Your Comment on the Southland Wind Farm Project

Please include all the contact details listed below with your comments and indicate whether you can receive further communications from us by email to substantive@fasttrack.govt.nz

1. Contact Details			
Please ensure that you have authority to comment on the application on behalf of those named on this form.			
Organisation name (if relevant)	West Catlins Preservation Society		
***First name**	Natalie		
***Last name**	McRae		
Postal address	[redacted]		
***Home phone / Mobile phone**	[redacted]	***Work phone**	[redacted]
***Email** *(a valid email address enables us to communicate efficiently with you)*	[redacted]		

2. *We will email you draft conditions of consent for your comment			
✓	I can receive emails and my email address is correct	☐	I cannot receive emails and my postal address is correct

3. Please provide your comments on this application
If you need more space, please attach additional pages. Please include your name, page numbers and the project name on the additional pages

WEST CATLINS PRESERVATION

TO PRESERVE AND ENHANCE THE WEST CATLINS AREA ENSURING A VOICE IN THE DEVELOPMENT OF OUR REGION

Introduction

1. West Catlins Preservation Society (**WCPS**) was formed in November 2008 to preserve and enhance the West Catlins area ensuring a voice in the development of our region.

2. WCPS was removed from the register in March 2019 and has been meeting informally since then. Meetings ramped up again in May 2023 when we became aware of Contact Energy Limiteds (**Contact**) proposal to build a large scale windfarm with 55 turbines 220m high on Slopedown Hill/Pawakataka (**Pawakataka**) for the third time (the **Project**).

3. WCPS has 65 households on our email list and our members come from all walks of life, having occupations such as farmers, engineers, builders, teachers and nurses etc.

4. Several WCPS members can trace their connection with Pawakataka back to the late 19th century, and early 20th century with many people being 5th and 6th generations living on the land.

5. Pawakataka to us, is what the Remarkables are to Queenstown, what Roys Peak is to Wanaka and what Mt Luxmore is to Te Anau.

6. Pawakataka is our maunga, a sacred place for us that has for generations been the guide to home from both sea and land.

7. There are many influences that could alter this unique area, meaning it is important that we all make wise choices that last beyond our lifetime.

General Comment

8. Contact Energy Limited (**Contact**) state the Catlins is located to the South and South-East of the Wind Farm Site. This is incorrect, geographically this Project is to occur within the Catlins Boundary[1], and directly adjacent to the Catlins Conservation Park[2][3].

[1] New Zealand Geographic Board, https://gazetteer.linz.govt.nz/place/54361
[2] For simplicity we will use Catlins Conservation Park to refer to all the conservation land in this area and apologise if at times it should actually be called Slopedown Conservation Area.
[3] Contact Energy did a pamphlet drop in our area approx. 3 weeks ago – it is propaganda. Note how far away Contact have shown the Catlins Conservation Park to be – attached as Appendix A image J

9. The Catlins Conservation Park, which is the largest area of indigenous forest on the east coast of the South Island, crosses the boundary between Southland and Otago and is an integral feature of the Catlins area[4].

10. We have reviewed all of the updated wind farm application documentation and understand Contacts reason for building on Pawakataka is that the site is on a hill with wind access reasonably close to the transmission lines. Contact is relying on their belief that this Project will contribute significant benefits to the country and as such all other effects in their opinion can be discounted. We absolutely refute this assessment and believe that the range of adverse effects and adverse impacts which will be generated as a result of the proposal are significant and have not been suitably identified or addressed.

11. Further, even if it is shown that the Project will have significant benefits – we believe section 85(3)(b) of the Fast Track Act (**FTAA**) applies and the adverse impacts are out of proportion to the Projects purported benefits. Our connections with Pawakataka are so strong, and the impacts of this Project are so significant that the adverse impacts are inherently unmitigable.

12. The saying 'you don't know what you got 'till its gone' couldn't fit a better scenario. The outstanding natural landscape of Pawakataka when viewed from around Southland, and the outstanding natural feature of the bush capped hills as viewed from the South / South East / South West of the Wind Farm site is incredible.

13. *"We have never lost connection to the natural world; we experience its wildness, beauty, and abundance as part of everyday life. Preserving the richness of our environment and the abundance of our natural taonga has been embedded within us for generations. We have a unique story that we believe is worth sharing with the world"*[5].

14. Pawakataka has meaning to us, and our community. This meaning and the effects the wind farm will have on our community have been inadequately assessed. "*The community treasures their special places, eco systems, native species, landscapes, and townships and wishes to ensure these are restored and protected*"[6].

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[4] Department of Conservation, Southland Murihiku Conservation Management Strategy, 2016.
[5] Great South, Murihiku Southland Destination Management Strategy 2023-2029 page 2 https://greatsouth.nz/assets/Media/Publications/230814_GS_Destination-Management-Strategy_Compressed-Download.pdf
[6] Great South, Murihiku Southland Destination Management Strategy 2023-2029 page 21 https://greatsouth.nz/assets/Media/Publications/230814_GS_Destination-Management-Strategy_Compressed-Download.pdf

15. The effects on the landscape have been inadequately assessed. The unique flora and fauna found on the enhanced site will be severely affected. WCPS do not oppose renewable energy development in principle. Our argument is similar to the right tree, right place forestry debate; wind farms are not appropriate for every site. This wind farm Project needs to be declined for this unique area as the scale of the adverse impacts on landscape, ecological and community effects are inappropriate for this location and out of proportion to the Projects regional or national benefits – even when taking into account schedule 17(1)(a) FTAA.

16. As we sit here typing this – we can't help but feel the FTAA is a massive mountain to climb? The legislation is stacked against the environment now. Poor decisions will be made in the misguided aid of economic prosperity, out competing environmental longevity. Then this writer looks north – towards Pawakataka, which on this sunny blue sky day is shining in all its glory, the only sound to be heard is birds chirping, while a few mobs of sheep can be seen grazing at the foothills of Pawakataka, and the bush has taken on that special blue haze that is hard to describe but for anyone who has the chance to witness it – you just know its special. It is a big mountain to climb, but it's worth fighting to protect this area from unnecessary development.

17. We realise the Panel have a mighty task ahead of them, and are all highly qualified. However, reviewing reports, experiencing limited viewing locations in person and accessing information from a screen is not the same as the lived experience. We are the only true group able to speak on behalf of local residents of West Catlins as to what this Project will actually mean for our community.

Parties invited to comment

18. WCPS is concerned that the FTAA process limits the ability of affected communities to fully engage with a project of this scale and significance. How can only one address on the South side of the Project Site be included as adjacent land? As in Ports of Auckland Limited (**POAL**), a road in between does not necessarily mean you are not adjacent. In this situation we believe that the green belt of the Catlins Conservation Park should not preclude landowners on the north side of the Wyndham Mokoreta Road from being adjacent land owners given a public road is similar to a green belt. A narrow interpretation of adjacent was proposed by the Applicant and also agreed by the Panel. When you look at the image in Appendix 2[7] its quite striking how far out from the Project Site the land identified yellow reaches, yet none is identified in the Mokoreta Redan Valley. We are disappointed the Panel did not take a wider interpretation or alternatively use section 53(3) to include more landowners on the

[7] Minute 1 of the Expert Panel dated 19 Nov 2025 – Land to which the substantive application relates and adjacent land for consideration

South side of the Project Site. Even taking into account the purpose of the FTAA, we believe the Panel erred in this decision for the reasons set out above. Presently in the Redan and Mokoreta Valleys the Catlins Conservation Park is the dominating feature and when coupled with the striking slopedown of Pawakataka it is truly magical to view.

19. We also respectfully state that any party invited to comment who has received a monetary incentive such as the Department of Conservation (**DOC**) or Tangata Whenua – their views must be held in light of that monetary incentive.

20. We understand the Waihopai ToeToe Communtity Board (**Community Board**) are adding comments into the Southland District Councils (**SDC**) comments as being the elected representatives of this area. We note to the Panel that the geographical boundaries to be elected to the Community Board is quite large[8]. WCPS are actually the ones living in this area and going to be affected by this Project. While we appreciate the contribution the Community Board makes for our area. We had one councillor tell us that they would probably fight this harder if it was in their backyard. The Community Board have also undertaken no engagement of public perception in our area.

21. The Community Board official plan states "Provide active support for the Catlins, by Ensuring that any development or projects within the Catlins are in line with the strategic plans for the area. These include the Catlins Tourism Partnership plan, Catlins Tourism Strategy, Vision for Curio Bay plan, Southland Murihiku Destination Strategy, Southland District Reserves and Open Spaces Strategy and SDC District and Long-Term Plans. As such any comments received from the Community Board Chair must be read against the above statement which was the outcome of public consultation.

22. We have received a technical report from a community source who specialises in report writing of this nature. We attach this Technical Review as part of these comments. We strongly encourage the panel to review this report thoroughly and request the Panel take a precautionary approach to this consent because of the short falls listed in the document.

FTAA

23. The purpose of the FTAA is to facilitate the delivery of infrastructure and development projects with significant regional or national benefits. What is not contentious – the

[8] https://www.southlanddc.govt.nz/assets/Community-board-plans/Waihopai-Toetoe-Community-Board-plan.pdf Map on page 4 of boundary.

Slopedown Wind Farm is an infrastructure project. What is contentious is whether this Project will have significant regional or national benefits.

24. The Panel when considering a resource consent application must give the greatest weight to paragraph a of schedule 17(1) ie the benefit of the project, and yet still take into account part 2 of the RMA which protects and promotes sustainable management of natural and physical resources. Section 6 of the RMA 1991 is still relevant here – protecting Outstanding Natural Features from inappropriate use, development or subdivision.

25. Section 7(i) of the RMA states other matters to have regard to - 'the effects of Climate change". We note the purpose of the FTAA does not elevate the effects of Climate change beyond this and query whether Contacts submissions around this Project benefiting climate change can be considered to hold any weight. It's not contentious that section 6 of the RMA (including protecting Outstanding Natural Features) has higher rating than section 7 (the effects of Climate Change). If the legislation writers had wanted to elevate climate change benefits to a higher weighting level than section 6 – they had an opportunity to do so and chose not too. Any proposed benefit for the country around decarbonisation is therefore not to be given greater weight than the effects on an Outstanding Natural Feature. The Panel in Ports of Auckland Limited (POAL) used the items listed in referrals for guidance (section 22(2)) to determine what 'significant benefit' meant which that section states "will support climate change mitigation and climate change adaptation". We assert that 'will support" is distinguishable from "will deliver significant" and that significant suggests a higher threshold than support. Supporting something is quite different to considering it in section 7 and thus the weighting of the RMA still holds force here.

26. Will deliver *significant* economic benefit – significant suggests a high threshold. And deliver regionally or nationally *significant* infrastructure – emphasis added. This Project has the potential to do that as renewable energy. However, when compared to other proposed and already consented projects in the same space throughout the country, why this location with its significant negative ecological, visual, cultural, tourism and community effects?

Regional & National Benefits

27. Contact show that Southland is an electricity importer and rely on this fact to explain that more capacity in Southland is required to meet future electricity demand. However, Contact has not presented the Panel with information about what planned capacity is available to meet that demand. In deciding whether this proposal is necessary, it is important for the Panel to know:

a. the amount of electricity capacity consented in Southland, and Otago as our nearest neighbour, but not yet built; and
b. the capacity being investigated and in the consent process for these two regions; and
c. the ecological and conservation values of these proposed sights.

28. Current power usage - Regional benefits stated by Contact are over estimated. A major focus of Clough's report is that Southland is a net importer of electricity. Yet it ignores the future contribution of the already consented Kaiwera Downs stage 2 wind farm and the Makarewa Solar Farm. The already consented Kaiwera wind farm (calculated 525 GWh) and Makarewa solar project (1200 households) will more than cover Southlands current power deficit (446 GWh)[9]. This is the real deficit as the simple average does not take into account Kaiwera Stage 1 coming on line.

29. There is also Contact Energy's proposed Kaihiku wind farm on Southlands border, in South Otago, and five further Southland wind projects either under investigation or in the consent process (NZWEA website).

30. If you look at actual figures for electricity consumption in New Zealand it has remained relatively stable and actually decreased from a peak in 2015 (Figure 1).

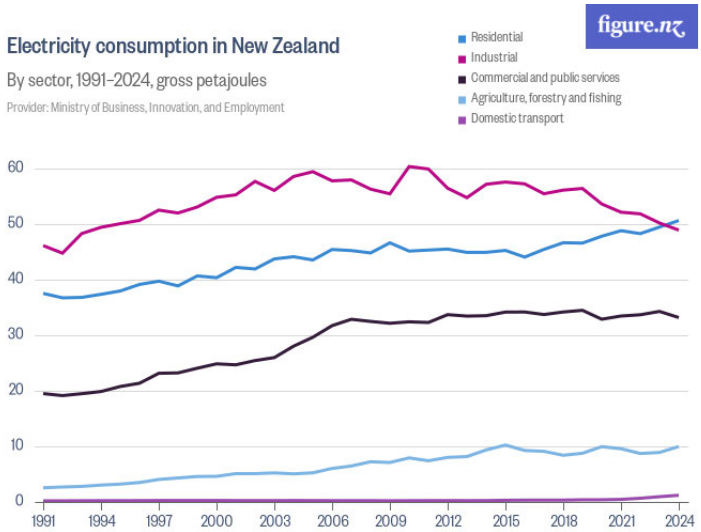

Figure 1: from figure.nz

31. Southland has an estimated 46,761 households (census data) which are already supplied by electricity, and Southlands current electricity deficit will be covered by Kaiwera Stage 2.

[9] Figures taken from report H02. Kaiwera 150MW @ 38.7% (table 3 H02)

32. Future power usage - We understand businesses are wanting to electrify such as Fonterra. However – this Project will generate twice the energy demands of Fonterra Edendale Plant. We believe Southland electrification projects can therefore be supplied by future renewable electricity projects in more suitable locations. Including solar on businesses and individual houses. Contact don't want this as it would remove the need for wind farms, and therefore their profits (as is currently being experienced in Australia).

33. Contact assert this is in response to current market conditions and a forecast period of sustained increases in electricity demand over the next few decades. We do not believe 'in response to current market conditions' should be considered as a 'significant regional or national benefit'. Contact is a private company that is required to make a profit. Doing this Project under the guise of national renewable energy goals is misleading.

34. Concept Consulting states 500MW of capacity needs to be built across the country annually. Assuming this takes into account the inefficiency factor, would not focusing on increasing efficiency decrease the capacity required? For example, if the current consented projects throughout the country were built to their potential this would be more efficient. Kaiwera is building 36 of the 56 turbines consented and White Hill is also below consented capacity.

35. Electricity projects need to be built where the power is needed. New Zealand's 2024 transmission line losses were 1393 GWh for transmission and 1646 GWh for distribution (MBIE). So surely it is not about doubling the overall volume of renewable electricity, but of siting projects in the appropriate location to maximise the use of that renewable electricity? Transmission line losses are noted when importing electricity for Southland (from Otago), but discounted 75% of the time when we are exporting electricity much further north[10]. The significant national benefits will not be realised if this electricity is consumed outside of Southland. Building infrastructure where the electricity is required to minimise the transmission line losses is also common sense.

36. In terms of the wind resource, Clough uses an estimated capacity utilisation for the Southland Wind Farm of 42.3%, but based on Contact figures we have calculated this to be 36% efficiency for the site. This is less than the 38% average of the modern Wind Farms listed in Table 3 Part H02 (NZ average 35%). We have already addressed the proximity to increased electricity demand, and while Southland has the potential to decarbonise industry, the recent weather events have highlighted the need for

[10] NZIER report.

alternatives to electricity especially in our harsh climate. As already stated, Table 1 is misleading in that Kaiwera Stage 1 came on line in 2023, meaning that the now only relevant figures are 2024.

37. Further Clough comments on the basis that wind is free. However, it is not, there is the cost of construction, the environmental, cultural, visual and social costs. The latter of which have not been assessed in this report.

38. As part of the proximity to energy demand argument they reference the decline in gas availability. This further supports the argument that this Project is not required in this location, the gas referenced is produced and mostly consumed in the North Island. We also note Contact need this electricity because they have and are shutting down gas plants, not because of increasing consumption.

39. The Grid Injection Point for this Project is close to the Southland and Otago boundary. The electricity figures and assessment of need should contain Otago and Southland figures to be relevant. Clough uses transmission line losses as an argument for a why a wind farm is needed in Southland because we import electricity from Otago (However as noted above that soon won't be the case). Clough then later states if the electricity is not required in Southland (which we believe its not) it can be exported to the North Island providing the transmission network is upgraded. The transmission line losses to the North Island would be significantly greater than transmission line losses between Otago and Southland due to the distance travelled. This supports our argument that electricity projects needs to be built where it is actually required, which is generally further North.

40. If Contact are convinced that there is no other preferable and available site, why have they bought into the Kaihiku project, which essentially will provide a wind farm cluster with this site and Kaiwera? We still believe there are other preferable sites. Clough puts forward the argument that localisation of wind generation is a negative thing, referencing the Manawatu Wind Farm cluster. NZ has 21 operating wind farms, 7 in Manawatu and 5 in Southland. The already operational and under construction stages of the Kaiwera Downs, this Slopedown Wind Farm and the Kaihiku wind farm under consent creates another such local cluster which diminishes the benefit of this Project.

41. Given the proximity of this Project to Kaiwera Wind Farm – the benefit regionally and nationally is questionable. Wind data shows that weather patterns for wind are relatively consistent across the country and thus if it's blowing in Southland, it will be in Canterbury too. Comparatively if there's a lull in Southland it will most likely be in Canterbury also. So, building a windfarm in such close proximity to Kaiwera actually

doesn't help shift the inefficiencies of wind power and any benefit has to be weighed against this factor. While this weather consistency might be different between say Southland and Auckland as highlighted by Contact at the Panel intro meeting on 3 December. A comparison between two areas at either end of the country is questionable due to the transmission line losses.

42. The idea that this Project will contribute to reducing electricity costs is flawed. New Zealand has one of the highest percentages of renewable energy globally at close to 90%, but we also have one of the highest costs of electricity. So, the argument that increasing renewable energy supply will reduce the cost of electricity to consumers holds a hollow ring.

43. The author read an ODT article recently (end Nov 2025) that wholesale prices were the lowest they had been in a long time. The same day the author received an email from their electricity company that their electricity price was increasing. "Wholesale electricity prices dropped dramatically in just two months – from over $280/MWh in late August 2025 to an average of $30/MWh in October"[11]. A private company's commitment is to their shareholders not their customers. If Contact were really concerned about the cost to the consumer, they would be promoting residential and business solar and small localised household wind turbines.

44. Wind v Solar: The idea is the greatest energy demand is in winter when solar is less efficient. But winter is when hydro lakes are highest. So lower cost solar would still be an effective option. It is worth noting that roof top solar in Australia comprises 40% of homes and businesses and generates up to half of Australia's electricity supply at times (ABC News, Oct 25). If we are talking reduced electricity costs to consumers this is the best way, without the associated environmental, landscape and cultural effects. There is also no discussion in the documents about the cost of fossil fuels versus wind and solar. A reduction in price cannot be considered a benefit as it's not based on evidence. Further, the Waiuku decision at paragraph 80 noted 'wind generation is not capable of affecting electricity prices'.

45. We disagree that electricity increases stated is correct for Southland as the majority of the increase is predicted to come from electric cars and space heating. The documents talk about demand at a national level rather than a regional level, however the regional level is very important given our data on transmission line loss detailed above. If we look at Southland, electric car uptake is not going to be significant due to the low population, few large urban areas and the distances required to be travelled. Further, in terms of space heating – the Labour weekend

[11] EA Eye on Electricity 14 November 2025

storm has highlighted the importance of alternative forms of heating, and onsite sources of electricity, that don't rely on the national grid for both domestic and commercial customers. Especially in Southland with its harsh climate. This includes Fonterra who have to process milk whether there is renewable electricity or not.

46. There is no mention of how much curtailment is happening in NZ, and any assessment of this going forward. Australia is currently experiencing significant curtailment of renewable because switching off coal fired plants is a significant cost.

Inefficiency of wind generation

47. We regularly check the Transpower website to establish the methods and input of different generation methods that contribute to the national grid. We often find that wind generation is only ever operating at 20-25% of potential, while other forms are consistently generating at 70-80% of potential.

Generation type	Generation occurring MW	Capacity MW	% of Potential Capacity
Wind	37	1259	2.9%
Hydro	3799	5415	70%
Coal	680	750	90%
Geothermal	1077	1230	87.56%
Gas	781	1280	61%

Figure A: Showing New Zealand generation as at 2005 hours 17 July 2024, collated using Transpower Data.

48. Figure A shows on this particular day wind was operating at 2.9% of potential capacity. There is a general trend showing that wind generation is unreliable and effectively can't be stored. Which makes us further doubt the truth in the idea of 110,000-150,000 households being powered by this wind farm. The wind turbines will only power that many households when the wind speed is at its optimum for the maximum output from each turbine (a very narrow kph range), below the optimum windspeed the turbines will produce far less and sometimes nothing at all. If the 55 turbines only end up working at 20-25% potential, then is that more like 37,500 households and greatly diminishes the significance of this Project. *Which then begs the question: are ecological issues of this nature really justified by inefficient energy?* Increasing the number of wind turbines across the country does not increase efficient production, it simply spreads inefficiency further.

49. Further, if the wind is not for homes but rather for industry opportunities like a hydrogen scheme or powering Fonterra switching to electric. When the turbines are

not producing as claimed (which is going to be a lot of the time) what power source will those industries use?

Decarbonisation

50. Contact reference decarbonisation of Aotearoa a lot in their large reports and hitting NetZero 2050 targets. If decarbonisation is the goal – and wind farms are the cure in their opinion. We suggest the cure is worse than the disease. We query whether this is greenwashing where an entity purports to be environmentally conscious, but in fact the reality is there is a heavy reliance on carbon rich materials in the manufacture, and construction of the windfarm. What are the emissions from 150 heavy vehicles twice daily during construction shifting so much earth? Plus, even the water is being pumped with a diesel pump. It all seems a fallacy. What is the carbon footprint of importing, constructing, maintaining and decommissioning a wind farm versus the clean electricity generated? At what point in its life does it break even? Looking at actual (not potential) electricity production.

Economic Effects

51. Contact state that this Project will generate positive economic effects.

52. We suggest that the economic benefit will be more for Contact themselves than the Southland economy. Southland and Otago already punching well above their weight for the economy[12]. This is attributed to tourism and agriculture. We highlight below why tourism will be affected by this Project.

53. We query the accuracy of $8-12million spending per year with over ½ being spent locally on resident staff, contractors and other suppliers.

54. In terms of economic benefits to Southland, as indicated, the majority of this is during the construction phase. Clough notes Southland punches above its weight nationally and has a limited labour force. The application notes "*given the strength of the Southland region's economic recovery and labour constraints it faces, its contribution to local job creation will likely draw on labour from outside the region and be mostly short-lived (NZIER)*". Staff will therefore need to be imported from other regions, as is the experience with Kaiwera Downs wind farm. A large proportion of the economic benefits will therefore exit Southland.

[12] https://www.kiwibank.co.nz/business-banking/thrive-hq/kiwi-economics/commentary-insights/the-regional-divide-widens-as-everything-just-gets-better-the-further-you-go-south/

55. The economic benefits will leave Southland – this then coupled with the transmission line losses point to this project going further north to actually capture real benefit.

Environmental Effects

56. Contact state the Project will have enhanced environmental outcomes. For the reasons set out below we absolutely refute that proposition.

57. The Waiuku decision delivered on 20 November 2025 by the High Court is still relevant albeit under the Covid 19 Fast Track Act (**C19FTA**). There is a reference at paragraph 92 which states the decision maker needs to assess the weight of the benefit in the context of the particular application and we believe that is still relevant here even with the purpose of the FTAA. The position has yet to be reached where local adverse effects are entirely irrelevant (paragraph 103 of that decision).

58. The benefits, both regional and national, are watered down once you consider the information above and below. The benefits even when given more weight in accordance with the FTAA – sit well below the adverse impacts which are large and diverse.

Landscape Effects

59. We disagree that the effects of the wind farm on the landscape character are low to moderate.

60. The windfarm will adversely affect the landscape it is proposed within. There will be effects on the landscape, effects on the natural features, and effects on the natural character of the setting. The Part B report and the two reports by Mr Coombs and Mr Bray do not cover this adequately, if at all.

61. Although this is not technically an ineligible activity under the FTAA, because the site is not part of a Conservation area, it is surrounded by Conservation areas. To the lay person looking from the South West and South it sits on the top of, and is therefore not distinguishable from, a Conservation Park. We therefore feel that weight should be given to this.

Our previous landscape comments provided to the panel under C19FTA application were[13]:

[13] We have included these again as our opinions have not changed and wanted to make sure the new Panel understood our point of view. We have amended where necessary – but lets be honest we are lay people doing our best in very trying circumstances.

62. The Southland Regional Policy Statement 2017 (**Southland RPS**) states "Consideration of options to better manage the increased development, and the establishment of "acceptable limits" are important to ensure landscape values and people's "sense of belonging" are not compromised."[14]

63. The Southland RPS Policy LNF.1 requires:

> *To identify and assess Southland's outstanding natural features and landscapes using, but not limited to, the following regional factors:*
>
> *(a) Natural science factors, which specifically includes the geological, topographical, ecological and dynamic components of the landscape;*
> *(b) Aesthetic values, including memorability and naturalness;*
> *(c) Expressiveness (legibility) which is how obviously the landscape demonstrates the formative processes which helped create it;*
> *(d) Transient values, which specifically includes the occasional presence of wildlife or its values at certain times of the day or of the year;*
> *(e) Whether the values are shared and recognised;*
> *(f) Value to tangata whenua;*
> *(g) Historical and heritage association;*
> *(h) The presence of water including in seas, lakes, rivers and streams;*
> *(i) Vegetation, particularly native vegetation; and*
> (j) *Wild or scenic values*.
>
> We believe the locale rates highly on these factors. This has not been addressed by Isthmus or Contact.

64. The Assessment of Environmental Effects Part B (**AEE**) paragraph 2.5 notes "the only notable features being identified on the planning maps are the Mimihau stream (…) and an archaeological feature". Despite the planning map lacking in detail, we note Objective NFL.1 of the Southland District Plan 2018 (**Southland DP**) states *Outstanding Natural Features and Landscapes are protected from inappropriate subdivision, land use and development*. Southland DP Policy NFL.3 states *avoid, remedy or mitigate adverse effects of subdivision, land use and development on the District's natural features and landscapes that have not been assessed by Council for landscape values*. An explanation then notes there are a range of natural features and landscapes within the District that have not been assessed to determine their landscape values (…) including the Southland Hills of the Inland Catlins.

65. The AEE in paragraph 2.7.2 discusses the recent report in which Boffa Miskell recently assessed part of the Project Site as an area of Outstanding Natural Feature Report

[14] Southland Regional Policy Statement (2017) Chapter 10 page 125

attached as Appendix C. Our members are not surprised that the area is assessed as Outstanding Natural Feature by Boffa Miskell.

66. The Southland District Council have advised us that the only reason the report did not go any further is because it was going to cost over $6 million dollars to implement and also Covid happened. Contact is quick to point out the report has not been subject to public scrutiny. However, the SDC did undertake a further public landscape survey in September 2023 reviewing natural features and landscapes and specifically asking questions about landscapes and the environment and people's perceptions of them. Preliminary findings noted that the areas of concern included the Catlins, Fiordland, Slopedown Hill etc and people were concerned about the impacts with skylines and ridgelines particularly with wind power[15]. We also attach a letter from Catlins Coast Inc supporting the timing of the SDCs review (Appendix B). The full findings of that survey have not been released to us, despite repeated requests. We cannot see any reference in Part B to what impact this survey and its findings may have on the application. We believe if the Boffa Miskell report was publicly scrutinised, which is all that is missing from making its findings correct – the area identified as Slopedown/Mokoreta-Pukemimihau would be an ONF candidate. The preliminary findings determining associative values confirms this.

67. This report could form the broader basis of a regional identity and value for the Southland District. A regional identity is a definition of who we are and what we value about our region. Further work needs to be undertaken in relation to this to adequately assess this Project application.

68. From reading both Mr Coombs & Mr Brays reports – it appears we are all agreed that the scarp area is an Outstanding Natural Feature. Where we differ is on the size of the ONF candidate, and also the impact of the Project on the ONF. The size of the ONF is significant because that determines the question of whether the Project Site is situated on an ONF.

69. We agree with Mr Coombs that the scarp has high landscape values. We further agree with Mr Coombs that the natural character values of part of the Wind Farm Site are high (wetlands on Jedburgh Plateau etc). The 'sharp slopedown' of Pawakataka is a distinctive feature. Mr Bray also notes outstanding values are derived from the scarp which has a highly legible form reinforced by forest canopy. We believe it is appropriate to proceed at this point on the basis of the scarp being noted as an ONF and respectfully seek you to do so.

[15] SDC Environmental Policy Team powerpoint presentation on Landscapes Project Jan 2024

70. Mr Bray states the "natural features are predominately experienced through the legibility of the landform, particularly the scarp and the distinctive skyline it creates from many viewpoints". How can the experts then conclude that having turbines towering over this skyline has minimal landscape impacts?

71. In relation to whether the Project Site is situated on an ONF – the previous panel found 27 of the 55 turbines were placed on the ONF area. We concur with that decision. We disagree with Mr Bray and Mr Coombs that the vegetation on the Jedburgh Plateau is not intact and query whether that has even been publicly tested as the benchmark? A lay person driving up a road with indigenous vegetation on both sides and one of which is being grazed – won't think that one side has higher ecological values than the other. That is an arbitray line in the sand that helps to reinforce their own argument that this Jedburgh Plateau area is compromised and thus does not qualify for ONF status.

72. Contact consistently mention how the current owner(s) have been wintering cattle in the Plateau through winter and sheep over summer. Lending the idea that the area is degraded and is not that special. That is not the correct test. If that was the case, a current owner who has let a special area of land be mismanaged[16] could going forward do whatever they want with it in aid of 'bettering' it.

73. Coombs notes that the site is a highly modified environment and yet, as is, it is still classified as significant indigenous vegetation. Brays comments about what exists versus the ideal is relevant here. Contact is discounting the effects of vegetation clearance on landscape values because that vegetation does not meet their ideal.

74. We note *Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines (**TTATM)*** state – information on protecting regional and district outstanding natural features. It doesn't mean non-naturalness and can include pastoral farming and pineland. Whether a feature or landscape is a natural feature or natural landscape is a matter for reasoned assessment in context[17].

75. We disagree with Contacts statements about the ecological significance of this area – and on the basis of TTATM the Jedburgh Plateau area combined with the scarp area can all be part of the ONF or ONL.

Scarp ONF

[16] For clarity – we are not stating the area is being mismanaged. We have not been allowed access to the site so are unable to comment on the accuracy of the MacGibbon Report.
[17] TTATM published 2022 – paragraph 8.11.

76. Contact are saying despite the scarp potentially being an ONF area – because its outside the Project Site, it won't be affected. None of the reports actually report on the ecology of the Scarp area because it is outside the Project Site – so how do Contact or the Panel know what the effects on the ONF area will be? Contact Energy should have to include the effects on the Park in its assessment, given several turbines are located right on the boundary.

77. Have the Panel obtained maps identifying Pawakataka and also 3D simulations in relation to the turbines from Contact? The report notes it has been identified by Te Ao Marama Inc (TAMI)[18]. However, we cannot speak to the accuracy of that identification as we can not view TAMIs correspondence and/or reports. Contact have advised the scarp is 1.5km from wind farm – we do not believe this is correct. Figure 2 of the Isthmus Report shows at least 4 turbines that will sit directly behind (and on top of) the scarp of Pawakataka. It will absolutely detract from the Slopedown. The substation is also in very close proximity to Pawakataka (figure 3, Isthmus report). Coupled with the permenant meteorological mast and 3 turbines which will jut out of the Glencoe Property – also decreasing the mana of Pawakataka. We found no reference to the Glencoe property in the landscape assessments.

78. The Glencoe Property turbines and mast – lie to the West and is the main view to the left as you head up through the Redan Valley. As this is on pasture land – the entirety of these 3 turbines and the mast, and the broken skyline over Slopedown will be the predominant view for everyone entering the Catlins from the west.

79. It's the size of these turbines and their location which is doing unjustified harm to Pawakataka. Figure 16 of the Isthmus report which we don't believe is accurate, but does show a turbine getting quite close to the Slopedown – however, we believe they will be closer than this. We completely disagree with the location of the turbines in the computer-generated images of Isthmus and the indicative turbine placement image of Isthmus Figure 3. Mr Coombs and Mr Bray say the only ecological area of significance might be the scarp, and thus surely the green in Figure 3 shows just how close to the scarp the turbines are reaching. Further Figure 21 shows again the turbines are actually on top of the scarp. Figure 42 arguably shows that at least 20 turbines are going to detract from the escarpment as it slopes down to Mount Egremont at its foothill.

80. The *previous* AEE page 101 notes "there will be some potential visual effects generated from the Wind Farm on the scarp skyline, which as viewed from the south, has higher landscape values than the back slope. The wind turbines will be

[18] Contact Energy Limited – Part B, AEE, paragraph 2.7.1

prominent behind the skyline ridge and will therefore *diminish the naturalness of the skyline'*. The turbine layout has not changed.

81. The *Isthmus* report notes the scarp is noted as having higher landscape values, prominent sharp skyline. We agree the outline of the Slopedown hills on the skyline is amazing. It's something you experience from afar and images don't do it justice. Despite this we have included a few photos for reference at Appendix A (Attached).

82. Contact conclude that setting the turbines back from the scarp will mean the turbines will have less impact than they could have. The real test is actually the natural skyline as we have now versus the setback turbines – not as Contact contend set back turbines versus not set back turbines. The turbine envelope zone also means turbines can potentially be placed directly above the scarp.

83. It is this skyline that our members families have viewed for over 100 years. The bush clad scarp, particularly of the south /south east sides of the Project is an important natural feature. In this proposal it will become the plinth to the turbines. We know from Kaiwera residents that the 10 erected turbines there have taken away from local amenity values of the hills. In the Southland Wind Farm proposal, the loss will be to the natural bush scarp known as the Catlins Conservation Park. The turbines will change the relationship of viewers and the community with the landform. It appears no reports have been prepared by Contact to assess this impact – even the new one by Mr Bray is questionable.

84. The landscape assessment was informed partly by photo-simulations from various locations. We do not believe the photo-simulations are a true representation of the Project. The Kaiwera wind farm is an example of how some days the turbines appear further away and other times they look as if you could reach out and touch them. Further, the photo-simulations showing both Kaiwera and this Project together appear to have turbines the same size. Despite the Kaiwera turbines being 80m shorter (tip height) and the landscape the turbines are placed on being different elevations at the two wind farms. The *previous* AEE page 102 does note certain lighting conditions can accentuate the grey colour of the turbines. Appendix A, image B is one of a few Contact prepared images that show the extent of the issue, and even then, we question the height of the turbines. Also refer Appendix A, image H.

85. Some of our members had photos created from Paul Botha of Roaring 40s of what their view will look like if the Project goes ahead. We believe these photos are not accurate representations of the scale of the turbines. It is also not clear whether

these photos formed part of the landscape assessment. Example at Appendix A image D.

86. We believe it is inadequate to say the Project Site is a working landscape, pasture and forestry and has no ecological values. This does not assess the landscape in terms of its context. **Part of the context is that it lies above the Catlins Conservation Park** (emphasis added). The AEE downplays this because at page 12 it notes the wind farm is not located on the park and no construction relative activities will be undertaken within this area. Further paragraph 2.7.2 the landscape patterns of the surrounding area are reflective of a working landscape. This makes a mockery of the natural beauty of the Catlins Conservation Park. While it could be said the working landscape of the Catlins Conservation Park is for pest management etc, it appears the conclusion the AEE wants the reader to make is that of a farming landscape.

87. The surrounding area of the Project Site and the Project Site itself cannot be accurately described as a "working rural landscape". This view is too simplistic. The landscape reporters go too far when they allege that working rural landscape characteristics include the indigenous vegetation of the Catlins Conservation Park and the Slopedown Conservation Park. We disagree with the landscape reports that state only the steeper areas have not been turned into productive farmland. If you look at the lay of the Jedburgh Plateau and parts of the Scarp – you can see that they could have been cleared for farming but instead have been protected whether through becoming conservation land or private stewardship land. The landscape architects want you to form the view that this area is all productive farmland/forestry and it's not that much of a stretch to chuck 55, 220m high turbines on the land too. However, that absolutely does not sit right with the Catlins Conservation Park and the ONF candidate area.

88. Further, the energy landscape is not prevalent in Southland at present. The proposed windfarm is not strongly connected to White Hill wind farm in Mossburn or Flat Hill windfarm in Bluff[19]. We do agree the proposed wind farm will be strongly connected to Kaiwera and it is one of the reasons we believe the cumulative effects of this Project are too high.

89. Unfortunately, with the timeframe we have been unable to obtain a report from an independent registered Landscape Architect. However, Di Lucas, registered Landscape Architect did have a brief look for us and she questioned several parts of the previous AEE and appendix J, which Mr Coombs has essentially resubmitted. We also respectfully ask that the Panel take into account Anne Stevens independent

[19] Contact Energy Limited, Part B – AEE, paragraph 2.7.1

report for the previous Panel. We briefly spoke with Ms Stevens who advised that the new report from Mr Bray appears to go beyond his scope of expertise by discussing the benefits of wind generation, and that her view was substantially still the same as Contacts position had not changed.

90. The comparative wind farms referenced by Contact in terms of distance from dwellings, generally sit on bare hills, not significant wetlands or above native bush and their turbines are significantly lower (105-185m). We believe other wind farms are distinguishable on the basis of the scale of this Project. Further, the wind farms in the North Island referenced as being ONFs – that is also a consideration but not determinative of this Project. The Southern Syncline is distinct because it borders the Southland Plains, whereas the North Island is generally much hillier, making similar landforms less distinctive there.

91. The Catlins as an area is marketing itself around its environment or 'eco-tourism', preservation and protection of the natural environment from potential threats such as gas and oil exploration, on and off shore mining, land use intensification – impacts on biodiversity, water quality, visual amenity values, land development in catchment areas – increase in sediment through clearing of vegetation, declining bird species – e.g. mohua, tom tit, and rifleman, need to retain bush remnants[20].

92. The Catlins area encompasses part of the Southland Syncline. An outcome of the Southland Murihiku Conservation Management Strategy is that the landscapes of the Southland Syncline (…) are valued and remain intact[21].

93. *"Slopedown forms a striking part of the Southland Syncline and contains an impressive altitudinal sequence of indigenous vegetation providing recreational activities". An over sense of naturalness. Memorable feature and skyline observed from the Southland Plains. Highly coherent sequence of native vegetation and subalpine tussock which expresses a notable altitude sequence in harmony with the landform.*[22]

94. The Boffa Miskell report was prepared without delving too deep into the associative values of this landscape[23]. We believe the finding of moderate-high associative values may become high once the wider community has a say as outlined above.

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[20] Great South, Catlins Tourism Strategy 2016-2026
https://greatsouth.nz/assets/Media/Publications/Catlins-Tourism-Strategy-2016-2026.pdf
[21] Department of Conservation, Southland Murihiku Conservation Management Strategy, 2016.
[22] Boffa Miskell, Southland Regional Landscape Study, 2019.
[23] Page 114 Boffa Miskell, Southland Regional Landscape Study, 2019 – community engagement may further refine the areas of landscape.

95. "The Environment Court may find that a natural feature or landscape is outstanding even where the District Council has not carried out this assessment and recognised and provided for them (where they exist) in their planning documents. A finding that a natural landscape and feature is outstanding in the absence of a district-wide assessment will be the subject-matter of comprehensive evidence."[24] We believe that Pawakataka should be an Outstanding Natural Feature.

96. Failing this though, the site and/or its context need not be an Outstanding Natural Feature or Landscape for the effects to need to be addressed. The RMA 1991 requires that amenity values are maintained and enhanced (section 7(c)); any finite characteristics of natural and physical resources (section 7(g)); and the quality of the environment is maintained and enhanced (section 7(f)). The current report by Isthmus has not addressed this point.

97. Southland DP NFL. P2 states "ensure that subdivision, land use and development within Visual Amenity Landscapes achieves appropriate integration with that landscape."

98. Southland DP GRUZ – P2 states "Manage subdivision, land use and development in a manner that maintains or enhances amenity values, including rural character and landscapes". *Amenity Values: has the same meaning as in section 2 of the RMA - Those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes*.

99. Amenity values are not merely visibility as Mr Coombs would suggest. The effects on amenity values have been inadequately assessed. Aesthetic includes all senses, including sight, sound, smell and movement and we would also argue memory[25]. It's about perceptual senses and experiential responses – in line with Te Tangi a te Manu 2022.

100. We disagree with Bray and Coombs that there are somewhat limited effects on perceptual landscape values when viewed from the South. Many of the most affected households are on this side, and our current view is of the Catlins Conservation Park – the turbines will be 50% again on top of the skyline when measured from the valley floor and nearly doubled when measured from the toe of the scarp.

[24] See 'Southland Fish and Game (Oreti River)' [2016] NZEnvC 220, paragraph 302–304.
[25] Di Lucas, registered Landscape Architect

101. Landscape values contribute to social and cultural wellbeing by providing a sense of place and identity in New Zealand, and to our economic wellbeing through tourism.[26]

102. Pawakataka has strong amenity values for our members and the community. The steep slope down into the Mokoreta / Redan Valley has been used as a guiding landmark for generations.

103. While our ancestors didn't have the luxury of google maps, the landscape has not diminished in value as a homing beacon for the people of Mokoreta /Redan /Glenham /Flamborough /Wyndham /Tahakopa. In a function at level 6 in the Kelvin Hotel, this author had the pleasure of pointing out where home was by pointing towards the skyline to the east and the distinctive shape of the slope and the valley carved out below to a person from Invercargill.

104. We note the previous cultural impact assessment also noted the importance of this by stating *"It has strong amenity and visual values to iwi and would be used as a pointer to the East, guiding access to the inland route up the Mokoreta Valley and onwards to Te Ākau Tai Tonga (the Southern Coast)".* Further the compensation package seeking to achieve a no net loss outcome does not support the continued adornment of the undulating landscape.

105. Mr Coomb alleges 'The landscape is expansive and can accommodate large structure. This totally disregards how important this natural feature is to our community.

106. The natural environment that we live in with bird song and other animals is amazing. We are rural people who are intuitively in tune with the outdoors, and nature as it is our living and working environment. There's quite a difference between rural landscapes surrounded by native bush and say a large-scale dairy conversion on the Southland plains[27]. The Landscape reports discuss the industries located on the plains such as Fonterra and Agrifeed & Wood Processing Plants at Kennington. That is not relevant to a landscape assessment for a project that is adjacent to the Catlins Conservation Park and the Slopedown Conservation Park and Jedburgh Plateau. Mr Bray wants us to see a sense of harmony between the productive rural landscape and those natural features within it which have been retained. However, an industry or farm occurring on the Southland Plains cannot be compared to properties on the

[26] Southland Regional Policy Statement 2017
[27] Page 77 Boffa Miskell, Southland Regional Landscape Survey notes the plains are highly modified.

Southern Syncline, particularly those surrounded by the Catlins Conservation Park. We completely disagree that this area can be written off as a working rural landscape.

107. The landscape reports are quick to downplay the wilderness factors at play here, particularly on the Jedburgh Plateau and the Project Site when viewed from the Mokoreta Redan Valley. This area is the start of the remote/wild environment of the Catlins. The landscape assessment is deficient by excluding this area as a wild landscape environment.

108. Mr Coombs notes the actual effect on the amenity values of view from each property will be a function of an individual's perceptions towards wind farms, including the value a person places on the perception of the generation of renewable electricity, *and the value a person places on the area's existing landscape character and value*. We undertook our own, albeit brief, holistic approach to our regions identity and values which should form part of the landscape value and character assessment. Some of the comments from people[28] include:

a. *"Are the panel from Mokoreta? How will they know how special this area is if they don't live here?"* Respondent age 6.
b. *"Our area is one of stunning scenery and natural beauty which is irreplaceable"*.
c. *"We are so lucky to now have the 5th generation working on the farm. We live on top of the hill at south Wyndham with magnificent views over the Mataura Valley, the Hokonui Hills and the magnificent views of Slopedown"*.
d. *"The Slopedown Hill Dominates the Landscape to our East. It's very presence speaks for itself. A Landscape of Outstanding Natural Significance. A Mountain with a Unique Land Formation. A Landmark – our Landmark that can be seen from many areas of Southland. Magnificent. Scenic. Tranquil. Inspiring Natural Beauty. Beautiful Sunrises - a blaze of colors. The moon peeping up over the skyline, Grandchildren going Wow Look at the Moon. The impressive dark Silhouette of the Slopedown Hill in the evening light. Our Dark Sky and starry nights – truly breathtaking! Slopedown Hill brings a Sense of Belonging"*.
e. *"During rough weather we look to Slopedown and if the snow is still there we know the weathers not clearing yet"*.
f. *"We drove via Slopedown and had the feeling that you are in absolutely the middle of nowhere, then we dropped over into the West Caitlins and it felt magical. We knew instantly that this incredible area was where we wanted*

[28] We have kept this anonymous as this document will be made public. However, records can be furnished if required.

our children to grow up. Since purchasing our slice of paradise we have made significant investment, including the building of seven houses, all facing Pawakataka. All of the residents get that magical feeling every time we look outside".

g. *"We strongly believe the wind farm will destroy the landscape forever".*
h. *"At the moment while we have our breakfast, we watch the sun rise over the top of the Slopedown hills. Every morning it is different, the colours of the morning changing as the sun dominates the darkness and starts a new day. We can't say in words how much this means to us and how desperately we want to preserve this area of nature for our community and for future generations. Our family has farmed in the district since 1905 nearly 120 years. We are custodians of this land and we must leave it better than what we received it."*
i. *"The family first arrived in the Wyndham area in 1890.The 6th generation are now living on the same farming property that was settled in 1899. Each generation have farmed with the Slopedown hill being the dominant skyline feature. I fear for future generations that will never know the intrinsic value of an unaltered Slopedown hill instead of a wind farm from which there is no escape. They may well ask "Why didn't you or anybody else do something to stop this!"*

How can this proposal go ahead without actually reviewing the amenity values of the community affected?

109. The visual catchment of this Project is extensive. Bray considers there is generally a restricted potential viewing catchment and yet Coombs has said the "Catlins hills provide a backdrop to the Southland Plains". The visual catchment to the South and South West of the site is most of Southland. The associative landmark values are therefore not limited to Mokoreta as later stated by Coombs.

110. How can a large-scale wind farm achieve integration with the landscape when the turbines will stick out 220m above it? The Landscape Report note "at first glance, a 55 turbine, large format wind farm has the potential to be dominating". However, in their opinion that is not the case. We strongly oppose this finding. The significance here is of the skyline shape to our community and thus to say "the wind turbines will not domesticate the landscape in the same way, for example, as a proliferation of dwellings"[29] is to totally exclude the importance of Slopedown to us.

111. Emphasis is put on the north slope in the landscape reports which they state is working rural landscape and forestry. As viewed from the South, South East and

[29] AEE page 105, 6.5.5

South West the site sits on top of the Catlins Conservation Park and/or stewardship land. Previous generations of Mokoreta and Redan fought to keep that native area. The scarp is below the Project Site, but it not separate from it as stated. Given the prominence of the landscape, and the valley below – the turbines will look like they are sitting on top of the Catlins Conservation Park/Slopedown Conservation Area. The turbines where visible are more than half the height of the escarpment and would appear along most of the crest (some 17km).

112. The fact the landowners are willing (because they are being compensated, both financially and through land development, and will not be affected as they do not live locally) should not be considered in the appropriateness of the site. We propose that having willing landowners does not negate the need to look at alternative sites. Here 52 of the 55 proposed turbines are sited on properties which the landowners do not live on. We believe not all hills are created equally and while the landowners might be gutted if this Project can't go ahead – they'll be the only ones.

113. When discussing appropriate locations the landscape experts state "where such places are identified there is also an imperative to avoid heavily populated locations and *highly natural environments*". The conclusion that this site is well suited for a wind farm ignores the highly natural environment within and surrounding the site.

114. Contact note that a change in view does not, of itself, constitute an adverse visual effect given the various subjective factors in play. We propose this conclusion is incorrect in the case of an ONL/ONF landscape, where the change detracts significantly from the feature to be preserved. We believe it is an inappropriate development in this context.

115. Our lived experience is of being surrounded by bush and wilderness (whether indigenous or forestry – as the greens blur together when viewed from afar). We disagree with Mr Coombs that the farms at the foot of the indigenous bush are a counterpoint to the view of the Catlins Conservation Park. People in this area accept the bush as an extension of their properties, with fingers of bush coming down into the neighbouring farmland. This is not farm area that can be compared to the likes of the Southland Plains with square paddocks and uniform tree lanes. This farm area is paddocks that might have indigenous vegetation on 3 sides, flax lanes that are naturally occurring, rimu trees dotted through paddocks, large bush areas within paddocks which are more often than not fenced off to protect them. There are more than limited remnant indigenous vegetations on properties neighbouring the Catlins Conservation Park. The landowners in this area are conservationist as you can't live this close to the Conservation Park and not wish to protect it.

116. We absolutely disagree with this idea that because the Project Site is surrounded by a part of the Catlins Conservation Park – which is separate and isolated from the larger Catlins Conservation Park by a few kilometres to the South, that it is less significant. If anything, we believe this fragmentation makes it more important to protect because indigenous biodiversity will be decreasing in size.

117. The planning documents make it clear that no one has truly understood the significance of this area and mapped out what the specific ONL/ONF area is for this site. As an alternative view to Mr Coombs/Mr Brays, we propose that the ONL/ONF is the*:*

- *forested area AND*
- *the landform shape with its distinctive line across the skyline AND*
- *sharp Slopedown AND*
- *the wildlife that lives here AND*
- *the impeccable dark skies* (emphasis added).

118. Ms Stevens has understood this in her "Response to Southland Wind Farm Applicants Response to RFI 4 dated 24 July 2024, 3 September 2024" page 6. We go further by adding night skies in. As outlined in TTATM and noted by Mr Coombs *landscape is the interplay of dimensions*. What is sought to be protected is the landform shape of the skyline AND the bush area AND the wildlife that live here or frequent here AND the dark skies. <u>It has to all be assessed together</u>.

119. 55, 220m turbines, with 16 lit, will alter the landform shape and substantially detract from the distinctive Slopedown, remove areas of indigenous vegetation, effect wildlife here and change the night sky. Man-made structures will detract from this special place. The effects on the landscape cannot be mitigated or offset to protect this ONF in this particular Project. Thus, this Project on Slopedown Hill is inappropriate pursuant to section 6 of the RMA and the adverse impacts are out of proportion to the Projects benefits pursuant to section 85(3)(b)FTAA.

120. Ms Stevens in her previous report agrees as "*the turbines appear to hug the boundary which on Pawakataka is very close to the crest. In terms of perception of change to prominent and distinctive landforms, there would be a significant change to character in my opinion with turbines appearing along much of the escarpment crest/skyline. These skylines are currently completely natural and intact, comprised of landform and indigenous vegetation. The layout of the turbines does not appropriately avoid these skylines in my opinion to the extent required to retain their character. The SWF does not provide "breathing room to key topographical features such as ridgelines, high points and the scarp, with the exception of Mokoreta Peak*

itself, when viewed from below (but only because it is not within the Site)"[30]. The community have been saying this all along – this a drastic change to our current environment. We propose that any offsetting of this change fails to understand the magnitude of this impact on the community. Ms Stevens notes the ecological offset and compensation measures would contribute positively but only to a low degree in her opinion relevant to the scale of the visual impact and landscape character change[31].

121. We also understand the tension between landscape protection and enhancement versus the need to farm and use land resourcefully and efficiently. The Landscape Reports have somewhere along the way forgotten about the intrinsic value that nature brings. *Our children deserve to see areas that are not developed*. We are not making more areas like this, once you sign off on this consent – our children and their children will never know what nature looked like untouched on the skyline in a wild area like the Mokoreta Redan Valley. Arguably this area is more special and deserves protection because of its accessibility for all people, compared to the likes of Fiordland which you can only visit at a large cost.

Recreational Values

122. Contact Energy state the recreational values are limited as there are no mapped tracks or walkways through the scarp. This is incorrect – there is an easement walkway which people use that juts out from Egremont Road to access the Scarp and also the Mokoreta Redan Hall have been trying to communicate with DOC about returning a marked track from Egremont Road, up Pawakataka to the trig. The only reason this project has not happened is because DOC have said no. The local residents and Wyndham community are very keen to reinstate these recreational activities. DOC have advised they are not in a position to fund this and have not answered queries to meet members out here to discuss this plan further. The community have advised we would fund it ourselves. The landowner, who DOC have an easement in place with on Egremont Road, have indicated their willingness to fence off part of their paddock for carparking at no cost. Despite this, people are still walking these areas, albeit not marked.

123. Further to our comments about our members association with Pawakataka we add to Mr Coombs comments at paragraph 111 about recreation use; that there have previously been at least 3 walking tracks on Pawakataka and Mt Mokoreta. We would propose that recreational values have been severely impacted by the sale to forestry

[30] Peer Review of Isthmus LVA, ASLA, August 2024 para 150 C19FTA.
[31] Peer Review of Isthmus LVA, ASLA, August 2024 para 192 C19FTA.

land, as access has been denied by the Forestry Company, and they also bulldozed down the day centre and confidence course that used to exist in this area. There used to be school camps at the foot of Mt Mokoreta, and a walking track up Egremont Road onto the plateau of Pawakataka. Just because our people have been unable to access the land easily shouldn't be taken into account to say recreational values are limited.

124. Further, there were running/biking events in this area as recently as 2014 for the *Pawakataka* trophies organised by the Mokoreta Redan Hall Committee. The Mokoreta – Redan Hall Committee have been looking at bringing this event back for some time but Covid-19 scarpered a few, and now we understand that committee are waiting for the paddocks around the hall to be in grass for parking. These examples all show that the topography does not limit recreational use as Mr Coombs asserts.

125. Further, people already do walk in the areas they are legally allowed access to, whether it be training for adventure races or just generally keeping fit – these hills are good training places. Just because there are not specific records of recreation doesn't mean it doesn't exist. Egremont road is utilised by the community as a walking track generally when forestry trucks are not working. There is even an NZTA watch for walkers sign as you head up Egremont Road towards Pawakataka.

126. We absolutely agree with Ms Stevens previous comments that the Mokoreta Escarpment and Forest Range are within easy reach of Gore and Invercargill, and "*appear to have sufficient scale, interesting landscape, and connectivity and legal access points to support good trail networks"*[32]. Given the popularity of walks like East Peak in Croydon Bush or Koropuku Falls in the Catlins – we believe trails on Pawakataka could be even greater. It's an easy day trip from Invercargill to head out to Fortrose, round through Curio, Waikawa, and then turn up Waikawa Valley Road, stopping for a spot of trail walking in Mokoreta/Redan, then back to Invercargill. There is huge potential here with the natural capital.

127. Mr Coombs asserts because the windfarm will be removed at the end of the 60 years, the effects don't count. However, if the SWF goes ahead that will have a direct impact on recreational use in this area as projects such as walking tracks up Pawakataka will not go ahead. People want to connect with nature in its natural form. Further, the 60 years of impact on the ecology of the site can not be ignored.

128. Further there is a growing astro tourism market in the Catlins that is occurring in these areas, people regularly sit at the Doctors Road intersection from Wyndham for

[32] Peer Review of Isthmus LVA, ASLA, Aug 2024, para 50.

star gazing, or on the likes of Mount Egremont. It's impressive here with almost no light pollution, except for the odd house. This will not be the case after the turbines are erected as the focal point will become the flashing LED warning lights, and not the stars.

Hunting

129. In relation to hunters – we can confirm there are regularly cars parked up with people out hunting on the likes of Egremont Road heading up into Pawakataka. Given the current cost of living crisis, more often than not there are people hunting in the Pawakataka area. People don't need huts or a track system to gather food such as venison, pork or koura. Further, the land owners of the SWF site will know how often they are approached for people to hunt on their properties. If it is anything similar to our members that live in Mokoreta/Redan it will be at least people texting 2-3 times a week to go out hunting in these areas.

130. We propose the unique idea that the offsetting measures including predator control ie paying hunters to shoot the wild deer etc on the SWF will actually impact the current hunting activities of the community on Pawakataka.

131. We do not accept that neighbouring properties are not doing enough towards pest control[33]. We advise that our members are actively trapping or shooting – possums, deer, rabbits, hares and pigs, and DOC have several hunters out on the conservation blocks. The Farmers in this area are actively protecting indigenous biodiversity. We propose that the gains to be made for the wind farm site in terms of indigenous biodiversity by fencing of an area of 250ha from deer - will actually cause effects on the ONL/ONF area (and potentially the rest of the Catlins Conservation Park). As that will force animals to be concentrated in other areas. Unless predator control is happening on a large scale across the park – it is practically pointless. There is already aerial control of predators – so what is to say that Wildlands idea will actually make an improvement, as they are saying the environment is already degraded?

GIS mapping

132. We have asked Contact Energy for a map showing the locations of where the turbines will be visible from in Southland and Otago. To date no map has been forthcoming. We understand this would be relatively easy with GIS mapping and Contacts resources. We assume this is not forthcoming because the map would highlight the far-reaching visibility of the wind farm.

[33] Mitchell Daysh Response to Comments Planning

133. We note the highest point in the Catlins is Mount Pye at 720m above sea level. Given the highest turbine will be placed at a height of 630m and reaches 220m high – it will tower over Mount Pye by an impressive 130m. For comparison, 220m high is the height of the highest Skytower observation deck[34]. The turbines will be widely visible in several locations.

134. The 10 turbines at Kaiwera which are only 145m high can be seen from the likes of Colac Bay. The elevation of the Kaiwera wind farm is only on hills of 400-460m elevation[35]. Compared to up to 630m at this site. Mr Coombs state "difference in size of the wind turbines is unlikely to be discernible". We query the accuracy of this statement. Given that our families use this landmark as a guiding beacon, it's highly likely that this will be discernible to us.

135. The AEE also notes that the layout of the wind turbines has been specially designed to account for and downplay visual impacts. We query the accuracy of this as the 3 turbines to be located on Glencoe Station for example were not included in the previous wind farm application 17 years ago. We suggest placement is less to do with visual impacts and ecological areas, and more about buying affected parties off.

136. The turbines will appear to tower over the Catlins Conservation Park. The base of the scarp is at 152m and it rises 4-500m from its toe. At 220m these turbines will tower 45-55% again above the skyline, when measured from the valley floor. The nearest turbine to Mt Mokoreta will tower over it by 120m.

137. We do not believe the proposal and information supporting the proposal truly reflects the scale of the structures proposed and the resulting adverse effects.

Mr Coombs / Mr Brays Report

138. We have had Mr Coombs report previously reviewed by an independent landscape architect. The findings were not a surprise to us. We note the Landscape and Visual Assessment Report is deficient in several areas which we set out below.

139. Table 10 of the AEE how were these locations chosen? And how were the assessments made? Without including the community's feelings and associations with an area, how can these be true representations of amenity values. Given that the Mokoreta / Redan Valley will sit below the turbines, we query why more locations

[34] IE not the main deck, but higher up on the sky tower.
[35] https://www.mercury.co.nz/-/media/project/mercury/mercury/documents/wind-farms/kaiwera-downs-project-details.pdf?rev=f956a6b8ac65479f8949dbc17e9440a5

weren't taken from hills further back such as Glenham which will see all the turbines. Further, Mr Brays expert report was informed in part by social media comments – we query the accuracy of this methodology. Reading social media posts does not mean you understand the concerns of the community. WCPS have deliberately refrained from sharing too many comments on social media as several Council members and politicians told us to 'trust the process' and not let our story be detracted with comments on our social media posts that we have no control over.

140. The report is only about public and household *visibility*. But the landscape experience of the community is broader than that, and deeper. As explained above we have a deep connection with the land. This doesn't appear to be in line with the TTATM guidelines which suggest a holistic concept of landscape that goes beyond physical character and scenery to the tangible and intangible relationships between people and place. Attention to the specific characteristics of each place rather than relying solely on generic parameters. Here the generic parameters of 10km from the wind farm site was used as the effect on dwellings. The dwelling inventory is the basis for the assessment of visual effects on dwellings in the Assessment of Effect (Appendix D, page 129).

141. When queried several of our members didn't even know their addresses were used in appendix D – dwelling inventory and effects on dwelling assessment. Comments like perspective of depth and partial views of small number of turbines do not do the effects of this proposal justice.

142. This 10km radius also disregards the prominence of the hill to a larger group of people. Given where Slopedown is situated which is a prominent northern outlook for a large proportion of homes (as most homes are built to the northerly aspect) in the lower half of Eastern Southland, and to the north-east of much of the wider Southland district along the Southland plains stretching to Invercargill.

143. Isthmus assessed the degree of visual change. On what scale? Further they state the actual effect will be a function of several things including individual perceptions towards wind farms. Given the only survey undertaken on community perception explained in paragraph 298 below, it is likely the actual visual effect is quite different to Isthmus calculation.

144. Isthmus acknowledge that there are some moderate-high visual amenity effects. We note one view point used, 1232 Wyndham Mokoreta Road which has moderate adverse visual effects is actually in a low-lying area compared to the other 4 surrounding houses. Further this photo is directly beside the "Welcome to the Catlins

Conservation Park" sign where we believe the turbines will take away from that enhanced area of natural beauty (refer Appendix A, images E & F.1 and F.2).

145. The Isthmus report notes the natural character values are assessed as high across the entire Project Site and very high in some areas. How are the effects of this Project largely avoided? Isthmus report specifically states some residual ecological and natural character effects cannot be avoided, so Contact proposes to offset this. What is the relationship between no net loss and outstanding natural landscapes?

146. Further we believe it's not just about scientific ecological values. We have ties to these hills for generations. What are the experiential and associative values of that natural character that could be adversely affected?

147. Associative attributes allow for recognition of cultural attributes that are not those of tangata whenua. The Isthmus report is too narrow and does not assess the pakeha (or otherwise) communities of this landscape. Many of the local residents have over 100 years history in this area and Contact have not prepared any reports in relation to community values. As outlined above.

148. The Isthmus report also does not comment on the perceptual nature of the landscape context as TTATM notes as best practice.

149. There will be some potential visual effects generated from the windfarm on the scarp skyline, which has higher landscape values than the backslope. The turbines will be prominent behind the skyline ridge and will diminish the naturalness of the skyline. However, the report notes the significance of the scarp skyline is restricted to a locality. Is this the test? Failing being an outstanding natural landscape or feature, is local significance not enough? To be clear though – this area is absolutely an ONF.

150. Southland regional landscape assessment 1997 is out of date. We further note it is antiquated to only identify Fiordland and Rakiura as ONL in Southland region as per 1997. This does not meet current best practice.

151. We do not accept the dismissal as a 'rural working landscape'. It's an old-fashioned approach. Every landscape is a working landscape, including conservation land for predator management etc. As an alternative we would suggest that the proximity to the Catlins Conservation Park adds a dimension of wilderness and that this value will be compromised by this Project. Further while there are some

areas of large- and small-scale forestry planting, native vegetation remains visually dominant in many areas.[36]

152. Para 55 states the Catlins is some 40km to the east and south of the Project Site. We note the definition of Project Site in the AEE includes the Wind Farm Site. The Wind Farm site is in the geographical area of the Catlins and thus this statement is incorrect.

153. Natural character. Wildlands and 4Sight address only scientific values of nature. Not the full spectrum of natural character. Refer Te Tangi a te Manu page 205. Natural character includes the natural darkness of the night sky. And places that people relate to as wild or scenic. That is, their experiential value. Scenic is a European cultural term. Cultural is thus not limited to tangata whenua.

154. Isthmus have limited the cultural landscapes to TAMI. Further, while we cannot comment on the cultural values of Kai Tahu as a whole, we can comment on behalf of our members who are tangata whenua. From their perspective their cultural values have not been addressed or mitigated. They have not been approached by their iwi since the first round of comments in the C19FT, and have therefore not been consulted on any of the agreements reached.

155. As noted by Contact the iwi's stance is '*not oppose*' in respect of this Project, due to the significant monetary incentive provided by Contact. We take the time to reiterate this point, as the tone we get from Contact's application is of iwi *support* for the Project.

156. With the continued reference to the CIA provided for the C19FT, we anticipate that this document (and indeed others referenced throughout the application but not provided) is available to the Panel.

157. Isthmus have done an inadequate assessment of the attributes and potential adverse effects on natural character. They state that natural character values of the site are 'high' and some areas are 'very high'. But the report does not assess how natural character effects would be addressed? Further this is only in relation to the wind farm site and not the broader context of the landscape.

[36] Boffa Miskell Southland Landscape Assessment 2019

158. The report acknowledges that the wind farm would change the landscape. The report also recognises that the turbines would diminish the naturalness of the skyline.

159. Isthmus assess there will be no significant adverse cumulative effects on landscape and visual amenity values. We disagree with this statement. Further, we note that it is not just 'significant' effects that need to be addressed. Any adverse impacts that are out of proportion to the benefits, even after taking into account conditions still need to be weighed up.

160. The effects of the proposal on the character of the area and the landscape values associated with the site and the viewing plane beyond the site, are significant. These effects will be long lasting, adversely affecting the landscape for generations, and are of an enormous scale. The proposal does not sufficiently avoid, remedy or mitigate the potential effects. It does not provide for the sustainable management of a highly valued and unique landscape.

161. We have reviewed the photos prepared by Isthmus and Roaring 40s several times. We have prepared our own photo which we believe to be a truer representation of how visible these 220m high wide turbines will be on the landscape [Appendix A, image C.1 and C.2]. As we have noted, the 10 Kaiwera turbines visual appearance changes with the weather, some days they look like you could reach out and touch them, and other days they blend in more.

162. On the basis of the above errors and deficiencies in the landscape assessment and images prepared by Isthmus we query the integrity of any of the reports prepared and paid for at the instruction of Contact. We do not have the resources to obtain expert reports of our own on any issues. We were lucky enough for Di Lucas to take an interest in this and her brief review and damning remarks of one report have made us very nervous about the quality of every report in this application. We do urge the Panel to review the work of Anne Stevens in the previous fast track application which was denied.

163. We note the Panel when considering a resource consent application must give the greatest weight to paragraph a of schedule 17(1) ie benefit of the project, and yet still take into account Part 2 of the RMA which protects and promotes sustainable management of the natural and physical resources. Section 6 of the RMA is still relevant here – protecting Outstanding Natural Features from inappropriate use, development or subdivision.

164. In Paragraph 2.7.3 of Part B – Contact state that there is generally a restricted potential viewing catchment, as the Windfarm appears to be less visually exposed. Now, we realise this report of Mr Brays was composed after only 1 day visiting Southland – but we have to query whether anyone can accurately believe that the largest hills between Slopedown and Bluff – ie where the Windfarm is going - can be classed as a restricted potential viewing catchment. Mr Bray keeps speaking about is the site as you presently see it – ie "the wind farm site essentially vanishes from view as it is screened by intervening landforms". You cannot erect 55 towers 220m high (the same height as the highest viewing deck of the Sky Tower in Auckland) on hills up to 630m high and say the site is less visually exposed. Given the Southland Plains lie to the west of the Project Site – we counter that the visual catchment area is large, and then when coupled with the height of the proposed project – it becomes even larger.

Visual Catchment

165. We disagree that views from the South will be more restricted. Further views do not display a strong contrast between pastoral farming and native vegetation. Anyone living in this valley would see the two intrinsically linked – native vegetation is evident everywhere from the drive into the valley with flaxes and cabbage trees adorning the roads, to large areas of indigenous vegetation on farms. Currently in the Mokoreta Valley – the dominating feature is being surrounded by native bush on all sides. We cannot see the industrial parts noted by Contacts landscape architects like Fonterra or Niagara sawmill. It's truly an idyllic valley with bush capped hills. To suggest that several metal tower 220m on our northerly views won't have a significant visual impact is a stretch too far.

Climate

166. Part B report notes that the climate data comes from Mokoreta at Mt Alexander site which is located approx. 7km southwest from the centre of the wind farm site. Mount Alexander is a property which was asked for comment in the previous Covid Fast Track Act Application. However, the Panel did not seek their comments this time. We query how the site can be 7km Southwest from the *centre* of the wind farm site and also how Mokoreta can not be impacted by the turbines? The idea is that the turbines will be far enough away from Pawakataka as to not displace its ONF feeling, however Mount Alexandar is less than 1 km away from the foot of Pawakataka.

Scale / Cumulative effects

167. Kaiwera wind farm will eventually consist of 66 turbines. Contact state the gap will be 4km between the closest turbines of each wind farm. We assert the scale of 121 turbines has not genuinely been investigated in terms of the landscape assessment.

168. Brays report does not consider this or the lighting effect. Contact note there are relatively few times when the two wind farms would be visible as one collection. This appears to be in relation to the dwelling assessment only of homes within 10km. Given the nature of the valleys surrounding the wind farm – it's clear that further afield areas will be able to see both wind farms ie South Wyndham, Glenham, Edendale area etc. Stating that these areas are beyond an immediate direct visual impact has not taken into account the significance of those hills and that skyline to our community. To liken wind turbines on the skyline to Fonterra on the plains is rather a stretch in this situation. This will be the dominating feature of the landscape for the next 60 years and its imperative we get this impact assessed correctly. Sentences like "has the potential to contribute to visual clutter" don't bode well[37].

169. Coombs concludes that there will be no significant adverse cumulative effects because the two wind farms will maintain a similar pattern with respect to the landscape "avoiding perceptions of turbines spreading across the hilltop from some viewpoints". We disagree, the cumulative effect when looking from the Southland Plains will be that the hills of Eastern Southland are covered in 120 plus turbines. The two projects will look like one. There is also no consideration of the cumulative effects of the Slopedown and Kaiwera transmission lines and GIPS. Further, the Kaihiku wind farm currently going through the consenting process will be visible in part. We agree with Ms Stevens that the scale of separation between Kaiwera and SWF is somewhat meaningless given the scale of the windfarms[38].

Dark Skies

170. The Catlins is currently looking into becoming an accredited area with Dark Sky International. We have been in touch with Catlins Coastal Inc and shown our support for any Catlins dark sky application. A windfarm of this scale could jeopardise the Catlins real potential in becoming an International Dark Sky. An international dark sky application takes considerable time, potentially 2-3 years. A group has been formed in the Catlins, Owaka Going Forward, (the Group) which have put forward the following submissions:

    a. to the Clutha District Council 2024-2034 Long Term Plan requesting they support the initiative of The Catlins becoming an International Dark Sky i.e., a lighting policy, to which they have responded in that the Council will investigate a Lighting Policy to align with Owaka Going Forward initiative to register The Catlins as an International Dark Sky Reserve; and

[37] Previous application Appendix J, Isthmus report, para 173.
[38] Peer Review of Isthmus, ASLA, Aug 2024 para 131.

b. The group have also put forward a submission to the Southland District Council 2024-2034 Long Term Plan (LTP) asking they support the initiative of The Catlins becoming an International Dark Sky to which the verbal hearings take place mid July, so we await the outcome of the SDC LTP.

171. One of the requirements of an International Dark Sky is that you have impeccable dark skies. Given the low populace of the Catlins area, including the inland Catlins hills and the large areas of indigenous biodiversity we know that light pollution is very low and astronomists have indicated we would easily qualify for the impeccable dark skies.

172. Dark Sky International is on a mission to ensure that light pollution is minimised and promoting access to the wonder of beautiful night skies[39]. As noted above amenity values include sight and our community is passionate about the night sky. We only have to step outside our doors to be able to see such beauties as the southern cross and the milky way. We take it for granted how normal this is. Seeing the stars is a part of rural living. "For centuries we've looked upward for enjoyment, direction, instruction and inspiration. Observing the sky above not only lets you reconnect with something of possible deeper meaning but also provides a fascinating sense of perspective about our place in the universe"[40].

173. 55 turbines 220m on top of hills 300-630m high will be rather detracting from the night phenomenon. Contact have previously noted "The effect of the lighting will be adverse". "When the windfarm is viewed within a dark sky setting, the adverse effects will be higher given the contrast between the dark sky and the flashing light. The viewpoints where there is a lack of intervening lighting from other sources will result in higher levels of night time adverse visual effects due to increased sensitivity to the flashing function of the obstacle lighting" (CFT19 Appendix J para 185).

174. Our region offers one of the darkest locations in the world to view the night sky – as the centre of the galaxy passes almost directly over your head[41].

[39] Dark Sky International, https://darksky.org/resources/what-is-light-pollution/light-pollution-solutions/ accessed 17 July 2024
[40] Great South, Southland New Zealand website, https://southlandnz.com/things-to-do/nature-outdoors/stargazing/ accessed 16 July 2024
[41] Great South, Southland New Zealand website, https://southlandnz.com/things-to-do/nature-outdoors/stargazing/ accessed 16 July 2024

175. What effect will the wind turbines have on the Aurora Australis / Southern Lights?[42]. There is nothing in the reports to discuss this effect.

176. We have repeatedly asked Contact for simulations of a turbine operating at night with a height of 220m, as turbines over 150m will require additional lighting[43]. Thus, the current 10 turbines at Kaiwera are not sufficient evidence of what these larger turbines will look like at night time. Further, a resident close to the Kaiwera turbines which are only 145m are saying they now can't see the Southern Lights because of 10 turbines. What will our community be facing if there are 55 turbines on the dominating landscape? Even if only 16 are lit – that still has to be tested against the current pitch dark that we can see. It's not relevant that some of them will not be lit now.

177. This will really dislodge our sense of place and understanding of the world as we are intuitively connected to the night sky. If the wind farm was to proceed, the visual pollution could not be ignored, night or day. Further, the cumulative effect with the Kaiwera wind farm together will be over 120 wind turbines. Previous Appendix J simply states the visibility has not been modelled (para 185) despite saying the effect of the lighting will be adverse.

178. The dark skies been assessed incorrectly as an environmental effect. Contact propose that 16 turbines lit is better than 55. However, the effect is of impeccable dark skies at present versus 16 lit turbines if the Project goes ahead. Also, we note the 16 lit turbines are subject to change within the turbine envelope zones.

179. We further propose that the impeccable dark skies in the Catlins could be a potential outstanding natural landscape or feature. And query what implications that would have for this consent application.

180. Dark skies contribute to wilderness values and this Project will compromise those values. If you took a child from a populated area and bought them here at nighttime where there is no light pollution – they would absolutely think they were in the wilderness.

181. We have also included in the paragraphs below our previous comments on this subject in the second round of comments in the C19FTA:

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[42] Julian, C. University of Oklahoma 23-2-2023 – https://www.ou.edu/research-norman/news-events/2023/how-could-the-aurora-borealis-affect-energy-grids-when-renewables-are-added-to-the-mix accessed 17 July 2024

[43] Civil Aviation Authority, Lighting and Marking of Wind Farm Turbines – rule 5.2 https://www.aviation.govt.nz/assets/airspace-and-aerodromes/airspace/wind-farm-turbines.pdf

a. The Leading Design Professional report alleges that it will not result in adverse effects that are more than minor on the rural night sky. We assume the writers realise the rural night sky definition is being pitch black on Pawakataka, and impeccable dark skies for astro tourism. Arguably any constant lights, such as intermittent red flashing, is an effect on the rural night sky because it is so dark here. This isn't town where you expect a level of lighting at night time.

b. We find Contacts comment at paragraph 5.24 irrelevant. The majority of our members don't work 9-5 jobs, rural people are regularly outside at night time, and early risers in the dark of night. Should the time of day an effect is occurring hold weight? We propose the idea that people out at night time in this area expect to see the night sky in its natural form.

c. Why will the lights not be visible from the nearest residences due to elevation? We do not accept that the light effects will be diminished from further away residences, as the further you are away from the Project site the more turbines lit up you will be able to see – ie. from Glenham or South Wyndham hills ALL the lit turbines will be visible and flashing at night time. Mr Coombs in FIR 4 notes the lights will be visible for up to 50km. We still believe this would detrimentally affect the Catlins and West Catlins area as a dark sky destination.

d. In response to FIR 4, Mr Coombs provided visual images of the Kaiwera lights. Our lived experience is that these images depict the lights as far less intrusive than what is actually experienced.

e. Further, minimising the effect by saying that the lighting will sit in the back of foreground lighting is deceptive. Many areas of Southland do not have significant foreground lighting. As these hills are high points for the area – the flashing lights will be seen from a large area. We propose the idea that this is part of the ONL/ONF assessment and dark skies over these areas need particular protection, even from aviation safety warnings, as they are remnants of Aotearoa before man-made items such as LED lights punctured the dark sky.

f. We agree with Ms Stevens that "where the natural dark sky is valued, this would constitute a significant adverse effect", "the shift from rural to rural-industrial landscape character would be accelerated". We propose going one step further and saying the shift from conservation land to industrial

landscape would have occurred, which doesn't align with section 6 of the RMA.

182. We have included the above paragraphs because we still hold genuine concerns about the effects on our impeccable dark skies which have not be sufficiently dealt with by Contact.

Screening

183. We dispute the notion that screening could effectively downplay the visual impact of the turbines. Given the height of the structures alone will be 220m, plus then situated on hills 300-630m high from sea level. There are no plants or trees that will sufficiently screen out the effects of this windfarm. Further, to take the view that our dwellings is the only view that is important to us is too narrow. Our homes our are entire properties whether that's ¼ acre section or 600ha's. We live predominantly outside.

Cemetery

184. The Wyndham Cemetery was opened in 1860 and many members of the West Catlins Preservation group have ancestors buried there. The cemetery is located at 373 Mimihau School Road at the top of a hill. The cemetery is located 10.2km from the closest turbine[44]. The majority of the gravesites face north-east looking towards Pawakataka (Appendix A, image G). Our ancestors buried here are rural people who appreciate the naturalness of this environment. The cemetery itself is surrounded by working farms. However, the dominating landscape and view from each burial site is Pawakataka and the Jedburgh Plateau. It does not sit comfortably with us that our ancestors will have to look at a large-scale wind farm if this Project goes ahead. Burial grounds are often faced towards significant landmarks like mountains as in this case.

185. In all the documentation we can find no research on the effects this Project will have on the visual amenities of the Wyndham Cemetery and the people there who no longer get a say. Given the rural nature surrounding the Cemetery and the wildness of Pawakataka and Jedburgh, it would seem highly improbable when selecting to be buried at this cemetery that you would ever have envisioned looking at some of the largest structures in Aotearoa. When choosing a burial site at a more urban cemetery we concede some level of development would be expected. That is not the case here. Our ancestors face east to see the sunrise over Pawakataka and at night time are witness to the impeccable dark skies present over and around Pawakataka. We are also surprised this is not accounted

[44] C19FT Appendix J. Para 106. Isthmus Report

for in the cultural impact assessment as iwi have burial plots in this cemetery. This does not align with the RMA and is another impact to be weighed up in the FTAA.

186. We propose the significance of the cemetery facing towards Pawakataka is significant to the cultural association our community have with this landscape. It is one of several factors which should be included in the landscape assessment to show how significant this area is to our community, it demonstrates associative values for landmark purposes.

187. The above paragraphs on the landscape all show the adverse impacts this Project will have on this unique area. The adverse impacts are greater than the benefits, please take a precautionary approach and protect Pawakataka and the ONF area for future generations.

Tourism

188. The Catlins is being marketed as a potential astro tourism area with the impeccable dark skies we have in this area. Coupled with ecological tours for the likes of the long-tail bat, this has the potential to be a very exciting area of diversification for Southland. Great South recently prepared the Destination Strategy which has tourism as a key diversification for Southland[45]. However, in their risks and limitations they failed to outline the effects if the Regional Energy Strategy comes to fruition. The Regional Energy Strategy has 100 potential windfarm sites listed on it. Why would tourists come to see areas of Outstanding Natural Features and Landscapes ruined by steel and fibreglass jungles? In an ever-growing population natural areas are going to become a rare commodity. Erecting a wind farm here is a short-term gain (for the Power Company) with long term consequences for the wider community and economy.

189. We believe the wind farm will also result in the loss of agri tourism opportunities for West Catlins members as there is growing demand for quiet escapes in rural settings. People do not want to leave the city to come and stay under the shadow of a wind turbine. We can find nothing in the report to analyse this loss of opportunity for Southland. Significant potential effects on the ability for people and communities to provide for their economic wellbeing as a result of the proposed windfarm is not considered to align with the sustainable management of resources, as required by section 5 of the RMA. And should be weighed against any benefits in the FTAA.

[45] Great South, Murihiku Southland Destination Strategy 2023-2029, https://greatsouth.nz/assets/Media/Publications/230814_GS_Destination-Management-Strategy_Compressed-Download.pdf

190. We assume the Panel are aware of Canopy Camping, and other such remote accommodation sites that have become popular post covid. Just over the hill we have Beresford Heights which is consistently booked out and the new Fern Hut – both of which have selling points of remote areas, wilderness areas etc[46]. Fern Hut is nestled on 200 acres of 'untouched' indigenous vegetation. The Mokoreta Redan Valley will lose this opportunity if the Project goes ahead. The writer knows of atleast *Five families* who are actively looking into accommodation options for the area but have put it on hold until the results of the Project are known as it will detract from the wilderness values and general aesthetic. Three of whom have amazing architecture designed accommodation for the farm ready to go. There has even been community interest in a walking track around the permitter of the Catlins Conservation Park in the Mokoreta Redan area with discussions between several generational farms taking place. Tourism investments being on hold until a call has been made on the progression of the windfarm is an undesirable proposal.

191. The Project is being fast tracked under the FTAA auspice to get the Southland economy going again. However, previous Appendix B by NZIER page 4 notes tourism which supported 10% of Southland employment in 2020 was hit particularly hard by covid 19. Given that same report notes jobs from the Project locally will be short lived, it is rather ironic that this Project will have further on-going negative impacts for tourism in the region.

192. There has been no assessment of the affect this Project will have on tourism in the West Catlins. Tourism is a significant part of Southlands economy leveraging the region's natural attractions and famous southern hospitality[47]. The Redan Valley is the western gateway to the Catlins and as noted prior this Project will tower over the highest hill in the Catlins, Mt Pye. More information is needed to understand the effect this project will have on tourism in the Catlins.

Archaeological and Heritage Values

193. How can Contact confidently state that G46/17 will not be affected by any Project related structures or activities when it is 210m from the proposed transmission line pylon which has a 200m corridor?

Noise

[46] These are just two examples of several highly successful tourism businesses operating on farms.
[47] https://southlanddata.nz/data/tourism

194. The previous Marshall Day Report stated "Background sound level measurements have been taken at locations representative of clusters of noise-sensitive dwellings", and "The background noise level was measured at 1542 Wyndham-Mokoreta Road, which reasonably represents the background noise environment at both of these dwellings". We do not believe this is appropriate as 1542 Wyndham Mokoreta for example is set right beside the road, compared with 1403 Wyndham Mokoreta Road which is set back by 400m.

195. The sound recordings at 1542 Wyndham Mokoreta Road noted fairly quiet 20-25dB some of the time. Further the turbines would be audible between speeds of 7-12m/s[48]. The wind data for the proposed site notes the speed is 9m/s[49]. So, for majority of the time the house at 1542 Wyndham Mokoreta Road is going to be able to hear turbines going. While we note compliance with standard NZS 6808:2010 doesn't indicate inaudibility, we still believe there will be an erosion of amenity.

196. We query whether for a particularly quiet location like this, a lower, more stringent limit should be imposed to preserve the natural noise amenity of the area. Despite this not being a rule in the district plan for the Catlins and rural zone.

197. Our members would like to query why sound is only relevant at dwellings. In a rural setting like this, the paddocks, gullies and hill tops are as much our home as the four walls we sleep in. One of our members was not allowed to put the noise detection monitor anywhere but their front lawn which is only 25m from the Wyndham Mokoreta Road.

198. When queried at the open day, Marshall Day had no response for the proposal that rural people are adversely affected by the wind farm noise standards and they are antiquated and need updated for larger wind turbines.

199. Further the modelling was undertaken in August and September which is a particularly busy time on farm with lambing and calving, which requires several vehicle movements per day, and large mobs spread out over the farm. It's not an adequate noise data set for this Project.

[48] Figure 19, Appendix R. Marshall Day C19FT.
[49] Contact C19FT consent application

200. What affect on amenity and noise does the outstanding natural landscapes assessment have on this?

201. Does the Catlins Conservation Park have a different zoning in the Southland District Plan? And if yes, are any of the reverse sensitivity effects provisions of the DP triggered?

202. We draw to your attention that the dwellings chosen for the noise assessment are not the closest dwellings. Based on the wind information gathered, how often will wind speeds be 7-12m/s and less than 3m/s?

203. It would also be good if the findings by Halstead that "stock and wildlife quickly adapt to the presence of new noise sources" could be referenced to a scientific study, rather than just opinion.

204. There has also been no assessment of the noise affects on local families several of whom have been here for several generations. Contact have no information on the noise affects and bearing on farm productivity. For example if people can no longer retain staff on farms then that has a direct impact on farm productivity which is one of the main drivers of the Southland economy.

Project description

205. The turbine envelope zone of 200m radius covers an area of 12.56ha per turbine. This gives a variation of 690 ha over the entire Project. How much significant vegetation and habitat exists within this area? In addition, the proposed vegetation clearance caps allow 100 ha of loss (excluding the additional 24 ha of fill disposal sites). This is over 30 ha more than the plan currently presented (33%).

206. The area covered by each turbine platform (excluding permanent hardstand) is 0.88 ha giving 48 ha total. Total earthworks area is 161 ha for wind farm construction and 6.2 ha for the transmission line plus 24 ha of fill disposal sites. How can these figures be seen as limited environmental effects on significant vegetation?

207. The proposed road pavement on the track is 250mm. Is this enough considering the size and weight of the traffic.

Ecology

Loss of Vegetation and Habitat Types

208. Vegetation avoidance figures – are still subject to detailed design and the clearance caps (where in place) allow for up to 30% more than that presented. The loss of vegetation is nearly 100ha of natural areas, which is over 30ha more than the current plan. Not sure how Contact finds 30% more "slightly greater". The avoidance figures only apply to the Jedburgh Plateau – is there any other significant vegetation outside of the plateau being cleared but not included in these figures?

209. We do not believe that 10m set back of transmission towers from areas identified as high or very high ecological value is enough.

Birds

210. Part B notes the Project Site is located adjacent to isolated areas of the Catlins Conservation Park. The Catlins Conservation Park comprises 53,000 hectares. Given that avifauna can fly considerable distances this 'isolated pocket' of indigenous forest cannot be written off.

211. We query whether the datasets prepared by Contacts experts over the drought of 2022/2023 would have an effect on avifauna numbers? Further, the wet season just been if further recording has been conducted. We suggest that there is no clear picture of the avifauna available for the wind farm site and wider Project Site yet due to the weather being hotter than average last summer and wetter than average this year[50]. Further the surveys have been conducted with inadequate time periods. We have repeatedly raised this issue with Contact.

212. Are the results from e-bird appropriate for a high value ecological site with a low population? Further given a large proportion of the site beside the Catlins Conservation Park is owned by people directly benefiting from the wind farm, they are unlikely to have submitted bird reports.

213. Contact advised in May 2024 that earthworks have already started in the wind farm site. This must have an impact on any surveys completed since. We know from local sources working up there that large scale earthworks are being undertaken.

214. We note the previous C19FTA Cultural Impact Assessment on page 20 states that Manu have been identified as being significantly affected by the proposed windfarm. Whilst all manu are important to iwi, notable manu potentially affected include korimako, Mātātā, pīwakawaka, tōrea, ruru, Karoro, kāhu, Tuī, karearea, pihoihoi, Tītitipounamu and Koekoeā. There will be an

[50] Residents lived experiences.

associated effect on their mauri due to the removal of any habitat during the construction and operation of the Project.

215. The main factors that contribute to collision fatalities are proximity to areas of high bird density or frequency of movements (migration routes, staging areas, wintering areas), bird species (some are more prone to collision or displacement than others), landscape features that concentrate bird movement, and poor weather conditions[51]. Landscape features include steep slopes.

216. Further, lit turbines can attract birds, thereby potentially increasing the risk of collision[52]. Given the migratory routes that birds follow Pawakataka as a guiding landmark to the Catlins Conservation Park and then further to the east coast, we query the appropriateness of a wind farm in this area. Just because Contact will use red lights rather than white as required by CAA doesn't simply mean they can state the overall effect of lighting on birds is considered low.

217. Our members know from their history and lived experience that this area is a Kereru flight path from Redan/Mokoreta to Kowhai Grove (alongside Mimihau Stream, Venlaw). What flow on effect will displacement for the kereru have on the wider environment as "landscape-scale movements make kereru the most important vector for the transfer of seeds between widely-spaced fragments of native forest"[53]. There is no mention in Part B of the Kereru as noted avifauna. Over 100 Kereru visit the valley in the spring[54] - knowing that kereru fly into anything, we would assume that the turbine and infrastructure effect on Kereru will be a lot higher.

218. Studies of bird collisions at coastal wind farms have generally reported higher numbers of collisions, which may reflect higher bird densities at coastal sites or greater frequency of bird movements at such sites[55]. With the coast only 28km's away we believe there is potential for this to occur here.

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[51] Powlesland R.G, (2009) *Impact of Wind Farms on Birds: a review.* Department of Conservation. Science for Conservation 289 pages 5, 18.
[52] Powlesland R.G, (2009) *Impact of Wind Farms on Birds: a review.* Department of Conservation. Science for Conservation 289, pages 11-12.
[53] New Zealand Birds Online, The digital encyclopedia of NZ birds https://nzbirdsonline.org.nz/species/new-zealand-pigeon#:~:text=Combined%20with%20the%20kereru's%20large,spaced%20fragments%20of%20native%20forest.
[54] Local knowledge.
[55] Powlesland R.G, (2009) *Impact of Wind Farms on Birds: a review.* Department of Conservation. Science for Conservation 289, page 16.

219. Poor weather conditions can have higher impacts on bird mortality[56]. Coupled with the potential for increased lightening strikes due to the height of the 220m high turbines. What, if any, assessment has been done on this?

220. The New Zealand Falcon/Kārearea is particularly threatened by wind farms. High mortality rates have been reported for some birds of prey at several overseas wind farms due to collision with the rotating turbine blades. The construction of wind farms in New Zealand falcon habitat may expose it to similar risks[57]. We know there is at least one pair of falcon on the Redan side of the scarp. No falcon surveys were taken by the Crest or on Glencoe. The collision report appears to be drafted on the basis of only one pair of Karearea living in the area.

221. Matuku-hūrepo/ Australasian bittern present in the Dunvegan Fen complex may also be at risk. Given that Matuku-hūrepo are now noted as endangered –we should be preserving this particular area rather than offsetting elsewhere. This writer saw an Australasian Bittern in the paddock in Mokoreta-Redan valley earlier this year – we query the accuracy of no sightings by the ecologists in an area of such high ecological significance.

222. We assert the impact of turbines at a height of 220m have not been adequately investigated in New Zealand conditions. Robust results from impact surveys at turbines of this height appear to be unavailable. Contact note there is little information on the rate of collision fatalities at New Zealand wind farms.

223. Steve Harding, Roaring 40s explained that bird loss examples in North Island wind farms are not an issue. We challenge the notion that bird deaths recorded in North Island conditions can cross over easily to a unique area like the Catlins, especially given the wayfinder presence of Pawakataka for several species. Further, the topography of the North Island is generally very different to that of the lower South Island.

224. "*Relatively long lines of turbines or large wind farms can become important barriers to the local or seasonal movements of birds (Langston & Pullan 2003). The effect of birds altering their local flight paths or migration routes to avoid a wind farm is a form of displacement. This effect is of concern because it may result in increased energy expenditure when birds have to fly further to avoid a large array of turbines, and it may disrupt linkages between distant feeding,*

[56] Powlesland R.G, (2009) *Impact of Wind Farms on Birds: a review.* Department of Conservation. Science for Conservation 289, page 14.
[57] Department of Conservation, https://www.doc.govt.nz/nature/native-animals/birds/birds-a-z/nz-falcon-karearea/

roosting, moulting and breeding areas (Drewitt & Langston 2006)"[58]. Given the scale of the windfarms being proposed will span the length of the skyline from Kaiwera to the Catlins this would seem to be a large problem. Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 further states "*ensure that the scale and location of any new energy development does not impede migratory bird paths*".

225. Fuller 2021 indicates that in New Zealand there are 1-11 mortalities per turbine per year, that equates to 55 - 605 birds per year for this Project. This is significantly different from the tables presented.

226. Given the above paragraph and our queries about the data, we believe there is not enough accurate data across multiple seasons to accurately account for the effects on birds. We should be avoiding establishing new developments at locations that are likely to pose significant risk to birds. We propose the only way this issue can be avoided in its entirety is to relocate this windfarm away from the unique biodiversity of the Catlins Conservation Park.

227. We further note that the idea to minimise bird strike by painting one of the blades black is not appropriate for an outstanding landscape of this nature.

228. Given our queries about the inadequate data samples for birds – we also query how a significant decline would be calculated. While Contact has collision triggers and intends to monitor, once the turbines are built it is too late. Compensation elsewhere does not adequately protect the rare species here. For all flora and fauna reducing populations results in an increased risk of extinction, and decreases genetic diversity.

229. Lastly, DOC are currently advocating around Bird Flu and how to minimise the impact on our native species, part of which includes protecting threatened species. Have the effects of Bird Flu been analysed in the information?

230. Please review further comments listed in our Technical Review section on the deficiencies of the information presented by Contact.

Bats / Pekapeka

231. Part B notes part of the bat survey data was completed from 29 Dec 2022 to 27 March 2023. Our members rainfall records show the summer of Dec 2021-

[58] Powlesland R.G, (2009) *Impact of Wind Farms on Birds: a review.* Department of Conservation. Science for Conservation 289, page 21.

March 2022 was very dry, significantly below the 10-year average for our area. The bat population could have been affected by this, and then again, the data collected the summer of 22/23 the January was very dry for our area[59]. Wildlands at an open day admitted the drier whether would have an effect on the wild life numbers recorded as drier weather means less insects around which is food for the bats and less food means less bats.

232. Following the significant number of bat passes detected (1616). We note Contact then deployed further monitoring in winter – June/August 2023. Bats can go into extended torpor over the cold winter months and it would be expected that lower numbers would be recorded.

233. Further this 2024 season has been particularly wet, with rain up 200ml for 2024 compared to 2023, as at June 2024[60]. Contacts report notes weather conditions such as strong winds, heavy rain and low temperature are known to affect/reduce bat activity. A number of nights within the survey sessions were subject to poor weather conditions that would likely limit bat activity due to the adverse impact on flying invertebrates during these conditions.

234. This resource consent application is being prepared on the basis of inadequate data timeframes and a couple of seasons of very variable weather for the site. It is not appropriate to compare 2023/24 data for bat passes with 2021/22 data at another location. The other location has greatly better resources and bat habitat is better understood so higher, more accurate bat records are achieved.

235. Data notes the surveys are sampling only the locations they are deployed and are unable to give a full account of bat activity across the site, nor rarely the number of behaviour bats that have been recorded.

236. Further, the possibility that they are roosting in the Site cannot be discounted. There is roosting habitat in native gullies and some of the plantation stands. Furthermore, the wider bioacoustic results suggest possible roosting closer than beech forests in the Catlins. Contact alleges the site is not core habitat for a local maternity population. However, the finding of mating roosts is important. Contacts statement that surveys show no indication of roosts is therefore incorrect. Further, if mating is prevented by turbine strike or displacement, then the population will be negatively impacted.

[59] Matt McRaes rain gauge data.
[60] Residents lived experience. Matt McRaes rain gauge data.

237. The nearest recorded known population of long-tailed bats is in the Catlins Forest Park, part of which is adjacent to the wind farm. There are sparse recordings of the species further afield, including from Stewart Island, and Piano Flat, suggesting that, aside from Fiordland National Park, the Catlins is a likely stronghold for this species in the Southland region, with known roosting sites in locations such as the Tahakopa Scenic Reserve. More specifically, known long-tailed bat populations are reported approximately 10 km – 20 km to the east of the Site in the Thisbe and Catlins River Valley and Cairn Road area (DOC database, Catlins Bat Project and Davidson-Watts pers com). Recent studies by Forest and Bird have identified roost sites in the Tahakopa Valley, about 16 km south of the site.

238. Many pekapeka populations are vulnerable, as they live in highly modified landscapes. "They don't translocate at all well," Mason says, "so if you lose them from an area that's it, they're gone."[61]

239. Given the likelihood of spotting bats, predators eating killed bats before collision fatalities are recorded etc we do not believe that there is sufficient research to date to draw conclusions between overseas windfarms and the effects on long tailed bats in New Zealand conditions. Further, Kessels & Davidson state there is no publicly available literature from NZ wind farms with known bat populations.

240. Curtailment of the wind turbines during certain conditions is not sufficient to offset the effects on long tail bats. This is a unique environment with minimal to no studies done on this particular bat environment. Contact is putting a threatened – national critical species at adverse risk.

241. Removal of any roost and/or trees around a roost, could result in significant adverse effects on bats in the locality by removing possibly limited roosting trees. This will remove and potentially fragment bat habitats (see section 5.3.1). In addition, the operational wind farm may also displace bats, causing them to relocate to new areas. This displacement might disrupt established foraging routes, roosting sites, or breeding grounds. Long-tailed bats might alter their behaviour to avoid the wind farm, which can disrupt their normal patterns of activity. This alteration might affect their ability to find food, mate, or roost

[61] Dr Norman Mason, https://newsroom.co.nz/2020/12/21/threatened-bats-found-near-planned-wind-farm/

effectively. The report then says this will be low effect on bats – but yet they also say not much information is known about wind farm affects and bats.

242. Clearing the Bat Risk Area turbines of vegetation in a 200m radius to ensure that the windfarm turbines are placed at least 200m from areas that are used by bats for commuting and foraging. Is that the intended use of the guidelines? Clearing areas to put turbines up would appear to have an adverse effect on bat populations. Would it not be better to conserve the areas where long tailed bats are present and maintain their habitat in this location? Given that long tail bats are threatened nationally critical we doubt felling potential roost sites is helpful to their continued survival.

243. Given the international research, it is considered probable that long-tailed bats are at risk of wind turbine strike and/or barotrauma injury and mortality at the proposed Southland wind farm. Kessels and Watts note "from 2000, 35% of all global bat mortality events are due to wind turbine collision".

244. Prior to the deployment of large wind turbines on the landscape, few other tall structures so closely resembled large trees—the preponderance of bat species that live in and around trees among the fatalities at wind turbines does not appear coincidental. Certain types of bats might visually mistake turbines for tall, prominent trees around which they are likely to have evolved behaviours important to individual survival and species persistence[62].

245. Contact points out that most of the wind farm site won't have an effect on bats. However, the part that will is significant. Kessels & Davidson-Watts find 9 turbines post a moderate bat strike risk, and the remainder are low to very low. Given the protected nature of the species, this is still significant. We do query whether curtailment of those turbines is adequate and suggest removal from the application would be better. Curtailment will not eliminate bat mortality. Further, Proteus found there was 50% less bat activity at wind speeds over 5m/s. Curtailment at 5m/s will therefore still leave a large part of the population open to strike.

[62] Cryan, P, Gorresen P, Straw B, Thao S, and DeGeorge E. Influencing Activity of Bats by Dimly Lighting Wind Turbine Surfaces with Ultraviolet Light. 2022

246. Relying on flight height is inaccurate, as this is generally 4-30m, but overseas studies have shown up to one third fly at turbine height (Kessels & Davidson- Watts).

247. Contacts solution of pest control of another area of long tail bats in Southland, does that really take into account the genetic variability of the species, and what damage might be done in the long run to this unique population? Alternatively, The Davidson-Watts Ecology bioacoustic surveys indicate the wind farm site is *likely* part of the home range of the Catlins bat population. Kessels & Davidson Watts also note "Long tailed bats have a very large home range and occupy a variety of different habitats and use of resources over any given year". If this is the case – the bats on the Beresford Range could be the same population?

248. Even if this isn't the case, has it been considered that increasing bat numbers at Beresford and other areas of the Catlins will actually increase bat activity at the site as more bats forage and establish further afield? Bat activity is higher around tracks and rivers – with the Project opening up several new tracks has this been considered in the information? This leads to the possibility that the risk of bat strike at unidentified turbines could increase.

249. What effects will the lighting on the turbines have on bats? Is there any known data for NZ long tail bats about this issue?

250. Contact has suggested fill disposal sites for the 1,000,000m3 of cut, including in the Matariki[63]. This will have an effect on the bats.

251. Perhaps Contact could install this windfarm in a site elsewhere of less ecological value and also maintain targeted pest control in this area as part of their social licence to operate. Contacts proposal is inconsistent with the RMA s7(d) which requires that the particular regard is given to intrinsic values of ecosystems. Plus, policy bio.4 of the RPS requires the maintenance of indigenous biodiversity, in particular the fragmentation or disruption of habitats for indigenous species and the linkages between those.

Fish and Eels

252. It concerns us that Wildlands found a high-quality stream habitat is also present on the site. Including, Koura – at risk declining, Gollum galaxias

[63] Contact - Maps Figure 7 Page 8

threatened. “Activities associated with SWF construction could mobilise sediments and without adequate measures to control erosion, the discharge of sediment to watercourses is possible, especially through stormwater runoff. Depending upon the level of sediment discharge, water quality and benthic macroinvertebrate and fish communities downstream of the works area may be impacted” (C19FT Appendix F AEE).

Lizards

253. Wildlands have only identified tussock skink and Tautuku gecko on the site but they have also indicated that all lizard surveys have inherent limitations.

254. With vegetation clearance limited to the lizard active season and restricted by the bird breeding season and also the wet southland winters – when is vegetation clearance able to occur?

255. Characterising fragmentation effects as “minor” for these habitats and “negligible” for birds fails to account for cumulative pressures, the heightened vulnerability of slow-moving fauna, and the well-documented sensitivity of lizards (including Tautuku gecko and green and herbfield skinks) and invertebrate assemblages to microhabitat disruption. In this ecological context, even limited habitat loss or disturbance can drive long-term population decline and functional degradation.

256. On the basis of the information presented, residual fragmentation effects remain moderate to high, not negligible. Under RMA s6(c) and Southland RPS criteria for representativeness, rarity, and ecological context, the assessment’s conclusion that impacts are negligible is inconsistent with both ecological evidence and statutory obligations.

257. The lizard mitigation package is essentially an administrative gloss over habitat loss, not genuine protection. Salvage-and-relocation, a method known for high mortality is treated as a default solution simply because habitat is being destroyed. Installing tree additional cover objects weeks or months before clearance assumes geckos will conveniently move into artificial structures, despite no evidence this reliably occurs for site-faithful species like Tautuku gecko.

258. Soft-release pens and “enhanced” release sites are speculative fixes that cannot replicate the microhabitat, thermal conditions, or prey networks being permanently removed. There is no proof these areas can support displaced populations without severe stress or predation losses. These measures fail the

basic threshold of RMA s6(c) as they do not protect significant indigenous fauna, instead they facilitate its removal.

259. Lastly, the Jedburgh Plateau skink release area is not fenced at all. Given that ungulates are not going to be fenced from the majority of the Plateau we cannot see that many of the ecological gains stated will occur in this area.

Invertebrates

260. Wildlands has stated that the invertebrate diversity at the site is high with protected Helm's stag beetle, local endemic ground beetle, at risk short horned grasshopper, peripatus and 45 other taxa.

261. The invertebrate mitigation framework treats salvage as an all-purpose solution, ignoring that most invertebrate species particularly the Helms' stag beetle are highly sensitive to microhabitat disruption, soil moisture shifts, and changes in decaying-wood structure that cannot be re-created elsewhere. The Terrestrial Invertebrate Management Plan and the Stag Beetle Management Plan rely on pitfall trapping, relocation of log piles, and "enhanced" release areas, yet none of these measures are backed by empirical evidence demonstrating long-term survival or population viability after translocation.

262. The incidental-discovery protocol (Section 258) effectively formalises ignorance by assuming un-surveyed areas are "low potential," despite the cryptic nature of many Threatened and At Risk invertebrates. Moving surface logs does nothing to replicate the fungal, microbial, and moisture regimes they require. Concentrating salvage in three areas and releasing beetles into an untested "Ecological Enhancement Area" treats a nationally significant species as debris to be cleared. Predator control and ungulate exclusion are speculative offsets, not protection. The measures manage displacement, not survival, and therefore fail to meet RMA s6(c)'s requirement to protect significant indigenous fauna.

Worms

263. We query what impact the vibrations of turbines have on worms? And whether any consideration has been given to earthworms moving away from turbines and the national policy statement for highly productive land? We could not see any reference to the impact on worms in the 1000s of pages put forward by Contact. However, as farmers we understand the importance of worms in the soil for soil health. If there is an impact on worms and thus soil health is impacted – this will in turn have an impact on farming productivity.

Bog and Fen Wetlands

264. Following the implementation of measures to avoid, remedy and mitigate effects on indigenous vegetation, some significant residual effects will remain.

265. We note that these areas were larger than first anticipated by Contact and the design has been re-done several times to avoid those areas as much as possible. Despite this, there is going to be a loss of 175 ha of vegetation, including 59ha indigenous vegetation and 3 ha of wetland. Wetland are classified as regionally threatened.

a. Does this include the extra area to be cleared around turbines to mitigate the effects on bats?
b. What flow on effect will this loss have on the ecosystem as a whole?

266. We understand Fen wetlands are ancient and very hard to restore. How does Contact propose to create 2ha of this somewhere else? If this was an area of farmland being removed for winter grazing for example we would absolutely not be allowed to do this, whether we offset with another area or not.

267. Restoring wetland at Davidson Road, as an offset, is not like for like. The fen and bog wetlands on the Jedburgh Plateau are significantly different to the wetlands at Davidson Road. Further, as owner of Davidson Road, Contact, as kaitiaki of the land, should be excluding stock and restoring wetlands as a matter of course, as most other farmers are.

268. Is there clear demarcation at Davidson Road between what Contact is required to do as the landowner and the measures to be taken to achieve no net loss as a result of the wind farm going ahead. As for all of us, this includes landowners' legal requirements as well as their moral obligations as Kaitiaki of the land. We don't see any clear evidence of this being considered.

269. We query whether Contact undertaking protection and restoration measures and pest control that is the landowners' responsibility can actually be counted in the no net loss equation? "*Pest management is an individual's responsibility in the first instance because generally owners and/or occupiers contribute to the pest problem and in turn benefit from the control of pests. The term 'occupier' has a wide definition under the Act and includes the person who physically occupies the place, and the owner of the place and any agent, employee, or other person acting or apparently acting in the general management*

or control of the place. Owners and/or occupiers must manage pest populations at or below levels specified in the rules[64].

270. Regional Councils are required to include a policy in their regional plans that the loss of extent of natural inland wetlands and streams is avoided, except where the regional council is satisfied of certain matters, including that there is a functional need for the specified infrastructure in that location, and that the effects management hierarchy has been applied. Functional need is defined as "the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment" NPS FW. We dispute this wind farm fits this test as there are several sites with less ecological effects. The Regional Energy Strategy for Southland alone notes over 100 potential windfarm locations, and this doesn't even include the other regions in Aotearoa. Further, this doesn't mention other options of renewable energy such as hydro that Contact could take into account.

271. It is noted in the archaeology report that the land around the substation was incredibly boggy. Why is this not classified as bog and therefore to be avoided?

272. Further, our Technical Review section notes: The assessment of wetland loss and hydrological effects on the Jedburgh Plateau dramatically underplays ecological significance. Fen wetland (1.08 ha; 1.1%), bog wetland (0.94 ha; 3.3%), and copper tussock/rautahi marsh (0.01 ha; 1.9%) are already degraded by ungulate browse, stock grazing, feral predators, and historic clearance. These wetlands perform irreplaceable functions by maintaining water quality, supporting invertebrates and small vertebrates, and providing habitat connectivity for species such as mātātā/South Island fernbird.

273. Even minimal clearance disrupts peat-forming vegetation, hydrological regimes, and faunal refuges, yet the assessment relies on nominal <5% thresholds to label losses as "Moderate" ignoring ecological rarity and sensitivity. Proposed offsets and compensation fail to address functional and structural losses, leaving severe, long lasting residual impacts.

274. Claims of negligible hydrological impact overlook indirect, cumulative pressures and the buffering role of surrounding vegetation, and therefore fail to meet RMA s6(c), Southland RPS biodiversity offset principles, the National Policy Statement for Freshwater Management (NPS-FM 2020) requirements to maintain

[64] Environment Southland - Southland Regional Pest Management Plan section 3.3.1 2019

wetland integrity, and the wetland protection provisions of the National Environmental Standards for Freshwater (Regulations 37-56) that regulate activities affecting natural inland wetlands.

Freshwater Ecology

275. The wind farm site lies in the Mimihau and Mokoreta catchments. 4Sight Consulting found a high-quality stream habitat at the wind farm site, including Koura and Gollum galaxias, and other significant species downstream.

276. Despite part of the wind farm being in the Mokoreta Catchment, at the headwaters of the Redan Stream, there is no mention of assessment or monitoring of the Redan Stream or mitigating of effects on this. We wouldn't call 10 turbines plus what looks like 10 more on catchment boundary (refer figure 10 AEE) a small proportion. Further, if the Mimihau stream is not appropriate to take water from then we could query whether the Mokoreta catchment is appropriate either.

277. Approximately 11,000m3 of water is required for the turbines – that's 11000000 litres. The maximum daily volume is anticipated to be 14,000L. That's equivalent to the daily usage of 50 households[65]. This must have a flow on effect for the waterways if used on site, or alternatively if trucked in from elsewhere.

278. Any effects on the water ways are not limited to the wind farm site and surrounding area. Rivers run clean from the mountains to the sea – ki uta ki tai[66]. Members situated along the Redan Stream have seen the negative effects of previous clearance activities on Slopedown. We do not want to see this again.

279. The Redan Stream, and eventually the Mokoreta river, is a playground for those that live alongside it and other Wyndham residents. It is important for fishing, investigating, learning and swimming for our whanau and tamariki.

280. Again, we query Contact claiming credit for restoration that is the landowners' responsibility. Wildlands photos indicative of areas to be fenced indicate that the land owner is not following the rules in the proposed Southland

[65] NZ Daily water take average is 281.8 https://www.qldc.govt.nz/services/water-services/water-supply/water-conservation/#:~:text=Compare%20that%20to%20the%20national,is%20146%20litres%20per%20day.&text=In%20January%202022%20our%20average,309%20in%20July%20this%20year.

[66] Southland Murikihu Conservation Management Strategy.

Water and Land Plan, rule 70 in relation to exclusion of stock. Will some of the offsetting measures just be making the landowner do what they should've been doing anyway?

281. It is one thing putting measures in place to minimise and mitigate the negative effects of the wind farm construction, but what if these are not followed or something unexpected happens? You cannot get the high-quality stream habitat and associated flora and fauna back once it is gone. An example of this post construction is the oil spills experienced at White Hill Windfarm which are visible from the air.

282. The Boffa Miskell Southland Regional Landscape report notes the Toetoes Harbour as an Outstanding Natural Feature. What flow on effect might this proposal have on the harbour as both the Mimihau and Mokoreta river feed into that catchment?

283. Please review the Technical Report attached below to this report for further comments and concerns on the water aspects.

Jedburgh Station Ecological Enhancement Area and Beresford Range

284. This area only includes 18ha of fen and 1.5ha of bog wetlands, compared to the 133.55ha of wetland on the wind farm site, a paltry 14%. This is only surrounded by an ungulate exclusion fence. Is smaller pest control going to occur within this area, given that lizards will also be moved here? Possums will also have a significant effect on the rate of regeneration. Enrichment planting at 20plants/ha is insignificant. We also query whether there is going to be ongoing monitoring and replacement of dead plants. Further, most of the enhancement area is outside of the plateau so how will Jedburgh Plateau benefit from ungulate exclusion?

285. The comment above regarding possums also applies to the Copper Enhancement and Skink protection area.

286. The Beresford Range area is already a DOC area, so this seems to us more like a payment than compensation for the negative effects at the wind farm site. Contact suggest that several forest bird species will recover at the Beresford location. Has an assessment been made of like for like? The only bird mentioned in Beresford were the Mohua.

Microplastics

287. We are not satisfied with Contacts statement that the wind turbine blades have not been identified as a material issue in terms of micro plastics in wind farm in New Zealand to date. Has the research actually been conducted? Plus, wind farms in NZ are relatively young so any research would be quite new. Contact and West Catlins do agree that wind turbines wear down. Stating that there are plastics on farm anyway is not the test to say this effect won't matter. Given this is situated on and beside areas with very high ecological value this effect cannot be minimalised as Contact suggests.

288. We also require confirmation that the wind turbines will not contain asbestos.

Ecology Summary

289. "The wind farm site encompasses a mix of high value and modified terrestrial and wetland habitats. It supports a moderate diversity of indigenous fauna, including forest birds and threatened wetland and shrubland bird species such as eastern falcon, SI fernbird and NZ Pipit. The Jedburgh plateau provides important habitat for invertebrates" (Wildlands report).

290. The unique flora and fauna on the site and the ecosystems they are a part of will be severely affected and we dispute that relocation, offsetting and compensation will adequately compensate for the adverse effects. Contact themselves note "*following the implementation of measures to avoid, remedy or mitigate adverse ecological effects associated with the Southland Wind Farm Project, some significant residual adverse ecological effects will remain*".

291. The most effective way to avoid the negative effects on the taonga species of flora and fauna at the wind farm site (as listed in the Southland Murihiku Conservation Management Strategy appendix 5 and 13) is to site this wind farm elsewhere. The benefit of more renewable power does not outweigh the impacts on the flora and fauna in this case.

Shadow Flicker

292. This has been assessed by Roaring40s in relation to dwellings. What assessment has been done to the natural and physical resource as defined as including all plants and animals whether native or not in relation to shadow flicker? We are particularly concerned with the effect this may have on the Catlins Conservation Park and species that call it home.

293. We also note there is nothing in the report about shading created by the turbines. How far will the turbines shade and what impact will this have on the biodiversity and ecosystem functioning in the Catlins Conservation Park?

Soil and Earthworks

294. Of the 1.8 million cubic metres of fill that is being relocated, 1million cubic metres of this is going to be spread over 162 hectares at slopes of less than 45 degrees. A 45 degree slope is very steep and we query how this can not impact on waterways? Winter grazing of stock which weigh considerably less than a large vehicle which will be required to shift and spread this dirt can only occur on slopes of less than 10 degrees (Southland Water and Land Plan). We suggest the same proposal for this wind farm.

Decommissioning

295. Decommissioning causes a great deal of waste. Contact note there are no recycling options for turbine blades yet[67]. According to the numbers there will be roughly 110,000 tonne[68] of concrete and reinforcing that needs to be removed and dumped elsewhere at the end of the lifespan of the windfarm. That is a significant amount of concrete to transport and dump where? Further, what guarantee will the community have that Contact will do the restoration?

296. Contact also purport the idea that because the site will be decommissioned in the future – none of the effects are long lived. However, there will be at least two generations of people that have not experienced the wilderness values of the Catlins Conservation Park as it now stands.

Consultation

297. We refute all notions in the application that note the adequate and numerous community consultations completed on this Project by Contact. We cannot speak for the other parties consulted, as a community though, we beg to differ that there was strong engagement and consultation in the C19FT. Contact did not proactively approach the most affected households. A lot of the information we have stated above has already been explained to Contact and their experts at those few meetings. Despite being on notice, no further actions appear to have been taken. Particularly disregarding the fact that Contact will destroy the

[67] Q and A session with local residents.
[68] C19FT application AEE 2.5 tonnes in cube of concrete, 800-1000m3 each foundation pour = 2000-2500 tonne at base of each turbine. Multiplied by 55 turbines.

landscape with this wind farm and we have repeatedly explained to them how important this area is to us. We value and treasure Pawakataka.

298. To date we know of only one survey undertaken in our community requesting information about whether parties were for, against, didn't know/care about the Slopedown windfarm. The Waihopai Toe Toe Community Board recommended we do this survey. This was undertaken at our local A and P show in Wyndham in December 2023 with anonymous voting with plastic counters able to be put into jars at a stall. The results were very clear with 79% of people being against the wind farm, 12% in favour and 9% didn't know or care (refer Appendix A, image I). Getting results from 159 people is no small feat for a town the size of Wyndham.

Conflicts of Interest

299. We hope that where any comments are received from people and entities who will directly benefit from the proposal going ahead – they have noted their conflict of interest.

Vibrant Community

300. Contact have been very vocal about the benefits that the community will receive in the form of grants from Contact. The example of re-roofing of the Roxburgh pool due to a $100k grant was used. The Wyndham and surrounding community have been successfully operating with extremely successful sports teams, schools and community groups for over 150 years. This success has built our community spirit and collectiveness and proves that we are sustainable and passionate about our people and area. We note that our members are involved in a broad range of organisations and charities across the Wyndham and wider district (ie; Rural Support Trust, Rugby Club, Netball Clubs, Tennis Clubs, Schools Boards, Hall Boards, Playgroups, Toy Libraries to name a few) and that these entities are surviving more than adequately with community support at present. Contact may find it hard to believe but money just isn't everything. A good sense of belonging to our landscape is more important to us. We don't need corporate welfare so Contact can maintain their social licence.

301. Upping the initial amount of the fund to $200,000 without consulting with the most impacted community does not negate the impact. Further, $4 million dollars spread over such a wide area over the life of the Project doesn't go far. A new museum for Wyndham alone is going to cost over $1million dollars and a similar amount will be required for the A and P Show Grounds Pavilion. The money

will make small ripples but not major improvements to the current people living in the most affected communities.

Report on impact on local residents

302. Further, Contact have been very forthcoming and proud of the effort they have put in to understanding the impact the proposed farm will have on flora and fauna. However, the same cannot be said for what we consider to be the most important element of the environment, the people who reside in the area and proudly call Wyndham and/or West Catlins home. There has been no report undertaken by Contact on the impact on people's wellbeing. This would also detract from any benefits to be gained.

303. The most empathy the residents have received is a "we are sorry you feel that way" - Steve Harding, Roaring 40's. We also know that Contact made a $1000 donation to the Southland Rural Support Trust to help with any issues experienced by residents. This didn't fix the issue; it simply added further insult to injury.

304. A petition undertaken by us has over 750 signatures to date with minimal advertising and a low population base in Wyndham[69]. 750 people are against this Project and if it goes ahead what will the impact be on their mental health of living beneath a windfarm they didn't want, on land they've called home for generations?

Conditions

305. We do not propose to comment on ALL the conditions at this stage, and will endeavour to comment in due course when requested. However, we would like to highlight a few conditions required as a minimum by us if the Consent application is not declined in its entirety for the reasons set out above:

a. Removal of Glencoe turbines and monitoring mast.
b. Set back of turbines and substation further from the scarp.
c. Removal of all the turbines in the ONF candidate area.
d. Similar levels of benefits for the community as agreed with Iwi, including:
    i. Free power for schools and halls;
    ii. Community scholarship.
e. Monitoring of the Redan Stream.
f. Member of WCPS on the liaison committee.

[69] West Catlins Preservation petition, https://www.change.org/p/stop-slopedown-windfarm

Summary

306. We submit that the consent application by Contact Energy for this southland wind farm on Pawakataka be refused in its entirety for the reasons detailed in this comment.

Disclosure

307. We fully accept that this report was prepared by passionate but albeit lay people. This is not our 9-5 job and the amount of paperwork on the Fast Track website is overwhelming. We lack the funding to back up all our findings with expert reports. However, the Technical Report prepared by a dedicated member and attached as part of these comments is extremely insightful.

308. We also wish to acknowledge that we have not been able to do this area and its people justice in the limited timeframe that we have had to prepare comments on this application. We do not believe this in anyway diminishes the comments we have made above though. If anything, perhaps it adds to them? Imagine what we could've done with more time and resources.

309. We will be the ones affected by this wind farm for the remainder of our lifetimes. This area is unique, it is taonga to our community and we need to protect this area of Outstanding Natural Landscape/Feature for future generations. We genuinely believe this Project is in the wrong place for future generations to fully appreciate the intrinsic nature of the Conservation areas on Pawakataka. Even when weighed against the benefits – the costs to the environment are too high in this case.

310. We would also like to take this opportunity to say that December is a very hectic time of year for everyone, our members have been busy doing all the farm jobs that must happen at this time of year like weaning, sowing grass and crops, and making winter feed. Plus trying to attend school concerts, Christmas functions and read the thousands of pages involved in this application a third time around. Going forward if you ever have the chance to be involved in a panel again, we strongly urge you to consider not setting a date for comments that falls in the middle of December. It has added immense stress to our community at an already crucial time in the farming calendar. We are lay people just doing our best in a situation where regrettably it seems the person with the most money wins. You have a chance here to say that actually the previous Panel, albeit under different legislation, made the right call and that this Project is not appropriate on

Slopedown. The cost for the environment has to be weighed up against the benefit and the cost here is too high.

Thank you for the opportunity to provide comment on this Project. We would be happy to discuss these matters further should you wish to do so.

Kind regards,

Natalie McRae

On behalf of West Catlins Preservation Society

Technical Review Section

Comments – Southland Wind Farm
The protection of Slopedown is a matter of national significance, reflecting the same principles that led to the rejection of Lake Hāwea and other recent fast-track wind farm applications. These decisions establish a clear precedent: iconic, ecologically significant landscapes like Slopedown cannot be overridden for expediency, particularly where threatened species and highly sensitive habitats are present. Permitting large-scale construction, earthworks, and infrastructure development at Slopedown would directly contravene this precedent, representing a serious erosion of New Zealand's commitment to protecting biodiversity, preserving ecological function, and maintaining the long-term integrity of landscapes that are nationally and regionally significant. Such an outcome would signal that ecological and landscape values can be subordinated to industrial development, undermining the protective framework that the Resource Management Act and related planning instruments are intended to uphold.
The Waiuku Wind Farm, a fast-track proposal for 13 turbines near Waiuku, was declined in 2024 (including the decline of an appeal in 2025) due to unacceptably high ecological risks, particularly to threatened and at-risk fauna. The panel found that proposed mitigation and compensation measures were insufficient to offset potential impacts, and highlighted gaps in baseline ecological data and reliance on unproven management strategies. The decision to decline Waiuku Wind Farm is a critical reminder that threatened species face a disproportionate risk when extensive industrialisation of critical habitat occurs. This is also observed at the proposed Southland Wind Farm site, which faces similar risks regarding threatened long-tailed bats, which are Nationally significant. The *Nationally Critical* long tailed bat population has declined sharply due to habitat loss and human related pressures.
Compounded by the Kaiwera Downs Wind Farm, which has recently expanded by adding more turbines, the proposed Southland Wind Farm represents a substantial escalation in the industrialisation of the Southland hill-country landscape. Both projects occupy separate ridge systems and headwater catchments, yet their effects are cumulative at the broader Mataura River catchment scale. The addition of a second industrial wind farm introduces extensive new earthworks, access roading, turbine platforms, and skyline infrastructure further degrading landform integrity, altering natural runoff processes, and increasing sediment and erosion risk across multiple neighbouring catchments. Ecologically, the cumulative expansion of turbine arrays, access roads, and associated infrastructure fragments habitats, amplifies edge effects, and increases disturbance, displacement, and collision risk for mobile fauna, compounding stress on ecosystems already affected by land-use modification. From a landscape and visual perspective, the combined presence of Kaiwera Downs Wind Farm and the proposed Southland Wind Farm creates an extensive industrial complex, fundamentally eroding landscape coherence, natural character, and outlook values, including from sensitive locations such as Slopedown. The resulting ecological, landscape, and hydrological harm is cumulative, long-term, and effectively irreversible, cannot be meaningfully mitigated, and has not been adequately assessed, resulting in a material underestimation of environmental effects inconsistent with integrated and precautionary management under the Resource Management Act and relevant regional planning instruments.

Slopedown and its surrounding hills form part of the natural landscape context recognised in the Southland Regional Policy Statement (RPS) 2017 as containing natural features and landscapes that warrant identification and protection from inappropriate subdivision, use, and development. The RPS's Objective LNF.1 directs that Southland's outstanding natural features and landscapes be identified and protected, and Policy LNF.4 requires decision-makers to protect these areas from inappropriate activities by having regard to the adverse effects, the extent of landscape modification, irreversibility, resilience to change, cumulative effects, and the relationship to the surrounding environment. In the context of Slopedown, its prominent skyline and landscape values -acknowledged in independent expert assessments as having characteristics consistent with an outstanding natural landscape for the purposes of RMA s6(b) mean that further industrialisation such as large-scale wind farm infrastructure risks irreversible modification of landscape character, visual amenity, and associated ecological and cultural values, contrary to the RPS's direction to protect natural features and landscapes from inappropriate use and development. Therefore, under the RPS framework, activities that would significantly alter Slopedown's natural features and landscape should be avoided to sustain these landscape values into future generations.
Technical Assessment 10 - Conceptual Hydrological Design
The proposed civil works on the Jedburgh Plateau will result in the direct loss of 2.03 ha of wetlands and minor impairment of 0.09 ha of fen wetlands. Although the concept design incorporates 109 culverts and approximately 1.2 km of clay bunding intended to maintain hydrological connectivity, these measures provide only partial mitigation and cannot fully safeguard wetland hydrology or ecological function. The cumulative effects of earthworks, altered surface water flows, and potential soil dewatering pose a significant risk to the wetland mosaic, including sensitive bog and fen ecosystems. Critically, this assessment is based on a conceptual design; detailed design may result in further wetland loss or additional impairment, amplifying ecological impacts. Given the high ecological and conservation value of these wetlands, reliance on concept-level mitigation provides limited assurance that the natural hydrological regime and associated ecological values of the Jedburgh Plateau will be maintained.
Technical Assessment 9 - Construction Effects - Hydrology Assessment Mimihau Stream Catchment
The hydrology assessment for the proposed Southland Wind Farm relies on a short and partially erroneous Mimihau Stream record at Stewarts Bridge, supplemented by regression from the larger Mokoreta catchment. This introduces uncertainty for upper-catchment tributaries such as M1 and M2, and does not capture potential variations in soils, topography, land use, or runoff. Limited gauging in the upper catchment further constrains confidence in the derived flows. The proposed water take at M1 and M2, capped at 5 L/s or 10% of stream flow, is presented as acceptable on the basis of water storage intended to maintain supply during low-flow periods. However, the assessment fails to quantify whether this storage is sufficient under prolonged or extreme low-flow conditions and provides no analysis of worst-case scenarios. Abstraction at M1 represents a material proportion of flow from a small headwater catchment (4.6 km^2), yet the implications for downstream flows, habitat availability, and ecological resilience are not assessed.

Consequently, the assessment does not provide a comprehensive demonstration of compliance with statutory requirements under the Operative Southland Regional Water Plan, Proposed Southland Water and Land Plan, or the Mataura River Water Conservation Order (1997), which require that abstraction avoid adverse effects on aquatic ecosystems and other water users. Reliance on extrapolated flows, limited upper-catchment data, untested storage mitigation, and absence of extreme low-flow modelling leaves uncertainty regarding ecological effects and regulatory compliance.

Technical Assessment 8 - Freshwater Ecology

Earthworks

Large-scale earthworks associated with the proposal have the potential to; generate repeated and prolonged sediment inputs into headwater streams, particularly during high rainfall events, smother benthic habitat, reduce oxygen exchange and degrade fish and macroinvertebrate communities. The assessment does not address these risks at a whole-of catchment scale and therefore does not demonstrate consistency with NPS-FM Policy 1 (giving effect to Te Mana o te Wai by prioritising ecosystem health), Policy 3 (integrated management of land-use effects on freshwater), Policy 5 (maintenance of freshwater ecosystem health), or Policy 9 (protection of indigenous freshwater species and their habitats).
The reliance on historic Ryder (1989) sediment response data, together with the assumption that sediment effects are brief and readily recoverable, fails to account for uncertainty, persistence, and spatial extent of sediment impacts in steep, high-rainfall Southland catchments - particularly given the scale of disturbance proposed, including the 55 turbines, around 71 km of access tracks (approximately 46 km new), 9 stream crossings and extensive trenching. Effects are assessed largely on a site-by-site basis, with erosion and sediment controls assumed to perform as intended, resulting in cumulative and interacting catchment scale effects not being risk evaluated. This approach is inconsistent with Policy 3 and Policy 5, and does not demonstrate that risks to river extent, values, and freshwater habitats are being avoided to the extent practicable, as required by Policy 7 and Policy 9.

In the absence of a catchment-scale sediment effects analysis, explicit treatment of uncertainty and a long-term monitoring framework, the assessment does not demonstrate how sediment-related risks will be identified, tracked, or responded to over time, as anticipated by Policy 13 (systematic monitoring and response to degradation) and Policy 14 (transparent reporting on freshwater condition). Accordingly, the assessment does not provide sufficient assurance that freshwater values will be maintained in a manner consistent with the National Policy Statement for Freshwater Management.

Stream Crossings

Stream crossings disturb stream bed substrates, increase sediment inputs, alter local flow regimes, and have the potential to impede movement of threatened non-migratory galaxiids. These effects are not adequately addressed in relation to Policy 1 (giving effect to Te Mana o te Wai), Policy 5 (maintaining the health and well-being of freshwater ecosystems), and Policy 9 (protecting the habitats of indigenous

freshwater species), all of which require the protection of ecological processes, habitat integrity, and connectivity within freshwater systems.
The assessment does not evaluate the additive and interacting effects of multiple stream crossings within the same headwater catchments, instead treating each crossing as an isolated activity. This approach is inconsistent with Policy 3 (integrated catchment-scale management considering land-use effects on freshwater) and Policy 7 (avoiding loss of river extent and values to the extent practicable), and results in the cumulative risks to fish passage, habitat fragmentation, and downstream ecological condition not being assessed.

Notwithstanding fish passage and habitat protection requirements under the Southland Water and Land Plan (SWLP), including Rule 55A (general conditions for activities in river and lake beds) and Objective 19 (maintaining or improving fish passage where appropriate), mitigation measures are applied selectively and rely on the assumed effectiveness of construction-phase erosion and sediment controls. In the absence of a cumulative effects assessment and demonstrated capacity to avoid or minimise disruption to fish passage and habitat structure, the assessment does not provide sufficient assurance that statutory obligations to protect freshwater habitats and indigenous species will be met.

Abstraction

Abstraction from the Mimihau Stream will reduce flow, elevate water temperatures, and increase entrainment risk if screening performance is inadequate, directly threatening ecosystem health and species persistence. The proposal seeks to abstract 5 L/sec, roughly 5 8% of the 2025 Q95 flows yet claims negligible effects without assessing ecological thresholds, cumulative impacts, or the capacity of an already declining system to absorb further reductions. Critically, the assessment relies on SQMCI scores from 2023 (7, 6.3, 7 for sites 1, 5 and 8) to justify impacts at 2025 low flows, creating a temporal mismatch that invalidates the inference. Macroinvertebrate data (MCI and SQMCI) indicate degraded or degrading ecological condition across the Mimihau and Mokoreta catchments, with NOF bands ranging from B to D and long-term declines observed, yet the report ignores this declining condition and assumes the system can absorb additional abstraction, underestimating risks to sensitive fish and invertebrate species. This approach is contrary to SWLP Objective 9/9A where the quantity of water in surface water bodies is managed so that (a) the life supporting capacity and aquatic ecosystem health, the values of outstanding natural features and landscapes, the natural character and the historic heritage values of waterbodies and their margins are safeguarded.

Paragraph 121 asserts that “potential effects of downstream flow reduction are not long term,” yet provides no evidence that ecological function is maintained at low flows for fish, macroinvertebrates, or periphyton. Two years of actual gauged flow data without drought conditions are wholly insufficient to substantiate this claim. The assessment also fails to integrate current biological datasets with the 2025 Q95 flows (65, 92, and 79 L/s at Sites 1, 5, and 8), misrepresenting the stream’s ecological resilience and capacity to absorb abstraction. This omission directly conflicts with NPS-FM Policy 1 (giving effect to Te Mana o te Wai), Policy

5 (maintaining freshwater ecosystem health), and Policy 9 (protection of indigenous freshwater species).

The report suggests that storage ponds will buffer abstraction demand, but the risks of habitat reduction, altered flow regimes, and downstream ecological effects remain under assessed. The effectiveness of storage ponds in maintaining ecologically protective flows under low-flow conditions is not demonstrated, and reliance on untested mitigation measures overstates the level of protection. As a result, the proposal does not demonstrate consistency with SWLP Objective 9/9A(safeguarding life-supporting capacity and aquatic ecosystem health) or Policy 28 (avoiding or mitigating adverse effects on water quality, habitats, ecosystems, and fish passage).

Surplus Fill

The placement of surplus fill (101 sites totalling 81.9 ha) poses substantial and unquantified risks to freshwater ecosystems through sediment mobilisation, altered flow paths, and disruption of riparian connectivity. Classifying these sites as "low-risk" because they are outside mapped wetlands or on gentle slopes is misleading. The assessment does not account for extreme rainfall events, potential erosion-control failure, or cumulative effects from multiple gully fills (nine gullies -up to 10 m deep) in high-rainfall catchments. Critically the exact number, location and design of surplus fill disposal sites remains unresolved, meaning potential hazard are unknown and risk is unquantified.

Proposed rock-lined channels are untested at this scale and may fail under high flows, causing downstream sediment deposition and habitat degradation. This approach conflicts with NPS-FM Policies 1 (giving effect to Te Mana o te Wai), 5 (maintaining ecosystem health), 7 (avoiding loss of river extent and values), and 9 (protecting indigenous freshwater species and their habitats). It also does not demonstrate compliance with SWLP Rule 5 (discharges must not reduce downstream water quality below standards), Rule 15 (stormwater discharges must not cause erosion, significant adverse aquatic effects, or major changes in water clarity), and Rule 55A (minimise bed disturbance, avoid water discolouration, and maintain fish passage and habitat). Without a cumulative, catchment scale assessment, the ecological risks of sediment and stormwater remain materially underrepresented.

Construction Contaminants and Machinery

Construction materials and machinery can release pollutants, mobilise sediment, and introduce invasive species, contrary to NPS-FM Policy 5 (maintaining the health and well being of freshwater ecosystems), Policy 9 (protection of indigenous freshwater species and their habitats), and Policy 1 (giving effect to Te Mana o te Wai), as well as SWLP Rules 5, 15, and 55A, which require that discharges, including sediment and contaminants, must not compromise water quality, habitat structure, or ecological function.

The assessment assumes perfect implementation of Erosion Sedimentation Control Plan (ESCP) and Construction Environmental Management Plan (CEMP) measures, ignoring historical evidence that even best-practice controls can fail. Diesel,

lubricants, sewage, concrete washout, and Didymo introduction could cause irreversible impacts on sensitive headwater streams, particularly where threatened galaxiids and other low-flow species are present. Cumulative effects across multiple turbines, tracks, and stream crossings exacerbate these risks, making reliance on procedural controls alone scientifically and ecologically inadequate.

Riparian Vegetation Disturbance

Removal or modification of riparian margins reduces shading, increases water temperatures, destabilises banks, and elevates sediment delivery, undermining freshwater ecosystem function. This is contrary to NPS-FM Policy 1 (giving effect to Te Mana o te Wai), Policy 5 (maintaining the health and well-being of freshwater ecosystems), Policy 7(avoiding loss of river extent and values), and Policy 9 (protecting the habitats of indigenous freshwater species).

The report proposes offsets via planting but ignores temporal gaps, lagged functional recovery, thermal effects, and the sensitivity of fish, macroinvertebrates, and riparian-dependent flora. Structural complexity in riparian zones takes decades to return, making assumptions of immediate mitigation ecologically implausible, particularly given cumulative pressures from multiple access tracks, turbines, and stream crossings. The assessment therefore does not demonstrate that freshwater values and indigenous species habitats are being adequately maintained or restored.

Water Quality

Construction will exacerbate sediment and nutrient loading, increasing turbidity, total suspended solids, and contaminant risks, contrary to NPS-FM Policies 1, 3, 5, 7, and 9 and SWLP Rules 5, 15 and 55A, which collectively require that discharges including sediment and contaminants must not compromise water quality, habitat structure or ecological function. Environment Southland monitoring shows the catchment is already in decline: at the Mimihau South Branch tributary (approx. 4km downstream of the location of proposed turbine JED-18, total phosphorus, nitrate-nitrogen, clarity, turbidity, and *E. coli* are all 'very likely degrading', and at the Wyndham site, *E. coli* is NOF Band E, the worst possible category.
These trends indicate the system has no capacity to absorb additional sediment or nutrient loads. Yet the assessment treats baseline conditions as stable, relying on generic Erosion Sediment Control Plan (ESCP) and Construction Environmental Management Plan (CEMP) measures while ignoring peak-event sediment pulses, extreme rainfall, and cumulative impacts from 55 turbines, 71 km of access tracks, and multiple stream crossings. Relying on assumed "perfect" ESCP/CEMP implementation in a catchment already trending downward is ecologically untenable. Operational claims that water quality will "improve" through culvert replacements and riparian planting are unsubstantiated. No temporal or functional gap analysis is provided, and decades-long lag times for habitat and water quality recovery are ignored. These measures are presented as automatic offsets despite no evidence that they can counteract large-scale earthworks-driven sediment mobilisation. Crucially, the report fails to establish a comprehensive pre-development baseline, including fine sediment, turbidity, total suspended solids, and nutrient variability across key

flow conditions and tributaries. Without these data, credible assessment of effects on the Mimihau Stream is impossible.

Construction will inevitably mobilise sediment and nutrients, further degrading water quality downstream, and placing additional pressure on benthic macroinvertebrates and non-migratory galaxiids already living in a degrading system.

Construction Phase Monitoring

The proposal claims that construction-phase monitoring and the ESCP will ensure SWLP receiving water quality standards ('Mataura 3' and 'Lowland Soft Bed') are met and freshwater values protected. Monitoring alone cannot prevent sediment or contaminant impacts, particularly during extreme rainfall, peak sediment pulses, or cumulative disturbance from multiple turbines, tracks, and crossings.

Compliance with standards does not guarantee protection of sensitive species or ecological processes, especially during low flows. Reliance on assumed perfect mitigation overstates protection and fails to meet the precautionary and ecosystem-health obligations of NPS-FM Policies 1, 5, and 9, and SWLP Rules 5, 15, and 55A.

Fish Screens and Flow Abstraction

The assertion that fish screens and restricted abstraction rates will "ensure" protection of downstream ecology is unsupported. Only two years of gauged flow data exist for the Mimihau Stream South Branch, which provides an insufficient baseline for a long-term abstraction regime. This dataset does not capture the full range of hydrological extremes - particularly drought or natural low-flow events—so ecological risk is likely underestimated. Low flows intensify thermal stress, reduce dissolved oxygen, contract habitat, and increase entrainment risk for small-bodied native fish. Without drought-year data, the Q95 values used in the assessment may be inflated, giving a false impression of available water during stress periods.
No evidence demonstrates that the stream maintains baseline ecological function for fish, macroinvertebrates, or periphyton under low-flow conditions. The assessment overlooks risks including entrainment, elevated temperatures, and localised habitat stress, and it fails to show whether the system recovers between low-flow events. Presenting mitigation as automatic, rather than conditional on verified outcomes, is scientifically deficient. This approach is inconsistent with NPS-FM Policies 1,5, 9, and SWLP Rules 49(a), 55A, and 58, which require credible, evidence-based assessment of abstraction effects.

The description of the water take as "temporary" in paragraph 12 is misleading in ecological terms. Although abstraction would cease once construction is complete, the proposed water take would occur during construction phases that coincide with low-flow conditions, periods of heightened thermal stress and critical life stages and movement periods for small-bodied native fish and sensitive macroinvertebrates. Short duration abstraction during these periods can result in disproportionate ecological effects and potentially lasting impacts on freshwater ecosystems. Temporary abstraction can still cause acute stress, increase water temperatures, reduce dissolved oxygen, and elevate entrainment risk. The statement also ignores cumulative effects from simultaneous abstractions, multiple stream crossings, and

ongoing sediment mobilisation, which can compound ecological stress. Classifying the take as temporary does not negate the need for a credible, evidence-based assessment of ecological impacts or compliance with NPS-FM Policies 1,5, 9 and SWLP Rules 49(a), 55A, and 58.

Only two years of gauged flow data were collected for the Mimihau Stream to assess the ecological effects of flow abstraction. This is an insufficient baseline for a long-term abstraction regime. The assessment does not identify whether these two years include the full range of hydrological extremes particularly drought or low-flow events. If the dataset contains no true low-flow periods , then ecological risk is systematically underestimated, because low flows intensify thermal stress, reduce dissolved oxygen, contract habitat, and increase entrainment risk for small-bodied native fish.

Without drought-year data, the Q95 values used in the assessment may be inflated, giving the false impression of available water during stress periods. As a result, the effects analysis fails to represent the actual vulnerability of freshwater species and habitats under the lowest natural flows for Mimihau Stream. Claiming 'not long term effects' from flow reduction are incompatible with the observed trend indicators showing ongoing degradation. The assessment does not reconcile this contradiction nor does it produce evidence that the system recovers between low-flow events.

Technical Assessment 9 - Construction Effects

The placement of 1.2 million m³ of surplus fill across 81.9 ha is not "disposal" but categorically landform replacement. A permanent re-engineering of an intact headwater landscape. This sensitive land is not being 'filled' but rather regraded, re-contoured and permanently reshaped, replacing natural headwater geomorphology with compacted engineering earth forms. Calling this 'fill disposal' is misleading and masks the irreversible nature of the transformation. This permanent landform replacement will irreversibly alter slope hydrology, subsurface flow pathways, sediment generation, hill slope stability, and downstream turbidity dynamics. Once imposed the effects cannot be mitigated or restored.

101 - Fill Disposal Sites

The construction will create 101 separate fill disposal landforms across a high value headwater catchment. Each new engineered landform introduces a new slope, a new drainage path, a new erosion zone and a new sediment source, effectively generating an entirely new sediment regime across 81.9 ha of modified terrain. Despite this scale of landscape re-engineering, no cumulative sediment modelling has been undertaken for the full network of 101 disposal sites.
During high intensity rain events (which Southland increasingly experiences), these fills will generate catastrophic sediment pulses, that the universal soil loss equation (USLE) cannot predict. The USLE calculations presented assess only isolated, typical scenarios rather than system-wide sediment generation or downstream delivery. This approach does not meet the Southland Water and Land Plan requirements to assess cumulative effects of discharges (Rule 5, Rule 15, Rule 55A), nor the NPS-FM requirement to evaluate and manage cumulative effects on freshwater ecosystem health (Policies 3, 5, 9, and 13).

In addition, the construction proposal allows new fill sites to be added during the detailed design stage, meaning that the extent of potential effects is unbounded. Freshwater impacts are therefore unknowable, ecological baselines cannot be reliably established, and compliance with the Southland Water and Land Plan (Rules 5, 15, 55A) and NPS-FM Policies 1, 5, 7, and 9 cannot be assured.

Wetlands

The construction methodology exposes the wetlands to significant hydrological and physical disruption. The assertion that impacts have been "minimised" by limiting direct wetland disturbance to 2 ha, with an additional 1.7 ha within 10 m, is misleading. A 10 m buffer provides no meaningful protection for headwater wetlands whose water supply and moisture balance depend on lateral subsurface flow through shallow conductive hydric soils that often extend well beyond the mapped vegetation boundary. The mapped edge is likely not the hydrological edge.

The construction process which includes blasting near wetland edges, excavation, dewatering trenches, clay bund construction, pumping water back into wetlands, and stripping organic wetland soils across nearly 4 ha of wetland and near-wetland interface represent substantial modification of the very groundwater gradients, seepage pathways, and moisture regimes that sustain these peat-forming systems. This constitutes functional destabilisation of wetland hydrology, creating multiple avenues for irreversible degradation, particularly during dry periods when wetland resilience is at its lowest. This approach is inconsistent with NPS-FM Policy 6, which requires that the extent and values of natural inland wetlands are protected and their restoration promoted.

Baseline Data

The project has not collected adequate pre-development baseline data for turbidity, total suspended solids, water temperature, clarity, or sediment dynamics, leaving no robust foundation to evaluate construction impacts, storm-event sediment pulses, seasonal variations, or wetland–stream interactions. Existing five-year median data for clarity/turbidity, black disc depth, and phosphorus/nitrogen at a few sites do not capture short-term variability, high-flow events, ecological thresholds, or all tributaries and construction impact zones.

The site is located within the Old Mataura physiographic zone, where soils and aquifers have high nitrogen leaching risk and groundwater discharges into streams, amplifying downstream contaminant loads. Without robust measurements, thresholds for sensitive species including upland bully, kōaro juveniles, and fine-sediment sensitive mayfly and caddis taxa cannot be established, cumulative effects from 101 fill sites cannot be assessed, and site-specific limits or adaptive management triggers cannot be implemented.

Consequently, Contact cannot demonstrate compliance with NPS-FM freshwater objectives, SWLP water quality rules, or Mataura WCO natural character standards, and the project lacks a scientific or regulatory basis to prevent irreversible ecological harm. While Contact proposes to implement its Erosion and Sediment Control (ESC) plan following GD05 principles, adherence to these measures cannot compensate for

the absence of a comprehensive pre-development baseline, nor confirm that discharges remain within natural variability, meet ecological thresholds, or protect sensitive species.

Technical Assessment 6 - Long Tailed Bat Effects

Habitat Removal

The assessment significantly underestimates the risk posed by habitat removal. Its claim that the footprint is "small" and habitat "low quality" ignores that even minimal loss of potential roost or foraging sites can critically affect the cryptic, low-density long-tailed bat. Reliance on sparse bioacoustic detections and limited radio-tracking as evidence that bats do not roost on-site is scientifically unsound: these methods systematically under-detect roosts in plantation forests, complex terrain, and exotic trees, precisely the habitats present within the Wind Farm Site.

By presuming roosting is unlikely, mitigation is restricted to a few isolated old-growth stands, leaving most potential roosts unprotected. This reactive approach fails to meet the Resource Management Act 1991 requirement (as currently amended) to avoid, remedy, or mitigate adverse effects on the environment, and conflicts with best practice guidance for bat habitat management. Overall, the assessment overstates certainty, underestimates ecological risk, and provides insufficient safeguards against potentially irreversible harm to long-tailed bats.

Habitat Displacement

The assessment downplays the risk of habitat displacement, labelling effects as "minor" based on low acoustic detections and the assumed availability of alternative habitat. This reasoning is flawed: bioacoustic surveys systematically under-detect bats in complex terrain and plantation forests, while displacement extends beyond cleared areas due to turbine noise, vibration, and air pressure changes.

The quantified footprint, including 303 ha of vegetation and infrastructure, rotor-swept zones, and transmission line impacts represents a substantial alteration of potential foraging and commuting habitat. Treating this as negligible ignores the cryptic, low-density nature of long-tailed bats and fails to comply with the Resource Management Act 1991's requirement to avoid, remedy, or mitigate adverse effects. Reliance on off-site compensation does not substitute for genuine on-site avoidance or mitigation and materially underestimates the real displacement risk.

Strike Risk

The assessment of strike risk is fundamentally limited and overconfident, relying on sparse, low-resolution bioacoustic data and coarse Bat Activity Indices (BAI) to infer site and turbine-specific risk. First, the report assumes that turbines in areas of low detections such as JED-14, JED-31 and MAT-08 are at negligible risk, yet this conclusion ignores the inherent limitations of bioacoustic surveys: detection ranges are short, activity is highly weather-dependent, and sparse detectors cannot map fine-scale commuting or foraging routes. These so-called "low-activity" turbines may still intersect critical flight corridors or ad hoc foraging paths, particularly since exotic plantations and linear edge habitats are known long-tailed bat habitats.

Second, the assessment selectively interprets outlier data to dismiss curtailment at certain turbines while defaulting to compensation for "residual risks." This effectively externalises uncertainty rather than addressing it on-site. Compensation cannot mitigate strike mortality in real-time or prevent habitat disruption from turbine presence, it is a post-hoc band-aid, not a primary mitigation.
Third, the methodology assumes that bat activity is negligible when wind speeds exceed 2–5 m/s, yet the rapid attenuation of calls in complex terrain, coupled with the unpredictable flight behaviour of long-tailed bats, makes such assumptions scientifically tenuous. The report effectively treats absence of detections as proof of absence, a standard explicitly rejected in NZ conservation practice (RMA s6(c), DOC Bat Recovery Group guidance).

Finally, reliance on curtailment at a small subset of turbines (mostly in the southern Bat Risk Area) fails to address the landscape-scale risk of displacement and cumulative mortality. The narrow focus on turbine-specific BAI masks broader ecological impacts and overstates confidence in the efficacy of the mitigation strategy. Overall, the strike-risk assessment is methodologically weak, selectively interpreted, and insufficient to justify the claim of "managed" strike risk.

Review of - Measures to Remedy or Mitigate Adverse Effects

The measures proposed to "remedy or mitigate" adverse effects overstate the effectiveness of limited interventions while downplaying real risk. Table 9 frames habitat removal and displacement as "Low" for unmitigated level of effect and "Negligible" post-mitigation, yet this ignores the ecological value of tall exotic pines and scattered native vegetation, and assumes off-site predator control in the Beresford Range can compensate for the loss of functional roosting, foraging, and commuting habitat on-site -a substitution that lacks ecological equivalence.

Strike risk is acknowledged as "Very High" in areas of high habitat value, yet the matrix reduces residual risk to "Low" contingent on perfect implementation of live curtailment, habitat enhancement, and monitoring, conditions that are untested under the site's specific wind, topography, and seasonal activity patterns. Transmission line impacts are labelled negligible without empirical justification. The assertion that the Wind Farm Site is "not core habitat" remains unsupported by targeted roost surveys, and reliance on temporary commercial pine stands fails to recognise their impermanence as bat habitat.

Overall, the effects matrix conveys a false sense of certainty, minimises the real strike and displacement risk, and fails to address structural inadequacies in the baseline ecological assessment, falling short of robust compliance with conservation guidance and Department of Conservation protocols.

The report's claim that the Wind Farm Site is "not core habitat" and of "low ecological value" is indefensible. It relies on low acoustic detections while simultaneously acknowledging that dense vegetation, complex terrain, and weather systematically suppress detection where bats are most likely present. These so-called

"low detections" are methodological artefacts, yet the report treats them as ecological fact. Its 50-fold comparison with nearby Catlins sites is meaningless, reflecting different detector placements and environmental conditions rather than true habitat quality. Radio-tracking, though minimal, shows bats still forage within the site, yet the assessment ignores this and elevates incomplete data into unwarranted certainties. The result is a deeply misleading characterisation that dramatically underestimates the site's ecological significance and overstates the reliability of its own flawed survey methods.
The claim that the eastern Matariki Forest "provides significantly more value" to long-tailed bats is unsupported. The entire conclusion is driven by a single un-replicated hotspot (L14) with no corroboration from adjacent detectors. Temporal replication at fixed sites was limited, with short monitoring windows and uneven seasonal coverage, providing insufficient data to establish consistent site-wide patterns or fully account for variation due to weather conditions. In addition no controls were used to rule out detector variability, placement effects, or environmental interference. Contact cannot assert that the eastern escarpment consistently supports higher bat activity, nor that Jedburgh and Glencoe consistently exhibit low or no activity, because acoustic bat monitors sample only their immediate vicinity and cannot map activity across the landscape. Non-detection within a 50m radius is not evidence of absence at station-scale landscapes. Despite acknowledging these limitations, the report extrapolates site-wide habitat rankings, assigning 'higher-value' status to the eastern escarpment while down-designating large areas such as Jedburgh and Glencoe which host the majority of proposed turbines as 'low activity' based on incomplete coverage and non-replicated sampling. These inferences exceed what the data can support.
Assessment of Effects The assignment of strike-risk levels is arbitrary and scientifically unsupportable. The 'low', 'moderate', and 'very high' categories are directly derived from habitat-value rankings based on patchy, sparse, and unevenly replicated bioacoustic data. Jedburgh and Glencoe are labelled 'low risk' solely because detectors there recorded zero or near-zero passes, yet the report itself concedes that non-detection is not evidence of absence. Conversely, a single anomalous high-pass site in Matariki is extrapolated to classify the entire escarpment as 'very high risk'. This approach is methodologically indefensible: one recorder cannot define landscape-scale patterns, and the classification ignores detector limitations, terrain effects, and temporal variability. The strike-risk framework therefore overstates certainty, misrepresents spatial risk, and cannot be relied upon to guide turbine-specific mitigation.
The Assessment on Habitat Displacement

The assessment dismisses habitat displacement as “minor,” but this relies on circular logic and unsupported assumptions. Low acoustic detections cannot justify claims of low habitat value when surveys cannot map actual use, movement corridors, or roosts. Long-tailed bats are cryptic, wide-ranging, and use exotic and edge habitats unpredictably; non-detection is not evidence of absence, nor proof that 300+ ha of vegetation loss and turbine disturbance are negligible.

Functional fragmentation from rotor-swept zones, noise, turbulence, and pressure changes -shown internationally to displace bats hundreds of metres is ignored. Similarly, the claim that curtailment reduces strike risk to “low at most” is speculative; strike events are highly sensitive to weather, season, and local behaviour, none comprehensively monitored. Off-site compensation cannot substitute for on-site avoidance or mitigation, and the assessment fails to meet RMA 1991 obligations to avoid, remedy, or mitigate adverse effects.

Curtailment

The statement that curtailment will reduce turbine-strike effects to “low at most” is speculative and unsupported. International evidence demonstrates that strike risk varies strongly with weather, season, and local bat behaviour -factors that were not comprehensively monitored at the site.
Curtailment cannot compensate for an inherently flawed and incomplete risk assessment.

Paragraph 111.
The claim that habitat loss will be “insignificant” rests on an unproven assumption that the affected areas are “low-quality pastoral habitats.” No evidence is presented to support this. The assessment contains no analysis of roost potential in exotic trees, hedgerows, shelter belts, or edge habitats, features long-tailed bats routinely use elsewhere in New Zealand.

International and NZ research shows bats preferentially use ecotones and linear corridors for commuting and foraging, yet these are the very features destroyed or severed by turbine platforms and access roads. Labelling the habitat “low quality” is circular; detections were low because monitoring was sparse and un-replicated, not because the habitat lacks value.

The conclusion that long-tailed bats are “unlikely” to be roosting within the Wind Farm Site is scientifically indefensible. It rests entirely on absence of evidence rather than evidence of absence: no targeted roost surveys were undertaken within the site, acoustic detectors cannot identify roosts, and exotic plantation trees, common across the project area are well documented roost habitat for long-tailed bats in multiple New Zealand studies.

The proponents even acknowledge potential roost trees near several turbine locations, directly contradicting their own inference. The small sample size of the tracking study only compounds the uncertainty, offering no basis to rule out roosting within the footprint. In this context, the assertion that roosting is “unlikely” is not a scientific finding but an unsupported assumption, employed despite the lack of appropriate survey effort and despite internal evidence that roosts may be present.

The assessment ignores the fragmentation effects created by turbine platforms and new access roads. Long-tailed bats rely on linear corridors, edges, and riparian routes- features that these structures sever even without removing trees. Treating impacts as limited to only the physical footprint overlooks the real connectivity loss and functional habitat degradation caused by fragmentation.
Recent research shows that wind turbines can displace bats from critical areas. Scholz, Klein & Voigt (2025) demonstrated that operational turbines measurably displace bats from drinking sites, confirming that disturbance effects extend well beyond the physical footprint of wind farms. This directly contradicts the report's assertion (paragraph 116) that displacement effects at the Southland wind farm will be 'minor'. Given that long-tailed bats rely heavily on predictable commuting routes, water access, and sheltered foraging corridors, turbine-driven displacement is likely to impose real energetic and behavioural costs. The report's reliance on low acoustic detections to downplay displacement ignores that displacement itself reduces detectability, a circular logic explicitly contradicted by emerging empirical evidence. Reference: Scholz, C., Klein, H., & Voigt, C. C. (2025). Wind turbines displace bats from drinking sites. Biological Conservation, 302, 110968.
The strike-risk zones presented are based on acoustic data that are inherently limited in detecting bats within forested and edge habitats. The report repeatedly equates low detections with low use, ignoring that detectability is heavily influenced by vegetation density, micro-topography, wind conditions, and detector placement. Key high-use areas such as edges, shelter belts, gullies, commuting corridors, and forest–pasture interfaces are under-sampled, rendering any conclusions of 'low-risk' structurally unreliable.
The report arbitrarily dismisses high-activity detections, undermining its own risk assessment. For example, at JED-14, a nearby acoustic recorder (B36) logged over 372 bat passes, yet the authors label this as an 'ad hoc foraging event'. This is not an evidence-based analysis but a selective reinterpretation designed to preserve the low-risk narrative. A single high-activity event demonstrates that the area is functionally used by bats, and functional use should determine strike risk.
The assertion that transmission-line effects are 'Low to Negligible' is unsubstantiated. There are no empirical New Zealand data on long-tailed bat interactions with transmission corridors, and potential impacts such as edge hardening, increased predation risk, loss of vertical structure, and altered flight paths remain entirely plausible. Despite these credible risks, the report provides no field-based evidence or justification to support its conclusion.
The focus on a 5 m vegetation height threshold to define "low-risk" areas is ecologically flawed and appears driven by the proposed turbine placement rather than bat behaviour. The authors assume that bats flying over short Manuka or low forest are unlikely to intersect turbine blades, which sit tens of metres above ground, and use this to justify minimal curtailment at sites such as Jedburgh and Glencoe.

This reasoning is a methodological shortcut: long-tailed bats routinely traverse low vegetation, paddocks, and open areas when commuting between roosts and foraging zones. Flight paths and not canopy height determine collision probability, meaning the 5 m cut-off does not reliably indicate low strike risk. By equating short vegetation with minimal hazard, the report underestimates potential turbine interactions and selectively downplays risk at key turbine locations.
The report uses selective curtailment and argues that compensation will cover any "residual risk," which effectively admits that their risk modelling is incomplete. When acoustic data contradict their low-risk designations such as at turbines MAT-08 or JED-31-they rely on compensation rather than revising the risk assessment. This is misleading because if compensation is necessary, it shows that strike risk has not been properly quantified.
With regards to paragraph 125c, the conclusion that curtailment is unnecessary is unsupported because it relies on an extremely narrow dataset. All recorded bat activity occurred below 2 m/s, but the survey lacks information on detector sensitivity, sampling effort, seasonal coverage, and how often higher-wind conditions were actually monitored. Without demonstrating that bat activity was genuinely absent, rather than simply undetected at higher wind speeds, the claim that bats are inactive when turbines operate is not robust. Consequently, the assertion that curtailment is unnecessary rests on an evidential gap, not a demonstrated absence of risk.
Exotic Pines - Bat Habitat The assessment's dismissal of exotic pines as bat habitat on the basis that they will eventually be harvested (paragraph 128) constitutes a critical flaw, undermining the reliability of its habitat evaluation. Consent authorities must evaluate effects against the current environment, and long-tailed bats are well-documented users of exotic plantation trees for both roosting and foraging. The timing, scale, and certainty of any future forestry harvest is uncertain, and adopting an "inevitable loss" premise effectively downplays existing ecological values rather than assessing them on their merits. This approach risks understating the significance of bat habitat presently available on the site and diminishes the robustness of the effects assessment.

The assessment falsely elevates curtailment as a dependable mitigation, ignoring overwhelming evidence that its effectiveness is highly conditional and conditions at the Southland wind farm are among the most challenging. The site's forest–pasture interfaces, gullies, linear corridors, and complex topography are prime bat commuting routes, yet inherently limit detection due to low call intensity, weather-driven behavioural shifts, and rapid acoustic attenuation.

Turbine airflow, wake effects, and unavoidable response delays create predictable windows where bats can enter the rotor-swept zone before shutdown. Despite these structural vulnerabilities, the assessment claims set-curtailment parameters will "eliminate most of the risk," citing turbines with <1% recorded activity, a dataset itself compromised by the detection issues that curtailment depends on. Reliance on curtailment as the principal mitigation tool thus inflates confidence and fundamentally understates the residual risk to a cryptic, highly mobile species like the long tailed bats.

The proposed compensation scheme cannot credibly substitute for direct mitigation of turbine strike or habitat loss. It relies on off-site predator control in the Beresford Range, an entirely different, intact forest ecosystem to offset mortality and displacement occurring within the Wind farm site's fragmented plantation–pasture landscape, a context where ecological equivalence is unproven and likely invalid.

This approach treats compensation as a veneer of protection while ignoring the critical uncertainties that remain: strike risk is poorly quantified, curtailment efficacy is experimental and untested in these conditions, and habitat use within the turbine array is inadequately mapped. The assertion that a financial contribution and predator-control programme will "more than adequately" offset residual effects is unsupported, speculative, and dangerously misleading; it masks real, site-specific risks and risks institutionalising a mitigation shortcut that fails to protect the species where it is directly exposed to harm.

The proposed monitoring approach is fundamentally limited and risks underestimating impacts. The decision not to conduct additional pre-construction radio-tracking or targeted surveys assumes that the 10,000 ha pest control area will automatically encompass all maternity roosts, yet this ignores the fine-scale spatial distribution and site fidelity of long tailed bats, particularly in fragmented plantation and forest–pasture landscapes.

Relying solely on post-construction bioacoustic surveys delays detection of adverse effects until after turbines are operational, by which time any strike mortality or displacement is irreversible. Bioacoustic monitoring is itself constrained by detection limitations in dense plantation forests, edge habitats, gullies, and linear corridors, all of which are prevalent at the wind farm site.

Southland Wind Farm DRAFT - Bat Management Plan

The bat management plans protocols for removing potential high-risk bat roost trees are fundamentally inadequate and reactive rather than protective. Requiring only two nights of bioacoustic monitoring or visual inspection before felling drastically underestimates the cryptic, low-density nature of long-tailed bats, particularly in dense plantation, edge, and gully habitats where detection is notoriously unreliable.

Visual inspections, thermal cameras, or bat dogs are no guarantee of detecting roosting bats high in the canopy or hidden in foliage. The plan relies on post-felling responses such as contacting DOC and veterinarians after bats are discovered which is too late to prevent mortality or stress-induced injury. The accidental discovery protocol is equally reactive, allowing work to continue until a bespoke plan is devised, leaving the species exposed in the meantime.

The proposed live-curtailment framework is overly experimental and structurally unreliable as the primary mitigation for turbine strike. Reliance on bioacoustic sensors mounted on nacelles assumes that bats will be consistently detectable within the rotor-swept zone -an assumption contradicted by international evidence showing rapid attenuation of bat calls, variable call intensity, and detection failures in forest–edge, gully, and complex terrain. The allowance to remove sensors for three months (1 June–31 August) further creates temporal gaps in monitoring, potentially coinciding with unrecorded bat movements.

Technical Assessment 5 - Terrestrial and Wetland Ecology

The project's claim of "100% avoidance" of high-value habitats—including pāhautea/southern rātā–kāmahi forest, indigenous broadleaved forest, Mānuka/copper tussock shrubland, and Mānuka -inaka/copper tussock marsh—is misleading. Permanent loss of 63.74 ha of indigenous-dominant vegetation, altered wetland hydrology, and unfinalised fill disposal sites directly contradict this assertion. Small, fragmented, or degraded patches cannot be assumed to retain ecological function.

The qualifier "to the greatest extent practicable" provides legal cover, not demonstrable protection, and fails to satisfy RMA s6(c) and the Southland RPS policies requiring protection of indigenous biodiversity, avoidance of significant habitat loss, and mitigation of cumulative ecological effects. Reliance on offsets and compensation underscores that avoidance is partial at best, leaving residual effects that are significant, cumulative, and largely unmitigated.

Permanent Loss of Terrestrial Vegetation within the Wind Farm Footprint

Table 4a identifies the permanent loss and percentage reduction of each vegetation type within the construction footprint, yet the assessment uses percentage values to downplay impacts on habitats that are already functioning under severe ecological stress. The so-called "moderate value" vegetation types such as mānuka- and inaka-dominant shrublands and mixed indigenous shrublands are among the last remaining structurally intact refuges and movement corridors on the Plateau. These habitats already show clear symptoms of long term degradation, including diminished palatable species, suppressed regeneration, and fragmented shrubland mosaics. Presenting an additional 25.25 ha (10.1%) loss of mānuka/tauhinu-inaka–*Veronica odora* scrub and shrubland as a minor proportional reduction is therefore misleading: when ecological baselines are already eroded, further clearance is not a "small" loss, but an amplification of cumulative decline. In this context, every hectare removed strips away remaining connectivity, weakens ecosystem resilience, and accelerates

the vulnerability of threatened and at-risk fauna whose persistence depends on these last vestiges of suitable habitat.

Small but ecologically distinct habitats are particularly vulnerable. Copper tussock grassland with a High ecological value, though only 0.34 ha in total, will lose 67.6% (0.23 ha impact area), while Inaka scrub (2.14 ha) will lose 44.9% (0.96 ha impact area). Despite their limited absolute area, these proportional losses are effectively catastrophic for habitat redundancy, connectivity, and species persistence. Limited foraging by long-tailed bats on plantation margins does not offset the cumulative effects of vegetation clearance, fragmentation, and breakdown of ecological networks.

By treating the loss of moderate-value habitats as negligible, Table 4a systematically underestimates cumulative and residual ecological impacts, ignores cascading effects across connected ecosystems, and directly contravenes the precautionary approach required under RMA s6(c) and the biodiversity offset principles articulated in the Southland RPS.

Temporary Loss of Terrestrial Vegetation within the Footprint of Fill Disposal Sites

Table 4b frames habitat loss within fill disposal sites as 'temporary,' but this misrepresents the ecological reality: impacts are neither minor nor readily remediable, and the assessment significantly underestimates the consequences for already stressed habitats. Moderate-value habitats including mānuka and inaka-dominant scrub and mixed indigenous shrublands are already under chronic pressure from ungulate browsing, stock grazing, feral predators, and historic clearance. Even short-term disturbance can disproportionately affect already depauperate populations of lizards, birds, and invertebrates, degrade critical refugia, and fragment the few remaining ecological corridors maintaining functional connectivity on the Jedburgh Plateau.

The proposed replanting and remediation do not fully address functional and structural losses. Recovery of invertebrate assemblages, rare lizard species such as tussock skink and Tautuku gecko, and small, threatened or At Risk birds such as mātātā/South Island fernbird and pīhoihoi/NZ pipit is likely to be delayed or incomplete. Even temporary clearance or compaction can have lasting effects on microhabitats, soil, and hydrology. The magnitude of impacts reported in Table 4b is therefore neither minor nor temporary; they represent a significant erosion of ecological integrity and resilience, failing to meet the precautionary approach required under RMA s6(c) and Southland RPS obligations.

Wetland Loss and Effects on Wetland Hydrology (Sections 165–167)

The assessment of wetland loss and hydrological effects on the Jedburgh Plateau dramatically underplays ecological significance. Fen wetland (1.08 ha; 1.1%), bog wetland (0.94 ha; 3.3%), and copper tussock/rautahi marsh (0.01 ha; 1.9%) are already degraded by ungulate browse, stock grazing, feral predators, and historic clearance. These wetlands perform irreplaceable functions by maintaining water quality, supporting invertebrates and small vertebrates, and providing habitat connectivity for species such as mātātā/South Island fernbird.
Even minimal clearance disrupts peat-forming vegetation, hydrological regimes, and faunal refuges, yet the assessment relies on nominal <5% thresholds to label losses as "Moderate" ignoring ecological rarity and sensitivity. Proposed offsets and compensation fail to address functional and structural losses, leaving severe, long lasting residual impacts.

Claims of negligible hydrological impact overlook indirect, cumulative pressures and the buffering role of surrounding vegetation, and therefore fail to meet RMA s6(c), Southland RPS biodiversity offset principles, the National Policy Statement for Freshwater Management (NPS-FM 2020) requirements to maintain wetland integrity, and the wetland protection provisions of the National Environmental Standards for Freshwater (Regulations 37-56) that regulate activities affecting natural inland wetlands.

Effects of Fragmentation on Habitat

The assessment of fragmentation seriously underestimates its ecological impact. Moderate-value habitats such as mānuka and inaka-dominant vegetation and mixed indigenous shrublands already function as critical refugia and dispersal corridors in a landscape degraded by ungulate browsing, stock grazing, and feral predation. New roads and infrastructure will exacerbate edge effects, facilitate weed invasion, and disrupt regeneration and dispersal, further weakening ecosystem integrity.

Characterising fragmentation effects as “minor” for these habitats and “negligible” for birds fails to account for cumulative pressures, the heightened vulnerability of slow-moving fauna, and the well-documented sensitivity of lizards (including Tautuku gecko and green and herbfield skinks) and invertebrate assemblages to microhabitat disruption. In this ecological context, even limited habitat loss or disturbance can drive long-term population decline and functional degradation.
On the basis of the information presented, residual fragmentation effects remain moderate to high, not negligible. Under RMA s6(c) and Southland RPS criteria for representativeness, rarity, and ecological context, the assessment’s conclusion that impacts are negligible is inconsistent with both ecological evidence and statutory obligations.

Disturbance (including death and injury) and displacement of indigenous fauna during construction and vegetation removal and potential fragmentation of fauna habitats and populations

The assessment of disturbance, displacement, and habitat fragmentation significantly underestimates ecological impacts across multiple taxa. For birds, fragmentation

effects are downplayed despite cumulative pressures threatening ground-nesting and forest species, while slow-breeding, predation-sensitive lizards such as Tautuku gecko and potentially green or herbfield skinks face long-term population declines in small, isolated habitat patches. Invertebrates are similarly vulnerable, with microhabitat loss, altered soil and litter conditions, and edge effects disproportionately affecting range-restricted and less mobile species.

Methodologically, reliance on limited observations and detectability underestimates cryptic or rare species, ignoring indirect, cumulative, and functional effects. Treating habitat loss as a localised issue fails to recognise wider landscape-scale consequences, including the erosion of refugia, disruption of ecological corridors, and weakening of ecosystem resilience.
Based on the information presented, residual disturbance and habitat loss effects are likely to remain moderate to high, not negligible. This conclusion is inconsistent with RMA s6(c) and Southland RPS criteria relating to representativeness, rarity, and ecological context.

Effects of Noise Disturbance, Vibration and Road Traffic on Fauna

The assessment of noise, vibration, and road-traffic effects systematically understates ecological risk by dismissing these impacts as negligible and temporary, despite clear evidence of heightened vulnerability across the fauna assemblage at the Wind Farm Site. Bird, lizard, and invertebrate populations are already heavily depleted by grazing, browsing, and predation, with species such as mātātā/South Island fernbird, pīhoihoi/New Zealand pipit, Tautuku gecko, tussock skink, and multiple slow-moving invertebrates confined to structurally fragile shrubland and wetland margins.

In this degraded context, additional noise, vibration, and traffic disturbance is not benign: it disrupts breeding, foraging, thermoregulation, and movement, compounding existing stressors on populations that are sparse, isolated, and slow to recover. Residual noise, vibration, and road-traffic effects are therefore moderate to high, not negligible. The assertion that effects are “low” simply because construction is temporary is ecologically unsound and ignores cumulative vulnerability, baseline degradation, and recovery constraints. This approach fails to meet statutory obligations under RMA s6(c) and the Southland RPS, which require the protection of significant indigenous fauna and their habitats, particularly where populations are already under sustained pressure.

Operational Effects - Avifauna Collisions with Turbines (Sections 188–201)

The assessment downplays collision risk by relying on modelling with clear gaps, exclusions, and unsupported assumptions. Key protected species with known regional presence (e.g., Australasian bittern, bar-tailed godwit, black-billed gull) were either not detected on site or excluded from the Band model, yet the assessment treats their risk as negligible. Predicted strike rates for kāhu/harrier (20–40 deaths per year) and regular mortalities for bellbird and black-backed gull contradict the claim that the site is “low-risk.” The conclusion of ‘virtually zero’ mortality for bittern is based on assumed flight frequencies rather than empirical data. Outstanding issues identified during expert conferencing including migratory flight paths, nocturnal movements, and collision uncertainty remain unresolved.

Based on the information presented, residual collision risks for threatened and fully protected indigenous avifauna are likely to remain moderate to high, not negligible. This approach is inconsistent with RMA s6(c) and Southland RPS provisions requiring the protection of threatened indigenous fauna and their habitats. In addition, under the Wildlife Act 1953, mortality of fully protected indigenous birds cannot be treated as acceptable unless collision risks are demonstrably avoided or minimised.
Operational Effects -Avifauna Collisions with Transmission Lines (Sections 202–204) The assessment of collision risk with transmission lines underestimates impacts, relying on overseas studies rather than site-specific data. High-flying indigenous species such as kārearea, kāhu, kererū, and tūī are identified as potentially at risk, yet exposure at the Project Site is not quantified. Migratory species, including torea/South Island pied oystercatcher and Australasian bittern, face residual risks despite mitigation measures and the removal of one transmission line route. Based on the information presented, residual collision risks for high-flying and migratory indigenous species are likely to remain moderate to high, not negligible. This assessment is inconsistent with RMA s6(c) and Southland RPS provisions requiring adverse effects on rare and threatened indigenous fauna, and their habitats, to be avoided where practicable and carefully managed where avoidance is not possible.
Operational Effect -Increased Risk of Predation The assessment downplays the ecological consequences of road construction as a facilitator of predator movement. While existing tracks are acknowledged, new roads create additional linear corridors that can significantly increase access for stoats, ferrets, feral cats, rats, and hedgehogs into previously less-disturbed indigenous habitats. These predators are known to suppress populations of ground-nesting birds (mātātā/South Island fernbird, pīhoihoi/NZ pipit), lizards (tussock skink, Tautuku gecko), and less mobile invertebrates, undermining recovery and connectivity. Human activity associated with roads can further exacerbate predator pressure through food attractants and shelter. Residual impacts from increased predation are likely to remain moderate to high, not negligible. Labelling the magnitude of effect as “low” or “low to moderate” ignores cumulative pressures and the functional consequences for vulnerable species, and is inconsistent with RMA s6(c) and Southland RPS obligations.
Review of - Measures to Avoid, Remedy or Mitigate The proposed avoidance, remediation, and mitigation measures are predominantly procedural and do not address the substantive ecological risks identified in the assessment. Heavy reliance on post-consent management plans, monitoring frameworks, and deferred finalisation of critical documents leaves highly sensitive wetlands, shrublands, and forest habitats exposed to unavoidable clearance,

fragmentation, and hydrological disruption. Fauna including Tautuku gecko, terrestrial invertebrates, and ground-nesting birds remain at genuine risk of mortality or displacement, and the proposed predator control, vegetation salvage, and habitat restoration function as reactive, post-impact responses rather than true preventative measures. Hydrological "safeguards" cannot compensate for direct wetland loss or the ongoing soil and vegetation disturbance inherent in the construction footprint.

Under RMA s6(c) and the Southland RPS provisions requiring protection of indigenous biodiversity, rare and functionally critical habitats, and ecological connectivity, the proposed measures fall short of meeting the statutory threshold for meaningful ecological protection. The approach prioritises procedural compliance over actual ecological outcomes, leaving residual effects that are likely to be significant, irreversible, and unacceptable.

Review of - Measures to Remedy Potential Adverse Effects

The reliance on procedural measures such as planting, topsoiling, and monitoring, without enforceable ecological performance criteria, means the proposed "remediation" remains largely theoretical. Under RMA s6(c) and Southland RPS obligations, which require protection of rare, threatened, and functionally critical habitats, these measures do not adequately compensate for the immediate or long-term loss of ecosystem function. The assumption that effects can be "fully remediated" within 5–15 years is not supported by ecological evidence and fails to account for irreversible functional losses.

Review of - Minimisation of Effects on Indigenous Terrestrial Vegetation and Wetlands

Avoidance measures are presented as provisional rather than guaranteed. The stated reductions in impact areas for high-value forests and wetlands are described only as "indicative" and remain dependent on later detailed design, meaning they do not secure actual ecological protection. The proposed 2.5 ha cap on wetland clearance is an arbitrary limit that does not address functional loss of wetland ecosystem services, invertebrate habitat, or faunal connectivity, nor does it prevent hydrological or edge effects on surrounding bog and fen systems. As a result, sensitive wetland types remain vulnerable to substantial disturbance despite the appearance of quantified avoidance.

Hydrological measures (culverts, bunds, 10-year ARI design; Sections 228–231) rely on modelling that does not account for cumulative construction impacts. Predicted "low impairment" of wetlands is not supported by empirical evidence and risks breaching RMA s6(c)obligations. Replanting and revegetation are insufficient for long-lived or sensitive habitats, and post-construction weed control and monitoring are reactive and offer no certainty of ecological recovery.
Under RMA s6(c), Southland RPS, and Policy 6 of the National Policy Statement for Freshwater Management 2020 (NPS-FM), natural inland wetlands and their values must be protected. Residual effects on wetlands and high-value vegetation remain moderate to high, not negligible, based on the information presented in the assessment.

Review of - Minimisation of Effects on Indigenous Birds During Breeding Season

The minimisation measures for indigenous birds during the breeding season (Sections 235–238) are superficial and insufficient to prevent significant disturbance or population impacts. Avoiding clearance only where "practicable" and relying on pre construction surveys leaves high-risk periods and sensitive species exposed. Setbacks of 50 m for Threatened/At Risk birds and 25 m for others are conditional and can be reduced case-by-case, undermining protection. These measures do not fully address cumulative disturbance, the potential loss of active nests, or functional impacts on local breeding populations, falling short of RMA s6(c) obligations to safeguard significant indigenous fauna.

Review of - Minimise the Potential for Collisions with Power Lines

The proposed transmission line mitigation measures (Sections 239–242) are conditional and partial. While rerouting avoids the Dunvegan Wetland Complex, the remaining line still traverses marsh wetlands and high-value forest, leaving birds including threatened species at risk. Reliance on dynamic flappers and other diverters assumes long-term durability and consistent effectiveness, yet these devices are vulnerable to wear and their performance can vary by species and environmental conditions. Effectiveness data are largely drawn from overseas studies (e.g., Ferrer et al., 2020), and may not reflect local avifaunal behaviour. These measures do not fully satisfy RMA s6(c) obligations to protect significant indigenous fauna, nor do they address cumulative collision risk across the broader site.

Review of - Post Construction Avifauna Monitoring

The proposed avifauna monitoring framework does not meet the directive of RMA s6(c) because it accepts harm as inevitable and only measures it after birds have been injured or killed. Quarterly surveys and carcass searches around only a subset of turbines cannot detect real-time impacts on Threatened and At-Risk species, whose breeding cycles, mortality events, and behavioural displacement can occur rapidly and go unnoticed between monitoring periods. The compensation trigger (Section 248) further entrenches a permission to-kill structure, where only after mortality reaches a predetermined threshold does any remedial action occur. This framework documents harm rather than preventing it, meaning significant adverse effects on indigenous avifauna are only managed after ecological loss has already occurred.

Review of - Mitigation Effects on Lizards

The lizard mitigation package is essentially an administrative gloss over habitat loss, not genuine protection. Salvage-and-relocation, a method known for high mortality is treated as a default solution simply because habitat is being destroyed. Installing tree additional cover objects weeks or months before clearance assumes geckos will conveniently move into artificial structures, despite no evidence this reliably occurs for site-faithful species like Tautuku gecko.
Soft-release pens and "enhanced" release sites are speculative fixes that cannot replicate the microhabitat, thermal conditions, or prey networks being permanently removed. There is no proof these areas can support displaced populations without severe stress or predation losses.

These measures fail the basic threshold of RMA s6(c) as they do not protect significant indigenous fauna, instead they facilitate its removal.

Review of - Mitigation Effects on Invertebrates

The invertebrate mitigation framework treats salvage as an all-purpose solution, ignoring that most invertebrate species particularly the Helms' stag beetle are highly sensitive to microhabitat disruption, soil moisture shifts, and changes in decaying-wood structure that cannot be re-created elsewhere. The Terrestrial Invertebrate Management Plan and the Stag Beetle Management Plan rely on pitfall trapping, relocation of log piles, and "enhanced" release areas, yet none of these measures are backed by empirical evidence demonstrating long-term survival or population viability after translocation.

The incidental-discovery protocol (Section 258) effectively formalises ignorance by assuming un-surveyed areas are "low potential," despite the cryptic nature of many Threatened and At Risk invertebrates. Moving surface logs does nothing to replicate the fungal, microbial, and moisture regimes they require. Concentrating salvage in three areas and releasing beetles into an untested "Ecological Enhancement Area" treats a nationally significant species as debris to be cleared. Predator control and ungulate exclusion are speculative offsets, not protection. The measures manage displacement, not survival, and therefore fail to meet RMA s6(c)'s requirement to protect significant indigenous fauna.

Review of - Level of Residual Effects after efforts to Avoid, Remedy and Mitigate Effects

The section reframes a large, irreversible ecological loss as a tidy numerical exercise. Stating that 63.74 ha is "only 2.1%" of significant vegetation obscures the actual ecological consequence: the loss includes irreplaceable wetland sequences, low-stature shrublands, and copper-tussock systems that are regionally scarce and functionally non-substitutable. RMA s6(c) protection duties attach to significance, not to percentages of a footprint.

Clearance caps and deferred mitigation through detailed design do not prevent permanent destruction of sensitive habitats. Residual effect ratings rely on assumptions and low detectability rather than evidence, downplaying impacts on Threatened or At-Risk species. Combining construction and operational effects in one table (Table 7) conceals cumulative impacts, while sensitive features such as bogs, rātā–kāmahi forest, bittern, geckos, and keystone species still face "Moderate" to "High" effects, contradicting claims that impacts have been fully avoided, remedied, or mitigated. This demonstrates that significant ecological effects remain, contrary to RMA s6(c) obligations to protect significant indigenous ecosystems.

Review of - Management of Residual Effects

The approach assumes that all residual effects ranging from Moderate to Very High on vegetation, and including sensitive species can be fully addressed through biodiversity offsets or compensation. This is a fundamental flaw: high-value, site-specific habitats (e.g., bogs, rātā–kāmahi forest) and cryptic fauna cannot simply be

"replaced" elsewhere without significant functional loss. Offsets do not restore the original ecological interactions, hydrology, or species assemblages, particularly for threatened or highly localised species. The framework treats potential species presence (e.g., herbfield and green skinks) as something that can be mitigated post-hoc, relying on assumptions rather than empirical verification. There is no guarantee that relocation, habitat enhancement, or predator control will succeed, and long-term monitoring and enforcement are uncertain. The generic "biodiversity offsetting package" conceals species-specific and cumulative impacts, falsely implying all residual effects are manageable. High-value habitats and threatened species will still face significant, unavoidable harm, rendering the approach inconsistent with RMA s6(c) and undermining its credibility.
Review of - Biodiversity Offsetting and Compensation The proposed biodiversity offsetting and compensation framework is largely aspirational, relying on broad principles such as no net loss, like-for-like restoration, and long-term outcomes, without demonstrating how these will be implemented or enforced in practice. By combining offsets and environmental compensation, the framework does not clarify how ongoing or unmitigated impacts on high-value or irreplaceable habitats will be addressed. The proposal does not provide enforceable, site-specific targets for maintaining ecological function, connectivity, or the timing of ecological benefits. Based on the information presented, significant residual effects remain unaddressed, and the approach does not satisfy the precautionary requirements of RMA s6(c).
Review of - Limits to Offsetting and the Jedburgh Plateau This section is highly problematic and overly optimistic. The argument that Jedburgh Plateau wetlands and terrestrial habitats are not highly vulnerable or irreplaceable (paras. 286–289) minimises both their ecological significance and sensitivity. Past land use and ongoing grazing impacts do not negate the intrinsic value of these ecosystems, nor do they justify treating them as easily off-settable. The claim that pest control, fencing, and habitat enhancement across the plateau will compensate for significant residual effects (paras. 290 299) relies on unproven, large-scale interventions and assumes perfect implementation and ecological recovery, which is rarely achieved in practice. The proposed offsetting and compensation approach conflates enhancement of degraded habitat with genuine replacement of lost ecological function. It ignores that certain habitats such as bogs, fen wetlands, and high-value forest remnants cannot be meaningfully recreated or replaced elsewhere. Assertions of Net Gain or Net Positive outcomes are speculative, lack site-specific empirical validation, and fail to address cumulative effects, connectivity loss, or the precautionary principle under RMA s6(c). In short, the measures presented cannot reliably neutralise the ecological harm caused by the Project.

Review of - The Package of Measures to address Residual Effects

The proposed “package” relies heavily on large-scale pest control, fencing, enrichment planting, and habitat enhancement across multiple areas (Jedburgh Plateau, Ecological Enhancement Area, Copper Tussock Enhancement Area, Davidson Road Wetland Restoration Site) to compensate for unavoidable habitat loss and residual effects on fauna (paras. 300–326). While these measures may improve some local conditions, they assume perfect implementation, long-term maintenance, and ecological responsiveness, which are rarely achieved at this scale. There is little empirical evidence that such interventions can fully offset the loss of sensitive habitats such as bogs, fens, or southern rātā–kāmahi forest, or the impacts on threatened species including skinks, geckos, invertebrates, and wetland birds. Post-construction monitoring and species-specific compensation measures for avifauna are reactive rather than preventative, accepting some level of avoidable mortality and deferring action until impacts occur. The use of expert panels and research funding does not guarantee ecological outcomes and risks obscuring actual losses. Overall, the programme conflates enhancement of degraded habitats with true replacement of lost ecological function, ignores cumulative impacts and connectivity loss, and falls short of the precautionary principle required under RMA s6(c).

Conclusion

At this crucial time when national institutions and decision makers have degraded levels of public trust, protecting Slopedown from inappropriate development is an opportunity to illustrate to the broader population and specifically affected communities that systems of accountability are adhered to. Protection from compounding industrialisation, particularly in highly sensitive ecological environments, is in the national interest. Preservation of these high value landscapes has active precedents which defend their outstanding natural features. The proposed Southland Wind Farm has persistent baseline gaps, poor mitigation strategies and failed to convince the expert Environmental Protection Agency panel in 2025. Overturning the EPA precedent risks collapse of public buy-in as participants in the democratic process, and will have an undeniable permanent legacy of large companies being perceived as circumventing the rules and being permitted to degrade the landscape and risk further pressure on the already Threatened - Nationally Critical fauna for their profits.

Appendix A

A. Images of Pawakataka:

Sunrising over Pawakataka – taken from Glenham. Breathtaking. The height between the fog covering the Redan Valley and the top of the hill is approximately 300 meters. Using this for a scale, imagine 55 plus 220 metre high towers dotted along this entire horizon.

Pawakataka viewed from Mokoreta, Mt Egremont in foreground.

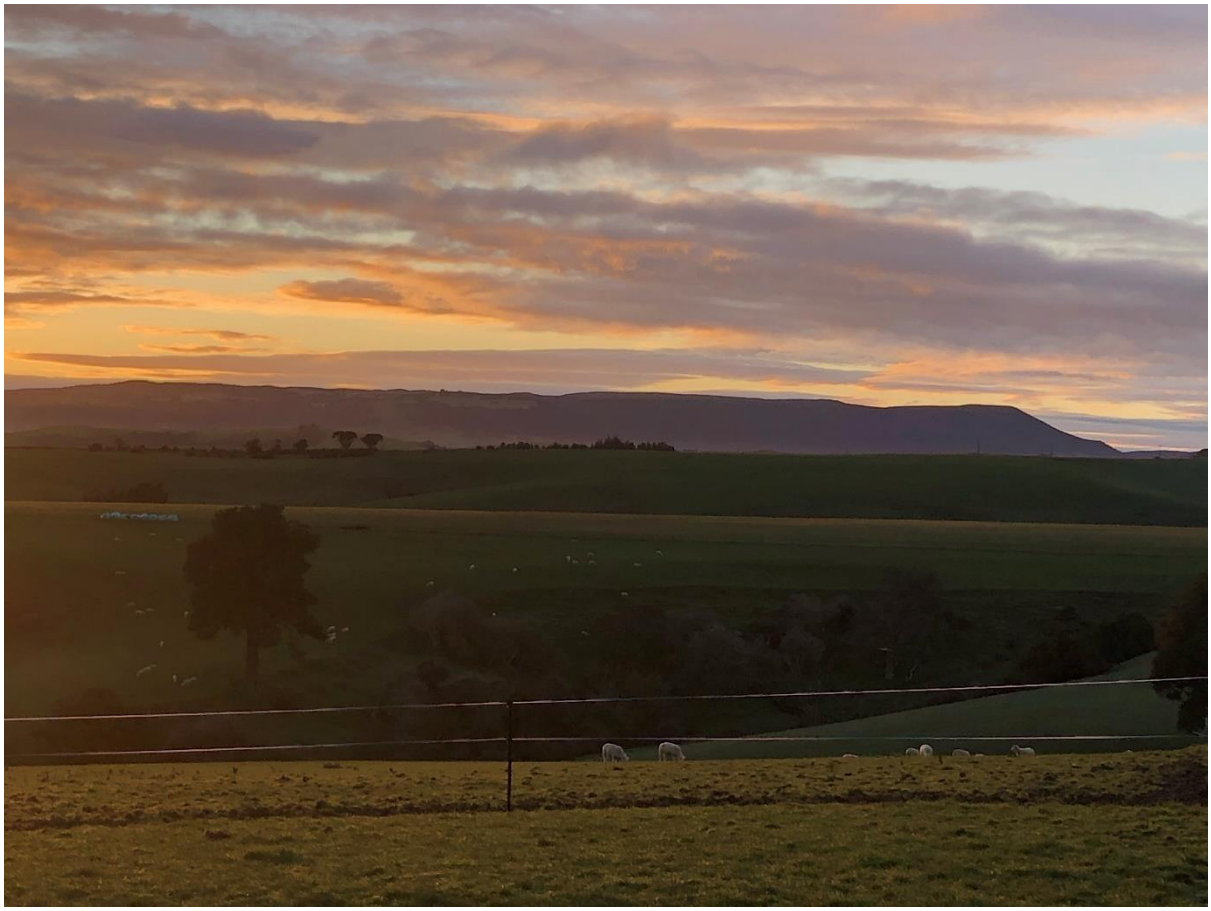
Skyline which wind farm will adorn. Looking north from Mokoreta Valley.

Catlins Conservation Park in background, Slopedown hill right hand side. Taken from Mokoreta/Redan Valley.

Drive into Mokoreta / Redan Valley – taken 23 July. Photos don't do this place justice but gives some idea of scale of slopedown visibility. Wind farm will be situated on green paddocks top left and back.

Pawakataka in background. Distinctive straight line across skyline then slope down to Mt Egremont. Taken from South Wyndham.

Slopedown and Wind Farm site from South Wyndham.



View of wind farm site in background from South Wyndham. Distinctive skyline shape.

B.Image prepared by Contact. Looks awful. Query how turbines on left hand side on front of ridge can appear so small. Scale of turbines questionable.

C.1 Image prepared by West Catlins – showing extent of degradation on Slopedown hill. We believe this is a more accurate representation then the grey/white scaled photos generally prepared by Contact. Taken at South Wyndham.

C.2 Image prepared by West Catlins showing artists impression of wind farm.

D. Image prepared by Paul Botha, Roaring 40s. One of the few pictures we could find by the developer of looking back at Slopedown Hill by Contact. Given how visible Kaiwera Turbines are, landowner disputes turbines shown in image. Location is 12.5km from nearest turbine at South Wyndham. Turbines grey/white scaled to look invisible. Apologise for size – can forward email if required.

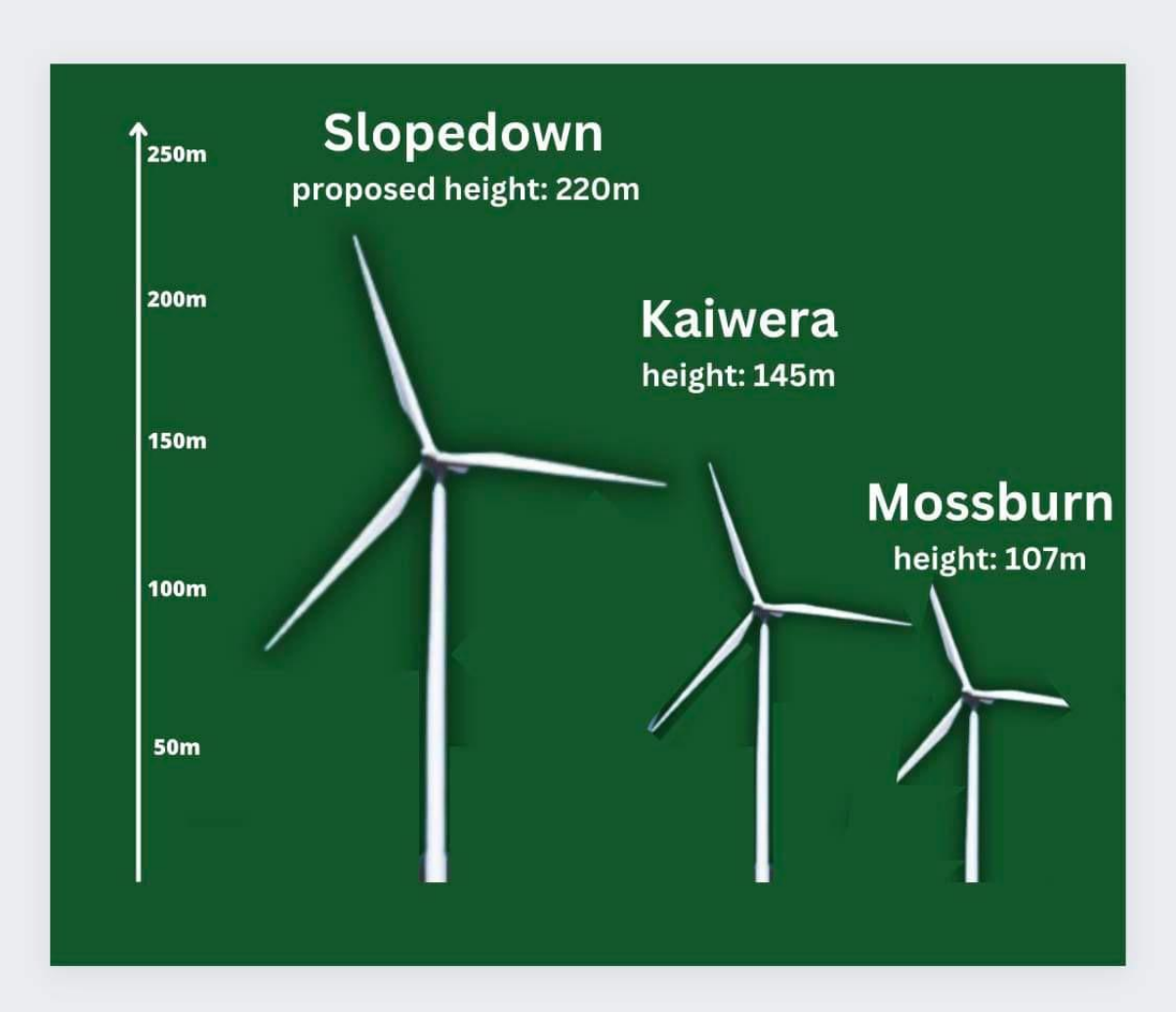
E. Contact prepared image at gateway to catlins conservation park.

F.1 Welcome to the Catlins Conservation Park will have the towers in image E above notably visible. House pictured in image E is this house in F.1 and F.2 below.

F.2 Continued Welcome to the Catlins Conservation Park will have the towers in image E above notably visible. House pictured in image E is this house in F.1 above and F.2

Note – beauty of Catlins Conservation Park in background.

G. View of Pawakataka and Jedburgh Plateau from Wyndham Cemetery – majority graves facing windfarm site.



H. Image showing how other Southland windfarms are not comparable for the purposes of any landscape assessment.

I. Photo taken of Wyndham A & P Show wind farm survey results.

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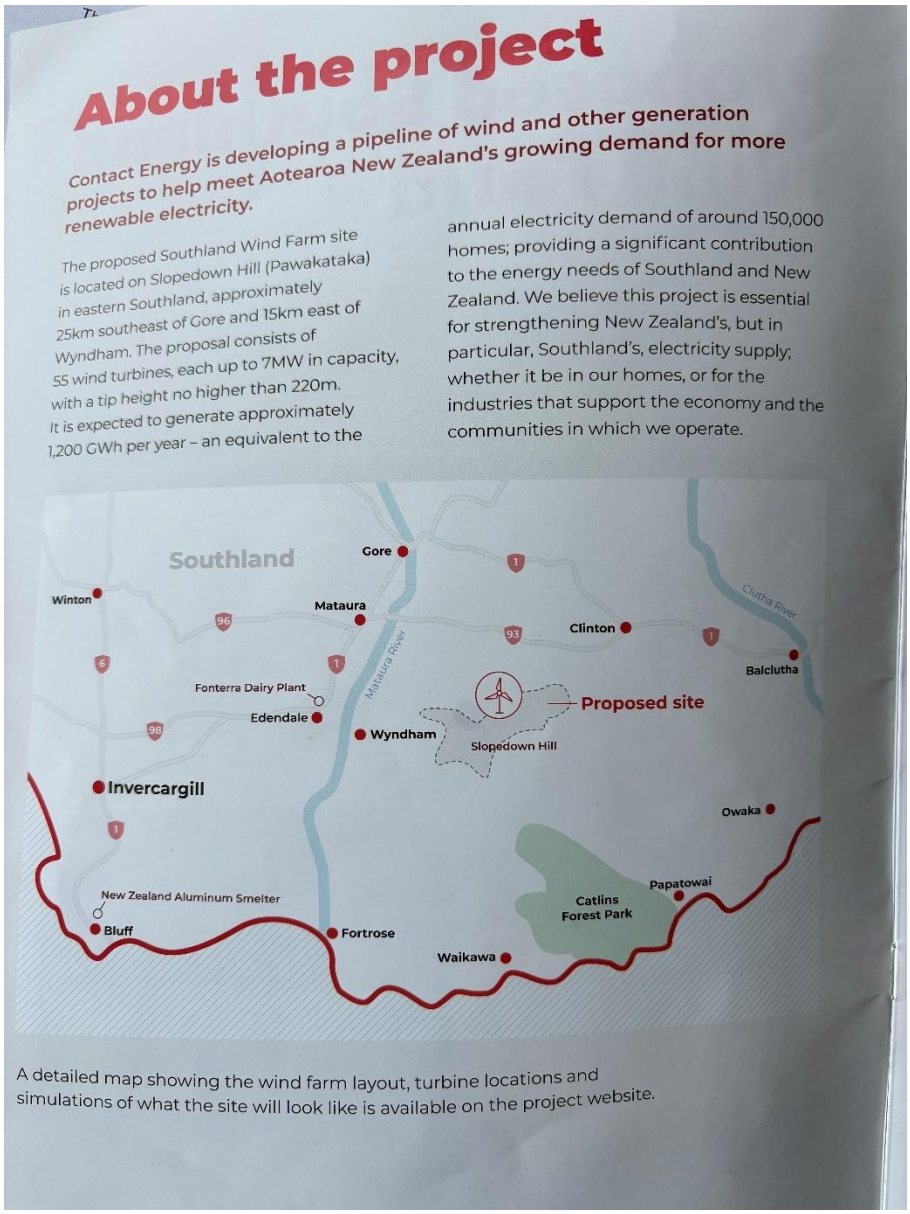

J – Contact Energy mail dropped brochure Nov/Dec 2025 showing inaccurate location of Catlins Conservation Park.

Appendix B – Letter from Catlins Coast Inc dated 23 August 2023

Appendix C – Boffa Miskell Report Noting Slopedown / Mokoreta – Pukemimihau ONF