PART B

CONTACT ENERGY LIMITED

Southland Wind Farm

Approvals relating to the Resource Management Act 1991

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1. INTRODUCTION

1.1 OVERVIEW

Section 43(3)(a) of the Fast-track Approvals Act ("**FTAA**" or "**the Act**") sets out that a substantive application must, for an approval for a resource consent, include the information required by clauses 5 to 9 of Schedule 5 of the FTAA.[1] This part of the substantive application provides the information required for all necessary resource consents sought by Contact Energy Limited ("**Contact**") to authorise activities for the Southland Wind Farm Project ("**the Project**") that would otherwise be applied for under the Resource Management Act 1991 ("**RMA**").

The other approvals that are being sought as part of this substantive application which relate to concessions, wildlife permits, a general archaeological authority and complex freshwater fisheries activities are addressed in **Parts C-F** of these application documents.

The Southland Wind Farm is located within the Southland District and Southland Region. In addition, the transmission line and Grid Injection Point are located in the Gore District. Therefore, resource consents to authorise the Project are being sought under the FTAA that would otherwise be required from the Southland District Council, Southland Regional Council and Gore District Council.

A description of the Project, including the Project Site, is provided in full in **Part A** to these application documents, which forms part of this application. The figures referenced in this report are included in **Part G** to the application documents.

1.2 REPORT STRUCTURE

This part of the substantive application is comprised of the following sections:

Section 1: Is this introduction.

Section 2: Describes the environmental setting, including general site characteristics, and the physical setting for the Southland Wind Farm Project.

Section 3: Sets out the resource consent requirements for the Southland Wind Farm Project in accordance with the relevant statutory planning documents.

Section 4: Outlines the consultation undertaken by Contact throughout the preparation of the application.

[1] Clause 8 and 9 of Schedule 5 of the FTAA are not relevant to this Project.

Section 5: Provides an assessment of the actual and potential environmental effects associated with the Southland Wind Farm Project.

Section 6: Outlines the methods to be applied to the management and monitoring of actual and potential environmental effects which are set out within proposed conditions of consent.

Section 7: Provides an assessment of alternatives.

Section 8: Sets out the statutory framework within which these applications have been made and describes the Project in relation to the provisions of the FTAA, the RMA and the relevant statutory planning documents.

Section 9: Is a conclusion.

2. EXISTING ENVIRONMENT

2.1 INTRODUCTION

This section of the application addresses clause 5(1)(b) of Schedule 5 of the FTAA and provides a description of the existing physical, social, environmental, and cultural values of the proposed Southland Wind Farm site and the surrounding environment. The description of the existing environment provides the context against which the potential effects of the proposal are to be assessed.

2.2 SITE LOCATION

The proposed Southland Wind Farm is located on Slopedown Hill in eastern Southland, approximately 50km east of Invercargill, 30km southeast of Gore and 12km east of Wyndham (refer to **Figure 1** below, which is **Figure Project Description-2A (Part G)**). The Wind Farm Site covers approximately 58km^2 of privately owned land, including land which forms part of two sheep and beef farms (Jedburgh Station and Glencoe Station), and Venlaw plantation forest owned by Matariki Forests.

The proposed Southland Wind Farm comprises two main components - a Wind Farm, where the wind turbines, wind farm substation, and wind farm roads are located, and the Grid Connection works, being the infrastructure required to connect the wind farm to the Transpower National Grid. This comprises a high voltage (220kV) overhead transmission line and a switching station, also known as the grid injection point ("**GIP**"). From a property perspective, these two Project aspects are described in this application as follows:

- **Wind Farm Site**: the land upon which the wind turbines, wind farm substation and wind farm roads are located. This area is entirely in the Southland District and the Southland Region.
- **Project Site**: the Wind Farm Site, plus the land also required for the grid connection works (i.e. the transmission line and the GIP). This area is partly in the Southland District and partly within the Gore District, and entirely in the Southland Region.

In addition, the main access route into the Wind Farm Site is through the privately owned Port Blakely forest. This is partly within the Southland District and partly within the Gore District (the boundary following the Mimihau Stream North Branch which flows through this property).

There are three broad components to the Wind Farm Site:

- The Venlaw Station / Matariki Forests site (the eastern part of the Wind Farm Site), which is dominated by exotic plantation forestry;

- Most of the combined Glencoe Station and Jedburgh Station sites (the western part of the Wind Farm Site), which is dominated by exotic pasture; and
- An elevated, approximately 530ha area on Jedburgh Station, located at the southern end of the Wind Farm Site, which is comprised of a mosaic of wetlands and other mostly indigenous vegetation.[2] This area is referred to as the **Jedburgh Plateau**, identified in **Figure Project Description-7 (Part G)**. The extent of the Jedburgh Plateau has been defined based on topography, geology, vegetation and ecology and is referred to throughout this application document. It can be described as an elevated, exposed and relatively flat area, between 520m – 630m in elevation. The area is currently used for farming, albeit not intensively.

[2] See Wildlands (2025) for a more detailed description of the ecological values of the Jedburgh Plateau.

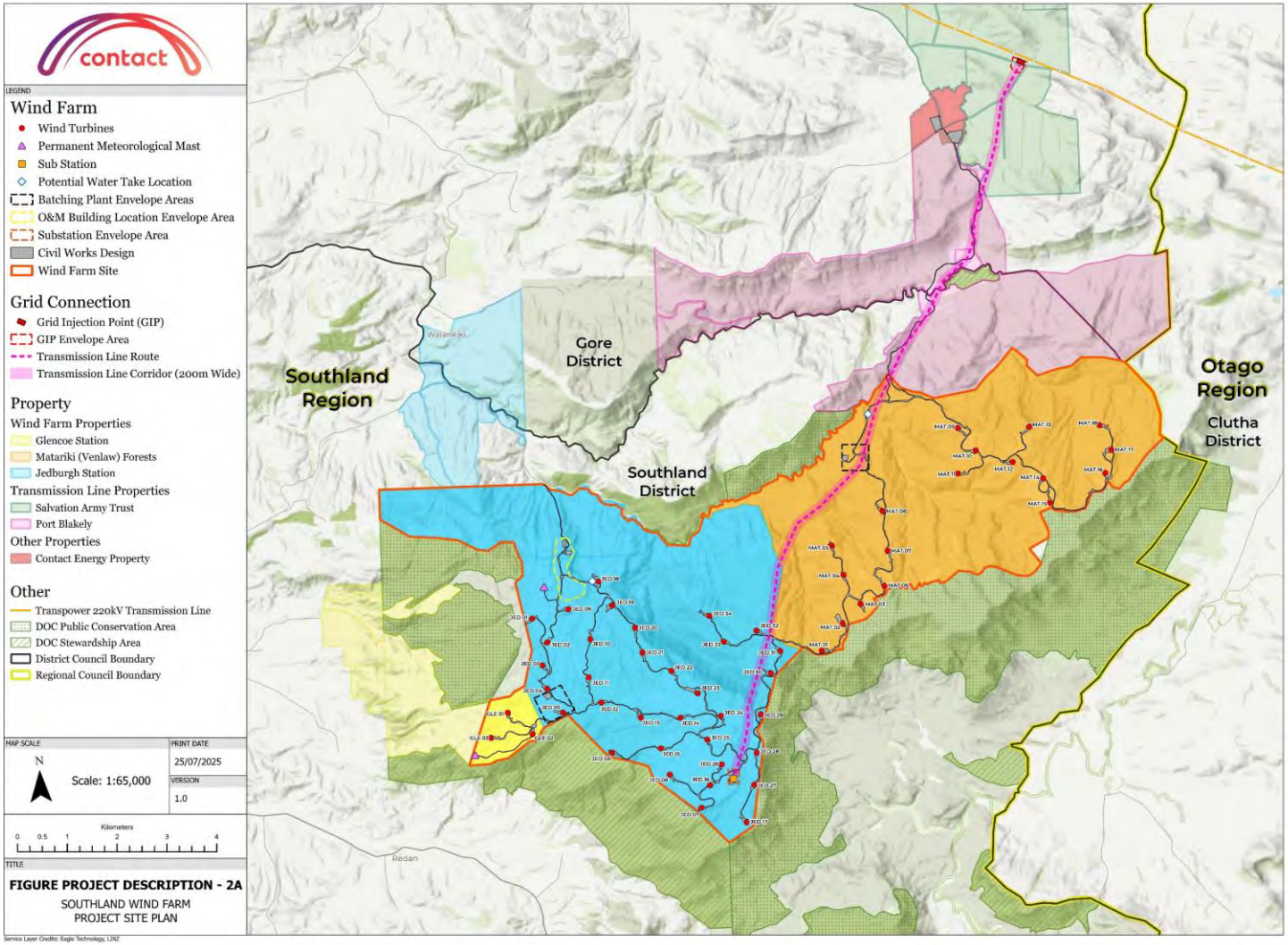

Figure 1: Southland Wind Farm Project Site.

2.3 LAND OWNERSHIP

Table 1 below outlines the land holdings for each component of the Southland Wind Farm (as in, the entire Project Site) and the relevant Record of Titles are included in **Part L** to these application documents.

Table 1: Southland Wind Farm – Land Holdings and Interests.

Legal Owner	Legal Description and Title Reference	WTGs[3]	Wind Farm Substation	Site Access	Transmission Line	Switching Station (GIP)
[redacted]	Section 3 Block IX Slopedown Survey District, RT SL9D/824	34	Y	Option 1[4]	Y	
[redacted]	Section 2 Block IX Slopedown Survey District, Section 1 Survey Office Plan 9639 and Section 1 Survey Office Plan 10255, RT SL8D/456			Option 1		
[redacted]	Lot 1 DP 3613 and Section 1 Survey Office Plan 9465, RT SL155/79			Option 1		
[redacted]	Lot 2 DP 363843 and Lot 1 DP 13176 and Section 1-2 Survey Office Plan 9464 and Section 15 Block X Tuturau Survey District and Part Section 16 Block X Tuturau Survey District, RT 259751			Option 1		
[redacted]	Lot 1 DP 363843, RT 259750			Option 1		
[redacted]	Lot 1 DP 12509, RT 407674	18				

[3] Wind Turbine Generators: these are located on three landholdings.

[4] Option 1 is the transport route into the Wind Farm Site accessed from the west, via Thornhill Road (off Venlaw Road).

Legal Owner	Legal Description and Title Reference	WTGs[3]	Wind Farm Substation	Site Access	Transmission Line	Switching Station (GIP)
[redacted]	Section 61-62 Block III Wyndham Survey District, RT SL9B/866	3				
[redacted]	Lot 2 DP 362693, RT 255758			Option 2[5]	Y	
[redacted]	Lot 4-7 DP 15305, Lot 1-4 DP 15076 and Lot 1 DP 15078, SL12B/81			Option 2	Y	
[redacted]	Section 26 Block II Slopedown Survey District, 265526			Option 2	Y	
[redacted]	Section 11, Section 16-17 and Part Section 9-10 Block II Slopedown Survey District, RT SLA4/151				Y	
[redacted]	Section 5 and Section 20-22 Block II Slopedown Survey District, RT SL17/134				Y	Y
[redacted]	Lot 1-3 DP 15305 and Lot 1 DP 15306, SL12B/80			Option 2		
Gore District Council, Southland District Council, Clutha District Council	Road reserve and unformed legal road (paper roads)			Option 1 and Option 2	Y	

[5] Option 2 is the transport route into the Wind Farm Site accessed from the north, through the Port Blakely forest property, accessed from Davidson Road West (off Kaiwera Downs Road).

2.4 ADJACENT PERSONS

The full name and addresses of owners and occupiers of the properties adjacent to the Project Site (where occupiers were identifiable after reasonable inquiry) is provided in **Part L** of these application documents in accordance with Clause 5(1)(d) of Schedule 5 of the FTAA. In compiling the list of adjacent persons, consideration has been given to land that has a common boundary or is contiguous with the Project Site, and land that is close enough to be considered to form part of the context of the Project Site.

2.5 ZONING AND PLANNING OVERLAYS

The Wind Farm Site is located in the General Rural Zone in the Southland District Plan (**Figure Part B-1 (Part G)**). The only notable features being identified on the planning maps are the Mimihau Stream South Branch, which runs along the northern boundary of the Wind Farm Site, the Mimihau Stream North Branch located to the north of the Wind Farm Site, and an archaeological feature (F46/24) located to the north of the Wind Farm Site.

The proposed transmission line route and GIP is located in the Gore District and is in the Rural Zone as defined in the Operative Gore District Plan and the General Rural Zone in the Proposed Gore District Plan.

The Catlins Forest Park, which the Department of Conservation ("**DoC**") administers, is located to the south-east of the Wind Farm Site. The Southland Wind Farm is not physically located on this land and no construction related activities will be undertaken within this area.

2.6 GEOLOGY

Riley (2025) consider the geology of the Project Site in their Construction Effects assessment prepared for the Project (included in **Part H**).

The geology of the Project Site is underlain bedrock consisting of fossiliferous sandstone and mudstone, with minor shell beds, which are correlated to the Ferndale Group of the Murihiku Supergroup. The sedimentary rocks were originally deposited in a marine environment and have since been consolidated and subject to low-grade metamorphism. Ancient compressional tectonics folded the Murihiku Supergroup about a current north-west to south-east trending axis to form the regional-scale Southland Syncline. The geometry of the Southland Syncline is asymmetrical, with bedding in the southern limbs inclined gently to the north and steep to very steep bedding north of its axis. Compressional tectonics associated with the plate boundary formation during the late Miocene and Pliocene has resulted in the present-day elevation of the Wind Farm Site. The geology and

tectonic history have significantly contributed to large scale landscape features such as ‘strike-ridges’, ‘dip-slopes’ and ‘back-slopes’.

2.7 LANDSCAPE

Coombs (2025) and Bray (2025) describe the landscape values of the existing Project Site (refer to **Part H**). Their analysis is summarised in the sub-sections below.

2.7.1 The Southland Wind Farm Site and Surrounding Area

The Project Site is located in eastern Southland. The topography of the area is comprised of rolling hill landscapes, with flat terraces and valleys, including the Mataura River and the eastern Southland Plains to the west. The surrounding area is a working rural landscape, characterised by flat productive land, primarily utilised for a mixture of pastoral farmland, plantation forestry, and associated processing industries, and indigenous vegetation associated with the Catlins Forest Park and the Slopedown Conservation Area, both administered by DoC. The energy landscape is also prevalent, including wind turbines at Kaiwera Downs, White Hill and Flat Hill as well as a range of transmission facilities. The Wind Farm Site sits on the edge of this landscape but is strongly connected to it.

The Catlins is located to the south and south-east of the Wind Farm Site. The inland Catlins area is dominated by several parallel ranges, typically at 400m-700m in height, separated by the valleys of the Owaka, Catlins and Tahakopa Rivers, draining south-eastwards to the Pacific Ocean. The ranges in the south-eastern part of the Catlins are largely clad in temperate indigenous forest, which in some areas extend down to the coast. This area is collectively known as the Catlins Forest Park. Valley floors with gentle topography within this area are largely comprised of pastoral agricultural land.

The scarp adjacent to the Wind Farm Site is part of an isolated area of the Catlins Forest Park, however, the closest part of the main area of the Catlins Forest Park is a contiguous area of forested hill and valley landscape that lies approximately 10km to the south-east of the Wind Farm Site. Therefore, whilst the proposed Wind Farm Site is the start of a transition towards this squally landscape, it firmly retains the sense of productive character from the plains.

The Wind Farm Site is located amongst broken hill country, on the back slope of a cuesta landform. It has a steep, bush-clad scarp to the south-east (**Figure 2** below) and a gentler back slope (dip slope) to the north-west. It is part of the Southland Syncline, a distinctive pattern of greywacke hills running between the Catlins and the Takitimu Mountains. While the northern limb of the syncline has a strong pattern of parallel ridges, the southern limb is broken up by faults and folds into a blocky pattern of cuesta landforms.

Coombs (2025) considers the scarp has higher landscape values compared to the backslope, with a prominent sharp skyline and a ridgeline comprising of named features including, Mokoreta (713m), and two distinctive knolls further to the east, Puke Mimihau (664m) and The Cairn (658m). An additional highpoint at 634m located on the Jedburgh Station Plateau is the location referred to as Pawakataka (identified by Te Ao Marama Inc ("**TAMI**") and described in the cultural values section below).

Figure 2: Helicopter view of the bush-clad scarp located to the south-east of the Wind Farm Site.

The Wind Farm Site is approximately half comprised of pastoral farmland (including some areas of native vegetation and scrub) and half plantation forestry (**Figures 3** and **4** below). The north facing dip slope of the Wind Farm Site's landform is therefore best described as a typical rural landscape, with a relatively broad surface, albeit dissected by streams. The streams rising on the north facing backslope are tributaries of the Mimihau Stream, which flows through a farming landscape, joining the Mataura River north of Wyndham.

Coombs (2025) considers that based on the description of the ecological and natural values of the ecology of the Wind Farm Site (summarised in the sections below) and the landscape attributes of the Wind Farm Site, the natural character values of parts of the Wind Farm Site are high. These are areas of identified wetlands on the Jedburgh Station Plateau (described further in the sections below). In addition, the Mimihau Stream South Branch is located

within the Wind Farm Site. Coombs (2025) considers the natural character values of the Mimihau Stream South Branch are moderate-high.

Recreational values in the area and within the Wind Farm Site are limited. There are no mapped tracks or walkways through the scarp. The DoC conservation areas surrounding the Wind Farm Site are used for hunting activities and tracks and huts in the wider Catlins Forest Park are utilised for tramping and hunting.

Figure 3: Aerial view of part of the Southland Wind Farm Site (looking west over Jedburgh Station).

Figure 4: Aerial view of part of the Southland Wind Farm Site looking south-east. Matariki Forest is on the left and Jedburgh Station is on the right.

2.7.2 Outstanding Natural Feature or Landscape

The Wind Farm Site is not located within a scheduled Outstanding Natural Landscape ("**ONL**") or Outstanding Natural Feature ("**ONF**") in any of the applicable statutory plans or policy documents. However, part of the Wind Farm Site has been identified as a candidate ONF through a separate report, the Southland/Murihiku Regional Landscape Assessment prepared by Boffa Miskell in 2019, which was prepared for all of the District and Regional Councils in Southland and TAMI. The report has not been used to inform a change to the Southland District Plan which would subject its findings to public consultation and scrutiny under plan change process under Schedule 1 of the RMA. The report identifies the Slopedown/Mokoreta-Pukemimihau ONF candidate area, which includes the scarp and dip slope and a mosaic of natural (and non-natural) vegetation on the dip slope (part of which includes the Jedburgh Plateau).

Coombs (2025) considers that the scarp is a noteworthy geomorphic feature with the distinctive 'Slopedown' sharp drop in the skyline of the landform, as viewed from the west (the Southland Plains), which is the southernmost section of the scarp, and is outside of, and separated from, the Wind Farm Site. Whilst the dip slope has some elevated ecological values, Coombs (2025) considers it is not a feature in the landscape sense (it is not singular and distinctive) and is clearly and significantly affected by browsing, productive land management practices and the presence of stock and pest animals.

Bray (2025) has also considered the appropriateness of the ONF candidate area and notes that most of the outstanding values are derived from the scarp, which has highly legible geological forms, which is reinforced by the forest canopy and its contrast to the surrounding productive landscapes. The productive and more compromised Plateau and north facing dip slope do not hold outstanding values, noting that the vegetation on the Jedburgh Plateau is not intact (as is incorrectly suggested in the report prepared by Boffa Miskell) due to the existing activities that occur on the land.

2.7.3 Visual Catchment

Bray (2025) considers there is generally a restricted potential viewing catchment, as the Wind Farm Site appears to be less visually exposed. The most prominent and broader views towards the Wind Farm Site are form the west and north-west, with views from the south being more restricted, generally focussed on small defined portions of the broader landscape. Views equally display the strong contrast between pastoral farming across the valley floor and native vegetation extending up the steep slopes. To the north and west, the Wind Farm Site essentially vanishes from view as it is screened by intervening landforms.

2.7.4 Dwellings surrounding the Wind Farm Site

The area around the Wind Farm Site is sparsely populated, with a low density of dwellings present across the rural landscape. The closest town to the Southland Wind Farm Site is Wyndham, located approximately 12km to the west. There are no dwellings within 2km of the proposed wind turbines, the closest dwelling is approximately 2.3km from the nearest wind turbine.

The dwelling inventory identifies the following:

- 8 identified dwellings within a 3km distance of the nearest proposed wind turbine;
- 25 identified dwellings located within a 4km distance of the nearest wind turbine (including the 8 above, all numbers below are likewise inclusive);
- 40 identified dwellings located within a 5km distance of the nearest wind turbine;
- 103 identified dwellings within a 7.5km distance of the nearest wind turbine; and
- 164 identified dwellings within a 10km distance of the nearest wind turbine.

Figure Part B-2 (Part G) identifies the dwellings present within 10km of the wind turbine layout.

2.7.5 Kaiwera Downs Wind Farm

The Kaiwera Downs Wind Farm, owned by Mercury NZ Limited, is located to the north of the proposed Southland Wind Farm. Stage 1 of the Kaiwera Downs Wind Farm was completed in November 2023 and consists of ten wind turbines, 145m in height. These are approximately 10km to the north of the closest wind turbines within the Southland Wind Farm. Consent has been granted for Stage 2 of the Kaiwera Downs Wind Farm, which will comprise of an additional 56 wind turbines, 165m in height. The distance between the closest wind turbines in the Kaiwera Downs Wind Farm (Stage 2) and the Southland Wind Farm will be approximately 4km.

2.8 CULTURAL VALUES

Contact recognises that Kā Papatipu Rūnaka ki Murikihu hold ahi kaa, mana whenua and mana moana within the Murihiku takiwa, and acknowledges the relationship mana whenua have with the Pawakataka/Slopedown area. Contact understands that it is for mana whenua to describe any cultural or historical associations with the Project Site. Section 6 of **Part A** to these application documents provides a detailed summary of the consultation that has occurred between Contact and TAMI and Te Rūnanga o Ngāi Tahu on behalf of Kā Papatipu Rūnaka, as well as with the individual Murihiku rūnaka in relation to this Project, including a description of the cultural values associated with the Project Site. This is summarised for completeness below.

Pawakataka is in the Ngāi Tahu takiwā, in a region known as Murihiku that includes Southland (refer to **Figure 5** below). Pawakataka is referred to as an Ihu Whenua, a prominent and revered part of the landscape where the interconnections between land, water, flora, fauna, atua and people are accentuated. Pawakataka is a landmark that looks across Te Awa a Kiwa, Te Rā a Takitimu (Southland Plains) to the inland mountains and headwaters. It is a place where people can physically and spiritually rest, reflect and orientate themselves.

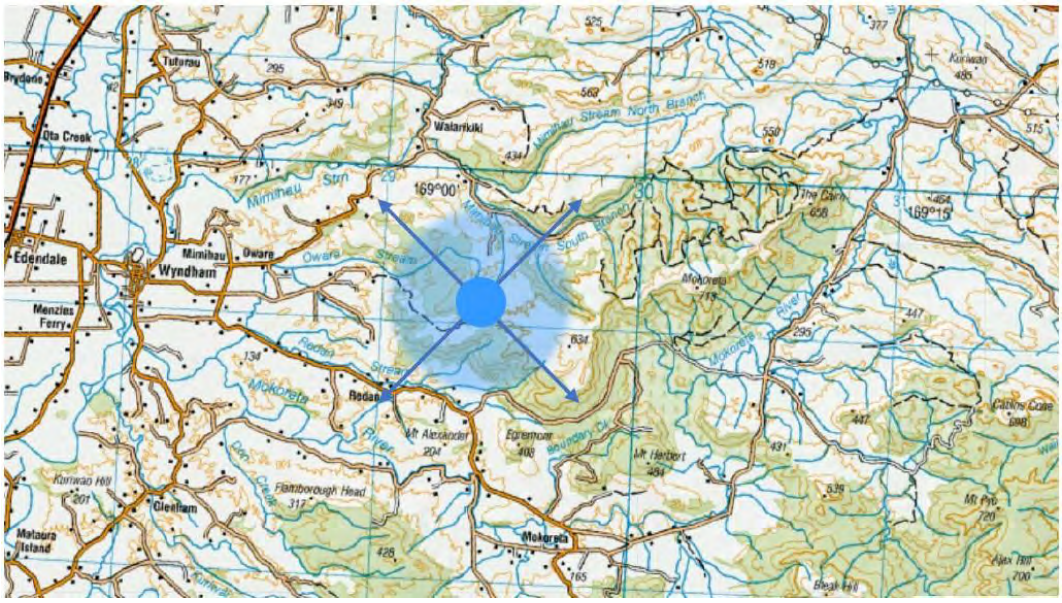

Figure 5: The area identified as Pawakataka.

Ngāi Tahu has a long association with the Murihiku Region, including the Pawakataka / Slopedown Hill, Mataura, Mokoreta and the Mimihau. Ngāi Tahu led a nomadic lifestyle throughout the region. Generally, the use of the area was extensive rather than intensive, however, the area is thick with iwi stories, traditions and cultural practices. Pawakataka was part of travel routes that crisscrossed between the inland and coastal nohoanga, kaika and mahinga kai.

Pawakataka has an important role in the biodiversity and ecology of the catchment and the connection of Ngāi Tahu ki Murihiku with the coast and inland areas, as well as with Tāwhiri-matea, Papatūānuku and Rangi. However, since European settlement of the area, access, use and condition of the landscape has declined. In particular, Ngāi Tahu ki Murihiku noted the loss of indigenous flora, fauna and biodiversity and the limited opportunities for Ngāi Tahu to practice mahinga kai or express kaitiakitanga.

The key values, rights and interests Waihōpai Rūnaka associate with the Project Site include:

> Mauri and the life-supporting capacity and cultural and ecological health of Pawakataka and the surrounding environment;

> The ability of future generations to engage with Pawakataka and the surrounding environment;

> Water quality is to be protected to standard that allows for mahinga kai to be diverse, abundant and safe to eat;

- Mahinga kai species, habitat and access to these for customary use during and after the activity is protected;
- The protection of wāhi tapu, wāhi ingoa and archaeological sites within, or surrounding, the vicinity of Pawakataka and surrounding environment; and
- The ability of Waihōpai Rūnaka to exercise rangatiratanga over Pawakataka and the surrounding environment; and
- Exercise of kaitiakitanga within the management and monitoring processes of the Southland Wind Farm Project.

2.9 ARCHAEOLOGICAL AND HERITAGE VALUES

Cook (2025) outlines the archaeological and heritage values within the Project Site. The existing archaeological and heritage values associated with the Project Site are summarised below.

The region immediately surrounding the Project Site was an important location of both settlement and travel for mana whenua prior to the arrival of Europeans. A network of several ara tawhito (traditional travel routes) converge to the north and a kāinga (village) known as Tuturau, is located approximately 12km north-west of the Project Site. Archaeological sites relating to mana whenua land use have been identified both in the surrounding area and within the Project Site and are indicative of a well-traversed and utilised landscape.

Following the arrival of Europeans, the land cover was transformed for agricultural purposes, becoming Run 251, later named as Venlaw Run, in 1858. The run went through various licence holders throughout the remainder of the 19th Century.

Aerial photography taken over time shows that the Matariki forestry blocks have been progressively harvested and are in the process of re-growing. The planting of forest plantations, their growth and harvest are all surface and subsurface disturbing activities. As such, it is likely that any archaeological sites have been at least partially disturbed by this land use, if not outright removed, thereby reducing the archaeological potential of this portion of the Project Site.

Given the above, Cook (2025) considers the most likely archaeological sites within the Project Site will be related to mana whenua land use.

Cook (2025) completed a site survey to identify archaeological sites within the Project Site. This included reviewing the New Zealand Archaeological Association's ("**NZAA**") site recording database (ArchSite) which indicated that 13 sites have been recorded within, and

near, the Project Site. 12 of these sites are related to mana whenua use, with eight of these being the remains of midden / oven sites, while the remaining four are adze find locations, with one site, F46/10, being the location of six adze finds. These sites demonstrate that the immediate area was likely used for frequent, relatively short-term occupations, likely a result of the location near the crossroads and Tuturau and the possible interactions that resulted from this. In addition, two musterer's huts were recorded during the site survey, which are now included on ArchSite as G46/17. The 14 recorded sites are shown in **Figure Archaeology-1 (Part G)**.

Two archaeological sites have been identified within the Project Site:

> G46/17 – This is the location of two musterer's huts that relate to the historic function of the property as part of the Venlaw Run. These huts are located approximately 145m away from the proposed access road, approximately 30m from the proposed transmission line, though 210m from the proposed transmission line Pylon. Therefore, this site will not be affected by any Project related structures or activities.

> G46/13 – This is recorded on the NZAA site as an artefact (adze) find. The adze was removed from the site in 1987. The site was investigated during the site visit undertaken by Cook and no archaeological material was found, although the ground was highly vegetated. Cook (2025) notes that the location of G46/13 within the NZAA database may be incorrect as the site record form mentions the find being near a crossing, which would most likely place the site south at the Mimihau Stream. For this reason, this site was also examined by Cook, however, no archaeological material was found. The archaeological value of the adze find site is considered to be low.

Overall, Cook (2025) considers the total archaeological value of the Project Site is low.

2.10 METEOROLOGY AND CLIMATE

Rainfall records nearest to the Wind Farm Site indicate that mean annual rainfall is typically between 1,000 – 1,500mm/annum.[6] Temperature records at Gore range between -4°C – 31°C. It is anticipated that the temperature on the Wind Farm Site will be lower than this, due to its elevation.

Occasional snowfalls are possible on the Wind Farm Site. Snow can remain on the ground for days or, or even weeks, especially on the more elevated parts of the Wind Farm Site when low temperatures persist following snow events.

[6] Southland Regional Council data collected at the 'Mokoreta at Mt Alexander site', located approximately 7km southwest of the centre of the Wind Farm Site.

Contact will deploy up to two meteorological masts on the Wind Farm Site to increase understanding of the meteorology and climate conditions of the Wind Farm Site for operational purposes.

2.11 SURFACE WATER

Riley (2025) describes the existing hydrological environment, while Ryder and Goldsmith (2025) describe the existing freshwater ecology environment.

The Project Site covers parts of three catchments, the Mimihau Stream catchment, the Kaiwera Stream catchment and the Mokoreta River catchment (as identified on **Figure Aquatic Ecology-1 (Part G)**. Of these three catchments, the Mimihau Stream catchment has the potential to be the most impacted by the construction of the Project, due to the majority of the Project being located in this catchment, as well as the proposal to take water from streams within this catchment during the construction of the Project.

The Mimihau Stream has two main branches, the Mimihau Stream South Branch and the Mimihau Stream North Branch. They both flow in a general westerly direction, with the tributaries to these streams draining from the Wind Farm Site in a northerly direction. The Mimihau Stream is a tributary of the Mataura River. There are some minor tributaries to the Mokoreta River, located to the south of the Wind Farm Site, and the Redan Stream which drain part of the Wind Farm Site. These also discharge into the Mataura River.

The Kaiwera Stream flows north out of the Project Site and then east, entering the Waipahi River, then the Pomahaka River before ultimately flowing into the Clutha River / Mata-Au.

Water quality monitoring within the Mimihau Stream South Branch tributary indicates existing impacts from high and increasing phosphorus levels, which, when considered with the decline in water clarity, indicates that sediment inputs are likely increasing through time.

2.12 TERRESTRIAL AND WETLAND ECOLOGY

Wildlands (2025) undertook an assessment on the terrestrial ecology and wetlands of the Wind Farm Site to inform this application. MacGibbon (2025) has carried out a review of that assessment, and provided additional observations. In addition, Kessels and Davidson-Watts (2025) completed an assessment on long-tailed bats. The following sub-sections describe the existing terrestrial and wetland ecology environment of the Project Site.

Collectively, Wildland Consultant's ("**Wildlands**") ecologists have spent approximately 3,600 person hours in the field since December 2022, comprising the following:

a) Vegetation mapping and plots, and wetland delineation – 550 hours;

b) Avifauna surveys – 1,100 hours;

c) Lizard surveys – 1,100 hours; and

d) Invertebrate surveys – 875 hours.

The time spent has allowed Wildlands to gain a deep understanding of the habitats, ecological processes, species, ecological values and existing threats to those values.

2.12.1 Ecological Context

The Project Site spans the boundary of the Waipahi and Tahakopa Ecological Districts. Most of the Project Site is comprised of land classified as 'less reduced and better protected' land environments (that retain >30% of their indigenous cover, of which >20% is protected), while a portion of the Project Site is classified as 'acutely threatened' land environments (that retain <10% of their original indigenous cover), mostly on the gently sloping landforms at lower elevations of western Jedburgh Station and Glencoe Station (**Figure Terrestrial Ecology-5 (Part G)**).

The Wind Farm Site is also located adjacent to conservation land on its southwestern and southern boundaries. The Slopedown Conservation Area (stewardship land) is located to the southwest, and isolated areas of the Catlins Conservation Park are on the southern boundary of the Project Site, as well as an area protected by QEII covenant in the Mimihau Stream Catchment (identified on **Figure Terrestrial Ecology-6 (Part G)**).

2.12.2 Site History

The upper Jedburgh Station was largely cleared of forest and indigenous vegetation by historic fires, probably in the mid-decades of the 20th century, to establish pasture for farming. Since clearance, there has been a gradual but noticeable reversion across the site from pasture back to shrubland. Aerial photography of the site shows obvious reduction in pasture-dominant land and an increase in indigenous shrubland between 1984 and 2023 (MacGibbon, 2025). The rate of reversion, especially of palatable native plants species, is very likely to have been slowed by the impacts of cattle and deer.

The pasture areas on Jedburgh Station and Glencoe Station are the more intensely farmed areas, however, the mānuka forest and scrub and the Jedburgh Plateau are also used for farming, although much less intensively. Approximately 300 cattle have been run in the Jedburgh Plateau through winter and sheep in summer. There is abundant evidence of the impact of cattle and feral ungulates (especially deer) on the Jedburgh Plateau. Ground surface pugging is evident through the wetland areas, across the shrubland, within the tall mānuka stands, and also beneath the margins of the regenerating rātā forest.

In addition, deer sign (hoof prints) is abundant across the whole Wind Farm Site, which suggests deer numbers are high. Evidence of browsing damage to a variety of indigenous species is also apparent and widespread which is likely due to the impacts of both cattle and feral deer (refer to **Figure 6** below). Recent and older ungulate tracking is also common beneath the taller mānuka stands and regenerating rātā-kāmahi forest and native seedling regeneration, especially of palatable species, is sparse, probably because of deer, pigs and cattle browsing and trampling. This is negatively affecting processes such as regeneration and forest succession.

Figure 6: Browsed understorey of the southern rātā-kāmahi forest, with only crown fern remaining.

2.12.3 Vegetation and Habitats

The Wind Farm Site is currently characterised by a mosaic of indigenous forest, pine and Douglas fir plantation forest, shrublands, wetlands and grassland habitats. Exotic grassland, indigenous forest, scrub, and shrubland, dominated by regenerating mānuka cover the gently rolling hills across most of Jedburgh Station. Indigenous broadleaved forest species characterised by co-dominant southern rātā and kāmahi occupy a large gully system that drains the northern portion of Jedburgh Station. Glencoe Station is dominated by exotic grazed grassland with ribbons of mānuka scrub and shrubland restricted to narrow

gullies. Matariki Forest is dominated by managed pine and Douglas fir forest, with small areas of indigenous vegetation, which mostly comprises copper tussock-dominated grassland and shrubland, scrub and shrubland dominated by mānuka and inaka, and narrow riparian corridors.

Approximately 62% of the Wind Farm Site consists of exotic-dominant vegetation.

Much of the indigenous vegetation is located on the Jedburgh Plateau. The Jedburgh Plateau is comprised of a mosaic of bog and fen wetland habitat interwoven amongst the extensive and regenerating mānuka (*Leptospermum scoparium*), tauhinu (*Ozothamnus vauvilliersii*), *Veronica odora*, and inaka (*Dracophyllum longifolium*) shrublands.

The Wind Farm Site includes pest plants and exotic-dominant habitat types that are found throughout the Southland Region. Moreover, as noted above, vegetation across the Wind Farm Site is subject to browsing and predation pressure by a number of introduced mammalian pests as the area is not currently subject to pest management.

2.12.4 Rare, Threatened and At Risk Plants and Habitat Types

The following habitat types listed as Threatened, At Risk or Rare ecosystems as per Appendix 2 of the Southland Regional Policy Statement ("**Southland RPS**"), are present within the Project Site:

- Pahautea / southern rātā-kāmahi forest;
- Southern rātā-kāmahi forest;
- Mānuka-haumakaroa-mountain holly forest; and
- Copper tussock / rautahi marsh.

One of the vascular plant species observed during a site visit, desert broom, is listed as 'At Risk – Declining'. Desert broom was not observed within the Wind Farm Site but is located close to the Mimihau Stream North Branch culvert crossing in the vicinity of where the northern construction access track site passes through the Port Blakely Forest. However, the proposed road footprint does not impact this vegetation.

In addition, indigenous forest and wetlands on the Jedburgh Plateau meet the criteria for ecological significance in the Southland RPS.

2.12.5 Wetlands

Extensive field surveys at the Wind Farm Site have been completed to determine the extent of natural wetlands within the Wind Farm Site using wetland delineation plots, field mapping and aerial imagery. Most of the wetlands present within the Wind Farm Site are fen

(102.26ha) and bog (28.7ha) wetlands, and many of these occur within Jedburgh Station on the Jedburgh Plateau. There is also 0.73ha of copper tussock-rautahi marsh wetlands within the Project Site.

The fen wetlands are located within gullies and the bog wetlands are located on broad ridges. The wetlands are prone to drying out in summer. Bog wetlands only receive water inputs via rainfall. Comparatively, fen wetlands are located in sloping areas where water collects, such as hillside slopes and gullies. Fen wetlands receive water inputs via rainfall, surface runoff and shallow subsoil interflow.

The wetlands on the Jedburgh Plateau are a mosaic of natural and induced wetland, of variable sized patches. These wetlands have abundant sub-fossil wood that indicates they formed as a result of deforestation of pahautea dominant forest and were induced after deforestation of pahautea forest. The Jedburgh Plateau has lost natural forest vegetation on the broad ridges, which means the wetlands on the Jedburgh Plateau have lost a significant part of their natural context. Their size, shape and water-holding capacity are largely determined by the topography of the impervious sub-strata layer below.

The vegetation in the fen wetlands is primarily comprised of rautahi, comb sedge and sphagnum moss, with scattered inaka and occasional upland shrubs (**Figure 7**), while the vegetation in the bog wetlands is dominated by low stature inaka, with occasional mānuka, *Olearia laxiflora* and *Coprosma elatirioides* (**Figure 8**). Currently, the wetlands on Jedburgh Plateau are adversely affected by browsing from mammalian pests, particularly deer (refer to **Figure 9**).

As the Jedburgh Plateau follows the successional path of reversion to shrubland and then back to forest, the type and extent of wetland can be expected to change. Woody species such as mānuka and pāhautea are expected to grow on the wetland margins and raised areas within the wetlands (mānuka is occupying wetland space now). As these species dominate and form a canopy, the nature of the vegetation growing in the wetland areas will change the wetland type and extent. Some of the bogs with deeper and more reliable water storage may retain bog vegetation and not revert to forest, but many of the bog and fen wetlands will be replaced by indigenous forest.

Wildlands (2025) completed an assessment of the ecological values and ecological significance of the wetlands present in accordance with the criteria outlined in the Southland RPS. The bog, fen and copper tussock wetlands are all assessed as having very high ecological values and are ecologically significant. All three wetland types meet the representativeness sub-criterion (i) and fen wetlands and copper tussock / rautahi marsh meet the rarity / distinctiveness sub-criterion (ii).

Figure 7: **A fen wetland present on Jedburgh Plateau.**

Figure 8: **Inaka-dominated bog on Jedburgh Plateau.**

Figure 9: Stock and deer pugging in a wetland on the Jedburgh Plateau.

2.12.6 Avifauna

The surveys of avifauna completed by Wildlands within the Wind Farm Site have identified 23 indigenous bird species and 15 exotic bird species. This included two indigenous bird species which are classified as 'Threatened – Nationally Vulnerable', the kārearea/eastern falcon and koekoeā/long-tailed cuckoo, and four indigenous bird species classified as 'At Risk', being the pihoihoi / New Zealand pipit ('At Risk – Naturally Uncommon'), mātātā/South Island fernbird, tōrea/South Island pied oystercatcher ('At Risk - Declining') and the kawau/black shag ('At Risk - Relict').

Kārearea/eastern faclon and mātātā/South Island fernbird have been observed at multiple locations across the Wind Farm Site. Pīhoihoi/NZ pipit observations were made in open country, along the track margins on the Jedburgh Plateau and in the pasture areas within the Wind Farm Site.

Based on the results of the bioacoustics surveys competed at the Wind Farm Site, which have only detected three species to date (ruru/morepork, mātātā/South Island fernbird, and tōrea/South Island pied oystercatcher), Wildlands (2025) consider the Project poses a low risk to migratory birds. With regard to kuaka/eastern bar-tailed godwits ('At Risk – Declining'), although there are records of this species around the Southland and Otago

coastline, they have not been recorded at the Wind Farm Site. Kuaka/godwits will fly over the South Island in small numbers, however, as the Wind Farm Site is approximately 35km inland, Wildlands (2025) consider it is highly unlikely that kuaka/godwits will fly over Wind Farm Site. Birds transiting from one site to another over the South Island generally fly at height, ranging between 0.5-4km, taking advantage of winds.

Further, no Australasian bittern have been recorded on the Jedburgh Plateau or Port Blakely wetlands.

2.12.7 Lizards

The surveys of the Wind Farm Site have detected two lizard species, the tussock skink and Tautuku gecko (both classified as 'At Risk – Declining').

Tussock skinks were primarily found within exotic grassland habitats within Jedburgh Station. At Matariki Forest, tussock skinks have been found within copper tussock, pine or mānuka dominated vegetation types near access roads or proposed platforms associated with wind turbines MAT-08, MAT-09, MAT-10 and MAT-11 and in mānuka-gorse/copper tussock shrubland along the proposed access road south of MAT-14 and at MAT-15.

Tautuku geckos were found within a patch of mānuka within the footprint of JED-21, on the other side of the main gully filled with southern rātā-kamahi forest near JED-34 and along an access track near JED-20 and JED-21. In total, six Tautuku geckos were detected during the surveys. Wildlands (2025) consider it is likely that Tautuku geckos are more widespread across the Wind Farm Site, although in low densities.

Whilst no green skink or herbfield skink have been detected in any surveys completed, Wildlands (2025) consider it is possible that green skink and herbfield skink may be present within the Wind Farm Site due to the presence of suitable habitat (copper tussock grassland).

2.12.8 Invertebrates

Invertebrate diversity, composition and abundance from surveys undertaken at the Wind Farm Site indicated high invertebrate values overall. The Wind Farm Site provides habitat for invertebrates, including moths, spiders, grasshoppers, wētā and beetles. The invertebrate surveys completed by Wildlands identified ten notable species:[7]

- Helms' stag beetles (*Geodorcus helmsi*; protected under the Wildlife Act 1953);

[7] Notable species are those that are 'At Risk' or 'Threatened', locally endemic, protected under the Wildlife Act (1953), large-bodied and reliant on a specific indigenous habitat type or taonga species for Ngāi Tahu.

- Ground beetle (*Megadromus meritus*; locally endemic);
- Ngaokeoke/peripatus (*Peripatoides* sp.);
- Short-horned grasshopper (*Sigaus campestris*; At Risk – Declining);
- Leaf-veined slug (*Athoracophoridae*);
- Giant springtail (*Platanurida* sp.);
- Trapdoor spider (*Cantuaria* sp.; likely locally endemic);
- Ground beetle (*Holcaspis* sp.; likely to be locally endemic);
- Ground beetle (*Megadromus sp.*; likely to be locally endemic); and
- Red and black millipede (?*Icosidesmus* sp.; undescribed species, locally endemic).

The invertebrate surveys completed indicate there are at least two distinct populations of Helms' stag beetle are present at the Wind Farm Site, one in the south-eastern area of Matariki Forest, between proposed turbines MAT-15 and MAT-16, and the other in the southwestern region of Jedburgh Station, along the boundary between Jedburgh Station and the Catlins Forest Park. Wildlands (2025) consider predation from feral pig and possums are likely limiting population growth of Helms' stage beetle at the Wind Farm Site.

Further, Wildlands (2025) note the presence of taxa such as giant springtail, ground wētā, and more ground beetle species indicates that some important habitat values for indigenous invertebrates are present in the areas where these species are surviving, but they would benefit from habitat restoration (including mammalian pest control) as they are highly vulnerable to habitat loss and predation by introduced mammals.

2.12.9 Bats

The closest documented short-tailed bat population is in the upper Eglinton Valley in Fiordland, almost 200km away from the Southland Wind Farm Site.

The long-tailed bat has a threat status of 'Threatened – Nationally Critical'. The nearest recorded known population of long-tailed bats is in the Catlins Forest Park, with known roosting sites in locations such as the Tahakopa Scenic Reserve, 10-20km to the east of the Wind Farm Site in the Thisbe and Catlins River Valley and Cairn Road area. The Wind Farm Site was not previously a known location for long-tailed bats.

Kessels and Davidson-Watts (2025) describe the use of the Wind Farm Site by long-tailed bats, and the key findings are summarised below.

Initial bioacoustics surveying was undertaken between December 2022 and June 2023 to identify whether long-tailed bats were present at the Wind Farm Site, and if so, the locations of bat activity. Following confirmation of bat presence, a comprehensive bat study was devised in consultation with Proteus (an ecologically focussed statistics consultancy), and further bioacoustics surveys were undertaken over the period between November 2023 to April 2024. In total eight bioacoustics surveys have been undertaken at the Wind Farm Site.

Monitoring of bat activity consisted of deploying Automatic Bat Monitors ("**ABM**") throughout the Wind Farm Site and in some locations within the Catlins Forest Park to determine the presence of bats within, and around, the Wind Farm Site. ABMs record bat calls and provide an indication of where bats are present / active. Statistical modelling of the bat survey results was undertaken by data modelling consultancy Proteus.

No short-tailed bat calls were recorded during any of the surveys. As such, short-tailed bats are considered to not be present within or near the Wind Farm Site.

Summary of results

The results of the surveys indicate that long-tailed bats are present at, and in the general area of, the Wind Farm Site, however, the Wind Farm Site is not core habitat for a local maternity population of long-tailed bats. Most of the Wind Farm Site is not significant habitat for the local long-tailed bat population.

Long-tailed bat activity levels vary depending on the location and the time of year. There is a pattern of consistently very low/no bat activity on Jedburgh Station, Glencoe Station and the western (lower elevation) part of the Matariki Forest, while there is low, but reasonably regular, activity on the eastern side of the Matariki Forest, close to the escarpment within the DoC conservation estate. There is also a pattern of increasing bat activity at a greater number of ABM locations as summer progresses into autumn (mid-February – mid-April showed the highest level of activity). Other key factors for bat activity include:

- Tall vegetation is associated with a higher level of bat activity across all models;
- Bat activity is predicted to be higher in areas that are close to rivers and tracks;
- Bat activity declines as wind speed increases (noticeably when speeds are greater than 5m/s);
- Bat activity increases with temperature increases (being most active from 8°C upwards); and
- Bat activity decreases with rainfall.

The bioacoustics surveys show that the pasture areas of the Wind Farm Site are largely utilised very occasionally and sporadically, and the Matariki plantations, while regularly utilised, are only utilised at very low detection rates, especially when compared to similar habitats elsewhere in the Catlins. To put this into context, the highest single average number of bat passes detected for any ABM over the 2023/2024 survey period was 3.2 per night. For comparison, detection rates at other nearby sites in the Catlins locality recorded from November to end of March as part of the Catlins Bat Project average 47.8 bat passes per night (based on 2021-22 data).

The key findings are summarised as follows:

> Jedburgh Station and Glencoe Station are of Low ecological value for bats;

> The intended locations for turbines MAT-01, MAT-02, MAT-03, MAT-04, MAT-06, MAT-07, MAT-12, MAT-16 (and potentially in the future at MAT-17) at Matariki Forest are in, or close to, areas of High bat habitat value; and

> The remaining turbine sites in Matariki are of Moderate ecological value for bats.

2.13 FRESHWATER ECOLOGY

Ryder and Goldsmith (2025) have assessed the freshwater ecology effects for the Project and the existing freshwater ecology values of the Project Site are summarised in the sub-sections below.

2.13.1 Water Quality

Existing water quality monitoring indicates that the Mimihau Stream South Branch tributary, which is adjacent to the general area of the proposed Project, is experiencing impacts from high and increasing phosphorus levels and a decrease in water clarity. This indicates that sediment inputs to the stream are likely increasing through time. Further downstream of the proposed Project, these impacts are less apparent, although faecal bacteria levels are high, likely reflecting the influence of the agricultural land use in the lower catchment.

2.13.2 Benthic Macroinvertebrates

Southland Regional Council surveys benthic macroinvertebrates annually at two sites in the Mimihau Stream catchment and one in the Mokoreta River catchment. This monitoring indicates that the Mimihau Stream South Branch tributary is experiencing the effects of mild to moderate organic pollution or nutrient enrichment, although less than that of macroinvertebrate communities further downstream. Long-term monitoring indicates that the health of the community at the tributary sites, which is within the general area of the

proposed Southland Wind Farm, is likely degrading, reflecting the declining water quality at this site through time.

Macroinvertebrate surveys at seven sites within the Wind Farm Site were also completed by Wildlands in 2023 and showed macroinvertebrate communities were moderately diverse. The surveys identified freshwater crayfish (kōura) ('At Risk – Declining') at the sites surveyed and therefore, it is considered freshwater crayfish are also likely to be present in most of the small headwater streams within the Wind Farm Site.

2.13.3 Fish

New Zealand Freshwater Fish Database records show longfin and shortfin eels, Gollum galaxias ('Threatened – Nationally Vulnerable') and brown trout have been found in the Mimihau Stream catchment, while longfin eels, giant kokopu, Gollum galaxias, lamprey, common, redfin and upland bullies, and brown trout have been found in the Mokoreta River and its tributaries. Ryder completed fish community surveys towards the south-west end of the Wind Farm Site in 2009, and Wildlands undertook further surveys in 2023, including at the two sites where it is proposed to take water (identified on **Figure Aquatic Ecology-2 (Part G)**).

Unidentified galaxias were the only fish species caught or observed at all sites and Ryder considered it was highly likely these were Gollum galaxias. Wildlands also found Gollum galaxias at the sites surveyed. Therefore, Ryder and Goldsmith (2025) consider it is likely Gollum galaxias are present in most of the small headwater streams within the Wind Farm Site, and possibly also the wider Project Site area, if hydrological flows are high enough.

Four fish species have been recorded in the Kaiwera Stream catchment, longfin eel, upland bully, brown trout and Clutha flathead galaxias. All four of these species have been recorded in tributaries of Kaiwera Stream in the vicinity of the transmission line, switching station and construction access track through the Port Blakely Forest. Clutha flathead galaxias are a threatened species, with the DoC classification of 'Threatened – Nationally Critical'.

2.14 ROADING AND TRAFFIC

A description of the existing transport environment in relation to the Southland Wind Farm Project is provided in the Transportation Assessment completed by Rossiter (2025). The existing roading and traffic environment outlined in this report is summarised in the sub-sections below.

2.14.1 State Highway Network

State Highway 1 ("**SH1**") provides the primary strategic link for the South Island. In Southland, SH1 passes through Invercargill, Edendale, Mataura and Gore. State Highway 98 ("**SH98**") and State Highway 93 ("**SH93**") provide local connections between regional centres. The state highway network within the Southland and Gore Districts is shown in **Figure Transport-1 (Part G)**.

2.14.2 District Road Network

There are two access routes to the Wind Farm Site (shown in **Figure Transport-2 (Part G)**). The northern access route is via SH93 and Kaiwera Downs Road. The southern access route follows rural roads from Wyndham to the Wind Farm Site, including Mimihau School Road, Waiarikiki Mimihau Road and Venlaw Road.

Ferry Road and Edendale Wyndham Road forms the primary connection between Edendale and Wyndham. Ferry Road meets SH1 at a roundabout and the road has a typical sealed carriageway width of 7.5m. Wyndham Road provides a link between Wyndham and Mataura that broadly follows the true left bank of the Mataura River. The road has a sealed carriageway width of 7-7.7m.

2.14.3 Existing Travel Volumes

Rossiter (2025) describes the existing traffic volumes on the state highway network. The highest traffic volumes are recorded on the section of SH6 between Invercargill and Lorneville, with approximately 12,200 vehicles per day ("**vpd**"). Traffic volumes remain relatively high where SH1 diverts to an east-west alignment along Tay Street at 11,100vpd. This decreases to 5,400 vpd around Wyndham. Traffic volumes near Gore increase to about 10,800 vpd. SH98 and SH93 carry comparatively lower traffic volumes of around 1,000-2,000 vpd.

Traffic volumes typically peak during the morning and evening commuter periods and are lowest during the night (10:00pm to 5:00am). SH93 carries volumes of 100-150 vehicles per hour during the day.

2.14.4 Road Safety

Stantec rates the majority of the state highway network within the Low-Medium and Medium risk band for personal risk.[8] There are some areas of Medium-High rated risk within the centres of Invercargill and Gore. Additionally, there is a small section of High risk just south

[8] Personal risk is the risk to the individual of fatal or serious casualties per million vehicle kilometres travelled.

of the Mataura River bridge and on SH93, between Mataura and Clinton (at the intersection of SH1 and SH93). The state highway collective risk[9] ratings are mostly within the Low-Medium risk band, with smaller sections in the Low and Medium risk areas.

2.15 NOISE ENVIRONMENT

An assessment of the existing noise environment has been undertaken by Halstead (2025).

In general, the daytime background sound level at neighbouring residential sites is around 30 dB L_{A90}. The background sound level measurements were completed during August – September 2023 at locations representative of clusters of noise-sensitive dwellings near the Wind Farm Site (identified in **Figure Noise Effects-3 (Part G)**) are summarised below:

- 267 Venlaw Road: The background noise level measured at this dwelling shows that the dwelling receives a significant amount of noise from the Mimihau Stream (around 45 dB L_{Aeq}). It is likely the noise received from the watercourse would decrease during the summer months;
- 696 Woods Road: The background noise level measured at this dwelling in still conditions is around 20 dB L_{A90} and is moderately affected by wind speeds as they increase. There is significant scatter in the night-time noise levels at higher wind speeds. The average noise level measured at this site was below 35 dB L_{A90} at all times;
- 1288 and 1382 Slopedown Road: The background noise level at these dwellings shows that the night-time noise level is reasonably low in still conditions (between 18 – 20 dB L_{A90}). The dwellings are moderately wind-affected; and
- 1403 and 1542 Wyndham-Mokoreta Road: The background noise level at these dwellings in still conditions was between 20 – 25 dB L_{A90}. These dwellings are significantly wind affected at moderate to high wind speeds.

The background noise levels at these sites were used to assess the noise effects associated with the operation of the Southland Wind Farm in Section 5 of this application document.

2.16 THE 'ENVIRONMENT' INCLUDING PLANTATION FORESTRY ACTIVITIES

When considering a resource consent application, the decision maker must assess the actual and potential effects of the proposed activity on the environment to determine whether a consent should be granted or declined. Case law has confirmed that the

[9] Collective risk is the risk density measured as the number of fatal and serious casualties over a distance.

environment includes the environment as it may be modified by realistic permitted activities and consented activities.

Having an understanding of what comprises the environment is essential to the resource consent assessment process. The environment is described above and more comprehensively in the technical reports included in **Part H** to these application documents.

As noted above, the Wind Farm Site covers approximately 58km^2 of privately owned land. Approximately half of the Wind Farm Site is an operational plantation forest owned by Matariki Forests. This is a well-established plantation forest and the clearance of pine and Douglas fir forest within this part of the Wind Farm Site is an existing permitted activity.

These activities are carried out in accordance with the Resource Management (National Environmental Standards for Commercial Forestry) Regulations 2017 ("**NES-CF**"). The plantation forestry was established with the specific purpose of harvesting in mind. Put another way, regardless of the development of the Southland Wind Farm, the exotic forest in this part of the Wind Farm Site will continue to be subject to the NES-CF. Any effects associated with the clearance of exotic forestry in this area can properly be disregarded.

3. APPROVALS REQUIRED THAT WOULD OTHERWISE BE APPLIED FOR UNDER THE RMA

3.1 INTRODUCTION

As required by Clause 5(1)(h) and (3)(a) and (b) of Schedule 5 of the FTAA, a detailed assessment of the activities requiring resource consents is provided below. A detailed analysis of the applicable rules which are classified as permitted activities in the relevant plans is included in **Part M** of this application.[10]

The construction, operation and maintenance of the Southland Wind Farm is subject to the rules set out in the Proposed Southland Water and Land Plan, Southland Regional Air Plan and the Southland District Plan. In addition, the transmission line and GIP will be located in the jurisdiction of the Gore District and is therefore subject to the rules in the Gore District Plan. The relevant plans and matters to consider are set out below.

An analysis of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 ("**NES-CS**") and the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 ("**NES-FW**") is also provided below.

The Southland Wind Farm does not involve any activities that would be classified as prohibited activities in a relevant plan or proposed plan, or in the regulations made under the RMA (including any national environmental standard).

In accordance with the RMA principles of "bundling" the overall status of this application is that of non-complying, being the most stringent activity status applicable arising from the assessment of the relevant rules which has been undertaken below. However, under the FTAA that is largely a moot point, in accordance with clause 17(1)(b) of Schedule 5 of the FTAA, section 104D of the RMA does not apply to the Panel's consideration of a resource consent application under the FTAA.

3.2 SOUTHLAND REGIONAL COUNCIL

The Proposed Southland Water and Land Plan ("**SWLP**") was made operative in part in May 2024. There are a small number of appeals remaining relating to provisions on water quantity and incidental discharges from farming activities and weed and sediment removal from waterways for drainage maintenance purposes. There are no rules under appeal in the

[10] In accordance with clause 5(5)(a) of Schedule 5 of the FTAA.

SWLP that are relevant to the Project.[11] Therefore, no resource consents are sought under the Operative Southland Regional Water Plan.

Table 2 below outlines the relevant rules under the relevant Southland Regional Council Regional Plans to enable the construction, operation and maintenance of the Southland Wind Farm.

Table 2: Relevant rules under the Southland Regional Council Regional Plans.

Rule	Rule Summary	Project Activity	Activity Status
Regional Air Plan 2016			
5.5.5	Any industrial or trade processes that are not strictly provided for in the Regional Air Plan.	Discharge of dust from construction activities including road improvement works and discharge of contaminants to air from the onsite concrete batching facilities.	Discretionary
Proposed Southland Water and Land Plan (operative in part)			
Rule 5	Discharge of contaminants or water to a waterbody, namely sediment during construction, that meet the rule conditions.	It is anticipated that with the appropriate management practices in place, including an Earthworks Management Plan ("**EMP**"), which will include an Erosion and Sediment Control Plan, Contact will avoid discharging sediment to water beyond what is permitted in the SWLP. However, as the Project involves activities near streams, including the construction of stream crossings, as a precaution, Contact is seeking resource consent to discharge sediment to surface water during construction activities. Contact will implement water quality monitoring during construction in accordance with the EMP, and this will ensure the relevant water quality standards are met.	Discretionary
Rule 42(b)	Discharge of cleanfill associated with the fill disposal sites greater than 500m^3 required for	The construction of the Southland Wind Farm will involve the discharge of approximately 1,111,000m^3 of cleanfill to land within the Wind Farm Site and	Restricted discretionary

[11] Rules 24, 54 and 78 of the Proposed Southland Water and Land Plan.

Rule	Rule Summary	Project Activity	Activity Status
	the wind farm construction.	665,000m³ of cleanfill to be used as engineered fill within the Project Site.	
Rule 49(b)(ii)	For non-consumptive takes where the total volume of water taken or diverted is returned within 100m of the take or diversion point.	The temporary diversion of water may be required during the construction of culverts and/or a bridge.	Restricted Discretionary
Rule 49(c)	The taking, use and diversion of surface water for infrastructure construction.	The take of water at a maximum rate of 5L/s at one site within Jedburgh Station and one site within Matariki Forest will exceed the permitted volume. The maximum daily volume of take at each site will not exceed 432m³, with compliance with the permitted activity rules of the SWLP when the minimum stream flow is Q95. Water will be used during construction including for earthworks activities, concrete batching, dust control and general Project activities.	Discretionary
Rule 53(a)	The drilling and construction of a bore.	Geotechnical investigations will be required as part of the enabling works and will include the drilling of a bore at each of the proposed wind turbine sites. The activity will comply with the conditions of the Rule.	Controlled
Rule 59(b)	The placement and erection of culverts in, on, under or over the bed of a river and any associated bed disturbance and discharge resulting from carrying out the activity that does not meet one or more of the conditions of Rule 59(a).	Culverts have been designed in accordance with the New Zealand Fish Passage Guidelines and the National Environmental Standards for Freshwater. Some of these culverts will exceed the 1,200mm limit specified by Rule 59(a) of the SWLP and three culverts will be designed to impede fish passage to protect the galaxias populations upstream, as outlined in Riley (2025), whereby the culvert invert will be 1m above the stream bed.	Controlled
Rule 69	Any use, erection, maintenance, placement of any	The Project involves activities within streams and wetlands, including the construction of a bridge, culverts and	Discretionary

Rule	Rule Summary	Project Activity	Activity Status
	structure in, on, or over the bed of a river or wetland, not provided for by a rule in the Plan.	access road. As a precaution, for any activities that are required that are not otherwise covered by another rule in the SWLP, consent is being sought under this rule.	
Rule 74(c)	The use of land within a natural wetland that is not for the purposes listed in Rule 74(a).	Civil works within a natural wetland(s).	Non-complying

3.3 SOUTHLAND DISTRICT COUNCIL

Table 3 below outlines the resource consents required under the Southland District Plan to enable the construction, operation and maintenance of the Southland Wind Farm.

Table 3: Relevant rules under the Southland District Plan.

Rule	Rule Summary	Project Activity	Activity Status
Ecosystems and Indigenous Biodiversity			
ECO-R3	The clearance, modification or removal of indigenous vegetation that is not provided for as a permitted or controlled activity.	The Project will involve the clearance of approximately 64ha of indigenous vegetation, primarily to enable the construction of the access tracks and wind turbine foundations.	Discretionary
Infrastructure			
INF-R4(1)	The construction of a new transmission line that is not provided for by another rule.	The construction a new 220kV transmission line to form the connection between the wind farm substation and the GIP.	Discretionary
INF-R4(2)	The construction of new transformers, substations and switching stations that distribute electricity (including their ancillary	A substation will be constructed on the Wind Farm Site and will be up to approximately 2.5ha in area.	Discretionary

Rule	Rule Summary	Project Activity	Activity Status
	buildings) that exceed 30m³ in area.		
General Rural Zone			
GRUZ-R3(1)	Earthworks disturbance that exceeds 1,000m³ in volume in a 12 month period and alters the existing ground level by more than 5m in depth or 2m in height.	The construction of the Southland Wind Farm will involve approximately 1,734,000m³ of cut within the Wind Farm Site.	Restricted discretionary
GRUZ-R3(1)	Earthworks greater than 25m³ within a riparian margin.	The Project will require earthworks exceeding 25m³ within a riparian margin during the construction of access roads, including stream crossings, and wind turbine platforms.	Restricted discretionary
GRUZ-R3(1)	The discharge of more than 500m³ of cleanfill.	The construction of the Southland Wind Farm will involve the discharge of approximately 1,111,000m³ of cleanfill to land within the Wind Farm Site and 665,000m³ of cleanfill to be used as engineered fill within the Wind Farm Site.	Restricted discretionary
GRUZ-4(1)	All other activities not provided for by another rule associated with the construction, commissioning, operation and maintenance of the wind farm.	The construction of the Southland Wind Farm involves a range of activities and resource consent is sought under this rule for any activities that are not otherwise provided for by any other rule in the Southland District Plan.	Discretionary

3.4 GORE DISTRICT COUNCIL

The proposed transmission line route and GIP will be located in the Gore District. The rules relevant to the proposed activities in the Gore District Plan are outlined in **Table 4** below.

The Gore District Plan is currently under review and the Proposed Gore District Plan was notified in February 2023. The hearings have been held; however, no decisions have been

made on the Proposed Gore District Plan. Therefore, the provisions of both the Operative Gore District Plan and the Proposed Gore District Plan are relevant to the Project.

Table 4: Resource consents required under the Operative and Proposed Gore District Plan.

Rule	Rule Summary	Project Activity	Activity Status
Operative Gore District Plan			
7.9.3(e)	A new electricity line that will exceed 110kV.	The construction of a 220kV transmission line to form the connection between the wind farm substation and the GIP.	Discretionary
7.9.4(b)	A new electricity substation.	The GIP will include an electricity substation that will comprise of pole mounted structures that exceed a volume of 0.6m^3.	Restricted Discretionary
4.13.1(1)	A land use activity that involves earthworks where the period of the commencement until of such earthworks until the completion of rehabilitation work exceeds 12 months.	Earthworks activities will be required for the construction of the transmission line, access road and GIP, and these activities may exceed a period of 12 months.	Restricted Discretionary
Proposed Gore District Plan			
ENRG-R2	Large-Scale Renewable Electricity Generation construction, operation, maintenance, repairs and upgrading (including and structures and associated buildings).	The Southland Wind Farm meets the definition of a large-scale renewable electricity generation activity,[12] and as such, any activities associated with the construction and operation of the Southland Wind Farm, including the transmission line and GIP, are provided for under this rule.	Discretionary

[12] Renewable electricity generation activities – large scale means electricity generation activities utilising renewable energy sources with a capacity of 20kW or greater for the purpose of exporting electricity directly into the distribution network or National Grid. It includes all ancillary components and activities such as substations, climate / environmental monitoring equipment, earthworks, roading, maintenance buildings, temporary concrete batching plants, internal transmission and fibre networks, vegetation clearance, and site rehabilitation works, Interpretation Chapter, Proposed Gore District Plan.

3.5 RESOURCE MANAGEMENT (NATIONAL ENVIRONMENTAL STANDARD FOR ASSESSING AND MANAGING CONTAMINANTS IN SOIL TO PROTECT HUMAN HEALTH) REGULATIONS 2011

The NES-CS aims to ensure that land affected by contaminants in soil is appropriately identified and assessed before it is developed, and if necessary, the land is remediated, or the contaminants contained to make the land safe for human use.

Clause 5(1) of the NES-CS states that it applies when:

> *"... a person wants to do an activity described in any of subclauses (2) to (6) on a piece of land described in subclause (7) or (8):"*

Clause 5(7) of the NES-CS states:

> *"Land covered*
>
> *(7) The piece of land is a piece of land that is described by 1 of the following:*
>
> *a) an activity or industry described in the HAIL is being undertaken on it:*
>
> *b) an activity or industry described in the HAIL has been undertaken on it:*
>
> *c) it is more likely than not that an activity or industry described in the HAIL is being or has been undertaken on it."*

A Preliminary Site Investigation has been completed for the Project Site by Williamson Water & Land Advisory Limited.[13] This demonstrates no activities on the Hazardous Activities and Industries List ("**HAIL**") have occurred on the Project Site. Therefore, in accordance with Regulation 5(9) of the NES-CS, the NES-CS does not apply to the Project.

3.6 RESOURCE MANAGEMENT (NATIONAL ENVIRONMENTAL STANDARDS FOR FRESHWATER) REGULATIONS 2020

The NES-FW regulates activities that pose risks to the health of freshwater and freshwater ecosystems.

The proposed Southland Wind Farm meets the definition of specified infrastructure[14] in the NES-FW as it:

- Is infrastructure that delivers a service operated by a lifeline utility, as defined in the Civil Defence Emergency Management Act 2002 (Contact is an entity that "generates

[13] Williamson Water & Land Advisory, Southland Wind Farm Preliminary Site Investigation (Ground Contamination), 15 December 2023.

[14] Regulation 3, NES-FW, Clause 3.21, National Policy Statement for Freshwater Management 2020.

electricity for distribution through a network or distributes electricity through a network" as listed in Part B of Schedule 1 of that Act); and

- Is infrastructure that meets the definition of regionally significant infrastructure, as defined in the Southland Regional Policy Statement[15] and the SWLP.[16]

Therefore, the provisions of the NES-FW relating to specified infrastructure apply to the proposed activity. The resource consents required for the Southland Wind Farm under the NES-FW are outlined in **Table 5** below.

Table 5: Relevant rules under the NES-FW.

Rule	Rule Summary	Project Activity	Activity Status
National Environmental Standards for Freshwater			
45	Vegetation clearance, earthworks or land disturbance within, or within a 10m setback from, a natural inland wetland for the purpose of construction specified infrastructure. The taking, use, damming or diversion of water within, or within a 100m setback from, a natural inland wetland.	The proposed Project Footprint intersects with wetlands within the Wind Farm Site. This will require vegetation clearance, earthworks and land disturbance within the wetlands. In addition, the construction of the wind farm access road will require the diversion of water within the wetlands on the Jedburgh Plateau. Culverts will be used to maintain the movement of water to maintain wetland hydrology below the crossing point.	Discretionary
71	The placement, use, alteration, extension of reconstruction of a culvert in, on, over or under the bed of a river that does not comply with the permitted activity conditions of regulation 70(2).	Following ecological advice, the construction of proposed culvert crossings referred to as NSC1, NSC3 and NSC6 will be designed to impede fish passage to protect the galaxias populations upstream of these culverts. All other culverts will comply with the permitted activity conditions in regulation 70(2).	Discretionary

[15] Glossary and Definitions, Southland Regional Policy Statement 2017.

[16] Glossary, Proposed Southland Water and Land Plan.

4. CONSULTATION

4.1 OVERVIEW

In accordance with clause 6(1)(e) of Schedule 5 of the FTAA, this section provides a summary of the consultation and engagement undertaken by Contact with mana whenua, local authorities and other stakeholders.

Section 5 of **Part A** of this application document summarises Contact's approach to consultation and engagement for the Southland Wind Farm Project.

Since the end of 2022, Contact has undertaken extensive consultation with mana whenua, the relevant local consenting authorities, key stakeholders and the local community in relation to the Project, particularly throughout the development[17] and processing of the previous resource consent application made under the Covid Fast-track Act, but also since April 2025, following the lodgement of its referral application to be admitted into the FTAA process.

This has allowed for valuable feedback to be provided, enabling the identification of potential issues and solutions, refinements to the Project, and thereby reducing potential effects associated with the Project. Additionally, it has built stronger relationships that will continue to be important as the Project progresses.

More specifically, this engagement included the following parties:

- Papatipu Rūnaka ki Murihiku, including Te Rūnanga o Ngāi Tahu, and Te Ao Marama Inc (who acts on their behalf on resource management and environmental matters);
- Department of Conservation;
- Southland District Council;
- Southland Regional Council;
- Gore District Council;
- Invercargill City Council;
- Heritage New Zealand Pouhere Taonga;
- Ministry for the Environment;
- Waihopai-Toetoe Community Board;

[17] Described in the engagement strategy and mana whenua engagement strategy prepared for the previous application made under the Covid Fast-track Act.

- Local residents;
- Transpower;
- Civil Aviation Authority;
- NZ Transport Agency; and
- South Port.

This engagement (inclusive of comments received on the previous Covid Fast-track application) directly contributed to shaping the development of the Project. The enhancements made to the Project as a result of the feedback provided to Contact through its engagement processes are wide-reaching and significant, and include:

- Development and refinement of the proposed ecological offset and compensation package, which will have widespread benefits, including in biodiversity, cultural and landscape terms;
- Development of a proposed suite of other measures to address the adverse cultural effects identified by mana whenua;
- Provision of a community fund (including a substantial uplift proposed during the Covid Fast-track consenting process) to support community activities and initiatives, which was a clear request made during community engagement and in comments received on the application;
- Changes to earthworks design practices, including the approach to maintaining wetland hydrology and the location of fill disposal sites;
- Optimised outcomes in respect of lighting on wind turbines. In this regard, following an initial determination by the CAA about the aviation warning lighting it considered necessary, Contact responded to community concerns about the amenity effects of such lighting by preparing and filing an appeal ('petition') with the CAA, providing further information and modelling. On 16 August 2024 the CAA made a new determination that resulted in a significantly reduced lighting plan. This will consist of only 16 out of the 55 proposed turbines requiring a single, medium-intensity red light (compared to the initial direction which required multiple lighting fixtures on each turbine). These will be directed LED lights that will minimise light going below the horizontal plane;
- Ongoing iterative updates to the proposed consent conditions, in particular following consultation with DoC, TAMI, Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku, Southland District Council and Southland Regional Council. This included setting hard environmental limits, within which avoidance is the first priority to address concerns

raised by these parties. Following this process, DoC confirmed to the Covid Fast-track expert panel that '*All technical experts are now satisfied that their concerns have been addressed in the latest set of conditions*'; and

- Contact has also reached an agreement with Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku that the Project is acceptable culturally and in terms of te taiao, including agreed tangata whenua specific conditions.

Contact has actively re-engaged with mana whenua, key stakeholders and the relevant local authorities during the preparation of this FTAA application. This has further informed the project, in particular resulting in additional refinements and updates to the proposed consent conditions (included in **Part I** to these application documents).

A summary of the consultation that has been undertaken in relation to the resource consent approvals sought as part of the Project is provided in the sections below.

4.2 MANA WHENUA

Section 6 of **Part A** to these application documents provides a detailed summary of the engagement Contact has undertaken with mana whenua in respect of the Project since 2022, and as such, this is not repeated here. However, for completeness, at a substantive level, Contact has a long history of engagement with Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku on the Southland Wind Farm Project leading up to and during the consenting process of the previous application made under the Covid Fast-track Act, and since that decision on the FTAA application and proposed conditions. This process of engagement identified the cultural values associated with the Project Site and the potential effects of the Project on these values. The outcomes of this longstanding engagement have subsequently informed the Project, including the proposed management of effects and consent conditions.

In addition, this engagement resulted in agreement between Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku and Contact, both in relation to consent conditions for the Project, and (via a confidential agreement) in relation to matters that cannot be mitigated by way of consent conditions.

Contact has continued to work closely with Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku throughout the preparation of this substantive application. This included an ā kanohi meeting between Contact and TAMI on 9 July 2025 in Invercargill to discuss the further changes that have been made to the Project, including the proposed consent conditions. TAMI sought clarification on some matters, and an online hui and further information was subsequently provided to TAMI along with to address these. Additional

feedback received from TAMI helped inform the proposed consent conditions, in particular in relation to the archaeology and accidental discovery protocol conditions.

Contact acknowledges and appreciates the feedback that Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku (including TAMI) have provided in respect of the Project. An important outcome of the engagement between Contact and mana whenua is the establishment of an ongoing relationship which will continue throughout the life of the Southland Wind Farm Project and beyond.

4.3 LOCAL AUTHORITIES

The relevant local authorities for the Project are the Southland District Council (Wind Farm Site), Southland Regional Council (the entire Project Site) and Gore District Council (in relation to the GIP and transmission infrastructure and proposed access to the Project Site). Extensive engagement occurred with local authorities during the preparation of the previous application under the Covid Fast-track Act. Workshops and meetings were held with representatives from the Southland District Council, Southland Regional Council, and Gore District Council, focusing on draft technical assessments.

These discussions helped identify key considerations for the technical assessments and management measures for the Project. Ongoing consultation addressed:

- Methodology for fill disposal and site identification;
- Impacts on wetlands and construction methods to minimise these impacts;
- Management plan framework and certification process; and
- Optimal transport routes to the Project Site with the Gore District Council.

Additionally, workshops with Southland District Council and Southland Regional Council, inclusive of its compliance teams, helped to shape the proposed consent conditions to ensure clarity and enforceability.

On 2 July 2025, Contact provided formal written notice (included in **Part N**) to the Southland District Council, Southland Regional Council and Gore District Council of its intention to apply for all necessary approvals to authorise the Project under the FTAA once referred by the Minister for Infrastructure. This letter included a request for written notice from each of the Councils that there are no existing consents to which section 124C(1)(c) or 165ZI of the RMA would apply if the Project were to be applied for as a resource consent under the RMA (as per section 30(3) of the FTAA).

Following the provision of the formal notice of the Project progressing under the FTAA, Project update meetings were held with the Southland District Council and Southland

Regional Council on 9 July 2025 which outlined the updates to the Project since the previous application was made, including the proposed consent conditions. Subsequently, the draft proposed consent conditions were provided to the Councils on 11 July 2025.

A further meeting was held with Southland Regional Council at its offices on 6 August to update Council consenting and technical staff, discuss any issues still at large with the Project or proposed conditions and receive any feedback. Only a few minor technical changes to improve the clarity of the conditions were received and these have been adopted in the proposed conditions submitted with this application.

Written notice was provided by each of the local authorities, confirming that there are currently no existing resource consents to which section 124C(1)(c) or 165ZI of the RMA would apply (provided in **Part N** to these application documents).

4.4 DEPARTMENT OF CONSERVATION

DoC has been a key stakeholder that Contact has engaged with regularly over the past two and a half years, particularly in relation to the potential effects of the Project on indigenous biodiversity.

Contact met with DoC on a number of occasions during the preparation of the Covid Fast-track application. These discussions primarily focussed on the results of ecological surveys and assessments that had been undertaken, in particular in relation to freshwater, terrestrial vegetation, wetlands, avifauna, bats, lizards and invertebrates, as well as discussing the proposed management measures.

Following the lodgement of the resource consent application with the EPA, Contact continued to engage with DoC throughout the processing of the application with a particular focus on the management of effects associated with the Project, including on bats, avifauna and lizards, and the proposed consent conditions. This engagement resulted in a number of substantive enhancements to Contact's approach to the management of effects, including:

- The proposed Bat Compensation Strategy (discussed in Section 5 and 6 below and in Kessels and Davidson-Watts (2025)) to address residual effects on long-tailed bats, was developed in collaboration with DoC, including the location, extent of the area and the proposed funding;
- The proposed 'compensation triggers' for avifauna required by proposed conditions EC37-EC37E were developed following detailed conversations with DoC to address any uncertainty on the potential effect of collision on key species; and

- The management of effects on lizards within the Project Site, including the response in the event green skink is found within the Project Site, as required by Condition EC16, was developed following advice from a specialist lizard expert at DoC.

As noted above, following these updates to the proposed consent conditions, DoC confirmed its concerns had been appropriately addressed.

Contact has subsequently continued its engagement with DoC during the preparation of this substantive application. This included discussing the appropriate application of the tree roost felling protocol to manage the effects on bats during construction, as well as the curtailment strategy for bats, and the methods for salvaging and relocating lizards within the Project Site. Contact provided DoC with an updated set of draft conditions for the Project and met with DoC on 25 June 2025 to discuss the changes that had been made. DoC provided helpful feedback, and Contact once again updated the conditions to reflect that. These were provided back to DoC for further comment, which was received on 6 August 2025, and final minor suggested changes have been adopted in the proposed consent conditions where appropriate.

Contact values the level of engagement, technical advice and constructive feedback expert staff at DoC have provided in relation to the Project which has enhanced the proposed consent conditions and increased the certainty and level of assurance about environmental outcomes associated with the Project.

4.5 COMMUNITY ENGAGEMENT

The community stakeholders include local residents, schools, businesses, and landowners. Contact implemented a strong engagement and consultation process during the preparation of the Covid Fast-track application.

Contact held public information sessions attended by key Contact staff and expert assessors, enabling the community to participate, be informed, and provide feedback. This included open days, as well as community appointments throughout 2023. Appreciating that not all members of the community may wish to attend in-person events or meetings, Contact also made information available through online formats and enabled feedback through webforms and emails, as well as a dedicated phoneline.

Some members of the community expressed concerns about the construction effects arising from the proposal, including the potential for traffic, noise and visual effects. In addition, some concerns were raised on the effects of the operation of the wind farm, including noise effects and the potential effects of the Project on ecology, particularly related to kererū and falcon.

Some neighbouring residents and members of the community also raised a specific concern that the Project will substantially change their existing outlook and impact their ability to enjoy their property. Contact sought to further understand any views from the neighbouring community by preparing site-specific visual simulations and discussing specific concerns with residents living in neighbouring properties.

Several members of the community also raised concerns with Contact regarding the effects of night-time lighting on the wind turbines, which are required for aviation safety purposes. As noted above, Contact filed a petition with the CAA to address this concern and the outcome of this was a new determination that now requires a significantly reduced lighting plan. This will consist of only 16 out of the 55 proposed turbines requiring a single, medium-intensity red light. These will be directed LED lights that will minimise light going below the horizontal plane.

Contact has also received considerable positive feedback from members of the local community who support the Project, including during the open days it held for the Project. A number of stakeholders and members of the community acknowledged the importance of renewable electricity development and decarbonisation of the economy. It was also generally accepted that the increased electricity production and economic activity from the proposal has the potential to make a meaningful contribution to local employment, and the local economy. Contact has had for example, a number of enquiries regarding contractor opportunities from members of the local community.

Conversely, some members of the community have questioned the need for, and benefits of, renewable electricity generation and a wind farm in this location, and in particular the end use of the electricity generated at the wind farm (i.e. where the end customer(s) were located). The Project rationale, including the need for renewable electricity generation and the appropriateness of the Project Site for a wind farm, is discussed in Section 3 of **Part A** to these application documents.

Further, Contact received a number of comments from those invited to comment on the Covid Fast-track consent application. Contact provided a detailed response to the comments received, which included responses to specific concerns raised by some members of the community.[18] Contact acknowledges the concerns that have been raised by some members of the community and Contact has made a number of updates to the Project to address the comments raised by the community, as outlined in Section 3 of **Part A** to these application documents.

[18] Contact Energy Limited Response to Comments, 13 September 2024.

Contact has provided letters to the local community and via the Project webpage outlining its intention to submit an application for the Project under the FTAA.

Contact intends to maintain community engagement throughout the next phases of the project, including following the lodging of the FTAA application, and during the construction and operation of the Southland Wind Farm. Contact is proposing to implement a Stakeholder Communication and Engagement Management Plan ("**SCEMP**") which will set out the procedures detailing how the public and stakeholders will be informed and engaged throughout the construction and operation of the Southland Wind Farm. This is required by proposed conditions SC1-SC2. A draft version of the SCEMP is included in **Part J** to these application documents.

As part of Contact's continued community engagement throughout the Project, proposed conditions SC3-SC9 require the establishment of a Community Liaison Group that can serve as a voice for the community through the construction and operation of the Project. The Community Liaison Group will play a key role in fostering good communication, sharing information in a timely way, and helping to address any concerns or opportunities that arise. Further details about the group's purpose and function are outlined in the draft SCEMP.

In addition, in response to comments from the community, Contact is proposing to establish a community fund to support community activities and initiatives. The Community Benefit Fund will involve Contact providing an initial contribution of $200,000, and a minimum contribution of $70,000 per year (indexed annually for inflation) during the construction and operation of the Southland Wind Farm. In addition, Contact will contribute an additional $250 per year (indexed annually for inflation) to the fund for every MW above 200 MW of installed capacity. If Contact implements a project with installed capacity of 380 MW, payments into the fund over 35 years would total $4,225,000.[19]

The Community Benefit Fund is required by proposed condition SC10 and will ensure that the wider communities surrounding the Project will be able to share some of its benefits. Grants from the Community Benefit Fund will be distributed by Contact following consultation with the Community Liaison Group. However, priority consideration will be given to projects or people residing within the Waimumu-Kaiwera, Clinton and Wyndham-Catlins statistical area as identified on **Figure Local Residents-1 (Part G)**.

[19] Based on the duration of the regional council consents. The actual value will depend on the final installed capacity of the Project, as implemented.

5. ASSESSMENT OF ENVIRONMENTAL EFFECTS

5.1 OVERVIEW

In accordance with Schedule 5 (clauses 5(4), 6 and 7) of the FTAA, this section provides an assessment of the actual and potential environmental effects associated with the construction, operation and maintenance of the Southland Wind Farm Project.

Contact has commissioned a number of independent experts to provide specialist reports on the actual and potential effects on the environment. Copies of those reports are included in **Part H** of these application documents (and refer to the list of reports at the end of **Part A**).

The relevant actual and potential environmental effects, as summarised in the following sub-sections of this report, are considered to be:

- Positive effects, including economic effects;
- Cultural effects;
- Landscape, visual amenity and natural character effects;
- Terrestrial and wetland ecology effects;
- Freshwater ecology effects;
- Construction effects;
- Hydrology effects;
- Geotechnical effects;
- Archaeological effects;
- Traffic effects;
- Noise effects;
- Aviation effects;
- Shadow flicker effects;
- Radio communication services effects; and
- National Grid effects.

The FTAA notes that the Panel has discretion to decline an approval if, in complying with section 81(2), it forms the view that there are one or more adverse impacts in relation to the approval sought, and those adverse impacts are sufficiently significant to be out of

proportion to the Project's regional or national benefits under section 81(4) of the FTAA, even after taking into account any conditions that the Panel may set in relation to those adverse impacts and any conditions or modifications that the applicant may agree to or propose to avoid, remedy, mitigate, offset, or compensate for those adverse impacts.

As explained below, the Project's benefits to New Zealand and the Southland region are very substantial and, while some adverse effects are inevitable for a large wind farm:

> A wide-ranging suite of measures are proposed to address the Project's adverse effects;

> A number of them, notably in respect of ecology, are addressed to a clear net-gain standard; and

> The Project's residual adverse effects are not sufficiently significant to be out of proportion to its regional or national benefits.

The technical assessments have carefully considered the management measures to appropriately address the potential effects of the Project. These measures are summarised in the sub-sections below. Contact proposes implementing these effects management measures by way of the proposed conditions provided in **Part I** of these application documents.

The proposed resource consent conditions for the Southland Wind Farm have been drafted to:

> Address the environmental effects associated with the Project in a robust manner, including setting clear objectives and monitored performance targets;

> Accord with best practice principles, such that they are enforceable and avoid any subsequent delegation of decision-making functions; and

> Be in accordance with the advice of Contact's technical experts.

In addition, the proposed conditions were carefully reviewed and updated throughout the Covid Fast-track consenting process, including based on the advice of the Panel's expert peer reviewers, and following consultation with TAMI, DoC and the relevant councils throughout that process, including in response to submissions on the Project from these parties as well as other submitters. The proposed conditions have subsequently been further refined and updated to reflect the additional work and investigations undertaken since the previous consent process. Overall, it is considered the conditions appropriately set out the measures to ensure the effects of the Project will be avoided, remedied, mitigated, offset and compensated.

Where management plans are proposed to give effect to conditions, the relevant conditions include a clear statement of the objectives that are required to be met by those plans, and what measures are to be included in the management plans. Draft versions of the management plans have been submitted with this application (refer to **Part J**).[20] The conditions outline the management plan certification process (see Section 6 of this application document), which will ensure that the management plans are consistent with the proposed effects management, as required by the conditions.

5.2 POSITIVE EFFECTS

As discussed in **Part A** of this application, the Southland Wind Farm will generate significant national and regional benefits. In addition to the economic benefits, the Project will also provide environmental benefits, including the provision of a new source of renewable electricity, contributing to New Zealand's decarbonisation goals, as well as the benefits that will be derived from the proposed environmental enhancement activities as part of the comprehensive ecological offsetting and compensation package. These benefits are described in Concept Consulting (2025), Clough (2025), Wildlands (2025) and MacGibbon (2025), and summarised below.

A secure, reliable and affordable electricity system is fundamental to the social, economic, and cultural wellbeing of New Zealanders. As electricity demand increases, and as the country experiences fluctuations in hydro inflows and the supply of gas for thermal power stations, there is a pressing ongoing need for new generation capacity to be added to the system. The Southland Wind Farm will increase the diversity of electricity supply in New Zealand, which will provide a number of benefits, including to the end consumer. This includes the potential to increase the amount of electricity generation in Southland that is available for supporting local industries, particularly those that are transitioning away from reliance on fossil fuels. A greater supply of electricity will contribute to reducing the cost of electricity.

New Zealand's electricity market is currently experiencing elevated market prices (since 2022 as illustrated in Concept Consulting (2025)) and the market is not expected to return back to equilibrium levels. The Project will reduce the length of time of electricity market scarcity and displace more expensive renewable projects. The analysis completed by Concept Consulting has estimated that if the Southland Wind Farm does not proceed, the

[20] Excluding the Lizard Management Plan and Terrestrial Invertebrate Management Plan, which form part of the wildlife approvals being sought in this substantive application and are being submitted for final approval by the Panel.

costs of electricity for consumers in New Zealand will likely increase by $1.2 and $2.6 billion in present value terms and emissions will increase by 0.6 to 1.5 $MtCO_2e$ emissions.

Moreover, electricity demand is forecast to increase significantly over the next few decades. Latest Government projections predict that the total electricity demand will grow by between 35 and 82 percent by 2050, driven by industry switching from fossil fuel use to electricity (such as for space and process heating) in the short-term, and the increased uptake of electric vehicles, particularly from the late 2030s. The Southland Wind Farm will provide a source of renewable electricity that will positively contribute to the New Zealand Government's goals of transitioning to a low emissions economy. The Southland Wind Farm will generate up to approximately 1,200GWh of electricity per year, which is sufficient to power up to 150,000 households. This will contribute to enabling New Zealand to transition away from carbon-emitting energy sources. This will be particularly important in the Southland region which has been identified as a region with many industries with considerable potential for decarbonising their businesses.[21]

The Project will also generate significant economic benefits. The proposed Southland Wind Farm is expected to cost around $782 to $1,292 million to construct, concentrated over a two-year period. Of this, an estimated $258 million to $426 million of capital investment will be added into the New Zealand economy (Clough (2025)). Much of this will go to local suppliers of materials, services and labour for civil engineering and road construction.

The Project also stands to generate approximately 180-300 direct jobs in the Southland region during the construction of the Southland Wind Farm (Clough (2025)).[22] These are full time equivalent jobs for the period of construction (approximately two years), so the annual equivalent would be 90-150 direct jobs. While some of these positions will likely be filled by locals, some with the specialist skills required may need to be imported from other regions.

Once the Southland Wind Farm is commissioned, there will be direct employment of 10-14 FTE operational staff. In addition, there will be some contractor roles to support activities like site security, ongoing maintenance (i.e. mechanical, civil and electrical), pest and predator control and other environmental maintenance activities, and transportation of supplies. Wages to local staff and payments for contract services will be the principal means of continued injection of funding into the local economy. Based on the total

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[21] Transpower's Transmission Planning Report 2023, page 364; https://static.transpower.co.nz/public/uncontrolled_docs/Transmission%20Planning%20Report%202023.pdf ?Versi onId=MXjcj_YNkmGsqK0046GEUEgf7lMUeqjB.

[22] Based on other construction at other wind farms which typically require about 0.8 FTE per MW of installed capacity.

operation and maintenance cost for previously consented wind farms, the Southland Wind Farm is expected to spend $8 million to $12 million per year on operations, of which over half would be spent locally on resident staff, contractors and other suppliers.

Contact will also establish a Community Benefit Fund that will include an initial fund of $200,000 and regular annual contributions into the fund of $70,000, plus $250 per MW above 200 MW of installed capacity. On this basis, if Contact implements a project with installed capacity of 380 MW, payments into the fund over 35 years would total $4,225,000.[23] This will be highly beneficial to members of the community and will support community-based services or projects aimed at empowering people to thrive, strengthening communities and achieving other positive social or environmental outcomes. Contact will establish a Community Liaison Group for the Project and part of the role of this group will include administering and disbursing the Community Benefit Fund.

In addition, and as discussed in further detail in MacGibbon (2025) and in Section 5.5.7 and Section 6 below, the Project will deliver significant positive ecological benefits to the Wind Farm Site and the wider vicinity. This will include the implementation of significant pest control across 1400ha of the Wind Farm Site, and over a 10,000ha area in the Beresford Range in the Catlins Forest Park, as well as habitat restoration and enhancement activities. This will improve the plant and animal diversity and is expected to generate a substantial overall net gain in biodiversity. In addition, the restoration and enhancement of existing wetlands within the Project Site will ultimately realise a net increase in the overall area of wetlands in the Southland Region.

In summary, the proposal creates considerable positive benefits at a local, regional and national scale by providing electricity utilising a renewable resource, reducing reliance nationally on energy generated by non-renewable sources, stimulating economic activity and generating long-term environmental benefits. The Project is therefore strongly aligned with the purpose of the FTAA, and in accordance with the FTAA, these national and regional benefits must be given the greatest weight by the Panel when considering this application.[24]

5.3 CULTURAL EFFECTS

Contact recognises that Kā Papatipu Rūnaka ki Murikihu hold ahi kaa, mana whenua and mana moana within the Murihiku takiwa, and acknowledges the relationship mana whenua have with the Pawakataka/Slopedown area. Contact understands that it is for mana whenua

[23] Based on the duration of the regional council consents. The actual value will depend on the final installed capacity of the Project, as implemented.

[24] Clause 17(1)(a), Schedule 5 of the FTAA.

to describe any cultural or historical associations with the Project Site. Since 2023 Contact has been engaging with Kā Papatipu Rūnaka ki Murihiku and their designated Resource Management authority, TAMI, as a nominated Kā Papatipu Rūnaka representative. The engagement between Kā Papatipu Rūnaka ki Murikihu and Contact to date is described fully in Section 6 of **Part A** to these application documents.

TAMI prepared a Ngā Hua o Āpiti Hono Tātai Hono report, as well as a Cultural Impact Assessment in December 2023 for the application for the Southland Wind Farm Project that was made under the Covid Fast-track Consenting Act. These documents identified the specific effects of the Project on mana whenua values, rights and interests. The values and issues identified laid the foundation for extensive kōrero between Contact and rūnaka representatives about the Project. Contact consulted with TAMI and Te Rūnanga o Ngāi Tahu on behalf of Kā Papatipu Rūnaka, as well as with the individual Murihiku rūnaka to respond to the issues.

This resulted in a comprehensive and substantial mitigation and relationship agreement and agreed consent conditions to address the cultural and taiao effects on mana whenua should the Project proceed.

A number of these measures are included in the proposed consent conditions (refer to conditions TW1-TW11), including:

- The establishment of the working group, Ngā-Pou-Whai-Hua, comprised of representatives from TAMI and Contact. The purpose of Ngā-Pou-Whai-Hua is to facilitate ongoing engagement between Contact and Ngā Rūnaka ki Murihiku and encourage collaboration and input into the Project, including the management and delivery of restoration measures associated with the Project, including many of the activities and initiatives outlined below;
- In partnership with Ngā-Pou-Whai-Hua, prepare and resource Tuia te Mana ō Pawakataka, a programme of works weaving together all of the Project outcomes to ensure the mana of the Taiao and the people is held strong. This is intended to recognise and provide for the mana whenua values of the area affected by the Project and develop mechanisms and processes to manage potential impacts on those values through the implementation of monitoring, mitigation, restoration and enhancement measures;
- The establishment of a Rūnaka Community Contribution pūtea/fund which will make payments to Kā Papatipu Rūnaka for the purpose of addressing residual cultural effects of the Project and to support the wellbeing of members of Kā Papatipu Rūnaka;
- Prior to the commencement of construction works, Contact will invite Kā Papatipu Rūnaka to:

- Co-design the wānanga (and potentially hikoi) on any topic that is of interest to kaitiaki/whanau/kura;
- Provide ingoa - naming of the site, project or features within the wind farm area;
- Design pou, or story boards or other measures chosen by Kā Papatipu Rūnaka to acknowledge their sites and stories; and
- Require Contact to take all reasonable steps to facilitate better access to the site and to allow Kā Papatipu Rūnaka to reconnect with the landscape and resources over the longer term.

> Contact will offer to Kā Papatipu Rūnaka:

- Provision of power to the four marae of Kā Papatipu Rūnaka, and support for the ambitions of Kā Papatipu Rūnaka to become energy self-sufficient;
- A commitment to local businesses owned by, or as advised by Kā Papatipu Rūnaka, appropriately weighted opportunities to provide services on a competitive basis; and
- An education/scholarship/training employment fund with sufficient funding to provide full support to up to two Kā Papatipu Rūnaka members each year.

Ngāi Tahu ki Murihiku and Contact have agreed to the mana whenua specific consent conditions and have reached an agreement in relation to matters that cannot be mitigated by way of consent conditions such that, should the approvals be granted, Ngāi Tahu ki Murihiku and Te Rūnanga o Ngāi Tahu consider that the cultural and te taiao effects relevant to them have been appropriately avoided, remedied, mitigated, offset and compensated.

5.4 LANDSCAPE, VISUAL AMENITY AND NATURAL CHARACTER EFFECTS

Coombs (2025) has completed an assessment of the proposed Southland Wind Farm on landscape and visual amenity values. This assessment has been informed by visits to the Project Site and wider vicinity, as well as photo-simulations of the Southland Wind Farm from various locations in the surrounding environment. In addition, Bray (2025) has also completed a site visit and an assessment of the landscape, visual and natural character effects associated with the Southland Wind Farm. This assessment provides a further expert opinion and is independent of the assessment completed by Coombs (2025). The findings of each of these assessments are summarised in the sub-sections below.

5.4.1 Key Considerations

Bray (2025) outlines the key matters that need to be considered in regard to renewable electricity generation projects and landscape assessment which are therefore relevant to the Southland Wind Farm. These are summarised as follows:

- **Electricity demand vs. landscape effects** – The predicted increase in demand for renewable electricity generation as New Zealand transitions to a low emissions economy is highly relevant to the consideration of landscape effects as these activities inevitably will have effects on landscape values. When considering landscape effects, particularly in regard to landscape perceptual values, it is widely understood that renewable technologies are more acceptable to most people than fossil-fuel plants, particularly within New Zealand, also noting the reversible nature of wind farms. This provides important context in terms of how such effects might be considered, particularly in terms of perceptual and associative landscape values.
- **Confirmation bias** - The intense level of scrutiny a particular site is subject to over other locations in a District or Region associated with considering the effects of a proposal often leads to confirmation bias. Assessment of the landscape must be undertaken in the broader context, and in comparison to other potential features across the landscape.
- **Rural character** – Broadly speaking, rural character is a construct to define the landscape character or amenity value of a rural environment, typically associated with an outlook dominated by production activity. Production is not limited to farming activities, and includes orchards, plantation forestry, and other alternative production such as maize, seeds, hemp biofuels and energy, and associated ancillary infrastructure such as production facilities, buildings, transmission infrastructure and roading. Bray (2025) considers renewable electricity generation activities are generally more appropriately suited to placement in productive rural landscapes in New Zealand than in other landscapes, such as urban or remote/wild environments.
- **Natural character** – Consideration of the physical natural processes associated with natural character must take into account how the landscape would inherently change, including by the types and intensity of the environmental and other pressures it is exposed to. The significance of an area's natural character is influenced by its setting and context, its relative uniqueness, and the way in which it might be experienced.
- **Landowner rights vs community outcomes** – This recognises the tension between the proposed activities a landowner wants to undertake and the desire of the community for the land to be retired or protected from all activity, which is not often a plausible concept. The baseline of landscape and visual amenity effects must be the existing

permitted activities being undertaken, and not the result of an arbitrary desire to remove such activities.

- **Factors that influence the perception of wind farms in a landscape** – There are a range of factors that can influence how a wind farm is perceived in the landscape which assist with understanding how a proposal will likely interact or integrate with the proposed site, including, but not limited to distance of the viewer from the wind turbines, number and size of turbines, blade cross-over, turbine layout, vegetative screening, skyline backdrop, complexity of landform and vegetation in the view, turbine elevation and blade movement and orientation.

These key considerations have informed Bray's assessment of the potential effects of the Southland Wind Farm on landscape values, visual amenity and natural character, summarised below.

5.4.2 Southland Wind Farm – Construction Landscape and Visual Amenity Effects

Construction activities will include upgrades to and creation of access roads within the Project Site. Contact will utilise the existing access tracks present where possible. While these types of roads are common within the rural landscape, in order to mitigate the landscape effects associated with the access tracks, Contact will minimise locating the roads on steep sections of the Project Site and areas visible from a distance where it is practicable to do so.

Construction activities directly associated with the wind turbines will be limited to the immediate area around each turbine site and the areas required for the wind turbine pad and foundations. The excavated material associated with the construction of the wind farm will be distributed within or around each turbine pad, used for roading or disposed of within identified disposal areas that meet the criteria specified in the proposed conditions (CM3(d)), and revegetated.

Potential effects on visual amenity during construction include vehicle movements associated with the transport of wind farm components and materials, the presence of concrete batching facilities, cranes and other specialised construction machinery and vehicles on-site. The isolated nature of the site and the distance from the closest residences and public viewpoints will minimise the visual effects during the construction phase of the Project.

Night-time lighting may be required for activities during construction, including for the concrete batching facilities and during turbine installation. Construction lighting will only be used when necessary and during times where the normal daylight hours are insufficient to

allow construction activities to be undertaken in a safe manner. Lighting is less likely to be required during the longer days in summer. Construction lighting will therefore be only a very temporary activity and effect. Construction lighting will be shielded and oriented downwards over the works area for the purpose of avoiding light spill outside of the area to minimise this effect, as required by the proposed condition (WF21).

Overall, it is considered that the construction activities will be largely localised to where the proposed wind turbines will be located, therefore, limiting impacts on landscape and visual amenity values during this period.

5.4.3 Southland Wind Farm – Operational Landscape Effects

Much of the landscape within and surrounding the Project Site is a working rural landscape, comprised primarily of pastoral farmland and forestry, with a dispersed low-density population present throughout the area. The Wind Farm Site sits among broken hill country, on the back slope of a cuesta landform. The hills within and around the Wind Farm Site are characterised by south-facing scarps and shallower dip slopes to the north. The Wind Farm Site is largely comprised of open pasture, plantation forestry, and an area of mānuka scrub and low-quality farmland that presents a mosaic of different habitat types.

Due to the nature of wind farms, they are prominent on the landscape and the scale of the landforms around them determines how dominant turbines may be perceived. The cuesta on which the Wind Farm Site is located is a large-scale landform that assists in accommodating the scale of the wind turbines and other infrastructure associated with the Southland Wind Farm. Coombs (2025) considers that the proposed Southland Wind Farm layout, being set back from the highest features (Mokoreta, Pukemimihau and The Cairn), as well as a consistent pattern of wind turbines within the back slope landform, contributes to the aesthetic coherence of the Project. The wind farm layout has been designed in consideration of the underlying landform and landcover, avoiding steeper land, gullies, indigenous vegetation and high value landscape features and areas to the greatest extent practicable. Bray (2025) notes the proposed layout prevents excessive clustering and blade crossover, and the turbines appear reduced in scale in comparison to the bold landforms surrounding the Wind Farm Site. These measures have assisted in minimising the landscape and visual effects of the Project on the surrounding environment.

As noted in Section 2 of this application document, the Southland/Murihiku Regional Landscape Assessment prepared by Boffa Miskell in 2019 (which has not been through any public notification process in the Southland District) identifies the Slopedown/Mokoreta-Pukemimihau area as a potential ONF candidate. The identified candidate area includes the scarp and a mosaic of indigenous and exotic vegetation on the dip slope (including part of the Wind Farm Site on Jedburgh Station).

Bray (2025) and Coombs (2025) disagree with the identification of this feature, particularly its extent, for various reasons, including that the primary values of the cuesta landform are confined to the scarp face, where the combined topographical and vegetation values are more pronounced. In contrast, the topographical and vegetation values on the dip slope are unremarkable. Bray (2025) concludes that the wind turbines are appropriately setback from the scarp edge and visible turbines will be subservient to the landform. Further, Bray (2025) and Coombs (2025) note the turbines do not alter the fundamental values of the landscape, regardless of whether the scarp is identified as an ONF; that is, they do not fundamentally alter the legibility of the cuesta landform, nor do they physically disturb or alter the vegetation values on the scarp.

Further, while the Project will involve the clearance of some indigenous vegetation and a loss of no more than 2.5ha (out of 130ha) of wetlands, Coombs (2025) notes the Project Site is in a highly modified environment and recommends mitigation planting to enhance the biodiversity of waterways and wetlands to minimise the impacts on this area. This will be carried out in accordance with the recommendations of the terrestrial and wetland ecology and freshwater ecology reports, discussed further in the sub-sections below. Furthermore, the enhancement and creation of wetlands as a means of compensation for the wetland loss will ultimately result in an overall net gain of wetland area.

5.4.3.1 Cumulative Landscape Effects

Coombs (2025) also considered the cumulative effects of the Southland Wind Farm and the consented Kaiwera Downs Wind Farm on the landscape, which are separated by approximately 4km. Coombs (2025) completed visual simulations of the Southland Wind Farm both with and without the consented Kaiwera Downs Wind Farm (attached as Appendix A to Coombs (2025)).

Coombs (2025) concludes that the two wind farms will follow a consistent pattern on similar landform types, which will contribute to aesthetic coherence. The narrow intervening cuesta will provide 'breathing space' between the two wind farms, reducing the number of viewpoints where turbines from both wind farms are visible. Coombs (2025) considers the difference in size of the wind turbines between the two wind farms is unlikely to be discernible as the topography will obscure the base of the towers beyond the crest of the hills and the rotor diameter is not significantly different between the two wind farms. Further, the larger turbines have a greater spacing between the wind turbines, which reduces the sense of clutter on the landscape. Any cumulative views of both wind farms are from a distance that are beyond an immediate direct visual impact and it is also noted that in some locations, the broader views of both wind farms include various industrial processing plants, including Fonterra Edendale, Alliance Mataura or the Daiken MDF plant,

in the foreground (refer to the visual simulations from View Point 1 in Appendix A of Coombs (2025)).

Overall, while any wind farm is going to have an aesthetic impact on the landscape, primarily due to the size and scale, the broad backslope of the Wind Farm Site assists in maintaining a similar pattern with respect to the landscape. The distance provided to the key landscape features contributes to the aesthetic coherence.

Therefore, Coombs (2025) concludes there will be no significant adverse cumulative effects associated with the proposed Southland Wind Farm.

5.4.3.2 Landscape Summary

Overall, Coombs (2025) and Bray (2025) consider that the Project Site is an appropriate location for the Southland Wind Farm in landscape terms. While turbines are necessarily prominent structures, the Southland Wind Farm will be in scale with the broad landscape, and the rural character of the surrounding pasture and plantation forestry will be maintained. Both Coombs (2025) and Bray (2025) conclude the effects of the Southland Wind Farm on the landscape character are no more than minor.

5.4.4 Operational Visual Amenity Effects and Perception

Coombs (2025) assessed the effects of the Southland Wind Farm on visual amenity values at 16 representative public viewpoints from the surrounding area. These are illustrated in the visual simulations appended to Coombs (2025). The effect of the Southland Wind Farm on the visual amenity at these viewpoints ranged from less than minor to minor.

Coombs (2025) also established an inventory of dwellings within approximately 10km of the proposed Southland Wind Farm and assessed the degree of visual change arising from the proposed wind farm from each dwelling. The results from this analysis are summarised in **Table 6** below.

Table 6: Level of effect of the Southland Wind Farm on nearby dwelling views.

Level of Effect	Number of Dwelling Views Affected
Neutral / No effect	48
Very low / Less than minor	32
Low / Less than minor – Minor	46

Level of Effect	Number of Dwelling Views Affected
Low – Moderate / Minor	23
Moderate / More than minor	5
Moderate – High / More than minor	10

Coombs (2025) notes the actual effect will be a function of the degree of change in the view, the appropriateness of the landscape context for a wind farm, and individual perceptions toward wind farms. This is also reflected by Bray (2025) who considers that in terms of visual amenity effects, adversity can only be determined by the person affected.

Bray (2025) has also reviewed Coombs (2025) assessment and concludes that there are somewhat limited effects on perceptual landscape values when viewed from the south. Whilst the wind farm will be visible from the south, Bray (2025) considers it will not overly dominate the bold landforms and crisp skyline as the wind turbines will remain subservient to it, set behind and at an appreciably smaller scale. There will be limited views of the proposal from the east and north and Bray (2025) agrees that the visual effects from such locations will be low. Bray (2025) also agrees with the potential effects ratings ascribed to various dwellings.

A total of 165 dwellings have been identified within 10km of the proposed Southland Wind Farm wind turbines. These are not high numbers in the context of large-scale wind farms in New Zealand, and therefore reflect a low level of settlement within close proximity of the wind farm. No dwellings have been identified within 2km of a turbine, with the closest dwelling being 2.3km from a proposed turbine.

Of the dwellings assessed, 10 were assessed as potentially experiencing moderate – high (more than minor) effects and five moderate (more than minor) effects. In order to mitigate the potential effects on the 15 dwellings that may experience more than minor adverse visual effects as a result of the Southland Wind Farm, Contact will make an offer to these property owners to develop and implement a planting / landscaping plan. The consultation will include a visual amenity effects assessment from the dwelling and associated outdoor living areas on the property to confirm the degree of effect following the completion of detailed design and the confirmation of the wind turbine layout.

Such planting could include foreground garden planting, shelter belt or tall screen planting, large scale rural trees or other functional planting that would contribute to the amenity of

the property. Screen planting may be considered by the relevant landowners to 'close in' broader views to the escarpment (or the landscape generally). Therefore, it is possible some landowners will consider the screen planting as having an overall detrimental impact and decline the offer of planting. As such, other types of landscaping opportunities can be explored with landowners, as provided for by the proposed conditions (WF26).

Overall, the Southland Wind Farm will result in potential adverse effects on visual amenity values, primarily associated with the views from dwellings, particularly in the Redan-Mokoreta area to the west of the Wind Farm Site, however, the extent of these effects will be dependent on individual perception as well as the wind turbines' location, distance and orientation.

5.4.5 Rural Character

The Wind Farm Site is part of a productive, working rural landscape, that includes some natural features. Generally, the rural character of Southland is comprised of a mix of land uses, including agriculture and forestry, rural processing industries (meat processing and dairy in particular), as well as renewable electricity activities, including wind farms.

The working rural environment of Jedburgh Station, Glencoe Station and Matariki Forest that comprise the Wind Farm Site are also subject to rural activities, which include activities such as stock mustering and transport, fencing, pest control, forest maintenance, earthworks, harvesting and re-establishment. Therefore, the Wind Farm Site is a working rural environment, and a wind farm is compatible with the working rural nature of this land use.

The Wind Farm Site is on the edge of a working rural landscape as it transitions to a more natural landscape associated with the Catlins Forest Park. The broader expanses of the Catlins Forest Park areas contrast with the working rural landscapes of the Southland Plains. The majority of the Catlins Forest Park stretches away from the Wind Farm Site to the south-east of the Wind Farm Site which provides separation from the Southland Wind Farm. Bray (2025) notes the Wind Farm Site maintains a stronger connection to the Southland Plains (including visibility) than it does to the wilder Catlins landscape to the south-east. Further, Coombs (2025) concludes the quiet and tranquillity of the majority of the expansive Catlins Forest Park will not be affected by the Southland Wind Farm due to the separation of the wind farm from the Catlins hill country.

Overall, Bray (2025) and Coombs (2025) consider that the Southland Wind Farm aligns with the concept of rural character, noting that wind farms have a fundamental need to be located in a rural environment and represent a productive use of the landscape.

5.4.6 Natural Character

As noted above, the consideration of natural character includes developing an understanding of the natural processes occurring in the environment, including how a landscape might be changing or evolving, with or without human intervention. Natural character focuses on how loss or change manifests in terms of experiential value, naturalness and character. In an RMA context, natural character is particularly relevant to waterbodies such as wetlands, lakes, and rivers, and their margins (section 6(a)).

In regard to the Jedburgh Plateau, Bray (2025) notes that the existing quality of vegetation across the Plateau is degraded due to historic fires, vehicle and stock access and pest animal browsing. This is not a natural landscape, but one fundamentally controlled by human activity. This is in contrast to the taller vegetation in the nearby DoC estate.

The design of the Southland Wind Farm avoids, where it is practicable to do so, the streams, wetlands and indigenous vegetation remnants that contribute to the overall natural character of the Project Site. Works in and near streams and wetlands, and their effects on natural character, will be carefully managed through the adoption of a Construction Environmental Management Plan during construction of the Project. This will ensure the risk of contaminant and pest introduction to watercourses is minimised.

As discussed in Section 5.5 below, as some residual ecological and natural character effects cannot be avoided, a comprehensive ecological offsetting and compensation package has been developed to provide for these effects and ensure an overall net benefit for ecology within and surrounding the Project Site. This is discussed further below, and Coombs (2025) considers that the high and very high natural character values of the Project Site will largely be avoided or protected by the Project design and ecological and natural character values will be enhanced through the proposed offsetting and compensation package. Bray (2025) notes that in time, the wind farm will be removed, and the Wind Farm Site will be rehabilitated, and the land will naturally recover from a much better starting point due to the proposed pest control efforts that will be undertaken within the Wind Farm Site.

Therefore, following the implementation of these measures, overall, the natural character effects of the Southland Wind Farm will be positive. This is because the landscape will change, regaining its inherent natural character, driven by more natural, indigenous processes, rather than one defined by human activities.

5.4.7 Transmission Line Route and GIP

Coombs (2025) also assessed the landscape and visual amenity effects of the proposed transmission line and GIP. The assessment notes that the proposed transmission line route

traverses through a working rural landscape, passing through areas of pasture, plantation forestry and low scrubland. The area is notable for having an extremely low population density with only two dwellings within 1km of the proposed transmission line route (one of which is owned by Contact and the other is on the property through which the transmission line passes over, and which Contact has an easement agreement with). No towers supporting the transmission line will be located within any wetlands or streams. Coombs (2025) notes transmission line structures are relatively common in the rural environment.

The GIP will be located within pastoral land, approximately 1.5km to the north-east of the closest dwelling at 57 Davidson Road East (this being a dwelling on the same property as the GIP is to be located). The GIP will be located adjacent to the existing Transpower National Grid transmission line between Invercargill and Dunedin and sits within a valley. It will not be visible from public viewpoints. The GIP is therefore consistent with the surrounding environment.

Overall, Coombs (2025) considers the effects of the transmission line route and GIP will be no more than minor.

5.4.8 Night-time Visibility and Lighting Effects

An initial determination by the CAA about the aviation warning lighting it considered necessary stipulated that all 55 turbines would be required to have aviation lights, not only positioned on the top of the turbine nacelle, but also affixed to the mid-point of the turbine towers with three lights around the towers at this midpoint location. Contact responded to community concerns about the amenity effects of such lighting by preparing and filing an appeal ('petition') with the CAA, providing further information and modelling. In response to this petition, the CAA made a new determination for the Southland Wind Farm which confirmed that only 16 of the 55 proposed wind turbines would be required to be fitted with an Aviation Obstruction Warning Light System ("**AWL**") located on the top of the nacelle. These will be red obstruction lights (with a flashing frequency of between 20 and 60 times per minute, co-ordinated across the Wind Farm Site). The AWLs will generate light with a horizontal maximum light intensity of 2,000 candela at night and 20,000 candela during the day.

Leading Design Professionals ("**LDP**")[25] undertook a lighting assessment for the Southland Wind Farm. Each AWL will be visible to aircraft approaching from any direction, however, each light will include optical control to reduce light intensity at angles below horizontal. The

[25] Assessment of Environmental Effects of Proposed Lighting, prepared by Leading Design Professionals, dated 10 September 2024.

LDP assessment confirms the effects of the Southland Wind Farm lighting on residents on sky glow, light spill, glare and health will all be less than minor and on amenity will be minor or less. LDP also considers the effects of the AWL on motorists and flora will be less than minor.

This assessment confirms that the effects of the Southland Wind Farm night lighting on neighbouring properties will be acceptable, and it will not result in adverse effects that are more than minor on the rural night sky.

5.4.9 Summary

Given the nature of wind farms, they will inevitably have an impact on the landscape in which they sit. This is due to their size and the often elevated and exposed locations where the wind resource is. The level of these effects, beyond those on intrinsic landscape values, is largely dependent on the perception of the individual viewer.

The Southland Wind Farm Site is situated within a productive rural landscape, on a large-scale cuesta landform that can accommodate (and is not dominated by) the proposed wind turbines, and the proposed layout is set back from key landform features, notably from the high points along the scarp. The proposal has been assessed as being consistent with the rural character of the surrounding environment and will result in positive benefits to the natural character of the Wind Farm Site. When considering the significant national benefits associated with the proposed renewable electricity activity, as is required under the FTAA, the landscape, visual and natural character effects of the proposal have been assessed as acceptable.

5.5 TERRESTRIAL AND WETLAND ECOLOGY EFFECTS

Wildlands (2025) has undertaken an assessment of the proposed Southland Wind Farm on terrestrial and wetland ecology[26] and Kessels and Davidson-Watts (2025) have completed an assessment on the effects of the Project on long-tailed bats. In addition, MacGibbon (2025) has prepared an independent review of the Project's effects on terrestrial and wetland ecology and the proposed management measures, including the proposed ecological offsetting and compensation measures.

The following sub-sections address the key conclusions from the ecological assessments, including the measures proposed to appropriately manage the identified effects. These will be implemented in accordance with the comprehensive suite of conditions that is proposed.

[26] Excluding long-tailed bats which is assessed in Kessels and Davidson-Watts (2025).

These conditions have been developed in accordance with the advice of Contact's technical experts, as well as in close consultation with DoC, the Councils and TAMI.

Among these measures, the conditions provide for Contact to prepare and implement a Terrestrial Ecological Management Plan ("**TEMP**"), which will be made up of a series of specific management plans to address effects on vegetation / habitats and fauna, and to provide for the details in respect of the implementation of the proposed offset and compensation measures.

These specific management plans are referred to in the sections below. Draft versions of all of the management plans are being lodged with this application (refer to **Part J** of these application documents). Most of the management plans are directly relevant only to the resource consents for the Project, and will be subject to a later certification process before they are finalised.

However, the Lizard Management Plan and Terrestrial Invertebrate Management Plan are being submitted to the Panel for final approval as part of its decision on this substantive application. That is because those specific management plans are directly relevant to the resource consents, but are also intended to be attached in final form to the wildlife approvals being sought in this application in respect of lizards and invertebrates (discussed further in **Part D** of these application documents).

Collectively, Wildlands ecologists have spent approximately 3,600 person hours in the field since December 2022, comprising the following:

a) Vegetation mapping and plots, and wetland delineation – 550 hours;

b) Avifauna surveys – 1,100 hours;

c) Lizard surveys – 1,100 hours; and

d) Invertebrate surveys – 875 hours.

The time spent has allowed Wildlands to gain a deep understanding of the habitats, ecological processes, species, ecological values and existing threats to those values to inform its assessment of the effects of the Project on ecological values summarised below.

5.5.1 Loss of Vegetation and Habitat Types

The existing ecological environment, including the vegetation and habitat types present on the Wind Farm Site are described in detail in Wildlands (2025) and summarised in Section 2.12 of this application document. Large parts of the Wind Farm Site are comprised of exotic-dominant vegetation, including pasture and pine plantation, however, the Jedburgh

Plateau presents a mosaic of different habitat types, and other indigenous vegetation types are present in other parts of the Wind Farm Site.

To minimise the effects on habitat loss associated with vegetation removal, reconfiguration and refinement of the Southland Wind Farm footprint has been an iterative process undertaken by Contact in collaboration with Riley and Wildlands' expert ecologists. This exercise has been undertaken to avoid, where practicable, impacts on high and very high value habitats and associated species, including through utilising pre-existing roads and tracks within the Project Site to the greatest extent possible. This has resulted in avoiding 100% of pāhautea /southern rātā-kāmahi forest, 100% of Indigenous broadleaved forest and scrub, 100% of Mānuka/copper tussock shrubland, and 100% of Mānuka-inaka/copper tussock marsh; more than 99% of southern rātā-kāmahi forest, over 98% of fen and bog wetlands on the Jedburgh Plateau, and 96% of mānuka-haumakaroa-mountain holly forest within the Wind Farm Site.

Notwithstanding the exercise to avoid vegetation loss to the extent practicable, on an indicative basis, approximately 64ha of the 134ha wind farm footprint is comprised of vegetation dominated by indigenous species (or 2.1% of all significant vegetation at the Wind Farm Site). This largely comprises moderate value vegetation characterised by mānuka and inaka dominant vegetation and mixed indigenous shrubland scrub. The vegetation loss is summarised in **Table 7** below.

Table 7: Indicative area of permanent loss and percentage loss per vegetation type within the Wind Farm Site.

Vegetation Type	Current Extent (ha)	Impact Area (ha)	Proportion of Habitat Impacted (%)
Indigenous forest and scrub	492.81	2.70	0.55
Mānuka and inaka dominant vegetation	796.34	20.16	2.53
Mixed indigenous shrubland and scrub	468.73	33.62	7.17
Exotic grassland	1,100.82	37.08	3.37

Vegetation Type	Current Extent (ha)	Impact Area (ha)	Proportion of Habitat Impacted (%)
Wetland	133.55	2.03	1.52
Copper tussock-dominant vegetation	31.92	5.24	16.42
Exotic-dominant forest, scrub, shrubland and grassland	2,624.71	33.86	1.29

It is noted that detailed design has not yet been completed, and therefore, the quantum of vegetation loss by type is subject to change. However, to provide additional certainty to the extent of vegetation loss, Contact proposes to implement a robust set of management measures, prioritising avoidance and minimisation, that are required by the proposed consent conditions and will be managed in accordance with the Vegetation Management Plan ("**VMP**") that will form part of the TEMP. This includes setting hard limits on the scale of vegetation clearance, through requiring fixed 'caps' on vegetation clearance of key habitat types (set out in **Table 8** below and required by Condition EC8).

Table 8: Vegetation clearance caps as per Condition EC8.

Vegetation / Habitat	Maximum Area
Indigenous forest	3.65 ha
Mānuka and inaka dominant vegetation	35 ha
Mixed indigenous shrubland and scrub	45 ha
Copper tussock-dominant grassland	8.5 ha
Indigenous wetland	2.5 ha

Further measures are required to be implemented by the proposed conditions (EC3-EC11B). These further measures apply in addition to the 'caps' (as in, they apply even where a specified 'cap' would in any event be complied with) and include:

> Prior to preparing the final VMP, a Suitably Qualified and Experienced Person ("**SQEP**") will confirm the areas of significant vegetation habitats (including wetlands) within, and adjacent to, the final Project Footprint following the completion of detailed design. This will involve re-mapping areas where vegetation clearance will occur, including describing the ecological value of vegetation to be cleared and identify any areas of vegetation that will be subjected to specified management actions;

> Contact will then consider whether any modifications can be made to the Project Footprint to avoid, as first preference, or minimise adverse effects on the significant vegetation habitat types, and confirm compliance with the vegetation caps listed in the conditions; and

> Contact will set out how the extent of adverse effects on the specified vegetation types (including wetlands) will be avoided and/or minimised in the final VMP. This will include developing mechanisms to ensure that the identified vegetation and habitat types (listed in the vegetation caps) that are not within the Project Footprint, but still within the Project Site, are avoided, and where they cannot be entirely avoided (i.e. parts of it may be impacted), developing mechanisms to minimise the adverse effects on those areas as far as practicable. Any residual loss will be offset and compensated for.

The hard cap on vegetation / habitat clearance ensures that the effects of the Project on vegetation and habitats will be no greater than what is directly anticipated in the conditions. In regard to the 'Turbine Envelope Zones', which is required to allow for some flexibility in the final location of turbines, the hard cap constraint, and the other requirements listed above, will mean that any movements to individual turbine locations and associated earthworks will have to be carefully considered to ensure that the overall hard cap constraints are not exceeded.

The proposed limits on vegetation clearance set out in the conditions are slightly greater than the anticipated clearance of vegetation outlined in the table above. This is because the estimated vegetation clearance outlined above is based on the indicative design of the wind farm. Therefore, to ensure Contact has sufficient flexibility during the detailed design phase, including to provide for the micro siting of wind turbines, the proposed caps provide a buffer to enable any required changes to the layout of the wind farm. These buffers have been taken into account when determining the appropriate effects management package, including the proposed offsetting and compensation for the loss of indigenous vegetation (discussed further below). High value vegetation types, including wetlands, have limited

‘headroom’, while other lower value types, such as mānuka dominant vegetation, have a higher level of ‘headroom’ to account for the difference in value/significance of these vegetation types.

Further provisions to minimise effects on vegetation include the required 10m setback of the placement of transmission line towers from areas identified as high or very high ecological value and avoiding placing fill within high or very high ecological value vegetation. These measures, when considered with the required vegetation caps, provide certainty that the adverse effects on indigenous vegetation communities will be strictly limited. In addition, where indigenous vegetation is cleared or disturbed by the deposition of fill, following stabilisation, Contact will undertake remediation by replanting the affected areas with appropriate ‘like for like’ indigenous species, such as mānuka.

In regard to the potential effects of surplus fill disposal on indigenous vegetation, potential fill disposal sites have been identified across the Project Site. The number and location of the fill disposal sites remains indicative, except for the disposal sites identified on the Jedburgh Plateau, no additional surplus fill disposal sites are to be located here (as required by proposed condition CM3(d)(v)). This provides additional certainty over the extent of the potential effects associated with these activities on the Jedburgh Plateau. Further, surplus fill disposal sites must comply with the criteria, as set out in the consent conditions, and this includes avoiding high value (or very high value) vegetation.

The majority of the surplus fill disposal sites will be located in pasture and low value and/or exotic-dominant habitats. Based on the indicative fill disposal sites, Wildlands has calculated that the area of indigenous vegetation that will be affected is approximately 24ha. This is in addition to the indicative vegetation loss identified in **Table 8** above, however, it is noted that the loss associated with the surplus fill disposal sites is not permanent, given the remediation replanting proposed, as described above. The impact of fill disposal on indigenous vegetation will be fully addressed by mitigation through rehabilitation of the sites (as described in MacGibbon (2025)). Fill disposal sites will be appropriately rehabilitated in accordance with the proposed conditions. Fill disposal sites will be capped, filled and restored within approximately 12-15 months of initial disturbance.

To mitigate effects associated with the loss of indigenous terrestrial vegetation and wetlands Contact will implement targeted weed control in indigenous-dominated habitats located within 50m of all roads and structures for a minimum of three years following the commencement of the operation of the Southland Wind Farm (EC54(f)(i)). In addition, Contact will undertake monitoring and control of wilding conifers in wetlands and indigenous-dominated terrestrial habitats on the Project Site for the duration of the operation of the Southland Wind Farm (EC54(h)).

Following the implementation of measures to avoid, remedy and mitigate effects on indigenous vegetation, Wildlands have assessed that some significant residual adverse effects will remain. The magnitude of residual effect ranges from low-high depending on the ecological value of the vegetation and the extent of habitat loss. Further details on the proposed offsetting and compensation measures for these values are outlined in Section 6 of this application document. These measures have been developed and calculated to achieve a 'no net loss' of ecological values and are considered to be likely to produce an overall net benefit to ecological values.

5.5.2 Wetlands

During the Covid Fast-track consenting process, there was particular disagreement between the expert ecologists involved on the potential effects of the Project on the Jedburgh Plateau, including the significance and value of the fen and bog wetlands present here, and the potential impacts of the construction of wind farm infrastructure on wetland hydrology (which could result in additional wetland loss through drying, which had not been calculated in the original application). Contact has subsequently commissioned further vegetation surveys and mapping and also a more comprehensive study to model surface and subsurface water flows on the Jedburgh Plateau and a detailed culvert design to ensure potential drying of wetlands was avoided. This additional work has been discussed in the relevant technical assessments described below to address the concerns raised.

Based on the indicative Project Footprint, there would be an unavoidable loss of a total of approximately 2ha (2.03ha to be exact) of wetlands, including fen wetlands (1.08ha) and bog wetland (0.94ha) and copper tussock/rautahi marsh (0.01ha), which represent proportional losses of 1.1%, 3.3% and 1.9% of those wetland types respectively across the Wind Farm Site.[27] Despite the small portion of wetland loss, due to the high ecological value of these wetlands, and the fact their loss cannot be offset (but can be compensated), Wildlands (2025) assess the magnitude of effect of the Project on fen, bog and copper tussock/rautahi marsh wetlands as Moderate (before the implementation of any effects management measures).

As noted in Section 2 of this application document, and as discussed in Wildlands (2025) and MacGibbon (2025), the wetlands present on the Jedburgh Plateau have been induced by human activity and exist where favourable hydrological conditions exist. The wetlands represent an early stage of vegetative succession, and in time, in the absence of further clearance or further pressures from stock or pest animals, the wetlands will be replaced by

[27] The 'hard cap' on wetland loss is 2.5ha.

woody shrub species and then forest species. Consequently, they are not a permanent vegetation type at this site and are not irreplaceable. It is likely that the presence of cattle and feral ungulates has prolonged their existence primarily through the browsing of palatable plant species.

In that context, MacGibbon (2025) concludes that the effect of the Project on the bog and fen wetlands on the Jedburgh Plateau will have no more than minor effects. The loss of wetlands on the Jedburgh Plateau is considered to be small, and is likely to not be more than what natural succession would replace over the next few years.

The surface and subsurface hydrology of the Jedburgh Plateau, which provides the supply of water to the bog and fen wetlands, is difficult to interpret from the surface. Inadvertent redirection or blockage of surface and shallow sub-surface water movement could occur if care is not taken, and this could result in an increased loss of bog or fen wetlands due to severed or restricted water flow. In addition, where access roads or turbine platforms sever existing wetlands the sections of wetland remaining on the downstream side of the road or platform could lose all water supply without the appropriate management measures in place. This was a particular focus of discussion (and criticism by other participants, in terms of certainty and extent of effects on wetlands not directly lost to clearance from earthworks) during the Covid Fast-track consenting process.

To assess this potential effect, and in response to the discussions in the previous process, Contact engaged Williamson Water & Land Advisory to prepare a comprehensive hydrological model of the Jedburgh Plateau to inform both a clay bund and culvert design that will avoid dewatering or isolation of bog and fen wetlands during and after construction (Williamson Water & Land Advisory (2025) included in **Part H** to these application documents). The findings of this model identify the key design elements that Contact will implement to maintain flow paths and hydrological connectivity between wetlands (and between wetlands and waterways), which include approximately 109 culverts and 1.2 km of clay bunds (the final design will be confirmed following the completion of detailed design in accordance with proposed Condition CM12). With the proposed water management devices in place, the area of impaired wetland (wetland that may be indirectly affected in hydrological terms) is estimated to be an additional 0.09ha of fen, while no bog area is estimated to be impaired.

This additional detailed analysis and suite of effects management measures provides further certainty as to the extent of effects on wetlands. With these measures in place, Wildlands (2025) assess the magnitude of effect on wetland hydrology as Low to Negligible; MacGibbon (2025) agrees with that assessment and is confident that the hydrological mitigation measures recommended will successfully minimise additional wetland loss.

Taking into account the natural hydrological regime of the wetlands on the Jedburgh Plateau, together with the proposed construction design to maintain hydrology, the total indicative impact of the Project on wetlands is approximately 2.12ha. As outlined above, Contact has proposed a robust set of management measures that will be implemented via the consent conditions to avoid, remedy and minimise effects of the Project on wetlands to the greatest extent practicable, with a hard 2.5ha cap on wetland loss. Contact will also undertake monitoring of wetlands near the proposed Project Footprint prior to construction, during construction and post-construction, in accordance with the methods outlined in the VMP and required by Condition EC11B. This provides an additional layer of certainty that the effects of the Project on wetlands will be appropriately managed.

As described above, whilst considerable effort has been made to avoid, remedy and mitigate impacts on wetlands to the greatest extent practicable, it is not possible for Contact to completely avoid any wetland loss (not without the removal of a number of wind turbines which would render the Project unfeasible and uneconomic). As such, and in order to address the maximum loss of 2.5ha of wetlands, Contact will implement the offsetting and compensation measures in accordance with the recommendations of Wildlands (2025). This will involve the off-site restoration of a wetland on land owned by Contact at the main construction entrance to the Project Site, including enhancement planting and stock exclusion. This is described in further detail in Section 5.5.7 below.

5.5.3 Avifauna

A wide range of avifauna surveys have been completed at the Project Site since 2023, totalling 1,200 hours. The avifauna surveys included the following:

- Five-minute bird counts, conducted over five survey periods (April 2023, February 2024, Oct/Nov 2024, February 2025, and May 2025). 12 transects were established across indigenous forest, wetlands, exotic plantation, and farmland. Each had eight count stations spaced ≥200m apart;
- Acoustic monitoring was used to detect cryptic or nocturnal birds. Digital recorders were deployed for two-week periods and analysed using Artificial Intelligence ("**AI**") to detect calls from a range of bird species. Bittern-specific surveys were carried out in October 2023 using 15 recorders in wetland areas within and near the Project Site;
- Flight height and path surveys were completed in October/November 2024 and February and May 2025 to determine bird flight altitudes and paths at turbine and transmission line sites. These were coordinated with bird counts;

- Kārearea/eastern falcon surveys were done at six fixed points using binocular observation, with additional sightings logged during other bird surveys. Habitat data were recorded to assess potential nesting suitability; and
- Playback surveys targeted fernbird, bittern, and marsh crake using recorded calls played at fixed stations.

The results from these surveys have informed the assessment of the effects of the Project on avifauna summarised below.

5.5.3.1 Construction Effects

Potential effects of the Southland Wind Farm on avifauna include disturbance to breeding birds during construction, loss of habitat from vegetation removal, and injury during vegetation removal. In particular, vegetation removal during the breeding season could result in adverse effects on birds, including the loss of nests, eggs or chicks.

In order to mitigate these potential effects, a careful regime for pre-clearance surveys and (if necessary) exclusion zones is recommended by Wildlands (2025). These measures are required in the proposed conditions of consent (EC31-EC33) and described in the draft Avifauna Management Plan ("**AMP**") that is included in the TEMP (refer to **Part J** to these application documents). In addition, Wildlands (2025) consider the potential effect of habitat fragmentation for all bird species to be low to negligible, given they are highly mobile, and no habitats will be isolated as a result of the proposed vegetation clearance.

5.5.3.2 Operational Effects

Direct mortality at wind farms can occur as a result of birds striking revolving blades, towers and nacelles, and also with the transmission line infrastructure. There was discussion amongst avifauna experts during the Covid Fast-track consenting process about the level of risk of bird collision posed by the Project. In response to that discussion, bird collision modelling has been undertaken by Bluewattle Ecology for the Southland Wind Farm based on the results of the avifauna surveys undertaken at the Wind Farm Site summarised above to determine the potential magnitude of effects of the operation of the wind farm on avifauna (included as an Appendix 6 in Wildlands (2025)).

The bird collision model focussed on 11 key bird species, and the results are summarised in **Table 9** below. Of the 11 species modelled, harrier, bellbird and black-backed gull (all of which have a 'Not Threatened' status) are predicted to have reasonably common strike events. However, overall, the results of the modelling show the Southland Wind Farm is a low-risk site in terms of the collision risk.

Table 9: Modelled risk of collision and magnitude of effect for nine indigenous bird species at the Southland Wind Farm.

Species	Predicted mortality rates	Threat status and ecological value	Magnitude of effect	Level of effect before mitigation
Bellbird	2 - 4 birds per year	Not Threatened/Moderate	Moderate	Moderate
Black-backed gull	4 - 8 birds per year	Not Threatened/Low	Moderate	Low
Kārearea /eastern falcon	1 bird every 15 - 40 years	Threatened/Very high	Negligible	Low
Kererū	1 bird every 3 - 6 years	Not Threatened/Moderate	Low	Low
Kahu/harrier	20 - 40 birds per year	Not Threatened/Low	Moderate to High	Low to Moderate
Pīhoihoi/NZ pipit	1 bird every 20 - 40 years	At Risk/High	Negligible	Very Low
Torea/South Island pied oyster catcher[28]	1 bird every 50 - 100 years	At Risk/High	Negligible	Very Low
Tūī	1 bird every 5 - 9 years	Not Threatened/Moderate	Low	Low
Paradise Duck	1 bird every 4 - 8 years	Not Threatened / Low	Low	Very Low
Mātātā/South Island fernbird	Virtually zero	At Risk/High	Negligible	Very Low
Matuku-hūrepo/bittern	1 bird every 18 - 35 years (virtually zero)	Threatened / Very high	Negligible	Very Low

[28] It is assumed that South Island Pied Oyster Catcher is not using the Wind Farm Site as part of their migratory routes and that flights will be confined to local movements while they are resident, which allowed the collision modelling to make an assumption on trail density.

Wildlands (2025) also considered the risk that the transmission line (and associated structures) would pose to avifauna. They concluded that the indigenous bird species likely to be most at risk of collision with the pylon structures and wires would be the strong fliers that fly well above the canopy, such as kārearea, kererū and tūī. In addition, the chance of migratory species striking lines is assessed as being low, with the exception of torea/South Island pied oyster catcher,[29] as few birds migrate seasonally across land, and those that do are coastal species that predominantly migrate along coastlines.

Wildlands (2025) conclude that the risk of electrocution and potential level of effect at the Southland Wind Farm is low as the overhead transmission line cables will be widely spaced and the largest indigenous birds known to occur within the Project Site could not feasibly create a short circuit between wires. In order to minimise potential effects associated with the collision of birds with the transmission line, Contact will install visual deterrents (dynamic flappers) along the section of the transmission line that traverses the high-quality southern rātā-kāmahi forest and along the section that is close to the wetland area within the Port Blakely property.

The lighting requirements for the wind turbines have been determined by the CAA, which confirmed 16 wind turbines are required to be lit. Contact will use red lights for these wind turbines and Wildlands (2025) consider this will lower the magnitude and level of effect of light on indigenous birds compared to the use of white lights, resulting in a negligible overall effect of the proposed lighting on birds.

Contact will implement post-construction monitoring of avifauna at the Southland Wind Farm in accordance with the requirements of the proposed consent conditions and the methods outlined in the AMP. This will include post-construction collision monitoring across the Wind Farm Site. Collision monitoring will be measured against the compensation triggers set out in the proposed consent conditions (refer to Condition EC37B). The results of the bird collision modelling discussed above indicate that it is very unlikely any of these triggers will be equalled or exceeded.

In the unlikely event the bird collision monitoring identifies that the mortality of any individual bird species listed in EC37B equals or exceeds the compensation trigger for that species, then Contact will engage a Suitably Qualified and Experienced Person to determine the potential cause of bird mortality and determine the compensation that Contact must implement to address the residual effect of the Project on this species. This will be in the

[29] Based on data collected by OSNZ.

form of enhancing a known habitat or breeding site of the affected bird species in New Zealand, and may include implementing predator control or habitat enhancement at the identified site. Given the results of the collision modelling outlined above, this a highly conservative approach, however, this provides an additional layer of certainty that any potential effects of the operation of the Southland Wind Farm will be appropriately addressed.

In addition, Contact is proposing to establish an Expert Avifauna Panel for the Project to assist with the provision of advice in relation to avifauna management for the Project. In particular, the Expert Avifauna Panel will provide advice and assistance in the unlikely event a compensation trigger is equalled or exceeded, and in relation to the post-construction review of the efficacy of the AMP required by Condition EC29A. This provides additional certainty that any potential effects of the Southland Wind Farm will be appropriately addressed.

5.5.4 Lizards

Wildlands (2025) consider there is a depauperate lizard fauna at the Wind Farm Site, with only tussock skink and Tautuku gecko having been detected. Numbers of both species, particularly Tautuku gecko, of which only six have been found to date, are likely to be sparse due to the effects of land clearance and predation by pest animals.

Potential effects of the Project on lizard populations (in particular tussock skink and Tautuku gecko which have been identified at the Wind Farm Site) primarily relate to the loss of habitat and reduced habitat connectivity. Wildlands (2025) consider direct effects such as accidental injury and/or death and disturbance from earthworks have the potential to have the most significant impact. The potential effects include:

- Disturbance to lizards during earthworks;
- Loss of indigenous lizard habitat through road widening and construction, and turbine construction;
- Fragmentation of lizard habitats from the creation of new roads and turbine platforms; and
- Ongoing disturbance (vehicle strike, human activity during day-to-day operation and turbine maintenance).

Tautuku gecko present in scrub and shrubland will be vulnerable to these effects, however, most Tautuku gecko habitat within the Wind Farm Site will be avoided.

Construction activities in rough grassland, such as vehicle use or material storage, may adversely affect tussock skink. Although the total area of vegetation clearance is low compared to the size of indigenous habitat outside of the Project Footprint, loss of habitat or death/injury to lizards may still occur in the absence of the implementation of mitigation measures.

Key measures that have been undertaken to avoid impacts on lizards include the refinement of the wind farm footprint to avoid impacts on high value habitat to the greatest extent practicable. In addition, vegetation clearance protocols and seasonal constraints on vegetation clearance activities will be implemented in accordance with the Vegetation Management Plan ("**VMP**"). Vegetation clearance activities in areas of identified lizard habitat can only occur during the lizard active season, following the salvage/mitigation activities described below.

Further efforts to reduce the impact of the Project Footprint on tussock skink and Tautuku gecko habitats will be implemented during detailed design to minimise the effects of the Project on identified habitat of these species where possible.

The majority of lizard habitat within the Wind Farm Site will be avoided, however, it is not possible to completely avoid all habitat due to topography and proximity to other proposed wind turbine locations (for example identified tussock skink habitat near MAT-9 and MAT-10). Therefore, in order to mitigate potential effects on tussock skink at sites where these species have been found, Wildlands (2025) recommend undertaking salvage and transfer of tussock skink to an enhanced release site. In addition, pre-clearance checks and supervised vegetation clearance will be undertaken at low density tussock skink sites and at sites where Tautuku gecko have been identified. Any tussock skink or Tautuku gecko found during these checks will be salvaged and transferred to the identified release sites. Details of these management methods are set out in the LMP (included in **Part J** to these application documents).

Contact is seeking wildlife approvals for the salvage and transfer of lizards as part of this substantive application, and this is described in more detail in **Part D** to these application documents. The LMP provided with this application also relates to the wildlife approvals being sought. Therefore, Contact is seeking that the Panel approve the LMP as final as part of this application.

Two dedicated lizard release sites will be established for the relocation of tussock skink, one on Jedburgh Station adjacent to the wind farm access road between JED-28 and JED-29, and one on Matariki Forest, within the Copper Tussock Enhancement and Skink Protection Area. In addition, one release site will be established for the relocation of Tautuku gecko south of JED-21. A Gecko Soft Release Pen will be constructed at this site, which is also located

within the 245ha Jedburgh Station Ecological Enhancement Area. These sites are identified in **Figure LMP-3 (Part G)**. Contact will implement targeted predator control and habitat enhancement at these sites, in accordance with the LMP and Habitat Restoration and Enhancement Management Plan ("**HREP**").

Contact will also implement an incidental discovery protocol in accordance with the LMP in the event any lizard (including herbfield skink and green skink) is discovered during vegetation clearance activities. In the event herbfield skink is discovered, salvage and transfer of herbfield skink will be undertaken in accordance with the protocol outlined in the LMP. A temporary leaky fence for skinks will be established within the Copper Tussock Enhancement and Skink Protection Area prior to the commencement of construction of the Southland Wind Farm for the release of any salvaged herbfield skink.

In the very unlikely event of the discovery of green skink during pre-clearance checks, all works within a 50m buffer zone will cease immediately and Contact will determine whether complete avoidance of green skink habitat is practicable, in accordance with the requirements of the proposed consent conditions (refer to EC16). If avoidance of green skink habitat is not practicable, Contact will implement the green skink salvage protocol in accordance with the methods outlined in the LMP. Any green skink found within the Project Footprint will also be salvaged and transferred to the leaky fence area within the Copper Tussock Enhancement and Skink Protection Area.

Following the implementation of these measures to avoid, remedy and mitigate effects of the Project on lizards, Wildlands (2025) consider there will be residual adverse effects on Tautuku gecko and, if identified during construction, green skink. These residual effects will be appropriately offset and compensated for, as discussed in Sections 5.5.7 below.

5.5.5 Invertebrates

The Wind Farm Site supports large areas of suitable habitat for invertebrates, including moths, spiders, wētā, and beetles. However, an intact invertebrate assemblage is unlikely to be present due to past habitat modifications and uncontrolled mammalian herbivores and predators.

Wildlands (2025) have identified the following potential effects of the Project on notable terrestrial invertebrates:

> Loss of invertebrate habitat associated with the vegetation clearance required for the construction of the Project. This effect is considered to be high, in particular, at proposed wind turbines MAT-10, MAT-14, MAT-15 and MAT-16, which are situated within, or adjacent to, diverse and potentially important invertebrate habitat;

- Fragmentation of habitat – clearance of shrubland vegetation will likely affect less mobile species such as Helms' stag beetle and peripatus;
- Disturbance, death, injury and displacement during the construction of the Project;
- Acute disturbance during development – for example, any work that continues after dark during construction of the Project may disturb active adult Helms' stag beetle, dust and vibration, including from traffic, may affect behaviour and communication and increase disease and mortality; and
- Increased risk of predation due to the construction of new roads – indigenous ground-based invertebrates are highly vulnerable to predation by a range of pests, particularly hedgehogs, stoats and rodents. The construction of roads within the Wind Farm Site has the potential to increase mammal movement, and therefore, increase predation pressure on invertebrates.

Avoidance and minimisation of the potential effects of the Project on high value invertebrate habitat has primarily been achieved through the redesign of the Project Footprint. Compared with the larger area of the Wind Farm Site, the relatively small Project Footprint means that habitat throughout the majority the Wind Farm Site will remain intact. The wind farm layout has been re-designed to avoid high-quality invertebrate habitat to the greatest extent practicable, including by utilising existing farm and forestry tracks and circumnavigating forest habitat instead of creating new tracks through it. This has reduced the amount of vegetation that will need to be cleared for the construction of the Project, and therefore, minimised the resulting loss and fragmentation of habitat.

To minimise the effects of vegetation clearance on invertebrates, where there are surface invertebrate habitats to be cleared in areas of high value invertebrate habitat as identified in the TIMP, such as woody vegetation, dead wood or large rocks, within the Project Footprint, Contact will relocate these to a patch of similar habitat as close as practicable to the location of removal to enable terrestrial invertebrates to transfer to the new habitat.

Helms' stag beetles have been identified within the Wind Farm Site. Wildlands (2025) recommends that Helms' stag beetles are salvaged at sites where they have been identified and relocated to an appropriate release site to mitigate the potential effects of the Project on this species. Helms' stag beetles are protected dunder the Wildlife Act 1953, and therefore, Contact is seeking a wildlife approval for the salvage and relocation of this species as part of this substantive application. This is described in detail in **Part D** to these application documents.

Other notable invertebrates will also be relocated should they be found in the pit fall traps deployed for the Helm's stag beetles, in accordance with the methods outlined in the

Terrestrial Invertebrate Management Plan ("**TIMP**"). Such notable invertebrates include ngaokeoke and giant springtails. In addition, Contact will undertake salvage of trapdoor spiders and short-horned grasshoppers in the areas identified in the TIMP. Contact will also implement an incidental discovery protocol during vegetation clearance activities for notable invertebrate species (described in the TIMP).

The TIMP (included in **Part J** to these application documents), outlines the measures to be undertaken by Contact to avoid, remedy and mitigate the adverse effects associated within the Project on notable indigenous invertebrates, including supervision requirements. The TIMP includes a Stag Beetle Management Plan, which supports the wildlife approval being sought for the salvage and transfer of Helms's stag beetles within the Wind Farm Site during construction of the Project. As such, Contact is seeking that the Panel approve the TIMP as final.

Following the implementation of the measures to avoid, remedy and mitigate the effects of the Project on invertebrates, some residual adverse effects will remain. These effects will be offset and compensated for, as outlined in Section 5.5.7 below.

5.5.6 Long-tailed Bats

Kessels and Davidson-Watts (2025) completed an assessment of the effects of the proposed Southland Wind Farm on long-tailed bats. As described in Section 2 of this application document, extensive bioacoustics surveys have been completed across the Wind Farm Site between December 2022 and April 2024. The results of these surveys (and subsequent statistical analysis by data modelling consultancy Proteus) indicate that:

- The Wind Farm Site is used for foraging and commuting, but is not likely to be core habitat for a local maternity population of long-tailed bats;
- Bat detection levels are comparatively very low in overall terms, particularly compared to other known areas with bats in the Catlins;
- There is a general preference for tall vegetation (exotic plantation forest or wilding conifers) and areas close to rivers, wetlands and tracks;
- Bat activity on or near the Wind Farm Site is focused along the escarpment between Matariki Forest and the adjacent Catlins Forest Park);
- The risk of blade strike over the majority of the Wind Farm Site is very low due to the low bat activity and the high altitude of the turbine locations, however, there is a moderate strike risk at proposed turbines MAT-01, MAT-02, MAT-03, MAT-04, MAT-06, MAT-07, MAT-12, MAT-16 and MAT-17 (these turbines being located within the area referred to as the 'Bat Risk Area'(identified in **Figure Long-tailed Bats-10 (Part G)**);

- Bat activity is highest over the autumn months of mid-February to mid-April;
- Bat activity declines with rainfall and as wind speed increases (noticeably when speeds are greater than 3.75 m/sec at 30m elevation (which corresponds to 5m/s at the height of the proposed turbine nacelle); and
- Bat activity increases with temperature increases (being most active from 8°C upwards).

5.5.6.1 Habitat Removal

Vegetation clearance during construction of the Southland Wind Farm has the potential to cause significant adverse effects on long-tailed bats if not appropriately managed. Long-tailed bats are cavity roosting bats. Roosts can be present both in large trees within indigenous vegetation and in exotic trees such as pine. Removal of trees with cavity bearing features could result in harm to long-tailed bats, if any occupying those trees.

The results of the surveys completed within the Wind Farm Site show no indication that bats are roosting within the Wind Farm Site. However, taking a precautionary approach, Kessels and Davidson-Watts (2025) consider that it is appropriate for Contact to implement targeted application of best-practice tree removal protocols[30] during vegetation clearance activities required for the construction of the Southland Wind Farm. In accordance with these recommendations, Contact will implement a tree felling protocol when undertaking the removal of old/mature trees in areas where moderate bat activity was recorded, such as near proposed wind turbines MAT-01, MAT-16, MAT-17, MAT-07 and MAT-12. In the unlikely scenario that an occupied bat roost tree is found within these areas, these protocols provide direction on the appropriate steps to avoid harming individual bats and mitigation measures for addressing the loss of a roost tree. The details of these measures will be outlined in the Bat Management Plan ("**BMP**") (refer to the draft version of the BMP included in **Part J** to these application documents).

Following the implementation of these mitigation measures, Kessels and Davidson-Watts (2025) consider the potential effects associated with habitat removal required for the construction of the Project on long-tailed bats will be negligible.

5.5.6.2 Habitat Displacement

The construction and operation of the Southland Wind Farm has the potential to create disturbances for long-tailed bats, primarily due to the operation of the wind turbines, such

[30] The Department of Conservation's national guideline document, '*Protocols for minimising the risk of felling occupied bat roosts*', dated October 2024.

as noise, vibrations, and changes in air pressure that can disrupt the bats' normal behaviours and routines, and may result in habitat displacement for long-tailed bats within the Wind Farm Site. The effects of this habitat displacement are considered minor given the low level of bat activity across the Wind Farm Site, and the similar or higher quality habitat available to this population of long-tailed bats in the Catlins. However, any residual effects associated with habitat displacement will be appropriately compensated for by the proposed compensation package, discussed further in Section 5.5.6 below.

Following the implementation of these measures, Kessels and Davidson-Watts (2025) consider the potential effect associated with habitat displacement on long-tailed bats will be negligible.

5.5.6.3 Strike Risk

Kessels and Davidson-Watts (2025) consider long-tailed bats are at risk of wind turbine strike and/or barotrauma injury and mortality at the proposed Southland Wind Farm. This is due to the more open, as well as edge forest habitats that long-tailed bats use, the presence of these habitats within the vicinity of some of the proposed wind turbines and the behavioural characteristics of long-tailed bats.

Kessels and Davidson-Watts (2025) have assessed the potential strike risk for bats as follows:

- The risk of bat strike is likely to be Very Low to Low across Jedburgh Station, Glencoe Station and the northern and western part of Matariki Forest due to the low bat activity in these areas;
- The effect of the construction and operation of the transmission line on long-tailed bats is likely to be Low to Negligible; and
- The level of bat activity is generally higher in the southern and eastern part of Matariki Forest, adjacent to the escarpment in an area identified as the 'Bat Risk Area' (identified in **Figure Long-tailed Bats-10 (Part G)**. Within this area, nine of the eleven wind turbines pose a Moderate bat strike risk (the remaining two are low risk).

In order to manage the potential strike risk to long-tailed bats, Kessels and Davidson-Watts (2025) consider, based on the specific site risk parameters and the bat activity data, the proposed wind turbines within the identified 'Bat Risk Area', being MAT-01, MAT-02, MAT-03, MAT-04, MAT-06, MAT-07, MAT-12, MAT-16 and MAT-17, should have their operation curtailed during certain conditions to avoid the potential effect of strike risk on bats.

During the Covid Fast-track consenting process, there was agreement between all bat experts that, if proven, live curtailment was preferred over set curtailment. Live curtailment

is technology that detects bats flying near or within the rotor-swept zone of an individual turbine through either microphones or (potentially in future) cameras. When combined with Artificial Intelligence, it slows down or turns off turbines when a bat is flying near that turbine. Live curtailment has the advantage over traditional 'set' curtailment as turbines are only shut down when bats are detected nearby as opposed to whenever certain climatic and temporal conditions are met, thus reducing the amount of time that the turbines are not operating. This has the benefit of reducing the amount of generation that is 'lost' and the subsequent regional and national benefits associated with this, without harming bats.

Live curtailment is a relatively new technology and has not yet been trialled in New Zealand. Therefore, Kessels and Davidson-Watts (2025) consider it is appropriate that acoustically based live curtailment is trialled at the identified wind turbines for an initial operating period of up to three years to determine the efficacy of the system in managing adverse effects on long-tailed bats. As this is new technology in New Zealand, live curtailment will only be implemented if the Expert Bat Panel (described further below) is satisfied that the available bat detection system is appropriate.

In the event the monitoring shows that live curtailment is not effectively managing adverse effects on bats, Contact will cease the use of live curtailment and revert to 'set curtailment' at the identified turbines, from sunset to sunrise, between 15 February and 15 April, when:

- Windspeed is less than 5 m/sec at the hub height of the wind turbine; and
- Temperature is 8°C or higher; and
- Precipitation is less than 1.5 mm/hour.

These parameters have been recommended by Kessels and Davidson-Watts (2025) on a conservative basis, based on the bat activity and statistical analysis of the surveys completed, noting that some turbine locations within the 'Bat Risk Area' recorded presence of bats less than 1% of the total dusk-dawn survey time.

Following the implementation of the proposed mitigation measures, Kessels and Davidson-Watts (2025) consider that the effect of the wind farm associated with strike of long-tailed bats will be low. Any residual risk associated with strike, including that associated with the wind turbines that are not proposed to be curtailed, will be addressed by the proposed compensation package discussed below.

5.5.6.4 Monitoring and Expert Bat Panel

Contact will implement post-construction bioacoustics monitoring of long-tailed bats in accordance with the BMP and proposed conditions (EC72). The pattern of bat activity will be used to inform whether long-tailed bats associate with wind turbines (primarily as a

research output), assess whether bat activity changes after commissioning and assess the effectiveness of the live curtailment regime.

An Expert Bat Panel (EC79A-EC79F) will also be established that will provide Contact with advice and assistance in relation to the monitoring and management of potential adverse effects. This will include the provision of advice in respect of Contact's responsibilities to implement the required monitoring and management of potential adverse effects on long-tailed bats at the Wind Farm Site, the effectiveness of live curtailment and the implementation of set curtailment (if required).

5.5.6.5 Compensation Package

Following the implementation of the above measures to avoid, remedy and mitigate adverse effects of the Project on long-tailed bats, Kessels and Davidson-Watts (2025) consider there will be potential residual adverse effects. As discussed further below, Contact has developed a significant Bat Compensation Strategy in collaboration with DoC to address the residual effects of the Southland Wind Farm on bats. This will involve Contact providing long term, guaranteed funding to DoC, so they can undertake an intensive predator control programme, over a 10,000ha area in the Beresford Range in the Catlins Forest Park (identified on **Figure Long-tailed Bats-14 (Part G)**).

The size of the predator control area and benefits expected to derive from the predator control work will more than compensate for the residual adverse effects expected (MacGibbon (2025)).

The objectives of the compensation strategy are to:

- Provide funding to enhance the habitat of a known long-tailed bat population within the Catlins Forest and Beresford Range in particular, to address any residual effects of the operation of the Southland Wind Farm on long-tailed bats;
- Provide funding to target predators through trapping and other methods in order to increase the likelihood of successful breeding of the long-tailed bats in this area of the Catlins Forest; and
- Provide funding to assist in monitoring the success of the predator control programme by monitoring the Mohua bird (yellow head) population, which is a known indicator of the overall health of the indigenous biodiversity of the area.

Kessels and Davidson-Watts (2025) consider that this will likely significant benefit the long-tailed bat population within the Catlins Forest Park and Beresford Range in particular (and likely other indigenous species also present). This will therefore more than adequately

compensate for the residual risk of turbine strike mortality and displacement of bat habitats within the Wind Farm Site.

5.5.7 Management of Residual Ecological Effects

As described in the previous sections, 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.

Given the national significance of the development of renewable electricity generation infrastructure, the relevant policy documents provide for offsetting and compensation of significant residual adverse effects associated with these activities. The measures for the offsetting and compensation[31] of the significant residual effects have been designed in accordance with the relevant policy guidance provided in the National Policy Statement for Renewable Electricity Generation ("**NPS-REG**"), National Policy Statement for Freshwater Management ("**NPS-FM**"), Southland Regional Policy Statement ("**Southland RPS**"), regional and district plans. As discussed further in Section 8 below, the objective is to ensure 'No Net Loss' of biodiversity and no net loss in extent of rivers or wetlands. These measures are discussed in detail in the reports prepared by Wildlands (2025), MacGibbon (2025) and Kessels and Davidson-Watts (2025), and are required to be implemented by the proposed consent conditions.

On-site effects management measures to address significant residual adverse effects include:

- **Jedburgh Station Pest Control Area:**
  - Large-scale aerial control of introduced mammalian pests will be carried out across indigenous vegetation and habitats over an approximate 1,400ha area on Jedburgh Station, on a three-yearly cycle for the life of the Southland Wind Farm Project (EC54(a));
  - Ground-based trapping will also be carried out along all wind farm roads within the 1,400ha pest control area on Jedburgh Station, targeting mustelids, rats, and feral cats, every two months for the life of the Southland Wind Farm (EC54(b)). This will address potential effects associated with fragmentation of habitats; and

[31] It is noted Policy BIO.9 of the Southland Regional Policy Statement considers all actions on-site are mitigation measures and offsetting and compensation provide positive effects for an activity off-site. Regardless of how it is identified, the measures that are being proposed on-site will result in an overall enhancement of the ecological values that exist.

- In addition to the above, the Jedburgh Plateau will be subject to targeted deer and pig control on a six-monthly basis for two years following the commissioning of the wind farm, and no less than every three years thereafter for the life of the Southland Wind Farm (EC54(c)).

> **Jedburgh Station Ecological Enhancement Area:**

- An ungulate exclusion fence will be constructed and maintained for the life of the Southland Wind Farm around a 245ha block of indigenous vegetation, characterised by mānuka forest and scrub, and smaller areas of shrubland and fen and bog wetlands, mostly outside of the Jedburgh Plateau (EC51). Within this area feral deer and pigs will be eradicated and stock excluded, and enrichment planting will be undertaken (within terrestrial habitats) at a rate of 20 plants per hectare (approximately 5,000 plants in total) (EC52);
- The fence will permanently protect 18ha of fen and 1.5ha of bog from browsing and pugging;
- Assisted regeneration and enrichment planting will also be undertaken on the existing tracks that are no longer required within the Jedburgh Station Ecological Enhancement Area, which will provide an additional 8.7ha of restoration (EC51); and
- This area will be legally protected (EC59).

> **Copper Tussock Enhancement and Skink Protection Area:**

- An ungulate exclusion fence will be constructed and maintained for the life of the Southland Wind Farm around an area of approximately 8ha of degraded copper tussock vegetation within the Matariki Forest, where the greatest number of tussock skink were found during field work. This to offset the direct and unavoidable loss of 5.2ha of significant copper tussock-dominant grassland and shrubland (EC51);
- Feral deer and pigs will be eradicated, ground-based control of rats and mice will be carried out, and pest plant control and enhancement planting will be undertaken at the Copper Tussock Enhancement and Skink Protection Area (EC52 and EC54(f)(ii)); and
- This area will be legally protected (EC59).

> **Plateau Fauna Enhancement Area:**

- Targeted intensive ground-based pest animal control (minimum of 2 devices per hectare), for the life of the Southland Wind Farm, across a 55ha area on the Jedburgh Plateau (EC54(d)); and

- Pest species targeted include rats, stoats, and hedgehogs and this will benefit the local populations of mātātā/South Island fernbird, pīhoihoi/NZ pipit, lizards and invertebrates and offset the potential residual effects associated with the construction of the Southland Wind Farm on other indigenous birds.

> **Compensation for residual effects on lizards:**

- Two release sites have been identified for the relocation of any salvaged skink prior to, and during construction, one site on the Jedburgh Plateau, an approximate 0.48ha area adjacent to the Wind Farm Site road access between JED-28 and JED-29 where tussock skinks have previously been captured (**Jedburgh Plateau Skink Release Area**), and the other is within the Copper Tussock Enhancement and Skink Protection Area described above. Habitat enhancement through the transfer of woody debris and logs and enhancement planting, pest plant control for a 10 year period and targeted control of mice every three months for the first five years following the commencement of the operation of the Southland Wind Farm will be undertaken within these release sites;
- For Tautuku gecko, a temporary Gecko Soft Release Pen will be established within the Jedburgh Station Ecological Enhancement Area. Any salvaged Tautuku gecko will be transferred into that soft release pen, which will be subject to pest control. Contact will undertake targeted control of mice within this area every three months for the first five years following the commencement of the operation of the Southland Wind Farm. The soft release pen can be decommissioned once the ungulate exclusion fence around the wider Jedburgh Station Ecological Enhancement Area is in place (EC15B);
- If green skink are found within the Project Footprint, the establishment of a minimum 2ha Green Skink Protection Area at an existing population for green skink to compensate for any residual effects from the Project. This will include the establishment and maintenance of a predator exclusion fence for the life of the Project, combined with predator control (to eradicate mice and other predators) within the protection area (EC16); and
- To compensate for any residual adverse effects on Tautuku gecko, Contact will provide a research institution or environmental organisation $30,000.00 for research or management of Tautuku gecko (EC18).

> **Compensation for residual adverse effects on terrestrial invertebrates:**

- Planting will be carried out in eight discrete areas (totaling approximately 1.6ha) using a mixture of copper tussock and divaricating shrub species adjacent to roads and turbines on the Jedburgh Plateau. These relatively small, discrete planting areas

(total area of approximately 16,000m^2) will provide habitat and connectivity for invertebrates between existing areas of indigenous shrubland (EC51); and

- To compensate for any residual adverse effects on notable indigenous invertebrates, a one-off payment of $30,000.00 to a research institution to support a grant for research into developing best practices for translocating notable indigenous invertebrates (EC26).

> **Potential additional compensation for operational effects on birds:**

- As discussed above, post-construction avifauna collision monitoring is proposed. If that monitoring confirms that any of the species-specific 'Compensation Triggers' (in terms of mortality) are exceeded, as listed in Condition EC37B, compensation will be provided, with details to be determined through the process set out in the proposed conditions. The purpose of the compensation will be to enhance a known habitat or breeding site of the affected bird species away from the wind farm. This may be in the form of additional predator control or habitat enhancement, or the provision of funding to an existing or proposed predator control or habitat enhancement programme for the affected bird species (EC37E).

In addition to the above, off-site compensation actions will comprise of:

> **Beresford Range Pest Control Area:**

- A collaborative approach between Contact and DoC, with Contact providing DoC funding to trap the intensive predator control area ("**ICA**"), which is a 10,000ha area in the Beresford Range in the Catlins Forest Park, where there is a known population of long-tailed bats (EC75). This will also benefit many other indigenous fauna and flora species; and

- This will involve Contact making a financial contribution to the Bat Compensation Strategy, of an initial payment to DoC of $300,000, payable upon commencement of construction of the Southland Wind Farm, to assist with the funding required for track building and maintenance, and the purchase of traps and resources to deploy them within the intensive pest control area; and ongoing annual payments to DoC of $150,000 (inflation adjusted) for the life of the Southland Wind Farm, to assist with ongoing, targeted predator control for long-tailed bats and monitoring of Mohua / yellowhead birds and long-tailed bats within the area to determine the efficacy of the predator control (EC78).

- **Davidson Road Wetland Restoration Area:**
  - To compensate for the loss of wetlands associated with the Project indigenous wetland revegetation and enrichment planting will be carried out in wetlands that are currently dominated by exotic grasses on land owned by Contact at Davidson Road, approximately 6km north of the Wind Farm Site (EC51);
  - Actions will include the removal and ongoing exclusion of stock, revegetation of exotic grassland with copper tussock, rautahi and harakeke (5.1ha in total); enrichment planting of existing wetland areas (6.7ha in total); approximately 1ha of terrestrial revegetation to provide connectivity between areas of wetland; and targeted pest plant control and control of rabbits and hares (EC52); and
  - This area will be legally protected (EC59).

The location of the above offsetting and compensation measures are identified in **Figures Terrestrial Ecology-3a to 3d (Part G)**.

Wildlands (2025) has developed a Biodiversity Offset Accounting Model ("**BOAM**") to demonstrate offsetting, i.e. No Net Loss or Net Gain outcomes for addressing residual adverse effects on terrestrial habitats within the Wind Farm Site, focusing on the residual loss of significant vegetation associated with the construction of the Southland Wind Farm.[32] The BOAM demonstrates that the proposed actions at the Wind Farm Site will result in the following outcomes:

- Net gain in habitat values within the 245ha Jedburgh Station Ecological Enhancement Area (focused on the Jedburgh Plateau) within five to ten years following the removal of stock and control of feral deer and pigs;
- Improvements in the condition and structure of indigenous shrubland on the Jedburgh Plateau will be realised within 10 to 25 years following the control of feral deer and pigs; and
- Significant improvements in the condition and structure of southern rātā-kāmahi forest on Jedburgh Station will be realised within five to ten years following the control of feral deer, possums, and rats.

MacGibbon (2025) has reviewed all of the proposed offsetting and compensation measures and concludes that the offset and compensation measures proposed will fully and appropriately address the ecological effects and can be expected to result in an overall net

[32] The models do not account for exotic-dominant vegetation or indigenous fauna.

benefit to biodiversity. Further, the expected recovery of several forest bird species as a result of the long-tailed bat predator control programme will far exceed, in terms of ecological benefits, any adverse effects of the Southland Wind Farm Project on indigenous birds. For this reason, the effects management package proposed by Contact can be expected to generate a substantial overall net gain in biodiversity.

A Habitat Restoration and Enhancement Management Plan will be prepared for the Project, and this will set out the procedures for how Contact will offset and compensate for significant adverse effects on terrestrial[33] and wetland values to implement the measures described above. The draft HREP is included in **Part J** to these application documents. This will also include the monitoring and reporting requirements to ensure the relevant performance targets as set out in the proposed consent conditions are achieved. This is described further in Section 6 below.

5.6 FRESHWATER ECOLOGY EFFECTS

Ryder and Goldsmith (2025) completed an assessment of the effects of the proposed Southland Wind Farm on freshwater ecology and this is summarised below.

5.6.1 Potential Freshwater Ecology Effects

The potential effects of the Project on freshwater ecology identified will primarily occur during the construction phase and include:

- Potential direct and indirect discharge of sediment to watercourses associated with construction activities;
- Effects associated with the extraction of water, including increased sediment input, downstream flow reductions (e.g. reduced habitat, increased water temperatures) and fish drawn into intakes if appropriate intake screening is not installed;
- Potential effects on freshwater ecology values associated with the construction and placement of new watercourse crossings; and
- Risk of contaminants and new pest species entering watercourses, with the potential to harm freshwater communities, due to the presence of construction machinery, ablution facilities and concrete batching plants.

The stream length potentially impacted by the civil works footprint will be approximately 769m (using NZ Rivers 50k topographic data). However, a portion of this estimate is already

[33] Excluding long-tailed bats which will be addressed separately in the Bat Management Plan.

culverted (13 culverts in total), and therefore, the actual stream length affected by the Southland Wind Farm Project will be lower (potentially 200m less). In accordance with the policy guidance provided in the NPS-FM, Contact will apply the effects management hierarchy to the management of identified effects on the extent and values of rivers and streams within the Project Site. These measures are outlined in full in **Table 15,** included in Section 8 of this application document and discussed further below.

5.6.2 Construction Management Measures

Given the identified effects on aquatic ecology primarily relate to the activities required for the construction of the wind farm, these effects will be managed through the implementation of best practice construction methods. These will be implemented in accordance with the proposed conditions of consent, as well as the proposed management plans, which collectively provide certainty that these potential effects will be appropriately managed. Potential effects associated with earthworks activities will be managed through the implementation of an Earthworks Management Plan ("**EMP**"), which will include an Erosion and Sediment Control Plan ("**ESCP**"), and form part of the CEMP. The EMP and ESCP will outline a number of management measures specific to protecting surrounding freshwater bodies, for example, fish recovery, and the provision of fish passage through culverts (where appropriate) (refer to condition CM13).

The ESCP will be in accordance with industry best practice, as discussed further in Section 5.7 below. This will also outline the requirements recommended by Ryder and Goldsmith (2025) to appropriately manage potential effects on freshwater, including water quality monitoring requirements. Implementation of the ESCP will ensure the relevant SWLP water quality standards[34] are met and the existing freshwater ecology values are protected. In addition, a well-designed stormwater management system will be outlined in the ESCP to reduce the potential for sediment run-off into waterways within the Project Site during high rainfall events.

Fill disposal sites will avoid any areas identified as wetlands, permanent or intermittent streams, identified areas of high-value vegetation and very steep slopes to avoid sediment release downstream into streams (refer to Condition CM3(d)). Erosion control will be implemented at fill disposal sites to ensure that sediment is not mobilised through run-off with the risk that it enters streams downstream. The measures specified in an ESCP will be

[34] Appendix E – Receiving Water Quality Standards, SWLP. The Wind Farm Site is classified as 'Mataura 3', and the part of the wider Project Site is classified as 'Lowland Soft Bed'.

adopted during fill disposal and the disposal sites will be rehabilitated as soon as practicable to minimise the potential for sediment loss.

In addition, the measures outlined in the ESCP and CEMP will ensure that the risk of contaminant and pest introduction to watercourses is minimised. This will include the following requirements:

- That contaminants (e.g. diesel, lubricants) stored on-site should be bunded, and refuelling of machinery should take place away from watercourses;
- To isolate and capture runoff from the concrete batching plants and pass it through buffer strips before discharging to land to prevent runoff from entering watercourses;
- To either remove waste from ablution facilities from the Project Site or treat the waste from ablution facilities to ensure untreated wastewater does not enter watercourses; and
- All machinery brought onto the Project Site will be thoroughly cleaned, to avoid the risk of introducing weed species.

5.6.3 Water Take Management

The ESCP measures will also be adopted during the construction of the water intake structure, including the requirement to monitor water quality. Contact will install fish screening devices on the water intake structure, in accordance with Appendix R of the Southland Water and Land Plan, and restrict the amount of water that is taken. Ryder and Goldsmith (2025) note that the restrictions on the proposed water take (including restrictions during low flow conditions required by Condition CM17) effectively provides levels of instream habitat maintenance that are conservative, are supported by past assessments of habitat protection in New Zealand and Southland streams, and will be sufficient to maintain existing stream ecosystem values. Further, the water supply will only be required during the construction phase of the wind farm (approximately 24-30 months) and the water take will cease when the wind farm construction has been completed.

These measures will ensure that the existing freshwater ecology values of the Mimihau Stream South Branch are protected while water is taken for the construction of the Southland Wind Farm.

5.6.4 Stream Crossings Including Offsetting

The Project roads follow ridgelines and other elevated areas where possible therefore mostly avoiding streams. However, some stream crossings are required for the Project,

including along the forestry road through the Port Blakely Forest (which will be upgraded and used for wind farm construction access).

Nine 'notable' stream crossings are required to enable access to and within the Wind Farm Site during construction, including along the forestry road through the Port Blakely Forest. These are identified in **Figure Aquatic Ecology-2 (Part G)**. All stream crossings will be by way of culvert (either replacing existing culvert or ford crossings), except for one which will be as a bridge (to replace an existing bridge in the Matariki Forest).

The existing values of these sites are described in Ryder and Goldsmith (2025). Some of the stream crossings, including NSC3, have unrestricted stock (sheep and cattle) access. While there will be some disturbance associated with the establishment of these culverts, they will provide localised positive benefits, in particular at sites NSC1, NSC3, NSC4, NSC5 and NSC8, through the removal of the current disturbance associated with vehicles driving over the stream bed due to existing fords at these sites.

Ryder and Goldsmith (2025) note that at three sites (NSC1, NSC3 and NSC6) it is considered to be more beneficial to prevent the passage of trout to protect the Threatened indigenous fish population present upstream of these culverts (Gollum galaxias upstream of NSC1 and NSC3 and Clutha flathead galaxias upstream of NSC6). This is in accordance with clause 3.26 of the NPS-FM and consultation with DoC has confirmed restricting passage of trout at these sites is preferable. Approvals for complex freshwater fisheries activities associated with excluding fish passage at these proposed culvert crossing sites are therefore being sought as part of this substantive application and this is described further in **Part F** to these application documents. All other culverts will be designed in accordance with the New Zealand Fish Passage Guidelines.

Further stream crossings beyond the 'notable' stream crossings will also be required, however, the additional streams crossings are classified as order 2 or less.[35] Estimates have been made of the total length of stream habitat lost or disturbed as a result of the civil works associated with the construction of the wind farm, based on the NZ Rivers 1:50k topographic river network database, however, the final calculations can only be made following the completion of detailed design. The estimate of total stream length potentially impacted by civil works is 769m. As noted above, the actual length of impacted stream will be lower than that figure potentially by as much as 200m.

[35] Strahler stream order: A measure of the relative size of streams. First order streams are the smallest tributaries. When two first order streams flow into each other they form a second order stream.

The watercourse crossings are required to enable the transportation of wind farm components, and therefore, the construction of the watercourse crossings cannot be avoided. To offset the unavoidable habitat disturbance associated with the installation of stream crossings, Contact will undertake enhancement of watercourses through fencing and riparian planting to prevent stock access, restore stream shade and reduce sediment and nutrient inputs via run-off.

The Stream Ecological Valuation ("**SEV**") method will be used to calculate the quantum of offsetting required, as described by Ryder and Goldsmith (2025). The SEV method will be used to describe the existing habitat values of the watercourse in a quantifiable way and ensure that enhancement offsets the stream crossing disturbance by increasing habitat elsewhere by a similar extent to that lost. This will occur at streams of the same order and that are within the Mimihau Stream catchment, close to the Wind Farm Site. Ryder and Goldsmith (2025) identify the potential offset sites along the Mimihau Stream South Branch tributary, including the values of these sites, noting that most are currently open to stock access, and some have obvious signs of bank erosion, pugging and a general lack of riparian cover.

Ryder and Goldsmith (2025) estimate that approximately 1-2km of stream length will be restored as an offset and confirm that there is sufficient stream available locally for offsetting purposes to address the effects of stream loss associated with the construction of the Project. The SEV and Environmental Compensation Ratio calculations will be completed following the completion of detailed design, as it is only then when the actual stream loss can be calculated.

The measures of the proposed offsetting will be outlined in a Riparian Offsetting Management Plan ("**ROMP**"), required by the conditions of these consents, and will be certified in accordance with the management plan certification process. A draft ROMP is attached in **Part J** of the application documents. In addition, Contact will be required by the proposed conditions of consent to secure the necessary rights to access and establish the riparian planting offset areas prior to the commencement of construction, and to secure the ongoing legal protection of those areas (refer to Conditions EC43A-EC46).

Given the above, it is considered the freshwater ecology effects can be appropriately managed through the implementation of best practice construction methods and that the proposed riparian offsetting programme is robust and will appropriately address the residual effects of the Project on freshwater values.

5.7 CONSTRUCTION EFFECTS

Riley (2025) completed a construction effects assessment for the Project. This report is summarised below.

A Construction Environmental Management Plan ("**CEMP**") will be prepared in accordance with the proposed consent conditions (refer to the draft CEMP included in **Part J** of these application documents). This will be comprised of a 'front-end' CEMP document, and the following management plans:

- Earthworks Management Plan ("**EMP**"), which will include an Erosion and Sediment Control Plan ("**ESCP**");
- Flocculant Management Plan;
- Construction Noise Management Plan ("**CNMP**"); and
- Construction Traffic Management Plan ("**CTMP**").

Draft versions of all of these management plans are included in **Part J** of the application documents.

The implementation of these plans will ensure any potential effects associated with the construction of the Southland Wind Farm will be appropriately avoided, remedied or mitigated.

5.7.1 Earthworks Within Wetlands

The Southland Wind Farm layout has been designed to avoid wetlands to the greatest extent practicable (described in Riley (2025)), however, in some cases, the wind farm layout could not completely avoid the wetlands present within the Wind Farm Site, in particular on the Jedburgh Plateau, where 14 of the proposed wind turbines are located. As noted above, the indicative Project Footprint of earthworks within wetlands on the Jedburgh Plateau has been limited to approximately 2ha,[36] comprising 1.42ha of cut and 0.6ha of fill earthworks (no surplus fill disposal sites will be located within wetlands, as discussed below). A further approximate 1.7ha of earthworks will occur within 10m of wetlands. Earthworks activities within and near wetlands will be managed in accordance with best practice to minimise the effects of these activities on wetlands, and this is discussed in Riley (2025).

In addition to refinements to the Project Footprint to minimise the impact of the Project on wetlands, additional measures will be implemented to minimise the potential adverse

[36] Noting the proposed limit of 2.5ha of wetland loss is being sought to accommodate a degree of flexibility.

effects on them. As mentioned above, Williamson Water & Land Advisory (2025) prepared a conceptual hydrological design report that assesses the flow conditions in specific areas adjacent to wetlands on the Jedburgh Plateau and recommends engineering mitigation measures to minimise the hydrological impact on wetlands and/or maintain water balance neutrality from the proposed linear construction. These measures include culverting beneath tracks and hardstands within the Jedburgh Plateau to maintain hydrological connectivity between/to wetlands), as well as the formation of low permeability clay bunds (effectively acting as a barrier to contain liquid (water) and prevent it from escaping into the surrounding area) where cut earthworks are proposed adjacent to wetlands to avoid dewatering them. Contact will implement the recommended mitigation measures, in consultation with its expert geotechnical engineers, hydrogeologists and ecologists, and these will be tailored for each circumstance where earthworks encroach wetlands, and will depend on whether it is a cut or fill.

5.7.1.1 Cut earthworks within wetlands

In areas where cut is required through wetland areas, the primary concern is seepage of water through the cut face, and thus, inadvertently dewatering the wetland. In order to prevent this from happening, a low permeability fill bund (using site won clays/silts) will be constructed prior to forming the cut face for the access track or wind turbine platform. The bund will be keyed into the underlying competent ground. This method may also be used where cut earthworks are proposed adjacent to wetlands (within 10m), where it is assessed that the proximity of the cut could result in seepage from the wetland. This will be assessed by a Suitably Qualified and Experienced Person during construction.

The bund will be formed from selected soils and will have a very low permeability when compacted to an engineered standard (expected to be many magnitudes lower than the adjacent organic wetland soils). To provide hydrological connectivity between the dissected areas of the wetland, a series of stormwater culverts will be installed beneath the access track or hardstands at existing flow paths, which will convey surface flow to the wetland downstream.

5.7.1.2 Fill embankment through wetland

Where a fill embankment (which will be founded on the clay / weathered rock layer beneath the wetland) is required, this will effectively be acting as a dam. Therefore, the primary concern is to provide connectivity between the dissected areas of the wetland, to maintain conveyance of flow to all parts of the wetland. To achieve this, a series of regularly spaced stormwater culverts will be installed through the fill embankment at existing flow paths, which will convey the surface flow to the downstream wetland.

5.7.1.3 Rock excavation close to wetlands

In some locations where excavations are within or adjacent to wetlands, un-weathered rock will be encountered at shallow depths. Such rock will likely be removed with the aid of rock blasting techniques. Therefore, specific mitigation measures will be employed to ensure the blasting does not affect the sub-soil drainage or permeability of the subsurface layers underlying the adjacent wetlands, and to limit the encroachment of earthworks into the wetlands. Blast trials will be conducted away from final batters to define the most effective method for the required excavation tolerances and details of these methods are outlined in the EMP.

5.7.1.4 Wind turbine foundations within wetlands

Where wind turbines are situated within wetlands, the base foundations will be formed at a lower level than the wetland. Separation (both horizontally and vertically) will be maintained between the adjacent wetland and the concrete foundation, and a low permeability clay bund (described above), will reduce seepage paths between the two. Therefore, under no circumstances will there be a risk of the concrete coming into contact with the wetlands. Furthermore, concrete pours will only be undertaken during dry weather, therefore, no dewatering of the foundation excavations is anticipated during the concrete pours.

5.7.1.5 Summary

With the implementation of the appropriate construction methods described above, the hydrology of the wetlands will be maintained and the impacts of the Project on wetlands will be minimised to the extent practicable.

5.7.2 Surplus Fill Disposal

The extent of earthworks required for the construction of access tracks, platforms and turbine foundations will result in a large quantity of excess fill (approximately 1,200,000m^3). It is proposed excess fill will be disposed within the Wind Farm Site. Fill disposal sites will generally be located close to areas of large surplus cut. In accordance with the proposed conditions of consent, the disposal of excess fill will comply with the following:

- No disposal shall take place within 10m of any areas identified as wetlands (including fen and bog wetlands) or high or very high ecological value vegetation or habitat types, as identified in the report prepared by Wildlands (2025);
- No disposal shall take place into any permanent or intermittent rivers or streams;

- No disposal shall take place into very steep slopes (>45 degrees) or erosion prone land;[37]
- No disposal site shall be contoured in such a way that it allows water to be impounded or pond on and around the fill site;
- All topsoil shall be removed from each disposal site and stockpiled for the future rehabilitation of the disposal site;
- All construction equipment and any debris from works shall be removed from the disposal site on completion of works; and
- Disposal sites shall be rehabilitated as soon as possible to minimise the potential for sediment loss, with:
    - The topsoil earlier removed from that site and with any additional topsoil required coming from a like for like ecosystem;
    - Like for like vegetation to that removed in accordance with the TEMP; and
    - To minimise the potential for sediment loss, maintain appropriate soil biota, and avoid the introduction or spread of pest plants as identified within the Biosecurity Management Plan.

An iterative process of identifying suitable fill disposal sites has been undertaken, through consultation between Riley and Contact's consultant ecologists (described in Riley (2025)). This includes refining the location of proposed gully fill sites to only be located in suitable identified sites within the Matariki Forest area of the site, which contains accessible broad gully features, allowing for the efficient placement of large volumes of material in the gully head, whilst being relatively low impact in terms of the vegetation type impacted. Further, shoulder fill disposal sites have been identified adjacent to tracks and other earthwork areas where the topography is suitable for this method.

The final fill disposal sites will be determined during detailed design, however, the indicative locations of fill disposal sites are identified in **Figure Project Description-7 (Part G)**. A total of 101 indicative fill disposal sites have been identified (9 gully fills, 39 shoulder fills and 53 blanket fills), all of which meet the above criteria. The identified sites have a combined storage capacity of approximately 1,479,000m^3, which is a greater capacity than the

[37] As shown on https://www.stats.govt.nz/indicators/highly-erodible-land/ as areas being "highly erodible land areas".

indicative surplus fill (approximately 1,200,000m^3), and therefore, not all of the identified fill disposal sites will be required.

Contact is seeking flexibility to identify alternative fill disposal sites during detailed design, which may identify more suitable locations, and therefore, the number and location of the fill disposal sites remains indicative. This approach is consistent with other large-scale infrastructure projects.

However, fill disposal on the Jedburgh Plateau will be restricted to the eight fill disposal sites that have been identified (see **Figure Project Description-7 (Part G)**). This provides additional certainty regarding the effects of the Project on the Jedburgh Plateau.

5.7.3 Stormwater Management

The introduction of a track network and hardstand areas (including turbine pads, the GIP and O&M building) will have the potential to affect the existing drainage patterns on-site. Minimising the degree to which this occurs was an important consideration in the design of stormwater control measures, and to some degree, track design.

Key design principles that will be employed in the design of the stormwater management and disposal arrangements for the Southland Wind Farm's access road network and hardstands are outlined in Riley (2025). These include, where practicable, allowing stormwater runoff to sheet flow from the access tracks and across the natural topography; conserving the natural flow paths to natural streams and wetlands downstream; constructing adequately sized culverts; and mitigation of potential erosion along drains and at outlets with energy dissipation through rock lined channels along steep gradient and rock aprons at culvert outlets.

5.7.4 Stream Crossings

Nine 'notable' stream crossings are required for the construction of the Southland Wind Farm. A new bridge is required to be constructed for a stream crossing over the Mimihau Stream South Branch, the remaining eight notable stream crossings will be culverts. As previously mentioned, these will be designed to accommodate fish passage in accordance with the NES-FW, except for three of the proposed culvert crossings (NSC1, NSC3 and NSC6), where it has been determined to be more beneficial to prevent fish passage to protect the upstream galaxiid populations. Where stream crossings are required, the disturbance area (culvert length) has been minimised to the extent practicable by ensuring the access track is aligned perpendicular to the stream alignment and the fill embankment height (above the culvert) is kept to a minimum.

Riley prepared a preliminary Stream Crossing Design Report included as Appendix C in Riley (2025), and this discusses the proposed stream crossing designs in greater detail.

5.7.5 Erosion and Sediment Control

Earthworks are required for a range of construction activities, including the construction of turbine platforms, internal access tracks, installation of culverts at crossing points of overland flow path features, fill disposal sites and stockpile sites. Without appropriate management, these activities can result in dust and sediment runoff until the site has been stabilised.

As noted above, the CEMP will include a number of management plans, including an Earthworks Management Plan, which will also include an ESCP. The erosion and sediment control measures will be designed and constructed in general accordance with the Auckland Council's Guideline Document 2016/05 "*Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region*". The general principles for sediment control that will be adopted for the construction of the Southland Wind Farm will include the implementation of measures reducing the potential for erosion of exposed soils during land disturbing activities and to utilise treatment devices that collect and retain sediment prior to discharging into the receiving environment.

In order to mitigate effects of earthworks activities on the surrounding topography, existing waterbodies and established vegetation, a low impact design approach will be adopted. This will reduce the volume of sediment and dust leaving the Project Site, including through, where practicable and available, aligning the access tracks along existing established accessways / tracks and disposing of fill in areas that are gently sloping, relatively easy access for vehicles, and situated on stable ground. Further, construction activities will be staged along the access tracks to allow time to stabilise the exposed surfaces and reduce the area of exposed earthworks throughout the construction period.

Typical sequencing of staging during construction is outlined in Riley (2025). These measures will appropriately manage runoff generated from earthworks required for access tracks, turbine platforms, fill disposal, culvert construction and other associated works such as the concrete batching plant and other temporary areas.

A Site or Activity-Specific Management Plan ("**SSMP**") will also be developed for identified zones within the Project Site during construction. These will be prepared in general accordance with the CEMP and ESCP. This will enable Contact to appropriately respond and manage site-specific characteristics and implement management procedures that are required for discrete areas within the Project Site during construction. The SSMPs will be prepared by a suitably qualified and experienced person and submitted to the Southland

Regional Council prior to the commencement of works, in accordance with the proposed conditions.

Mitigation measures for sediment, erosion and dust control will generally include:

- A stabilised construction entrance on a filter cloth base at the entry / exit points of the Project Site (and entrances to the surplus fill disposal sites, dependent on construction staging);
- A wheel wash adjacent to the construction entrance(s);
- The use of silt fences in suitable locations;
- Sediment retention ponds to treat sediment laden runoff and reduce the volume of sediment leaving the site;
- Runoff diversion channels to intercept and detain silt laden runoff and divert into drop-out pits, earth decant structure or sediment ponds where specified. In addition, cleanwater diversion bunds will be constructed to intercept overland flow from upper catchments and divert around the earthwork sites;
- Excavation around the inlet of the culverts to allow storage capacity where suspended materials can settle out;
- Install drop-out pits at open drain termination points;
- Stabilised channel protection; and
- Dust control, including wet suppression via water trucks, covered storage in more sensitive locations, reduced / controlling stockpile height and slopes to reduce wind entrainment.

Additional control measures will be implemented for construction activities on the Jedburgh Plateau, including in relation to the construction of the clay bunds and these are described in Riley (2025) and will be implemented via the CEMP.

Contact will ensure regular maintenance and inspections of the sediment, dust and erosion control devices are conducted throughout the construction of the Southland Wind Farm. Erosion and sediment control measures implemented will meet the performance standards required by the proposed consent conditions (refer to Conditions CM5).

Worked areas will be stabilised using topsoil on moderate slopes (1v:2h or flatter) and grass seed or hydro-seed techniques on steeper cut batters.

5.7.6 Dust Control

Dust generated during the construction of the Southland Wind Farm could affect vegetation or fauna, become a nuisance to site personnel and neighbouring landowners and could also potentially contribute to sediment loads. Dust can be made airborne by wind or vehicle movements (or both). In this respect, a number of activities are likely to generate dust including vehicle movements, removal and placement of topsoil, excavations, stockpiling of material, loading of vehicles, site clearance, track construction and foundation construction. For this reason, dust will need to be managed during the construction of the Southland Wind Farm. It is noted that the Project site has an annual rainfall of approximately 1,800mm/annum, and as such, is not a dry site and significant dust effects are not anticipated.

In the event that dust generation on the Project Site becomes obvious, appropriate mitigation measures will be adopted. Such measures may include:

> Ensuring track surfaces remain damp, including via the use of water trucks;

> Limiting traffic speeds on-site;

> Staging earthworks in order to reduce the area of exposed surfaces and the revegetation of exposed areas as soon as practicable;

> Stabilising entry / exit points to the Project Site; and

> Limiting earthworks during periods of high wind.

In addition, suitable measures will be put in place to control dust from stockpiles. These will include:

> Wet suppression via water trucks;

> Covered storage in more sensitive locations;

> Reduced / controlling stockpile height and slopes; and

> In the extreme event that remedial measures are found to be ineffective for the control of dust, works may be suspended as a precautionary measure until conditions are suitable for resumption.

The draft CEMP provides further detail on the measures to be implemented during construction of the Southland Wind Farm to mitigate the potential risk of discharges of dust to air.

In addition, while the on-site concrete batching facilities will result in the discharge of contaminants to air, there will be no objectionable discharges associated with these activities beyond the boundary of the Wind Farm Site.

5.7.7 Hazardous Substances

Construction and operational activities at the Southland Wind Farm will require the storage and use of potentially hazardous substances, such as diesel and oil. The use and handling of these substances will be undertaken in a manner that complies with all relevant requirements of the Hazardous Substances and New Organisms Act 1996 and the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Careful management of potentially hazardous materials will substantially reduce the risk of spills. To avoid spillages, an appropriate location for re-fuelling and a suitable storage facility will be decided by the appointed contractor prior to the commencement of construction. The fuel storage location will be located at least 20m away from any water courses or wetlands, will be appropriately bunded and spill kits will be stored at this location at all times.

Significant oil leaks are highly unlikely at the wind farm substation[38], however, should oil leak from the transformer tanks, or the radiator body, the full volume will be able to be safely drained and accommodated within the electricity substation facility and avoid the risk of contaminating the wider environment. In this regard, bunded areas will be able to contain more than 110% of the total volume of oil in the transformers.

In addition, appropriate containment will be adopted for the storage of hazardous substances required for the ongoing operation of the Southland Wind Farm. These will be stored within the operations and maintenance building in a designated hazardous substances store. The types of substances required will include operational quantities of solvents, oils, grease and similar materials.

Overall, any potentially adverse effects associated with the storage and use of hazardous substances can be appropriately avoided, remedied or mitigated.

5.7.8 Site Rehabilitation

At the completion of the construction of the Southland Wind Farm, all construction buildings and equipment that are not required for the continued operation and maintenance of the wind farm will be removed from the site (e.g. the concrete batching plants, temporary

[38] Noting there are no transformers at the switchyard.

site buildings). The land occupied by these construction buildings and parts of the areas utilised for hard stand areas will be re-contoured (where necessary) and rehabilitated back to the previous vegetation cover (like for like).

Likewise, exposed areas around the wind farm substation, the Grid Injection Point (switchyard compound) and around any operational buildings will be rehabilitated and planted with appropriate plantings.

Fill disposal sites will be progressively re-contoured during construction in a manner that is consistent with the surrounding landscape features, reinstated with topsoil and revegetated with appropriate plant species (like for like) in accordance with the TEMP.

5.7.9 Geotechnical Effects

In terms of potential geotechnical effects, Riley (2025) has considered the following matters:

- Ground profile;
- Groundwater;
- Faults and folds;
- Slope stability;
- Seismicity;
- Liquefaction;
- Wet areas; and
- Earthworks, aggregates and fill disposal sites.

The assessment did not identify any geotechnical fatal flaws with respect to the proposed development. Riley (2025) considers the seismic hazard at the Wind Farm Site is relatively low and liquefaction of low-strength and saturated soils is not considered to be a risk at the Wind Farm Site.

Ground conditions vary laterally and vertically across the Wind Farm Site. The ground profile consists of variable sequences of near-surface 'unconsolidated soils' underlain by more-weathered 'lower-strength' bedrock. These units are underlain by less-weathered 'higher-strength' bedrock. The bedrock is very close to the surface in the southern parts of the Jedburgh Station (i.e. on the Jedburgh Plateau) and localised near-surface 'perched' groundwater zones are anticipated in this area as a result.

Engineered fill will be required for access tracks and platforms. All cut materials except topsoil and organics can potentially be used for bulk fill (e.g. soils, lower-strength bedrock,

and higher-strength bedrock). The earthworks will be undertaken in accordance with the detailed design, earthworks specification, and quality control programme. Some moisture control works (i.e. drying) may be necessary with colluvium to achieve close to optimum moisture content. Rock fill blocks may need breaking to conform to grading specifications for this material.

Surplus fill disposal sites will be constructed to a general design and specification confirmed during detailed design (including surface and subsoil drainage). Surplus fill disposal sites will be at practicable locations to minimise haul distances from source areas, while ensuring compliance with the fill disposal criteria required by the proposed consent conditions (described above).

In accordance with the recommendations from Riley, Contact will undertake further geotechnical investigations during detailed design to confirm the geotechnical model and horizontal and vertical variability across the Wind Farm Site. The investigations will assist in confirming the ground and groundwater conditions and confirm and optimise the design for various elements of the Project.

Given the above, the Wind Farm Site is suitable from a geotechnical perspective.

5.7.10 Construction Effects Summary

Construction activities will be managed in accordance with industry-best practice. This is reflected in the proposed conditions which specify performance standards, management measures and monitoring and reporting requirements, and in the CEMP and the associated management plans that will be finalised and implemented. This will appropriately manage the effects associated with the construction of the Southland Wind Farm.

5.8 HYDROLOGY EFFECTS

The effects of the proposed Southland Wind Farm on hydrology are assessed in Riley (2025) and summarised below.

During construction, the Southland Wind Farm will require water for activities such as earthworks, concrete batching and dust suppression. The maximum daily water volume required is estimated at up to 500m^3, however, demand will likely be between 250-350m^3 per day. To meet this demand, Contact proposes to take water from two sites within the Wind Farm Site, one site on a tributary to the Mimihau Stream South Branch (M1) and the other on the Mimihau Stream South Branch (M2), identified on **Figure Aquatic Ecology-2 (Part G)**. The proposed water take concept is described in detail in the project description (refer to **Part A** of this application).

Riley (2025) assessed the effects of the proposed water take. Riley established stream water level data loggers at the proposed water take locations in March 2023 and the stream level has since been continuously recorded at these sites. Rating curves for each site have been generated based on stream low gaugings undertaken over a range of flow conditions. The stream level data can be converted to flow data using rating curves. A summary of the flow information from the analysis of these stream flow records is provided in **Table 10** below.

Table 10: Mimihau Stream flow statistics at the proposed water take sites (from 29 March 2023 to 10 March 2025).

Location	Catchment Area (km^2)	Mean Flow (l/s)	Median Flow (l/s)	95 Percentile Flow (l/s)
Site M1	4.6	153	115	65
Site M2	12.4	377	269	92

Given the water requirements of the wind farm construction (i.e. up to 500 m^3/day), and the rules as stipulated in Appendix K of the proposed Southland Water and Land Plan ("**SWLP**"), Contact proposes a water take of a maximum of 5 l/s at each site M1 and M2, but restricted when stream flows are Q95 (or lower), at which point water take shall comply with the permitted activity limits set in Rule 49(a) or 49(b) (whichever is applicable) in the SWLP.

A maximum rate of take of 5 l/s corresponds to a (maximum) daily volume of 432m^3, which is close to the anticipated maximum daily demand of 500m^3. However, water take will be significantly restricted when flows are Q95 or lower. This means that water take will be significantly restricted for 5% of the time – or approximately 18 days a year. To address the potential issue of not having enough water in the short term to meet construction demands during these periods of low stream flow (i.e. Q95 or lower), water storage tanks or ponds are proposed so that the stored water can be used during periods of high demand that coincide with periods of low stream flow.

Ryder and Goldsmith (2025) consider that with the appropriate management in place, such as the implementation of the measures in the ESCP, fish screening and restrictions on the amount of water that is taken, the existing freshwater ecology values of the Mimihau Stream South Branch will be protected while water is taken for the construction of the Southland Wind Farm.

Given the above, it is considered the proposed water take is reasonable and will not result in more than minor adverse hydrological effects.

5.9 ARCHAEOLOGICAL EFFECTS

Cook (2025) assessed the potential effects of the Project on archaeological values within the Project Site. The conclusions of the assessment are summarised below.

The assessment has identified two archaeological sites within the Project Site, both in a similar location. There are two musterer's huts (G46/17) which are approximately 145m from the closest section of the proposed road alignment and approximately 210m from the nearest proposed pylon. As such, this site will not be impacted in any way by the construction of the Project.

The other archaeological site (G46/13) is located approximately 250m from site G46/17 and is notable as being a site where an adze was found. This site is the only site which is close to the proposed works, being near the proposed road alignment and also close to a pylon for the transmission line. The archaeological material at this site was removed in 1987 and no additional above surface material was found during the survey of the site. Therefore, the archaeological value of this site is low and Cook (2025) considers the Project will not modify or destroy this archaeological site. However, it is possible subsurface deposits related to this surface find are present within the vicinity. If deposits such as umu or other artefacts are present within the path of the proposed access road, Cook (2025) considers there is a high potential for them to be disturbed or removed during works.

As such, all works within 100m of the site marker will be monitored by a suitably qualified archaeologist and a representative from TAMI. Cook (2025) also notes that the location of the adze may have been incorrectly recorded, and that, based on the description, the correct location may be close to where the existing bridge crosses the Mimihau Stream South Branch. As such, adopting a precautionary approach, all site works that are undertaken within 100m of this stream location will also be treated the same as the site marker location (i.e. that the works will be monitored by a suitably qualified archaeologist and a representative from TAMI). These locations are identified on **Figure Archaeology-2 (Part G)**.

Despite there being only these two archaeological sites identified on the Project Site, Cook (2025) considers earthworks elsewhere on the Project Site have the potential to modify or destroy unrecorded archaeological sites or material within the Project Site due to the extensive earthworks required. Fill disposal will not disturb any subsurface deposits as it will involve adding material, rather than conducting earthworks.

Given the above, in accordance with the recommendations in Cook (2025), Contact is seeking to obtain a general Archaeological Authority that covers earthworks activities across the entire Project Site (including but not limited to works that would potentially affect G46/13) (this is described in further detail in **Part E** to these application documents).

Resource consent conditions are proposed to ensure adherence to appropriate protocols in the event of the accidental discovery of archaeological material, in accordance with best practice. TAMI has specifically advised that its preference is for resource consent conditions addressing archaeology to be included, in addition to conditions on the Archaeological Authority. Contact is comfortable with that approach.

As a first principle, every practical effort will be made to avoid damage to any archaeological site that might be discovered during work on the Project Site (including G46/13). The excavation contractors will be informed of the requirements of the potential to uncover items and sites of archaeological value and the requirements of the Archaeological Authority and briefed by the Project's archaeologist about the site's archaeological values prior to the commencement of works.

An Archaeological Management Plan will be prepared to guide contractors and Contact whilst undertaking site works (refer to **Part J** of these application documents for the draft Archaeological Management Plan). This will include:

- Protocols relating to the discovery of archaeological sites and features during the construction of the Project, including Contact's responsibilities and procedures for undertaking subsequent archaeological investigations;
- Monitoring of earthworks within a 100m buffer zone around the site marker and stream crossing location for site G46/13; and
- Involvement of TAMI in respect of mana whenua sites, such as:
    - Inviting the presence of a representative of TAMI during works within the 100m buffer zone for site G46/13; and
    - Notification of TAMI in the first instance if additional archaeological features are found at site G46/13.

These measures will ensure suitable protocols are in place to effectively manage archaeological values in the event they are discovered with the Project Site. Given the above, it is considered the proposed activity will have a negligible effect on the Project Site's archaeological values.

5.10 TRAFFIC EFFECTS

Rossiter (2025) assessed the transportation effects of the construction works required for the proposed Southland Wind Farm. The key conclusions from the assessment are summarised below.

5.10.1 Expected Construction Transport Effects

Construction of the Southland Wind Farm is anticipated to take approximately 24-30 months to complete and will involve construction of access roads. The expected transport effects associated with the construction of the Southland Wind Farm include:

- Changes in traffic volumes, including:
  - In practice, there will be day to day variations in transport volumes depending on the specific activities being undertaken. The construction of roads and foundations will require the transport of aggregates to the Project Site, which are expected to require an average of 60 heavy vehicle site deliveries per day over the first 18 months of construction;
  - Hourly truck volumes of 10-20 vph along the western access route will be noticeable to residents along this route because of the very low volumes that currently exist (less than 100 vpd). The primary effect will be on travel time, as the trucks will travel more slowly uphill and potentially delay any following vehicles;
  - Construction staff travel could generate up to 300 light vehicle movements per day (150 vehicles to the Project Site and 150 vehicles from the Project Site). Again, the increase in movements will be most noticeable along the western access route because of the very low volumes that currently exist;
- Kaiwera Downs Road has been constructed with a formed but unsealed surface that varies in width from 4.5m to 5.5m, which is not sufficient width for two trucks to pass without using the adjacent berms;
- The tower sections, nacelles, hubs, drive-trains and main wind farm transformers all represent over-weight and over-dimension loads and will require temporary mobile road closures along portions of the port to site transport route;
- An independently steered rear trailer / vehicle will be required at many of the complex intersection locations to transport the turbine blades; and
- The movement of over-weight and over-dimension transporters has the potential to damage the road pavement, particularly at intersections.

While the above traffic related effects have been identified, Rossiter (2025) considers this will not contribute to any noticeable effects on the operation of the wider road network. With the appropriate management practices in place, discussed below, the Project will not have a significant impact in terms of delays, safety of the road network or pavement damage.

5.10.2 Expected Operational Transport Effects

Once the Southland Wind Farm is operational, numbers of workers on-site will decrease, with the majority of traffic movements being light vehicles. It is expected that 10-14 full time staff will be employed in the operation of the Southland Wind Farm, with occasional additional maintenance staff as required from time to time. It is expected that the maintenance activity will generate less than 20 vehicle movements per day. As such, Rossiter (2025) considers the operational transport effects of the Southland Wind Farm will be negligible and will not contribute to noticeable effects on the road network.

5.10.3 Construction Route Assessment

The proposed transport route for over-weight and over-dimension loads has been designed in consultation with Gore District Council, Southland District Council and Invercargill City Council, as well as taking into consideration the transport route used for the Kaiwera Downs Wind Farm. It is proposed the transport of over-weight and over-dimension loads will likely occur overnight when traffic volumes on the road network are lower to minimise disruption to other drivers. It is anticipated this will involve transporters departing form South Port between 1:00am and 3:00am. Special vehicle permits will be obtained from NZ Transport Agency, Invercargill City Council, Southland District Council and Gore District Council. These methods are typical for wind farm construction as successfully carried out during 2023 for the construction of the Kaiwera Downs Wind Farm.

Mobile road closures will be required along the full transport route to minimise the risk of crashes with general traffic as the loads are transported from South Port to the Wind Farm Site. Rossiter (2025) completed vehicle tracking, based on the longest of the heavy vehicle loads (the longest tower section) and the blade transporters. This tracking has identified where mobile road closures will be required along the transport route and any other works that are necessary to enable the transport of over-weight and over-dimension loads. These measures will be outlined in the Construction Traffic Management Plan ("**CTMP**").

Further, to accommodate two-way movement along the parts of the access routes into the Wind Farm Site that are unsealed, signals on narrow sections of the road or passing bays will be utilised and these management measures will be outlined in the CTMP.

Prior to the commencement of construction works, Contact will record the existing state of the roads in a Base Condition Report and identify reasonably foreseeable pavement wear issues associated with the overweight loads and provide this to the road controlling authorities (NZ Transport Agency, South Roads, Gore District Council). At the completion of construction, or when an issue arises, another inspection will be undertaken to determine what inputs and actions are required by Contact to ensure the Project's effects on road pavements are remedied. Further, during construction, Contact will undertake regular maintenance of the unsealed pavements on Kaiwera Downs Road, Waiarikiki Mimihau Road and Venlaw Road. This will avoid adverse effects on ride comfort and vehicle operating costs experienced by other road users.

5.10.4 Construction Traffic Management

Rossiter (2025) considers the potential effects on traffic associated with the construction of the Southland Wind Farm can be appropriately managed via 'standard practice' measures that are typical for large infrastructure projects such as this, together with measures to manage the more specific matter of the delivery of wind turbine components.

Rossiter (2025) notes that the use of a CTMP is a typically accepted protocol to manage short-term traffic effects. A draft of the CTMP is included in **Part J** of these application documents and this will be finalised in consultation with stakeholders and the relevant Councils (Invercargill City, Southland District and Gore District) during detailed design. The CTMP will address any potentially sensitive land uses along the access routes, such as schools, and provide flexibility to accommodate rural-related activities. The CTMP will be provided to stakeholders, including residents close to the construction vehicle access routes and the Community Liaison Group, to ensure they are informed on how the Project will affect the roads they use.

As a minimum the CTMP will address:

- Site access arrangements;
- Travel routes;
- Construction programme;
- Predicted traffic volumes;
- Management and procedures relating to over-weight and over-dimension loads;
- Driver protocols;
- Road improvements;
- Methodology for pavement maintenance;

- Monitoring of the public road network;
- Temporary traffic management controls to be installed at the site accesses, intersections, stock crossings and/or local accesses;
- Measures for the removal of debris and/or tracking materials during construction from public roads;
- Timing of construction traffic to minimise disruption to, and any potential safety effects on, users of the local transport network;
- Practices to be adopted to reduce conflict with stock droving on the affected roads and minimise the risk to students travelling to and from school; and
- Communication and complaints protocols.

A copy of the CTMP will be available on the Project website and will record a list of entities that will be notified electronically of updates to the CTMP, as per the proposed Condition TR2A. The proffered consent conditions include a set of conditions specific to construction traffic management (TR1-TR8), including the requirements for a CTMP (including certification and consultation requirements), as well as the base and post-construction condition report and financial responsibility.

Given the above, it is considered that the construction works will not generate noticeable effects on the operation of the road network.

5.11 NOISE EFFECTS

Halstead (2025) has assessed the potential construction and operational (both turbine and non-turbine related) noise effects associated with the Project. The conclusions from this assessment are summarised in the following sub-sections.

5.11.1 Construction Noise

Construction noise modelling was completed for the most significant construction activities, including:

- Construction of turbine foundations and platforms (involving a large bulldozer or scraper, loader, dump trucks, small cranes, delivery trucks, concrete delivery trucks and pumping);
- Construction of the transmission line and GIP;
- Operation of the concrete batching facilities required for construction;
- Blasting, if required for foundation excavation;

> Construction of internal roads within the Wind Farm Site; and

> Construction traffic noise on internal roads, within the Wind Farm Site.

The noise from construction activities will in most cases be received in the context of daytime rural activities, characterised by quiet periods dominated by bird and insect noise, stock and dog noise, wind in vegetation, and punctuated by vehicles and farm machinery. At the dwellings near the Venlaw Road entrance, sound from the nearby Mimihau Stream is also present.

In general, the daytime background sound level at neighbouring residential sites calculated by Halstead (2025) is around 30 dB $L_{A90.}$ The effects of noise from construction were considered against the existing noise environment. Noise levels which are ten decibels above the background (L_{A95}) sound level are generally considered acceptable as construction noise activities are tolerated at higher levels due to their temporary nature. This is consistent with *NZS 6803:1999 Acoustics – Construction Noise*.

Halstead (2025) completed predictions for each of the construction activities listed above at nine dwellings near the Project Site that would receive the greatest noise levels. This concluded, for the most part, the construction noise effects on the nearby dwellings will be minor as they are equal or very close to the typical level of daytime noise, and not more than ten decibels above the “calm conditions” background noise level. Further, wind noise frequently present would significantly mask construction noise sound, rendering it a negligible effect.

For the closest dwellings to the Project Site, initial entrance and road construction will cause a noticeable increase in daytime noise levels, although noise levels will be far less than the daytime permitted activity noise limits and comply by a large margin with construction noise limits for long-term construction activities.

At all dwellings external to the Project, construction activities are predicted to comply with daytime and night-time permitted activity limits (and with the construction noise limits at all times), and therefore will have a negligible adverse noise effect.

Blasting may also be necessary at some turbine platform sites and will be managed in accordance with best practice. For blast charges typical of the activities required for the Southland Wind Farm, the startle threshold would be achieved at a 1,400m setback. It is anticipated that with the implementation of best practice during construction, noise levels and vibration effects associated with blasting on dwellings closer than 1,400m will be minimal.

Halstead (2025) confirms the construction of the transmission line towers and GIP will also comply with construction noise limits, with the transmission line construction calculated to produce 37 dB LA_{eq} at the closest dwelling and the GIP calculated to produce 41 dB L_{Aeq} during construction, and thus, will have negligible noise effects.

In summary, Halstead (2025) considers that all onsite construction activities (inclusive of blasting activities) will comply with the daytime and night-time permitted activity limits outlined in the Southland District[39] and Gore District[40] Plans, and therefore, will have a negligible adverse noise effect.

Temporary noise effects during construction, including blasting, will be appropriately managed through the implementation of a Construction Noise Management Plan ("**CNMP**") that will be prepared in accordance with NZS6803:1999 and form part of the CEMP, as well as compliance with the proposed conditions of consent (a draft of the CNMP is included in **Part J** to these application documents). The CNMP will include the following:

- Operating hours of construction works and any time restrictions on the operation of particular machinery and equipment;
- Details on the machinery and equipment to be utilised during the construction works, and any required mitigation measures associated with the operation of machinery and equipment;
- Predictions of sound levels from machinery and equipment to be utilised during the construction works;
- Procedures for the reporting and logging of noise related complaints;
- The construction noise standards for the Project in accordance with NZS6803:1999;
- Identification of sensitive receivers (dwellings) within the 35dBA noise contour;
- A hierarchy of management and mitigation options, and identification of the Best Practicable Option;
- Methods and frequency for monitoring and reporting on construction noise;
- Procedures for responding to monitored exceedances;

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[39] Southland District Plan noise limits when measured at the boundary: Daytime – 65 dB L_{Aeq} and 85 dB L_{AFmax} and Night-time – 45 dB L_{Aeq} and 70 dB L_{AFmax} and at the notional boundary: Daytime – 50 dB L_{Aeq} and 75 dB L_{AFmax} and Night-time – 40 dB L_{Aeq} and 70 dB L_{AFmax}.

[40] Gore District Plan noise limits when measured at the notional boundary: Daytime – 55 dB L_{Aeq} and Night-time – 40 dB L_{Aeq} and 75 dB L_{AFmax}.

- Procedures for communication and engagement with nearby residents and stakeholders, including notification of proposed construction activities, the period of construction activities, and management of noise complaints; and
- Contact details of the Project Liaison Person or site supervisor.

5.11.2 Construction Noise – Traffic

Halstead (2025) has relied on Rossiter (2025) for information relating to the number and types of vehicles accessing the Project Site during the construction of the Southland Wind Farm. Halstead (2025) has identified that *NZS 6803:1999 Acoustics – Construction Noise* is also the relevant standard to assess potential traffic noise related effects. The assessment finds that while there will be elevated noise effects associated with construction traffic, particularly for residents along Venlaw Road when aggregate is being brought to the Project Site (an increase of approximately 6 decibels more traffic noise than the current noise they are exposed to from existing traffic generation along this road), these effects will be temporary and will cease once these construction activities are completed. As such, Halstead (2025) considers no mitigation is necessary.

The transport of overweight and over-sized wind turbine components will require travel through residential areas during night-time. Halstead (2025) anticipates this may potentially result in noise levels of around 70 dB L_{Aeq} momentarily as they pass at each residential dwelling whose façade may be within 10m of the proposed transportation route. More commonly at a distance of 20m or more, the sound level would be in the order of 65 dB L_{Aeq} or less. While these types of carrier-type movements are unusual in any district (due to the nature of the wind farm development and its components), they are anticipated in the general scheme road usage. The frequency of these vehicle movements is not dissimilar to forestry vehicle movement and Halstead (2025) concludes that the proposed activities do not represent a significant change or noise effect.

Any noise effects arising from these movements are also temporary and can be managed through the use of traffic and noise management plans to ensure truck operators operate in a courteous and careful manner, particularly when they are travelling near or through residential areas. This may include good maintenance of equipment, avoiding engine braking through towns, keeping cab windows closed while using radios, ensuring reversing (with associated alarms) is not necessary for manoeuvring, and ensuring that obstructions are cleared prior to vehicles arriving, so as not to require idling near dwellings.

In this regard, Condition TR2 sets out the matters which are required to be addressed in the CTMP and includes, among other matters, details of the management for the transportation

of over-dimension / overweight goods to the site, driver protocols, monitoring and communication and complaint management.

5.11.3 Operational Noise – Wind Turbine Noise

Operational noise generated from the Southland Wind Farm will primarily be related to the sound generated through the operation of wind turbines. Noise generated from wind turbines is assessed under NZS6808:2010 which requires that all dwellings within the 35 dBA noise contour are investigated to determine the background noise environment. This forms the basis for setting the noise limits and determining the contribution of turbine noise to the overall noise levels when measuring post-construction compliance. This seeks to avoid sleep disturbance and maintain reasonable amenity at noise sensitive locations.

While the cumulative noise levels predicted for the Southland Wind Farm layout do not exceed 35 dBA, Contact commissioned noise measurements at four representative sites around the Wind Farm Site to ensure a robust assessment was completed. The background noise environments measured at these sites are discussed in Section 2.15 of this application document.

The predicted noise level generated by the Southland Wind Farm wind turbines and the cumulative noise level of both the Southland Wind Farm and Kaiwera Downs Wind Farm wind turbines at each of the sites where background noise measurements were recorded are displayed in **Table 11** below.

Table 11: Predicted Southland Wind Farm wind turbine noise levels.

Dwelling Number – Address	Southland Wind Farm Only (dB L_{Aeq})	Cumulative with Kaiwera Downs Wind Farm (dB L_{Aeq})
02 – 267 Venlaw Road	31	34
20 – 696 Woods Road	28	28
39 – 1403 Wyndham-Mokoreta Road	34	34
42 – 1542 Wyndham-Mokoreta Road	33	33
76 – 1380 Slopedown Road	28	29
77 – 1288 Slopedown Road	27	27

The assessment completed by Halstead (2025) confirmed that at each of the nearest dwellings, listed in **Table 11** above, the cumulative noise generated from the wind turbines of both the Southland Wind Farm and Kaiwera Downs Wind Farm will comply with the NZS6808:2010 noise limit at all wind speeds. Further, the noise level produced would be at levels less than the Southland District Plan[41] night-time permitted activity noise limits and meet the World Health Organisation recommendations for a sleeping environment with windows open. This noise level is consistent with (or slightly more stringent than) the noise limit applied in the District Plan for noise sources such as water pumps, heat pumps, spa pools, and other noise sources that could impact on a dwelling.

Noise from the wind turbines is likely to be somewhat audible at low – moderate wind speeds (7 to 12m/s) at the nearest dwellings, but at lower and higher wind speeds, the noise will likely be dominated by other wind and activity noise. During calm conditions (less than 3 m/s) the wind turbines will not be moving, and as such, there will be no noise generated.

5.11.4 Operational Noise – Non-Turbine Noise

In terms of the operational noise that is non-turbine related, Halstead (2025) concludes the following:

- Wind Farm Substation and GIP: No significant noise will be produced at the GIP and the calculated sound pressure levels from the wind farm substation at all dwellings is negligible (less than 0 dBA);
- Operations and Maintenance ("**O&M**") Facilities: The predicted noise associated with the O&M facilities included noise from air conditioner units, and machine shop noise breaking out through the fabric of the building. The predicted noise is negligible and less than the existing background noise level at all dwellings, and will comply with the District Plan noise limits; and
- Road Traffic Noise – Operational Stage: The noise effects generated from the access to the Wind Farm Site, including from vehicles on both public roads and internal roads within the Wind Farm Site, associated with the ongoing maintenance and management of the Southland Wind Farm were assessed as being negligible.

5.11.5 Noise Effects Management and Summary

In summary, the noise generated during both construction and operation of the Southland Wind Farm, as assessed by NZS6801, NZS6802 and NZS6808, will comply with the

[41] Southland District Plan Night-time noise limits when measured at the boundary: 45 dB L_{Aeq} and 70 dB L_{AFmax} and at the notional boundary: 40 dB L_{Aeq} and 70 dB L_{AFmax}.

provisions of the Southland and Gore District Plans as appropriate. A Final Operational Noise Assessment Report will be prepared prior to the construction of the Southland Wind Farm once the final wind farm layout is confirmed to ensure compliance with the noise limits outlined in NZS6808:2010.

A CNMP will form part of the CEMP and will be prepared for the Project in general accordance with Section 8 and the relevant annexes of NZS 6803:1999 Acoustics – Construction Noise. A draft CNMP for the Project is attached in **Part J** of these application documents.

Given the above, the adverse effects associated with the noise generated from the Project will be no more than minor.

5.12 AVIATION AND LIGHTING EFFECTS

Contact has engaged closely with the Civil Aviation Authority ("**CAA**") regarding the Project, including to determine the lighting of turbines which is required to ensure that risks to aircraft are suitably minimised. The CAA determination[42] has confirmed that 16 of the 55 proposed wind turbines are required to be fitted with an Aviation Obstruction Warning Light System and Contact will comply with these requirements to ensure there are no adverse effects of the Southland Wind Farm on aviation.

The effects of aviation lighting have been minimised to the extent that is practicable, with the CAA revisiting its original decision and reducing the minimum number of marker turbines required to be lit to 16. An assessment undertaken by Leading Design Professionals[43] also confirms that the effects of night lighting on neighbouring properties will be acceptable, and it will not result in adverse effects that are more than minor on the rural night sky (as discussed in Section 5.4.8 above).

5.13 SHADOW FLICKER EFFECTS

Shadow flicker effects occur as shadows of moving wind turbine blades create shadows which move across the ground. When the shadows pass over buildings, they can have an impact on the occupants within the buildings. The outside light entering a building through the windows can create a flickering effect each time a moving shadow passes over a

[42] Included as Appendix C to the Assessment of Environmental Effects of Proposed Lighting, prepared by Leading Design Professionals, dated 10 September 2024.

[43] Assessment of Environmental Effects of Proposed Lighting, prepared by Leading Design Professionals, dated 10 September 2024.

window. This can lead to annoyance effects on affected parties, or, in extreme scenarios, adverse health effects.

Roaring40s Wind Power completed an assessment on the potential shadow flicker effects associated with the proposed Southland Wind Farm.[44] The results are displayed in **Figure Shadow Flicker-1 (Part G)** This identifies the locations of the turbines and several dwellings surrounding the Wind Farm Site. Shadow flicker is shown as the shaded areas within 1.7km of each turbine. There are no dwellings located within the zone where shadow flicker has been predicted. Therefore, there will be no shadow flicker effects associated with the Southland Wind Farm.

5.14 RADIO COMMUNICATION SERVICES EFFECTS

Kordia completed an assessment on the effects of the Southland Wind Farm on licensed radio communication services operating in the vicinity of the Southland Wind Farm.[45]

The assessment results indicate that the Southland Wind Farm is not expected to cause any harmful interference effects to licenced radio communication services operating in the vicinity of the Wind Farm Site (refer to **Figure Radio Compatibility-1 (Part G)**).

Contact will inform the nearby operators identified by Kordia of the proposed Southland Wind Farm as a courtesy, including the operator of a nearby VHF radio link, the operator of two wide area coverage services and any Wireless ISPs which may have a presence in the area. The Southland Wind Farm layout will also be provided to Airways Corporation of NZ to allow them to undertake their own assessment and update their RADAR signatures if required.

5.15 NATIONAL GRID EFFECTS

Contact has been liaising with Transpower about Southland Wind Farm since 2022, with the Connection Application for the Project being lodged in February 2023, and accepted into the connection queue in March 2023.

The proposed Southland Wind Farm design aligns with Transpower's "Guidance for developers establishing Wind Farms near Transpower Assets" document and their project specific studies. The design was optimised in consultation with Transpower and their design

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[44] Titled '*Southland Wind Farm, Shadow Flicker Assessment*', prepared by Roaring40s Wind Power, dated 11 December 2023.

[45] Titled '*Southland Wind Farm, Radio Compatibility Assessment Report*', prepared by Kordia, dated 21 November 2023.

consultants to ensure the wind farm, GIP configuration and location minimise any potential adverse impacts on National Grid assets and reliability.

5.16 CONCLUSION

Overall, the Southland Wind Farm Project will generate nationally significant benefits, including the provision of a regionally and nationally significant source of renewable electricity which will contribute to the New Zealand Government's goals of transitioning to a low emissions economy, as well as economic benefits including generating employment and increasing the security of electricity supply, which is fundamental to people's wellbeing. The Project is therefore clearly aligned with the purpose of the FTAA.

Moreover, the Southland Wind Farm can be constructed and operated in a way that will ensure its adverse effects are appropriately managed. It does so, notwithstanding the significant national benefits that would accrue from the Project in terms of renewable electricity generation.

Importantly, the Project Site is also considered to be an appropriate location for a wind farm due to the expansive scale of the landscape, the surrounding productive farmland and forestry activities, and the low density of dwellings in the area. Contact acknowledges, however, that the presence of the turbines on this site may adversely affect some community members' enjoyment of this location. Ultimately however, like any other wind farm, there are locational and technical constraints that require the turbines to be located in elevated locations.

Particular consideration has also been given to avoiding potential adverse effects through the shaping of the Project design, which has resulted in the Project affecting indigenous vegetation habitats and wetlands to the least extent practicable. Where residual adverse effects on these features remain, Contact is proposing a comprehensive biodiversity offset and compensation package to address any remaining effects to achieve at least a 'No Net Loss' ecological outcome.

Contact is proposing that the Southland Wind Farm Project be undertaken in accordance with a suite of consent conditions which will limit the potential for adverse effects on the environment. Management plans will also be utilised to ensure that Contact undertakes practicable measures to minimise any potential effects caused by the Project. These various management measures proposed by Contact are discussed further in Section 6 of this application document and are detailed in the proposed consent conditions attached as **Part I** to these application documents.

6. MANAGEMENT AND MONITORING OF ACTUAL AND POTENTIAL ENVIRONMENTAL EFFECTS

6.1 APPROACH TAKEN

Section 5 of this application document provides an assessment of the actual and potential effects of the Southland Wind Farm Project, based on various technical assessments undertaken by experts commissioned by Contact, and informed by the engagement Contact has undertaken with mana whenua regarding cultural effects. Many of the technical assessments have recommended implementing various measures to assist in avoiding, remedying, or mitigating potential adverse effects on the environment.

In respect of ecology, specifically, there will be residual ecological effects associated with the Project requiring a further response, as discussed in Section 5. These matters require offsetting or compensation, with the necessary measures recommended in the ecological assessments. Contact is therefore proposing a series of measures to manage adverse effects on terrestrial, wetland and freshwater ecology values within the Wind Farm Site. These measures reflect a cascading management approach consistent with the requirements of the relevant national, regional and district planning frameworks for such projects, firstly seeking to avoid, then remedy, mitigate, and finally offset or compensate for any residual adverse effects.

The recommendations made by Contact's expert advisors have shaped the development of a robust suite of proposed conditions which is provided in **Part I** of these application documents. The proposed conditions of consent, and the effects management measures that underpin them, have also been informed by the extensive consultation Contact has undertaken with mana whenua and stakeholders, including DoC and the relevant Councils. As a result of this engagement, there is a general consensus among mana whenua, DoC and the relevant Councils and Contact that the proposed conditions are appropriate and well-founded. These conditions offer assurance that the Project and its effects will be managed in an appropriate manner.

Recently, Contact has undertaken further refinements and updates to the proposed conditions in the preparation of this application. These modifications reflect the additional technical work which supports this application, and the resulting refinements have been discussed with DoC, mana whenua, and the Councils.

Contact will also undertake the Project in accordance with a number of detailed management plans, consistent with the suite of consent conditions, to ensure that measures to minimise potential adverse effects are employed throughout both the construction and operation phases of the Project.

Overall, Contact and its expert advisers consider that the Project can be undertaken in a manner that will appropriately address any unavoidable adverse environmental effects. Where residual ecological effects remain, they will be managed to achieve an overall net gain in ecological values, while also achieving the purpose of the FTAA – to deliver a project with significant regional and national benefits.

The overall scheme of the conditions was developed for the Covid Fast-track consenting process. The FTAA scheme, including its overall purpose and the specific direction in section 83 that requires conditions to be no more onerous than necessary, provided Contact with an opportunity to reassess its approach to effects management and conditions. However, Contact has deliberately retained the previous condition scheme, with refinements made (discussed above) to reflect additional technical work. The end result is a set of proposed conditions that is arguably more conservative than anticipated under the FTAA.

The key measures proposed by Contact to manage identified effects are outlined in **Table 12** below.

Table 12: Summary of Key Management and Monitoring Measures for the Southland Wind Farm Project.

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
Cultural Matters		
Potential effects on matters of importance to mana whenua, and their relationship with ancestral lands, ecology and water in particular.	Contact has worked closely with Kā Papatipu Rūnaka ki Murihiku in relation to the Project to identify and appropriately manage the potential effects of the Project on cultural values. This engagement has resulted in agreement between Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku and Contact, both in relation to consent conditions for the Project, and (via a confidential agreement) in relation to matters that cannot be mitigated by way of consent conditions (refer to Conditions TW1-TW11). This will include: > Establishment of the working group Ngā-Pou-Whai-Hua; > Preparing Tuia te Mana ō Pawakataka, a programme of work which will include developing mechanisms and processes to manage potential impacts on cultural values through the implementation of monitoring, mitigation, restoration and enhancement measures; > Cultural induction programme for contractors; > Engagement of a full-time project manager or cultural monitor; > Establishment of a Rūnaka Community Contribution pūtea/fund; and > Accidental discovery protocol procedures.	The cultural mitigation and management measures will be developed in accordance with the proposed conditions of consent (and the confidential relationship agreement between Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku and Contact) and developed alongside TAMI (on behalf of Ngāi Tahu ki Murihiku).

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
Landscape and Visual Amenity		
Potential landscape effects.	Consideration and refinement of the wind farm layout to minimise effects on landscape character – this has been an iterative process with the wind farm designers, civil engineers, landscape architects and ecologists. All agree that the current layout is acceptable from a landscape, visual, engineering, geotechnical and ecological basis.	Nothing additional.
Visual amenity effects.	Consideration and refinement of the wind farm layout to minimise effects on visual amenity, including setbacks behind the main ridge and scarp on the backslope of the Wind Farm Site, avoiding stacking of wind turbines where possible and distance from dwellings. To further mitigate visual amenity effects on the 15 dwellings identified as having Moderate or greater adverse visual effects from the Southland Wind Farm by Coombs (2025), an offer will be made by Contact to these landowners to develop and implement a planting/landscape plan that could screen or integrate views of the turbines into the landscape (refer to Condition WF26).	Contact will provide the Southland District Council with a summary of the consultation undertaken and any planting/landscaping plans agreed to (or not agreed to and outline the reasons why).
Night lighting.	Avoid night-time lighting on structures unless there is a security or safety requirement. Construction lighting will only be used when necessary and during times when daylight hours are insufficient to allow construction activities to be undertaken in a safe manner. Lighting will be shielded and oriented downward over the works area to avoid light spill outside of the relevant works areas. Any lighting required for aviation purposes on the wind turbines will be in accordance with the CAA's determination, which (following formal advocacy from	Nothing additional.

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
	Contact to minimise lighting effects) states that 16 of the 55 proposed wind turbines must be lit. Aviation Obstruction Warning lights used will be medium-density obstacle lights, producing a monochromatic red light, with a flash speed between 20 and 60 flashes per minute, and include optical control to reduce red light intensity at angles below the horizontal plane.	
Terrestrial Ecology		
Loss of indigenous vegetation / habitat.	The Project Footprint has been designed to avoid and minimise the impact on indigenous vegetation within the Project Site to the greatest extent practicable. Further, the fixed vegetation clearance 'caps' of key habitat types required by Condition EC8 and the implementation of the Vegetation Management Plan will ensure vegetation loss associated with the construction of the Project, including any further refinements to the Project Footprint during detailed design (such as the micro-siting of turbines within the turbine envelope zones) will not result in the loss of indigenous vegetation greater than what is directly anticipated in the conditions. To account for the unavoidable loss of indigenous vegetation, Contact will prepare and implement a Habitat Restoration and Enhancement Management Plan (refer to draft HREP included in the draft TEMP in **Part J** of these application documents), which will outline requirements for measures to offset and compensate for the loss of vegetation / habitat. This will include extensive predator control and habitat enhancement across the Wind Farm Site (described further in the sub-section below). Contact will legally protect all fenced ecological restoration and habitat enhancement sites in accordance with the proposed conditions of consent.	Monitoring required as part of the VMP and HREP, including preparing an annual post-vegetation clearance monitoring report to confirm vegetation clearance activities were carried out in accordance with the consent conditions and the VMP (EC11).

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
Accidental vegetation loss.	Preparation and implementation of a pre-clearance protocol, in accordance with the VMP (refer to the draft VMP included in **Part J** of these application documents), during indigenous vegetation clearance to minimise the potential for incidental habitat loss outside of the Project Footprint. In addition, Condition EC7(b) requires the VMP to develop mechanisms to ensure that the high value vegetation and habitat types outlined in that condition that are not within the Project Footprint are avoided. Further, as noted above, the hard vegetation clearance limits set out in Condition EC8 provides certainty that any accidental vegetation loss will not result in these limits being exceeded.	Monitoring required as part of the VMP, including an annual post-vegetation clearance monitoring report and incident monitoring and reporting.
Impacts of surplus fill disposal on indigenous vegetation.	The fill disposal criteria set out in the consent conditions requires fill disposal to avoid being located in areas identified as high or very high value vegetation. Indicative locations of fill disposal sites have been identified across the Project Site, except for the Jedburgh Plateau, where eight final fill disposal sites have been confirmed, to provide additional certainty of the location of fill disposal on the Plateau. The impact of fill disposal will be fully addressed by mitigation through appropriate rehabilitation of the site, including re-planting any sites that affect moderate value indigenous vegetation with suitable indigenous species, in accordance with proposed condition EC9.	Compliance monitoring and monitoring of planted areas, as required in the VMP.
Impacts on birds during vegetation clearance.	Implement vegetation clearance and nest avoidance / setback protocols during peak bird breeding season (1 September to 31 March inclusive), as per the proposed conditions (EC31-EC33) and with details set out in the AMP (refer to draft AMP in **Part J** to these application documents).	Monitoring as required in the AMP, including monitoring of any indigenous bird nests found within the area to be cleared, in accordance with EC32.

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
Impacts on birds during the operation of the Southland Wind Farm due to collision with wind turbines.	An AMP will be prepared and implemented in accordance with the proposed conditions, which includes requirements for collision mortality monitoring and protocols for managing accidental bird injury and mortality (refer to draft AMP in **Part J** to these application documents). Collision mortality monitoring will be measured against the compensation triggers set out in the proposed consent conditions. The use of bird flight diverters (dynamic flappers) on sections of transmission lines that cross high quality bird habitat, required by proposed condition EC34.	Monitoring will be implemented in accordance with the methods outlined in the AMP, including collision mortality monitoring for at least three years following the commencement of operation of the Southland Wind Farm and preparation of an annual avifauna monitoring report.
Impacts on lizards during vegetation clearance.	Implementation of the LMP, including the vegetation clearance protocols and seasonal constraints on vegetation clearance activities, and the implementation of the lizard salvage and transfer protocol and the incidental discovery protocol (refer to the LMP in **Part J** to these application documents). The handling and relocation of native lizards will be carried out in accordance with the wildlife authority (and the conditions that apply to it), which is being applied for as part of the overall FTAA application. The LMP will apply to both the wildlife authority, and the resource consent conditions.	Monitoring will be implemented in accordance with the methods outlined in the LMP and HREP, including baseline and post-release monitoring of release sites.
Impacts on terrestrial invertebrates during vegetation clearance.	Implementation of a TIMP prior to vegetation clearance, that details salvage, habitat enhancement and relocation of any present and potentially present notable invertebrates that may be affected by the Project, as identified in Wildlands (2025) (refer to the TIMP included in **Part J** to these application documents). The handling and relocation of Helms's stage beetle (the only relevant species protected under the Wildlife Act) will be carried out in accordance with the wildlife	Monitoring will be implemented in accordance with the methods outlined in the TIMP and HREP.

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
	authority (and the conditions that apply to it), which is being applied for as part of the overall FTAA application. The TIMP will apply to both the wildlife authority, and the resource consent conditions.	
Impacts on long-tailed bats during vegetation clearance.	Implementation of a BMP prior to vegetation clearance that details vegetation clearance protocols that will be carried out in accordance with the protocols recommended by DoC when clearing old growth stands, which are currently not required to be managed as part of the existing forestry activity operated by Matariki Forest, near proposed wind turbines MAT-01, MAT-16, MAT-17, MAT-07 and MAT-12.	Monitoring as required in the BMP.
Impacts on long-tailed bats during the operation of the Southland Wind Farm.	Implement live curtailment (if feasible from a technical / turbine operational perspective) at the proposed wind turbines within the identified 'Bat Risk Area', being MAT-01, MAT-02, MAT-03, MAT-04, MAT-06, MAT-07, MAT-12, MAT-16 and MAT-17 for an initial operating period of the first three years of the operation of the Southland Wind Farm. In the event the monitoring shows that live curtailment is not effectively managing adverse effects on bats (or is not technically feasible), Contact will cease the use of live curtailment and implement set curtailment at the identified turbines, from sunset to sunrise, between 15 February and 15 April, when: > Windspeed is less than 5 m/sec at the hub height of the wind turbine; and > Temperature is 8°C or higher; and > Precipitation is less than 1.5 mm/hour.	Ongoing post-construction monitoring as required in the BMP and in accordance with EC73, including to determine the efficacy of the curtailment strategy.

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
Impacts of habitat fragmentation for lizards and terrestrial invertebrates.	The wind farm layout has been re-designed to avoid high-quality invertebrate habitat to the greatest extent practicable, including by restricting much of the development to the existing farm tracks, circumnavigating forest habitat, instead of creating new tracks through it, to minimise effects of habitat fragmentation. Removed vegetation will be placed along wind farm roads and turbine edges at sites where tussock skink is present. Cut vegetation will also be placed on the edges or within existing Tautuku gecko habitat where it is practicable to do so. Where there are surface invertebrate habitats to be cleared, such as woody vegetation, dead wood or large rocks, within the Project Footprint, Contact will relocate these to a restored patch of similar habitat as close as practicable to the location of removal to enable terrestrial invertebrates to transfer to the new habitat.	Monitoring in accordance with the LMP, TIMP and HREP.
Wetlands		
Loss of wetland extent.	Design the wind farm footprint to avoid wetlands to the greatest extent practicable, including the conditioned 'cap' on the extent of wetland loss (2.5ha) and requirement for prioritising further avoidance and minimisation measures during detailed design and construction of the Southland Wind Farm. Offsetting and compensating for residual adverse effects on wetlands to result in 'no net loss' of ecological function by enhancing and legally protecting the existing copper tussock-rautahi marsh wetlands on the land owned by Contact at Davidson Road.	As required in the VMP and HREP. As a minimum, this will include monitoring of offset and compensation measures to ensure it is delivering the ecological outcomes expected, in accordance with the performance targets set out in the proposed conditions, and to trigger any maintenance actions required.

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
Potential for fill disposal sites to impact on wetland values.	The disposal of fill will avoid being located within 10m of wetlands in accordance with the selection criteria required as a condition of consent. The confirmation of the eight fill disposal sites that will be located on Jedburgh Plateau.	Monitoring as required in the CEMP and VMP.
Potential for earthworks within and near wetlands to change wetland hydrology.	Minimising clearance of wetlands through designing the wind farm layout to avoid wetlands to the greatest extent practicable. Contact will construct a series of water management devices within the Jedburgh Plateau, comprising of approximately 109 culverts and 1.2km of clay bunds, to maintain flow paths and hydrological connectivity between wetlands. The final design of these will be confirmed following the completion of detailed design, in consultation with the civil engineers and ecologists.	Monitoring of wetlands in accordance with Condition EC11B and the VMP.
Potential impacts of sedimentation and contaminated runoff on wetland habitats during construction.	Preparation and implementation of an ESCP (as part of the Earthworks Management Plan) that outlines strict protocols around freshwater management, including wetlands (refer to the draft EMP / ESCP included in **Part J** to these application documents).	Monitoring as required in the CEMP and ESCP.
Freshwater		
Potential effects associated with the construction of stream crossings.	The proposed culverts will be constructed in accordance with the design guidance provided in the Ministry for the Environment's New Zealand Fish Passage Guidelines.	Monitoring as required in the CEMP and ESCP, including water quality monitoring.

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
	Implementation of an ESCP (including water quality monitoring and fish and freshwater crayfish recovery protocols) during the construction of stream crossings to avoid the discharge of sediment into streams during construction.	
Potential effects on freshwater fish and invertebrate habitat associated with fill disposal in streams.	Fill disposal sites will avoid being located within 10m of permanent and intermittent streams, and within steep slopes (>45 degrees), and will be rehabilitated as soon as possible to minimise the potential for sediment loss into surrounding waterways.	Monitoring as required in the CEMP and ESCP.
Loss of stream extent and fish habitat from the installation of stream crossings.	Minimising the extent of stream loss to the extent practicable by utilising existing tracks within the Wind Farm Site. Offsetting for residual adverse effects on stream and freshwater ecology to result in No Net Loss of ecological function by undertaking riparian restoration planting and fencing, with details to be set out in the ROMP (refer to the draft ROMP attached in **Part J** to these application documents).	Monitoring until canopy closure if confirmed as required in the ROMP.
Risk of contaminants and new pest species entering watercourses.	Implementation of the CEMP, ESCP and Biosecurity Management Plan, which includes the management measures to avoid contaminants or new pest species entering watercourses, including incidental discovery protocols.	Monitoring as required in the CEMP and ESCP.
Potential effects on downstream flow associated with the water take during construction.	Requirement to restrict the water take to 5 l/s and a maximum of 432m^3 per day, and further restrictions when the stream flow is Q95, in accordance with Condition CM17.	A hydrological monitoring system will be installed to provide information on the instantaneous stream flow and this information will be included in the annual reporting requirements.

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
Construction		
Dust and sediment runoff resulting from earthworks activities.	Preparation and implementation of a CEMP and associated management plans, including an Earthworks Management Plan and Flocculant Management Plan. Mitigation measures will include: > A stabilised construction entrance and wheel wash at the entrance to the Project Site; > Use of silt fences and earth decanting bunds; > Sediment retention ponds; > Runoff diversion channels and stabilised channel protection; > Excavation around the inlet of the culverts in the track side v-drains; and > Dust control.	Monitoring as required in the CEMP and associated management plans, including regular maintenance and inspections of the sediment, dust and erosion control devices.
Potential effects associated with the disposal of surplus fill within the Project Site, including sediment loss.	Compliance with the fill disposal site criteria required by proposed condition CM3(d), including avoiding disposing of fill within wetlands, high value vegetation, permanent and intermittent streams, very steep slopes or erosion prone land. Rehabilitation of fill disposal sites as soon as practicable to minimise the potential for sediment loss, including the replanting of 'like for like' vegetation.	Monitoring in accordance with the CEMP.
Potential effects on the existing drainage patterns on-site associated with the introduction	Implementation of key design principles, including, where practicable, allowing stormwater runoff to sheet flow from the access tracks and across the natural topography, conserving the natural flow paths to natural streams and wetlands downstream, constructing adequately sized culverts and mitigation of potential	Monitoring in accordance with the CEMP.

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
of a track network and hardstand areas.	erosion along drains and at outlets with energy dissipation through rock lined channels along steep gradient and rock aprons at culvert outlets.	
Potential effects associated with the storage and use of hazardous substances.	The use and handling of hazardous substances will comply with the Hazardous Substances and New Organisms Act 1996 and the Health and Safety at Work (Hazardous Substances) Regulations 2017. The fuel storage facility will be located at least 20m away from any water courses or wetlands and will be appropriately bunded and spill kits will be stored at this location at all times.	Monitoring in accordance with the CEMP.
Archaeology		
Potential effects on the identified archaeological sites (G46/13) during construction.	A general site-wide archaeological authority is being sought as part of this substantive application (described in **Part E** to these application documents) and any works within 100m of G46/13 will be monitored by a suitably qualified and experienced archaeologist and a representative from TAMI.	Monitoring and recording will be undertaken as required by the Archaeological Authority and in accordance with the Archaeological Management Plan.
Accidental discovery and disturbance of archaeological material.	A general site-wide archaeological authority is being sought as part of this substantive application and this, along with the Archaeological Management Plan included in **Part J** to these application documents, will outline the appropriate management measures that Contact, and its contractors, will implement in the event of the discovery of any archaeological material during construction of the Project.	Monitoring and recording will be undertaken as required by the Archaeological Authority and in accordance with the Archaeological Management Plan.

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
Traffic		
Increase in traffic volumes during construction.	The preparation and implementation of a CTMP that outlines communication protocols with local residents and with school bus drivers to minimise the effects on the local road network.	Monitoring as required in the CTMP.
The width of Kaiwera Downs Road is not sufficient for two trucks to pass without using berms.	Construct passing bays along Kaiwera Downs Road, as confirmed in consultation with the Gore District Council and the CTMP.	Monitoring as required in the CTMP.
Transport of over-weight and over-dimension loads.	Transport of over-weight and over-dimension loads will be piloted and will occur overnight to minimise disruptions to other drivers. Mobile road closures will be used along the full transport route to minimise the risk of crashes with general traffic.	Monitoring as required in the CTMP.
Potential for pavement damage associated with transport during construction.	A Base Condition Report will be prepared prior to commencement of construction that will outline the conditions of the local roads and sections of state highways that will be used for the transport routes. Post-construction, the condition of the roads will be inspected, and any damage will be remedied by Contact.	Regular inspections and maintenance of unsealed access roads during construction as required in the CTMP.
Noise		
Potential for noise creating nuisance effects during	Compliance with NZS6803:1999 Acoustics – Construction Noise during construction.	Nothing additional.

Actual or Potential Effect	Recommended Mitigation / Management	Recommended Monitoring / Future Action
construction and operation of the Southland Wind Farm.	Compliance with NZS6802:2008 – Acoustics – Environmental Noise and NZS6808:2010 Acoustics – Wind Farm Noise and the permitted noise limits in the Southland, Clutha and Gore District Plans during operation of the Southland Wind Farm.	

6.2 MANAGEMENT PLAN FRAMEWORK

Contact is proposing to manage the effects associated with the Project through the development and implementation of a number of management measures, including a robust set of consent conditions, a series of management plans, and monitoring and reporting requirements. Contact is proposing to adopt management plans to provide detailed guidance on the construction and operational aspects of the Southland Wind Farm and ensure compliance with conditions. The management plans have been prepared in draft form, and will be finalised in accordance with the proposed consent conditions, which are appropriately detailed, include clear objectives and performance outcomes and ensure both clarity and enforceability. This approach is consistent with large scale infrastructure projects of this nature.

All of the management plans that will be certified by the Council(s) will be subject to further consultation with TAMI and DoC (where relevant) before being submitted to the Council(s) for certification. This is required by the proposed consent conditions.

Draft versions of the proposed management plans are included in **Part J** to these application documents.[46] However, the LMP and TIMP, which form part of the TEMP, are being submitted for final approval by the Panel, as these form part of the wildlife approvals that are also being sought as part of this application (as well as being applicable to the resource consents being sought). The management plan framework and relevant certifying authority is identified in **Table 13** below, and this is included in the proposed consent conditions.

Table 13: Southland Wind Farm Management Plan Framework and Relevant Certifying Authority.

Management Plan	*Southland Regional Council*	*Southland District Council*	*Gore District Council*
Construction Environmental Management Plan			
Earthworks Management Plan (including Erosion and Sediment Control Plan)			
Flocculant Management Plan			
Construction Noise Management Plan			
Construction Traffic Management Plan			

[46] Excluding the Decommissioning Management Plan, which will be prepared closer to the time of the decommissioning of the Southland Wind Farm.

Management Plan	*Southland Regional Council*	*Southland District Council*	*Gore District Council*
Terrestrial and Wetland Ecological Management Plan			
Vegetation Management Plan			
Bat Management Plan			
Avifauna Management Plan			
Lizard Management Plan			
Terrestrial Invertebrate Management Plan			
Biosecurity Management Plan			
Habitat Restoration and Enhancement Management Plan			
Riparian Offsetting Management Plan			
Stakeholder Communication and Engagement Management Plan			
Archaeological Management Plan			
Decommissioning Management Plan			

Typically, the management plans required by the conditions of resource consents are certified by the Council prior to the commencement of construction. As outlined in the sections above, the proposed management of effects of the Southland Wind Farm Project will largely be controlled and implemented through the various management plans that are proposed and required by the conditions of these consents. A number of the management plans will relate to areas that overlap between the responsibility of the regional and district Councils, including the CEMP and TEMP.

Given the scale of the Project and the range of activities and jurisdictions the Project spans (being the Southland District, Gore District and Southland Region), Contact is also proposing an independent peer review process for the management plans that are required for the construction and operation of the Southland Wind Farm (with the exception of the LMP and TIMP which are proposed to be approved by the Panel as final for the reasons noted above). Contact has consulted with the Southland District Council, Gore District Council and Southland Regional Council on this process. Given that there are two district councils involved and one regional council, and the level of resourcing required to certify plans "in

house" at the Council, there is support by the councils for an independent certification process.

The management plan certification process is set out in proposed conditions MP1-MP11 and shown in **Figure 10** below. Contact will nominate an independent, Suitably Qualified and Experienced Person(s) to review the management plans required for the Project.[47] The independent reviewer will be approved by the relevant consent authorities. The independent certifier will vary for the different management plans required and be a Suitably Qualified and Experienced Person in the topic covered in the management plan (e.g. a suitably qualified and experienced ecologist will provide technical guidance and recommendations on the TEMP (with the exception of the LMP and TIMP as noted) and associated management plans).

Contact will submit the relevant management plans to the independent reviewer(s) for review. The independent reviewer(s) will provide technical guidance and recommendations on the management plan(s). Once reviewed, Contact will amend the management plans where appropriate and submit the management plan to the relevant council (depending on the jurisdiction and the activities covered in the management plan as outlined in **Table 13** above) for certification. A report prepared by the independent reviewer(s) will accompany the management plan for certification. This report will set out how the management plan, in the opinion of the reviewer meets its intended objectives and is (or is not) consistent with the condition requirements and outcomes.

The proposed certification process will ensure that the effects associated with the Project are appropriately managed and provided for.

[47] Excluding the LMP and TIMP, which are requested to be approved by the Panel as part of this FTAA application.

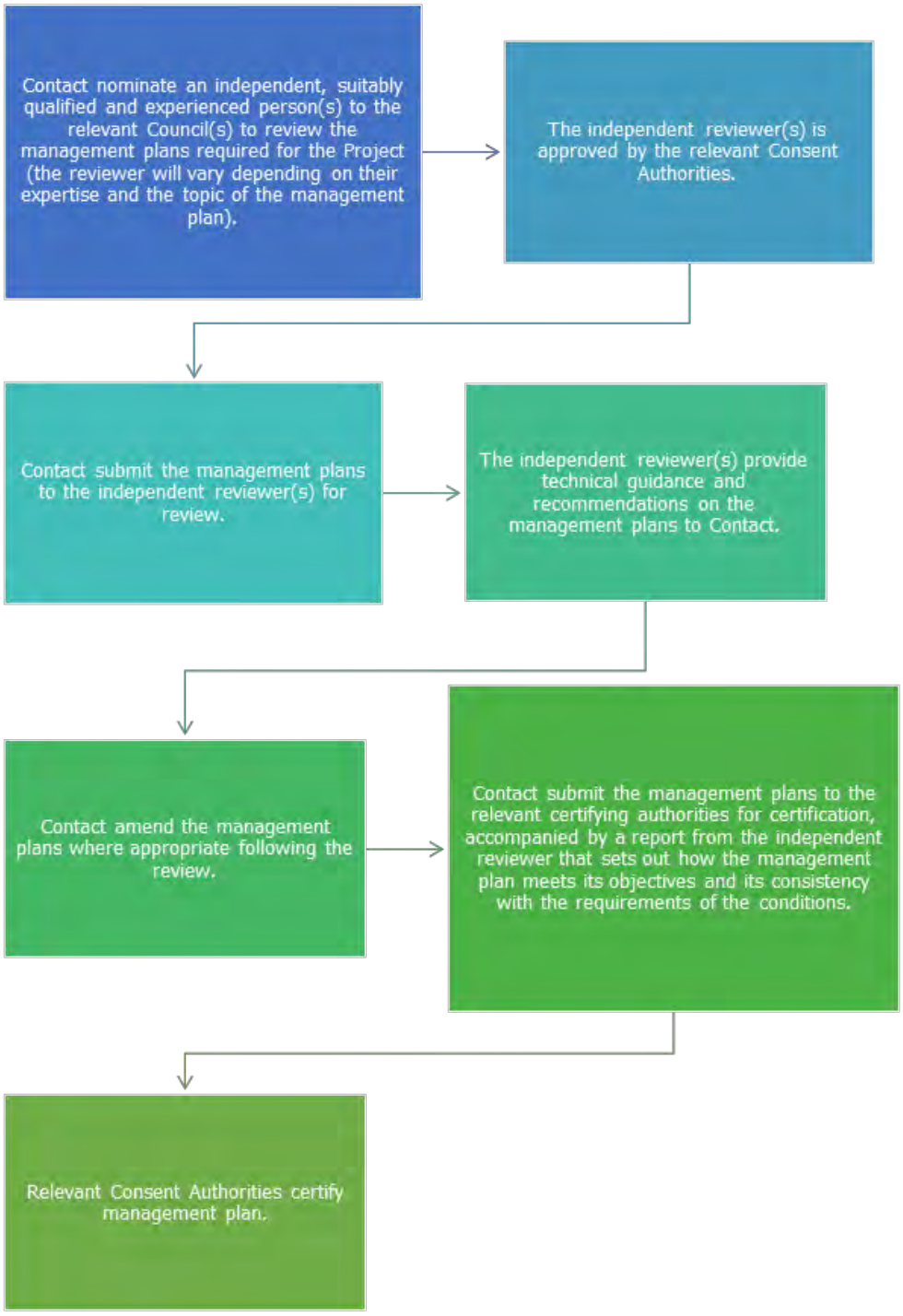

Figure 10: Management Plan Certification Process.

6.3 MANAGEMENT OF CONSTRUCTION EFFECTS

The Southland Wind Farm Project is a large-scale infrastructure project that will involve large quantities of earthworks. Without the appropriate management practices in place, construction of the Southland Wind Farm has the potential to generate adverse

environmental effects. Contact is committed to ensuring the construction of the Southland Wind Farm is undertaken in a manner that appropriately manages these potential effects.

The construction of the Southland Wind Farm will largely be managed through the implementation of a CEMP. A copy of the draft CEMP and associated management plans are included in **Part J** to these application documents. The final CEMP will be prepared by a Suitably Qualified and Experienced Person, and will include the following management plans:

> Earthworks Management Plan, including Erosion and Sediment Control Plan;

> Flocculant Management Plan;

> Construction Noise Management Plan; and

> Construction Traffic Management Plan.

The EMP (inclusive of the ESCP) will be the primary management plan that will manage the effects associated with erosion and the discharge of sediment into the environment, including the discharge of sediment laden runoff to land where it may enter water. The EMP is provided in draft form with this application, and will continue to be developed as needed in accordance with best practice and the various technical assessments that have been completed for the Project. The final EMP, as required by the proposed conditions of consent, will include the following:

> Details of all principles, procedures and practices that will be implemented to undertake erosion and sediment control across the Project Site and minimise the potential for sediment discharges;

> The location and design of fill disposal sites, in accordance with the fill disposal site criteria;

> The location of temporary laydown areas;

> Details of ground stabilisation measures;

> The engineering and management procedures for material sources, use, disposal and treatment, stockpiling, fill placement and disposal of unsuitable materials;

> Measures to ensure all disturbed worked areas are appropriately rehabilitated;

> Details of the requirements of the construction of bunds;

> Details of the measures to minimise effects of construction activities within wetlands;

- The location of the concrete batching facilities within the Project Site and the specific measures to contain and manage contaminant runoff and stormwater runoff from the concrete batching plants;
- Details of the water quality monitoring required for works within and near streams;
- The protocols for the recovery and translocation of any fish and / or freshwater crayfish that may be disturbed by earthworks;
- The construction programme;
- Dust control measures;
- Adverse weather response and contingency measures; and
- Details of the frequency of annual reporting requirements.

The management of ecological effects associated with construction activities will be managed in accordance with the management plans required as part of the TEMP and discussed in further detail in Section 6.4 below.

Contact will also develop and implement appropriate protocols for fire management during the construction and operation of the Southland Wind Farm to ensure the appropriate measures are in place to minimise the potential risk and effect of fire within the Project Site.

Through the implementation of the above measures, it is considered the effects associated with the construction of the Southland Wind Farm will be adequately minimised and controlled.

6.3.1 Site-Specific Management Plans

In addition to the management plans that are required above, Contact is proposing to prepare and implement SSMPs for identified zones within the Project Site during construction. These will be prepared in general accordance with the CEMP and EMP (including the ESCP) and will enable Contact to appropriately respond and manage site-specific characteristics and implement management procedures that are required for discrete areas within the Project Site during construction.

In accordance with the proposed conditions of these consents, the SSMPs will include:

- The specific erosion and sediment control measures that will be applied at each stage of earthworks;
- Details of the water quality monitoring that will be undertaken throughout the construction works;

- Supporting calculations and design drawings of all stormwater and sediment control structures;
- Catchment boundaries and landform contours;
- The location of vegetation types, habitats and other features of ecological value (e.g. wetlands);
- The location of stabilised entranceway(s);
- Details of any temporary and / or permanent stabilisation;
- Construction methodologies applying to any proposed instream structures;
- If relevant, specific details of the flocculation management and implementation; and
- If relevant, details of the earthworks mitigation measures to minimise impacts on wetlands.

6.4 MANAGEMENT OF ECOLOGICAL EFFECTS

As discussed above, there are areas of significant vegetation and significant habitats of indigenous fauna, present within the Project Site that will be affected by the Project. Identification of these areas is consistent with the policy guidance in the Regional Policy Statement for Southland ("**Southland RPS**"), including Policy BIO.1 and the criteria outlined in Appendix 3. With regard to these matters, as outlined above, Contact has adopted a cascading approach to the management of adverse effects, known as the effects management hierarchy. The effects management hierarchy is an internationally accepted approach to managing biodiversity and is considered to be one of the most effective and appropriate procedural instruments for protecting biodiversity from the impacts of development.

As a first priority in implementing the effects management hierarchy to manage effects on biodiversity, wetlands and streams, Contact has sought to avoid effects, and where avoidance is not practicable, Contact will minimise and remedy these effects. Following the implementation of these measures, some residual effects will remain, and Contact is proposing to offset and compensate for these. As described further in Section 8 of this application document, this approach is directly consistent with the policy guidance in the National Policy Statement for Renewable Electricity Generation ("**NPS-REG**"), NPS-FM and Southland RPS, specifically Policy ENG.6, which recognises the significance of the use and development of renewable electricity generation activities, as well as the relevant regional and district plans. These proposed measures are discussed further below.

6.4.1 Significant residual adverse ecological effects

Wildlands (2025) (and Kessels and Davidson-Watts (2025) in relation to long-tailed bats) consider, following the implementation of the above management measures, residual adverse effects associated with the Project remain, including the following:

- **Vegetation / habitats**: Residual adverse effects on terrestrial and wetland vegetation assessed as 'Moderate', 'High' or 'Very High' and all residual effects on indigenous habitats assessed as significant under the Southland RPS (regardless of level of residual effect);
- **Avifauna**: Residual effects on indigenous bird species, 11 in total (regardless of the level of effect);
- **Bats:** Residual effects on long-tailed bats associated with habitat displacement and the potential injury or mortality of bats from turbine strike;
- **Lizards**: Residual effects on indigenous lizard species, regardless of the level of effect, including the tussock skink and Tautuku gecko, which have been detected at the Wind Farm Site (both classified as At Risk – Declining); and
- **Invertebrates**: Residual effects on all notable species (ten in total, including Helms' stag beetle, short horned grasshopper, giant springtail, and peripatus).

In addition, Ryder and Goldsmith (2025) note residual adverse effects will remain due to the loss of stream extent associated with the construction of stream crossings required for the Project.

6.4.2 Proposed management of residual adverse effects

Where significant residual adverse effects remain, Contact is proposing to offset and compensate for such effects in accordance with relevant national and regional policy requirements for renewable electricity projects specifically. Contact has developed a significant ecological offsetting and compensation package that will benefit the biodiversity both within the Project Site, and in the nearby Catlins Forest Park.

The details of the proposed offsetting and compensation measures are contained in Wildlands (2025), Kessels and Davidson-Watts (2025), Ryder and Goldsmith (2025) and MacGibbon (2025), and summarised in Section 5.5.7 above, and therefore are not repeated here. The proposed conditions require these measures to be implemented through setting clear objectives, methods and performance targets that will ensure the expected gains in ecological values are realised.

The offsetting and compensation measures will primarily be managed and implemented in accordance with the following management plans:

> **Habitat Restoration and Enhancement Plan** – this will outline the procedures for how Contact will offset or compensate for significant residual adverse effects on terrestrial (excluding long-tailed bats) and wetland ecology values (refer to the draft HREP included in the draft TEMP included in **Part J** to these application documents);

> **Bat Management Plan** – this will outline the methods for how the proposed compensation measures relating to long-tailed bats will be achieved (refer to the draft BMP included in **Part J** to these application documents); and

> **Riparian Offsetting Management Plan** – this will outline the procedures for how the loss of stream extent will be offset, including the methods to calculate the offset and identifying sites where offsetting will be undertaken (refer to the draft ROMP included in **Part J** to these application documents).

Additional offsetting and compensation measures are also set out in the LMP and TIMP.

The proposed offset and compensation measures have been designed in accordance with the principles for biodiversity offsetting and compensation outlined in the Southland RPS to achieve at least a 'No Net Loss' outcome and preferably a net gain in indigenous biological diversity. In addition, the proposed offsetting and compensation for effects on wetlands and stream extent have been designed to be consistent with the NPS-FM, as discussed further in Section 8 below.

More specifically, the overall package regarding offsetting and compensation has been developed in accordance with the following principles:

> Biodiversity outcomes are above results that would occur if the offset and compensation was not proposed;

> The offset and compensation package is located within the Project Site, or close to the Project Site in regard to the proposed wetland and bat compensation measures;

> The offset and compensation package is applied so that the ecological values being achieved are the same, or similar (as far as is practicable) to those being lost;

> The positive ecological outcomes of the offset and compensation last at least as long as the impact of the activity;

> The offset and compensation will achieve biological diversity outcomes beyond results that would not have occurred if the offset (and compensation) scheme was not proposed; and

> The delay between the loss of biodiversity through the proposal and the gain or maturation of the offset and compensation package's biological diversity outcomes is minimised.

It is noted that the policy guidance in the RPS considers measures undertaken on-site are mitigation measures and measures undertaken off-site are offsetting and compensation measures. While some of the offsetting and compensation measures proposed will be undertaken on-site, these measures will result in the overall enhancement of ecological values, typically considered biological offsets, and will address significant residual adverse effects. As such, they have been included in the proposed biodiversity offsetting and compensation package described below.

The overarching goal of the residual effects management package for the Project is to achieve Net Gain (offsetting) or Net Positive (compensation) outcomes for indigenous biodiversity. In summary, the offsetting and compensation approach is as follows:

> Biodiversity **offsetting** is proposed to address the residual effects on significant terrestrial vegetation at the Project Site. This will occur through various actions at the Wind Farm Site, focussed in particular (but not exclusively) on the Jedburgh Plateau, including predator control and habitat restoration and enhancement; and

> Biodiversity **compensation** is proposed as the primary mechanism to address the loss of wetland extent at the Wind Farm Site. This will occur through increasing indigenous wetland extent and enhancing existing wetland on land purchased by Contact at Davidson Road. In addition, as discussed above, the fen and bog habitats at Jedburgh Station will still benefit from offset measures such as ungulate exclusion and targeted pest control. Compensation is also proposed as the primary measure to address any residual effects on long-tailed bats through the funding of predator control within the 10,000ha area in the Beresford Range for the life of the Project.

In addition, to achieve biodiversity gains at the offset/compensation sites, Wildlands (2025) has proposed to use enhancement of existing habitat to address residual effects on indigenous vegetation and indigenous fauna (birds, lizards and invertebrates), through a combination of pest and predator control, enrichment planting and fencing.

For completeness, it is noted that during the Covid Fast-track consenting process particular focus was given to the vulnerability and irreplaceability of the wetland and terrestrial habitat present on the Jedburgh Plateau, and therefore, the appropriateness of offsetting and compensating for the loss of wetlands on the Plateau. Wildlands (2025) and MacGibbon (2025) both provide a detailed analysis of the irreplaceability and vulnerability of the

wetlands present on the Jedburgh Plateau and conclude that compensating for the loss of the wetlands on Jedburgh Plateau is appropriate, as summarised below.

As described in Section 2 of this application document, most of the bog wetlands present on the Jedburgh Plateau exist because the pāhautea forest that once covered the higher altitude ridges and flats has been cleared for farming, and the wetlands are likely to have been sustained because the grazing of cattle and browsing of feral ungulates has suppressed revegetation. The wetlands on the Plateau are in an early stage of vegetative succession, and in time, they will be replaced by woody shrub species, and subsequently, forest species. Therefore, whilst the wetlands on the Jedburgh Plateau have high ecological value, they are not a permanent vegetation type at this site, and as such, are not irreplaceable.

Further, the wetlands on the Jedburgh Plateau are intact, but not 'pristine', due to the land use at the site, which has been farmed for over 100 years, and the fact that it is browsed by high numbers of feral deer and disturbed by pigs. Wildlands (2025) consider the fact that the wetlands still persist, despite the significant disturbance that occurs at the site, suggests they have low vulnerability. As such, both Wildlands (2025) and MacGibbon (2025) consider the proposed offsetting and compensation for the loss of approximately 2.11 ha of wetlands (capped at 2.5ha) on the Jedburgh Plateau is appropriate, noting that the proposed measures will have significant benefits to the wetlands and terrestrial habitat on the Jedburgh Plateau, as described above.

In accordance with best practice, a biodiversity offset model was used to calculate the offsetting and compensation package to address residual adverse effects on terrestrial habitats within the Wind Farm Site, focusing on the residual loss of significant vegetation associated with the construction of the Southland Wind Farm.[48] This is described in full in Wildlands (2025). The models confirmed the proposed management measures to address the loss of vegetation and wetlands will deliver significant benefits and a net gain in habitat values onsite and net positive outcome for wetlands.

MacGibbon (2025) has reviewed all of the proposed offsetting and compensation measures and concludes that the offset and compensation measures proposed will fully and appropriately address the ecological effects and can be expected to result in an overall net benefit to biodiversity.

[48] The models do not account for exotic-dominant vegetation or indigenous fauna.

6.4.3 Monitoring

Contact will implement ecological monitoring in accordance with the procedures that will be required by the proposed conditions (and with the detail set out in the relevant management plans), both pre- and post-construction of the Southland Wind Farm. The purpose of the monitoring will be to ensure the proposed measures to manage adverse effects on ecological values within the Wind Farm Site are appropriate and whether additional measures are required. This will include the following:

- Robust post-construction monitoring of avifauna within the Wind Farm Site will be conducted in accordance with proposed consent condition EC36 and following the prescribed methodology outlined in the AMP;
- Bird collision mortality monitoring through carcass searches during the operation of the Southland Wind Farm, in accordance with proposed conditions EC37 and 37A and the measures outlined in the AMP;
- Robust post-construction monitoring of long-tailed bats within the Wind Farm Site will be conducted in accordance with proposed condition EC73 and the methodology outlined in the BMP. This will be completed for at least five years following the commencement of the operation of the Southland Wind Farm and this will provide data to confirm the effectiveness and ongoing necessity of the bat management response, and more specifically to:
    - Assess the extent to which long-tailed bats are attracted to wind turbines, primarily as a research output;
    - Assess the effectiveness of the acoustically based live curtailment in managing adverse effects on long tailed bats; and
    - Provide data on long-tailed bat activity at wind turbine sites where curtailment is not required;
- Pre- and post-release lizard monitoring at the lizard release sites in accordance with the methods set out in the LMP;
- Monitoring of riparian planting required in accordance with the ROMP until canopy closure is confirmed;
- Monitoring of the ecological enhancement areas in accordance with the methods set out in the HREP;
- Monitoring the pest management activities and pest plant management activities;
- Implementation of a biodiversity outcome monitoring programme to assess the degree to which the performance targets outlined in the proposed conditions are being

achieved and to identify whether the biodiversity management measures need to be adjusted to ensure that gains are achieved and maintained for the long term, in accordance with proposed condition EC58; and

> Compliance monitoring reporting will be carried out in accordance with the management plans and proposed conditions of consent.

For at least 12 years following the practical completion of the implementation of all of the plantings set out in the HREP, Contact will engage a Suitably Qualified and Experienced Person to conduct a review of the enhancement sites every three years to determine that all offsetting and compensation actions proposed have been undertaken in accordance with the HREP. In the event that any of the monitoring demonstrates that the expected outcomes will not occur, Contact will prepare a further enhancement programme outlining new offsetting and compensation requirements, in consultation with TAMI and DoC, to ensure a No Net Loss biodiversity outcome is achieved, in accordance with proposed condition EC58A.

6.5 SUMMARY

As previously noted, in accordance with section 85(3) of the FTAA, the Panel only has discretion to decline an application where the adverse impacts are sufficiently significant to be out of proportion to the Project's regional or national benefits, even after taking into account any conditions that the panel may set in relation to those adverse impacts and any conditions or modification that the applicant may agree to or propose to avoid, remedy, mitigate, offset or compensate for those adverse impacts.

The national and regional benefits of the Project are described in detail in **Part A** to these application documents and in Concept Consulting (2025) and Clough (2025). The proposed measures outlined above to avoid, remedy, mitigate, offset and compensate more than sufficiently address the potential adverse effects of the Project.

7. ASSESSMENT OF ALTERNATIVES

7.1 FTAA CONSIDERATIONS

Schedule 5, clause 6(1)(c)(ii) of the FTAA requires that if the activity includes the discharge of any contaminant, a description of any possible alternative methods of the discharge, including discharge into any other receiving environment, is required to be included in the application. This is provided in the sub-sections below.

7.1.1 Discharge to Air

Resource consent is sought for the discharge of contaminants into air from the temporary on-site concrete batching plants required for the construction of the Southland Wind Farm. In addition, works required for road improvements may also result in the discharge of dust to air.

The Wind Farm Site is located in a rural area, and as such, transporting concrete required for the wind turbine pads to the Wind Farm Site is impractical. It is expected if concrete was transported from off-site, it would cure before being able to be used on-site. Further, construction activities, such as road improvements, are required to enable the transport of wind turbine components to the Wind Farm Site. The existing tracks within the Wind Farm Site are not sufficient to enable the transport of wind turbine components within the Wind Farm Site. These activities will be managed in accordance with the EMP that will be prepared for the Project to minimise the discharge of dust to air to the greatest extent practicable. This will include the utilisation of a water truck to dampen exposed surfaces until exposed earthworked areas are stabilised, limiting site traffic speeds and re-vegetating exposed surfaces as soon as practical.

While these activities will result in the discharge of contaminants and dust into air, it is considered these activities are the most practicable options that will minimise environmental effects and enhance the efficiency of the required construction works.

7.1.2 Discharge to Water

Given the large-scale earthworks required during the construction of the Southland Wind Farm, there is potential that these activities may result in the discharge of sediment to water. This is most likely to occur for earthworks activities that are completed in proximity to streams and wetlands within the Wind Farm Site.

The Project has been designed to avoid and minimise environmental effects associated with the discharge of sediment to water to the greatest extent practicable. This includes the access road tracks following ridgelines within the Wind Farm Site, where possible, to reduce

the runoff of sediment into waterways, and the implementation of best practice erosion and sediment control measures, including the use of sediment control devices and the disposal of fill in areas that avoid permanent and intermittent streams and wetlands.

The technical assessments commissioned for the Project have identified a number of measures that will be implemented to minimise the discharge of sediment to water. This includes the implementation of an EMP, including an ESCP that will be prepared in accordance with best practice, as well as SSMPs to implement site-specific management measures, where appropriate. These measures are described in detail in Riley (2025) and Ryder and Goldsmith (2025). This includes the installation of a range of treatment and management devices such as silt fences, diversion channels and earth decanting bunds.

It is considered that with the implementation of these measures, Contact will avoid discharging sediment into streams beyond the permitted limits in the SWLP, however, as a precaution, Contact is applying for resource consent to discharge sediment to water. Contact will implement water quality monitoring during construction in accordance with the EMP and this will ensure the relevant SWLP water quality standards are met (in accordance with the proposed consent conditions CM7A and CM7B).

An existing bridge that crosses the Mimihau Stream South Branch within Matariki Forest is not sufficient to support the transport of the over-weight and over-dimension loads required for the turbine components. As such, construction of a new bridge is required. This will be located beside the existing bridge. In addition, new culverts will be required at other stream crossings (identified in Riley (2025)). While the construction of these structures has the potential to result in the discharge of contaminants into water and subsequent discolouration of water, it is considered that with the implementation of erosion and sediment control measures, this will appropriately ensure any effects on water quality are avoided. As noted above, water quality monitoring will be carried out during these activities to ensure the water quality standards in the SWLP are complied with.

7.2 OTHER CONSIDERATIONS

Beyond the discharge of contaminants, applications for resource consent under the FTAA are not required to describe or consider alternative locations or methods.[49] For completeness, consideration of alternatives to the proposed wind farm layout and Project Site is provided below. That consideration is relevant in demonstrating that the proposal,

[49] Clause 6 and 7 of Schedule 5 of the FTAA; the requirement to consider alternatives in Clause 6 of Schedule 4 to the RMA is not carried through to Schedule 5 of the FTAA.

and its associated infrastructure, has a 'functional need' to be located at the proposed Wind Farm Site, including in terms of effects on wetlands and rivers under the NPS-FM.

7.2.1 Wind Farm Layout

The typical process for developing a wind farm layout to be sought for consent (at any site) is to:

1. Identify the *technically feasible wind turbine layout* (based on the available land (the site)), the modelled wind resource across the site, required setbacks from external property boundaries and compliance with the wind turbine noise standard, NZS6808.
2. Critique and revise this technically feasible wind turbine layout to consider the ability to access the locations, by way of completing a preliminary civil design and identification of the preliminary electrical works design – being the indicative location of the substation and transmission line to facilitate connection to the local electricity network or Transpower National Grid. This revised wind turbine layout, and preliminary civil and electrical design forms the *technically feasible wind farm layout*.
3. Assess the effects on the environment of this technically feasible wind farm layout and make changes to the layout, where necessary, to avoid or minimise effects on the environment.

This last step creates an iterative loop whereby new / revised locations for the wind turbines may need to be considered and assessed, the civil design will need to be revised, and the new technically feasible layout needs to be reassessed for its effects on the environment.

The process of assessing the effects and redesigning the Southland Wind Farm layout occurred multiple times, especially in terms of minimising the impact on sensitive ecological areas (described in Riley (2025)). The proposed wind farm layout subject to this application has avoided high value ecological features to the greatest extent practicable. This includes redesigning the internal access road routes, orientation of wind turbine hardstands, the location of wind turbines and the relocation of the wind farm substation. There has been a particular focus on minimising wetland loss and following the redesign work, the indicative impact on wetland areas is 2.12ha.

While the reconfiguration of the wind farm layout aimed to avoid impacting the wetlands present within the Project Site to the greatest extent practicable, the topography of the area, wind turbine spacing requirements, geotechnical requirements and the extent of earthworks required also needed to be considered. As noted above, considering all of these factors, minimising effects, particularly on wetlands, was achieved through an intensive process undertaking many iterations of the design layout, which was guided by expert ecological

advice. It is noted that the proposed conditions of consent have set hard limits in terms of the impacts of the Project on high value vegetation, including wetlands, and this will ensure the impact of the Project on vegetation and habitats will not exceed what is directly anticipated by the consent conditions (as described in Section 5 above). The conditions also require continuing emphasis on minimising effects through the detailed design process (in addition to the 'hard cap' requirements on vegetation clearance).

Following the Covid Fast-track consenting process, there has been a particular emphasis on progressing the identification of fill disposal sites for the Project. The process has involved careful consideration of alternatives sites, led by Riley and with close input from the expert ecologists. That exercise also worked within the constraints on fill disposal site location specified in the proposed conditions, including avoiding intermittent and permanent streams and wetlands. As described in Section 5 above, fill disposal sites have been indicatively identified in the application; locations will be finalised during detailed design.[50]

7.2.2 Project Site Selection

Prior to selecting the Project Site, Contact spent over a year assessing potential locations for wind farms throughout New Zealand. Due to the forecasted electricity demand growth in Southland over the next few decades, the Southland Region was identified early on as a region of particular focus for Contact. The Project Site was one of a number of potential sites in the lower South Island that had been identified during the initial assessment exercise. Following initial generation yield modelling and the compilation of construction cost estimates, site visits of the most economically attractive sites were undertaken by technical experts, including landscape experts, to provide an initial assessment of the likely environmental effects. This process discounted some potential sites due to the associated potential environmental effects that could be generated from the development of a wind farm, particularly on landscape values.

Ultimately the Southland Wind Farm Site was chosen as the site that had the best overall attributes. Selection criteria included the sites wind energy resource (wind speed), proximity to neighbouring dwellings, scale, landowners within the Project Site willing to make the land available to Contact, port to site transportation access for the large wind turbine components, and proximity to the Transpower National Grid (and where there is available 'spare' capacity for electricity export).

[50] Noting that no fill disposal sites not already identified can be located on the Jedburgh Plateau, to provide additional certainty in respect of potential effects on ecological values in that location.

Additionally, and in specific regards to the wind resource at the Southland Wind Farm Site, the attractive wind resource, low turbulence intensity, low wind shear and low occurrence of extreme wind speeds are all favourable for the installation of a wind farm at this location.

An early assessment of the number of dwellings around the proposed Wind Farm Site and their separation distance was undertaken during the selection process. Potential wind farm noise and shadow flicker are directly related to the separation distances between the dwellings and turbines. The separation distances at the proposed Southland Wind Farm Site are much greater than many operational wind farm sites in New Zealand (with the nearest dwelling being located 2.3km from the nearest proposed wind turbine). Therefore, the proposed Wind Farm Site is a good location as it is remote from large, built-up populations of people, but not so remote as to compromise what could otherwise be 'wilderness' values.

As noted above, proximity to the Transpower National Grid is an important consideration in order to reduce the cost of the connection between the wind farm and the transmission grid. Not only is close proximity an attractive attribute, but there needs to be available ('spare') capacity on the grid, to ensure the electricity generated by the wind farm can be accommodated in the grid at the point of connection. The proposed Wind Farm Site is located close to the existing Transpower 220kV circuit between Invercargill and Dunedin (the North Makarewa to Three Mile Hill A Circuit), and this circuit is currently one of the most under-utilised Transpower lines in New Zealand.

Transportation accessibility for large components that are used for modern commercial scale wind turbines was also a consideration for the Project. The transportation route from the port at Bluff has already been shown to be suitable for large components with the construction of the nearby Kaiwera Downs Stage 1 Wind Farm. The transport assessments undertaken for the Project shows the proposed transport route is suitable for the typical components required for the Southland Wind Farm. Additionally, the existing forest road network through the Port Blakely Forest and Matariki Forest will minimise the construction impact of the wind farm, providing access for heavy equipment to start the Project construction works.

A further consideration was the ecology of the Wind Farm Site. Prior to commencement of the design of the proposed Southland Wind Farm, Wildlands completed a preliminary assessment of the ecological values associated with the Wind Farm Site and concluded the Wind Farm Site is suitable for the construction of a wind farm. Information gathered since that time has not negated that initial view, given the broad range of measures available and proposed to avoid, remedy, mitigate, offset and compensate adverse ecological effects to an acceptable level (refer to Sections 5 and 6).

7.2.3 Summary

Given the need to increase the generation of renewable electricity to meet the predicted increase in electricity demand and contribute to the decarbonisation of New Zealand's economy, it is considered that the Wind Farm Site is appropriate for the development of the Southland Wind Farm and will enable the development of this nationally significant infrastructure. Further, the considerations described above show the Southland Wind Farm has a functional and operational need to be located at the Wind Farm Site.

8. STATUTORY ASSESSMENT

8.1 INTRODUCTION

In assessing applications, Panels are to give the greatest weight to the purpose of the FTAA, which is "*to facilitate the delivery of infrastructure and development projects with significant regional and national benefits*". Section 81(4) of the FTAA states that, when taking into account the purpose of the FTAA, the Panel must consider the extent of the Project's regional or national benefits. Where a substantive application is made the approval process set out in the FTAA applies instead of the processes provided for under other legislation.[51]

8.2 REQUIREMENTS FOR A SUBSTANTIVE APPLICATION FOR A RESOURCE CONSENT

Section 43(3)(a) of the Act sets out that a substantive application must, for a resource consent include the information required by clauses 5 to 9 of Schedule 5 of the FTAA.[52] Schedule 5 of the FTAA sets out the information requirements for a substantive application for approvals required under the RMA. This includes:

- A description of the proposed activity, including a description and map of the proposed location:

  This is addressed in Section 7 of **Part A** of these application documents. The Project Site plan is included as **Figure Project Description-2 (Part G)**.

- Confirmation that the application complies with section 46(2)(a), (b), and (d):

  In accordance with section 46 of the FTAA, this substantive application for the Southland Wind Farm:

  - Has been developed to adhere to the requirements of section 42 of the FTAA;[53]
  - Includes all of the information listed in section 43 of the FTAA, and is specified in sufficient detail to satisfy the purpose for which it is required in accordance with section 44 of the FTAA;[54]
  - Is for a referred project;[55]

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[51] Section 40 of the FTAA.

[52] Clauses 8 and 9 are not relevant to this Project.

[53] Section 46(2)(a)(i) of the FTAA.

[54] Section 46(2)(a)(ii) of the FTAA.

[55] Section 46(2)(b) of the FTAA.

- The Project does not involve an ineligible activity;[56] and
- Contact has paid all fees, charges, or levies for the processing of this substantive application.[57]

> The full name and address of each owner of the site and of land adjacent to the site, and each occupier of the site and of land adjacent to the site whom the applicant is unable to identify after reasonable inquiry:

This is addressed in Section 2 of **Part B** and in **Part L** to these application documents.

> A description of any other activities that are part of the proposal to which the consent application relates:

The project description in Section 7 of **Part A** to these application documents contains a detailed description of all aspects of the Project. **Parts C-F** contain information relevant to all other approvals required for the Project.

> A description of any other resource consents, notices of requirement for designations, or alterations to designations required for the project to which the consent application relates:

No other resource consents, notices of requirement for designations or alterations to designations are required for the Project.

> An assessment of the activity against Sections 5, 6 and 7 of the RMA:

An assessment of the Project against the purpose and principles of the RMA is set out later in Section 8.5 of this application document.

> An assessment of the activity against any relevant provisions of the following documents:

- A national environmental standard;
- Other regulations made under the RMA;
- A national policy statement;
- A regional policy statement or proposed regional policy statement;
- A plan or proposed plan; and

[56] Section 46(2)(c) of the FTAA; refer to Part A.

[57] Section 46(2)(d) of the FTAA.

- Iwi management plans.

  The Project is assessed against the provisions of these documents later in this section (refer to Sections 8.7-8.22).

> Information about Treaty settlements that apply in the area covered by the consent application:

  Information about applicable Treaty settlements is included in Section 8.23 of this application document.

> A list of any relevant customary marine title groups, protected customary rights groups, or applicants under the Marine and Coastal Area (Takutai Moana) Act 2011:

  Not applicable to this application.

> The conditions that the applicant proposes:

  A suite of proposed conditions is included in **Part I** to these application documents.

> A copy of the notice required under section 30 of the FTAA:

  A copy of the letters from Southland District Council, Gore District Council and Southland Regional Council are included in **Part N** to these application documents.

> An assessment of the Projects effects on the environment:

  Section 5 of this application document and the technical assessments provided in **Part H** of these application documents provide a comprehensive assessment of the effects of the Project on the environment.

> If a permitted activity is part of the proposal to which the consent application relates, a description that demonstrates that the activity complies with the requirements, conditions, and permissions for the permitted activity (so that a resource consent is not required for that activity under section 87A(1) of the RMA):

  A detailed rules assessment of all the relevant permitted activities is provided in **Part M** of these application documents.

8.3 PRELIMINARY STEPS FOR APPLICATION FOR RESOURCE CONSENT

As required by section 30(2) of the FTAA, Contact has notified the Southland District Council, Gore District Council and Southland Regional Council in writing of the Southland Wind Farm Project. **Part N** to these application documents contains the responses from the Consent Authorities that addresses the matters set out in sections 30(3) to (6) of the FTAA.

8.4 PURPOSE OF THE FTAA

Section 3 of the FTAA sets out the purpose of the FTAA:

> *'The purpose of this Act is to facilitate the delivery of infrastructure and development projects with significant regional or national benefits.'*

Part A to these application documents describes the significant regional and national benefits that the Southland Wind Farm Project is expected to generate, and these are further discussed in the reports prepared by Concept Consulting and Clough (2025) (attached in **Part H**). These are summarised below:

- The Project will provide a significant contribution to the security of New Zealand's electricity capacity. The generation capacity for the Project will have a peak output of up to approximately 380 MW, with an expected generation output of approximately 1,200GWh/annum. This is sufficient electricity to power up to 150,000 households. The Project also therefore represents a major opportunity to support the Government's commitment to double the overall volume of electricity from renewable sources by 2050 and transition to a low-emissions future;
- New Zealand's electricity market is currently experiencing elevated market prices. The Project will reduce the time of electricity market scarcity and displace more expensive renewable projects. The analysis completed by Concept Consulting has estimated that if the Southland Wind Farm does not proceed, the costs of electricity for consumers in New Zealand will likely increase by $1.2 and $2.6 billion in present value terms and emissions will increase by 0.6 to 1.5 $MtCO_2e$ emissions;
- The proposed Southland Wind Farm is expected to cost around $800 to $1,300 million to construct, concentrated over a two-year period. Of this, an estimated $260 million to $430 million of capital investment will be added into the New Zealand economy. Much of this will go to local suppliers of materials, services and labour for civil engineering and road construction;
- The Project stands to generate 180-300 direct jobs in the Southland region during the construction of the Southland Wind Farm. These are full time equivalent jobs for the period of construction, so the annual equivalent would be 90-150 direct jobs. Once the Southland Wind Farm is commissioned, there will be direct employment of 10-14 FTE operational staff;
- Contact will establish a community benefit fund that will include an initial fund of $200,000 and regular annual contributions into the fund of $70,000, plus $250 per MW above 200 MW of installed capacity. This will be highly beneficial to members of the community and will support community-based services or projects aimed at

empowering people to thrive, strengthening communities and achieving other positive social or environmental outcomes; and

- A secure, resilient electricity system is fundamental to people's social, economic, and cultural wellbeing, and the Southland Wind Farm will increase the diversity of electricity supply in New Zealand. This includes the potential to increase the amount of electricity generation in Southland that is available for supporting local industries, particularly those that are transitioning away from reliance on fossil fuels.

In addition, as discussed in Wildlands (2025) and MacGibbon (2025) and described in Section 5 and 6 of this application document, the Project will deliver significant positive ecological benefits to the Wind Farm Site and local area, including:

- Aerial pest control of mammalian pests across indigenous vegetation and habitat on Jedburgh Station, as well as targeted deer control on Jedburgh Plateau and surrounds covering a total area of 1400ha for the life of the wind farm;
- Feral deer and pig (and ungulate) exclusion area, requiring a deer-proof fence around the 245ha Jedburgh Station Ecological Enhancement Area comprised of mānuka forest and wetland habitat on Jedburgh Station. Enhancement planting will be undertaken within this area to increase floristic diversity and enhance forest structure;
- Funding of ground-based pest control over 10,000ha of the Beresford Range within the Catlins Forest Park to support existing known long-tailed bat populations for the life of the wind farm. This will also provide significant benefits to forest birds in this area as well;
- Feral deer and pig (and ungulate) exclusion fencing around an 8ha area of copper tussock in Matariki Forest. This area will also be used as a release site for any salvaged skinks;
- Targeted ground-based pest control alongside all wind farm roads within the 1400ha Jedburgh Station Pest Control Area for the life of the wind farm;
- Intensive pest control within the 55ha Plateau Fauna Enhancement Area for the duration of the operation of the Southland Wind Farm;
- Enhancement of habitat for indigenous lizards and invertebrates including by undertaking enhancement planting of discrete areas within Jedburgh Sation and by transferring woody debris and logs into proposed relocation sites, together with targeted predator control will also offset any residual effects on lizards and invertebrates;
- Targeted pest plant control in identified areas;

- Legal protection of the Davidson Road Wetland Restoration Site, the Jedburgh Station Ecological Enhancement Area and the Copper Tussock Enhancement and Skink Protection Area;
- Riparian planting to offset stream loss due to wind farm road construction; and
- Indigenous wetland revegetation and enhancement, including fencing to exclude stock, enhancement planting, removing drainage and undertaking pest control at the Davidson Road Wetland Restoration Site.

The implementation of the above measures is expected to result in an increase in the animal and plant diversity and to generate an overall net gain in biodiversity.

Given the above, the Project is an infrastructure project that will provide significant national and regional benefits, and the Project is therefore consistent with the purpose of the FTAA.

8.5 PART 2 OF THE RESOURCE MANAGEMENT ACT 1991

Clause 5(1)(g) of Schedule 5 of the FTAA requires an assessment of the Project against sections 5, 6 and 7 of the RMA. It is noteworthy that while promoting sustainable management is the purpose and focus of sections 5, 6 and 7 of the RMA, that is not the purpose of the FTAA, and sustainable management considerations must be given less weight in the Panel's overall evaluation than facilitating the delivery of infrastructure and development projects with significant regional or national benefits.[58]

The purpose of the RMA is to promote the sustainable management of natural and physical resources. As previously discussed, the Southland Wind Farm will provide a nationally significant source of renewable electricity and contribute to achieving New Zealand's decarbonisation goals. Further, the Project will provide for the social and economic wellbeing of the local and regional community, as discussed in the sections above. A secure electricity system is fundamental in this regard.

With respect to sustaining the potential of natural and physical resources and safeguarding the life-supporting capacity of water and ecosystems, the relevant technical assessments demonstrate that the potential effects of the Project can be appropriately avoided, remedied or mitigated, and where required, offset and compensated for. The Project provides safeguards for (and in regard to ecology, at least a No Net Loss) of the life supporting capacity of air, water, soil and ecosystems through the implementation of appropriate

[58] Clause 17, Schedule 5, of the FTAA.

standards included within the comprehensive management plan framework and the proposed conditions (refer **Part I**).

This application provides details on the measures proposed by Contact to manage the actual and potential effects of the Project on the environment in accordance with section 5(2)(c) of the RMA and the implementation of these measures is secured by the proffered conditions, which have been prepared in consultation with mana whenua, DoC and the relevant Councils to ensure they are appropriately robust.

With respect to the key matters in sections 6 and 7 of the RMA:

- Contact will prioritise the protection of the natural character of wetlands and rivers and their margins within the Project Site through the implementation of best practice during construction, which will be managed in accordance with the proposed management plans and consent conditions. While the Project Footprint will result in unavoidable loss in the extent of streams and wetlands within the Project Site, in accordance with the relevant policy direction set out in the NPS-FM (discussed further in Section 8.8 below) Contact will offset and compensate for any loss to ensure there is an overall increase in the quality and extent of wetlands and streams through enhancement and restoration of other wetlands and riparian margins. Details of these are described in detail in Section 5 and 6 of this application document, and the relevant technical reports included in **Part H** (section 6(a));
- The Project Site is not located in an area identified as an outstanding natural feature or landscape in any of the applicable statutory plans or policy documents. It has been assessed that the wind farm will not physically alter the characteristics and qualities of highest landscape interest within the site (which is the escarpment) (section 6(b));
- The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna is achieved through the construction and design refinements which have limited the effects on such areas. Where unavoidable effects on such areas arise, Contact will implement a comprehensive offsetting and compensation package, that is described in detail by Wildlands (2025) and MacGibbon (2025). This will ensure there will be No Net Loss in biodiversity. This will include habitat enhancement and restoration in areas that are not affected by the Project footprint, as well as the implementation of an extensive pest and predator control programme (both on-site and at off-site locations) (section 6(c));
- The Project Site is primarily located on privately owned land and the Project itself will not involve or restrict any public access to any areas directly (section 6(d));

- Section 6(e) and 7(a) of the RMA refer to the relationship of Māori with their ancestral waters and other taonga, and the need to have particular regard to kaitiakitanga and the ethic of stewardship. Contact has engaged in detail with mana whenua throughout the development of the Project. As previously discussed in this application document, Contact has reached as substantial mitigation and relationship agreement, as well as agreed consent conditions, to address the cultural and taiao effects of the Project on mana whenua. These measures recognise the relationship of mana whenua with the Wind Farm Site and their role as kaitiaki;
- The archaeological assessment prepared for the Wind Farm Site identified the archaeological sites near the proposed works. Contact will ensure appropriate management measures (secured by conditions of consent) are in place to protect identified historic heritage throughout the construction of the Southland Wind Farm and is seeking a global archaeological authority for the Project as part of this application (section 6(f));
- The Wind Farm Site is not located in an area that is subject to any existing protected customary rights by any entity (section 6(g));
- The Wind Farm Site has not been assessed as being subject to significant risks from natural hazards (section 6(h));
- Section 7(b) of the RMA is concerned with the efficient use and development of natural and physical resources. The Southland Wind Farm is an efficient use of natural and physical resources as it will utilise the wind resource present at the Wind Farm Site to generate renewable electricity and contribute significantly to New Zealand's decarbonisation goals;
- Section 7(c) of the RMA relates to the maintenance and enhancement of amenity values. Contact is seeking to minimise potential amenity effects through controls in relation to construction and operational noise, and site design. The range of management plans will also assist during the construction phase to maintain amenity values for neighbouring properties. However, it is recognised that the Southland Wind Farm will, for some residents and members of the community, result in a reduction in amenity values as a result of predominately visual effects of the turbines once these are operational;
- Sections 7(d) and (f) of the RMA relate to the intrinsic values of ecosystems and the maintenance and enhancement of the quality of the environment. These matters have been considered in the design of the Southland Wind Farm and the technical assessments commissioned for the Project. Where effects on identified ecological values cannot be avoided, remedied or mitigated, Contact will implement a

comprehensive offsetting and compensation package that has been developed collaboratively with Contact's expert ecologists, DoC and iwi to provide for these effects, including through habitat enhancement and restoration of similar environments, and extensive pest and predator control, within and near the Wind Farm Site. These measures are secured by proposed conditions of consent;

- In recognising the finite characteristics of natural and physical resources, the Project will provide a source of renewable electricity, utilising the wind resource present at the Wind Farm Site, and contribute to New Zealand's decarbonisation goals. Further, the Project has avoided, to the greatest extent practicable, locating the Project footprint within identified threatened habitats, including wetlands (section 7(g)); and
- In accordance with section 7(i) and 7(j), the Project will positively contribute to New Zealand's efforts to mitigate climate change by providing a significant new source of renewable electricity and reducing reliance on non-renewable sources of energy. The Project will realise the number of benefits that are derived from the use and development of renewable electricity.

While under the FTAA, section 8 of the RMA need not be addressed in this section, for completeness, it is noted that although Contact is not a "person exercising functions and powers under the RMA", it is undertaking consultation with iwi in good faith and in a manner that reflects the scale and significance of this proposal. Contact will continue this relationship throughout the life of the Southland Wind Farm.

Overall, and based on the technical assessments that have been commissioned for the Project, it is considered that the proposal will promote the sustainable management of natural and physical resource in the environment in accordance with section 5, 6 and 7 of the RMA.

8.6 RELEVANT PLANNING DOCUMENTS

Clauses 5(1)(h) and 5(2) of Schedule 5 require an assessment of the Project against relevant RMA planning documents. An assessment of the Project against these documents must include an assessment of the Project against any relevant objectives and policies (the rules are addressed in Section 3 of this application document). The relevant statutory planning documents are considered to be:

- National Policy Statement for Renewable Electricity Generation 2011 ("**NPS-REG**");
- National Policy Statement for Freshwater Management 2020 (amended October 2024) ("**NPS-FM**");
- National Policy Statement for Highly Productive Land 2022 ("**NPS-HPL**");

- National Policy Statement for Indigenous Biodiversity 2023 ("**NPS-IB**");
- Resource Management (National Environmental Standards for Freshwater) Regulations 2020 ("**NES-FW**");
- Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 ("**NES-ET**");
- Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 ("**NES-CS**");
- Resource Management (National Environmental Standards for Air Quality) Regulations 2004 ("**NES-AQ**");
- Southland Regional Policy Statement ("**Southland RPS**");
- Proposed Southland Water and Land Plan ("**Proposed SWLP**");
- Regional Water Plan for Southland ("**Southland Water Plan**");
- Regional Air Plan 2016 ("**Air Plan**");
- Southland District Plan; and
- Gore District Plan.

Each of these policy statements and plans are considered further below. As a preliminary point, it is noted that these documents have been prepared in accordance with, and to promote, the sustainable management purpose of the RMA. They do not directly inform the purpose of the FTAA.

Consideration is also given to the Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 ("**NREIMP**") in accordance with Clauses 5(1)(i) and 5(2)(g) of the FTAA.

For completeness, in accordance with clause 17(1)(b) of Schedule 5 of the FTAA, section 104D of the RMA is not relevant to the decision making under the FTAA, and therefore, the Project has not been assessed against section 104D of the RMA.

8.7 NATIONAL POLICY STATEMENT FOR RENEWABLE ELECTRICITY GENERATION

The NPS-REG came into effect in 2011. It seeks to enable the sustainable management of renewable electricity generation under the RMA.

The sole objective of the NPS-REG is:

> *"To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and*

existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation."

Policies A, B, C1 and C2 of the NPS-REG are considered most relevant to the Southland Wind Farm as they seek to ensure decision makers:

- Recognise and provide for the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities;
- Acknowledge the practical implications of achieving an increase in the proportion of electricity generated from renewable resources, including that meeting or exceeding the New Zealand Government's national target for renewable electricity generation will require the significant development of renewable electricity generation activities;
- Acknowledge the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, having particular regard to the following:
    - The need to locate the renewable electricity generation activity where the renewable energy resource is available;
    - Logistical or technical practicalities associated with developing, upgrading, operating or maintaining the renewable electricity generation activity;
    - The location of existing structures and infrastructure and the need to connect renewable electricity generation activity to the national grid;
    - Designing measures which allow operational requirements to complement and provide for mitigation opportunities;
    - Adaptive management measures; and
- Have regard to offsetting measures or environmental compensation, including those which benefit the local environment and community affected, when considering any residual environmental effects of renewable electricity generation activities that cannot be avoided, remedied or mitigated.

The Southland Wind Farm Project is consistent with, and is strongly supported by, the NPS-REG as it will provide a significant new source of renewable electricity that will contribute to increasing the security of electricity supply at a local, regional and national level, diversifying the type and location of electricity generation. A secure, reliable and affordable system of generation and supply of electricity is critically important to the economic, social and

cultural wellbeing of New Zealanders. It is clear that as electricity demand increases, and as the country experiences fluctuations in hydro inflows and the supply of gas for thermal power stations, there is an ongoing need for new generation capacity to be added to the system.

The Government has set a goal to double the renewable energy production in New Zealand by 2050. Meeting the Government's target for an increase in the generation of electricity from renewable resources will require significant development of renewable electricity generation activities, and therefore, the development of the Southland Wind Farm is of national significance. Concept Consulting has estimated that if the Southland Wind Farm does not go ahead, emissions will increase by between 0.6 and 1.5 $MtCO_2e$.

A report released by the Ministry of Business, Innovation and Employment shows latest government projections are that total electricity demand will grow between 35.3 and 82 percent by 2050, driven by industry switching from fossil fuel use to electricity and the electrification of the transport fleet. It has been estimated that almost one wind farm equivalent to the size of the proposed Southland Wind Farm must be constructed every year until 2050 in order for New Zealand to reach this target.[59]

Policy C1 of the NPS-REG recognises the practical implications and locational constraints associated with the development of renewable electricity generation activities. There are a number of factors that influence the identification of a site as being suitable for the development of a wind farm, not least being the quality or consistency of the wind resource and proximity to transmission infrastructure. Contact considers the proposed site to be eminently suitably located in terms of these factors, having regard to its wind quality and accessibility to the transmission network.

It also needs to be acknowledged that wind turbines need to be located where the wind resource exists, and due to the elevation often required to ensure consistent and quality wind speeds, they cannot always be placed in locations where they are not visible from any dwellings, for example, or where flying animals never forage or transit. The effects of the Project associated with these locational constraints are recognised by, and provided for, through the policy direction of the NPS-REG.

Policy C2 seeks to ensure that decision-makers have regard to any offsetting measures or environmental compensation when considering any residual environmental effects associated with renewable electricity generation activities that cannot be avoided, remedied or mitigated. In this regard, Contact has focussed on avoiding, remedying and mitigating the

[59] https://www.bcg.com/publications/2022/climate-change-in-new-zealand.

potential effects of the Southand Wind Farm through the implementation of appropriate management measures and the refinement of the design to avoid ecologically significant areas where it is practicable to do so.

To account for the effects that cannot be avoided, remedied or mitigated, Contact is proposing to implement a comprehensive offsetting and compensation package that has been developed alongside its expert ecologists, DoC and iwi. This will ensure No Net Loss of indigenous biodiversity. The measures proposed will involve revegetation of native plants and a substantial pest control programme. This environmental offsetting and compensation package is discussed in detail in Section 6 of this application document and in Wildlands (2025) and MacGibbon (2025) and its implementation is required by the proposed consent conditions included in **Part I** of these application documents. The package will adequately offset or compensate for the effects of the Project and, in accordance with Policy C2 of the NPS-REG, this should attract significant weight in assessing the merits of the Project.

The proposed Southland Wind Farm is therefore strongly consistent with the objective and policy directives of the NPS-REG.

8.8 NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT

The NPS-FM sets out objectives and policies that direct local authorities to manage water in an integrated and sustainable way, while providing for economic growth within set water quantity and quality limits. The NPS-FM came into force on 3 September 2020 and was most recently updated in October 2024.

The NPS-FM is relevant to the Southland Wind Farm as the Project involves various activities that have the potential to impact on freshwater (and wetlands), including:

- The take and use of water from the Mimihau Stream;
- Impact on streams;
- Impacts on natural inland wetlands; and
- The potential discharge of contaminants to surface water bodies, namely sediment during construction.

The objective of the NPS-FM is:

> *'...to ensure that natural and physical resources are managed in a way that prioritises:*
>
> *(a) first, the health and well-being of water bodies and freshwater ecosystems*
>
> *(b) second, the health needs of people (such as drinking water)*

(c) *third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.'*

Clause 17(1)(b) of Schedule 5 of the FTAA sets out the matters the Panel must, subject to Part 2 and section 77M of the RMA, have regard to. This includes section 104 of the RMA. It is therefore noted that section 104(2F) of the RMA applies to this application, which means that when forming its decision, the Panel must not have regard to clause 1.3(5) or 2.1 of the NPS-FM, which relates to the hierarchy of obligations in the NPS-FM. The policies of the NPS-FM considered to be of most relevance to the proposal are as follows:

Policy 1: *Freshwater is managed in a way that gives effect to Te Mana o te Wai.*

Policy 2: *Tangata whenua are actively involved in freshwater management (including decision-making processes), and Māori freshwater values are identified and provided for.*

Policy 3: *Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.*

Policy 4: *Freshwater is managed as part of New Zealand's integrated response to climate change.*

Policy 5: *Freshwater is managed (including through a National Objectives Framework) to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.*

Policy 6: *There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.*

Policy 7: *The loss of river extent and values is avoided to the extent practicable.*

Policy 9: *The habitats of indigenous freshwater species are protected.*

Policy 10: *The habitat of trout and salmon is protected, insofar as this is consistent with Policy 9.*

Policy 11: *Freshwater is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided.*

Policy 15: *Communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with this National Policy Statement.*

8.8.1 Policy 1

The Southland Wind Farm Project is consistent with Policy 1 as the health and wellbeing of waterbodies and freshwater ecosystems has been prioritised. The impact of the Southland Wind Farm on freshwater quantity and quality is anticipated to be less than minor, as concluded in the hydrology and freshwater ecology assessments commissioned for this Project and discussed in Section 5. Contact is committed to ensuring that freshwater values of the Project Site are maintained and will implement a number of measures to achieve this, which will primarily be managed through the CEMP, in particular the ESCP that will be prepared for the Project, as well as required by the proposed conditions of consent.

8.8.2 Policy 2

Policy 2 has been given effect to through wide engagement with mana whenua that will continue throughout the implementation of the Project. Contact has actively engaged with mana whenua over the past two and a half years in relation to the Project, including in relation to the management of potential effects of the Project on freshwater (described in detail in Section 6 of **Part A** of this application). This consultation has been instructive in informing the proposed management measures that will be implemented during construction.

8.8.3 Policy 3

The technical assessments commissioned by Contact have considered the actual and potential effects of the Southland Wind Farm on land and freshwater in an integrated manner, which is consistent with Policy 3. This includes considering the potential effects of sedimentation and the proposed water take in terms of both water quality and aquatic ecology. These assessments demonstrate that with the appropriate measures in place, including an ESCP and the requirement to monitor water quality during construction, Contact will effectively manage any potential effects on the receiving environment, including nearby freshwater bodies.

8.8.4 Policy 4

New Zealand will require significant investment in renewable electricity generation to meet the New Zealand Government's emissions reductions targets. Consistent with Policy 4, the Southland Wind Farm will provide a new and nationally significant source of renewable electricity. This will contribute to New Zealand achieving its decarbonisation goals. In addition, the effects of climate change will be given appropriate consideration in the design development of the Southland Wind Farm with specific reference to the culverts and other stream crossings. This includes provision for extreme rainfall events and an increase in

rainfall frequency and overall depth predicted to occur due to climate change. As such, consistency with Policy 4 can be achieved.

8.8.5 Policy 5

Policy 5 of the NPS-FM related to the National Objectives Framework ("**NOF**") and ensuring the health and wellbeing of degraded water bodies and freshwater ecosystems is improved, and that where water is not degraded, it is maintained or improved (if the community chooses). The NOF directs how Councils must set objectives, policies, and rules about freshwater in their regional plans. They must do this by establishing Freshwater Management Units ("**FMUs**") across their regions and identifying the values that communities hold for the water in those areas. Councils are required to maintain or improve water quality within their region.

The Southland Regional Council has identified FMUs in the SWLP and the Project Site is located within the Mataura FMU. Waterbodies in this FMU are primarily affected by contamination from surrounding land use activities, and over-allocation of the water resource.

As discussed previously in this application, Contact will implement best-practice construction management measures during the construction of the surrounding wind farm to ensure the health and well-being of aquatic ecosystems that rely on the water bodies that are located within the Project Site. These measures will be detailed in the management plans and required by the proposed conditions of consent. Further, the 'Mataura 3' catchment the Project Site is located within is not overallocated and the proposed water take has been assessed as being appropriate and the proposed conditions relating to the water take (refer to Condition CM17) will ensure the flow of the Mimihau Stream South Branch is maintained to protect the associated freshwater ecosystem. The Project is therefore consistent with Policy 5 of the NPS-FM.

8.8.6 Policy 6

Policy 6 seeks to ensure that there is no loss to the extent of natural inland wetlands, that their values are protected, and restoration is promoted. It is anticipated the proposed Southland Wind Farm will result in the loss of extent of approximately 2.12ha of wetlands present within the Project Site. Subpart 3 of the NPS-FM outlines the specific requirements

for certain identified activities relating to wetlands. This includes the construction of specified infrastructure, of which the Southland Wind Farm meets the definition.[60]

Clause 3.22(1)(b) requires regional councils to include provisions that avoids the loss of extent of natural inland wetlands, their values are protected and restoration promoted, except where:

a) *The activity is necessary for the purpose of the construction or upgrade of specified infrastructure; and*

b) *The specified infrastructure will provide significant national or regional benefits; and*

c) *There is a functional need for the specified infrastructure in that location; and*

d) *The effects of the activity are managed through applying the effects management hierarchy.*

This policy recognises that for infrastructure projects of regional and national significance, such as this, it may not always be possible to completely avoid wetlands. For a resource consent to be granted under the above provisions in a standard RMA consenting process, the decision maker must be satisfied of the following matters:[61]

- The applicant has demonstrated how each step of the effects management hierarchy will be applied to any loss of extent or values of the wetland (including cumulative effects and loss of potential value), particularly (without limitation) in relation to the values of ecosystem health, indigenous biodiversity, hydrological functioning, Māori freshwater values, and amenity values;
- If aquatic offsetting or aquatic compensation is applied, the applicant has complied with principles 1 to 6 in Appendix 6 and 7 of the NPS-FM, and has had regard to the remaining principles in Appendix 6 and 7, as appropriate; and
- There are methods or measures that will ensure that the offsetting or compensation will be maintained and managed over time to achieve the conservation outcomes.

Any consent granted under the above provisions is subject to:[62]

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[60] Being infrastructure that delivers a service operated by a lifeline utility (as defined in the Civil Defence Emergency Management Act 2002) and is defined as regionally significant infrastructure in the Southland Regional Policy Statement, Clause 3.21 – Definitions relating to wetlands and rivers, National Policy Statement for Freshwater Management.

[61] Clause 3.22(3)(a) of the National Policy Statement for Freshwater Management.

[62] Clause 3.22(3)(b) of the National Policy Statement for Freshwater Management.

- Conditions that apply the effects management hierarchy;
- A condition requiring monitoring of the wetland at a scale commensurate with the risk of the loss of extent or values of the wetland; and
- Conditions that specify how the offsetting or compensation requirements will be achieved.

An assessment of the Project with respect to the criteria in clause 3.22(1)(b) is provided below.

The activity is necessary for the purpose of the construction or upgrade of specified infrastructure

As noted above, the Southland Wind Farm meets the definition of specified infrastructure. The loss of wetland extent that will occur as a result of the Project is necessary for the construction of the wind farm and is unavoidable. As discussed further below, the Project Footprint has been redesigned multiple times to avoid the loss of wetlands to the greatest extent possible. However, it is not possible for the Project Footprint to completely avoid the wetlands present within the Wind Farm Site. Therefore, the loss of wetlands associated with the Project is necessary to enable the construction of the Southland Wind Farm.

The specified infrastructure will provide significant national or regional benefits

As discussed throughout this substantive application, and in accordance with the purpose of the FTAA, the Project will provide significant national and regional benefits. The generation capacity for the Project will be up to 380 MW, with a generation output of approximately 1,200GWh/annum. This is sufficient electricity to power up to 150,000 households. The Project also therefore represents a major opportunity to support the Government's commitment to double the overall volume of electricity from renewable sources by 2050 and transition to a low-emissions future. If the Southland Wind Farm does not proceed, costs to consumers will likely increase by between $1.2 and $2.6bn, and emissions will increase by 0.6 to 1.5 $MtCO_2e$.

The Southland Wind Farm will therefore generate a nationally significant source of renewable electricity which will help to decarbonise the economy by replacing other forms of energy generation which cause negative environmental effects. The Project will also have significant economic benefits for local communities, creating up to 300 jobs during construction, with an estimated $260 million to $430 million added into the New Zealand economy. The Project is therefore clearly a project with significant national and regional benefits.

There is a functional need for the specified infrastructure in that location

The NPS-FM defines functional need 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'*. Case law has determined that the functional need test does not require the proposed location for the infrastructure to be the only possible location and instead practicalities that constrain potential locations need to be considered.[63]

The Southland Wind Farm Project has a clear functional need to be located in this location due to the associated constraints and practicalities. As noted in Section 7, there are a number of factors that influence whether a site is suitable for the development of a wind farm, including the quality and consistency of the wind resource, the proximity of the site to the Transpower National Grid (including where there is available 'spare' capacity for electricity export), port to site transportation access for large wind turbine components, proximity to neighbouring dwellings and environmental considerations.

As discussed in Section 7 of this application document, following a broad assessment of potential locations for wind farms in New Zealand, the Southland Wind Farm Site was selected because it met this very specific criteria as:

- The wind resource at the Wind Farm Site is good quality for the development of a wind farm, with low turbulence intensity, low wind shear and low occurrence of extreme wind speeds;
- The Wind Farm Site is located relatively close to the existing Transpower 220kV circuit between Invercargill and Dunedin (the North Makarewa to Three Mile Hill A Circuit). Transpower has confirmed that this circuit has the capacity to accommodate the electricity that will be generated from the Southland Wind Farm;
- The proposed transportation route from South Port to the Wind Farm Site has been confirmed as being suitable for the transportation of oversized and overweight wind turbine components;
- The landowners within the Project Site are willing to make the land available to Contact;
- The nearest dwelling is located 2.3km from the nearest proposed wind turbine. The separation distances are much greater than many operational wind farm sites in New

[63] *Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council [2019] NZEnvC 196; Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council [2020] NZHC 3388; Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council [2022] NZCA 598; Poutama Kaitiaki Charitable Trust v Taranaki Regional Council* [2022] NZHC 629.

Zealand and this will minimise potential effects on nearby dwellings, such as noise and shadow flicker effects; and

> The wind farm layout is restricted to the technical feasibility of the design, including the modelled wind resource across the site, wind turbine spacing requirements, setbacks from external property boundaries and compliance with the wind turbine noise standard. Changes can then be made to the layout in response to site specific environmental considerations, such as the location of wetlands and identified high-value vegetation. The wind farm layout has been redesigned a number of times following updates to the vegetation mapping prepared by Wildlands to avoid the impact of the Project on high value ecological features to the greatest extent practicable. Alternatives to the proposed wind farm layout have been considered and the proposed wind farm layout has been determined the best practicable option from both a technical and environmental effects perspective.

In light of the above, the Southland Wind Farm has a clear functional need to be in this location.

The effects of the activity are managed through applying the effects management hierarchy

Contact will adopt the effects management hierarchy to manage the effects of the Southland Wind Farm on wetlands. It proffers this even though the benefits of the Project in terms of renewable electricity generation are nationally significant. The application of the effects management hierarchy for the management of identified effects of the Southland Wind Farm on wetlands is outlined in **Table 14** and summarised below.

In the first instance, where practicable, adverse effects on the wetlands present within the Project Site have been avoided. This has been achieved through multiple iterations to the wind farm layout to avoid impacts on wetlands to respond to the modifications made to the mapping of vegetation as more field work and aerial imagery interpretation was carried out (as discussed in Riley (2025)). Wildlands has worked regularly with Riley in order to avoid wetlands to the greatest extent practicable (while still allowing the necessary access to the identified wind turbine locations). Further, Contact will ensure the disposal on fill on the Project Site and transmission line towers will avoid being located within 10m of areas identified as wetlands.

Where avoidance is not practicable, Contact will firstly minimise the footprint of any intrusion, and secondly, remedy any harm caused. Contact will implement an indigenous vegetation clearance protocol to minimise the potential for incidental wetland loss beyond the Project footprint as well as implement appropriate construction methods and erosion

and sediment control measures, managed through the ESCP and SSMPs. These are described in Riley (2025) and will include the installation of a low permeability bund made from compressed clay between the wetland and works area prior to forming a cut face within, or adjacent to (where appropriate), a wetland to minimise the effects on wetland hydrology.

The proposed conditions include a hard cap of vegetation clearance associated with the Project, including a clearance cap of 2.5ha of wetlands. This will ensure the impact of the Project on wetlands will be no greater than what is directly anticipated by the conditions. Further opportunities for avoidance and minimisation of the impact of the Project Footprint on wetlands will be undertaken following the completion detailed design, and this is required by the proposed condition (refer to EC4A-EC8). This process is as follows:

> Prior to preparing the final VMP, a SQEP will confirm the areas of significant vegetation habitats (including wetlands) within, and adjacent to, the final Project Footprint;

> Contact will then consider whether any modifications can be made to the Project Footprint to avoid, as first preference, or minimise adverse effects on the significant vegetation habitat types and confirm compliance with the vegetation caps listed in the conditions; and

> Contact will set out how the extent of adverse effects on the specified vegetation types (including wetlands) will be avoided and/or minimised in the final VMP. This will include developing mechanisms to ensure that the wetlands that are not within the Project Footprint, but still within the Project Site, are avoided, and where wetlands cannot be entirely avoided (i.e. parts of it may be impacted), developing mechanisms to minimise the adverse effect on those areas as far as practicable.

Following the implementation of these measures, residual adverse effects will remain given the wind farm footprint cannot completely avoid wetland habitat, and as such, the Project will result in some loss of wetland extent. In accordance with the effects management hierarchy, Contact will offset and compensate for these effects. Further details of the proposed offsetting and compensation package are outlined in Wildlands (2025), included in **Part H** of these application documents, and have been designed in accordance with the principles for aquatic offsetting and compensation included in Appendices 6 and 7 of the NPS-FM. Compensation for the loss of wetland habitats within the Project Site will include the following on the land owned by Contact at Davidson Road:

> Revegetation of approximately 5.1ha of exotic pasture into indigenous wetland species, totalling approximately 8,000 plants;

- Enrichment planting of an area of approximately 6.7ha will also be carried out, to achieve an overall enhancement of an approximately 10.1ha area of indigenous wetland restoration at this site;
- Approximately 1ha of terrestrial revegetation and buffering between areas of wetland; and
- Stock exclusion.

In addition, the values of the wetlands remaining on the within the Jedburgh Station Ecological Enhancement Area and on the Jedburgh Plateau will be protected and enhanced through an onsite pest and predator control programme.

In accordance with the NPS-FM requirements outlined above, Contact has prepared a set of conditions relating to the management of effects on wetlands, that clearly outline how the effects management hierarchy will be applied and include monitoring requirements and how the proposed compensation will be achieved (refer to **Part I**).

Ultimately, with the above measures in place, the Project is consistent with Policy 6 of the NPS-FM.

Table 14: Assessment of Effects Management Hierarchy – Policy 6 and Clause 3.22 of the NPS-FM.

	Avoid	Minimise	Remedy	Wetland Offsetting	Wetland Compensation
Actual and potential effects that could result in the loss of wetland extent and values (including cumulative effects and loss of potential values) – and on the basis that there is a functional need for the activity in that location.	*Can the effect be avoided in a 'practicable' manner?* *If so, how?* *If not, why not?*	*Can the effect be minimised in a 'practicable' manner?* *If so, how?* *If not, why not?*	*Can the effect be remedied in a 'practicable' manner?* *If so, how?* *If not, why not?*	*If there are more than minor residual adverse effects, what wetland offsetting is available?* *Is the imposition of wetland offsetting possible?* *If not, why not?*	*What wetland compensation can be provided if wetland offsetting is not possible?*
Loss of wetland extent					
Direct effects on the extent of fen and bog wetland and copper tussock-rautahi marsh within the Project Site.	The Southland Wind Farm layout, including the location of the wind turbines and access roads, has been designed to avoid fen, bog and copper tussock-rautahi marsh wetland habitat to the greatest extent practicable, however, total	An indigenous vegetation clearance protocol will be implemented to minimise the potential for incidental fen and bog wetland habitat loss outside of the Project footprint and appropriate construction methods and erosion and sediment control measures will also be	It is assumed that all impacted wetland within the wind farm footprint will be permanently lost, which means any meaningful remediation of wetland habitat is unlikely to occur. Minor inadvertent damage to wetlands immediately adjacent to the construction	No – it is not possible to increase the extent of fen and bog wetland vegetation habitat on the Project Site.	Yes – enhance and legally protect in perpetuity the existing copper tussock-rautahi marsh wetlands on land owned by Contact at Davidson Road. The extent of these wetlands will be increased through the conversion of grazed wetted pasture with hydric soils to natural wetlands through stock

	Avoid	Minimise	Remedy	Wetland Offsetting	Wetland Compensation
	avoidance was not possible. The revised wind farm layout will impact approximately 1.08ha of fen wetland, 0.94ha of bog wetland and 0.01ha of copper tussock-rautahi marsh. In addition, approximately 0.09ha of fen wetland on the Jedburgh Plateau will be impaired due to the construction of the wind farm. This represents a small portion of habitat impacted relative to the surrounding Wind Farm Site, avoiding >98% of the fen and bog wetland habitat and has been assessed as having a 'Moderate' magnitude of effect, in accordance with the EIANZ EcIAG.	implemented in order to minimise effects.	footprint could possibly be remediated by removing earthworked material to allow wetland vegetation to recover.		exclusion, planting, weed control and the blocking of drains. These measures will be detailed in the HREP and required by the conditions of consent, which include triggers and performance targets. Overall, the residual wetland loss effects will be appropriately addressed.

	Avoid	Minimise	Remedy	Wetland Offsetting	Wetland Compensation
	Further opportunity for avoidance of impacts on wetlands is required by the proposed conditions during the detailed design process.				
Loss of wetland values					
The potential for fill disposal sites to impact on wetlands.	Yes – The disposal of fill will avoid being located within 10m of areas identified as wetlands through selection criteria required as a condition of consent.	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*
	The potential adverse effects can be **avoided**.				
Loss of hydrological function of wetlands					
The potential for earthworks within and near wetlands to change wetland hydrology.	The Project footprint cannot entirely avoid being located within wetlands present on the Project Site.	Yes – minimising clearance of wetlands through designing the wind farm layout to avoid wetlands to the greatest extent practicable will	N/A - *the actual and potential adverse effects have been minimised, and are assessed as no more than minor.*	*N/A – the actual and potential adverse effects have been minimised and remedied, and are assessed as no more than minor.*	*N/A – the actual and potential adverse effects have been minimised and remedied, and are assessed as no more than minor.*

	Avoid	Minimise	Remedy	Wetland Offsetting	Wetland Compensation
		reduce the potential for hydrological change. Design of the roading will facilitate rainwater to be directed back into the wetlands. Appropriate use of culverts to maintain wetland hydrology where wetlands are bisected by roads. Implementation of appropriate construction methods, as outlined in Section 5.7.1 of this application document, will ensure the hydrology of the wetlands is maintained. It is considered that given the above, the hydrological function for all wetlands will be maintained, and			

	Avoid	Minimise	Remedy	Wetland Offsetting	Wetland Compensation
		therefore, not require remediation.			
	The proposed measures will minimise the effects of the Project on the hydrology of wetlands. As such, this residual effect is considered to be **no more than minor**.				
Potential impacts of sedimentation and contaminated runoff on wetland habitats during construction of the Southland Wind Farm.	Contact will prepare and implement an industry standard ESCP which will manage the discharge of sediment, however, all adverse effects associated with sedimentation on wetlands cannot be completely avoided.	Yes – the implementation of industry best-practice and low-impact design features, such as vegetated swales, and the implementation of an ESCP and CEMP that outline strict protocols around freshwater management with regard to concrete batching and refuelling vehicles and equipment at the Project Site will minimise the impact of sedimentation on wetland habitats.	Yes – in the unlikely event that excess sediment or earthworked material accumulates in wetland habitat, Contact will prioritise removing the material as soon as practicable.	*N/A – the actual and potential adverse effects have been minimised and remedied, and are assessed as less than minor.*	*N/A – the actual and potential adverse effects have been minimised and remedied, and are assessed as less than minor.*
	The proposed measures will minimise the potential impact of sedimentation and contaminated runoff on wetlands. As such, this effect is considered to be **less than minor**.				

8.8.7 Policy 7

Similar to Policy 6 above, while Policy 7 seeks to ensure that there is no loss of river extent and values, to the extent practicable, clause 3.24(1) requires regional councils to include provisions to avoid the loss of river extent and values unless the regional council is satisfied that:

a) *There is a functional need for the activity in that location; and*

b) *The effects of the activity are managed by applying the effects management hierarchy.*

For a resource consent to be granted under the above provisions in a standard RMA consenting process, the decision maker must be satisfied of the following matters:

> The applicant has demonstrated how each step of the effects management hierarchy will be applied to any loss of extent or values of the river (including cumulative effects and loss of potential value), particularly (without limitation) in relation to the values of ecosystem health, indigenous biodiversity, hydrological functioning, Māori freshwater values, and amenity; and

> If aquatic offsetting or aquatic compensation is applied, the applicant has complied with principles 1 to 6 in Appendix 6 and 7 of the NPS-FM, and has had regard to the remaining principles in Appendix 6 and 7, as appropriate; and

> There are methods or measures that will ensure that the offsetting or compensation will be maintained and managed over time to achieve the conservation outcomes.

Any consent granted under the above provisions is subject to:

> Conditions that apply the effects management hierarchy; and

> Conditions that specify how the offsetting or compensation requirements will be achieved.

As discussed in Section 8.7.6 above, the Southland Wind Farm has a functional need to be located at the Wind Farm Site. The Wind Farm Site is suitable for the development of a wind farm due to a number of factors, including the quality of the wind resource and the proximity to the National Grid. Therefore, the Project meets this requirement of 3.24(1).

The Project has the potential to generate adverse effects on water quality, aquatic ecology, water quantity and hydrological function. Contact has adopted the effects management hierarchy to the management of the actual and potential effects identified. The application of this is outlined in **Table 15** below. For the most part, the potential effects can be avoided

through the implementation of best practice management measures which will be outlined in the ESCP, including:

- Designing culverts in accordance with the Ministry for the Environment's New Zealand Fish Passage Guidelines;
- Implementing water quality monitoring during works within and near streams;
- Avoiding the disposal of fill within 10m of streams, including ephemeral waterbodies;
- Ensuring appropriate erosion and sediment control devices are installed to prevent the runoff of contaminants and sediment into waterways; and
- Limiting the take of water to prevent hydrological alteration and downstream flow reductions that would adversely affect stream flora and fauna.

Following the implementation of measures to avoid, remedy and mitigate effects on river extent and values, residual adverse effects remain. Stream crossings are required to enable the transport of wind turbine components within the Wind Farm Site. This will result in some localised habitat disturbance and loss of stream extent which cannot be avoided. It is estimated the total stream length potentially impacted by the civil works footprint will be approximately 769m. However, a portion of this estimate is already culverted (13 culverts in total), therefore the actual impact of stream length from the construction of the Southland Wind Farm will be lower than this estimated range, potentially by as much as 200m.

Contact proposes that, as a minimum, a similar length of watercourse will be enhanced through fencing and planting to prevent stock access, restoring stream shade and reduce sediment and nutrient inputs via run-off. Contact is proposing to use the SEV method to calculate the quantum of offsetting required. This will be outlined in a Riparian Offsetting Management Plan. The proposed offsetting measures are required as conditions of these consents. Ryder and Goldsmith (2025) has estimated that between 1-2km of stream length will be restored as an offset.

Given the implementation of the above measures, the Project will appropriately apply the effects management hierarchy to the effects on streams within the Project Site in accordance with the policy direction in the NPS-FM, and as such, the proposal is consistent with Policy 7 of the NPS-FM.

Table 15: Assessment of Effects Management Hierarchy – Policy 7 and Clause 3.24 of the NPS-FM.

	Avoid	Minimise	Remedy	Aquatic Offsetting	Aquatic Compensation
Actual and potential effects that could result in the loss of river extent and values (including cumulative effects and loss of potential values) – and on the basis that there is a functional need for the activity in that location.	*Can the effect be avoided in a 'practicable' manner?* *If so, how?* *If not, why not?*	*Can the effect be minimised in a 'practicable' manner?* *If so, how?* *If not, why not?*	*Can the effect be remedied in a 'practicable' manner?* *If so, how?* *If not, why not?*	*If there are more than minor residual adverse effects, what aquatic offsetting is available?* *Is the imposition of aquatic offsetting possible?* *If not, why not?*	*What river compensation can be provided if aquatic offsetting is not possible?*
Water Quality and Aquatic Ecology					
The potential effects on fish passage resulting from the construction of culverts required for stream crossings.	Yes – the culverts will be constructed in accordance with the design guidance provided in the Ministry for the Environment's New Zealand Fish Passage Guidelines and this will be required as conditions of these consents. Furthermore, fish and crayfish recovery will be undertaken in accordance with the protocols that will be outlined in the ESCP (consistent with New Zealand Works in Waterways	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*

	Avoid	Minimise	Remedy	Aquatic Offsetting	Aquatic Compensation
	Guideline) and required as a condition of these consents. Therefore, effects on fish passage will be avoided.				
	The potential adverse effects can be **avoided**.				
The potential effects of the construction of culverts and a bridge required for stream crossings resulting in the discharge of contaminants into water and discolouration of water, impacting water quality.	Yes – implementation of an ESCP (including water quality monitoring and confirmation of compliance with relevant water quality in-stream water standards) during the construction of the culverts and bridge will avoid the discharge of sediment into streams during bridge and culvert construction and ensure the 'Mataura 3' and 'Lowland Soft Bed' receiving water standards are met.	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*
	The potential adverse effects can be **avoided**.				
Potential changes to fish habitat and macroinvertebrate communities associated	Yes – fill disposal sites will avoid permanent and intermittent streams.	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*

	Avoid	Minimise	Remedy	Aquatic Offsetting	Aquatic Compensation
with fill disposal in streams.	The potential adverse effects can be **avoided**.				
The effects of the installation of new stream crossings on stream extent and fish habitat.	No – the stream crossings are required to enable the transportation of wind farm equipment within the Wind Farm Site. Therefore, the construction of the stream crossings cannot be avoided. The total stream length potentially impacted by the civil works footprint has been estimated at approximately 769m, however, a portion of this estimate is already culverted.	No – Contact will implement erosion and sediment control measures throughout the construction of the stream crossings which will minimise the effects on the loss of fish habitat, however, given the stream crossings are required, the effect on stream extent cannot be fully minimised.	No – Contact will ensure the sites where the stream crossings are constructed are rehabilitated following construction to remedy any potential effects on fish habitat. However, where stream crossings are required, the effect on stream extent cannot be fully remedied.	Yes – a similar length of stream, that is at least equal to the stream extent lost from the construction of stream crossings and calculated using the SEV method, will be enhanced through fencing and planting to prevent stock access, restore stream shade and reduce sediment and nutrient inputs via run-off. This will occur at sites within the Mimihau Stream catchment, local to the Wind Farm Site. Details of the offsetting is provided in Ryder and Goldsmith (2025).	*N/A – any actual and potential adverse effects have been offset.*
	The proposed measures will offset for the significant residual adverse effects of the Project on the extent of streams.				

	Avoid	Minimise	Remedy	Aquatic Offsetting	Aquatic Compensation
Potential changes to fish habitat and macroinvertebrate communities in the streams within the Project Site resulting from the take of water.	Yes – Contact will implement an ESCP (including water quality monitoring), fish screening and restrictions on the amount of water that is taken, and these measures will appropriately avoid adverse effects associated with the water take on fish habitat and macroinvertebrate communities.	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*
	The potential adverse effects can be **avoided**.				
The potential risk of contaminants (e.g. diesel, lubricants, sewage effluent) associated with construction machinery, ablution facilities, concrete batching plants etc. entering streams, with the potential to harm freshwater communities.	Yes – contaminants stored on-site will be bunded and fuelling of machinery will take place away from streams. To prevent runoff from the concrete batching plants entering streams, it will be isolated and captured and passed through buffer strips before being discharged to land. Waste from ablution facilities will be removed from the Project Site or treated using an appropriate	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*

	Avoid	Minimise	Remedy	Aquatic Offsetting	Aquatic Compensation
	method, to ensure that untreated wastewater cannot enter streams.				
	The potential adverse effects can be **avoided**.				
The potential for machinery brought to the site from elsewhere bringing pest species (e.g. Didymo) to the Project Site.	Yes – all machinery brought to the Project Site will be thoroughly cleaned to avoid the risk of introducing weed species.	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*
	The potential adverse effects can be **avoided**.				
Water Quantity					
Downstream flow reductions associated with the proposed water take.	No – the water take is required to enable the construction of the Southland Wind Farm and cannot be avoided.	Yes – The proposed water take will ensure no more than 5L/s will be taken. This has been assessed by Riley (2025) and Ryder and Goldsmith (2025) as a low degree of hydrological alteration and unlikely to have any downstream flow reduction effects.	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*
	The potential adverse effects can be **minimised**.				

	Avoid	Minimise	Remedy	Aquatic Offsetting	Aquatic Compensation
Hydrological Functioning (Sedimentation)					
Potential sedimentation effects in the stream where culverts and streams will be constructed.	Yes – the implementation of an ESCP, and therefore robust sediment control measures, will ensure the discharge of sediment into waterways is avoided.	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*	*N/A – the actual and potential adverse effects have been avoided.*
	The potential adverse effects can be **avoided**.				
Potential sedimentation effects in streams associated with the fill disposal sites.	Yes – Contact will avoid disposing fill in streams, as required by the consent conditions, and as such, sedimentation effects will be avoided.	Yes – Shaping of the fill disposal sites to be level will ensure that any potential sedimentation release is minimised. Erosion and sediment control measures will also be employed to prevent any runoff entering downstream waterways.	Yes – all topsoil removed from each disposal site will be stockpiled for future rehabilitation of the disposal site. Fill disposal sites will be rehabilitated as soon as is possible to minimise the potential for sediment loss.	*N/A – the actual and potential adverse effects have been minimised and remedied, and are assessed as minor.*	*N/A – the actual and potential adverse effects have been minimised and remedied, and are assessed as minor.*
	The proposed measures will avoid the disposal of fill in watercourses and potential effects associated with runoff of sediment from fill disposal sites located near streams will be minimised and remedied. As such, the adverse effect is considered to be **no more than minor**.				

8.8.8 Policy 8

Protecting the significant values of outstanding water bodies is the focus of Policy 8 of the NPS-FM. There are no outstanding water bodies identified within or directly adjacent to the site.

8.8.9 Policies 9 and 10

The proposed construction management measures, including the implementation of an ESCP, will ensure the habitats of indigenous freshwater species are protected. In addition, Contact will avoid disposing of fill within streams to protect any potential habitats. Further, the proposed stream crossings have been deigned to ensure fish passage is provided for. However, as noted in the report prepared by Ryder and Goldsmith (2025), in circumstances where it is considered desirable to prevent the passage of trout in order to protect threatened *Gollum galaxias* or Clutha flathead galaxias populations, fish passage will not be provided for at these stream crossings (described further in **Part F** of these application documents). This is consistent with the guidance provided in clause 3.26 of the NPS-FM. The requirements for fish passage at the proposed stream crossing structures will be confirmed by a suitably qualified ecologist in consultation with DoC and TAMI. Given the implementation of these measures, it is considered the Project is consistent with Policies 9 and 10 of the NPS-FM.

8.8.10 Policy 11

The proposed water take is not located within a catchment that is defined as over allocated in the SWLP. Riley (2025) completed an assessment of the proposed water take and concluded the catchment has sufficient water available to provide for the proposed water take. Further, Ryder and Goldsmith (2025) completed an assessment of the proposed water take and concluded the water take, within the parameters it is proposed to be taken, will not result in adverse effects on freshwater ecology. Therefore, the proposed water take is consistent with Policy 11 of the NPS-FM.

8.8.11 Policy 15

Contact is seeking to undertake the Southland Wind Farm Project to provide a nationally significant source of renewable electricity and manage any potential or actual adverse effects in a manner which prioritises the health and wellbeing of waterbodies. The construction and operation of the Southland Wind Farm will also provide for the economic and social wellbeing of the Southland region and New Zealand more generally and is therefore consistent with Policy 15 of the NPS-FM.

8.8.12 Summary

Given the above, it is considered the Southland Wind Farm is consistent with the provisions of the NPS-FM. The Southland Wind Farm is nationally significant infrastructure that will provide a significant contribution to New Zealand's climate change targets and decarbonisation goals. The Southland Wind Farm has a functional need to be located at the Project Site and Contact will apply the effects management hierarchy to the management of adverse effects associated with the construction and operation of the Southland Wind Farm. Where residual adverse effects remain, Contact proffers to ensure 'No Net Loss' in extent and values is achieved, which will result in ecological benefits, in accordance with the requirements of the NPS-FM. It does so, notwithstanding the significant national benefits that would accrue from the Project in terms of renewable electricity generation.

8.9 NATIONAL POLICY STATEMENT FOR HIGHLY PRODUCTIVE LAND

The NPS-HPL provides protection of highly productive land from inappropriate subdivision, use and development and to ensure its availability for food and fibre production.

The objective of the NPS-HPL states:

> *'Highly productive land is protected for use in land-based primary production, both now and for future generations.'*

The policies of most relevance to the proposed Southland Wind Farm are:

> ***Policy 1:*** *Highly productive land is recognised as a resource with finite characteristics and long-term values for land-based primary production.*
>
> ***Policy 4:*** *The use of highly productive land for land-based primary production is prioritised and supported.*
>
> ***Policy 8****: Highly productive land is protected from inappropriate use and development.*
>
> ***Policy 9:*** *Reverse sensitivity effects are managed so as not to constrain land-based primary production activities on highly productive land.*

In accordance with the objective and relevant policies of the NPS-HPL outlined above, the location of the wind turbines will avoid land that is identified as arable. **Figure Part B-3 (Part G)**, identifies the proposed locations of the wind turbines, transmission lines and roading. This shows that the wind turbines will be located outside of any Class 1-3 areas.

A portion of the transmission line route and the GIP will be located on land that is within Class 3 land. However, the area of transmission line pylons that will be located within this land will be less than 0.2ha in total and the location of the transmission line in this area will

not prevent other activities such as farming, forestry and horticulture from co-existing on this site. The GIP will have a maximum footprint of 1ha within Class 3 land.

In addition, part of the Operations and Maintenance facility may be located within Class 3 land (up to 0.9ha, however, the full extent of which will be confirmed following detailed design, therefore, it is possible this extent will be reduced) and a maximum of 1.7ha of the temporary turbine storage and site compound at Davidson Road could be located on Class 3 land. Most of this area will only be used during the construction phase of the Project, and therefore, will undergo rehabilitation following construction and revert to Class 3 land for utilisation as pasture, forestry or other rural purposes.

Therefore, approximately 3.5ha of the Project Footprint will be located on Class 3 land. This limited and unavoidable loss of some Class 3 land, characterised as the least valuable class of highly productive soil, has been minimised through the strategic siting of turbines and other project infrastructure, effectively avoiding arable land.

Clause 3.9(2)(j)(i) of the NPS-HPL provides an exception for the use or development of highly productive land for the development, operation or decommissioning of specified infrastructure (of which the Project meets the definition of as discussed above) where there is a functional or operational need to be in that location. There is a functional and operational need for the infrastructure to traverse this land. The Project's functional need to be in this location has been described in detail previously in this application document (refer to Sections 7 and 8.8.6 in particular) and is therefore not repeated here. It is noted; however, the GIP has an operational requirement to be located near the National Grid and the transmission line is required to provide the connection between the wind farm substation and the GIP. Locating this infrastructure on pasture of course also means that it will not affect other habitats that are of higher ecological value.

As such, the activities that will be located in Class 3 land are not considered to be an inappropriate use and development of the Project Site. Combining a wind farm with ongoing pastoral farming is a particularly efficient use of this class of land.

Given the above, the proposed activity is consistent with the NPS-HPL.

8.10 NATIONAL POLICY STATEMENT FOR INDIGENOUS BIODIVERSITY

The NPS-IB came into force in August 2023 and provides policy direction to protect, maintain and restore indigenous biodiversity in the terrestrial environment in New Zealand.

The application of the NPS-IB is outlined in clause 1.3. Clause 1.3(3) states the following:

> *'Nothing in this National Policy Statement applies to the development, operation, maintenance or upgrade of renewable electricity generation assets and activities and*

electricity transmission network assets and activities. For the avoidance of doubt, renewable electricity generation assets and activities, and electricity transmission network assets and activities, are not "specified infrastructure" for the purposes of this National Policy Statement.'

The proposed Southland Wind Farm is a renewable electricity generation asset and activity,[64] and as such, the NPS-IB does not apply to any parts of this activity, including construction. Therefore, the objectives and policies of the NPS-IB do not apply to the Southland Wind Farm Project and the proposed activity has not been (and need not be) assessed against the provisions of the NPS-IB.

For completeness, the NPS-IB section 32 report further clarifies that no part of the NPS-IB applies to renewable electricity generation assets and activities, as this will be addressed within the proposed amendments of the NPS-REG. As the proposed amendments to the NPS-REG have not yet been made, the current national policy direction relating to the management of indigenous biodiversity for renewable electricity generation activities is provided for in the existing NPS-REG, discussed above.

8.11 OTHER NATIONAL POLICY STATEMENTS

In addition to the above, there are further National Policy Statements which are either considered not applicable to have only limited relevance to this application as noted in **Table 16** below.

Table 16: Relevance of other National Policy Statements for the Project.

National Policy Statement	Relevance to the Southland Wind Farm Project
National Policy Statement on Electricity Transmission 2008 (NPS-ET)	The NPS-ET was developed to acknowledge the national significance of the National Grid and guide the balanced consideration of the national benefits and the local effects of electricity transmission. Transpower's assets are afforded recognition by the NPS-ET which effectively permits the growth and upgrade of the National Grid network subject to certain conditions or controls. Through consultation with Transpower, Contact will ensure that any future network connection from

[64] The NPS-IB defines renewable electricity generation assets as 'the physical components required for renewable electricity generation, along with the assets and infrastructure (such as cabling, access roads, and tracks) required to store the generated electricity and connect it to transmission or distribution networks or direct to end users'.

National Policy Statement	Relevance to the Southland Wind Farm Project
	the Southland Wind Farm will be undertaken in a manner that does not impact wider Transpower assets.
National Policy Statement on Urban Development 2020 (NPS-UD)	Not applicable – the Project Site is located in a rural area.
New Zealand Coastal Policy Statement 2010 (NZCPS)	Not applicable – the Project Site is located outside the coastal marine area and coastal environment.

8.12 NATIONAL ENVIRONMENTAL STANDARDS FOR FRESHWATER

The NES-FW regulates activities that pose risks to the health of freshwater and freshwater ecosystems. Of relevance to the Southland Wind Farm are rules relating to activities that may affect natural wetlands and culverts. As outlined in Section 3.6 above, resource consent will be required for activities associated with the wind farm construction, including earthworks, within, or within 100m of, natural wetlands.

The NES-FW specifies rules relating to the construction of specified infrastructure. A resource consent must not be granted under the standard RMA consenting process unless the consent authority has first:[65]

- Satisfied itself that the specified infrastructure will provide significant national or regional benefits; and
- Satisfied itself that there is a functional need for the specified infrastructure in that location; and
- Applied the effects management hierarchy.

In respect to these matters:

- **Part A** to these application documents describes the significant national and regional benefits of this Project, noting in particular that the Southland Wind Farm will generate a nationally significant source of renewable electricity which will help decarbonise the economy and confirms the Project is strongly aligned with the purpose of the FTAA;

[65] Regulation 45(6) of the National Environmental Standards for Freshwater.

- The functional need for the Project to occur at this location is addressed above in Sections 7 and 8.8.6. In summary, the development of wind farm is limited to a number of practical and technical constraints, including the quality of the wind resource and proximity to the National Grid, and the Wind Farm Site is suitable in this regard which demonstrates the functional need for the Project to be in this location; and
- As outlined in the sections above, Contact will apply the effects management hierarchy to manage the effects of the Project on wetlands. As wetlands are present on the Project Site, adverse effects on wetlands have been avoided to the greatest extent practicable through the reconfiguration of the wind farm layout. Contact will implement remediation and mitigation measures throughout the construction of the Southland Wind Farm. However, where effects cannot be avoided, remedied or mitigated, offsetting and compensation for these effects will be implemented. This will be in the form of re-creating habitat, enhancing the wetlands on the land owned by Contact at Davidson Road, and increasing protection from pests and predators within wetlands on the broader Jedburgh Plateau, as discussed in Section 5 and 6 of this application document.

Therefore, the Project is consistent with the requirements of the NES-FW.

8.13 NATIONAL ENVIRONMENTAL STANDARDS FOR ELECTRICITY TRANSMISSION ACTIVITIES

The proposed activity includes the construction of a new transmission line to convey the electricity generated from the Southland Wind Farm to the National Grid. The NES-ET only applies to existing high voltage electricity transmission lines. Therefore, these standards do not apply to the proposed activity.

8.14 NATIONAL ENVIRONMENTAL STANDARD FOR ASSESSING AND MANAGING CONTAMINANTS IN SOIL TO PROTECT HUMAN HEALTH

The NES-CS outlines the standards relating to the disturbance of soil at sites that are potentially contaminated. Contact commissioned a soil expert to confirm whether activities listed on the Hazardous Activities and Industries List ("**HAIL**") have occurred on the Project Site.[66] This confirmed that the Project Site has not been subject to any HAIL activities, and as such, the NES-CS does not apply to the Project.

[66] Williamson Water & Land Advisory, Southland Wind Farm Preliminary Site Investigation (Ground Contamination), 15 December 2023.

8.15 NATIONAL ENVIRONMENTAL STANDARDS FOR AIR QUALITY 2004

The NES-AQ came into effect on 1 June 2011 and contains standards which set a guaranteed minimum level of health protection for people living in New Zealand, particularly in relation to discharges within urban airsheds. No resource consent for the Project is required under these regulations, however, Contact will ensure that the management of dust and any other discharges of airborne particulates associated with the construction of the wind farm are appropriately managed.

8.16 SOUTHLAND REGIONAL POLICY STATEMENT

The Southland RPS became operative in 2017 and provides guidance on how to address the resource management issues in Southland. An assessment of the relevant objectives and policies is provided in the sub-sections below.

8.16.1 Chapter 3: Tangata Whenua

Objective TW.3 - tangata whenua spiritual values and customary resources, seeks to ensure that mauri and wairua are sustained or improved where degraded, and mahinga kai and customary resources are healthy and abundant and accessible to tangata whenua. In addition, Objective TW.4 - sites of cultural significance, seeks to ensure that wāhi tapu, wāhi taonga and sites of significance are appropriately managed and protected.

In accordance with this policy direction, as discussed in Sections 4 and 5 of this application document, Contact has been consulting closely with representatives of Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku in relation to the Project, to ensure the cultural or historical associations with the Project Site are understood and managed appropriately. TAMI prepared a CIA for the previous application made under the Covid Fast-track consenting process which identifies the key cultural values associated with Pawakataka and the potential effects of the Project on these values, and a separate overview report *Ngā Hua o Āpiti Hono Tātai Hono – Pawakataka*, which identifies a number of matters of importance to mana whenua. Contact has worked through these matters with TAMI, and this has helpfully informed the Project, including the proposed management measures to ensure the potential effects identified are appropriately addressed and provided for.

Further, the proposed consent conditions have been agreed with mana whenua and require ongoing mana whenua consultation throughout the Project, establishment of a cultural monitor role, and provide for cultural monitoring and a programme of works, which, when combined with the more traditional western based limits and monitoring, are intended to assist with recognising the kaitiaki role of mana whenua.

Cultural associations and opportunities for involvement on site can be enhanced and maintained through the implementation of the consent, including proposed conditions (i.e., opportunities to be involved in restoration planting and other works as agreed between the parties).

8.16.2 Chapter 4: Water

Part A: Water Quality

Objective WQUAL.1 seeks to ensure water quality in the region:

- Safeguards the life-supporting capacity of water and related ecosystems;
- Safeguards the health of people and communities;
- Is maintained, or improved in accordance with freshwater objectives formulated under the NPS-FM; and
- Is managed to meet the reasonably foreseeable social, economic and cultural needs of future generations.

In accordance with the policies that give effect to this objective, Contact will:

- Manage discharges and land use activities associated with the development of the Southland Wind Farm to maintain or improve water quality to ensure freshwater objectives are met through the implementation of best-practice construction methods;[67]
- Maintain water quality surrounding the Project Site through the use of appropriate erosion and sediment control measures during construction;[68]
- Ensure significant values of wetlands within the Project Site are identified and appropriately provided for. Where any adverse effects on wetlands will occur as a result of the development of the Southland Wind Farm, Contact will adopt the effects management hierarchy and offset and compensate for any residual adverse effects;[69]
- Monitor water quality during construction activities to ensure the Mataura 3 and Lowland Soft Bed receiving water quality standards are met;[70]

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[67] Policy WQUAL.1, Southland Regional Policy Statement.

[68] Policy WQUAL.2, Southland Regional Policy Statement.

[69] Policy WQUAL.3, Southland Regional Policy Statement.

[70] Policy WQUAL.5, Southland Regional Policy Statement.

- Develop the Southland Wind Farm which will be nationally significant infrastructure and will provide a new source of renewable electricity that will result in social, economic and cultural benefits;[71]
- Discharge contaminants to land as a preference to discharging to water, including the disposal of fill which will avoid being discharged into streams, and on-site wastewater will be appropriately treated and transported off-site or discharged to land;[72]
- Design the Southland Wind Farm in a way to ensure that adverse effects on groundwater and surface water quality from point source discharges of contaminants to land are avoided, remedied or mitigated;[73]
- Avoid any effects on the sources of community water supplies, given there are no identified community water supplies near the Wind Farm Site;[74] and
- Integrate the management of land use, water quality, water quantity and air, and the use, development and protection of resources wherever possible to achieve the freshwater objectives through the implementation of appropriate management measures, as outlined in Section 5 of this application document.[75]

Part B: Water Quantity

Objective WQUAN.1 seeks to ensure flows, levels and allocation regimes of surface water and groundwater in the region are developed in accordance with the NPS-FM. Further, Objective WQUAN.2 aims to ensure allocation and use of Southland's water resources is efficient.

In accordance with the policies that give effect to these objectives, the development of the Southland Wind Farm will:

- Not be located in an over-allocated catchment;[76]
- Be managed in accordance with the policy direction of the NPS-FM, as discussed in Section 7.7 above;[77]

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[71] Policy WQUAL.7, Southland Regional Policy Statement.

[72] Policy WQUAL.8; Policy WQUAL.9, Southland Regional Policy Statement.

[73] Policy WQUAL.10, Southland Regional Policy Statement.

[74] Policy WQUAL.11, Southland Regional Policy Statement.

[75] Policy WQUAL.12, Southland Regional Policy Statement.

[76] Policy WQUAN.2, Southland Regional Policy Statement.

[77] Policy WQUAN.3, Southland Regional Policy Statement.

- Appropriately manage the demand for water to protect instream values of surface water, including by placing restrictions on the amount of water taken to maintain an appropriate stream flow, and using two water storage ponds to store water to be used during construction;[78]
- Be constructed in a way that maintains instream values of surface water that derive from flows and level of water;[79]
- Ensure water taken for the construction of the Southland Wind Farm is used efficiently;[80]
- Provide social, economic and cultural benefits through the development of a new source of renewable electricity by generating employment and engagement with tangata whenua to ensure cultural values associated with the Project Site are provided for;[81] and
- Integrate the management of land use, water quality, and use and development of resources wherever possible.[82]

Part C: Beds of Lakes and Rivers

Objective BRL.1 seeks to ensure all significant values of lakes and rivers are maintained and enhanced and Objective BRL.2 and Policy BRL.4 seek to maintain and enhance public access to, along and across lakes and rivers. Policy BRL.5 aims to recognise the social, economic and cultural benefits that may be derived from the use of river and lake beds.

In accordance with the above policy direction, the proposed activities will ensure the significant values of the rivers and streams within and surrounding the Project Site are maintained. Where the proposed activities impact on the values of rivers, or cause the loss of river extent, these will be offset in accordance with the Riparian Offsetting Management Plan.

The Project, including the proposed stream crossings that will be constructed, will not result in any changes to the existing public access to streams within the site.

Further, the proposed activity will provide significant social and economic benefits, as well as a nationally significant source of renewable electricity, and therefore, the proposed

[78] Policy WQUAN.4, Southland Regional Policy Statement.

[79] Policy WQUAN.1, Southland Regional Policy Statement.

[80] Policy WQUAN.6, Southland Regional Policy Statement.

[81] Policy WQUAN.7, Southland Regional Policy Statement.

[82] Policy WQUAL.8, Southland Regional Policy Statement.

activities that will occur within the streams within the site are provided for by this policy direction.

Given the above, it is considered that the proposed activity is consistent with the relevant objectives and policies relating to water in the Southland RPS.

8.16.3 Chapter 5: Rural Land / Soils

The Southland Wind Farm Site is located in a rural area. Therefore, of relevance to the Project, Objectives RURAL.1 and RURAL.2 seek to achieve sustainable use of Southland's rural land resource and to safeguard the life-supporting capacity, mauri and health of soils in rural areas, preventing or minimising soil erosion and sedimentation from land use soil disturbance.

Consistent with the relevant policies that give effect to these objectives, the development of the Southland Wind Farm will:

- Enable people and communities in Southland to provide for their social, economic and cultural well-being through the development of a new source of renewable electricity, which will generate a more secure electricity supply, as well as generating additional employment throughout the construction and operation of the Southland Wind Farm, while enabling the existing land use within the site, being pastoral farming and plantation forestry, to continue;[83]
- As noted above, whilst a small portion (approximately 3.5ha) of the Project infrastructure will be located on land that is identified as Class 3, the infrastructure has a functional and operational need to be in this location, and therefore, is not an inappropriate use and development of this land, and for the most part, the underlying use of the land will remain or be rehabilitated following the completion of construction;[84]
- Maintain the rural amenity values of the area by being an activity that has been assessed as being consistent with the surrounding productive rural land use, and the rural character of Southland more generally, which is comprised of a mix of land uses, including agriculture and forestry, large scale structures associated with rural processing industries (meat processing and dairy in particular) and other renewable electricity projects (including wind farms);[85]

[83] Policy RURAL.1, Policy RURAL.4, Southland Regional Policy Statement.

[84] Policy RURAL.4, Southland Regional Policy Statement.

[85] Policy RURAL.2, RURAL.5, Southland Regional Policy Statement.

- Be sustainably managed to ensure the properties of the soil are safeguarded and water quality is maintained through the implementation of a certified ESCP and best practice management measures during construction;[86] and
- The on-site wastewater system will not be located in a culturally sensitive site and any potential adverse effects will be avoided or mitigated through the implementation of appropriate management measures.[87]

8.16.4 Chapter 6: Biodiversity

The relevant objectives of the biodiversity chapter of the Southland RPS seek to:

- Understand the extent of loss of indigenous ecosystems and habitats across the Southland Region and identify those at risk to further loss and degradation;[88]
- Maintain indigenous biodiversity in Southland and protect areas of significant indigenous vegetation and significant habitats of indigenous fauna for present and future generations;[89] and
- Enhance the range, extent and condition of indigenous biodiversity in Southland, with a particular emphasis on those areas most at risk to further loss or degradation.[90]

Policy BIO.1 outlines the methods that should be used to identify areas of significant indigenous vegetation and significant habitats of indigenous fauna in Southland and includes:

- The Schedule of Threatened, At Risk and Rare Habitat Types (attached as Appendix 2 in the Southland RPS), which provides an indication of areas likely to be significant;
- An ecological assessment undertaken using the ecological significance criteria (attached as Appendix 3 in the Southland RPS) to ascertain whether an area listed is significant or otherwise;
- The ecological significance criteria, which incorporates the following matters:
    - Representativeness;
    - Rarity or distinctiveness;

[86] Policy RURAL.5, Southland Regional Policy Statement.

[87] Policy RURAL.6, Southland Regional Policy Statement.

[88] Objective BIO.1, Southland Regional Policy Statement.

[89] Objective BIO.2, Southland Regional Policy Statement.

[90] Objective BIO.3, Southland Regional Policy Statement.

- Diversity and pattern; and
- Ecological context.

> The investigation and identification of areas of indigenous vegetation on private land that are likely to be significant, in collaboration with landowners.

The above policy direction provides guidance on identifying the areas of significant indigenous vegetation or significant habitats of indigenous fauna within the Project Site and these methods have therefore been adopted for the ecological assessments commissioned for the Project (refer to **Part H**). These assessments indicate that some of the species (including long-tailed bats, birds and lizards) and habitat, particularly within the Jedburgh Plateau, meet the significance criteria set out in the RPS.

The below biodiversity policies are of relevance to the Southland Wind Farm:

> Areas of significant indigenous vegetation and significant habitats of indigenous fauna in the Southland Region will be protected, and where appropriate, enhanced; [91] and

> Manage a full range of indigenous habitats and ecosystems to achieve a healthy functioning state, and to ensure viable and diverse populations of native species are maintained.[92]

In giving effect to these policies, particular regard will be given to the following:

> Fragmentation of, or reduction in the extent of, significant indigenous vegetation or significant habitats of indigenous fauna;

> Fragmentation or disruption of connections and linkages between significant ecosystems or significant habitats of indigenous fauna;

> Loss of, or damage to, buffering of significant ecosystems or significant habitats of indigenous fauna; and

> Loss or reduction of rare or threatened indigenous species populations or habitats.

In addition, the following policies are also relevant to the Project:

> Gather, monitor, record and report information on Southland's indigenous biodiversity;[93]

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[91] Policy BIO.2, Southland Regional Policy Statement.

[92] Policy BIO.4, Southland Regional Policy Statement.

[93] Policy BIO.6, Southland Regional Policy Statement.

- Promote an active and integrated management approach to maintaining and restoring or enhancing indigenous biodiversity through methods including the Regional Pest Management Plan for Southland;[94]
- Recognise the role of tangata whenua as kaitiaki;[95] and
- In addressing significant residual adverse effects, consider the use of any biodiversity offset and / or environmental compensation measures.[96]

The guidance provided in the above policies, as well as the direction provided in the NPS-REG and the energy chapter of the Southland RPS, has informed the ecological effects assessments for the Southland Wind Farm and the proposed measures to avoid, remedy, mitigate, offset and compensate for the effects identified. These measures are described in detail in Section 5 and 6 of this application document, as well as the associated technical assessments.

The technical assessments identify that the Wind Farm Site is being adversely affected by current and previous land use activities (including farming and stock access) and the presence of pest species. The presence of feral ungulates (deer and pigs) is having a significant adverse effect on terrestrial and wetland habitats in terms of browsing, pugging, and inputs of nutrients to what is naturally a low-nutrient ecosystem. Deer and pigs are also negatively affecting the quality and structure of lizard and invertebrate habitat, whilst also posing a severe risk to mātātā/South Island fernbird, particularly during breeding season. It is also assessed that the presence of ungulates at the Wind Farm Site is significantly impeding the regeneration of many plant species, which is evident in the large areas of indigenous shrubland on the plateau that are not succeeding in indigenous forest.

Predators such as feral cats, rats, possums, mustelids, and hedgehogs are also identified as exerting further pressure on bird, lizard, and invertebrate populations. Currently, there is some pest control occurring at the Wind Farm Site (on Jedburgh Station and Glencoe Station), but neighbouring properties are not doing enough (or anything), and thus overall, there is a pest problem at the site which is not being properly managed.

Therefore, whilst there are taxa within the Wind Farm Site that meet the RPS significance criteria, the habitat within the Wind Farm Site is currently within a degraded state, which is impacting the indigenous species within the site.

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[94] Policy BIO.7, Southland Regional Policy Statement.

[95] Policy BIO.8, Southland Regional Policy Statement.

[96] Policy BIO.9, Southland Regional Policy Statement.

While it is acknowledged the Southland Wind Farm will result in unavoidable adverse effects on indigenous biodiversity, in particular the physical loss of habitat, the implementation of the proposed measures to avoid, remedy and mitigate, or offset and compensate for the identified effects will ensure that there is No Net Loss of areas of significant indigenous vegetation and significant habitats of indigenous fauna (e.g. high value vegetation, bats and other threatened taxa), consistent with the above policy direction. These measures are secured by the proposed consent conditions (**Part I**).

This approach is appropriate given the national significance of the generation of renewable electricity and the benefits that will be derived from the Project. The national policy direction provided in the NPS-REG notes that where adverse effects cannot be avoided, remedied or mitigated, offsetting and compensation should be considered. Consideration of offsetting measures and environmental compensation for renewable electricity generation projects is also a requirement for decision-makers under the Southland RPS (see Policy ENG.6). There are no limitations on the type or application of these management measures that might be applied to manage the effects of such projects.

The proposed ecological effects management has taken into account potential effects associated with fragmentation of significant habitats and significant ecosystems within the Wind Farm Site, as well as the effects of the loss of significant habitats and potential effects on rare and threatened indigenous species. The proposed offsetting and compensation package will result in significant gains for indigenous biodiversity at the Wind Farm Site. The exclusion of all ungulates from the 245ha Jedburgh Station Ecological Enhancement Area comprised of predominantly mānuka bush and sustained control of feral ungulates over the 1400ha of Jedburgh Station Pest Control Area for the life of the wind farm will markedly improve the regeneration of palatable species, which in turn will provide optimal food and habitat resources for a wide range of indigenous fauna. Widespread, sustained aerial control of predators (including feral deer and pigs) will benefit indigenous birds, invertebrates, and likely lizard species.

In addition, for lizards, targeted control of mice (a known predator of lizards) will be undertaken in the proposed lizard compensation and release sites. Enhancement planting on Jedburgh Plateau will also provide further benefits for lizards and terrestrial invertebrates in this area.

Specifically for avifauna, the proposed compensation triggers set out in the consent conditions and AMP will also ensure that any adverse effects on birds associated with turbine strike are appropriately provided for and addressed. The compensation that will be implemented in the event a trigger is reached shall enhance a known habitat or breeding site of the affected bird species in New Zealand to address the residual effects on avifauna.

In regard to wetlands, the wind farm layout has been carefully assessed to maximise the avoidance of fen, bog, and marsh wetlands at the Wind Farm Site (approximately 98% of wetland habitats avoided). The proposed compensation approach will increase the net extent of indigenous copper tussock/rautahi marsh wetland by restoring approximately 6.7 hectares of existing wetlands, and increase the extent of these by a further 5.1ha through revegetation of exotic pasture, on land purchased by Contact at Davidson Road. It is also noted that fen wetland is not identified as a Threatened, At Risk or Rare habitat type in the Southland RPS, whereas copper tussock/rautahi marsh is a Threatened habitat type. The proposed biodiversity offsetting and compensation measures have also considered the 'irreplaceability' and 'vulnerability' of the wetlands on Jedburgh Plateau, as discussed in Wildlands (2025).

In addition, in managing the effects on long-tailed bats, it is important to note that Contact has taken a conservative approach to the assessment of potential effects on this species due to the low bat activity across much of the Wind Farm Site. In locations where there are more pronounced levels of activity, Contact will implement a curtailment regime to minimise the effects on long-tailed bats at these locations. In addition, Contact is proposing to implement a compensation scheme to account for any residual adverse effects on long-tailed bats by funding ongoing predator control within a 10,000ha intensive pest control area in the Beresford Range in the Catlins Forest Park. This will significantly benefit the long-tailed bat population in this area, as well as other indigenous species, resulting in an overall enhancement of the ecosystem in the area.

The proposed conditions of consent also outline specified monitoring and reporting requirements including of long-tailed bats, avifauna and of the habitat restoration and enhancement measures that will be implemented by Contact.

Therefore, the Project clearly aligns with the relevant provisions of the Southland RPS. The approach is directed at protecting significant areas of indigenous vegetation and significant habitats of indigenous fauna. This protection will be achieved through avoidance, mitigation, remediation, offsetting, and compensation measures to achieve an overall net gain in biodiversity. Without the Project, Contact's expert ecologists consider that the Wind Farm Site (and adjoining areas) would continue to lack effective pest and predator control, leading to further degradation of the existing terrestrial ecology and wetland values.

In addition, Contact has consulted in detail with mana whenua on the management of ecological effects associated with the Project and will continue to do so throughout the construction and operation of the Southland Wind Farm. The proposed consent conditions that have been developed alongside mana whenua are intended to assist with recognising the kaitiaki role of mana whenua.

Given the above, the proposed indigenous biodiversity management for the Project is consistent with the policy direction of the Southland RPS.

8.16.5 Chapter 8: Natural Hazards

Objective NH.1 seeks to avoid, remedy or mitigate the risks to people, communities their businesses, property and infrastructure form the effects of natural hazards to result in communities becoming more resilient. Consistent with Policy NH.2, the Project Site is not located within an area identified as a risk from natural hazards. Contact will undertake any physical works needed to mitigate and reduce the potential for any natural hazards to affect people and infrastructure and in accordance with the recommendation of Riley (2025). The wind farm design and construction methodology will be informed by multiple design reports to ensure the risks from natural hazards are managed to acceptable levels and this will be consistent with Policy NH.3 and NH.6.

8.16.6 Chapter 9: Air Quality

The key objectives in the Southland RPS relating to air quality are Objectives AQ.1 and AQ.2. These objectives relate to:

> Enabling the discharge of contaminants to air while managing the adverse effects of those contaminants on human health and wellbeing, and the environment; and

> Ensuring new activities established in Southland do not hinder the region's ability to achieve compliance with national environmental standards and guidelines for ambient air quality.

The discharges to air associated with the Project primarily relate to dust during construction and contaminants from the proposed concrete batching activities. In accordance with the relevant policy directive, Contact will avoid, remedy or mitigate any adverse effects of discharges of contaminants to air on human health, cultural and amenity values and the environment throughout the construction of the Southland Wind Farm.[97] This will primarily be managed through the implementation of a CEMP which will be prepared in accordance with the proposed consent conditions (including CM19-21 in relation to dust).

8.16.7 Chapter 10: Natural Features and Landscapes

The objectives and policies of the Natural Features and Landscapes chapter of the Southland RPS seek to:

[97] Policy AQ.1, Southland Regional Policy Statement.

- Identify and protect Southland's Outstanding Natural Features and Landscapes from inappropriate subdivision, use and development;[98] and
- Identify and manage Southland's locally distinctive and valued natural features so that any subdivision, use and development is consistent with their values.[99]

Policy LNF.1 outlines the criteria to be used to identify and assess ONFs and ONLs in Southland. Coombs (2025) has completed his assessment in accordance with this criteria.

As discussed previously, the Project Site is not a scheduled ONL or ONF in any of the applicable statutory plans or policy documents, nor is the Project Site identified as a locally distinctive and valued natural feature or landscape in any statutory document. However, parts of the Wind Farm Site have been identified as such through a separate report (prepared in 2019), which has not been through a public Schedule 1 consultative plan change process. Coombs (2025) and Bray (2025) disagree that this status is appropriate (particularly its extent). However, for completeness, these policies are assessed below.

Neither Objective LNF.1 nor the ensuing cited policy require absolute protection for sites that are classified ONLs or which are an ONF. Rather, decision-makers are required to assess the "appropriateness" of an activity in the context of the landscape values that exist and the extent and degree of effects that would accrue on those values. The proposal in this regard is appropriate as it avoids any physical modification of the identified scarp feature (which is identified in the separate report as having higher-value in landscape terms which derive from its geomorphic shape and ecological values), as the turbines are set back varying distances from the scarp's edge, and, more generally, from high points of the feature. Although some turbines will be visible on the skyline, the natural edge will remain legible, and the scarp as a natural face will remain intact and distinguishable. The visual effects of the turbines are also reversible, and there will be no permanent earthworks or other distinguishable features that alter the shape of the scarp area.

Furthermore, the proposed fencing, replanting, and pest control measures are anticipated to enhance ecological values across the Jedburgh Plateau and the scarp, as Wildlands' reporting indicates.

Further to the above, Policy LNF.3 seeks to identify, assess and manage landscapes and natural features of cultural significance to tangata whenua. Contact has consulted with mana whenua on the Project and TAMI has identified the cultural values associated with the

[98] Objective LNF.1; Policy LNF.1, Southland Regional Policy Statement.

[99] Objective LNF.2; Policy LNF.2, Southland Regional Policy Statement.

Project Site and surrounding area. This has informed the proposed management measures, which are required by the proposed consent conditions.

8.16.8 Chapter 11: Contaminated Land

The objectives and policies of the Contaminated Land chapter seek to identify, investigate and manage land affected by soil contaminated to avoid, remedy or mitigate adverse effects on the environment (including human health). As noted above, an expert assessment of the Project Site has confirmed no HAIL activities have occurred on the Project Site and the site is not subject to contaminated land.[100] Therefore, the Project is consistent with the provisions of this chapter of the RPS.

8.16.9 Chapter 12: Hazardous Substances

Objective HAZ.1 seeks to prevent or mitigate the adverse environmental effects associated with the storage, use, transportation and disposal of hazardous substances.

In accordance with the relevant policies that give effect to this objective, Contact will:

- Ensure hazardous substances on the Project Site are stored appropriately to avoid any potential adverse effects on the environment and human safety. Any hazardous substances stored on site will be appropriately stored in a bunded location (if required due to the nature of the substance) in accordance with the Hazardous Substances and New Organisms Act 1996;[101]
- Have appropriate systems and management plans in place in the event of accidents involving hazardous substances;[102] and
- Transport any hazardous substances in a safe manner.[103]

8.16.10 Chapter 13: Solid Waste

Objective WASTE.1 seeks to reduce the generation of solid waste in Southland and Objective WASTE.2 seeks to avoid, mitigate or where appropriate, remedy adverse environment effects associated with solid waste. In accordance with the policies that give effect to these objectives,[104] Contact will ensure waste generated from the Project will be

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[100] Williamson Water & Land Advisory, Southland Wind Farm Preliminary Site Investigation (Ground Contamination), 15 December 2023.

[101] Policy HAZ.1, Southland Regional Policy Statement.

[102] Policy HAZ.2, Southland Regional Policy Statement.

[103] Policy HAZ.3, Southland Regional Policy Statement.

[104] Policy WASTE.1; Policy WASTE.2, Southland Regional Policy Statement.

appropriately managed and minimised to the extent practicable. Following the completion of construction of the Southland Wind Farm all construction-related temporary structures, material stockpiles and waste materials will be removed from the site and will be reused / recycled or disposed of in appropriate registered waste management facilities. Further, the Decommissioning Management Plan required for the Project will include measures for the disposal of any waste, including total quantity and types of material to be recycled, identification of the destination of the waste, recycled and salvaged materials and demonstration that, where possible, waste materials have been diverted from landfill.

8.16.11 Chapter 14: Historic Heritage

Objective HH.1 and its associated policies[105] seek to identify and protect historic heritage values from inappropriate use and development and encourage the integration of historic heritage with new development through avoidance, mitigation and remediation. Contact will implement the management recommendations of Cook (2025) to ensure the development of the Southland Wind Farm will not result in adverse effects on historic heritage and a global archaeological authority for the Project is being sought as part of this substantive application (refer to **Part E** of these application documents). As such, it is considered the proposed Southland Wind Farm development is appropriate.

8.16.12 Chapter 15: Infrastructure / Transport

Part A: Infrastructure

The Southland Wind Farm will meet the definition of both regionally and nationally significant infrastructure in the Southland RPS.[106] Objective INF.1 and its associated policy[107] seek to ensure Southland's regionally and nationally significant infrastructure is secure, operates efficiently and is appropriately integrated with land use activities and the environment, recognising the benefits derived from, and making provision for, these activities.

Policy INF.2 seeks, where practicable, to avoid, remedy or mitigate the adverse effects of infrastructure on the environment. In determining the practicability of avoiding, remedying, or mitigating adverse effects on the environment, the following matters should be taken into account:

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[105] Policy HH.2; Policy HH.3, Southland Regional Policy Statement.

[106] Glossary and Definitions, Southland Regional Policy Statement.

[107] Policy INF.1, Southland Regional Policy Statement.

- Any functional, operational or technical constraints that require the physical infrastructure of regional or national significance to be located or designed in the manner proposed;
- Whether there are any reasonably practical alternative designs or locations;
- Whether good practice approaches in design and construction are being adopted;
- Where appropriate, and such measures are volunteered by a resource user, whether any significant residual adverse effects can be offset or compensated for; and
- The need to give effect to the NPS-ET, including that planning and development of the transmission system should seek to avoid adverse effects on outstanding natural landscapes, areas of high natural character and areas of high recreation value and amenity and existing sensitive activities.

It is considered that the proposed Southland Wind Farm is consistent with the above policy direction, recognising that the Southland Wind Farm has a functional, operational and technical need to be located at the Project Site, noting both the quality of the wind resource and proximity to existing transmission infrastructure, making this site preferential for the development of a wind farm.

Contact has adopted best practice in the design and construction of the Southland Wind Farm, including the proposed transmission lines, to reduce the effects to the extent that it is practicable. Contact will also appropriately manage adverse environmental effects on biodiversity values associated with the construction and operation of the Southland Wind Farm through the adoption of the effects management hierarchy. A comprehensive offsetting and compensation package has been prepared by ecological experts, as outlined in the ecology assessments (included in **Part H**), to ensure any significant residual adverse effects are appropriately provided for and there No Net Loss of indigenous biodiversity as a result of the Project.

The Project Site is not located in an area identified as an Outstanding Natural Landscape. Coombs (2025) and Bray (2025) consider the Southland Wind Farm development is appropriately accommodated by and consistent with the surrounding rural landscape.

Further, as previously noted, the design and development of the Southland Wind Farm Project has taken into account the potential effects of natural hazards, noting that the Wind Farm Site is not identified as being subject to the risk of natural hazards, consistent with Policy INF.4.

Part B: Transport

Objective TRAN.1 seeks to ensure the development of transport infrastructure and land use take place in an integrated and planned manner which:

> Integrates transport planning with land use;

> Protects the function, safety, efficiency and effectiveness of the transport system;

> Minimises potential for reverse sensitivity issues to arise from changing land uses;

> Provides for positive social, recreational, cultural and economic outcomes;

> Minimises the potential for adverse public health and environmental effects; and

> Enhances accessibility and connectivity, maximising transport choice for users of the transport system.

In accordance with the relevant policies that give effect to these objectives,[108] the transport activities required for the Project have been design in collaboration with local authorities, to ensure that the safe and efficient function of the road network is maintained. Rossiter (2025) has confirmed that the proposed transport route is suitable and the implementation of appropriate management measures that will be detailed in the CTMP will ensure that there are no more than minor adverse effects on the transportation network during construction of the Project.

8.16.13 Chapter 16: Energy

The provisions of the Energy chapter of the Southland RPS are particularly relevant to the Project, given the Project is for the development of a new renewable electricity generation activity. In addition to recognising the benefits of the use of energy resources, including the national significance of renewable electricity generation activities, the policy direction of the Energy chapter provides clear direction as to how the effects of these activities should be managed. This has directed the approach Contact has applied to the management of the effects associated with the Southland Wind Farm Project.

The relevant objectives of the Energy chapter seek:

> Efficient use of energy resources;[109]

[108] Policy TRAN.1; Policy TRAN.3; Policy TRAN.4, Southland Regional Policy Statement.

[109] Objective ENG.1, Southland Regional Policy Statement.

- Use and development of energy resources is undertaken where the adverse environmental effects are avoided, remedied, mitigated, or where appropriate, offset and compensated for;[110]
- To increase the generation and use of renewable energy resources;[111] and
- To recognise and provide for the national significance of renewable electricity generation activities.[112]

The Southland Wind Farm will provide a nationally significant new source of renewable electricity. Consistent with Policy ENG.2, this will contribute to the following:

- Increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;
- Increasing security of electricity supply at local, regional and national levels by diversifying the type and location of electricity generation;
- Using renewable natural resources rather than finite resources; and
- Avoiding reliance on imported fuels for the purposes of generating electricity.

Further, in accordance with Policy ENG.6, when considering any residual environmental effects arising from the use and development of the Southland Wind Farm that cannot be avoided, remedied or mitigated, decision makers shall have regard to offsetting measures or environmental compensation where appropriate. It is considered such measures are appropriate for the Project, given the national significance of the renewable electricity that will be generated from the Southland Wind Farm. Contact has adopted this effects management approach for the Project and these measures are outlined in detail in Section 6 of this application document.

In addition, consistent with Policy ENG.7, Contact will ensure any potential adverse effects of the Southland Wind Farm on local communities from the ongoing operation and subsequent closure of the Southland Wind Farm are appropriately addressed and provided for, in accordance with the recommendations of the various technical assessments included in **Part H** to these application documents. Upon the closure of the Southland Wind Farm, Contact will remove all turbines and above ground infrastructure from the Project Site

[110] Objective ENG.2, Southland Regional Policy Statement.

[111] Objective ENG.3, Southland Regional Policy Statement.

[112] Objective ENG.4, Southland Regional Policy Statement.

and ensure the Project Site is rehabilitated, including revegetating exposed ground surfaces, in accordance with a Decommissioning Management Plan.

8.16.14 Summary

Based on the analysis above, the proposal can be undertaken in a manner than achieves the overall management expectations for natural and physical resources under the Southland RPS.

8.17 PROPOSED SOUTHLAND WATER AND LAND PLAN

The SWLP was made operative in part in May 2024. There are a small number of appeals remaining, including Policy 42 which addresses the consideration of water permit applications, and therefore, relevant to this application.

8.17.1 Region-wide Objectives

The region-wide objectives of the SWLP of most relevance to the Southland Wind Farm seek to:

- Sustainably manage land and water and associated ecosystems as integrated natural resources;[113]
- Ensure the mauri of water provides for te hauora o te taiao (health and mauri of the environment), te hauora o te wai (health and mauri of the waterbody) and te hauora o te tangata (health and mauri of the people), including by identifying tangata whenua values and interests and reflect these in the management of freshwater and associated ecosystems and recognising and providing for taonga species;[114]
- Recognise water and land as enablers of economic, social and cultural wellbeing in the region;[115]
- Provide access to, and sustainable customary use of, both commercial and non-commercial mahinga kai resources;[116]
- Maintain or enhance water quality and avoid further over-allocation of freshwater within the identified Freshwater Management Units;[117]

[113] Objective 1, Proposed Southland Water and Land Plan.

[114] Objective 2; Objective 4; Objective 15, Proposed Southland Water and Land Plan.

[115] Objective 3, Proposed Southland Water and Land Plan.

[116] Objective 5, Proposed Southland Water and Land Plan.

[117] Objective 7, Proposed Southland Water and Land Plan.

- Manage the quantity of water in surface bodies to safeguard the life-supporting capacity and aquatic ecosystem health, and sustainably manage surface water to support the reasonable needs of people and communities to provide for their economic, social and cultural wellbeing, including through the efficient allocation and use of water;[118]
- Recognise the importance of Southland's regionally and nationally significant infrastructure, including enabling its sustainable and effective development and operation;[119]
- Enable the development of land and soils, provided the quantity, quality and structure of soils are not degraded and the health of people and ecosystems are safeguarded;[120]
- Maintain or enhance water quality and the range and diversity of ecosystems and habitats within rivers and wetlands and preserve their natural character, and protect them from inappropriate use and development;[121]
- Public access to, and along, river and lake beds is maintained and enhanced;[122]
- Implement environmental practices that optimise efficient resource use and achieve the objectives of the Proposed SWLP;[123] and
- Maintain or improve fish passage.[124]

It is considered with the proposed design of the Southland Wind Farm and the implementation of best practice construction methods and appropriate management plans, the above objectives will be met, as discussed further in the sub-sections below.

8.17.2 Region-wide Policies

As discussed previously in these application documents, Contact acknowledge the role of mana whenua as kaitiaki and has consulted widely with papatipu rūnaka in relation to the Project.[125] This has informed the proposed effects management and conditions of consent. Further, in accordance with Policy 2, the relevant iwi management plan is assessed in Section 8.22.

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[118] Objective 9/9A; Objective 11, Proposed Southland Water and Land Plan.

[119] Objective 9B, Proposed Southland Water and Land Plan.

[120] Objective 13, Proposed Southland Water and Land Plan.

[121] Objective 6; Objective 14; Objective 17, Proposed Southland Water and Land Plan.

[122] Objective 16, Proposed Southland Water and Land Plan.

[123] Objective 18, Proposed Southland Water and Land Plan.

[124] Objective 19, Proposed Southland Water and Land Plan.

[125] Policy 1, Proposed Southland Water and Land Plan.

Where there are any adverse effects on taonga species associated with the construction and development of the Southland Wind Farm, these will be appropriately managed. Extensive ecological assessments have been completed for the Project, in consultation with mana whenua. This consultation has informed the values and species of importance to mana whenua and this has informed the development of the offsetting and compensation package where any adverse effects cannot be avoided, remedied or mitigated. Therefore, the proposal is consistent with Policy 3 of the SWLP.

The Project Site is located in the Bedrock/Hill Country physiographic zone. This zone is characterised by rolling to steep land below 800m in elevation. The policy is to avoid, as a first priority, risk to water quality from contaminants, and where avoidance is impractical, requiring risk to water quality from contaminants to be minimised by:

> Identifying contaminant pathways to ground and surface water bodies;

> Implementing good management practices to manage adverse effects on water quality from contaminants transported via artificial drainage, and overland flow where relevant; and

> Having particular regard to the adverse effects on water quality from contaminants transported via artificial drainage and overland flow.

In accordance with this policy, Contact will ensure that adverse effects on groundwater and surface water quality from point source discharges of contaminants to land are avoided where practical, and where avoidance is impractical, adverse effects are remedied or mitigated. Water quality will be maintained, and the transport of contaminants via artificial drainage will be managed by implementing an ESCP and best practice management measures during construction. This is further explained in Riley (2025).

8.17.3 Water Quality

In accordance with the relevant policies relating to water quality, the Project will:

> Manage any discharges to water to ensure the discharge does not adversely affect the health of people and communities or the life-supporting capacity of the freshwater body;[126]

> Contribute to the social, economic and cultural wellbeing of the community;[127]

[126] Policy A4, Proposed Southland Water and Land Plan.

[127] Policy 13, Proposed Southland Water and Land Plan.

- Where required, prefer to discharge contaminants to land over water;[128] and
- Any wastewater will be treated and disposed of to a disposal field that will be designed in accordance with Sections 5 and 6 of NZS AS/NZS 1547:2012 – On-site Domestic Wastewater Management. This will avoid wastewater entering surrounding waterways.[129]

In addition, Policy 15A sets out that where existing water quality meets the Appendix E Water Quality Standards or bed sediments that meet the Appendix C ANZECC sediment guidelines, water quality is to be maintained by avoiding where reasonably practicable, or otherwise minimising any adverse effects, including residual adverse effects, of discharges, so that those standards or sediment guidelines will continue to be met (beyond the zone of reasonable mixing for point source discharges).

Policy 15B sets out the response required where existing water quality does not meet the Appendix E Water Quality Standards or bed sediments do not meet the Appendix C ANZECC sediment guidelines. This requires that water quality will be maintained by avoiding, where reasonably practicable, or otherwise minimising any adverse effects, including residual adverse effects, on water quality or sediment quality from new discharges to land, new discharges to groundwater or new diffuse discharges to water so that the exceedance of those standards or sediment guidelines, is as a minimum, not exacerbated.

Policy 15A therefore applies to discharges where existing water quality standards set out in Appendix C and E of the SWLP are met, and Policy 15B applies when the standards are not met. Watercourses within the area of the Project Site are primarily classified as 'Mataura 3' in Appendix E of the SWLP.[130] The relevant standards relating to this surface water class and sedimentation type effects include that:

- The natural colour and clarity of the waters must not be changed to a conspicuous extent;
- The change in sediment cover must not exceed 10%; and
- The oxygen concentration in solution in the waters must not be reduced below 5 milligrams per litre.

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[128] Policy 14, Proposed Southland Water and Land Plan.

[129] Policy 17A, Proposed Southland Water and Land Plan.

[130] Approximately one third of the construction access track through the Port Blakely Forest traverse the Kaiwera Stream catchment. Watercourses within the Kaiwera Stream catchment are classified as 'Lowland Soft Bed' in the SWLP.

Given how the standards are set out in Appendix E of the SWLP, it is difficult to determine whether the existing receiving water quality meets these or otherwise (i.e. they appear to be focussed on what the discharge should achieve). Ryder and Goldsmith (2025) consider that the development and implementation of an ESCP (including water quality monitoring) will ensure that the 'Mataura 3' receiving water quality standards are met and existing freshwater ecology values are protected during the construction of the wind farm, and therefore, it is considered Policy 15A is most relevant to the Project and will be achieved.

Notwithstanding the uncertainty of whether the existing water quality meets the relevant standards, the proposed implementation of appropriate erosion and sediment control measures will ensure adverse effects from the proposed construction works and any associated discharges to land will be appropriately avoided (or alternatively, avoided as far as practicable and otherwise minimised), such that any exceedance of the Appendix E standards is not exacerbated, and therefore, Policy 15B is achieved.

8.17.4 Water Quantity

In accordance with the relevant policies relating to water quantity, the proposed water take will:

- Not result in adverse effects on the life-supporting capacity of freshwater and associated ecosystems.[131] Ryder and Goldsmith (2025) confirmed the proposed water take will not result in adverse effects on aquatic ecology;
- Enable the construction of the Southland Wind Farm, positively contributing to the social and economic wellbeing of the Southland community, while avoiding, remedying or mitigating any potential adverse effects on the surrounding freshwater bodies, including water quantity and quality, natural character values, and the associated ecosystems, through the implementation of appropriate management measures;[132]
- Not be located in an over-allocated catchment and ensure that water is used efficiently and reasonably, meeting the relevant criteria in the SWLP;[133] and
- Be managed in accordance with best practice, as determined by the technical assessments commissioned for the Project, ensuring the efficient abstraction and use of water. Consideration has also been given to the direction provided in Appendix K of the SWLP, and this is reflected in the proposed consent conditions, which restrict the

[131] Policy B7, Proposed Southland Water and Land Plan.

[132] Policy 20, Proposed Southland Water and Land Plan.

[133] Policy 20(3); Policy 21, Proposed Southland Water and Land Plan.

water take to the permitted activity limits set out in the SWLP when the minimum flow at the location of the take is Q95.[134]

8.17.5 Activities that Affect Water Quality and Quantity

The SWLP includes specific provisions that provide for the development of infrastructure, and associated activities. It is considered the proposed Southland Wind Farm is consistent with these policies as:

- The Southland Wind Farm will be a nationally and regionally significant renewable electricity generation activity that has a functional and operational need to be located within the Project Site, and this should be recognised and provided for when considering activities relating to the take and use of water;[135]
- In accordance with the technical assessments completed for the Project, Contact will implement appropriate measures to avoid, remedy or mitigate adverse effects, and where any residual effects remain, Contact will offset and compensate for these, and this will provide for the effective and sustainable development, operation and maintenance of the Project;[136]
- Any bores will be constructed in accordance with NZS 4411:2001 Environmental Standard for Drilling of Rock and Soil and will comply with the conditions of Rule 53(a);[137]
- Structures and riverbed disturbance activities will be appropriately managed to avoid, remedy or mitigate adverse effects, in accordance with the proposed management plans and conditions of consent;[138]
- As discussed in Section 8.8 above, Contact will apply the effects management hierarchy to the loss of river extent and values associated with the Project in a way that is consistent with clause 3.24 of the NPS-FM;[139]
- Contact will ensure any sites used for the discharge of fill are appropriate. This includes avoiding the disposal of fill within the Project Site in areas identified as wetlands,

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134 Policy 22, Proposed Southland Water and Land Plan.

135 Policy 26, Proposed Southland Water and Land Plan.

136 Policy 26A, Proposed Southland Water and Land Plan.

137 Policy 27, Proposed Southland Water and Land Plan.

138 Policy 28, Proposed Southland Water and Land Plan.

139 Policy 28A, Proposed Southland Water and Land Plan.

streams or high or very high ecological value vegetation, as required by the proposed consent conditions;[140]

> The Wind Farm Site is not contaminated land, and Contact will implement best-practice management measures to the management of hazardous substances on site;[141] and

> The Project will contribute to the New Zealand Government's emissions reduction targets and aid in New Zealand's effort to combat climate change. The Southland Wind Farm will be designed to avoid effects associated with natural hazards.[142]

In addition to the above, Policy 33 of the SWLP seeks to prevent the reduction in area, function and quality of natural wetlands, including through drainage, discharges and vegetation removal, and Policy 32 seeks to protect significant indigenous vegetation and significant habitats of indigenous fauna and maintain indigenous biodiversity associated with natural wetlands, lakes and rivers and their margins. It is noted that these policies cannot be read in isolation and need to be read together with Policy 33A, which was inserted directly into the SWLP, as directed by clause 3.22 of the NPSFM, discussed above. That is to say, the policies drive the protection of natural inland wetlands, including protecting their values and functions and avoiding the loss of area / extent, subject to the exceptions that are specified in detail in Policy 33A.

The Project is for the development of specified infrastructure, being a nationally significant renewable electricity generation activity, has a functional need to be in this location, and Contact has applied the effects management hierarchy to the management of effects on the Project on wetlands, and has therefore been assessed as being consistent with Policy 6 of the NPS-FM, and as such, the exceptions provided for in Policy 33A of the SWLP.

It is anticipated there will be 2.12ha of wetland loss due to the construction of the Southland Wind Farm. The reduction in wetland areas is necessitated by the establishment of the internal access road network and wind turbine generator platforms, where there is a functional need and no practicable alternative location to position these. This was the minimum area of impact the design team could achieve through multiple iterations of civil design, as discussed in Riley (2025). The proposed conditions of consent then require further opportunities for refinements to the Project Footprint during the detailed design phase to minimise the impact on wetlands further, where it is possible to do so.

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[140] Policy 35, Proposed Southland Water and Land Plan.

[141] Policy 36, Proposed Southland Water and Land Plan.

[142] Policy 37; Policy 38, Proposed Southland Water and Land Plan.

Several iterations of the wind farm layout have been made to maximise the avoidance of fen, bog, and marsh wetlands at the Wind Farm Site (approximately 98% of wetland habitats avoided). The proposed compensation approach will increase the net extent of indigenous wetland including by undertaking enrichment planting of an approximate 6.7ha area of existing wetlands, and revegetation of an approximate 5.1ha area of existing exotic pasture on land purchased by Contact at Davison Road. In addition to these offsetting and compensation measures, there are also onsite measures which Contact will employ in order to minimise or remedy the effects of the proposal on wetlands values, extent and physical characteristics (such as hydrology). These are all detailed in **Table 14** above.

It is therefore considered that the proposed measures to avoid, minimise, remedy, offset and compensate for the loss of area, function and quality of wetlands strike an appropriate balance between the "protection" and "prevention" requirements set out in Policies 32 and 33 of the SWLP , and both Policy 33A and Policy 26A, which provide a pathway for the development of regionally and nationally significant infrastructure to apply the effects management hierarchy with respect to managing effects on wetlands.

With regard to terrestrial and wetland offsetting and compensation, the proposal, which seeks to improve the quality of natural wetland habitat through the proposed compensatory enhancement and protection of areas described above, is also considered consistent with Policy 34, which seeks to encourage the restoration of existing natural wetlands.

8.17.6 Consideration of Resource Consent Applications

Policy 39A of the SWLP directs that cumulative effects of land use and discharge activities should be considered with an integrated management approach. In accordance with this policy direction, the assessment of effects for the Project have been undertaken with an integrated management approach, including considering the catchment as a whole. These have confirmed there are not anticipated to be any adverse effects, including those associated with runoff and nutrient loss, into the surrounding waterbodies.

The duration of the consents sought under the SWLP are outlined in the proposed conditions (refer to **Part I**). For activities relating to the construction of the Southland Wind Farm, a duration of ten years is sought and for any land use activities a duration of 35 years is sought. These durations are sought as this will provide Contact with sufficient certainty for the construction and operation of the Southland Wind Farm, and no issues have been raised in the technical assessments associated with the duration of the consents sought. This is consistent with Policy 40 of the SWLP.

Consistent with Policy 41, the proposed monitoring required by the proposed management plans and consent conditions, has been informed by the recommendations outlined in the

technical assessments. This will include water quality monitoring, wetland monitoring and monitoring of the water take. All monitoring results will be supplied to the Councils annually.

In accordance with Policy 42[143] of the SWLP, the proposed water take locations are not located within an over allocated waterbody and the technical assessments have confirmed there will be no more than minor adverse effects associated with the proposed take and use of water from the Mimihau Stream. A hydrological monitoring system will be installed at the location of the water take and the take will be restricted to 5L/s. Further, as noted above, in accordance with Appendix K of the SWLP, in the event the minimum flow of the stream, as measured at the point of the water take, is Q95, the water take will comply with the permitted activity limits set out in the SWLP. Contact has proposed a robust set of resource consent conditions, which include reporting and monitoring requirements and ensure certainty, transparency and enforcement. Upon the construction work's conclusion, water extraction from the stream source will cease. If any storage ponds are to be retained on the site, they will be replenished by precipitation only. It is considered this will appropriately manage the potential environmental effects of the Project.

8.17.7 Summary

In light of the above assessment, the proposed Southland Wind Farm is consistent with the provisions of the SWLP.

8.18 REGIONAL WATER PLAN FOR SOUTHLAND

The Southland Water Plan was made operative in 2010. As the SWLP is operative in part, the only provisions of the Southland Water Plan that are relevant to the Project are the matters addressed in Policy 42 of the SWLP. An assessment of the relevant provisions of the Southland Water Plan is provided below.

Policy 16 of the Southland Water Plan outlines the matters that shall be considered when granting a consent for a water take. In accordance with this policy direction, the technical reports completed for the Project have confirmed the values of the waterbodies subject to the water take will not be affected by the proposed activities. As described above, Contact will implement the management measures as recommended by the technical experts to ensure that the values of the waterbodies are not affected by the Project. This includes through the requirement of a minimum flow, hydrological monitoring and reporting

[143] Subject to appeal to the Environment Court by Wilkins Farming Co ENV-2018-CHC-000030 and Southland Fish and Game Council ENV-2018-CHC-000037.

requirements. Further, in accordance with Policy 18, the proposed water take is not in an overallocated waterbody.

8.18.1 Summary

Based on the above, the Project is consistent with the relevant policy direction of the Southland Water Plan.

8.19 REGIONAL AIR PLAN 2016

The Air Plan became operative in 2016 and outlines the control and management of discharges to air. The most relevant provisions relating to the Southland Wind Farm Project seek:

- To avoid, remedy or mitigate any adverse effects upon the localised air quality environment (including health and amenity effects) from the discharge of contaminants into air;[144]
- To ensure that Māori cultural and traditional beliefs are recognised and provided for when dealing with discharges to air;
- Require any discharges of contaminants to air to avoid, remedy or mitigate adverse effects;[145] and
- To require applications that seek to discharge contaminants to air, to comply with the NES-AQ and have regard to the appropriate ambient air quality guidelines.[146]

In accordance with these provisions, Contact will ensure construction activities are managed in accordance with best practice, including through the implementation of a Dust Management Plan, to ensure the discharge of dust to air does not result in adverse effects beyond what is permitted within the Wind Farm Site boundary and complies with the NES-AQ requirements. TAMI has not raised any issues with this approach to the management of discharges to air.

The Project is therefore consistent with the Regional Air Plan.

8.20 SOUTHLAND DISTRICT PLAN

The Southland District Plan became operative in 2018 and sets out the framework for development and the management of the natural and physical resources in the Southland

[144] Objective 2.4, Regional Air Plan 2016.

[145] Policy 3.12, Regional Air Plan 2016.

[146] Policy 3.13, Regional Air Plan 2016.

District. An assessment of the relevant provisions of the Southland District Plan is provided in the sections below.

8.20.1 TW - Tangata Whenua

Objective TW-O1 seeks to recognise the importance of, and provide for, Māori culture and traditions with ancestral lands, water, wāhi tapu and other taonga. Policy TW-P1 aims to recognise and provide for tangata whenua to exercise kaitiakitanga in the management of and decision-making process regarding natural and physical resources, with particular regard to Iwi Management Plans. In accordance with this policy direction, Contact acknowledge the role of mana whenua as kaitiaki and has consulted widely with Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku in relation to the Project. This engagement has informed the proposed management of effects for the Project, including through the proposed consent conditions.

8.20.2 EM - Energy and Minerals

The Southland District Plan includes specific provisions that recognise the regional and national significance of renewable electricity generation activities and provide guidance for the management of effects associated with the development and operation of renewable electricity generation activities. In particular, Objective EM-O1 and Policy EM-P1 seek to enable electricity generation in a manner that avoids, remedies or mitigates the adverse effects on the environment. In addition, Objective EM-O2 seeks to recognise that energy resources are important to the current and foreseeable needs of Southland and New Zealand.

In order to give effect to this policy directive, the relevant Southland District Plan provisions recognise and provide for:

- The local, regional and national benefits associated with the generation of electricity;[147]
- The functional, technical and operational need that activities associated with the development of the generation of electricity have to be sited at a particular location;[148]
- The development, operation, maintenance and upgrading of new renewable electricity generation activities in a manner that recognises the need to locate the activity where the renewable electricity resource is available and the logistical and technical

[147] Policy EM-P3, Southland District Plan.

[148] Policy EM-P4, Southland District Plan.

practicalities associated with developing, operating and maintaining renewable electricity generation activities;[149] and

> Contact has designed the Project in a manner that appropriately avoids, remedies or mitigates adverse effects on the environment.[150] Offsetting measures or environmental compensation will be implemented where any residual environmental effects of renewable electricity generation activities cannot be avoided, remedied or mitigated, in accordance with the principles outlined in the RPS.[151]

The above policy direction recognises the national significance of the generation of renewable electricity. The Southland Wind Farm is therefore supported by this policy direction in that it will provide a nationally significant source of renewable electricity and, as discussed above, has a functional, operational and technical need to be in this location, in particular noting the quality of the wind resource and the proximity of the site to the National Grid.

Contact has appropriately applied the policy direction of this chapter of the Southland District Plan to the management of the effects associated with the Project. As a priority, Contact will seek to avoid, remedy or mitigate adverse effects on terrestrial ecology and freshwater values as far as practicable, the methods for which are outlined in the ecological reports included in **Part H** of this application and in Sections 5 and 6 above.

However, where there are any significant residual environmental effects, Contact will offset and compensate for these effects. The proposed biodiversity offsetting measures and environmental compensation have been designed in accordance with the direction provided in the Southland RPS, and as discussed by MacGibbon (2025), Wildlands (2025) and Ryder and Goldsmith (2025), will more than adequately offset and compensate for any residual adverse effects of the Project. The proposed measures will result in an enhancement to the wetlands and biodiversity on the Project Site, which is currently in a degraded state, particularly due to the effects of pests on site, as well as to the surrounding area, including the Catlins Forest Park due to the significant pest control programme that is proposed.

[149] Policy EM-P6, Southland District Plan.

[150] Policy EM-P1, Southland District Plan.

[151] Policy EM-P8, Southland District Plan.

8.20.3 INF - Infrastructure

Objective INF-O1 seeks to ensure that infrastructure meets the current and foreseeable needs of the Southland District, whilst ensuring that the adverse effects on the environment are avoided, remedied or mitigated.

In accordance with the relevant policies that give effect to this objective, the Southland Wind Farm:

- Will consist of regionally significant infrastructure that will increase the security of electricity supply to the Southland region and be designed in a way that appropriately avoids, remedies or mitigates adverse effects on the environment.[152] Where there are residual adverse effects following the implementation of these measures, these will be offset and compensated for in accordance with the relevant policy direction;
- Has a functional, technical and operational need to be located at the Wind Farm Site, due to the location of the wind resource and supporting electricity transmission infrastructure;[153] and
- Will be located to avoid effects associated with climate change and natural hazards.[154]

8.20.4 TRAN - Transportation

The development of the Southland Wind Farm will include the construction of access roads within the Project Site, the transportation of over-sized and over-weight components from South Port to the Project Site, and the upgrading of roads to support the transport of these components. Objective TRAN-O1 seeks to have an integrated, safe, responsive and sustainable transport network. The relevant policies seek to:

- Recognise the benefits of a safe and efficient transport network;[155]
- Recognise the benefits from the development, operation, maintenance and upgrading of the transport network, whilst avoiding, remedying or mitigating adverse effects on the environment;[156] and

[152] Policy INF-P1, Southland District Plan.

[153] Policy INF-P2, Southland District Plan.

[154] Policy INF-P4, Southland District Plan.

[155] Policy TRAN-P1, Southland District Plan.

[156] Policy TRAN-P2, Southland District Plan.

> Manage land use and development to achieve integration with the transport network and protect the transport network from incompatible land use and development.[157]

The proposed transport related activities that will be required for the development of the Southland Wind Farm have been designed to ensure the safe and efficient functioning of the transport network in the Southland District.

The Southland Wind Farm will involve large numbers of construction vehicle movements and some over-sized and over-weight vehicle movements during the construction period. Contact will implement a CTMP in order to minimise the potential for conflict with other road users. This approach is consistent with the approach adopted for other wind farms around New Zealand, including the Kaiwera Downs Wind Farm, and as noted by Rossiter (2025), will ensure an acceptable level of service is maintained on the local roads.

Contact will also upgrade roads where required. Contact will inspect the roads used for transportation of wind farm equipment both during construction and following completion of construction of the Southland Wind Farm. Where any damage to the roads caused by the construction of the Southland Wind Farm is identified, this will be remedied, and all associated costs will be met by Contact. As such, it is considered the proposed activities are consistent with these provisions.

Overall, Rossiter (2025) concludes that the management of traffic associated with the construction of the Southland Wind Farm can be appropriately managed to ensure the continued safe and efficient vehicular access and movement throughout the Southland District. As such, the development of the Southland Wind Farm will be consistent with the objectives and policies in the Transportation section of the Southland District Plan.

8.20.5 CL – Contaminated Land

Objective CL-O1 seeks to manage contaminated land to precent adverse effects on human health and mitigate other adverse effects on the environment. Policy CL-P1 seeks to promote the identification of contaminated land where it is proposed for development or land use activity. In accordance with this policy direction, a Preliminary Site Investigation has been prepared for the Project Site and there is no contaminated land within the Project Site.[158] However, in the event that any unexpected contamination or hazardous material is encountered during the construction of the Southland Wind Farm, works will cease immediately in the affected area. The area will be isolated, and a contaminated land

[157] Policy TRAN-P3; Policy TRAN-P4, Southland District Plan.

[158] Williamson Water & Land Advisory, Southland Wind Farm Preliminary Site Investigation (Ground Contamination), 15 December 2023.

specialist will be contacted to assess the unexpected contamination, delineate its extent and advise a suitable management or remediation approach for implementation.

8.20.6 NH - Natural Hazards

The relevant provisions of the Natural Hazards section in the Southland District Plan seek to reduce the risk of natural hazards to people, communities, businesses and infrastructure[159] by avoiding inappropriate land use and development and avoiding, wherever practicable, the placement of regionally significant infrastructure in areas at significant risk from natural hazards.[160] Further, the relevant provisions seek to not exacerbate the risk of natural hazards from development.[161] In accordance with these provisions, the Project Site is not located within an area identified as a risk to natural hazards. The Southland Wind Farm will be designed in accordance with best practice to avoid potential natural hazard effects. Furthermore, the geotechnical reporting (refer to Riley (2025)) identifies that the ground conditions within the Project Site are not at risk of liquefaction and potential works on steeper slopes in order to construct the internal access roads or turbine platforms can be appropriately designed.

8.20.7 WASTE – Waste

Objective WASTE-O1 seeks to minimise the adverse effects of solid waste management and disposal on human health and the environment, by:

- Ensuring that solid waste is handled, stored, processed, transported and disposed of in a manner that avoids, remedies or mitigating adverse effects on the environment;[162] and
- Recognising the benefits of solid waste recycling, reuse and recovery activities.[163]

In accordance with these provisions, Contact will ensure waste generated from the Project will be appropriately managed and minimised to the extent practicable. Following the completion of construction of the Southland Wind Farm Contact will remove all construction-related waste materials from the site and these will be reused / recycled or disposed of in appropriate registered waste management facilities. Further, the Decommissioning Management Plan required for the Project will include measures for the disposal of any waste, including total quantity and types of material to be recycled,

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159 Objective NH-O1, Southland District Plan.

160 Policy NH-P1, Southland District Plan.

161 Policy NH-P5, Southland District Plan.

162 Policy WASTE-P1, Southland District Plan.

163 Policy WASTE-P2, Southland District Plan.

identification of the destination of the waste, recycled and salvaged materials and demonstration that, where possible, waste materials have been diverted from landfill.

8.20.8 HAZS – Hazardous Substances

Objective HAZS-O1 seeks to manage the storage, use, transportation and disposal of hazardous substances in order to prevent adverse effects on human health and mitigate other adverse effects on the environment. In accordance with the relevant policy direction,[164] Contact will ensure any hazardous substances (such as diesel and oil) required for the construction and operation of the Southland Wind Farm are stored, used, transported and disposed of in a manner that avoids, remedies or mitigates adverse effects on human health and the environment. All such activities will be undertaken in compliance with all relevant requirements of the Hazardous Substances and New Organisms Act 1996 and the Health and Safety at Work (Hazardous Substances) Regulations 2017.

8.20.9 HH - Historic Heritage

Objective HH-O1 and Policy HH-O1 seek to recognise and provide for the protection of historic heritage from inappropriate land use and development. In accordance with the relevant Southland District Plan policies, Contact will maintain the heritage values identified on the Project Site[165] by avoiding any direct effects on identified sites.[166] Contact is seeking a global archaeological authority as part of this application under the FTAA and will also adopt an accidental discovery protocol to monitor the potential discovery of archaeological / heritage sites, as proposed as a condition of consent. As such, it is considered that the approach to historic heritage being adopted at the Southland Wind Farm is consistent with the expectations set out in the objectives and policies of the Historic Heritage section of the Southland District Plan.

8.20.10 ECO – Ecosystems and Indigenous Biodiversity

This chapter outlines the policy direction for the management of ecosystems and indigenous biodiversity within the Southland District. It is noted, however, that these provisions need to be read in conjunction with the provisions of other chapters relevant to this Project, such as the Energy and Minerals chapter and Infrastructure chapter, which provide policy direction for the management of effects associated with renewable electricity generation activities.

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[164] Policy HAZS-P1; Policy HAZS-P2, Southland District Plan.

[165] Policy HH-P3, Southland District Plan.

[166] Policy HH-P4, Southland District Plan.

Objective ECO-O1 seeks to ensure significant indigenous vegetation and significant habitats of indigenous fauna are identified and protected and other indigenous vegetation and habitats of indigenous fauna are maintained so that the overall life supporting capacity of ecosystems is safeguarded.

The relevant policies that give effect to this objective seek to:

> Protect ecosystems which support significant indigenous vegetation and significant habitats of indigenous fauna;[167]

> Maintain areas of indigenous vegetation and habitats of indigenous fauna including indigenous ecosystem connections;[168]

> Avoid, remedy or mitigate the adverse effects of land use and development on indigenous vegetation and habitats of indigenous fauna;[169]

> Identify the ecological value of indigenous vegetation and habitats of indigenous fauna to determine significance;[170] and

> Encourage biodiversity initiatives that promote the retention, maintenance and enhancement of indigenous biodiversity.[171]

This policy direction gives effect to the policy direction in the Biodiversity chapter of the Southland RPS. A full assessment of the Project against these provisions is provided in Section 8.16.6, however, for completeness, a brief assessment of the Project against the provisions of the Biodiversity chapter of the Southland District Plan is provided below.

In accordance with the above policy direction, the ecological assessments that have been completed for the Project have identified the ecological values associated with the Project Site and the effects the Project will have on these values. These assessments identify there are areas of significant indigenous vegetation and significant habitat of indigenous fauna within the Wind Farm Site. However, they also identify the ecological values of the site are being significantly affected by pest animals.

As outlined in Sections 5 and 6 of this application document, and in the assessment of the Project against the provisions of the NPS-FM and the Southland RPS in particular, Contact will implement a number of measures to avoid, remedy and mitigate these effects. Where

[167] Policy ECO-P1, Southland District Plan.

[168] Policy ECO-P2, Southland District Plan.

[169] Policy ECO-P3, Southland District Plan.

[170] Policy ECO-P8, Southland District Plan.

[171] Policy ECO-P9, Southland District Plan.

significant residual effects remain, Contact will offset and compensate for these. The ecological assessments confirm these measures will appropriately provide for the effects of the Project and ensure there is No Net Loss of wetland or terrestrial biodiversity as a result of the Southland Wind Farm. As confirmed by MacGibbon (2025) the proposed offsetting and compensation measures will provide significant benefits to the indigenous biodiversity within and adjacent to the Project Site, that would not otherwise occur without this Project.

As such, the Project will be managed to ensure the overall life-supporting capacity of ecosystems, including habitats, is safeguarded and the Project is consistent with the policy direction of this chapter.

8.20.11 NFL - Natural Features and Landscapes

Objective NFL-O1 seeks to protect Outstanding Natural Features and Landscapes from inappropriate land use and development and Objective NFL-O2 seeks to maintain amenity values and visual qualities within Visual Amenity Landscape. The Project Site is not located within a scheduled Outstanding Natural Feature or Outstanding Natural Landscape in the Southland District Plan, nor is it identified as a Visual Amenity Landscape. Whilst parts of the site have been identified as a potential ONF candidate through a separate report, this report has not been through a public Schedule 1 consultative plan change process (noting it was prepared in 2019) and therefore has no statutory status. Coombs (2025) and Bray (2025) have also considered the findings of this report and disagree with this assessment. Therefore, the Project does not engage with Objectives NFL-O1 or NFL-O2, nor the two policies that give effect to these objectives (Policies NFL-P1 and NFL-P2).

Notwithstanding this, Coombs (2025) and Bray (2025) conclude that the proposal is appropriate in this landscape for the following reasons:

> The overall scale of the Wind Farm Site, the underlying landscape and the surrounding landscape context is strong and bold and is capable of accommodating the Project. That is, the 'Slopedown Hill' landform comprises an expansive dip slope that can accommodate a sizable number of large wind turbines, and thereby make a measurable contribution to sustainable electricity generation from one location;

> The dip slope has a mosaic of productive rural activities and areas of wetland, tussock, and remnant bush, and the civil engineering can and has been designed to work through that mosaic in a way that reduces potential effects on areas of value;

> Connections to the National Grid are available within a short distance, avoiding the need for very long stretches of new transmission infrastructure; and

> For a rural landscape, the settlement density is relatively low and there is good buffer separation, reducing the potential for adverse visual amenity effects.

Policy NFL-P3 seeks to avoid, remedy or mitigate adverse effects of land use and development on the Southland District's natural features and landscapes that have not been assessed by the Council for landscape values and is the only policy relevant to this Project.

It is acknowledged that due to the nature of a wind farm, there will be some effects from the wind turbines on visual amenity, which in turn has some bearing on landscape values. The relevant policy directive requires decision-makers to assess the "appropriateness" of an activity in the context of the existing landscape values and the extent and degree of effects that would affects those values.

The proposal in this regard is appropriate as it avoids any physical modification of the identified escarpment feature (having higher value in landscape terms which derive from its geomorphic shape and ecological values), as the turbines are set back varying distances from the scarp's edge (and, more generally, from high points of the feature). Although some turbines will be visible on the skyline, the natural edge will remain legible, and the scarp as a natural face will remain intact and distinguishable. The wind turbines do not fundamentally alter the legibility of the cuesta landform. The visual effects of the turbines are also reversible, and there will be no permanent earthworks or other distinguishable features that alter the shape of the escarpment area.

In addition, the proposed fencing, replanting, and pest control measures are anticipated to enhance ecological values across the Jedburgh Plateau and the escarpment area, as indicated in Wildland's reporting.

Therefore, to the extent practicable, the adverse effects of the Project on natural features and landscapes has been avoided, remedied or mitigated, consistent with NFL-P3.

8.20.12 ASW – Activities on the Surface of Water

Objective ASW-O1 and Policy ASW-P1 seek to manage adverse effects of land use and development on the quality and quantity of waterbodies through avoidance, remediation and offsetting. Contact will implement best practice management measures during the construction of the Southland Wind Farm to ensure the surrounding waterways are appropriately protected. This will include the implementation of an ESCP and water quality monitoring to ensure the 'Mataura 3' and 'Lowland Soft Bed' receiving water quality standards in the SWLP are met. Ryder and Goldsmith (2025) assessed the effects of the proposed activities on aquatic ecology and considers with the implementation of the

recommended management measures there will be no more than minor adverse effects on water quality or quantity as a result of Project activities.

8.20.13 FIN - Financial Contributions

As noted above, in accordance with the policy direction in the Financial Contributions chapter of the Southland District Plan, Contact will meet all fair and reasonable costs for developing, maintaining and upgrading roading infrastructure necessitated by the development of the Southland Wind Farm and this is required by the proposed conditions.[172]

8.20.14 NOISE - Noise

Objective NOISE-O1 and Policy NOISE-P1 seek to manage the noise emissions associated with land use and development activities to avoid, remedy or mitigate adverse effects of noise. The Southland Wind Farm will be constructed and operated in accordance with the relevant noise standards for construction activities and operation of a wind farm (NZS6801, NZS6802 and NZS6808). Halstead (2025) has completed an acoustics assessment for the proposed Southland Wind Farm and concluded there will be no adverse noise effects generated. The construction and operation of the Southland Wind Farm will meet all of the relevant standards and permitted activity limits outlined in the Southland District Plan, meaning that the expected level of noise generation within the General Rural Zone will not be exceeded. Therefore, the proposed activity is consistent with the provisions relating to noise in the Southland District Plan.

8.20.15 GRUZ - General Rural Zone

The Wind Farm Site is located in the General Rural Zone in the Southland District Plan, and therefore, the provisions of this chapter are relevant to the Project. Objective GRUZ-O1 seeks to ensure land use and development in the General Rural Zone is undertaken in a manner that maintains the life-supporting capacity and productive value of the land resource. Further Objective GRUZ-O2 seeks to maintain the amenity values, including rural character.

It is noted that in assessing the effects of the Project on rural character, it is essential to understand the rural character of Southland in a more general sense, which is one punctuated by a mix of land uses, including agriculture and forestry, large scale structures associated with rural processing industries (meat processing and dairy in particular), and

[172] Objective FIN-O1, Southland District Plan.

other renewable electricity projects, including wind farms. In this context, the development of a wind farm in the subject location is consistent with that character.

In addition, in accordance with the policies that give effect to these objectives:

> The Project is of national significance and will contribute positively to the Southland District through generating employment and increasing the security of electricity supply;[173]

> Bray (2025) concludes that the proposal, in this landscape context, fundamentally aligns with the concept of rural character, noting that the relevant provisions of the Southland District Plan recognise that renewable electricity generation activities should be located within the rural environment and the Wind Farm Site is located within a landscape that is strongly connected to the productive Southland Plains;

> The environmental effects of the Project will be appropriately managed, including those on rural amenity values, such as dust, noise and traffic, through the implementation of best practice construction methods which will be managed through the management plans that will be prepared in accordance with the proposed conditions;[174]

> Contact has sought to minimise the amenity effects, including on rural character and landscapes to the extent practicable. This includes most civil works occurring on broad hill tops and plateau-like areas of the Project Site, the surfaces of which have low visibility beyond the Project Site. Access tracks to be used and developed for the Southland Wind Farm will also use, where practicable, existing farm and forestry tracks to minimise new or additional cuts into the hillside areas of the Project Site. The effects on rural amenity values arising from earthworks activities that are visible beyond the Project Site will be mitigated by their temporary duration, their separation from public and private viewpoints, and the implementation of the proposed conditions / construction management plans regarding site rehabilitation;[175]

> With respect to the visual effects of the turbines (and other infrastructure on the Project Site), it is recognised that there will be some unavoidable visual effects, particularly from the nearest rural dwellings. It is noted the wind farm will have a small viewing audience and there are no residential dwellings within 2km of a wind turbine. There are 15 dwellings that Coombs (2025) has assessed as having a moderate or high adverse visual effect and Contact is proposing to mitigate these effects by offering to develop

[173] GRUZ-P1, Southland District Plan.

[174] GRUZ-P1; GRUZ-P2, Southland District Plan.

[175] GRUZ-P1; GRUZ-P2, Southland District Plan.

and implement a planting/landscaping plan for the identified affected dwellings. Ultimately, however, there are functional and technical constraints that require the turbines to be located in elevated areas of the Wind Farm Site;[176]

- The Project will enable the existing land uses within the Project Site to continue, being on land that is currently used for pastoral farming and plantation forestry. In this regard, the Southland Wind Farm can co-exist with the existing rural land use practices that occur in the area. Whilst a small portion of the Project Footprint will result in the loss of Class 3 soils (approximately 0.9ha in the Southland District), when considering the very limited extent of land affected, and accounting for the measures proposed to avoid, remedy or mitigate erosion, sedimentation and instability of soils, this will ensure the life-supporting capacity and productive value of the land resource is maintained, noting also the functional and operational need for the Project to be in this location;[177] and
- Any effects associated with the proposed earthworks activities will be avoided, remedied or mitigated and managed in accordance with best practice. The proposed consent conditions provide sufficient safeguards that will ensure earthworks activities are appropriately managed, and any worked sites are rehabilitated as soon as practicable following the completion of works.[178]

Overall, it is considered that the Southland Wind Farm aligns well with the expectations for the General Rural Zone under the Southland District Plan. Whilst the turbines in particular will have adverse visual effects for some adjacent residents to the Project Site that cannot be avoided, it is noted that Coombs (2025) and Bray (2025) conclude that the Southland Wind Farm will maintain the overall rural character of the surrounding environment, which is a key outcome sought by this chapter of the Southland District Plan.

8.20.16 Summary

Overall, based on the above analysis, it is concluded that the Project is consistent with the objectives and policies of the Southland District Plan.

8.21 GORE DISTRICT PLAN

The proposed transmission line route and GIP are located within the Gore District. Further, the transport of over-weight and over-sized wind turbine components will be required to

[176] GRUZ-P1; GRUZ-P2, Southland District Plan.

[177] GRUZ-P4, Southland District Plan.

[178] GRUZ-P8, Southland District Plan.

utilise roads in the Gore District. An assessment of the provisions relevant to these activities is provided below.

The Operative Gore District Plan is currently under review and the Proposed Gore District Plan was notified in February 2023. The hearings have been held; however, no decisions have been made on the Proposed Gore District Plan. Therefore, the provisions of both the Operative Gore District Plan and the Proposed Gore District Plan are relevant to the Project.

8.21.1 Operative Gore District Plan

8.21.1.1 Chapter 2.3: Significant Indigenous Vegetation and Significant Habitats of Indigenous Fauna

Objective 2.3.3(1) seeks to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna and to manage the adverse effects of land use activities and Policy 2.3.4(1) seeks to control the adverse effects of land use activities on areas of significant indigenous vegetation and significant habitats of indigenous fauna, as shown on the Planning Maps. In accordance with this policy direction, the area of the Project Site subject to the transmission line and GIP infrastructure located within the Gore District is primarily pastoral farmland and is not identified as a significant natural area in the Gore District Plan. Contact will implement appropriate management controls to protect significant indigenous vegetation and fauna, including through avoiding locating transmission line pylons in wetlands and other high-value vegetation types. Wildlands (2025) has assessed the impact of the transmission line on avifauna as low. This will be monitored through the proposed post-construction collision monitoring, which will include monitoring sections of the transmission line.

8.21.1.2 Chapter 2.6: Mana Whenua

The relevant objectives and policies seek to ensure that waahi tapu, waahi taonga, and other taonga and mahinga kai sites are not adversely affected by land use activities, and to enable access to mahinga kai sites[179] In accordance with this policy direction, the consultation Contact has undertaken with mana whenua in relation to the Project activities, as well and the CIA, has identified the potential effects of the Project on cultural values. Whilst the Project Site is not identified as a Site and Area of Significance to Māori, Contact acknowledge the relationship Ngāi Tahu has with the Murihiku region and the role of mana whenua as kaitiaki. The transmission line and GIP infrastructure will avoid being located within areas of high value to mana whenua, including streams, wetlands and high value

[179] Objective 2.6.3(1); Objective 2.6.3(2); Policy 2.6.4(1); Policy 2.6.4(3), Operative Gore District Plan.

vegetation. Further, the proposed conditions provide a framework for a collaborative approach to the management and monitoring of effects with mana whenua, as well as facilitating access to the site. Therefore, it is considered the Project is consistent with these provisions.

8.21.1.3 Chapter 3: Land Use Activities

The Project activities located in the Gore District are located in the Rural Zone. The proposed activities in the Gore District are consistent with the relevant land use activity provisions of the Gore District Plan as the activities are considered to be compatible with the surrounding rural landscape, as confirmed by Coombs (2025) and Bray (2025).[180] The activities required for the construction of the transmission line and GIP, including earthworks activities, will be managed in accordance with best practice and the CEMP (including ESCP) that will be developed prior to the commencement of construction works. This will ensure the potential adverse effects associated with these activities are appropriately managed.[181] Further, Halstead (2025) confirmed the activities will comply with the noise limits outlined in the Gore District Plan.

8.21.1.4 Chapter 5: Transport

The relevant objectives of the Transport chapter seek to sustain the potential of the transportation routes to meet future needs, and protect, where practical, the quality of the adjoining environment and amenity values from the adverse effects of the use of land transport routes.[182]

In accordance with the relevant policies that give effect to these provisions, Contact will:

- Ensure the appropriate management is in place for the transport of wind farm equipment to the Wind Farm Site, including through the implementation of a CTMP to ensure any effects of the proposed transport activities are managed. This will include limiting the hours of the transport of over-sized and over-weight loads to night-time, when activity on the roads is low. Contact has also consulted with the Gore District Council on the proposed transportation route;[183] and
- Complete a pre- and post-construction report which details the state of the roads utilised for the transport of equipment to the Wind Farm Site. Any damage to the roads

[180] Objective 3.3(1); Objective 3.3(2), Operative Gore District Plan.

[181] Objective 3.3(7); Policy 3.4(2); Policy 3.4(10); Policy 3.4(11), Operative Gore District Plan.

[182] Objective 5.3(1); Objective 5.3(3), Operative Gore District Plan.

[183] Policy 5.4(1); 5.4(2), Operative Gore District Plan.

identified as a result of the construction of the wind farm will be remedied and all costs incurred will be met by Contact.[184]

8.21.1.5 Chapter 6: Hazardous Substances

The GIP will contain oil within the transformers in a quantity that is appropriate for this activity and in accordance with the limits set out in the Gore District Plan.[185] In accordance with the relevant policy direction, all hazardous substances will be appropriately stored in a bunded location (if required due to the nature of the substance), in accordance with the Hazardous Substances and New Organisms Act 1996 and this will appropriately prevent adverse environmental effects associated with hazardous substances.[186]

8.21.1.6 Chapter 7: Utilities

The provisions of the Utilities chapter most relevant to the activities in the Gore District seek to:

- Ensure that utilities are provided for so as to meet the economic, social, health and safety needs of individuals and the community;[187]
- Ensure the location and design of utilities avoids significant adverse effects on identified sites and values, and avoid remedy or mitigate any other adverse effects of the provision of utilities, including visual effects, where practicable;[188]
- Provide for the sustainable, secure and efficient use, operation, maintenance, upgrading and development of the electricity transmission network within the Gore District, while seeking to avoid, remedy or mitigate adverse effects on the environment to the extent practicable;[189]
- Recognise the importance of the electricity transmission network to the social and economic wellbeing of the Gore District, Southland Region and the nation;[190]
- Consider the constraints imposed by the technical and operational requirements of the electricity transmission network when considering measures to avoid, remedy or mitigate adverse environmental effects of transmission activities and recognise the

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184 Policy 5.4(3), Operative Gore District Plan.

185 Policy 6.4(1), Operative Gore District Plan.

186 Objective 6.3(1), Operative Gore District Plan.

187 Objective 7.3(1); Policy 7.4(1), Operative Gore District Plan.

188 Objective 7.3(2); 7.3(3); Policy 7.4(4); Policy 7.4(5), Operative Gore District Plan.

189 Objective 7.3(7); Policy 7.4(10), Operative Gore District Plan.

190 Objective 7.3(8); Policy 7.4(12), Operative Gore District Plan.

national, regional and local benefits of sustainable, secure and efficient electricity transmission;[191]

- Have regard to the extent to which any adverse effects have been avoided, remedied or mitigated by the route, site and method selection when considering the environmental effects of new transmission infrastructure or major upgrades of existing transmission infrastructure;[192] and
- Avoid locating new transmission infrastructure in the Hokonui Hills Significant Landscape area, areas of significant indigenous vegetation and habitats of indigenous fauna as shown on the planning maps and urban environments.[193]

In accordance with the above provisions, the proposed transmission line and GIP in the Gore District will enable the electricity generated from the Southland Wind Farm to be delivered to the National Grid. Therefore, this infrastructure has a functional and operational need to be in this location. The infrastructure will enable the development of the Southland Wind Farm and will therefore contribute to the social and economic wellbeing of the community, as well as the provision of the regional and national benefits that will be derived from this Project.

The underlying land is primarily pasture and there are no identified ecological values, including areas of significant indigenous values, that will be affected by the transmission line or GIP located in the Gore District. The transmission line pylons will avoid being located within 10m of streams or areas identified as high-value vegetation. The technical assessments commissioned for the Project have considered the effects associated with the transmission line routes and GIP, including on ecological and landscape values, and have concluded there will be no more than minor adverse effects generated from these activities. As such, the activity is consistent with the relevant provisions of the Operative Gore District Plan.

8.21.2 Proposed Gore District Plan

8.21.2.1 Energy - ENRG

The transmission line infrastructure and GIP meet the definition of renewable electricity generation activities in the Proposed Gore District Plan as they will support the operation of

[191] Policy 7.4(11); 7.4(12), Operative Gore District Plan.

[192] Policy 7.5(13), Operative Gore District Plan.

[193] Policy 7.5(16), Operative Gore District Plan.

the Southland Wind Farm.[194] The relevant provisions seek to recognise and provide for the significant local, regional and national benefits derived from the development of renewable energy resources and enable the development, operation and maintenance of renewable electricity generation activities.[195] The provisions also seek to manage the effects from electricity generation activities and avoiding locating these activities in areas such as outstanding natural features and landscapes, significant natural areas and areas of indigenous biodiversity.[196]

The transmission line and GIP are required to enable the development and operation of the Southland Wind Farm, and therefore, has a functional and operational need to be in this location, in particular noting the need for the GIP to be in close proximity to the National Grid. It is therefore considered the proposed activities are consistent with, and supported by, the Energy provisions of the Proposed Gore District Plan. The Project will provide a nationally significant source of renewable electricity and will contribute to New Zealand's decarbonisation goals. As previously noted, the transmission line and GIP infrastructure will be constructed and maintained in a way that appropriately manages effects on the environment, including compliance with the relevant noise provisions. This infrastructure will not be located in any areas identified as high-value vegetation, nor any areas identified as Outstanding Natural Features of Landscapes.

8.21.2.2 Transport - TRANS

The transport route of heavy and over-sized wind farm components requires the use of local roads within the Gore District, which has been designed in consultation with the Gore District Council. As discussed in Rossiter (2025), the transport of material through the Gore District required for the Southland Wind Farm will ensure the function and operation of the transport network is not compromised as a result of these activities.[197] The CTMP that will be implemented will appropriately manage potential effects on the transportation network.[198] Upgrades to roads and bridges will be undertaken where required to ensure the safe and efficient operation of the transport network and any effects associated with these activities will be appropriately managed.[199]

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[194] Interpretation, Part 1, Proposed Gore District Plan.

[195] ENRG-O1; ENRG-O2; ENRG-P1; ENRG-P2; ENRG-P5, Proposed Gore District Plan.

[196] ENRG-O3; ENRG-P5; ENRG-P7; ENRG-P10; ENRG-P11, Proposed Gore District Plan.

[197] TRANS-O1; TRANS-O2; Proposed Gore District Plan.

[198] TRANS-O3, Proposed Gore District Plan.

[199] TRANS-P10; TRANS-P12, Proposed Gore District Plan.

8.21.2.3 Sites and Areas of Significance to Māori – SASM

The relevant objectives of this chapter:

- Identify that all land, waterbodies, natural features and marae within the Gore District are recognised as sites and areas of cultural significance to mana whenua and are afforded appropriate considerations in relation their management, development and use;[200]
- Seek to recognise, retain and strengthen the traditional and contemporary mana whenua and tangata whenua relationships with land, waterbodies, natural features, and cultural structures;[201] and
- Recognise and provide for the mātauranga and kaitiakitanga of mana whenua in decision-making relating to impacts on the underlying relationship Ngāi Tahu hold with the natural environment.[202]

In accordance with the policies[203] that give effect to these objectives, and as noted above, Contact has consulted widely with Ngāi Tahu and Kā Papatipu Rūnaka ki Murikihu in relation to the Project. This included Contact taking on board and responding to the issues described in the Ngā Hua o Āpiti Hono Tātai Hono report, as well as a CIA prepared by TAMI. This resulted in a comprehensive and substantial mitigation and relationship agreement (and agreed consent conditions) to address the cultural and taiao effects on mana whenua.

8.21.2.4 Ecosystems and Indigenous Biodiversity – ECO

Objective ECO-O1 seeks to maintain indigenous biological diversity in the Gore District and protect areas of significant indigenous vegetation and significant habitats of indigenous fauna (significant natural areas). Wildlands (2025) has assessed the ecological values of the Project Site within the Gore District and this confirms there are no areas of significant indigenous vegetation and significant habitats of indigenous fauna within this part of the Project Site. The location of the GIP (of which has a functional and operational need to be in this location) is pastoral farmland and the transmission line pylons will avoid locating in areas identified as wetlands or high-value vegetation.[204] Further, the implementation of the TEMP and proposed consent conditions will provide appropriate protection for indigenous biodiversity. These measures will ensure the indigenous biodiversity is maintained and it is

[200] SASM-O1, Proposed Gore District Plan.

[201] SASM-O2, Proposed Gore District Plan.

[202] SASM-O3, Proposed Gore District Plan.

[203] SASM-P1; SASM-P2, Proposed Gore District Plan.

[204] ECO-P9, Proposed Gore District Plan.

therefore anticipated the Project will not significantly adversely affect ecosystems or indigenous biodiversity in the Gore District.[205]

8.21.2.5 Earthworks - EW

Objective EW-O1 seeks to ensure earthworks and land disturbance for subdivision, land use and development are facilitated and undertaken in a manner that minimises adverse effects on the surrounding environment and protects the natural environment, Ngāi Tahu cultural values, people and property. In accordance with the policies that give effect to these objectives, the earthworks activities associated with the Project in the Gore District will:

- Be of a bulk, scale and form appropriate to the anticipated character and amenity of the General Rural Zone;[206]
- Not compromise the safe and efficient functioning, operation, maintenance and repair, upgrading and development of the National Grid;[207]
- Be appropriately managed in accordance with best practice construction methods that will be managed through the CEMP, including ESCP, and proposed consent conditions to ensure the potential adverse effects associated with earthworks are appropriately managed, including on any surrounding water ways, land stability and cultural values associated with the area;[208]
- Be appropriately designed, located and undertaken to not detract from the amenity or stability of other sites, ensure people and property are protected;[209] and
- Contact is seeking to obtain a site-wide archaeological authority for the Project as part of this substantive application and this will include the implementation of an accidental discovery protocol.[210]

8.21.2.6 General Rural - GRUZ

The transmission line and GIP that are located in the Gore District are located in the General Rural Zone in the Proposed Gore District Plan. Therefore, the provisions of this chapter are

[205] ECO-P10, Proposed Gore District Plan.

[206] EW-P1, Proposed Gore District Plan.

[207] EW-P2, Proposed Gore District Plan.

[208] EW-P4; EW-P5, Proposed Gore District Plan.

[209] EW-P4, Proposed Gore District Plan.

[210] EW-P4, Proposed Gore District Plan.

relevant to these activities. The objectives of the General Rural chapter of the Proposed Gore District Plan seek to:

> Identify that the character and qualities of the General Rural Zone are comprised of a variety of primary production activities, a very low degree of built form, well setback from other properties and roads, high levels of open space and open pasture or crops, and high levels of rural amenity from adjacent sites;[211]

> Provide for non-primary production activities that rely on a rural location, while managing the nature, scale and location of such activities;[212]

> Not compromise the purpose and predominant character of the General Rural Zone by non-rural activities;[213] and

> Recognise the value and long-term benefits of using highly productive land for primary production and protecting its availability for future generations.[214]

In accordance with the policies that effect to the above policy directive:

> The construction of the transmission line will enable the continued existing use of the underlying land for primary production;[215]

> The transmission line and GIP have a functional and operational need to be in this location, noting the proximity to the National Grid. The presence of the National Grid in this location confirms the proposed activities are compatible with the character, amenity values, qualities and purpose of the General Rural Zone. The transmission line and associated towers will be spaced out in the landscape and will not detract from the amenity or rural character of the surrounding environment, as confirmed by Coombs (2025) and Bray (2025);[216]

> The proposed activities will not adversely impact the safe and efficient operation of the road network and will not constrain the establishment of activities otherwise anticipated within the General Rural Zone;[217]

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[211] GRUZ-O2, Proposed Gore District Plan.

[212] GRUZ-O3, Proposed Gore District Plan.

[213] GRUZ-O4, Proposed Gore District Plan.

[214] GRUZ-O5, Proposed Gore District Plan.

[215] GRUZ-P1, Proposed Gore District Plan.

[216] GRUZ-P9; GRUZ-P11; GRUZ-P12, Proposed Gore District Plan.

[217] GRUZ-P9, Proposed Gore District Plan.

- There will be no light spill associated with these activities;[218]
- The Project will provide for the Wind Farm and existing rural land uses to co-exist, bringing additional economic benefits for the district and region. There will be limited loss of 'Class 3' soils (which is potentially not irreversible as the GIP could be decommissioned and removed if the wind farm ceases operation), however those have been minimised to the greatest extent practicable through the design of the Project;[219] and
- The transmission line and GIP is regionally significant infrastructure that is best located in the General Rural Zone, noting that this infrastructure will enable the development of the Southland Wind Farm, and therefore, enable the provision of the nationally significant benefits that will be derived from the Project.[220]

8.21.2.7 Summary

Given the above analysis, the proposed activities located within the Gore District are consistent with the provisions of the Proposed Gore District Plan.

8.22 NGĀI TAHU KI MURIHIKU NATURAL RESOURCE AND ENVIRONMENTAL IWI MANAGEMENT PLAN 2008

The Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 ("**NREIMP**") has been developed for the Southland Region and the only Iwi Management Plan relevant to the Project Site.

The kaupapa of this NREIMP is Ki Uta Ki Tai - From the Mountains to the Sea. It is a culturally based natural resource framework developed by and for Ngāi Tahu Whānui and has been identified and advocated as a key tool in assisting Ngāi Tahu achieve more meaningful rangatiratanga and kaitiakitanga in natural resource management. It is about an indigenous understanding of the environment that can be used to help address the wide range of issues rūnanga face with regards to environmental management. Ki Uta Ki Tai is based on the idea that if the realms of Tāwhirimatea (god of the winds), Tāne Mahuta (god of all living things), Papatūānuku (mother earth) and Tangaroa (god of the sea) are sustained, then the people will be sustained.

The purpose of the NREIMP is to:

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[218] GRUZ-P9(8), Proposed Gore District Plan.

[219] GRUZ-P10, Proposed Gore District Plan.

[220] GRUZ-P13, Proposed Gore District Plan.

- Describe the values underpinning the relationship between Ngāi Tahu ki Murihiku and the natural environment;
- Identify the primary issues associated with natural resource and environmental management in the takiwā, from the perspective of Ngāi Tahu ki Murihiku; and
- Articulate Ngāi Tahu ki Murihiku policies and management guidelines for natural resource and environmental management, wāhi tapu and wāhi taonga.

Further, the NREIMP provides a tool to:

- Enable Ngāi Tahu ki Murihiku to effectively and proactively apply cultural values to the management of natural resources, wāhi tapu and wāhi taonga;
- Assist regional, territorial and national authorities to understand Ngāi Tahu ki Murihiku values and perspectives, and thus fulfill their statutory obligations under the RMA, Ngāi Tahu Claims Settlement Act 1998, Local Government 2002 and other relevant legislation; and
- Provide a tool recognising the importance of consultation, but as such, does not replace the need for direct communication and dialogue with Ngāi Tahu ki Murihiku.

The Southland Wind Farm is located within the Takitimu Me Ona Uri – the high country and foothills region. Section 3.4.3 of the NREIMP relates specifically to energy generation within this part of the region. It sets out here that using and developing energy resources can have negative impacts in respect to the environment, and that such development can also have implications on, and may lead to loss of indigenous vegetation, ecosystems, landscapes, and culturally significant sites. It goes on to say that while there is potential for development of renewable energy including wind, biofuels and solar, there needs to be recognition that with any form of development there is a potential for adverse effects which when identified should be avoided or remedied. Effects as a result of development include land disturbance, visual and noise impacts, air and water pollution, impacts on communities and existing infrastructure, loss of natural landscapes and biodiversity and health and safety implications.

Relevant policies with respect to this issue, are as follows:

- Ensure that Ngāi Tahu ki Murihiku is proactively involved with the management of future energy development within high country and foothill areas. This includes assessing the appropriateness of large- and small-scale energy development and the localised effects of these developments on communities, natural character, biodiversity, cultural significance and the possible changes in experiences tangata whenua may have when visiting the area or areas adjacent to the development;

- Protect the natural and cultural landscape and potential loss or irreversible change to landforms from inappropriate energy development;
- Ensure that the scale and location of any new energy development does not unreasonably detract from the natural landscape and character of the high country and foothill areas, e.g. wind farms. Such development must recognise and provide for cumulative effects on the land, water, possible downstream effects, biodiversity, changes to experiences with the land and visual impacts;
- Ensure that the scale and location of any new energy development does not impede migratory bird paths; and
- Encourage use of visual representations in the consent and consultation process to enable rūnanga to picture the projects (large or small scale) on the landscape and clearly visualise the effects it may have.

Contact understands and respects the fact that only tangata whenua can speak to what these provisions mean for the Southland Wind Farm Project. As discussed in Section 4 of this application document, the meaningful engagement Contact has undertaken, and this has helpfully informed Contact's approach to the management of effects of the Project on cultural values.

Further, in briefing and engaging technical assessments, Contact has sought to align such instructions with the directions and outcomes set out in the NREIMP. As an example, Coombs (2025) prepared photo simulations of the Southland Wind Farm from cultural sites of significance, such as the wharenui of the Hokonui Rūnaka, Awarua Rūnaka and Waihōpai Rūnaka, to assist in facilitating whānau with a greater understanding of the effects of the Project from such areas. The ecological assessments have also sought alignment with these provisions. Contact also engaged its freshwater ecologists to undertake additional research, such as eDNA sampling of the Mimihau Stream, to specifically assist in determining whether kanakana (pouched lamprey) have been present in such waterways.

8.23 TREATY SETTLEMENT ENTITIES

Clause 5(1)(i) of Schedule 5 of the FTAA requires the applicant to include information about any Treaty settlements[221] that apply in the area covered by the consent application, including

[221] Under Section 4 (Interpretation) of the Act, a treaty settlement means a Treaty Settlement Act or Treaty Settlement Deed.

- Identification of the relevant provisions in those Treaty settlements; and
- A summary of any redress provided by those settlements that affects natural and physical resources relevant to the project or project area.

Ngāi Tahu are the Iwi that, under Te Runanga o Ngai Tahu ("**TRONT**") Act 1996 and Ngāi Tahu Claims Settlement Act 1998 and in the Ngāi Tahu WAI 27 claim under the Treaty, hold ultimate authority over the broader takiwa. Contact has a good relationship with TRONT through Ngāi Tahu Holdings Limited, who advised that it is appropriate for Contact to engage with papatipu rūnaka for the Project.

Ngāi Tahu ki Murihiku is the collective of the four representatives papatipu rūnaka of Murihiku, namely Te Rūnaka o Waihōpai, Te Rūnaka o Awarua, Te Rūnaka o Oraka / Aparima and Te Rūnaka o Hokonui. They are recognised as mana whenua under Te Rūnanga o Ngāi Tahu Act 1996, Ngāi Tahu Claims Settlement Act 1998 and in the Ngāi Tahu WAI 27 claim under Te Tiriti o Waitangi.

Engagement with Te Rūnaka o Waihōpai has been undertaken throughout the preparation of the application. Contact has engaged directly with TAMI (the subsidiary company that represents Ngāi Tahu ki Murihiku tangata whenua for resource management issues) and representatives from Waihōpai Rūnaka.

Taonga Species

In the Treaty settlement the Crown acknowledges the cultural, spiritual, historic and/or traditional association of Ngāi Tahu with each of the taonga species, and taonga fish species. Some of the species identified within the Project Site are taonga species or taonga fish species under the settlement. Contact has worked closely with Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku to ensure any effects on taonga species and taonga fish species are appropriately addressed.

Overall, the views of Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku in respect of taonga species are directly relevant to the FTAA process. The settlement provides Te Rūnanga o Ngāi Tahu with a voice concerning the management of taonga species and taonga fish species:

- The Minister of Conservation is required to consult with, and have particular regard to, the views of Te Rūnanga when making policy decisions concerning the protection, management or conservation of that taonga species;
- Te Rūnanga o Ngāi Tahu is appointed as an advisory committee to provide advice to the Minister of Conservation on all matters concerning the management and conservation

by the Department of Conservation of freshwater fisheries within the Ngāi Tahu Claim Area; and

> In all matters concerning the management and conservation by the Department of Conservation of taonga fish species within the Ngāi Tahu Claim Area, the Minister of Conservation must consult with, and have particular regard to, the advice of that advisory committee.

Recognition of Mana

Ngāi Tahu's mana is recognised in the Treaty settlement through statutory acknowledgements, deeds of recognition, Tōpuni and place names.

A statutory acknowledgement is an acknowledgement by the Crown of Te Rūnanga o Ngāi Tahu's particular cultural, spiritual, historical, and traditional association with a site or area. Statutory acknowledgements recognise the mana of Ngāi Tahu over a range of sites and areas in the takiwā and have implications for processes under the RMA and the Heritage New Zealand Pouhere Taonga Act. There are no statutory acknowledgements within the Project Site. However, there is a statutory acknowledgement for the Mataura River, to the east of the Project Site, which has been highlighted during discussions about the Project Contact has had with TAMI on behalf of Papatipu Rūnaka ki Murihiku.

The Crown agency responsible for the management of a site or area subject to a statutory acknowledgment was required to enter into a deed of recognition, providing for agreed input by Te Rūnanga o Ngāi Tahu into management processes. The settlement includes a deed of recognition for the Mataura River.

Tōpuni provide an overlay of the cultural, spiritual, historic, and traditional association of Te Rūnanga o Ngāi Tahu, on certain areas of land managed by DoC. The Ngāi Tahu values of the Tōpuni are a mandatory consideration in approving management policies, plans and strategies under the Conservation Act 1987. Te Rūnanga o Ngāi Tahu must also be consulted in the preparation of those documents. There are no Tōpuni within the Project Site.

The settlement also amended the place name of various locations in the takiwā. No names within the Project Site were amended.

Nohoanga

The Treaty settlement provides nohoanga entitlements for the purpose of permitting members of Ngāi Tahu Whanui to temporarily occupy land close to the waterways on a non-commercial basis, so as to have access to the waterways for lawful fishing and gathering of other natural resources. There are no nohoanga entitlements within the Project Site.

Commercial redress in respect of the Slopedown Forest.

The Slopedown Forest, including land now owned by Matariki Forests (Lot 1 DP 12509) was formerly Crown forest licensed land that was transferred to Te Rūnanga o Ngāi Tahu as commercial redress in its Treaty settlement.

Treaty Settlement Land

The Project will not be located on land returned under a Treaty settlement (as opposed to the commercial redress land noted above, now owned by Matariki Forests).

Māori Land, Marae, or Identified Wāhi Tapu within the Project Area

As mentioned above, of relevance to the proposed Wind Farm Site, the Mataura River is a Statutory Acknowledgement Area. The Mimihau Stream, which runs east to west along the northern boundary of the Wind Farm Site, with tributaries of the stream running through the Site, is a tributary of the Mataura River. In addition, there are some minor tributaries to the Mokoreta River, located to the south of the site, and the Redan Stream which drain part of the site. These also discharge into the Mataura River. The engagement Contact has undertaken with mana whenua has informed the management of effects on this tributary to ensure that the cultural values associated with the Mataura River, including the Mimihau Stream and other tributaries, are protected.

There are no parcels of Māori land, marae or other identified wāhi tapu within the Project Site.

8.23.1 Protected Customary Rights

Clause 5(1)(j) of the FTAA requires an application to list of any relevant protected customary marine title groups, protected customary rights groups, ngā hapū o Ngāti Porou or applicants under the Marine and Coastal Area (Takutai Moana) Act 2011 that apply to the Project Site.

There are no relevant protected customary marine title groups, protected customary rights groups, ngā hapū o Ngāti Porou or applicants under the Marine and Coastal Area (Takutai Moana) Act 2011 that apply to the Project Site.

9. CONCLUSION

Contact is seeking all necessary resource consent approvals to enable the construction, operation and maintenance of a wind farm in Slopedown, Southland, which will directly contribute to the purpose of the FTAA. The Southland Wind Farm will comprise of up to 55 wind turbines and will generate approximately 1,200 GWh of emissions-free, renewable electricity annually, sufficient to power up to 150,000 homes. The construction of the Southland Wind Farm will generate up to 300 direct jobs and a further 10-14 full time ongoing roles once operational. The Project will also provide a significant contribution to the New Zealand Government's goals of transitioning to renewable electricity sources.

The actual and potential effects associated with the construction and operation of the Project have been assessed in Section 5 of this application document, and within the technical assessments contained in **Part H**. The proposed management measures have been helpfully informed by the extensive consultation Contact has undertaken in relation to the Project, including with mana whenua, DoC and the relevant Councils. It is considered the Project can be undertaken in a manner that will appropriately avoid, remedy, mitigate or offset and compensate for adverse effects on the environment. Where adverse effects have not been able to be avoided, remedied or mitigated, offsetting and compensation measures have been identified and will be implemented in accordance with the proposed consent conditions (**Part I**) and a robust management plan framework.

Overall, it is considered that the construction and operation of the Southland Wind Farm will be consistent with the purpose of the FTAA and there are no impediments to granting the resource consent approvals sought by Contact.