

**In the Environment Court
I Mua I Te Kōti Taiao O Aotearoa**

Under the Resource Management Act 1991 (**RMA**)

and in the matter of the direct referral of an application for resource consents by
Meridian Energy Limited in respect of the proposed Mt Munro wind farm under section
87G of the Resource Management Act 1991

Meridian Energy Limited
Applicant

and

**Tararua District Council, Masterton District Council, Manawatū-
Whanganui Regional Council and Greater Wellington Regional Council
(Councils)**
Consent Authorities

and

s 274 Parties

**Statement of Reply Evidence of Rebecca Anne Foy on behalf of Meridian
Energy Limited**

6 September 2024

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EXECUTIVE SUMMARY

1. My full name is Rebecca Anne Foy. I am a Director of Formative, an independent consultancy, specialising in social, economic and urban form issues.
2. I hold the qualification of Master of Arts (Hons in Geography) and am a member of the New Zealand Association for Impact Assessment (**NZAIA**), the International Association of Impact Assessment (**IAIA**) and the Resource Management Law Association (**RMLA**). I have 23 year's consulting and project experience in New Zealand.
3. I have prepared this statement of rebuttal evidence on behalf of Meridian Energy Limited (**Meridian**) to describe the likely social effects arising from the proposed wind farm at Mt Munro in northern Wairarapa. My engagement was requested in response to requests made at (and before) mediation, and in my evidence, I focus on matters raised in the statements of evidence filed by the s274 parties.
4. Social wellbeing and effects on people and communities' ability to provide for their social, economic, and cultural wellbeing and health and safety is an important aspect of Part 2 of the RMA.
5. Social impacts refer to changes to individuals and communities resulting from proposed changes that will alter the day-to-day way in which they live, work, play, relate to each other, organise to meet their needs, and generally participate as members of society.
6. The Social Impact Assessment process provides information to decision makers and affected parties when planning for change, concentrating on who is affected, where, when and how, and what measures can be used to improve the outcomes across different timeframes. For large scale infrastructure projects, social wellbeing effects can be generally experienced in the following four key timeframes: the planning and consenting phase, the construction period, the operational period, and if relevant during decommissioning.
7. Meridian did not engage a social impact expert earlier in the planning stage because it considered that wind farms often cause concern

before and during construction but usually have a limited 'social' footprint for local communities once operational, other than potential access to its 'community fund', additional jobs, some limited additional traffic movements, engagement via ongoing conditions as a means of providing community feedback, and that other effects of the Project (e.g. noise and visual amenity) are addressed in subject experts' evidence. Meridian also noted that this understanding is aligned with guidelines issued by the New Zealand Wind Energy Association.

8. I agree that nearly all social effects have been considered in the expert's assessments and evidence. The only social effect I consider has not been sufficiently addressed is mitigating stress and anxiety and social division arising from the planning and consenting process.
9. I understand that Meridian's project team was advised that concern about potential effects should only be given weight if they are reasonably based on real risk, that discomfort due to the potential presence of a new facility does not in itself amount to an adverse effect that can be considered under the RMA, and that concerns about the consenting process are not properly characterised as effects of the activity for which consent is sought.
10. The social wellbeing effects arising from the Project are likely to be mainly positive, including at national, regional and local geographies. At the national level, additional renewable energy will be supplied helping the country to achieve carbon emission reduction goals and providing more resilient supply of electricity to the industries and social service facilities that provide employment and access to goods and services. Positive social wellbeing effects will arise in the local and regional communities through increased income and employment, including by enabling the farmers of the Project Site to continue to remain financially viable and stay within the community, and funding community projects through the proposed Community Fund which will be provided annually for the life of the Project.
11. Mitigation measures that address the key negative social wellbeing effects that could arise from the Project, particularly during construction, have been proposed in conditions and will be developed

in management plans as more information becomes available during the detailed design stage. The subject matter experts have provided input into the conditions. I have reviewed the proposed conditions, and consider that they require identification and management of potential effects on social wellbeing, so that those effects will be acceptable.

12. There will be opportunities for ongoing consultation with the community, and there is a proactive framework established in the conditions for identifying and addressing social wellbeing effects that may arise during construction and operation. It is important that community members utilise these opportunities to express their concerns and opinions to Meridian.
13. Despite the frustration and lack of trust that has been expressed by the Society, the independent facilitation of the Stakeholder Liaison Group (**SLG**) is an appropriate mechanism to ensure that all issues and concerns that could impact on social wellbeing are given adequate consideration when developing management plans. The SLG also provides an opportunity to enhance the social capital related to the construction and operational phases of the Project.
14. In my opinion, the proposed wind farm will have significant positive effects for the local, regional and national communities and the consent conditions provide appropriate opportunities for ongoing consultation to manage and mitigate any adverse social wellbeing effects that may be experienced at a local level.

INTRODUCTION

15. My full name is Rebecca Anne Foy.
16. I hold the qualification of Master of Arts (Hons in Geography) from the University of Auckland. I am a member of the NZAIA, the IAIA and the RMLA.
17. I am a Director of Formative, an independent consultancy, specialising in social, economic, and urban form issues. Prior to this, I was an Associate Director of Market Economics Limited for three years, and employed there for 20 years.

18. I have 23 years' consulting and project experience, working for commercial and public sector clients. I specialise in social impact assessment, understanding the form and function of urban economies, and the evaluation of outcomes and effects.
19. I have applied these specialties in studies throughout New Zealand (**NZ**), across most sectors, including natural hazards, freshwater, urban transformation, housing, retail, transport, urban and rural form, land demand, commercial and service demand, and local government.
20. I have been engaged by Meridian to consider the likely social effects arising from the proposed wind farm at Mt Munro in northern Wairarapa (the **Project**). My engagement was requested in response to statements of evidence filed by the s274 parties which raise concerns about a number of social effects and are critical of the fact that the application for the Project did not include a social impact assessment.
21. My understanding is that during mediation between the parties, Meridian agreed to consider engaging a professional to assess the social effects of the Project, and I was subsequently engaged to undertake this work in July 2024.
22. This statement provides my response to matters raised in the evidence of the s274 parties, and describes the methodology and findings of my assessment of the likely social effects arising from the Mt Munro Wind Farm Project.
23. In preparing this evidence I have read:
 - (a) Meridian's Assessment of Environmental Effects¹, and all of Meridian's evidence in chief and mediation RFI letters,
 - (b) All submissions received on the application,
 - (c) The Council's s87F Report,

¹ Incite, May 2023. Assessment of Environmental Effects on behalf of Meridian Energy Limited – Mt Munro Wind Farm Project

- (d) Evidence lodged by the s274 parties,
- (e) The Council's Evidence in Chief,
- (f) Joint Witness Statements (**JWS**), and
- (g) Literature relating to the social effects of wind farms in New Zealand and internationally.

24. As part my assessment I conducted a site visit to Mt Munro and the general area on 13 August 2024. There I conducted interviews with people living near the Project site, including some s274 parties. This is set out in more detail in my methodology section below.

CODE OF CONDUCT

25. I confirm that I have read the 'Code of Conduct for Expert Witnesses' contained in the Environment Court Consolidated Practice Note 2023. I agree to comply with this Code of Conduct. In particular, unless I state otherwise, this evidence is within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

SCOPE OF EVIDENCE

26. Social wellbeing and effects on people and communities' ability to provide for their social, economic, and cultural wellbeing and health and safety is an important aspect of Part 2 of the RMA. I have been asked to provide rebuttal evidence in reply to evidence on the social impacts arising from the Project and to address concerns raised by section 274 parties about Meridian's failure to provide an assessment of effects on social matters.

27. In this evidence I:

- (a) Summarise the methodology and key considerations for a social impact assessment;
- (b) Describe the key characteristics of the social environment and key communities that will be affected by the Project;

- (c) Describe the social wellbeing issues that are likely to arise from the Project;
- (d) Summarise the social impact evidence and reporting that is part of the application and applicant's evidence to date;
- (e) Note and comment on the position regarding social impacts outlined in the s87F report;
- (f) Consider and respond to issues relating to social impact raised in the s274 and Council evidence; and
- (g) Comment on proposed conditions of consent which relate to potential social impacts.

28. The key conclusions of my assessment are:

- (a) If constructed, the proposed wind farm will generate positive wellbeing effects for the nation, through renewable energy provision, achieving carbon reduction goals and providing a more resilient supply of electricity. Regional and local positive social wellbeing effects will arise through increased income and employment, providing the Project site landowners the opportunity to diversify their farming operations, and funding of community projects which are aligned with the communities' values and Meridian's Community Fund objectives.
- (b) Negative effects are also likely to arise during the construction and operational phase of the project and those effects will be managed and mitigated through conditions and management plans.
- (c) It is apparent that there have also been some negative effects on wellbeing due to perceptions of the potential effects of the Project, as well as stress and anxiety arising in the planning and consenting stage.
- (d) Meridian has undertaken consultation and engagement with the community and has been proactive in responding to the Hastwell

community's desire to have other types of engagement undertaken. Mr Bowmar acknowledges that Meridian has not been able to resolve all outstanding matters, and this is not unusual for many large-scale projects.

- (e) I was not involved in the consultation, but from my review the process appears to have been robust, and responsive to the communities' requests for further information and additional opportunities to engage with Meridian. From the interviews I have undertaken there are conflicting opinions about the adequacy of the consultation, with individuals believing that the consultation was either very good (respondents that were either neutral or in support of the proposal) or very poor (those opposed to the proposal). For some community members who are opposed to the Project it is apparent there is a high degree of mistrust in Meridian, which they say stems from engagement that started back in 2009 but also reflects experiences they have had in the latest rounds of engagement. This is a concern that has arisen during, and relates to, the planning and consenting stage for the Project.
- (f) Meridian considers it has identified and assessed the key social effects of the project in subject experts' evidence and addressed how these are to be managed in the proposed conditions. Mr Anderson's RFI response letter clearly describes Meridian's position which is aligned with the New Zealand Wind Energy Association's (**NZWEA**) guidelines. I agree that apart from the potential for stress and anxiety to arise during construction and operational phases, all of the social effects that may arise during the construction, operational and decommissioning stages of the Project have been considered in the expert's assessments and evidence. Appropriate mitigation measures have been proposed in conditions or will be developed in management plans in the future. This management framework anticipates ongoing consultation with the community and providing a proactive approach to addressing issues that may arise during construction and operation. Facilitation of the Stakeholder Liaison Group is an

essential mechanism to enable all parties to have their concerns raised and appropriate solutions explored.

- (g) Meridian has considered the social wellbeing effects that have arisen during the planning and consenting stage, such as the impact on individuals' mental health and social connections. My understanding is that concern about potential effects of a project should only be given weight where it is reasonably based on real risk; and that discomfort about the presence of a new facility does not in itself amount to an adverse effect that can be considered under the RMA.
- (h) It is evident from my interviews, s274 parties' evidence, and submissions that there are some perceived negative social wellbeing effects occurring currently in the planning and consenting phase, and for some individuals this reflects their response to or understanding of engagement that occurred in the past.
- (i) The planning and consenting stage of the Project has had a long-term and ongoing effect on some people's frustration and anxiety levels, and if the Project is approved, there are likely to be lingering effects due to frustration created during construction (potentially reinforcing people's negative opinions of the project), and even once operational, as the presence of the turbines may be enough to cause some mental anguish for some parties.
- (j) For most parties, the proposed Community Fund will help to generate positive social outcomes by investing money back into projects that the community values. That investment is expected to be available to parties on both sides of Mt Munro, and could include things such as riparian planting and trapping, which many submitters have emphasised are important goals.
- (k) For some neighbours continued proactive and responsive engagement will be required to help address concerns and manage tensions and stress arising in the community. Due to the mistrust in Meridian by some parties who are likely to have visual

impacts arising on their properties, it is important that such discussions are facilitated, to ensure that positive outcomes are achieved for all participants.

- (l) Meridian's experts have concluded that adverse effects on directly affected persons and the community during the construction and operations phases are able to be mitigated and/or are not as significant as they are perceived to be by the s274 parties.
- (m) Overall, the Project is assessed as unlikely to give rise to significant adverse social effects at a local level, and will generate a range of positive social wellbeing effects for the communities of Eketāhuna and Hastwell as well as more broadly.

THE PROPOSAL

- 29. Meridian is applying for a resource consent to construct, operate and maintain a new wind farm on Mt Munro, south of Eketāhuna. The site is predominantly within Tararua District and Manawatū-Whanganui region and a small eastern portion of the site is located within Masterton District and Greater Wellington Region. It is comprised of 897.5ha land that is owned by five separate parties.
- 30. The key features of the proposed windfarm and the range of construction works being undertaken are described primarily in the evidence in chief of Messrs Anderson and Bowmar.

SOCIAL IMPACT ASSESSMENT METHODOLOGY

- 31. I first describe what social impacts are, and how they are appropriately assessed.
- 32. Social impacts refer to changes to individuals and communities resulting from proposed changes that will alter the day-to-day way in which they live, work, play, relate to each other, organise to meet their needs, and generally participate as members of society. Social impacts occur across different timeframes. They can either be predicted before an action takes place, or exhibited once a change has occurred.

33. It is important to note that people respond differently to change based on their own experiences and appetite for change/making trade-offs, and for this reason a continuum of impacts can be experienced by individuals where one person may experience significant impacts, and another may be much less or not at all affected by the same issue.
34. The SIA process provides information to decision makers and affected parties when planning for change, concentrating on who is affected, where, when and how, and what measures can be used to improve the outcomes across different timeframes.
35. A SIA includes analysis of the intended and unintended consequences (both positive and negative) of resource use and planning decisions on people and communities, the duration and timing of impacts (short and long term), and the extent of social impacts (number of people, their characteristics and the areas affected).
36. The basic steps for SIAs include²:
- (a) Scoping a proposal so it focuses on the main issues of concern to the community and the key elements of the likely changes,
 - (b) Understanding the social baseline prior to changes, including understanding important values in the community,
 - (c) Estimating the likely social wellbeing effects by comparing the current and future situation after a change comes into effect,
 - (d) Making recommendations about social impact management in terms of which aspects can be monitored and managed in the future to avoid, remedy, or mitigate potential social effects.
37. The IAIA provides a detailed list of the social impacts that should be covered by SIAs (Appendix 1). Typically, when I conduct SIAs I group those effects into the following eight key social wellbeing categories as a way of reducing the overlap between each of the IAIA effects, and to

² Taylor, C.N., and Mackay, M (2022). Social Impact Assessment Guidelines for Thriving Regions and Communities. Building Better Homes Town and Cities, Wellington, New Zealand.

provide a better structure for summarising the effects. The categories I typically use are:

- (a) Environment: outcomes relate to the consequences of changes to the physical and natural environment for people and communities, and the ability to govern and sustain natural systems in culturally appropriate ways.
- (b) Livelihoods: effects relate to people's and households' access to places of work, business opportunities, investments (including homes), and incomes, including businesses' ability to establish and operate in markets and the resulting pattern of employment and incomes.
- (c) Health and safety: outcomes relate to people's ability to live healthy and safe lives, including the associated effects on physical and mental health.
- (d) Social cohesion: relates to the ability of people to form inclusive and cohesive social and cultural relationships in spatially defined places and to participate in decision-making. The cohesiveness of communities reflects a sense of belonging and place, physical connectedness and accessibility, and the ability to establish and maintain social relationships.
- (e) Social equity: relates to the distribution of positive or negative effects on different types of households and social groups, including vulnerable people and Māori.
- (f) Access and connectivity: outcomes include the ability to obtain goods, services (health, education, training), employment, and consumption (retail, business activity), and social life by being able to move around and between communities.
- (g) Recreation: the natural environment is often used for recreational activities and there are many long-term physical and mental health benefits that arise from recreation, including building social connections.

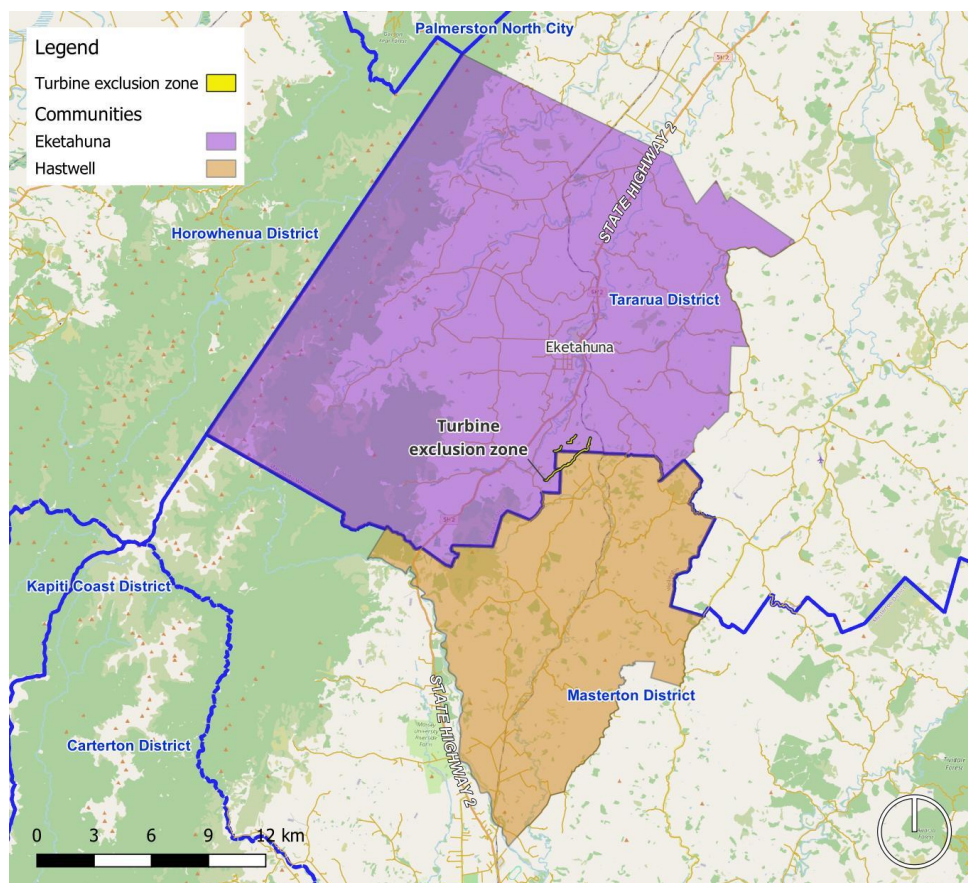
(h) Urban or rural form: refers to the way places are laid out in relation to land use activities and topography.

38. The relevance and level of importance of each of these categories is context specific and varies between proposed changes or projects. For this evidence, due to many of the social effects already having been identified and considered by subject area experts in their assessments, I have looked at the topic area effects assessed with a view to identifying any gaps, rather than describing effects using my usual approach. I note it is common for social impact experts to work collaboratively with other subject information experts and draw on their assessments and information for large projects when considering social wellbeing effects.
39. For large infrastructure projects, social wellbeing effects are likely to arise across the following four time periods: pre-construction/planning, construction, operational, and decommissioning. I have structured my evidence to assess the adequacy of the assessment of social effects already undertaken by other experts for each of these periods.
40. I visited Eketāhuna and Hastwell on 13 August 2024 and spoke to a number of community members, including representatives from the Hastwell Mt Munro Protection Society Incorporated (**Society**) and neighbouring properties, as well as a landowner, at short notice. I appreciate the willingness of those parties to make themselves available to meet in person and host me at their properties so that I could understand a range of perspectives about the proposal.
41. Due to social tensions already present in the community as a result of differing views (i.e. opposition and support) about the Project, the community's small size, and the need for the community to respect each other and continue to function, I have not named the parties or numbers of people that I have talked to. This allows me to maintain confidentiality and not add to this social tension which I describe later in my evidence.

DESCRIPTION OF THE SOCIAL BASELINE

42. Meridian's AEE describes the primary use of the adjoining and surrounding land to the Project site as being used for pastoral farming (sheep and beef). There are other land uses close by, including rural residential housing, the 110kV Mangamaire to Masterton national grid transmission line to the west, State Highway 2 (SH2), Pūkaha National Wildlife Centre at Mt Bruce, the Wairarapa railway line, and quarrying activities. The township of Eketāhuna is approximately 5km to the north of the Project site.
43. For the purposes of this assessment, I briefly describe below the communities based on my understanding of how local residents perceive the communities to be defined, while more detail is provided in Appendix B. To understand the demographics of those communities I have aggregated Statistics NZ's statistical areas into two communities I refer to as Eketāhuna and Hastwell (Figure 1).

Figure 1: Community definitions



44. The topography, the ranges and hills and roading layout, form natural breaks in the local community. There are two local social areas of interest (Eketāhuna and Hastwell), and the other wider communities affected by the proposals include the Greater Wellington and Manawatū-Whanganui Regions and New Zealand.
45. The Eketāhuna community extends generally to the north and east of the wind farm site, taking in the town of Eketāhuna, and extending either side of State Highway 2, and as far west as the foothills of the Tararua Ranges. The Eketāhuna community is completely within Tararua District. The Hastwell community lies to the south of the wind farm, and east of the ridge line on which the wind farm is proposed, and is completely within Masterton District.
46. Both communities are predominantly rural in nature, with the largest settlement being Eketāhuna, with a population of around 530 people in 210 households (2023 estimate), which has grown little since the 2018 Census (17 households). The Hastwell community has grown by 20 households over the same period, up to 200 in 2023 (+11%). Other settlements in the communities are much smaller, and most include fewer than 20 dwellings. Most (nearly 70%) of the communities' population is widely dispersed over a large rural area.
47. There has been a marked decline in employment in both communities in the last two decades. Since 2000 there are 200 fewer jobs in Eketāhuna (-34%) and 105 fewer in Hastwell (-53%), with the largest decreases in the primary sector.
48. These changes were discussed in some of the interviews, and it was expressed to me that while once upon a time Eketāhuna was a bustling social hub, that is no longer the case. However, it is evident that there is a strong sense of community, and examples include the community working together to ensure that the 4 Square did not close, and when the service station had a fire, some locals invested money to help get it back up and running. There is strong loyalty to shop owners and people try to support local businesses as much as they can to keep them operating. Some families have been heavily involved in giving back to the community. Many of the social facilities have struggled recently and

their roles have changed. An exception is the Golf Club which is performing well and provides a good social space.

49. Road access to and through the communities is dominated by SH2, which runs north-south through the Eketāhuna community, and skirts the western side of the Hastwell community. There are also local roads through the communities, although the only road connection between the communities is Opaki-Kaiparoro Road just south of the wind farm site.
50. Appendix B provides more description about the demographic and business composition of each of the communities in comparison to district and national trends. It is important to note that Statistics NZ statistical areas have been used to define the communities and in rural areas they can be larger spatial areas due to the small populations residing there.
51. Manaaki Whenua - Landcare Research conducts the biennial “Survey of Rural Decision Makers” (**SRDM**), which is one of the largest and longest-running rural surveys in the world. The survey compiles responses that are used to inform research and policy advice. The SRDM shows that attitude, values and concerns across New Zealand’s rural sector include concerns for the environment, having strong connections to the land, and rural people feeling disconnected and underappreciated by other New Zealanders.
52. Some of the key findings of the SRDM³ that are relevant to the proposed windfarm, include that confirm farmers feel a strong connection to and responsibility to look after the land:
 - (a) Most farmers, foresters, and growers describe their own environmental performance as being very good – much higher than the environmental performance of others in their region.⁴

³ <https://www.landcareresearch.co.nz/discover-our-research/environment/sustainable-society-and-policy/survey-of-rural-decision-makers/>

⁴ Key results sheet 4: Environmental outcomes

- (b) Farmers mostly focus their environmental management on improving the health of their soil and waterways, and reducing soil erosion.⁵
 - (c) More than half of respondents aged 65+ have no intention of retiring within the next 10 years. Of those planning to retire, 24% plan to pass their rural property on to a successor.⁶
 - (d) Regulations relating to climate change and the environment are the greatest source of stress for farmers.⁷
 - (e) Regional and local councils and unitary authorities are trusted less than other organisations.⁸
53. Data from lifestyle block owners (**LBO**) shows some differences from other rural residents, including:
- (a) Only 35% of lifestyle blocks are GST registered, 80% have their own livestock, and 17% graze livestock, indicating that most LBOs are not reliant on income from their block.⁹ Only 10% of lifestyle blocks generate meaningful production, with most producing little to none.¹⁰
 - (b) Lifestyle block owners are more likely to trust local and regional councils.¹¹
 - (c) Lifestyle blocks can impinge on the rural production activities of neighbouring properties through reverse sensitivity effects, which

⁵ Key results sheet 4: Environmental outcomes

⁶ Key results sheet 5: Future intentions

⁷ Key results sheet 1: Rural regulation

⁸ Key results sheet 2: Sources of advice

⁹ Information sheet: LBOs

¹⁰ "Big Potential. Small Blocks: A concept to unlock the production potential held in New Zealand Lifestyle Blocks", David Eade, Kellogg Rural Leadership Programme (2019)

¹¹ Information sheet: LBOs

can give rise to a lack of social cohesion and connection in rural areas.¹²

- (d) Most LBOs value living in a rural environment and having peace and quiet,¹³ and are less likely to aim to achieve a return on their property investment (29% of LBOs) than other farmers (52%). Fewer LBOs aspire to have better environmental stewardship (60% cf. 74% for other farmers).¹⁴

54. The SRDM also surveys rural wellbeing, using the World Health Organisation (**WHO**)-5 Index, a common measure of wellbeing internationally. Results of the wellbeing part of the survey include that:

- (a) Farmers have a slightly poorer wellbeing than the general population, and similar risk of mental illness and depression.¹⁵ Primary causes of stress include regulatory pressure, time-work pressure, and finances. LBOs have greater wellbeing than the general population.
- (b) The dominant opinion among farmers is that current environmental standards to which their industry is subject are set at a high level, but that their practices match up to what is required under those standards.¹⁶
- (c) 74% of farmers aspire to have better environmental stewardship, indicating the environment is an important concern for them.¹⁷

¹² Andrew, R., & Dymond, J. (2012). Expansion of lifestyle blocks and urban areas onto high-class land: an update for planning and policy. *Journal of the Royal Society of New Zealand*, 43(3), 128–140.

¹³ Eade, 2019

¹⁴ Factsheet: Aspirations for the land

¹⁵ Information sheet: Rural well-being

¹⁶ Information sheet: Aspects of farm environmental management

¹⁷ Information sheet: Aspirations for the land

55. A Massey University survey¹⁸ found that while people from both rural and urban backgrounds value farming's contribution to the country:
- (a) Farmers feel they have a reasonable understanding of public concerns but that the public does not fully understand the issues farmers face.
 - (b) Rural people perceive greater disconnection than urban people.
56. These survey results and demographic information provide a useful context to help to interpret the social effects of the Project on these largely rural communities, including those living on lifestyle blocks.

MERIDIAN'S ASSESSMENT OF SOCIAL EFFECTS

57. Meridian's initial position was that the key potential social effects of the proposed Project have been considered by subject matter experts for specific effects, will be appropriately managed by conditions, and therefore a separate SIA was not required. A number of submitters, including the Society, have repeatedly asked that a SIA be undertaken.¹⁹
58. The 87F Report indicated that no assessment of health and social wellbeing effects was provided by Meridian, aside from a brief mention about the positive benefits of the Power Up Community Fund.²⁰
59. Meridian provided additional information to the Councils about social and health wellbeing effects in Appendix 4 of their RFI#2 Response 3 letter (23 February 2024). The letter prepared by Mr Anderson summarised the submissions and highlighted the positive and negative issues that were raised. He referred to the NZWEA guidance

¹⁸ Conducted as part of the Diverse Experience of Farming project, <https://ourlandandwater.nz/wp-content/uploads/2023/10/Diverse-Experiences-of-Farming-Public-Short-Summary-MU-Oct-2023.pdf>

¹⁹ #8 Chris Clarke, #11 Ian John Maxwell, #13 Hastwell Mt Munto Protection Society Inc, #45 Mr Hamilton, #53 Corrinne Oliver.

²⁰ Section 87F Report – Mount Munro Windfarm Application of Lauren Edwards, Joshua Pepperell and Damian McGahan – Planning 15 March 2024. Para 667

document²¹ as a basis for the assessment of social effects and referenced subject area expert assessments of effects.

60. Mr Anderson acknowledged that people's opinions on wind farms vary widely. He also acknowledged that people's attitudes can change over time, explaining that often those who were initially opposed can view the completed project more favourably or less negatively. He confirmed that a variety of opinions were expressed during the community engagement.
61. Mr Anderson's letter stated "*we do not anticipate any material adverse social effects will arise from the proposal, additional to effects arising in relation to direct effects such as visual amenity, noise and construction traffic. There will be a range of positive economic outcomes which are likely to contribute to social and community wellbeing.*"
62. The NZWEA document states that "*inevitably some people in a community will benefit from a proposal, some will be adversely affected, and others will neither benefit nor be adversely affected. As individual behaviour and community dynamics vary considerably it is a complex process to accurately predict the social impact of a wind farm development*".²²
63. This position reiterates sentiments that I have expressed earlier in this evidence relating to the subjective responses of individuals based on their values and life experiences. I would note however, that SIAs typically document those effects, for example whether they are positive or negative, and describe differing viewpoints even when the situation is complex.
64. Mr Anderson goes on to quote "*any evaluation of social impact should be based on the particular community that may be affected. Often local people and communities raise concerns about their connection with the surroundings and landscape as a potential social impact. However,*

²¹ New Zealand Wind Energy Association, (2013). Wind farm development in New Zealand – A framework for best practice.

²² Ibid cited in Evidence in Chief of Mr Anderson, para 160

such perceptions are best incorporated into an evaluation of the effect on landscape and amenity values".²³

65. As outlined by Mr Anderson in his letter, Meridian considers that concerns about or anxiety arising from the "consenting process should not be considered an adverse effect of the proposal".²⁴ He does, however, state that Meridian acknowledges that the resource consent process can be stressful, and that community members may be concerned about the potential impacts of this process on their daily lives and wellbeing. In his assessment, the stress associated with the application process should not be considered an adverse effect of the project itself, due to it being a consequence of a statutory process.
66. Council's planners agreed with this position and stated that the effects of noise, dust and shadow flicker have been assessed in other sections of the 87F Report and that the Project does not appear to give rise to any adverse health effects. Following the 87F Report, Mr McGahan requested an opinion on the necessity of an assessment of social wellbeing effects from Ms Strogan,²⁵ I agree with her opinion that there are a range of social wellbeing effects arising in submissions that warrant consideration.
67. While I do agree that Meridian has assessed and acknowledged many of the social effects arising in the context of other subject matter experts' assessments, and there is potential for double counting of effects if two subject matter experts consider them, in my opinion social effects should be specifically acknowledged and considered.
68. As outlined earlier, in my opinion, the four key timeframes where social effects may arise from the Project are during:
- (i) the planning and consenting phase;
 - (ii) construction period;

²³ Ibid cited in Evidence in Chief of Mr Anderson, para 161

²⁴ Ibid, para 669.

²⁵ Statement of evidence of Damien McGahan, 23 August 2024, Attachment A

(iii) operation of the wind farms; and

(iv) decommissioning of the windfarms.

69. I have used these timeframes to assess the range of effects arising for each stage and comment on the assessment of the associated social effects in the following sections.

Scale and significance of effects

70. Mr Girvan, who assessed the natural character and landscape effects for Meridian has identified that there are 46 rural dwellings and 240 dwellings within the southern part of Eketāhuna township, that are likely to have potential views of the wind turbines within 5km of the Site.
71. Mr Halstead, who assessed the noise effects for Meridian has identified that there is one receiver in the 40-45DB noise range, 24 receivers in the 35-40DB range and 8 receivers in the 30-35DB range. The operational noise contours show that there are 19 properties to the west of the Mt Munro range that are within the estimated noise ranges (in the Eketāhuna community) and 14 properties to the west of the Mt Munro range (in the Hastwell community).

Social effects during planning and consenting period

72. There are three key social effects that have been identified in the evidence of Meridian's experts and the s274 parties, and in submissions, that are likely to arise during the planning and consenting period. Those effects relate primarily to stress and anxiety arising from frustration with the consultation and engagement process, and concerns about social cohesion, and livelihoods.
73. Table 1 summarises the key effects and names the parties who have addressed these concerns. I have described the nature and scale of effects in more detail below the summary table, and commented on Meridian's assessment of effects.

Table 1: Pre-construction/planning period social effects assessment

Effect	Addressed by Meridian	Name of Relevant Meridian Expert/Evidence
Health effects – stress, uncertainty, fear and frustration with communication and proposed designs.	Partial	<ul style="list-style-type: none"> • Mr Anderson • Mr Bowmar • Mr Halstead • Mr Jones
Social cohesion	Partial	<ul style="list-style-type: none"> • Mr Anderson
Economic and rural form – livelihoods	Yes	<ul style="list-style-type: none"> • Mr Telfar • Mr Jones

Health effects

74. A number of the s274 parties²⁶ and submitters²⁷ have described the consultation and engagement process as having been stressful and emphasise that there has been underlying stress in the community since 2009 when the proposal was first initiated. The length of time that the proposal has been ongoing for, and the stop-start nature, has led to uncertainty, frustration and mistrust for some community members.
75. When I conducted my interviews, it was apparent that uncertainty was being experienced by all parties (supporting, neutral and in opposition) to the Project. However, the extent of frustration and stress varied by person, and while some had coping strategies that appeared to be working well for them, others were very concerned about the burdens that were being placed on them from a time, financial and health perspective.
76. I note that further information has been provided by Meridian through responses to a number of RFIs, communications with submitters, and additional clarity has been provided in the evidence of Meridian's

²⁶ Statement of Evidence of Hastwell Mt Munro Protection Society Inc, and Statement of Evidence of Robin Olliver, and John Maxwell Social impact report redacted

²⁷ # Chris Clarke, #13 Hastwell Mt Munro Protection Society Inc, #17 Bruce Wallace, #21 Charmaine Jane Semmens, #23 Rhys Semmens, #30 Ian Robert Olliver, #31 Trinity Buchanan, #33 Hera Wi Repa, #35 Kaylene Duffell, #37 Robin Remington Olliver, #40 Steve Merrin, #43 Josie Braddock, #46 Rebecca Braddock-Tahiariki, #47 Mark Braddock Santon Farm Ltd, #56 Janet McIlraith, #57 Eketāhuna Health Centre, #67 Andrea Sutherland, #71 Amy Sutherland

experts to address some of the outstanding questions that submitters have expressed.

77. For lay people it can be daunting to read thousands of pages of evidence searching for information, and this task comes at a significant cost in terms of time and money. If they are dissatisfied with what they read, they may feel a need to conduct their own assessments. This workload is another cause of frustration for some of the submitters that was expressed to me. I do agree with Mr Anderson that this is a normal part of the resource consent application process, and I have heard similar sentiments expressed by members of the public in other hearings, during interviews, in submissions and while making appearances.
78. However, I also note that one submitter has expressed that “if individuals hold on to a core belief, any communication, in any medium, is unlikely to convince them”.²⁸ This opinion was also expressed to me by others who talked about misinformation that was being spread in the community and the determination of some community members to oppose the Project.
79. Another cause for uncertainty is that Meridian has applied for a 10-year lapse period, which in my experience is standard practice for larger projects, which is longer than the standard five year lapse period. If the lapse period was restricted to the default five-year period, that could falsely imply certainty to the community as to when construction might occur. If, the lapse period then needed to be extended, feelings of bad sentiment could be reignited once more which would be unfair and unhelpful to the community. In my opinion avoiding such an outcome is important, and the 10-year lapse period sought would be preferable to the normal lapse period. I do not consider it is an unreasonable extension to the timeframe.
80. Many of the concerns held and stress experienced have arisen from perceptions that the consultation process has been unfair, one which is described in the evidence of Mr Maxwell as an “orchestrated litany of

²⁸ #2 Clive Bickerstaff

lies". It is evident that there is a great deal of scepticism from those involved in the Society that accurate information has not been provided to affected parties and that information provided may not be truthful or relevant to the Mt Munro context.

81. I note that some information is unable to be provided until detailed design commences and that typically occurs once a resource consent has been granted, due to the significant costs involved in preparing more detailed plans. This is an issue that is not unique to this case, and I have encountered it in other projects. My interpretation of the issue is that Meridian has provided the available information as accurately and as completely as it can for this (consenting) stage of development and continues to do so as more information comes to hand, but I acknowledge that this can be very frustrating for landowners who feel unable to accurately assess what the impacts of the Project will mean for their daily activities and enjoyment of their properties.
82. Mr Bowmar's evidence describes in detail the consultation process which resumed in February 2021²⁹ and Meridian's guidelines for engaging with stakeholders.³⁰ I understand that subsequent to a meeting that was held at the offices of local MP Mr McAnulty with Meridian's CEO and the Society, Meridian agreed to a 'Pop-In' shop being held in Eketāhuna town centre and advertised the shop on the radio. Approximately 139 people attended across the week.
83. I was not involved in the engagement process, but my assessment of the information provided by Mr Bowmar indicates that the process undertaken by Meridian appears to have been appropriate to the context, and responsive to suggestions about engagement procedures that the Society felt could be improved.
84. I recognise that some community members are not satisfied with the way in which they were engaged with and are specifically concerned that people were told that other people were supportive of the proposal, when in their opinion that was not the case (described as a "divide and

²⁹ Evidence in Chief Nick Bowmar 24 May 2024, para 68.

³⁰ Evidence in Chief Nick Bowmar 24 May 2024, para 47.

rule” approach), experts were viewed as dismissive and patronising, and there are reports of people entering properties without advising that they were coming.³¹ I understand that Mr Bowmar is clarifying and responding to some of these matters in his reply statement.

85. I agree with NZWEA’s guideline that while there is no duty to undertake consultation for resource consent applications, the process is an important one for large scale infrastructure, such as wind farms. The engagement process can help to identify issues and risks and seek to identify mitigation options and build goodwill (social licence to operate) and ongoing working relationships.
86. Mr Bowmar acknowledges that Meridian has not managed to resolve all areas of stakeholder’s concerns. Some of the information to address those concerns is not available at this stage due to detailed design not having commenced. As I mentioned earlier, this is not unusual for a project of this nature, and it would be very difficult to resolve all concerns ahead of a hearing.
87. Due to Meridian not undertaking an assessment of social effects that satisfied the Society, they commissioned a report from Ms Steadman³² about the likely mental health effects of the Project. In her opinion the unintended consequence of the prevailing levels of stress and anxiety is that individuals will have a tendency to assume a defensive or distrusting position towards Meridian.
88. Ms Steadman documents that farmers and rural dwellers are already adapting to significant changes and uncertainty in the industry, and those experiences can negatively impact their ability to adapt to additional change and uncertainty, or exacerbate the compounding effect of more change on top of an already changing environment. The health consequences can lead to “lowered mood, increased worry and

³¹ #8 Chris Clarke, #13 Mt Munro Hastwell Protection Society Inc, #37 Robin Remmington Olliver, #56 Janet McIlraith

³² Statement of Evidence – Hastwell Mt Munro Protection Society Inc Appendix 1 Second Nature Psychology Mt Munro 11.06.2024

apprehension about future changes, and overall reduction in well-being”, and reduced sleep, more migraines and physical ailments.³³

89. The Second Nature Psychology Report emphasises that the belief or value placed on silence is very common in rural communities and it reflects a living choice. Many submitters³⁴ and the s274 parties describe their reasons for choosing to live in the communities which reinforces this perspective, including having a sense of peace and tranquillity, opportunities to live off the land, views of Mt Munro and being connected to the natural rural environment.
90. The report also describes the subjectivity of change and values present in communities by stating that “*everyone has a set of internal values that guides their decision making, drives them towards particular people activities, work, or places, and ultimately informs who they are as people*”³⁵. I agree that wellbeing can be compromised if people are unable to behave in ways that reflect their values.
91. It is clear to me that for some members of the community the Project application and consenting phases have created significant stress, and this has been ongoing for many years. Meridian accepts and acknowledges that this is a part of the resource consenting process.

Social cohesion

92. Due to the rural nature of the community and the importance of relationships, Meridian had a preference to engage face to face with individual landowners, so that people could express their opinions and ask for information without feeling the need to withhold information or opinions to protect friendships and connections. Confidentiality and

³³ Ibid, p5.

³⁴ #5 Ceilidh McPhee, #6 Chris Davies, #7 Dave Berry, #8 Chris Clarke, #11 Ian John Maxwell, #13 Hastwell Mt Munro Protection Society Inc, #16 Jenny Clarke, #17 Bruce Wallace, #22 Jenkobi Semmens, #23 Rhys Semmens, #36 Rebecca Needham, #37 Robin Remmington Olliver, #39 Lisa Joy Merrin, #41 Jodi Tomlin, #42 Naomi B Pussell, #43 Josie Braddick, #48 Anne Braddick, #56 Janet McIlraith, #57 Eketāhuna Health Centre, #58 Falene Grimmer, #61 Tessa Bardella, #66 Cade, Wayne and Kim McDermott, #67 Andrea Sutherland, #68 Deborah Gully, #71 Amy Sutherland,

³⁵ Statement of Evidence – Hastwell Mt Munro Protection Society Inc Appendix 1 Second Nature Psychology Mt Munro 11.06.2024, p7

providing the ability to speak openly without being judged or fearing repercussions from presenting conflicting views is an important part of the consultation process.

93. When I visited Eketāhuna and Hastwell it became evident that there are a number of supporters or neutral parties who are afraid to voice their opinions in a public forum for fear of causing ongoing personal problems. It was conveyed to me that many people are choosing to 'keep their head down' to ensure that community relationships are not jeopardised.
94. This is a potential explanation for the discrepancy between the numbers of people who voiced their support or neutrality at the open day or Pop-In shop to Meridian in comparison to the numbers of people who voiced their opposition to the Society when they were collecting their data outside the Pop-In shop.
95. From both sides, I heard stories of fists being raised at people to intimidate them, bottles being smashed at gates, stock gates being left open having serious impacts on farming operations, people entering other people's properties without first making contact, and protest signs being defaced. One submitter has described the tensions in the community being very high, and as creating a "powder keg".³⁶
96. It is clear to me that there is a simmering tension in the community relating to the consenting phase and perceived or anticipated effects of the construction and operational stages of the Project, although neither Meridian itself, nor the landowners of the sites, can be directly linked to these behaviours.
97. This is a matter that was addressed by Mr Anderson who stated that "matters such as social division that have been raised in submissions are subjective matters and outside of Meridian's control".³⁷ I do agree that these matters are outside of Meridian's control, but it is clear to me that the consenting process in itself has given rise to additional stress

³⁶ #47 Mark Braddock Santon Farm Ltd

³⁷ Appendix 4 of their RFI#2 Response 3 letter (23 February 2024)

within the community that is being experienced by parties on both sides of the fence.

98. I also heard stories of people who moved out of the community due to the stress and anxiety that was created during the first consideration of the windfarm, and a 2013 letter to Meridian³⁸ described the irreparable damage that had been caused to relationships, which were often multi-generational.
99. Conversely, it was relayed to me that one of the positive outcomes that has arisen from the consenting phase of the Project is that members of the Society living in the Hastwell community are very united and there are very strong social connections that have been formed among families objecting to the proposal. Ms McIlraith describes in her evidence this strong community spirit and provides evidence of how the community help one another.³⁹
100. It has been recognised that wind farm developers can generate social division by utilising a development model that creates winners and losers amongst neighbouring landowners. This is due to landowners with turbines on their land receiving large annual rental payments while immediate neighbours who may experience unwanted adverse effects receive no financial compensation.⁴⁰ This is a sentiment that was expressed to me in most interviews that I conducted.
101. In their SIA of the Mahinerangi Wind Farm Proposal, Taylor Baines and Associates, considered that social divisions and tensions in the local community were not unusual at the stage of considering a proposal and stated that this is “less important than the potential social effect of such community polarisation continuing in the future if the proposal is approved”.⁴¹

³⁸ Statement of Evidence – Hastwell Mt Munro Protection Society Inc Appendix 2 Letter Meridian CEO 2013

³⁹ Evidence of Janet McIlraith

⁴⁰ Baines, J., and Taylor, N. (2010). ‘Green’ is good, but is more ‘green’ always better? NZ wind farming experience.

⁴¹ Taylor Baines & Associates for Minter Ellison Ruud Watts on behalf of TrustPower Ltd, March 2007. Mahinerangi Wind Farm Proposal: Social Impact Assessment, p27.

102. It is evident to me that there are elements of social division that are occurring in the community in relation to the project. Some people are able to cope with the tensions by using a “keep calm and carry on” mentality, while for others the division is more distressing.
103. While Meridian has acknowledged that this is an inherent and sometimes inescapable part of the resource consent process, in my opinion it is important that there are ongoing opportunities for community members to express their concerns and desired outcomes with Meridian to help address these issues through the construction and operation phases, should consent be granted for the Project. I discuss these opportunities further in the context of the proposed conditions.

Economic and Livelihoods

104. There is the potential that during the periods of uncertainty (planning and construction phase) property sales in the area may slow down, until the final design and operational effects of the wind farm are better understood. There are concerns from many submitters that this will have a negative financial impact on the value of properties, and this may in turn affect household’s ability to provide for their economic security and fund retirement plans.⁴²
105. Frustration has also been expressed by those who have recently purchased properties and were unaware of the Project until after purchase agreements were signed, while others in the community (including real estate agent Harcourts, representing the vendor) were allegedly already aware.
106. I note that Mr McGahan has assessed the subdivision potential of properties surrounding the wind farm and considers that it is “difficult to predict with certainty where future development is likely to take place

⁴² #3 David and Mark Cook, #6 Chris Davies, #7 Dave Berry, #8 Chris Clarke, #9 Shelley Pender, #11 Ian John Maxwell, #13 Hastwell Mt Munro Protection Society Inc, #15 John A Murray, #17 Bruce Wallace, #21 Charmaine Jane Semmens, #24 Nick Olliver, #34 Glen Opel Ltd, # Robin Remmington Olliver, #40 Steve Merrin, #41 Jodi Tomlin, #40 Brendon Braddock, #47 Marc Braddock Santon Farms Ltd, #48 Anne Braddock, #49 Jesse Braddock, #58 Falene Grimmer, #66 Cade, Wayne and Lim McDermott, #67 Andrea Sutherland, #68 Deborah Gully, #70 Andrew and Brigitte Sims, #71 Amy Sutherland

and on what basis”.⁴³ Household growth projections indicate growth of one household per annum for each of the Hastwell and Eketāhuna communities⁴⁴, which are relatively large geographic areas.

107. The NZWEA emphasises that the Environment Court holds the position that property value effects are not a relevant RMA consideration, essentially due to the effects already being considered in assessments of amenity and other matters.

Social effects during construction period

108. There are ten key areas of social effects that might arise during the construction period, that have been identified in the evidence of Meridian’s experts and the s274 parties, and in submissions. Table 2 summarises the key effects and names Meridian’s experts who have addressed these concerns. I have described the nature and scale of these effects in more detail below the summary table, and commented on Meridian’s response.

⁴³ Statement of Evidence of Damein McGahan, Para 21.

⁴⁴ Defined as social areas of interest

Table 2: Construction period social effects assessment

Effect	Addressed by Meridian	Name of Relevant Meridian Expert/Evidence
Certainty/Duration of Construction/Engagement	Yes	<ul style="list-style-type: none"> • Mr Bowmar • Mr Halstead • Mr Jones
Economic	Yes	<ul style="list-style-type: none"> • Mr Telfar • Mr Jones
Traffic and Transport	Yes	<ul style="list-style-type: none"> • Mr Shields • Mr Bowmar
Noise and vibration	Yes	<ul style="list-style-type: none"> • Mr Halstead • Mr Bowmar
Landscape	Yes	<ul style="list-style-type: none"> • Mr Girvan
Air Quality/dust	Yes	<ul style="list-style-type: none"> • Mr Bowmar • Mr van der Munckhof
Freshwater ecology/water quality	Yes	<ul style="list-style-type: none"> • Dr Keesing
Light	Yes	<ul style="list-style-type: none"> • Mr Wright
Archaeology/heritage	Yes	<ul style="list-style-type: none"> • Ms Howitt
Health, safety, and equity - mental health/stress	Partial	<ul style="list-style-type: none"> • Mr Anderson

Certainty/Duration of Construction/Engagement

109. Some parties have expressed concern that certainty about the length of construction has not been provided by Meridian, and there are also concerns that assumptions or data used by experts is incorrect, meaning in their view, that the construction period would extend, and therefore the associated effects could be for a longer duration than anticipated.⁴⁵ Mr Bowmar's evidence confirms that construction will be for less than three years.⁴⁶

⁴⁵ #8 Chris Clarke, #13 Hastwell Mt Munro Protection Society, #48 Anne Braddick

⁴⁶ Evidence in Chief Nick Bowmar 24 May 2024, para 19.

110. Additionally, Mr Halstead states the anticipated construction timeline provides nine months for construction of external roads. After that, works will occur within the site, with most of the heavy construction completed by the end of year two and the overall construction timeframe being 32 months.
111. The proposed consent conditions require that Meridian provides the details of a person who will be the key contact person for public information, queries, stakeholder liaison and complaints during the construction period (Condition CM4), including understanding the specific access requirements and effects that residents may be experiencing during construction. Additionally, a series of management plans will be provided to address effects and provide certainty to residents about the mitigation measures.
112. There will also be a Stakeholder Liaison Group which will provide a forum for relaying community concerns about the construction of the Project. Meridian proposes to have an independent Chair facilitate that group. This is reflected in the proposed conditions of consent attached to Mr Anderson's rebuttal (Condition SLG4). This is a very important provision within this community context (with evidence of mistrust and conflict apparent) to ensure that discussions remain focused on key construction issues and to allow all participants to feel like they can voice their concerns and have those concerns addressed fairly.
113. In my opinion, the concerns raised by submitters about uncertainty regarding construction timeframes have been addressed by Meridian and the proposed conditions will provide opportunities for community members to provide input and ask questions during the construction period which will provide increased certainty.

Economic

114. Once construction commences, some parts of the community may feel optimistic, confident, and positive about future economic opportunities. Mr Telfar has described many of the economic benefits during construction, including:

- (a) The budget for the Project will be approximately \$300 million, and it is anticipated that 10% of the total budget (\$30 million) will be spent locally across the 32-month construction timeframe. This assumption is based off the information collected during the establishment of the Harapaki wind farm. Mr Telfar explains that the targets of local spending were surpassed at Harapaki and were formally embedded in contractual arrangements, with a target of 40% of the workforce being employed from the wider region.⁴⁷
 - (b) Local expenditure during the construction period is likely to come from civil works, electrical infrastructure installation, turbine transportation and crane and project management. It is estimated that at the peak there would be 100 to 150 people on site at one time and there are likely to be 600-1,000 people inducted on site over the construction timeframe. In this context, it is likely that businesses throughout the wider regions will be supported due to the small local economy.
115. Aside from supporting local businesses through contract work and procurement of goods, there may be opportunities for additional local employment and skills training. Mr Anderson described the potential training and career opportunities in the RFI letter⁴⁸, which is an element of the Project that is supported by Ngāti Kahungunu ki Tamaki nui a Rua.
116. The economic flow-on effects have not been quantified, but it is likely that new workers to the area will buy food, fuel and other goods and services locally (i.e. Eketāhuna). There could also be some need for accommodation depending on where construction teams are based. The general level of optimism around the opportunities that may arise for local businesses, who have been contacting Meridian to express interest in being contracted for parts of the work, was relayed to me. This was also described to me in interviews and is contained in some

⁴⁷ Ibid, para 83.

⁴⁸ Appendix 4 of their RFI#2 Response 3 letter (23 February 2024)

submissions.⁴⁹ It appears that for the time being optimism has been expressed in personal conversations rather than being publicly expressed.

117. Ms McIlraith and some submitters have indicated that they intend to change their shopping patterns during construction, due to perceived traffic safety issues associated with increased volumes of trucks, and others have expressed concern about safety issues in Eketāhuna township.⁵⁰ The traffic and transport JWS experts agree that the effects on transport and the safe functioning of the network will be managed appropriately. If this avoidance behaviour eventuates, it could represent a loss of income to those businesses in Eketāhuna. However, it is difficult to know whether such effects will actually arise or if they do, how significant that loss might be and how much of that will be offset by spending from construction workers.
118. Due to the surrounding area being rural and the largest sector being primary industry, some submitters are concerned about the impacts on farm operations, such as stock movements, water quality for stock, topdressing, and stress to animals.⁵¹
119. Mr Jones has provided information about how existing stock fencing along Old Coach Road will be reinstated after sealing of the road and states that the location and nature of temporary fencing would need to be discussed with landowners. Those concerns are also addressed in relation to traffic and transport safety and dust effects later in my evidence.

⁴⁹ #10 Hamish Anderson, #12 Matthew Anderson,

⁵⁰ #11 Ian John Maxwell, #3 Hastwell Mt Munro Protection Society, #21 Charmaine Jane Semmens, #37 Robin Remmington Olliver, #56 Janet McIlraith, #62 Isaac Davies, #63 Amelia Boot,

⁵¹ #1 Rachel Taylor, #3 David and Mark Cook, #8 Chris Clarke, #11 Ian John Maxwell, #13 Hastwell Mt Munro Protection Society Inc, #21 Charmaine Jane Semmens, #34 Glen Opel Ltd, #36 Rebecca Needham, #37 Robin Remmington Olliver, #41 Jodi Tomlin, #43 Josie Braddick, #46 Rebecca Braddick Tahiariki, #47 Marc Braddick Santon Farms Ltd, #49 Jesse Braddick, #56 Janet McIlraith, #57 Eketāhuna Health Centre, #65 Jason Taylor, #72 John and Susan Barber, #73 Gary Groombridge

120. I consider that the social consequences arising from economic activity during construction are likely to be positive.

Traffic and transport matters

121. Safety, recreation, and access are key social concerns arising from traffic and transport matters. Council's traffic expert summarised submitters' key transport concerns related to the volumes and safety for residents, pets, livestock, visitors and other road users (including school pick-ups, and on weekends and nights), road maintenance and damage, recreational cyclists using Opaki Kaiparoro Road, school bus routes, Eketāhuna township, aggregate delivery routes and reduced accessibility. Many of these matters are raised in the s274 evidence of Mr Maxwell, Ms McIlraith, Mr Olliver and Mr Clarke.
122. Mr Shields has considered the safety and access issues on roads extending from Port to Site and on public roads surrounding the Site. He acknowledges that there will be a temporary increase in traffic on both SH2 and Old Coach Road but does not consider that the operational capacity of the roads will be compromised.⁵²
123. As explained by Mr Bowmar, Old Coach Road is the preferred site access route due to a number of factors including road alignments, earthwork requirements and better access to laydown areas. Mr van der Munckhof recommends sealing the road to mitigate dust effects (discussed later), another consequence of sealing the road will be reduced noise and traffic volumes during the construction period. Road widening is proposed to allow for safe movements of construction vehicles and over dimension turbine deliveries. There will be allowances and communication methods for farmers to arrange stock movements at times that suit them, and the procedures to manage this will be outlined in the Construction Traffic Management Plan (**CTMP**).
124. Mr Shields acknowledged and addressed the safety concerns regarding construction traffic movements on recreation, specifically the

⁵² Evidence in Chief Colin Shields 24 May 2024, para 185.

Tour Aotearoa Heartland Ride cycling route, and the CTMP provides guidance about this matter.

- 125. Mr Shields has identified that there is one school bus service that travels on SH2 and Falkner Road.
- 126. Mr Shields recommends that concerns regarding emergency vehicles be addressed in the CTMP.
- 127. Mr Bowmar has confirmed in his evidence that construction traffic will only use Opaki Kaiparoro Road in the section between SH2 and Mount Munro Road, so many of the concerns raised by submitters relate to parts of the road which will be unaffected.
- 128. In my opinion, the social effects arising from increased traffic have been addressed by Meridian's experts and there are mechanisms for addressing safety concerns in the CTMP. This is a standard approach for addressing such concerns. The proposed Stakeholder Liaison Group will provide an appropriate forum to raise community concerns and have them addressed during this period. As a consequence, the social effects relating to traffic and transport effects during construction will be identified and will be managed by conditions.

Noise and vibration

- 129. Elevated noise levels can negatively affect people's ability to go about their daily activities and have negative health consequences.
- 130. Mr Halstead has assessed the noise levels during construction and confirms that the Project will comply with noise levels which have been set to protect health and reasonable levels of amenity. He considers that significant levels of noise will be received by dwellings on Old Coach Road while the road is being improved. Where the noise standards are not met, mitigation will be offered during short term exceedances.
- 131. Mr Halstead explains that the District Plan controls construction noise during the night to ensure reasonable noise levels that ensure sleeping

can be achieved.⁵³ Mr Halstead also states that WHO recommendations for safe sleeping environments could be achieved even with windows open according to those standards.⁵⁴

132. It is recommended that mitigation for the noise effects associated with upgrading Old Coach Road is to be decided in consultation with residents of that road. Temporary relocation may be warranted during daytime activity periods of loud noise. A Construction Noise and Vibration Management Plan (**CNVMP**) has been proposed, which is typical for projects of this nature.
133. A number of submitters also raise concerns that the old Bushman's Cottage, that is currently the home to a now 90 year old individual, may be impacted by vibration from the heavy traffic movements on Old Coach Road.⁵⁵ The proposed CNVMP, as well as a Condition Study requirement for this dwelling (Condition CN4) makes provision for monitoring work to be undertaken, that would need to be agreed with the landowner.
134. There are some concerns remaining about the outdoors nature of living and working in the rural environment and how noise effects will disturb the use of outdoor spaces.⁵⁶ The Acoustics JWS experts agree that the "amenity of rural working land does not receive the same degree of protection" as residential amenity.⁵⁷
135. Additionally, some submitters have raised concerns about the noise effects on livestock. Mr Halstead has presented an assessment of the likely change in noise levels and suggests that animals are generally unlikely to be affected by construction activity, with the exception of blasting which can generate a surprise. There are conditions relating to

⁵³ Evidence in Chief Miklin Halstead 24 May 2024, para 31.

⁵⁴ Evidence in Chief Miklin Halstead 24 May 2024, para 34.

⁵⁵ #13 Hastwell Mt Munro Protection Society Inc, #37 Robin Remmington Olliver, #56 Janet McIlraith, #57 Eketāhuna Health Centre

⁵⁶ Evidence of Hastwell Mt Munro Protection Society Inc, Submissions: #8 Chris Clarke, # Ian John Maxwell, #13 Hastwell Mt Munro Protection Society Inc, #16 Jenny Clarke, #37 Robin Remmington Olliver, #47 Marc Braddick Santon Farm Ltd, #48 Anne Braddick, #56 Janet McIlraith, #70 Andrew and Brigitte Sims

⁵⁷ Mt Munro JWS Acoustics 8 August 2024

Controlled Blasting (CBL1-3) that include the preparation of a Controlled Blasting Management Plan with consideration of health and safety requirements and warning systems amongst other matters.

136. In my opinion, because the health effects of noise have been considered by Mr Halstead, Meridian's assessment of noise impacts during construction has considered the associated social effects and I note that while noise during construction may be disruptive to rural environments, these effects will occur over a limited duration and are not uncommon for road work and large-scale infrastructure projects. I accept the noise experts' assessment that some noise effects will arise, but that the noise mitigation measures that have been offered are adequate.

Landscape

137. Landscape effects are important from a social point of view because people derive value from enjoyment of spaces and natural landscapes helping to create positive amenity and sense of place.
138. Mr Girvan has assessed the landscape effects for Meridian and considers that although it is inevitable that earthworks during construction of the wind farm will cause landscape effects, in his opinion the effects will be contained and can be viewed in the context of an established working rural landscape. His opinion is that the proposed location of individual wind turbines and the associated access and earthworks responds well to the underlying topography.⁵⁸
139. In my opinion, the social effects relating to landscape effects will be relatively minor during the construction period.

Dust and air quality

140. Dust and air quality is a social matter because of the potential effects on human health.

⁵⁸ Evidence in Chief Rhys Girvan 24 May 2024, para 14.

141. Mr van der Munckhof has considered the human and animal health, and nuisance effects associated with dust in his evidence for Meridian. His evidence relies on the Ministry of the Environment's good practice guidelines to assess the sensitivity for rural land uses. He has recommended that Old Coach Road is sealed to reduce the dust effects associated with heavy vehicles travelling along it during construction.
142. Council's expert (Mr Curtis) also outlined the risks to human health from dust and diesel emissions, including effects to drinking water (from roof and tank supplies) and ground water sources, existing medical conditions, and to animal health and pasture used to gain incomes, food and recreation, and general nuisance effects which could include cleanliness of properties.
143. The JWS Air Quality experts consider that apart from the properties on Old Coach Road, the potential for effects on drinking water and produce grown on site is negligible and the risk of dust effects on stock or pastures would be low.⁵⁹
144. Mr van der Munckhof's evidence has considered the social effects of air quality and dust, which will be managed by adhering to central government issued guidance and standards, and for this reason the social effects arising from dust will be no more than minor.

Freshwater ecology/water quality

145. Freshwater ecology and water quality are relevant to social impact assessment due to the reliance on water for production activities (livelihoods), growing food (livelihoods and health), cultural uses, and for recreational activities (fishing).
146. Council's expert, Dr Forbes, has highlighted that there is trout spawning and fishing occurring in the Mākāhahi and Kōpuaranga Rivers and that sediment loads may exceed water quality targets.

⁵⁹ Mt Munro JWS Air Quality 31 July 2024

147. Dr Keesing assessed freshwater ecology and water quality for Meridian and identified that the design and installation of culverts on two tributaries could be an impediment to fish passage if not well executed. In his opinion, any sediment released into the streams during construction is expected to have a 'Low' or 'Moderate' (Bruce Stream) effect on freshwater values that are present, resulting in a 'Low' (Bruce Stream) to 'Very Low' overall level of effect.⁶⁰
148. Conditions are proposed to manage and mitigate the effects on ecological values during the construction period. I consider that the social effects relating to freshwater ecology and water quality have been considered and are capable of management through conditions.

Lighting

149. As with noise and dust, light can affect the way that people use their properties and can create nuisance which could lead to health effects.
150. Mr Wright assessed the effects of lighting and considered construction lighting including vehicle headlight sweep, security building lights, main laydown area lights, concrete batching plant lights and turbine laydown area lights. In his opinion, all lighting will meet the permitted activity rules in the Tararua and Masterton District Plans and AS/NZS 4282:2019. This means that lighting should not spill into dwellings and headlight sweep should not affect dwellings on Old Coach Road at night. It is expected that the turbine lift lighting will project light over the horizontal for no more 30 nights over the construction period.
151. I therefore consider that the social effects related to lighting during construction have been addressed by Meridian and will be less than minor.

Archaeology and heritage

152. Social effects may arise in relation to values associated with heritage buildings. As previously discussed, s274 parties⁶¹ are concerned about

⁶⁰ Evidence in Chief Dr Vaughan Keesing 24 May 2024, para 167.

⁶¹ Evidence of Mr Maxwell and Mr Olliver

the effects of vibration on the Bushman's Cottage which dates to 1881. Mr Olliver is also concerned that Old Coach Road is one of the original settler roads in NZ and has historical significance.

153. Ms Howitt has provided an assessment of the archaeology and heritage effects of the Project. She has identified that there is some potential for subsurface features of a demolished 1900s farmhouse on Old Coach Road to be discovered. She recommends that an Archaeological discovery protocol is utilised to manage any finds, and an exclusion zone is utilised during construction. As discussed earlier, the CNVMP and Condition Study will address concerns about the cottage on Old Coach Road.
154. I have reviewed the evidence of Ms Howitt and consider that Meridian has considered social effects associated with heritage and proposed conditions to manage any potential effects.

Health and equity

155. Health effects that are likely to arise (or continue) during the construction period include stress. This can be associated with noise, vibration and dust, but can also arise due to people feeling unhappy that the Project is proceeding against their wishes. Some of those effects may be more concerning for certain demographic segments, such as children, the infirm and elderly.
156. In rural communities, community members may also feel unsafe due to changes to access, and having construction workers present who are new faces and not locals. The CTMP makes provision for ensuring that residents on Old Coach Road will be able to access their properties at all times. Expectations about contractors' behaviour being respectful towards residents is a matter that can be controlled through contractual arrangements with Meridian at the time that external parties are brought in to do work.
157. These are effects that have been mostly considered by Mr Anderson and other experts for Meridian and Councils. There are further

opportunities for mitigation through residents ensuring that they express their concerns in the Stakeholder Liaison Group.

Social effects during operational period

158. There are nine key areas of social effects that have been identified in the evidence of Meridian's experts and the s274 parties, and submissions that are likely to arise during operation of the wind farm. Table 3 summarises the key effects and names Meridian's experts who have addressed these concerns. As in earlier sections, I have described the nature and scale of effects in more detail below the summary table, and commented on Meridian's assessment of effects.

Table 3: Operational period social effects assessment

Effect	Addressed by Meridian	Name of Relevant Meridian Expert/Evidence
Climate change/greenhouse gases	Yes	<ul style="list-style-type: none"> Ms Purdie
Economic	Yes	<ul style="list-style-type: none"> Mr Telfar Mr Faulkner
Traffic and Transport	Yes	<ul style="list-style-type: none"> Mr Shields
Noise and vibration	Yes	<ul style="list-style-type: none"> Mr Halstead
Landscape and visual	Yes	<ul style="list-style-type: none"> Mr Girvan Mr Bowmar
Lighting	Yes	<ul style="list-style-type: none"> Mr Wright
Shadow Flicker	Yes	<ul style="list-style-type: none"> Mr Faulkner
Telecommunications interference	Yes	<ul style="list-style-type: none"> Mr Anderson
Health and safety	Partial	<ul style="list-style-type: none"> Mr Shields Mr Anderson

Climate change and greenhouse gas emissions reductions

159. Reductions in greenhouse gas (**GHG**) emissions arising from the use of wind-generated electricity will have positive social effects for communities at all scales (local, regional, and national).

160. Ms Purdie has described that NZ will need to build approximately one to two wind or solar farms that will produce the same outputs as the proposed Project per year for the next 30 years to cater for increased demand in renewable electricity generation.
161. The Mt Munro wind farm will generate enough electricity to supply approximately 42,000 households, which is equivalent to supplying all the power to residential users in present day Tararua District (7,800 households⁶²), Masterton District (12,100 households), Carterton District (4,300 households), South Wairarapa District (5,100 households) and Manawatū District (13,300 households), or a city the size of Lower Hutt (42,300 households). This is notwithstanding that electricity will get supplied to the national grid and will be allocated throughout the country based on supply and demand.
162. Some submitters have questioned whether there are GHG emissions inherent in the construction and operation of the wind farm.⁶³ Ms Purdie has stated that evidence from a literature review supports the conclusion that the life cycle carbon emissions from the construction, operation and decommissioning of wind farms in NZ will be significantly net negative.⁶⁴ There is also evidence that the emissions offset from the windfarm will result in a net reduction in GHG emissions overall.
163. Ms Steadman's report documents that while many submitters agreed that the "notion to explore and invest in renewable energies is worthwhile"⁶⁵, people's perceptions or weighting of the worthiness of the cause was prioritised differently depending on individual's values and perceived impacts. Generally, most submitters are supportive of providing renewable energy, but are not willing to host that energy production close to their homes due to the perceived adverse effects that will be generated.

⁶² 2023 Households estimates using Statistics NZ projections

⁶³ #8 Chris Clarke, #13 Hastwell Mt Munro Protection Society Inc, #14 Kristin Doering, #33 Hera Wi Repa, #46 Rebecca Braddick-Tahiariki

⁶⁴ Evidence in Chief Jennifer Purdie 24 May 2024, para 54.

⁶⁵ Statement of Evidence – Hastwell Mt Munro Protection Society Inc Appendix 1 Second Nature Psychology Mt Munro 11.06.2024

164. A Climate Change condition (CC1) has been proposed to confirm that Meridian will consider the whole of life embodied carbon for the Project and minimise GHG emissions for construction, operation and end of life stages.
165. From my point of view, it is clear that there will be substantial positive social impacts arising from renewable energy generation, as discussed in the evidence of Ms Purdie, Mr Telfar and Mr Anderson.

Economic

166. Mr Telfar's evidence described many of the economic benefits of the proposed wind farm for the national, regional and local economies, including:
- (a) Low-cost electricity provision benefiting electricity consumers NZ-wide.
 - (b) Having a dispersed pattern of renewable energy sites means that there is more resilience and certainty that the required levels of electricity can be supplied nationwide despite weather variability in parts of the country. This provides ongoing security for the national economy due to most businesses relying on electricity to produce goods and services.
 - (c) Reliable electricity supply is also a critical input into other social and economic infrastructure such as banks, hospitals, schools, and other public and private institutions.⁶⁶
167. Mr Anderson has described the positive economic effects of the project on the local community, including stimulating economic activity within the community.⁶⁷
168. It is expected that the wind farm would generate employment for up to eight full time staff on site to manage its maintenance and operation.⁶⁸

⁶⁶ Evidence in Chief Grant Telfar 24 May 2024, para 51.

⁶⁷ Appendix 4 of their RFI#2 Response 3 letter (23 February 2024)

⁶⁸ Evidence in Chief Grant Telfar 24 May 2024

From time to time there may also be additional staff visits for equipment inspections, engineering support and major maintenance exercises.

169. Mr Telfar explains that at other wind farms (Te Āpiti, White Hill, Te Uku and Harapaki) some of the staff have chosen to live close to the site to reduce commutes and therefore have become a part of the community. The more employment provided locally, the more money is likely to be spent in local businesses, including in the shops in Eketāhuna, and assisting to ensure other services (such as schools, play centres, ATMs and mail services) can be sustained. This includes if people currently living in the communities are trained to work at the wind farm (which would represent a retention of people in the community). With only eight additional permanent jobs it is unlikely that new stores will establish in Eketāhuna, but more importantly the viability of existing stores will be enhanced with the spending coming from new workers and resident households.
170. Other businesses such as engineering, civil works, warehouse storage and equipment repairs and maintenance are likely to be supported on an ongoing basis during the operational phase.
171. There will be financial benefits to the landowners who will be able to diversify their operations and support continued long term farming of the land, some of the facilities such as access tracks will be upgraded during construction at no cost to the landowners, thereby improving farm efficiency.
172. Another positive effect is that Meridian anticipates providing a Power Up Community Fund. There are examples of these funds operating in other communities with wind farms (Te Āpiti, White Hill, West Wind, Mill Creek and Te Uku) and hydro schemes (Waitaki and Manapōuri).
173. The size of the anticipated budget is described in Mr Telfar's evidence which estimates that the Mt Munro Community Fund is likely be similarly sized to the Community Funds for the Te Āpiti and Te Uku wind farms which currently contribute \$32,000 per annum to local

projects, however the actual financial amounts will reflect the long-term average energy generated from the facility.⁶⁹

174. The fund will be managed by an advisory panel comprising Meridian and community representatives. Community projects which will contribute to sustaining and building the capacity and capability of the community are generally supported by surveying the community to identify the issues that are important to them, and they feel should be financially supported. Typically, the funds promote environmental awareness and improving the quality and attractiveness of the environment in the community, contribute to non-profit organisations, support lifelong learning opportunities and sporting, social and recreational activities, and volunteer services.
175. Although there will be a very small loss of highly productive land (**HPL**) on the site, assessed by Ms Hopkins as a decrease of 0.0013% of total HPL in Tararua District, there will be no reduction in stock carrying capacity and land based primary production will be unaffected.
176. Some submitters have raised concerns that farming operations on neighbouring farms may have to change, especially in relation to the airstrip use for spraying and fertilising.⁷⁰ Ms Hopkins commented on reverse sensitivity and stated that the effects will be minimal, noting that activities such as weed and pest control, and fertiliser application can continue. Mr Maxwell identifies other operational issues such as intergenerational farms losing their continuity of management and production and the potential that large blocks that were earmarked for subdivision may be unable to be sold. He emphasises that farmers rely on this income to supplement their farming operations and fund retirement.

⁶⁹ Evidence in Chief Grant Telfar 24 May 2024, para 92

⁷⁰ #3 David and Mark Cook, #8 Chris Clarke, #13 Hastwell Mt Munro Protection Society Inc, #34 Glen Opel Ltd, #46 Rebecca Braddick Tahiariki, #47 Marc Braddick Santon Farms Ltd, #49 Jesse Braddick, #73 Gary Groombridge

177. Notwithstanding some concerns raised, in my opinion the social effects relating to livelihoods and economics will be strongly positive, as identified in Meridian's evidence and discussed above.

Traffic and Transport

178. The ongoing effects of operational traffic were assessed by Mr Shields, who has estimated that if carpooling does not take place, then the maximum number of vehicle movements is likely to be 56 per day on Old Coach Road. He therefore considers that the impacts of maintenance traffic will be minimal.
179. Mr Shields also highlights that there would be ongoing benefits to residents from use of the upgraded and sealed road, including in respect of noise, dust and safety matters.
180. I consider that Mr Shields assessment identifies the social effects associated with transport movements during the operational phase. Due to the low volume of the traffic along the upgraded road I consider the social effects will be less than minor, if not positive.

Noise and vibration

181. Ms McIlraith, Mr Olliver and Mr Clarke are concerned about the operational noise effects of the turbines and suggest that their life will be 'drastically affected' by the "cacophony of noise from whistles, hum and swishes". It is important to note that other rural activities also create noise which can be loud and sporadic such as from machinery, farm operations, stock and stock movements, transport, and planes etc, which are recognised as part of the rural environment but can still cause nuisance effects.
182. Mr Maxwell has also raised concerns about the noise that is currently being created by the existing wind monitoring mast. I understand the noise associated with the existing mast is not part of this application. Acoustics JWS addresses the mitigation measures considered to be

appropriate to manage noise effects from the proposed permanent mast.⁷¹

183. Mr Maxwell explains that Hastwell residents are concerned about the “doppler effect” they predict will occur due to the presence of multiple turbines. Many of the submissions raised similar concerns.⁷² The noise JWS addresses this matter and considers that NZS6808:2010 adequately addresses these and other noise effects.⁷³
184. Mr Halstead has assessed the operational noise effects and predicts that sound levels will comply with the relevant standards, which have been set to protect health and reasonable amenity. He acknowledges that there is potential for turbines to produce noise levels which could be too loud for suitable sleeping environments but states that the standards are aimed at achieving acceptable noise levels inside bedrooms (with windows partially open for ventilation which meet WHO recommendations).
185. Mr Halstead expects that some dwellings which are relatively proximate to some turbines may experience some discernible swishing (periodicity), but he states that the noise levels will not be comparable to those produced by industrial or transport activities.⁷⁴ On moderately windy days, noise from the wind turbines is likely to be a dominant feature of the noise environment. In his opinion, adverse health effects will not be caused by the Project.⁷⁵
186. Mr Halstead comments that most neighbours will be able to recognise the wind turbine noise in their environment. He states that for those that

⁷¹ Mt Munro JWS Acoustics 8 August 2024

⁷² #1 Rachel Taylor, #3 David and Mark Cook, #5 Ceilidh McPhee, #6 Chris Davies, #7 Dave Berry, #8 Chris Clarke, #9 Shelley Pender, #11 Ian John Maxwell, #13 Hastwell Mt Munro Protection Society Inc, #16 Jenny Clarke, #21 Charmaine Jane Semmer, #34 Glen Opel Ltd, #35 Kaylene Duffell, #38 Carolyn and John Braddick, #39 Lisa Joy Merrin, #41 Jodi Tomlin, #43 Josie Braddick, #44 Brendon Braddick, #45 Mr Hamilton, #48 Anne Braddick, #49 Jessie Braddick, #54 Gavin Osborne, #56 Janet McIlraith, #57 Eketāhuna Health Centre, #61 Tessa Bardella, #66 Cade, Wayne and Kim McDermott, #67 Andrea Sutherland, #68 Deborah Gully, #70 Andrew and Brigitte Sims, #71 Amy Sutherland

⁷³ Mt Munro JWS Acoustics 8 August 2024

⁷⁴ Evidence of Miklin Halstead dates 24 May 2024, para 43.

⁷⁵ Ibid, para 35.

are not opposed to the turbines, the effects will not be adverse, but for those who are against them, the noise could be a reminder of their presence, and they are likely to form the opinion that the noise is out of character and inappropriate.⁷⁶ This opinion reflects the sentiments expressed in Ms Steadman's report that the level of noise and the disturbing qualities of the noise will vary based on individual perceptions and sensitivity.⁷⁷

187. An ex-post survey of the Turitea wind farm found that a much smaller proportion of the rural population surveyed could hear the turbines from their property than could see the turbines.⁷⁸ The survey did note that there was a strong correlation between separation distance and the frequency that survey respondents reported hearing noise from windfarms.
188. It has also been expressed in submissions and evidence, and during discussions with me that trees may not be effective at blocking noise if they need to be removed due to their age, and the placement of trees may mask noise but create other effects such as shading.⁷⁹ My understanding is that the offer of tree planting as a mitigation measure relates to visual effects rather than noise effects during the operational period, and the management of noise effects is provided in the wind farm operation conditions (WFO1-WFO11).
189. Mr Halstead has also assessed the likely effects of noise generated by turbines on stock and other animals and comments that sheep and cattle are often seen seeking shade under the operational towers, and therefore noise is unlikely to impact animals.⁸⁰ This means that farming

⁷⁶ Ibid, para 44

⁷⁷ Statement of Evidence – Hastwell Mt Munro Protection Society Inc Appendix 1 Second Nature Psychology Mt Munro 11.06.2024

⁷⁸ Baines, J., Baker, J., Brophy, L., Rielly, A., Thompson, J., and Yasin, Y., (2012) Social monitoring can contribute to ex-ante SIAs: a case of New Zealand wind farm planning in Impact Assessment and Project Appraisal, 30:3, p195-206.

⁷⁹ Evidence of John Maxwell, Submissions: #8 Chris Clarke, #13 Hastwell Mt Munro Protection Society Inc,

⁸⁰ Evidence of Miklin Halstead dates 24 May 2024, para 50

operations are unlikely to be compromised due to poor animal health related to turbine noise.

190. Council's noise effects reviewer Mr Lloyd agrees with Mr Halstead that noise effects can be appropriately managed.
191. In my opinion, the potential health effects of operational noise have been identified and assessed by Mr Halstead for Meridian and Mr Lloyd for the Councils and the conditions ensure that management of ambient noise levels are compliant with standards and acceptable, but there may be an ongoing 'annoyance' effect for some receivers.

Landscape and visual

192. NZWEA explains that visual amenity affects arise when views are changed by wind farm projects, which can affect how people experience the landscape. Generally, it is expected that the more dominant turbines are in views, the more adversely impacted surrounding communities may be. There is a great degree of concern from s274 parties about the visual dominance of turbines in association with the proposed and necessary navigational lights. Mr Maxwell is also concerned about the methodology employed to assess the visual effects. Many submissions described these concerns.⁸¹
193. Mr Girvan assessed the operational landscape and visual effects for Meridian. He states that current best practice recognises that relevant factors encompass a range of physical, sensory and associative dimensions.⁸² There is also an assumption that occupiers of dwellings are assumed to have higher sensitivities to change. This an assumption that the Hastwell Mt Munro Protection Society Inc challenge due to the high levels of time spent outdoors working on their landholdings. I note

⁸¹ #3 David and Mark Cook, #6 Chris Davies, #7 Dave Berry, #8 Chris Clarke, #9 Shelley Pender, #11 Ian John Maxwell, #13 Hastwell Mt Munro Protection Society Inc, #17 Bruce Wallace, #21 Charmaine Jane Semmens, #23 Rhys Semmens, #24 Nick Olliver, #30 Ian Robert Olliver, #33 Hera Wi Repa, #34 Glen Opel Ltd, #35 Kaylene Duffell, #37 Robin Remmington Olliver, #38 Carolyn and John Braddick, #41 Jodi Tomlin, #42 Naomi B Pussell, #45 Mr Hamilton, #47 Marc Braddick Santon Farm Ltd, #48 Anne Braddick, #49 Jesse Braddick, #54 Gavin Osborne, #55 Merryn Osborne, #56 Janet McIlraith, #61 Tessa Bardella, #66 Cade, Wayne and Kim McDermott, #70 Andrew and Brigitte Sims, #71 Amy Sutherland, #73 Gary Groombridge

⁸² Evidence in Chief Rhys Girvan 24 May 2024, para 111

that the Landscape and Visual JWS experts agree that it is appropriate to assess the effects on visual amenity from people's homes as opposed to views from working and open areas which are considered to be incidental to the land use activity.⁸³ However, they do also acknowledge that the assessment of visual effects requires the consideration of the context and values in which the views occur.

194. The effects of the wind turbines are expected to reduce significantly at distances further away from the turbines (between 2km and 5km). In Mr Girvan's opinion, many of the properties close to the Mt Munro turbines will have restricted views of the wind farm due to intervening landforms and existing vegetation. He expects that only a relatively small number of dwellings will have full open views of wind turbines.⁸⁴
195. Beyond the site the four dwellings at 48 Smiths Line, 117 Opaki Kaiparoro Road, 51 Falkner Road, and 31 Hall Road are expected to have high visual effects resulting from primary open views. Those views are assessed as being prominent but not dominant and overwhelming.
196. Some dwellings along South Road No. 2 and north of the Pahiatua Basin are anticipated to have moderate visual effects. Mr Girvan's opinion is that in open views, the turbines may be highly visible across the skyline but will also form part of the wider rural view.
197. Mr Girvan recognises that reactions to the turbines will be subjective (influenced by individual's disposition towards windfarms). He explains that attitudes can change over time and describes how this occurred at Te Āpiti.
198. Additionally, an ex-post survey undertaken on Turitea wind farm found that the overwhelming majority of viewers (77%) were either totally indifferent to the visual presence of turbines nearby or reported positive

⁸³ Mt Munro JWS Landscape and Visual 2 August 2024

⁸⁴ Ibid, para 15

impacts.⁸⁵ It was noted that younger people tended to view wind turbines more favourably than older residents, and the lack of acceptance of the visual impacts of wind farms increases with the length of residence in the receiving community. Additionally, an ex-post assessment of the Te Āpiti wind farm reported low levels of adverse visual effects were experienced (15%).⁸⁶

199. Mr Hunt has assessed the landscape effects for Council and agrees the scale of effects diminishes with distance from a windfarm.
200. To mitigate the visual effects, on-site landscape works have been offered, though Mr Girvan acknowledges that it is generally not possible to screen all potential views of wind turbines by introducing planting. Meridian has made efforts to engage with each of the four most affected off-site parties, and offers mitigation for all dwellings that will experience moderate-high or high adverse effects (Condition VM1). Mr Olliver's view is that mitigation will be ineffective.
201. Mr McGahan reiterates there is agreement in the Landscape and Visual JWS that effects must be considered within the statutory context within which the change is proposed.⁸⁷ Wind farms are anticipated and considered to be an appropriate land use within the rural environment subject to effects being avoided, remedied or mitigated.
202. A positive effect of the visual appearance of the wind farm is that it will become a part of the future identity of the locality and community.⁸⁸
203. The landscape assessment undertaken by Mr Girvan on behalf of Meridian has identified the potential social effects arising from changes to the landscape and views. The assessment has considered the subjective responses to the establishment of the turbines and has

⁸⁵ Baines, J., Baker, J., Brophy, L., Rielly, A., Thompson, J., and Yasin, Y., (2012) Social monitoring can contribute to ex-ante SIAs: a case of New Zealand wind farm planning in Impact Assessment and Project Appraisal, 30:3, p195-206.

⁸⁶ Baines, J., and Taylor, N. (2010). 'Green' in good, but is more 'green' always better? NZ wind farming experience.

⁸⁷ Statement of evidence of Damien McGahan, para 78.

⁸⁸ Taylor Baines & Associates for Minter Ellison Ruud Watts on behalf of TrustPower Ltd, March 2007. Mahinerangi Wind Farm Proposal: Social Impact Assessment.

acknowledged that not all parties in the community are satisfied with the proposed mitigation offered to address these effects.

Lighting

204. The s274 parties have outlined their concerns about the effects of the proposed aviation lights on the dark sky and stargazing, including views of Matariki, and the potential effects on sleep patterns. During the day, the lighting effects relate to glint and glare.
205. Mr Wright has reviewed operational lighting, including vehicle headlight sweep, operations and maintenance building lights, site substation lights, terminal substation lights, aviation warning lights, spill light, glare, skyglow, and effects on road users for Meridian. His opinion is that all lighting will meet permitted activity rules under the Tararua's and Masterton District Plans and AS/NZS 4282:2019.
206. The experts agree in the Lighting JWS⁸⁹ that the aviation warning lights will be visible and will have some amenity effects when generally viewing the overall vista of the night sky. However, light pollution will not be present to a significant degree.
207. Positive effects will arise from the provision of navigational lights by increasing aviation safety.
208. Mr Wright has considered the social effects arising from the health and amenity effects of lighting related to the Project, and in his opinion the appropriate standards will be adhered to, therefore I consider the potential social effects arising from lighting will be minimal and relate to potential annoyance.

Shadow Flicker

209. Shadow flicker from turbines can potentially cause social effects by affecting the amenity of living environments, though there is no established link to health effects. Mr Maxwell's evidence contends that

⁸⁹ Mt Munro JWS Lighting 30 July 2024

13 properties are likely to suffer the full effects and Ms McIlraith suggests that amenity effects will arise due to flicker.

- 210. Mr Faulkner has assessed the effects of flicker for Meridian and indicates that it is a straightforward matter to control this effect to acceptable limits, as turbines can be shut down when required to achieve appropriate limits set by the National Windfarm Guidelines (Australia).
- 211. Mr Girvan considers that there are eight dwellings which would potentially experience shadow flicker exposure.⁹⁰
- 212. The experts consider that the proffered consent conditions will be effective and where shadow flicker cannot otherwise be reduced to appropriate durations individual wind turbines can be shut off automatically to ensure shadow flicker does not exceed appropriate limits.
- 213. I therefore consider, based on this expert opinion, that the proposed shadow flicker mitigation conditions will ensure that any social effects arising from potential amenity and health effects are appropriately managed.

Telecommunications interference

- 214. Telecommunications are an important way of ensuring that people can access important services, as well as keeping up to date with current news, and providing a means of social connection and avoiding isolation.
- 215. Mr Anderson has explained that a Radio Compatibility Assessment Report was commissioned by Meridian and the findings of that report were that the indicative layout of turbines is unlikely to cause harmful interference to telecommunications services.

⁹⁰ Identified as BML ID# 1, 2, 6, 10, 11, 12, 14, and 15).

216. Meridian has considered the likely social effects of interference with telecommunications and has proposed a Telecommunications Pathway Clearances condition (TP1) to manage effects.

Health and safety

217. There are a range of health and safety effects that may arise from the wind farm operation and many of those effects have been addressed by subject matter experts. In response to the Council's RFIs, Mr Anderson commented that *"it is not the norm now for dedicated health assessments to be required, or health evidence to be presented in relation to the operational effects of wind farms."*⁹¹ This is in part due to the Environment Court recognising that *"the overwhelming weight of evidence is that the NZS6808 standard provides an appropriate level of protection of both amenity and health and arising from noise, including protection against sleep disturbance"*.⁹²
218. In Mr Anderson's evidence, he considers that compliance with the proposed conditions will mean that health issues are unlikely to arise, and he notes that Mr McGahan for the Councils has reached a similar conclusion.
219. There are two health and safety aspects relevant to social effects which I comment on here.
220. The first relates to concerns raised by Mr Maxwell about the risk of fire and the associated impacts on businesses for volunteers in the Rural Volunteer Fire Brigade and the potential for fires to spread. The risks of fires in turbines are also described in submissions.⁹³
221. Mr Anderson comments on these concerns in his evidence and states that fires at wind farms are very rare and that Meridian has had no fires. There has been one fire recently at Mercury's Tararua wind farm. I

⁹¹ Appendix 4 of their RFI#2 Response 3 letter (23 February 2024)

⁹² Ibid

⁹³ #8 Chris Clarke, #9 Shelley Pender, #11 Ian John Maxwell, #13 Hastwell Mt Munro Protection Society Inc, #37 Robin Remington Olliver, #41 Jodi Tomlin, #45 Mr Hamilton, #69 Fire and Emergency New Zealand,

therefore consider that fire safety is an issue that has been identified by Meridian.

222. There may also be mental health concerns related to lingering frustration once the wind farms are operational, and as people come to the realisation that they are an established part of the environment. Ms Steadman's report⁹⁴ highlighted literature that stated that residents living within 10km of a windfarm are likely to overestimate the risks of the windfarms and the associated stress can manifest in physical ill health which could show up as increased doctors' visits or increased reliance on social services.
223. Submitters have explained that several families left the community after the initial proposal was postponed, and there is potential that people may choose to leave the community if the Project progresses or due to unhappiness once the turbines are operational. Alternatively, residents may decide the effects on them are not as bad as they had anticipated, and they will stay living in the community. In any event, this is an effect that is unable to be mitigated. It is also likely that some of the people working in the operational wind farm will move to the community and become more involved in community life, thereby fostering friendships and contributing to the social fabric.
224. The SIA regarding Mahinerangi windfarm found that the visual effects of the wind farm were unlikely to cause established residents to leave the community as the farming community was well established. It was considered to be more likely that the wind farm would add to the economic viability of several farming properties helping to sustain the enterprises and those who rely on them for their livelihoods, which reinforces the positive effects described in the economic section above.⁹⁵

Decommissioning

⁹⁴ Statement of Evidence – Hastwell Mt Munro Protection Society Inc Appendix 1 Second Nature Psychology Mt Munro 11.06.2024

⁹⁵ Taylor Baines & Associates for Minter Ellison Ruud Watts on behalf of TrustPower Ltd, March 2007. Mahinerangi Wind Farm Proposal: Social Impact Assessment.

225. NZWEA states that wind turbines typically have an operating life of 20 to 25 years before they are decommissioned, though with good maintenance and refurbishment a turbine can operate for longer.
226. Mr Maxwells' evidence and some submissions present concerns about the end-of-life treatment of blades in particular, but also the restoration of the landscape.⁹⁶
227. Decommissioning of the windfarms was considered in the AEE and by Mr Girvan. It is generally understood that the effects of the wind farms are largely reversible, as major elements can be removed and residual wind turbine platforms would not appear prominent. A proposed Decommissioning of Windfarm Condition (DT1) ensures that all turbines must be removed when the wind farm has not been operational for 36 months.

COMMENTS ON PROPOSED CONDITIONS

228. Meridian has developed a set of conditions to mitigate the effects of the Project, and those conditions have been reviewed by Council's experts. In this section I provide comments on those conditions from a social wellbeing effects perspective.
229. The conditions which are relevant to social effects are:
- (a) The establishment of a Stakeholder Liaison Group (**SLG**) which will be established at least 40 working days prior to the Construction Environmental Management Plan (**CEMP**) being lodged with the Councils and maintained for a period of three years after the completion of construction (unless unanimously agreed by the group to dissolve it earlier) (Conditions SLG1-SLG7). Membership of this group will be wide, and many people will be invited to participate. The purpose of the group will be to facilitate the provision of information between Meridian and the community. The group will provide input into the various construction management plans, and act as a forum for voicing

⁹⁶ #8 Chris Clarke, #9 Sheller Pender, #13 Hastwell Mt Munro Protection Society Inc,

community concerns about the construction and initial operation of the Project. Meridian has undertaken to ensure that these meetings are chaired by an independent suitably qualified person. In my view, this will ensure that everyone is given a voice, and I support this provision due to ongoing concerns being likely to be expressed in this forum. The SLG is an important mechanism for ongoing exchange of information and management and mitigation of any social effects arising from the construction and operational phases, therefore it is important that community members utilise this opportunity.

- (b) A complaints register will be used to record complaints about construction activities and Meridian is expected to respond to complaints within five working days (Condition GA7). The details of the key contact person will be provided in the CEMP and the community will be advised how to make complaints and who to contact through the SLG, letter drops and on the project page of Meridian's website. This is a proactive complaints procedure and provides certainty that if complaints are made that Meridian is obliged to respond promptly to address concerns.
- (c) A CEMP will outline the roles and responsibilities of staff and contractors, the Project Manager and Project Representative(s) including contact details, key contact person(s) for public information and complaints, the construction programme and hours, and procedures for complaints and incident management. There is a proactive approach to the management of feedback received which includes recording changes that are made and providing explanations of the reasons why changes are not made. A range of management plans will also be provided.
- (d) The Construction Traffic Management Plan (**CTMP**) has procedures for consulting and communicating with residents along Old Coach Road regarding traffic arrangements and road closures in written form. Access for Old Coach Road residents is to be maintained at all times. There are restrictions about where construction traffic is permitted to travel on the local road network

to manage any effects that may be tied to that activity (adverse effects on property access, damage to private and public property including roads, and traffic safety etc). Provisions are also made for educating drivers about safety issues including regarding cyclists who may be on the Heartland Ride route and pedestrians on local roads. Temporary traffic management measures (including signage) are intended to be installed at site accesses, intersections, level crossings, stock crossings and/or local accesses to improve safety. There are also provisions around the timing of construction traffic to minimise disruption to and potential safety effects on users of the local transport network. Meridian will be required to undertake written consultation and procedures for consultation with Waka Kotahi NZTA, Councils, emergency services, NZ Post, PowerCo, residents on Old Coach Road and other identified affected people.

- (e) The Construction Noise Vibration Management Plan (**CNVMP**) requires mitigation such as co-ordination of activities with residents' activities, noise barriers, provision of sound insulation and ventilation to houses where appropriate, or temporary relocation where short term exceedances may occur. Appropriate mitigations are expected to be explored in consultation with affected residents. A clear programme of blasting works will be communicated to residents to allow farmers to relocate stock if that is required. Another condition that will require input from the landowner relates to the Bushman's Cottage on Old Coach Road to remedy any effects caused to the building by vibration during construction activity. The Concrete Batching Plant will cause noise during pours for the foundations for the turbines for a limited period at night and residents who may experience noise that exceeds the night-time noise limits will be informed seven days in advance. Other construction activities will occur between 7.30am and 6pm Monday to Friday. Blasting will occur between 9.00am and 5.00pm Monday to Friday.
- (f) Mitigation for properties that are expected to experience 'moderate-high' or 'high' visual effects has been offered as

Condition VM1. This includes planting additional advanced grade specimen tree(s) and the offer to construct or extend decks on the 'high' dwellings to direct views away from the turbines.

However, the effectiveness of this strategy relies on property owners agreeing to use the proffered mitigation and discussions with property owners needs to commence at least six months prior to construction.⁹⁷

- (g) A condition about the noise associated with the operation of the wind farm (WF01) provides noise limits during daytime and nighttime hours at the boundary of any consented dwelling.

- 230. Transparent engagement and ongoing discussions about the development of management plans once the detailed design phase has been completed is the best way of ensuring that the community has sufficient certainty about the likely effects and proposed mitigation and management options for social effects. This will include ongoing communication with the entire community about the timing for when construction is likely to commence, as opposed to information filtering out through the grapevine. I recommend that the Project website is regularly updated to convey that information as well as members of the SLG being provided with opportunities to ask questions. The opportunity to enhance social capital was a positive benefit identified in the Mahinerangi SIA and I agree with these sentiments.⁹⁸

Other potential mitigation

- 231. Meridian also intends to establish a Community Fund, as it has for its other generation projects. It is important to recognise that the fund can be applied towards any activity that meets Meridian's criteria, and environmental activities such as funding the ongoing work of the Pūkaha National Wildlife Centre, riparian planting and predator trapping

⁹⁷ Refers to properties assessed as 'high': 48 Smiths Line, 117 Opaki Kaiparoro Road, 51 Falkner Road, 31 Hall Road, and 'Moderate-High': 2310 Opaki Kaiparoro Road, 152 Opaki Kaiparoro Road, 124 Opaki Kaiparoro Road, 136 Falkner Road, 114 Falkner Road, 18 Hall Road, 18A Hall Road, 18C Hall Road, No address Old Coach Road, No address Old Coach Road, 340 North Road, and 'Moderate' increasing to 'Moderate-High' 72 Smiths Line as outlined in Mt Munro JWS Planning 9 August 2024.

⁹⁸ Taylor Baines & Associates for Minter Ellison Ruud Watts on behalf of TrustPower Ltd, March 2007. Mahinerangi Wind Farm Proposal: Social Impact Assessment.

will all be eligible and will benefit the local communities of Eketāhuna and Hastwell.

CONCLUSIONS

- 232. Meridian considers that it has addressed the social effects of the project in subject expert's evidence and that this approach is aligned with the guidelines provided by the NZWEA.
- 233. I agree that nearly all social effects have been considered in the expert's assessments and evidence. The only social effect I consider was not previously sufficiently acknowledged relates to stress and anxiety arising from the planning and consenting process.
- 234. I understand that Meridian sought advice about stress and social tension effects arising during the planning and consenting phase and was advised that concern about potential effects can only be given weight if such concern is reasonably based on real risk, and that anxiety or stress arising from an applicant seeking consent for a proposal does not amount to an adverse effect of the activity that should be considered under the RMA.
- 235. Mitigation measures that address the key potential effects on social wellbeing have been proposed in conditions and will be developed in management plans as more information becomes available during the detailed design stage.
- 236. There will be opportunities for ongoing consultation with the community and there is a proactive framework established in the conditions for addressing social wellbeing effects that may arise during construction and operation. It is important that community members utilise these opportunities to express their opinions to Meridian, and despite a significant amount of frustration and lack of trust having been expressed by the Society, the independent facilitation of the Stakeholder Liaison Group will ensure that all issues and concerns that are raised by stakeholders are given adequate consideration when developing management plans.

237. Finally, there is evidence that there is significant demand for renewable energy provision in New Zealand and this is set to continue as the nation strives to meet its carbon emission reduction goals. Wind farms can generate positive effects not only for the nation, but also for the community, through increased income and employment, and funding of community projects, and also for individual landowners who are able to derive additional revenue and diversify their farming operations. The potentially adverse effects of wind farms are localised and can be mitigated through conditions and management plans.

Rebecca Anne Foy

06 September 2024

APPENDIX A: IAIA SOCIAL IMPACT VARIABLES

The IAIA states⁹⁹ that a convenient way of conceptualising social impacts is as changes to one or more of the following:

- (a) people's way of life – that is, how they live, work, play and interact with one another on a day-to-day basis
- (b) their culture – that is, their shared beliefs, customs, values and language or dialect¹⁰⁰
- (c) their community – its cohesion, stability, character, services and facilities
- (d) their political systems – the extent to which people are able to participate in decisions that affect their lives, the level of democratisation that is taking place, and the resources provided for this purpose
- (e) their environment – the quality of the air and water people use; the availability and quality of the food they eat; the level of hazard or risk, dust and noise they are exposed to; the adequacy of sanitation, their physical safety, and their access to and control over resources
- (f) their health and wellbeing – health is a state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity
- (g) their personal and property rights – particularly whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties
- (h) their fears and aspirations – their perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children.

⁹⁹ <https://www.iaia.org/wiki-details.php?ID=23>

¹⁰⁰ Noting that in New Zealand this variable should exclude Māori culture and values which are described in Cultural Impact Assessments undertaken by Manawhenua

APPENDIX B: COMMUNITY DEMOGRAPHIC DESCRIPTION

Demographic Characteristics

There were 1,820 people living in 730 households in the two communities in 2023 (Figure B1). In the Eketāhuna community there are 1,320 people living in 530 households, while Hastwell was home to 500 people living in 200 households. Together the two communities accounted for only 4% of the population of Masterton and Tararua Districts.

Figure B1: Community population and households (2023, Statistics NZ)

	2023 population	2023 households	Share of Districts' population	Share of Districts' households
Eketāhuna	1,320	530	3%	3%
Hastwell	500	200	1%	1%
Sub-total two communities	1,820	730	4%	4%
Masterton District	29,700	12,100	61%	61%
Tararua District	19,100	7,800	39%	39%
Sub-total two districts	48,800	19,900	100%	100%

Figure B2: Population and household growth projections

	2023	2028	2033	2038	2043	2048	Growth 2023-2048	
							n	%
Population								
Eketāhuna	1,320	1,330	1,350	1,360	1,360	1,360	40	3%
Hastwell	500	520	540	550	560	560	60	12%
Sub-total two communities	1,820	1,850	1,890	1,910	1,920	1,920	100	5%
Masterton District	29,700	30,600	31,300	31,700	31,900	32,100	2,400	8%
Tararua District	19,100	19,350	19,500	19,600	19,550	19,350	250	1%
Sub-total two districts	48,800	49,950	50,800	51,300	51,450	51,450	2,650	5%
New Zealand	5,149,500	5,354,100	5,564,400	5,752,800	5,924,000	6,077,100	927,600	18%
Households								
Eketāhuna	530	540	550	560	560	550	20	4%
Hastwell	200	210	220	220	230	230	30	15%
Sub-total two communities	730	750	770	780	790	780	50	7%
Masterton District	12,100	12,600	12,900	13,100	13,200	13,400	1,300	11%
Tararua District	7,800	8,000	8,100	8,200	8,100	8,000	200	3%
Sub-total two districts	19,900	20,600	21,000	21,300	21,300	21,400	1,500	8%
New Zealand	1,432,300	1,500,400	1,573,700	1,636,100	1,687,500	1,739,000	306,700	21%

The population and household characteristics of the Eketāhuna and Hastwell communities are summarised below. Comparisons of those characteristics are relative to the combined population of Masterton and Tararua districts (Figures B3, B4, and B5).

Eketāhuna

The Eketāhuna community is projected to grow by around 3% in the next 25 years (+40 people, and +20 households).

Compared to the districts' average, Eketāhuna had:

- (a) A similar age composition, although slightly higher proportion of older working people (47%) than the districts' average (44%) and correspondingly smaller share of retirement aged people (14% versus 18%).
- (b) A higher proportion of people identifying with Māori ethnicity (21% versus 17%), and lower proportions of Pacific Peoples, and people of Asian and other ethnicity.
- (c) A similar share of the population (91%) lived in NZ at the last census, with 40% living at the same place of residence in 2018 as in 2013, and 51% having moved to their current home from somewhere else in NZ (including local moves). This is a slightly higher proportion of people moving between the 2013 and 2018 censuses than the districts' average.
- (d) A very similar income distribution, with a slightly greater share of households earning \$70,000-\$100,000, and a smaller share earning \$100,001+.
- (e) A higher share of rented dwellings were privately owned, with only 2% owned by the councils (compared with 4% for the districts), and nil by the government or community housing providers (compared with 6%).
- (f) A higher proportion of residents worked as labourers (41%, compared with 37%) or managers and professionals (42%, compared with 36%) and lower shares in services, clerical, sales, and admin roles (17%, compared with 27%).
- (g) Residents were similarly qualified, more likely to be self-employed, more likely to be employed in primary industry, and less likely to be employed in most other sectors.

Hastwell

The Hastwell community is projected to grow by around 12% (population) in the next 25 years (+60 people, and +30 households).

Compared to the districts' average, Hastwell had:

- (a) Greater shares of people in older cohorts, including retirement aged people (23% versus 18%) and older working people (47% versus 44%) and correspondingly smaller shares of children (18% versus 21%) and younger working people (12% versus 16%).
- (b) A higher proportion of people identifying with NZ European ethnicity (85% versus 70%), and much smaller proportions of all other ethnicities (e.g. Māori 9% compared to 17%).
- (c) A higher share of the population (93% compared to 90% for the districts) lived in NZ at the last census, with 54% living at the same place of residence in 2018 as in 2013 (compared to 47%), and 39% having moved to their current home from somewhere else in NZ (including local moves).
- (d) A much greater share of households earning \$70,000-\$100,000 (22%, compared to 16% for the districts) and \$100,001+ (34% compared to 23%).
- (e) A higher share of privately owned dwellings (77% compared to 69%).
- (f) All rental dwellings were privately owned.
- (g) A higher proportion of residents worked as managers and professionals (48%, compared with 36%), and lower shares as labourers (29%, compared with 37%) and services, clerical, sales, and admin roles (22%, compared with 27%).
- (h) Residents are much more likely to have a university qualification (17% versus 11%), and less likely to have no qualification (24% versus 30%).
- (i) Residents are much more likely to be self-employed (21% versus 12%), and less likely to be in paid employment (33% versus 38%), and like the Eketāhuna community, more likely to be employed in primary industry, and less likely to be employed in most other sectors.

Figure B3: Community demographic characteristics, 2018¹⁰¹

	Eketāhuna	Hastwell	Masterton District	Tararua District	Masterton and Tararua Districts	New Zealand
Age						
Children (<15 yrs)	22%	18%	20%	23%	21%	20%
Young working (15-29)	17%	12%	17%	16%	16%	20%
Older working (30-64)	47%	47%	44%	45%	44%	45%
Retirement aged (65+)	14%	23%	19%	16%	18%	14%
Ethnicity						
NZ European	73%	85%	70%	69%	70%	61%
Māori	21%	9%	16%	19%	17%	13%
Pacific Peoples	1.4%	1.2%	2.8%	1.3%	2.2%	6.5%
Asian	1.1%	0.6%	2.3%	1.7%	2.1%	10.5%
MELAA* and Other	3.7%	3.9%	8.7%	9.1%	8.8%	8.7%
Sex						
Male	48%	48%	52%	50%	51%	51%
Female	52%	52%	48%	50%	49%	49%
Years at Usual Residence (U.R.)						
0 years	19%	14%	20%	20%	20%	22%
1-4 years	32%	28%	31%	29%	30%	32%
5-9 years	18%	14%	19%	18%	19%	19%
10+ years	31%	44%	30%	33%	31%	27%
U.R. 5 Years Ago						
Same as UR	40%	54%	46%	48%	47%	43%
Elsewhere in NZ	51%	39%	44%	43%	43%	42%
Not born five years ago	6%	6%	7%	8%	7%	7%
Overseas	2%	1%	3%	2%	3%	8%
No fixed abode	0%	0%	0%	0%	0%	0%

**Middle Eastern, Latin American and African*

¹⁰¹ Source: Statistics NZ Census of Population and Dwellings, 2018

Figure B4: Community household characteristics, 2018¹⁰²

	Eketāhuna	Hastwell	Masterton District	Tararua District	Masterton and Tararua Districts	New Zealand
Household Income						
<\$30,000	27%	13%	24%	26%	25%	19%
\$30,001-\$50,000	18%	16%	19%	21%	20%	15%
\$50,001-\$70,000	17%	15%	16%	16%	16%	13%
\$70,001-\$100,000	19%	22%	16%	16%	16%	16%
\$100,000+	19%	34%	24%	20%	23%	37%
Household Type						
One person household	16%	11%	17%	17%	17%	13%
Couple only	17%	24%	17%	18%	18%	15%
Couple with child(ren)	57%	60%	53%	54%	54%	57%
One parent with child(ren)	5%	2%	6%	5%	5%	5%
Multi-family	5%	4%	7%	6%	6%	9%
Dwelling Tenure						
Owned or partly owned	69%	77%	69%	68%	69%	65%
Not owned	31%	23%	31%	32%	31%	35%
Sector of Landlord						
Private	98%	100%	89%	90%	90%	83%
Local Council	2%	0%	4%	5%	4%	3%
Housing NZ	0%	0%	3%	1%	2%	13%
Iwi, hapu or Maori land trust	0%	0%	0%	0%	0%	0%
Other community housing provider	0%	0%	2%	1%	2%	0%
Other state owned enterprise or government	0%	0%	2%	3%	2%	1%

¹⁰² Source: Statistics NZ Census of Population and Dwellings, 2018

Figure B5: Community employment and education characteristics, 2018¹⁰³

	Eketāhuna	Hastwell	Masterton District	Tararua District	Masterton and Tararua Districts	New Zealand
Employment status						
Employed (FT or PT)	68%	72%	61%	64%	63%	64%
Unemployed	5%	2%	4%	4%	4%	4%
Not in Labour Force	26%	26%	35%	32%	34%	32%
Occupation type						
Manager/ prof.	42%	48%	35%	37%	36%	40%
Trades and labourers	41%	29%	35%	40%	37%	30%
Services, clerical, sales and admin	17%	22%	30%	23%	27%	30%
Study Participation >5yrs						
Full time	20%	17%	18%	20%	19%	21%
Part time	3%	4%	2%	2%	2%	3%
Not studying	77%	80%	79%	78%	79%	76%
Highest qualification						
None	29%	24%	28%	33%	30%	21%
Secondary School and Work Qual	60%	57%	56%	56%	56%	52%
University	9%	17%	13%	9%	11%	21%
Overseas	2%	2%	3%	2%	3%	6%
Source of Income						
Paid Employment	36%	33%	39%	37%	38%	42%
Self Employment	21%	21%	11%	15%	12%	11%
Private Investents	11%	15%	14%	14%	14%	14%
Benefits and Allowances	29%	29%	33%	31%	32%	28%
No Source	3%	2%	3%	3%	3%	5%
Occupation by Industry						
Agriculture Forestry and Fishing	42%	32%	13%	31%	20%	7%
Mining	0%	1%	0%	0%	0%	0%
Manufacturing	5%	6%	10%	14%	11%	10%
Electricity Gas Water and Waste Services	1%	1%	1%	1%	1%	1%
Construction	7%	9%	9%	5%	7%	8%
Wholesale Trade	4%	1%	3%	3%	3%	5%
Retail Trade	6%	7%	11%	9%	10%	10%
Accommodation and Food Services	6%	2%	6%	4%	5%	6%
Transport Postal and Warehousing	1%	1%	3%	3%	3%	4%
Information Media and Telecommunications	0%	0%	1%	0%	1%	2%
Financial and Insurance Services	0%	2%	2%	1%	2%	3%
Rental Hiring and Real Estate Services	2%	0%	2%	2%	2%	2%
Professional Scientific and Technical Services	3%	6%	6%	4%	5%	9%
Administrative and Support Services	4%	2%	3%	2%	3%	4%
Public Administration and Safety	4%	6%	4%	3%	4%	5%
Education and Training	3%	8%	8%	6%	8%	8%
Health Care and Social Assistance	8%	8%	12%	8%	10%	9%
Arts and Recreation Services	1%	2%	1%	1%	1%	2%
Other Services	3%	7%	4%	3%	4%	4%

Business and employment activity

There were just over 400 people employed in businesses based in the Eketāhuna community (2023),¹⁰⁴ and around 90 in Hastwell. Employment in both communities is now much reduced from the peak recorded in 2000. Since 2000 total employment in the Eketāhuna community has decreased by 34% (just over 200 workers), and in Hastwell employment has more than halved in that time (-53%, -105 workers). Nearly all of that reduction has been from a decrease in employment in the primary sector, with all other sectors combined having nearly nil net growth since 2000. This pattern reflects anecdotal information provided in interviews that farmers are undertaking more of the work and employing fewer people currently.

Key observations relating to employment activity in the communities include:

- (a) The dominant activity within both communities is the primary sector, with Agriculture, Forestry and Fishing¹⁰⁵, employing 54% of all workers in Eketāhuna community, and 43% in Hastwell, although much reduced from around 70% in each community in the year 2000.
- (b) The next largest employment sector in each community is Construction (25 workers in Eketāhuna and 17 in Hastwell).
- (c) The Eketāhuna commercial centre provides a base for 125 workers engaged in commercial activity (retail, services, education, healthcare etc), with very limited examples of that activity in Hastwell.
- (d) There is low employment in other industries, including Manufacturing (fewer than 10 workers).
- (e) The average business is small in both communities, at just 1.7 workers per business in Eketāhuna, and close to 1.0 in Hastwell.

¹⁰³ Source: Statistics NZ Census of Population and Dwellings, 2018

¹⁰⁴ The most recent employment data available from Statistics NZ's Business Demography data

¹⁰⁵ All data in this part is classified according to Statistics NZ's Australian and New Zealand Standard Industrial Classification ("ANZSIC") framework, which classifies economic activity to 19 divisions

Figure B6: Community employment, 2023¹⁰⁶

	Employment (TECs*)		Emp. Structure	
	Eketahuna	Hastwell	Eketahuna	Hastwell
Agriculture, Forestry and Fishing	221	29	54%	31%
Mining	-	10	0%	11%
Manufacturing	5	1	1%	2%
Electricity, Gas, Water and Waste Services	1	-	0%	0%
Construction	25	17	6%	18%
Wholesale Trade	13	1	3%	1%
Retail Trade	22	-	5%	0%
Accommodation and Food Services	28	-	7%	0%
Transport, Postal and Warehousing	10	1	3%	1%
Information Media and Telecommunications	-	-	0%	0%
Financial and Insurance Services	1	0	0%	0%
Rental, Hiring and Real Estate Services	12	4	3%	5%
Professional, Scientific and Technical Services	5	5	1%	6%
Administrative and Support Services	4	1	1%	1%
Public Administration and Safety	2	1	0%	1%
Education and Training	18	9	4%	9%
Health Care and Social Assistance	4	8	1%	8%
Arts and Recreation Services	12	1	3%	1%
Other Services	24	4	6%	5%
Total all sectors	407	92	100%	100%

TEC = Total Employment Count, which includes paid employees and working proprietors

Other social infrastructure

Other notable activities in the communities include:

- (a) The Pūkaha National Wildlife Centre
- (b) Eketāhuna Golf Club
- (c) Schools at Mauriceville and Eketāhuna
- (d) Eketāhuna Playcentre
- (e) Eketāhuna Rugby Football Club.

¹⁰⁶ Statistics NZ Business Demography, 2023