Businesses and complainants will have some certainty about what a reasonable noise limit is and how to achieve it which will result in a better environment for all.

This option will combine the benefits of options 1 & 2 as there will be noise limits for operators and sound insulation requirements for noise sensitive activities where appropriate.

Therefore, option 3; updating and re-formatting the existing provisions and providing standards for activities is recommended because it is considered to be the most efficient and effective way to protect the environmental values identified, with the best outcomes in terms of the environmental, social/cultural and economic costs and benefits.

3.2.4 Appropriateness of the Plan Change

Whether or not the Plan change is necessary or appropriate is directly linked to Sections 5, 6 and 7 of the Act. This Plan change is considered necessary to achieve the purpose and principles of the Act because it meets the following:

5 Purpose

(2) In this Act, ***sustainable management*** *means managing 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 while—*

Section 7 Other Matters:

(c) the maintenance and enhancement of amenity values:
f) maintenance and enhancement of the quality of the environment

The proposed objectives and policies recognise the need to provide for the health and safety of the community by restricting noise to maximum limits and having lower limits at night. The limits also encourage maintenance of the amenity of the environment by making sure that noise and vibration beyond the boundary will not adversely affect people's experience of an area. Therefore this Plan change meets the purpose and principles of the Act.

3.2.5 Conclusion & Recommended Option

Various Council staff and the community have been involved in undertaking a significant amount of work and consultation to ensure that Council has sufficient information to prepare a Plan change. The Council has not relied on any uncertain or insufficient information, but has used the report undertaken by acoustic experts at Malcolm Hunt Associates to ensure the subject is adequately understood and recommendations are wisely founded.

It is considered that the reviewed objectives and policies are the most efficient and effective means available to Council to mitigate the adverse effects of noise within Wanganui District.

3.3 PROPOSED ISSUES

Although not required by the Act, the identification of resource management issues is generally provided for in most District Plans. It provides a base to develop suitable objectives and policies that are relevant to the local circumstances or context.

The following amendments (highlighted grey) are proposed as a result of consideration of the submissions and further submissions:

17.1.1	Activities can produce unwanted sound that affects the health and safety of people as well as the amenity of an area.
17.1.2	Noise sensitive activities located in existing high noise environments and the adverse effects of that noise cannot reasonably be mitigated.
17.1.3	Airport flight operations create significant levels of noise over a wide geographical area beyond the Airport itself. Some activities are more

sensitive to this noise than others, including residential dwellings and schools. Over time, there is an increased probability of conflict between the needs of both uses. It is improbable that the Wanganui Airport can be moved, and reducing operating hours for air operations may result in a reduction of the viability of the continued operation of the Airport.	
Comment	The proposed issue identifies the need to manage noise effects produced by activities to safeguard the community health and safety as well as to protect the amenity of the environment.
Summary of benefits	Noise produced by activities above the background noise environment can be managed to a level that does not adversely affect humans.
Summary of costs	No direct cost implications although the community will be in a position to make better informed assessments.
Effectiveness	The new issue is effective as improved understanding of the issue will support better informed decision making.
Efficiency	The new issue is efficient as improved understanding will support better informed decision making which recognises inherent levels of affecting people.
Appropriateness	The proposed issue identifies that it is only noise above the background environment that can be an issue and that noise is assessed in relation to how it is heard by and affects people's health and environment (dB scale).
Risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods	It is vital for the Council to demonstrate that it is managing the effects of noise. Excessive noise can ruin people's enjoyment of an area or their health. Managing noise is a requirement of the Act.

3.4 PROPOSED OBJECTIVES

17.2.1	To enable noise at levels which do not have an adverse effect on human health.
17.2.2	An acoustic environment within each zone that is compatible with the character of the area.
17.2.3	The adverse effects of operational noise from the Wanganui Airport are minimised.
Comment	The proposed objectives identify that sound can be unwanted due to potential health effects or the character of the area.
Summary of benefits	Improved awareness of what is the preferred outcome of noise issues.

Summary of costs	No increased cost implications for Council although the community will be in a position to make better informed decisions on what noise levels are achieving. Potential costs for developers and land users to manage noise levels.
Effectiveness and Efficiency	The new objectives are effective and efficient as improved understanding will support better informed decision making.
Appropriateness	The proposed objectives are responsive to the understanding that noise is an important issue for the community for health as well as amenity reasons. Objectives that clearly state these issues are appropriate to provide transparency and certainly on what is to be achieved.
Risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods	It is vital for the Council to demonstrate that it is managing unwanted sound in accordance with the requirements of the Act.

3.5 PROPOSED POLICIES

3.3.6 To ensure a Rural Production zone where the following characteristics are maintained:

…

f. a varied noise environment may exist including intermittent noise from rural machinery and equipment;

3.3.10 To achieve a Rural Living zone with the following amenity characteristics:

…

f. A rural living environment with low traffic and moderate noise levels given the relatively low productive use made of land, and low development density.

3.3.14 To define a Rural General zone where the following characteristics are maintained:

…

f. a varied noise environment may exist including intermittent noise from rural machinery and equipment;

3.3.16 To define rural settlement areas where the following characteristics are maintained:

b. a range of residential, community and rural activities that are developed and managed in such a way that their effects are compatible with the rural character and amenities of the settlement and surrounding rural area;

4.3.2 To ensure activities in the Residential zone that:

c. avoid or mitigate nuisance from noise, light spill and vibration;

5.3.2 Define a Central Commercial zone with the following characteristics:

…

f. Provision for noise associated with commercial activities are tolerated

5.3.3 Define Outer Commercial zone with the following characteristics:

b. protection for the amenity values of neighbouring residential areas;

5.3.4 Define an Arts and Commerce zone with the following characteristics:

…

f. Provision for noise associated with commercial activities are tolerated

5.3.4 Define a Riverfront zone with the following characteristics:

…

f. Provision for noise associated with commercial activities are tolerated

5.3.14 To define a Neighbourhood Commercial zone where the following characteristics are maintained:

…

i. address the effects at the zone boundaries from noise, light spill, vibration, visual amenity and advertising.

6.3.5 To define manufacturing areas where the following characteristics are maintained:

…

c. protection for the amenity values of neighbouring areas;

7.3.1 Ensure adequate provision, and distribution of recreational facilities and opportunities, and define reserves and open spaces to ensure the following characteristics are enhanced or maintained:

…

e. Avoidance of nuisance from traffic, noise, glare or other adverse environmental effects on the surrounding environments.

17.3.1 Ensure that new land use activities, subdivision or development adjoining strategic land transport networks including, the railway corridor, avoid, remedy or mitigate any potential adverse reverse sensitivity effects of noise and vibration; generated by ~~from~~ that land transport network provided that best practicable options have been implemented by the transport operator.

17.3.2 To manage noise emissions at levels, time restrictions or in locations which protect the health of individuals and the community.

17.3.3 Ensure that noise occurs within limits that maintain and reflect the amenity values and character of the locality by:

a) Limiting the sources, type, duration, timing or location of the noise;
b) New noise sensitive activities are acoustically isolated to mitigate any adverse noise effects from existing noise generating activities.
c) Requiring adoption of the 'best practicable option' and regular maintenance of noise generating equipment or activities; and
d) Requiring the use of landscaping to mitigate the perception of noise.

17.3.4 To maintain the character and amenity values of the rural zones with respect to noise, without unduly restricting rural activities. Limits for noise received by occupants of dwellings will be set to avoid restrictions on rural activities, provided that such activities adopt the best practicable option.

17.3.5 To ensure that there is a uniform approach to the measurement of noise effects and assessment of their adverse effects, all sound emissions shall be measured and assessed in accordance with:

a. New Zealand Standard 6801:2008 Acoustics - Measurement of Environmental Sound.
b. New Zealand Standard 6802:2008 Acoustics - Environmental Noise.
c. New Zealand Standard 6803:1999 Acoustics – Construction Noise
d. NZS 6805:1992 Airport Noise Management and Land Use Planning
e. New Zealand Standard 6806:2010 Acoustics - Traffic Noise from New or Altered Roads
f. New Zealand Standard 6807:1994 Noise Management and Landuse Planning for Helicopter Landing Areas
g. New Zealand Standard 6808:2010 Acoustics – Wind Farm Noise
h. New Zealand Standard 6809:1999 Acoustics - Port Noise Management and Land Use Planning
i. AS/NZS1276.1:1999 Acoustics- Rating of sound insulation in buildings and of building elements Part 1: Airborne sound insulation.
j. ISO 140-5:1998 Acoustics – Measurement of Sound Insulation In Buildings And Of Building Elements Part 5: Field Measurements Of Airborne Sound Insulation Of Façade Elements And Facades.

17.3.6 Provide for the establishment or expansion of activities in the Airport Enterprise Zone, that:

a. are not sensitive to air noise;
b. do not compromise the safe and efficient operation of airport activities; and,
c. are compatible with noise, flight paths and aeronautical equipment required to operate the airport.

17.3.7 The airport shall be operated so that the day/night noise level (Ldn) produced by airport operations shall not exceed:

a. 65dBA at or outside the Air Noise Boundary; and
b. 55dBA at or outside the Outer Control Boundary.

Comment	These policies recognise that noise is a constant part of the environment and activities, but should be avoided or mitigated through best practice methods and avoiding co-location of incompatible activities.
Benefits	These policies reflect the intent of the objectives but are more specific on the course of action to achieve this. Provides some certainly for both new and existing activities on reasonable noise limits.
Costs	The monitoring and enforcement of noise is a cost placed on Council under s16 of the act. These policies will not increase this cost, but may make assessment of unreasonable noise easier as there is a clear course of action to remedy the noise effects. Potential costs for developers and land users to manage noise levels.
Effectiveness and Efficiency	These policies are effective and efficient as they create more precise guidance for decision makers.
Appropriateness	These policies are appropriate as they create more precise guidance for decision makers.
Risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods	The policies are based on the current noise guidance supported by the national and World Health Organisation policies and the Malcolm Hunt report on the Plan provisions. The information is more accurate than existing policies and acknowledges that noise is a by-product of all activities. There is also a specific policy to address rural activities and the reserve sensitivity effects on neighbouring noise sensitive environments.

3.6 PROPOSED RULES

The following methods have been identified as being suitable for achieving the relevant objectives and policies outlined above.

3.6.1 Rules

A review of the existing rules applying within the zones and Appendix D was completed. It is considered that these rules needed to be updated to reflect current world wide practices and measuring standards as well as be combined into one chapter of the Plan for ease of use. This is considered the most appropriate way to achieve the objectives and purpose of the Act.

17.4.1 Permitted Activities.

The following are permitted activities within the Air Noise Boundary (ANB) and Outer Control Boundary (OCB), unless otherwise stated:

a. All activities, other than Activities Sensitive to Aircraft Noise

17.4.2 Restricted Discretionary Activities.

The following activities are restricted discretionary activities throughout the District:

a. Events at Springvale Park or Cooks Gardens that do not comply with the performance standards for noise.

Council restricts its discretion to the following matters:

i. Preparation of an Operational Noise Management Plan by a suitably qualified and experienced acoustic consultant suitable to Council and containing:
   - Description of activity including layout and position of noise sources on site;
   - Description of sound sources including auxiliary sound sources
   - Hours of operation;
   - Proposed Management methods in line with the 'Best Practical Option' [BPO] defined under the RMA and related sections of the Act including s.16 and s.17 requirements;
   - Noise monitoring procedures;
   - Community consultation and liaison including a list of potentially affects residential sites.

b. Any permitted activity in a zone that does not comply with the noise performance standards in 17.5

Council restricts its discretion to the following matters:

i. The potential effects on human health;

ii. Limiting the sources, type, duration, timing or location of the noise;

iii. Preventing noise sensitive activities within certain distances of the source of the noise unless sound insulated;

iv. Requiring the use of the 'best practicable option' and regular maintenance of noise generating equipment or activities; and

v. Requiring the use of landscaping to mitigate the perception of noise.

17.4.3 Discretionary Activities

The following activities are discretionary activities throughout the District:

a. Any activity that produces noise that is not provided for as a permitted or restricted discretionary activity.

17.4.4 Non Complying Activities

The following activities are non-complying activities:

a. Activities Sensitive to Aircraft Noise in the OCB, not provided for as permitted, discretionary (refer to Rule 6.2.3(a)).or prohibited activities

17.4.5 Prohibited Activities

The following activities are prohibited activities for which no consent may be sought:

a. Activities Sensitive to Aircraft Noise within the ANB.

b. Activities Sensitive to Air Noise in the OCB that do not comply with the performance standard for internal noise in 6.7.2.

17.5 PERFORMANCE STANDARDS - Noise

17.5.1 General.

All Activities shall implement best practice options to minimise adverse noise effects.

Note: Council may require confirmation of compliance with any of these standards, from a suitably qualified and experienced acoustic expert.

17.5.2 Air Noise Overlays

a. Air Noise resulting from the operation of the Wanganui Airport shall not exceed a Day/Night(Ldn) level of:
   i. 65dBA outside the Air Noise Boundary; and
   ii. 55dBA outside the Outer Control Boundary

17.5.3 Noise Sensitive Activities (including dwellings).

New, altered or relocated buildings for a noise sensitive activity on any site within any commercial or manufacturing zones (excluding the Airport Enterprise Zone) or within 30 metres of a railway designation or within 50 metres of any portion of the state highway 3 designation to which with a signed speed limit exceeding 70km/hr applies shall comply with the following:

a. Any habitable space within a new or altered building shall be designed to achieve an insulation rating of no less than:

   $D_{2m,nT,w} + C_r > 30$ dB

   for the external building envelope of each habitable room when tested and verified in accordance with the following standards:

   i. AS/NZS ISO717.1:2004 Acoustics – Rating of sound insulation in buildings and of building elements – Airborne sound insulation.

   ii. ISO 16283-1:2014 Acoustics – Field measurement of sound insulation in buildings and of building elements – Part 1: Airborne sound insulation.

b. Compliance with this performance standard shall be achieved when the design and construction of each habitable room:
   i. accords with the exact construction specification and schedule as set out in 17.6.

or

ii. an acoustic design certificate is provided to Council by a suitably qualified and experienced acoustic engineer (suitable to Council) which confirms that when built to the recommended design and specification will achieve the minimum acoustic insulation standard of $D_{2m,nT,w}+ C_r > 30$ dB for the external building envelope of each habitable room.

or

iii. providing an acoustic design certificate prepared by an acoustic engineer acceptable to Council stating the outdoor noise level at the most affected exterior of the building containing the habitable room will be unlikely to exceed:

55dB LAeq(1hr) for rail traffic noise

57 dB LAeq(24hr) for road traffic noise

or

iv. If a landscaping or physical noise insulation solution is developed, an acoustic design certificate is provided to Council by a suitably qualified and experienced acoustic engineer (suitable to Council) which confirms that when built to the recommended design and specification will achieve the minimum acoustic insulation standard of $D_{2m,nT,w}+ C_r > 30$ dB for the external building envelope of each habitable room.

c. If the above standard cannot be met with open-able doors and windows then:

i. mechanical air ventilation shall be required in accordance with provisions of the New Zealand Building Code G4- Ventilation.

ii. At the same time as meeting this requirement, the sound of the system must not exceed 30 dB LAeq(30secs) when measured 1m away from any grille or diffuser.

iii. The occupant must be able to control the ventilation rate in increments up to a high air flow setting that provides at least 6 air changes per hour. At the same time, the sound of the system must not exceed 35 dB LAeq(30secs) when measured 1m away from any grille or diffuser.

17.5.4 Mining Explosives.

a. The measurement of blast noise (air blast) from explosives related to mining, quarry, mineral processing or construction activity shall be carried

out in accordance with AS 2187.Part 2:-2006 Explosives Storage and Use Part 2: Use of Explosives.

b. Blast noise (air blast) from explosives related to mining, mineral processing or construction activity shall not exceed a peak sound pressure level of 128dB.

c. Blast noise (air blast) shall be measured at any point within the notional boundary of any dwelling unit, other than a dwelling unit on the same site as the activity.

d. Neighbouring sites shall be advised of pending blasts, at least 48 hours and again at least 1 hour before any such blast.

e. Peak particle velocity from blast vibration measured on any foundation of an adjacent occupied building not connected with the site, or suitable location adjacent to the building, shall not exceed 25mm/second for commercial buildings or 10mm/second for dwellings and buildings of similar design.

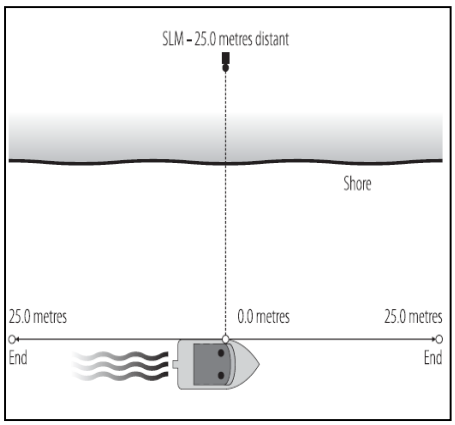
17.5.5 Telecommunication cabinets.

Noise emission levels shall comply with Clause 9 of the Resource Management [National Environmental Standards for Telecommunication Facilities] Regulations 2008.

17.5.6 Commercial Boating.

Sound emissions from commercial boating activities shall not exceed the following limits:

a. When the boat is “wide open throttle” the noise measured at 25 metres will be less than:
   77 dB L_{ASmax} for vessels to be operated between 0800 and 2000 hours;
   67 dB L_{ASmax} for vessels to be operated between 2000 and 0800 hours.



17.5.7 RURAL ENVIRONMENT.

All activities within the Rural Production, Rural Lifestyle or Rural General

zones shall comply with the following:

a. Noise emissions shall not exceed the following limits at any point within the notional boundary, unless provided for elsewhere in this section.

NOISE LIMIT **dB LAeq(15min)**			**LAFmax** **dBA**
Daytime 6.00am-7.00pm	**Evening** 7.00pm-10.00pm	**Night time** 10.00pm-7.00am	**Night time** 10.00pm – 6.00am
50	**45**	**40**	**75**

b. The operation of **gas guns** for the purpose of bird scaring shall be permitted provided that:

i. The gas gun device shall be located so that the maximum number of devices does not exceed one device per four hectares of land in any single land holding, except that in the case of a single land holding less than four hectares in area, one device shall be permitted.

ii. The device shall only be operated between 6.30 am and 8.00 pm on any day.

iii. The operation of the device shall be controlled so that the maximum number of discharges per time period does not exceed 6 within any 60 minute period.

iv. Sound emitted from the device shall not exceed L_{AE} 65 dB measured within the notional boundary of any rural dwelling or at any point within a residential zone. Sound levels shall be measured in accordance with NZS6801:2008 *Acoustics – Measurement of Sound*.

v. No device shall be placed in such a manner that any public place receives noise exceeding exceed L_{AE} 90 dB measured in accordance with NZS6801:2008 *Acoustics – Measurement of Sound*.

c. The operation of **avian distress alarms** for the purpose of bird scaring shall be permitted provided that:

i. The device shall not used within 300 metres of a notional boundary of any dwelling.

ii. The device shall only be operated between 6.30 am and 8.00 pm on any day.

iii. Sound emitted from the device shall not exceed LAeq(15 min) 50 dB when measured within the notional boundary of any

rural dwelling or at any point within a residential zone.

iv. No device shall be placed in such a manner that in any public place receives noise exceeding exceed L_{Amax} 80 dB.

d. The operation of **Frost Fans** for the purpose of protecting a crop from frost from bud burst to harvest shall be permitted provided that noise (excluding maintenance and testing) does not exceed 55 dBA Leq (15min):

i. At any point within the notional boundary of any noise sensitive activity; or
ii. At a distance of 300 metres from the device.

17.5.8 RESIDENTIAL ENVIRONMENT.

All activities within the Residential, Coastal Residential or Rural Settlement zones shall comply with the following:

a. Sound emissions from any activity shall not exceed the following limits at any point within the boundary of any other site zoned for residential, coastal residential or rural settlement purposes.

NOISE LIMIT dB LAeq(15min)			**LAFmax dBA**
Daytime 7.00am-7.00pm	**Evening** 7.00pm-10.00pm	**Night time** 10.00pm-7.00am	**Night time** 10.00pm – 7.00am
55	**45**	**40**	**75**

17.5.9 COMMERICAL ENVIRONMENT.

All activities within the Arts and Commerce, Riverfront, Central Commercial, Neighbourhood Commercial or Outer Commercial zones shall comply with the following:

a. Sound emissions from any activity shall not exceed the following limits:

	NOISE LIMIT dB LAeq(15min)			**LAFmax dBA**
	Daytime 7.00am-7.00pm	**Evening** 7.00pm-10.00pm	**Night time** 10.00pm-7.00am	**Night time** 10.00pm – 7.00am
Residential Zone	**55**	**45**	**40**	**75**

Other Zones	**65**	**85**

17.5.10 INDUSTRIAL ENVIRONMENT.

All activities within the Manufacturing zone shall comply with the following:

a. Sound emissions from any activity shall not exceed the following limits at any point within the zones specified:

	NOISE LIMIT dB LAeq(15min)			**LAFmax dBA**
	Daytime 7.00am-7.00pm	**Evening** 7.00pm-10.00pm	**Night time** 10.00pm-7.00am	**Night time** 10.00pm – 7.00am
Residential Zone	**55**	**45**	**40**	**75**
Other Zones	**65**		**55**	**75**

17.5.11 AIRPORT ENTERPRISE ZONE.

All activities within the Airport Enterprise zone shall comply with the following:

a. Sound emissions from any activity (excluding airport operational noise) shall not exceed the following limits when measured within the boundary of any land zoned Central Commercial, Outer Commercial or Neighbourhood Commercial:

NOISE LIMIT dBA(10min)		**LAFmax dBA**
Daytime 7.00am-10.00pm	**Night time** 10.00pm-7.00am	75 or L95 background sound level plus 30dBA, whichever is lower
65	**55**	

b. Sound emissions from any activity (excluding airport operational noise) shall not exceed the following limits when measured within the boundary of any land zoned for residential purposes:

NOISE LIMIT dBA(10min)		**LAFmax dBA**
Daytime 7.00am-6.00pm	**Night time** 6.00pm-7.00am	85 or L95 background sound level

55	**45**	plus 30dBA, whichever is lower

c. Residential Units Internal Noise.

New aircraft hanger dwellings shall:

i. be fitted with acoustic insulation to ensure that noise does not exceed Ldn 40 dBA in any habitable room with all doors and windows shut.

ii. require an Acoustic Design report from a suitably qualified Acoustic Engineer confirming that any new building is designed to meet the (i) above.

d. Aircraft Engine Testing.

i. No person shall operate an aircraft engine for the purpose of engine testing unless carried out in compliance with the following noise levels within the notional boundary to any dwelling in the rural zone or within the boundary of any residentially zoned site:

NOISE LIMIT dBA Leq(2 hours)		**LAFmax dBA**
Monday to Sunday 7.00am-10.00pm	**All other times**	All days 10.00pm-7.00am
55	**45**	**75**

ii. On each occasion of testing the date, time, duration and reason for the tests shall be retained in a log which must be supplied to Council if requested.

iii. Aircraft engine testing shall be measured in accordance with New Zealand Standard NZS 6801:2008 “Acoustics – Measurement of Environmental Sound”.

17.5.12 NATURAL ENVIRONMENT.

All activities within the Reserves and Open Spaces zone shall comply with the following:

a. Sound emissions from any activities (including amplified sound) shall not exceed the following limits:

	NOISE LIMIT dB LAeq(15min)	**LAFmax dBA**

	Daytime 7.00am-10.00pm	Night time 10.00pm-7.00am	Night time 10.00pm – 7.00am
Residential Zone	**50**	**40**	**75**
Other Zones	**60**	**40**	**75**

b. The following noise limits shall apply to events at the specified locations:

i. Events at Springvale Park:

	For up to 5 calendar days per year but for no more than 2 consecutive days			For up to ten calendar days per year	
	8.00am – 12.30am	12.30am – 8.00am		8.00am – 11.00pm	11.00pm – 8.00am
Residential Zone	55 dB LAeq(15min)	40 dB LAeq(15min)		55 dB LAeq(15min)	40 dB LAeq(15min)
	65 dB LAeq(15min) at 63Hz	50 dB LAeq(15min) at 63Hz		65 dB LAeq(15min) at 63Hz	50 dB LAeq(15min) at 63Hz
	55 dB LAeq(15min) at 125Hz	40 dB LAeq(15min) at 125Hz		55 dB LAeq(15min) at 125Hz	40 dB LAeq(15min) at 125Hz
Other Zones	60 dB LAeq(15min)	40 dB LAeq(15min)		60 dB LAeq(15min)	40 dB LAeq(15min)
	70 dB LAeq(15min) at 63Hz	50 dB LAeq(15min) at 63Hz		70 dB LAeq(15min) at 63Hz	50 dB LAeq(15min) at 63Hz
	60 dB LAeq(15min) at 125Hz	40 dB LAeq(15min) at 125Hz		60 dB LAeq(15min) at 125Hz	40 dB LAeq(15min) at 125Hz

ii. Events at Cooks Gardens:

	For up to 6 calendar days per year	
	8.00am – 11.00pm	11.00pm – 8.00am
Residential Zone	55 dB LAeq(15min)	40 dB LAeq(15min)
	65 dB LAeq(15min) at 63Hz	50 dB LAeq(15min) at 63Hz
	55 dB LAeq(15min) at 125Hz	40 dB LAeq(15min) at 125Hz
Other Zones	60 dB LAeq(15min)	40 dB LAeq(15min)
	70 dB LAeq(15min) at 63Hz	50 dB LAeq(15min) at 63Hz
	60 dB LAeq(15min) at 125Hz	40 dB LAeq(15min) at 125Hz

17.6 NOISE INSULATION TABLE

The schedule describes the minimum requirements necessary to achieve an external sound insulation level of $D_{2m,nT,w}+ C_r > 30$ dB

Building Element	Minimum Construction Requirement	
External Walls of Habitable Rooms	Stud Walls: • Exterior cladding:	20mm timber or 9mm compressed fibre cement sheet over timber frame (100mm x 50mm)
	• Cavity infill:	Fibrous acoustic blanket (batts or similar of a minimum mass of 9kg/m³) required in cavity for all exterior walls. Minimum 90mm wall cavity
	• Interior lining:	One layer of 12mm gypsum plasterboard. Where exterior walls have continuous cladding with a mass of greater than 25kg/m² (e.g. brick veneer or minimum 25mm stucco plaster), internal wall linings need to be no thicker than 10mm gypsum plasterboard.
	• Combined superficial density:	Minimum not less than 25kg/m² being the combined mass of external and internal linings excluding structural elements (e.g. window frames or wall studs) with no less than 10kg/m² on each side of the structural elements.
	Mass Walls:	190mm concrete block, strapped and lined internally with 10mm gypsum plasterboard, or 150mm concrete wall.
Glazed Areas of Habitable Rooms	Glazed areas up to 10% of floor area	6mm glazing single float
	Glazed areas between 10% and 35% of floor area	6mm laminated glazing
	Glazed areas greater than 35% of floor area	Require a specialist acoustic report to show conformance with the insulation rule.
	Frames to be aluminium window frames with compression seals.	
Skillion Roof	Cladding:	0.5mm profiled steel or 6mm corrugated fibre cement, or membrane over 15mm thick ply, or concrete or clay tiles.
	Sarking	17mm plywood (no gaps).
	Frame:	Minimum 100mm gap with fibrous acoustic blanket (batts or similar of a minimum mass of 9kg/m³).
	Ceiling:	Two layers of 10mm gypsum plasterboard (no through ceiling lighting pementrations unless correctly acoustically rated). Fibrous acoustic blanket (batts or similar of a minimum mass of 9kg/m³).
	Combined superficial density:	Combined mass with cladding and lining of not less than 25kg/m² with no less than 10kg/m² on each side of structural elements.
Pitched roof (all roofs other than skillion roofs)	Cladding:	0.5mm profiled steel or tiles, or membrane over 15mm thick ply.
	Frame:	Timber truss with 100mm fibrous acoustic blanket. (batts or similar of a minimum mass of 9kg/m³) required for all ceilings.
	Ceiling:	12mm gypsum plaster board.
	Combined superficial density:	Combined mass with cladding and lining of not less than 25kg/m².
Floor areas open to outside	Cladding:	Under-floor areas of non-concrete slab type floors exposed to external sound will require a cladding layer lining the underside of floor joists of not less than 12mm ply.

	Combined superficial density:	Floor to attain a combined mass not less than 25kg/m² for the floor layer and any external cladding (excluding floor joists or bearers).
External door to habitable rooms	Solid core door (min 25kg/m²) with compression seals (where the door is exposed to exterior noise)	

Comment	These are the updated standards for each zone combined into one chapter, but ordered the same as the chapters in the Plan. The existing provisions are generally working effectively so changes are targeted to noise where issues have arisen or to improve efficiently to process resource consents where necessary and to take account of changes to best practice noise measurement methods. Restrictions will apply to noise that breach the maximum limits but are still an activity provided for by the zone. Noise breaches from activities not provided for by the zone are a Discretionary Activity as the noise could have greater adverse effects than a permitted noise source of the same measured level. The requirement to insulate for noise sensitive activities is expanded from just applying in the commercial zones to include the commercial and industrial zones as well as within 30 metres of a railway or state highway designation. This is because noise sensitive activities are permitted in all these areas, however as they are predominately used for production, freight and entertainment, there is a high probably of reserve sensitivity effects from noise sensitive activities. The 30 metre distance comes from the operative rule in the Residential Zone that requires noise insulation for a noise sensitive activity within 30 metres of a railway line. The state highways produce a similar adverse effect that must be avoided or reduced. The Transport Agency's *Guide to the management of reverse sensitivity effects on the state highway* proposes buffer areas where buildings are restricted in the rural zones and requires noise insulation in the urban areas. This proposed rule meets these requirements in a similar manner by expanding the existing rule rather than develop additional noise measurement systems. A table provided by Malcolm Hunt, explaining how to achieve the noise insulation minimum level is included at the end of the chapter. New provisions for mining explosives, telecommunication cabinets, commercial boating, gas guns, frost fans and avian distress alarms address current gaps in the operative Plan provisions that have resulted in unnecessary enforcement action in the past. The vibration provisions have been altered to removed the superseded New Zealand standard and the remaining words are in accordance with the 2003 standard, which will be implemented under section 16 of the Act or the Health Act 1956.

Benefits	**Environmental –** Specifically sets insulation standards for noise sensitive activities in order to address the noise environment in particular areas. Specifically addresses the noise issues for each zone based on the expected ambient noise of the area and potential activities. The introduction of limits for Lmax will result in a quieter environment from impulsive sounds. **Economic –** There are no employment/growth potential benefits to be addressed, as this is a continuation of an existing situation, but with contemporary standards. Rules are more specific and apply best practice with consistency which will assist Plan users and minimises costs.
	Social & Cultural – Specifically addresses the types of noise that Council has a duty to control as well as identifies how the noise will be measured. This provides certainty to the community and users of the Plan.
Costs	**Environmental & Economic–** Minimal as this is a continuation of an existing clear message about noise and status quo is retained in relation to existing activities with only minor costs to new activities.
	Social & Cultural - Continuation of the clear message about noise sensitive development in noise prone areas by extending the insulation requirements beyond the commercial zones.
Effectiveness	The new measuring standards for noise and insulation will allow staff and the public to address noise issues with more certainty as they are in accordance with current best practice. Specifying areas which are impacted by or impact on the noise risk is effective. This enables a targeted consideration of the effects of particular proposals and the potential to consider alternative locations. This is highly effective as it is well understood and accepted by the affected parties and the community having been in place for a number of years. Updating how noise is measured ensures that Council is applying best practice as recognised by the Environment Court.
Efficiency	Enabling activities and specifying areas not impacted by or impacting on the noise environment is efficient and avoids unnecessary consent processes and ensures that resources are efficiently targeted to the activities with implications for sustainable management. Efficient as the small cost of the review will protect the integrity of the noise standards and its purpose into the next decade.
Appropriateness	The rules allow for development while ensuring that environmental effects are avoided, remedied or mitigated. This is considered to be an appropriate approach.
Principal Alternative	The principal alternative would be to increase or reduce the level of restriction. However no parties have indicated that the current regulation is less than effective or should be improved

	beyond updating how the noise is measured and providing for new technology.

3.7 PROPOSED ACILLARY CHANGES

With the proposed changes to the rules, the Definitions will need to be altered to be consistent. The following changes have been identified as being suitable for achieving the relevant objectives and policies outlined above.

Commercial Boating Activities: means activities involving the use of the surface of water for boating operations undertaken for hire or reward by means of any type of powered vessel or equipment designed to be used for floatation and navigation on or through the surface of water, and includes any aircraft whilst such aircraft is on the surface of the water.

Habitable space/room means a space used for activities normally associated with domestic living, but excludes any bathroom, laundry, water-closet, pantry, walk-in wardrobe, corridor, hallway, lobby, clothes-drying room, or other space of a specialised nature occupied neither frequently nor for extended periods.

LAFmax: means the maximum noise level, measured in decibels, which is permitted at any time.

L10 is that sound level which is equalled or exceeded 10% of the total measurement time.

L95 is that sound level which is equalled or exceeded 95% of the total measurement time.

LAeq: means the time-averaged sound level (or equivalent sound level) that has the same mean square sound pressure level as the time-varying sound level under consideration.

Noise Sensitive Activities: means buildings or parts of buildings used for, or able to be used for the following purposes:

- Residential activity; or
- Community activity; or
- Marae activity.

Noise means unwanted sound or vibration affecting people. For the purposes of this Plan, the following sounds and vibrations are exempt from this definition provided that best practicable options are implemented to minimise noise:

a. Vehicles being driven on a road (within the meaning of Section 2(1) of the Transport Act 1962),

b. All reasonable noise arising from within the designated rail corridors as long as it is generated for “Railway Purposes”

c. Crowd noise at a park, reserve or any land zoned as recreation, racecourse, conservation and amenity or showgrounds.

d. Livestock noise and noise from mobile rural machinery in the rural zones.

e. Non-commercial boating activities on the Whanganui River.

f. Emergency sirens.

Noise event means an event that is a cumulative maximum period of up to seven hours on any day, during which time the noise generated by a temporary event exceeds the normally applying District Plan noise limits.

Notional Boundary: means a line 20 metres from the exterior wall of a dwelling or the legal boundary where this is closer.

Reverse sensitivity: The conflict between incompatible land uses where a newly established activity complains about the effects on amenity (environmental qualities i.e. levels of noise) from a legally established pre-existing activity.

Comment	The definitions section defines the current practices and helps guide compliance with the rules for noise. The list of exemptions from the noise provisions was previously in Appendix D. It has been included in the definition for ease of Plan use. The list of noise exemptions has been reduced to only noise from those activities that it is unreasonable to control specific with noise limits.
Benefits	**Environmental & Economic –** The Plan is clear and enables people to make clear decisions based on an established set of development constraints.
	Social & Cultural - continuation of a clear message in the Plan about how to achieve compliance.
Costs	**Environmental & Economic –** Existing costs for owners in the form of loss of development potential are retained with the Plan Change. However in reality the owners still have a duty to avoid unreasonable noise, so the proposed rules will help them achieve this.
	Social & Cultural – There will be less confusion as the definitions are improved to include current working practices.
Effectiveness	Better definitions of measurement and how to insulate to an acceptable standard will make this Plan more effective as there will be less confusion.
Efficiency	Better definitions of measurement and how to insulate to prevent excessive noise provides certainty for land owners. It avoids unnecessary consent processes and ensures that resources are efficiently targeted to the activities with implications for sustainable management.
Appropriateness	This approach is mirrored in plans throughout the country as well as in the national standards for noise measurement and the World Health Organisation. Therefore it is considered appropriate.

Principal Alternative	The main alternative to these definitions and insulation guidance would be the status quo which leaves the public more confused as to their rights and a legal uncertainly which could prove costly to Council.