Mahinerangi Wind Farm Stage 2 - Puke Kapo Hau

Technical Evaluation for Wildlife Approval

Prepared for Tararua Wind Power Ltd

27 October 2025

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Approved for issue:

Stephen Fuller | Ecology | Senior Principal | 27/10/2025

Release and Reliance

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Cover photograph: Rolling hills in improved pasture and tussockgrasslands with scattered rocky outcrops.

CONTENTS

1.0 Introduction

This report is prepared to support Tararua Wind Power's application for a Wildlife Approval under Schedule 7 of the Fast-track Approvals Act 2024 ("FTAA") for the proposed Mahinerangi Wind Farm ("Project Site"). Specifically, this report addresses the information requirements in Schedule 7, clause 2(1) and the relevant criteria contained in Schedule 7 clause 5 of the FFTA for an application for eastern falcon / kārearea (*Falco novaeseelandiae*), classified as Threatened – Nationally Vulnerable (Robertson et al., 2021) to authorise the capture, attachment of identification leg bands and GPS transmitters, and handling of carcasses for eastern falcon.

This report also seeks approval to collect the carcass of any native bird with a conservation status of threatened or at-risk, including falcon, found by staff within the wind farm development area where cause of death is undetermined and may be related to the operational wind farm. A Wildlife Approvals checklist (Checklist E) is provided in Appendix 1 to guide the reader to the sections of this report and the associated reports (detailed below) that address each of the information requirements.

Documents that provide information relevant to this assessment include:

- Mahinerangi Wind Farm Stage 2 – Puke Kapo Hau: Avifauna Assessment (Boffa Miskell Ltd, 2025a)
- Monitoring Report: New Zealand Falcon Monitoring at Mahinerangi Wind Farm 2011-2012 (Golder Associates Ltd, 2012)
- New Zealand Falcon Monitoring at Mahinerangi Wind Farm 2008-2009 (Golder Associates Ltd, 2009)
- Mahinerangi Wind Farm Stage 2 – Puke Kapo Hau: Avifauna Management Plan (Boffa Miskell Ltd, 2025b).

2.0 Information requirements

The information requirements set out in Clause 2(1) of Schedule 7 of the FTAA, and addressed below in this report as they relate to eastern falcon, are as follows:

Information required for application for wildlife approval:

For the purpose 43(3)(h), an application for a wildlife approval must –

(a) specify the purpose of the proposed activity:

(b) identify the actions the applicant wishes to carry out involving protected wildlife and where they will be carried out (whether on or off public conservation land):

(c) include an assessment of the activity and its impacts against the purpose of the Wildlife Act 1953:

(d) list protected wildlife species known or predicted to be in the area and, where possible, the numbers of wildlife present and numbers likely to be impacted:

(e) outline impacts on threatened, data deficient, and at-risk wildlife species (as defined in the New Zealand Threat Classification System):

(f) state how the methods proposed to be used to conduct the actions specified under paragraph (b) will ensure that best practice standards are met:

(g) describe the methods to be used to safely, efficiently, and humanely catch, hold, or kill the animals and identify relevant animal ethics processes:

(h) state the location or locations in which the activity will be carried out, including a map (and GPS co-ordinates if available):

(i) state whether authorisation is sought to temporarily hold or relocate wildlife:

(j) list all actual and potential wildlife effects (adverse or positive) of the proposed activity, including effects on the target species, other indigenous species, and the ecosystems at the site:

(k) where adverse effects are identified, state what methods will be used to avoid and minimise those effects, and any offsetting or compensation proposed to address unmitigated adverse effects (including steps taken before the project begins, such as surveying, salvaging, and relocating protected wildlife):

(l) state whether the applicant or any company director, trustee, partner, or anyone else involved with the application has been convicted of any offence under the Wildlife Act 1953:

(m) state whether the applicant or any company director, trustee, partner, or anyone else involved with the application has any current criminal charges under the Wildlife Act 1953 pending before a court:

(n) provide proof and details of all consultation, including with hapū or iwi, on the application specific to wildlife impacts:

(o) provide any additional written expert views, advice, or opinions the applicant has obtained concerning their proposal.

3.0 Responses to Information Requirements

3.1 Purpose of the Proposed Activity

2 (1)(a) specify the purpose of the proposed activity

Tararua Wind Power seek a Wildlife Approval to track falcon flight activity within the Project Site, to consider potential displacement of falcon from the Project Site, to be alerted to a falcon mortality, and allow retrieval of the bird for necropsy by Wildbase Pathology (Massey University, Palmerston North wildlife diagnostic services). This monitoring will include:

- Catch and handle adult and fledged juvenile falcon active within 3 km of the Windfarm Development Area (where all physical works are to occur).
- Attach identification leg bands and GPS transmitters to those adult and juvenile falcon.
- Handle falcon carcasses and for Wildbase Pathology (Massey University, Palmerston North wildlife diagnostic services) to undertake necropsy to establish cause of death.

The approach to the management of the falcon within the Project Site during construction and the operational phase, is described within this report and the accompanying Avifauna Monitoring and Management Plan for Mahinerangi Wind Farm Stage 2 - Puke Kapo Hau (Boffa Miskell, 2025).

Tararua Wind Power seek a 10-year duration of the wildlife approval to ensure that the term of the wildlife approval adequately covers all construction and post-construction works.

Additionally, Tararua Wind Power seek a Wildlife Approval to collect, store, and transport for necropsy the carcass of any native bird with a conservation status of threatened or at-risk, including falcon, found by staff or contractors within the wind farm development area, where cause of death is undetermined and may be related to the operational wind farm.

The requested term for collection and handling of native bird carcasses with a conservation status of threatened or at-risk is 30 years.

3.2 Actions to be carried out and locations in which the activity will be carried out

2 (1)(b) identify the actions the applicant wishes to carry out involving protected wildlife and where they will be carried out (on or off public conservation land)

The actions proposed involving protected wildlife will be carried out on both private and public conservation land (refer to Map 1 below) and will involve:

- The capturing of adults and fledged juvenile falcon, active within 3 km of the Project Site, either by hand, noose hat, or bal-chatri traps.
- Handling falcon to attach identification leg bands, GPS transmitters, and collection of morphological data. All banding data will be entered into the Falcon database within one week of collection.
- Recapture of falcon if GPS transmitters require remedial action, including removal if required.
- Release falcon back to the location of trapping.
- Tracking falcon with GPS transmitters, including locating and handling dead falcon for Wildbase Pathology (Massey University, Palmerston North wildlife diagnostic services) to undertake a necropsy to establish cause of death.

Collection for necropsy of the carcass of any native bird with a conservation status of threatened or at-risk, including falcon, found within the Wind Farm Development Area, where cause of death is undetermined and may be related to the operational wind farm.

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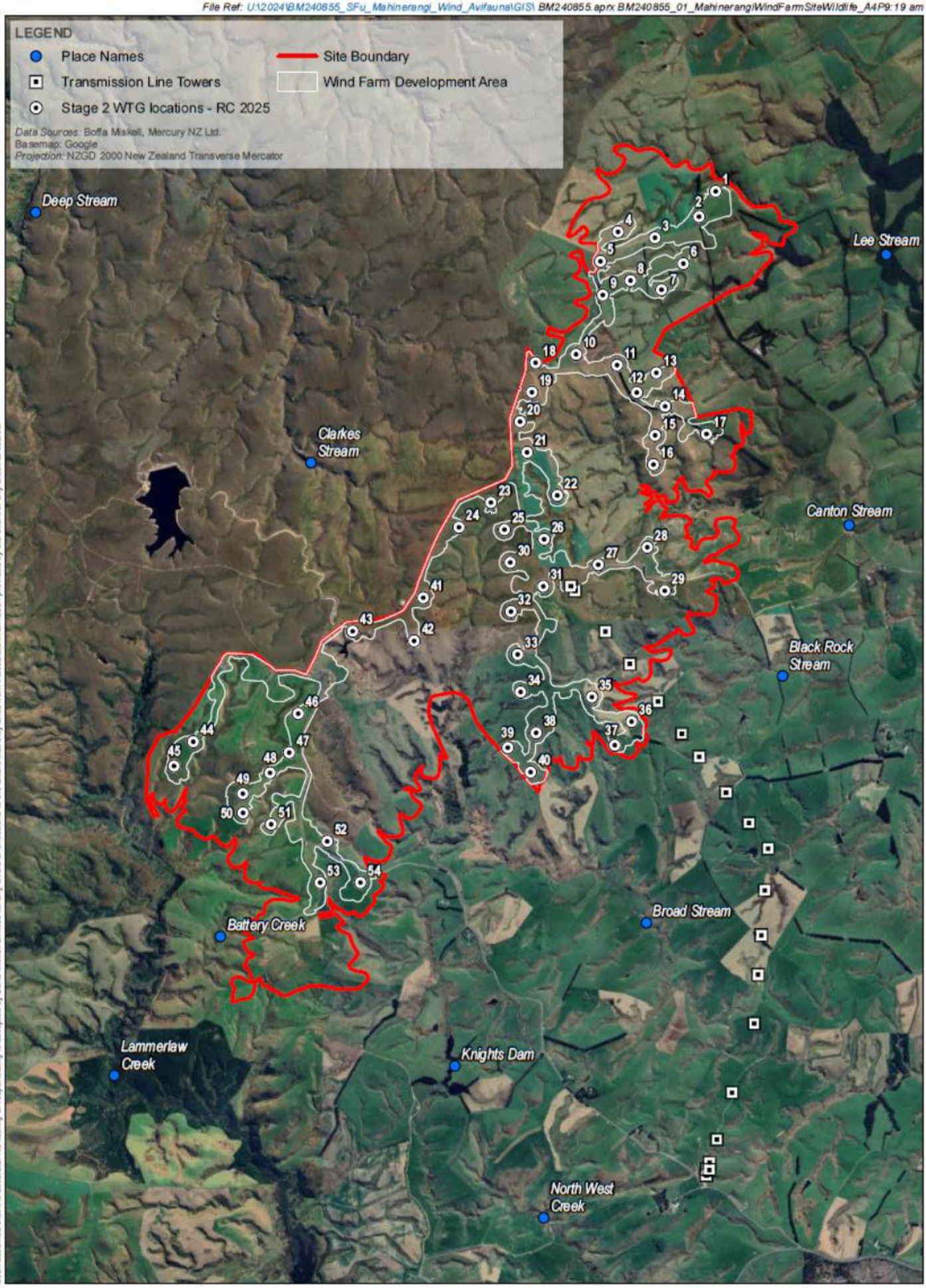

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MAHINERANGI WIND FARM

The Mahinerangi Wind Farm Site

Date: 01 October 2025 | Revision: 0

Plan prepared for Mercury NZ Limited by Boffa Miskell Limited

Project Manager: [redacted] | Drawn: LJa | Checked: SFu

Map 1

The Project Site is situated on the eastern foothills of Lammermoor Range, approximately 5 km north of Lake Mahinerangi and approximately 50 km west of Dunedin. The Windfarm Development Area located entirely within the Project Site and lies primarily in modified pasture that is regularly grazed and cropped.

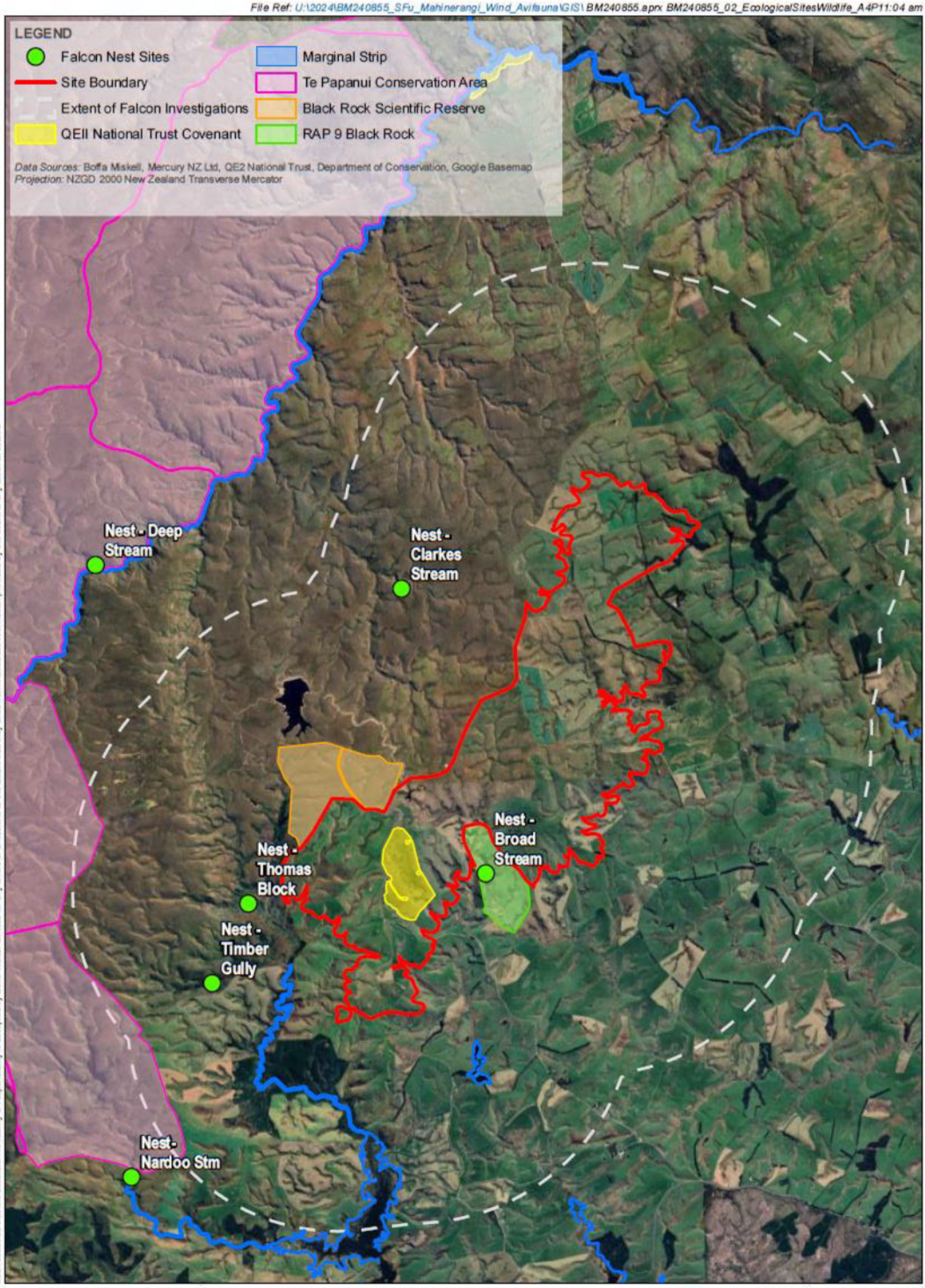
There are several protected and unprotected natural areas adjacent to the Windfarm Development Area.

- The Black Rock Scientific Reserve lies along part of the south western boundary of the wind farm, but which has been specifically avoided. Falcon have not historically nested in this area, but falcon activity has been seen over this reserve.
- A requirement in the land use consent for the Mahinerangi Wind Farm was the establishment of a 59ha QEII covenant area within the Project Site. Falcon have not historically nested in this area, and it is unlikely that they would, due to lack of nesting habitat and high levels of human activity. Falcon activity has however, been seen over this area.
- There is a Recommended Area for Protection (RAP 9) which lies along part of the eastern boundary of the Wind Farm Development Area, but which has been specifically avoided. Falcon have nested in an area of native forest within this RAP. This is the closest known nest to the Project Site, and this pair will form part of this investigation.

No other Protected or Unprotected natural areas will be affected by this study.

More information on these natural areas is available in the Vegetation, Wetland, and Terrestrial Invertebrate Assessment for Mahinerangi Wind Farm Stage 2 (SLR Consulting 2025).

These significant natural areas are shown in Map 2. The maximum search extent, which is 3km from the Project Site boundary, is also shown.



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MAHINERANGI WIND FARM

Ecological Sites

Date: 01 October 2025 | Revision: 0

Plan prepared for Mercury NZ Limited by Boffa Miskell Limited

Project Manager: [redacted] | Drawn: LJa | Checked: SFu

Map 2

3.3 Assessment of the Activity

2 (1)(c) Include an assessment of the activity and its impact against the purpose of Wildlife Act 1953

The principal purpose of the Wildlife Act 1953 ("Wildlife Act") has been described by the Supreme Court as the protection of wild animals.[1] The Wildlife Act, including its application to the Project, are discussed further in the Legal Submissions on behalf of Tararua Wind Power.

The activities subject to the Wildlife Approval are consistent with the protective purpose of the Wildlife Act, as trapping, the attachment of GPS transmitters, monitoring of nest success and tracking adults and juvenile falcon active within and around the Project Site, is for the purpose of:

- Confirming the accuracy of the collision risk modelling that has been carried out in terms of the frequency of turbine interactions and avoidance behaviours,
- Confirming that displacement from habitat is not of risk for falcon, and
- Confirming through observation of falcon, their nest sites and fledging success, that associated targeted pest control during breeding is supporting the sustainability of the local population.
- To retrieve any carcasses of falcon so that a necropsy can be undertaken by Wildbase Pathology (Massey University, Palmerston North wildlife diagnostic services) to ascertain the cause of death.
- To retrieve the carcasses of any other native bird with a conservation status of threatened or at risk, including falcon, found within the Wind Farm Development Area where the death may be related to the operational wind farm, so that Wildbase Pathology (Massey University, Palmerston North wildlife diagnostic services) can undertake a necropsy to ascertain the cause of death.

3.4 Wildlife Species, impact and effects

2(1)(d) List protected wildlife species known or predicted to be in the area and, where possible, the numbers of wildlife present and numbers likely to be impacted.

The species the approval will apply to is the eastern form of the New Zealand falcon (*Falco novaeseelandiae*) that has a conservation status of Threatened – Nationally Vulnerable (Robertson et al., 2021). Under this approval, the approach will be to focus on the established falcon territories and nest sites and expand as necessary to include any new observations of falcon which are utilising habitat within the Project Site.

Historically, up to five pairs of falcons have had territories that overlap with the Project Site. A permit that allows for up to 25 adults and/or juveniles would enable each adult and a cohort of up to three juveniles per pair to be captured and have a transmitter attached. The actual number is likely to be less but will not be more.

A distribution survey which involved collating information from the Department of Conservation and various birding groups from 2006 to 2009, found 296 individuals in the Otago region (Bell & Lawrence, 2009).

[1] See *Shark Experience Ltd v PauaMAC5 Inc* [2019] NZSC 111 [2019] 1 NZLR 791 at [44], and the Legal Submissions on behalf of Manawa Energy.

2(1)(e) Outline impacts on threatened, data deficient, and at-risk wildlife species (as defined in the New Zealand Threat Classification System).

The most up to date threat classification for the eastern form of the New Zealand falcon (*Falco novaeseelandiae*) is Threatened – Nationally Vulnerable with the qualifiers Conservation Research Needed (CR), Data Poor Size (DPS) and Data Poor Trend (DPT)[2]. CR indicates that the causes of decline and/or solutions for its recovery a poorly understood and further research is required. DPS and DPT indicates that the confidence in the assessment of eastern falcon is low because of a lack of data on population size and population trends, respectively.

2(1)(f) State how the methods proposed to be used to conduct the actions specified under paragraph (b) will ensure that best practice standards are met

The following measures are standard practice for the capture and handling of the New Zealand falcon. Only certified and experienced practitioners are allowed to carry out this work.

Table 1: Tasks and Measures to manage effects.

Activity	Measures to manage effects
Nest Disturbance Disturbance to nesting kārearea / falcons by people approaching the nest, or by researchers playing falcon calls during surveys. If adult birds leave eggs or brood-stage chicks, eggs could chill and thus not hatch, and eggs or chicks could be vulnerable to depredation by predators	To minimise nest disturbance, surveys using call-playback and trapping will not be conducted during wet weather, cold conditions or strong winds. To reduce disturbances to bird nests, all call-playback activities and nest searches using the nest flashing method will be limited to a maximum duration of 10 minutes. When active nests are confirmed, they will be observed using binoculars or a spotting scope from a distance that ensures the incubating or brooding birds remain undisturbed.
Injury while banding When approaching nests, capturing kārearea / falcons, and leg-banding, there is the potential to injure birds.	Only workers with training and experience specific to falcons will approach nests and be involved in capturing birds for leg-banding (Chifuyu Horikoshi). Helmets are not to be worn, to minimise risk of damage to falcons' legs. The proposed capture techniques are those provided in the NZ Bird Banders Manual (Melville 2011). Chifuyu Horikoshi has used these capture techniques since 2007, and these methods were used intensively during Horikoshi's PhD, research project (2011 – 2015) and are in use in three ongoing kārearea projects 2016 - 2023.
Use of GPS Transmitter Transmitters if too large or poorly fitted can affect a birds ability to fly, forage and preen.	One of the following two methods will be used to attach transmitters based on the weight and condition of each falcon: backpack harness with 'weak link' or 'back feather' attachment. Attachment to back feathers at bird's mantle will be with Tesa 4651 tape. A small UV-stable PVC base plate (custom to device LxW, 1.5mm thick) will first be taped to 6-8 feathers, then the transmitter will be attached to the base plate. These methods have been used successfully on New Zealand falcons, and many other bird species.
Short term stress of captured birds.	Skilled and experienced operators using demonstrated protocols for safe short-term (<15 minutes) holding.

[2] https://nztcs.org.nz/content/QUALIFIERS

Activity	Measures to manage effects
	Use of falcon hood and quiet handling sites to minimise stimulation.
By-catch of other species in traps.	This is unlikely as individual kārearea / falcons will be targeted. However, if additional species are caught, they will be immediately removed from the trap by experienced operators and released at the point of capture.
Trail Cameras Setting up trail cameras near active falcon nests to monitor breeding success	For the avoidance of doubt the installation of the trail cam will be carried out by the operators to minimise disturbance to nesting adults and chicks.

3.5 Methods

2(1)(g) describe the methods to be used to safely, efficiently, and humanely catch, hold, or kill the animals and identify relevant animal ethics processes.

The following methods will be used to safely, efficiently and humanely catch and hold falcon.

The capturing of adults and juvenile falcon.

If nesting falcon are detected within 3 km of the Project Site an attempt to trap adults and any fledged chicks will be carried out by hand or using a noose hat or bal-chatri traps. To minimise stress to the trapped falcon, they will be hooded as soon as they are captured with a standard raptor hood. Adults will be trapped once their chicks are at least 14 days old to prevent disturbances that could lead to nest failure. Fledglings will be caught and transmitted once they have fledged from the nest to ensure they are sufficiently mature for a transmitter to be attached. To minimise nest disturbance, surveys using call-playback and trapping will not be conducted during wet weather, cold conditions or strong winds.

Handling falcon to attach GPS transmitter, determine the sex and age class of the falcon.

Once captured, the raptor hood will be fitted. All key morphometric data, the sex and age class of falcon, the GPS co-ordinates of the nest/capture location (and nest unique identifier), the transmitter number and any other relevant information will be recorded and saved electronically and entered into a spreadsheet after each falcon trapping session. The transmitters will be set to a frequency that has been confirmed in advance with the Department Conservation and will avoid frequencies 160.6 MHZ to 161.11MHz (channels 48-99).

Transmitters will be attached to back feathers via a custom baseplate, tape glue and cable tie. The transmitters used will either be:

Lotek PP VHF 75s

- Standard weight: 3.5 g
- Size (L x W x H): 25 mm x 14 mm x 7 mm
- Antennae length: 5 cm GPS antenna, 18 cm VHF antenna; **OR**

Lotel PinPoint Cell Solar 5G-2-30 (depending on availability)

- Standard weight: 8.6 g

- Size (L x W x H): 23 mm x 21 mm x 15 mm
- Antennae length: 5 cm GPS antenna, 9.6 cm GSM

Potential recapture of birds if GPS transmitters require remedial action, including removal if required

If recapture is required to reattach or remove transmitter the same capture and handling techniques will be used as described above. In all other cases transmitters will be left to moult off (i.e., come off when the feathers they are attached to fall off). NZ falcons complete a moult once per year (Marchant & Higgins., 1993).

Release back to location of trapping.

Once transmitter is attached and morphological measurements are taken and recorded, the falcon will be placed back close to the nest and falcon hood removed.

Tracking adults with GPS transmitters.

Falcon movements will be tracked remotely (physical in the field radio-tracking surveys will not be required) and the transmitters will include a mortality switch which will send an alert if a mortality has occurred.

The raptor ecologist will conduct fortnightly visual checks of transmitted birds to make sure the birds are not distressed and that the transmitters remain attached and functional.

A data review of falcon movements will be conducted remotely twice daily and will occur via cellular network download with one download between 7-10 am and the second between 3-6 pm. In the event that a mortality switch on a falcon transmitter is activated and the carcasses is located or an adult or juvenile falcon is found injured or deceased by anyone within the Wind Farm Site (e.g., Mercury NZ staff, contractors, etc.), then the consent holder shall notify the Department of Conservation within 24 hours of becoming aware of the discovery (including the species, location, date and time the carcass was located), the carcass will be photographed and sent to Wildbase Pathology (Massey University, Palmerston North wildlife diagnostic services) for necropsy to determine cause of death where possible. All necropsy results are to be provided to the Department of Conservation within three days of these being provided to Tararua Wind Power. All necropsy costs including courier will be covered by Tararua Wind Power and all carcasses are to be returned to the Department of Conservation after necropsy.

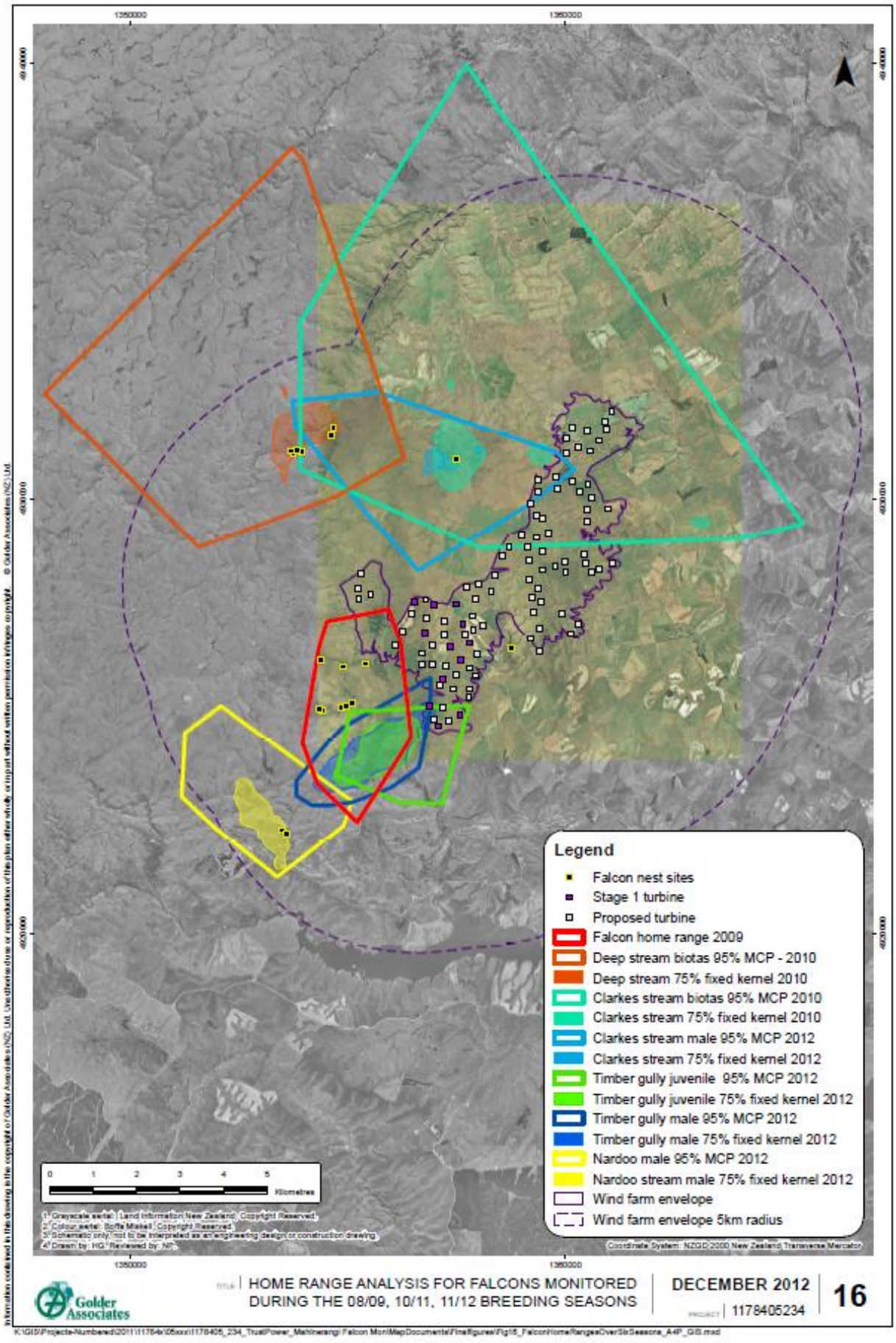
3.6 Location Activity Will be Carried Out

2(1)(h) State the location or locations in which the activity will be carried out, including a map (and GPS co-ordinates if available)

The consented Project Site is centred on privately owned pastoral farmland and is approximately 1,723 ha in area, which encompasses the Wind Farm Development Area. The proposed activity will be conducted within and up to 3 km from the Project Site.

The approach will be to focus on previously observed falcon territories and nest sites and then expand as necessary to include any new observations of falcon which are utilising habitat within the Project Site. The locations for historically observed nest sites where the activity will be prioritised are shown in the Figure 1 below.

Figure 1 Falcon home range analysis and nest sites' 2009 to 2012 (Golder Associates Ltd, 2012).



3.7 Is the Authorisation to Hold and Relocate

2(1)(i) State whether authorisation is sought to temporarily hold or relocate wildlife

Authorisation is not being sought to temporarily hold or relocate falcon. Trapped birds will be released immediately once the identification band and GPS transmitter have been fitted.

3.8 Actual and Potential Effects of the Proposed Activity

2(1)(j) List all actual and potential wildlife effects (adverse or positive) of the proposed activity, including effects on the target species, other indigenous species, and the ecosystems at the site

The proposed activity is the capture, handling and attachment of GPS transmitters to falcon, as well as the collection of morphological data. The purpose of the proposed activity is to track falcon flight activity within the Wind Farm, to consider potential displacement of falcon from the Wind Farm, and to be alerted to a falcon mortality, allow retrieval of the bird, and carry out a necropsy.

Table 2. Potential and actual wildlife effects of the proposed activity.

Potential and actual wildlife effects of the proposed activity
Nest Disturbance • Disturbance to nesting kārearea / falcons by people approaching the nest, or by researchers playing falcon calls during surveys. • If adult birds leave eggs or brood-stage chicks, eggs could chill and thus not hatch, and eggs or chicks could be vulnerable to depredation by predators
Injury while banding • When approaching nests, capturing kārearea / falcons, and leg-banding, there is the potential to injure birds.
Use of GPS Transmitter • Transmitters if too large or poorly fitted can affect a birds ability to fly, forage and preen.
Short term stress of captured birds • See table 3
By-catch of other species in traps • See table 3
Trail Cameras • Potential disturbance to nesting adults and chicks resulting from the setting up trail cameras near active falcon nests to monitor breeding success

3.9 Methods to avoid, minimise offset or compensate effects

2(1)(k) Where adverse effects are identified, state what methods will be used to avoid and minimise those effects, and any offsetting or compensation proposed to address unmitigated adverse effects (including steps taken before the project begins, such as surveying, salvage and relocating protected wildlife)

Potential and actual wildlife effects of the proposed activity outlined in Section 2(1)(j) and the measures to be used to avoid and minimise those effects are set out below in Table 2.

Table 3. Potential effects on falcon from the proposed activity and methods to avoid and minimise those effects.

Potential and actual wildlife effects of the proposed activity	Measures to avoid or minimise actual or potential effects of the proposed activity
Nest Disturbance Disturbance to nesting kārearea / falcons by people approaching the nest, or by researchers playing falcon calls during surveys. If adult birds leave eggs or brood-stage chicks, eggs could chill and thus not hatch, and eggs or chicks could be vulnerable to depredation by predators	To minimise nest disturbance, surveys using call-playback and trapping will not be conducted during wet weather, cold conditions or strong winds. To reduce disturbances to bird nests, all call-playback activities and nest searches using the nest flashing method will be limited to a maximum duration of 10 minutes. When active nests are confirmed, they will be observed using binoculars or a spotting scope from a distance that ensures the incubating or brooding birds remain undisturbed.
Injury while banding When approaching nests, capturing kārearea / falcons, and leg-banding, there is the potential to injure birds.	Only workers with training and experience specific to falcons will approach nests and be involved in capturing birds for leg-banding (Chifuyu Horikoshi). Helmets are not to be worn, to minimise risk of damage to falcons' legs. The proposed capture techniques are those provided in the NZ Bird Banders Manual (Melville 2011). Chifuyu Horikoshi has used these capture techniques since 2007, and these methods were used intensively during Horikoshi's Ph,D, research project (2011 – 2015) and are in use in three ongoing kārearea projects 2016 - 2023.
Use of GPS Transmitter Transmitters if too large or poorly fitted can affect a birds ability to fly, forage and preen.	One of the following two methods will be used to attach transmitters based on the weight and condition of each falcon: backpack harness with 'weak link' or 'back feather' attachment. Attachment to back feathers at bird's mantle will be with Tesa 4651 tape. A small UV-stable PVC base plate (custom to device LxW, 1.5mm thick) will first be taped to 6-8 feathers, then the transmitter will be attached to the base plate. These methods have been used successfully on New Zealand falcons, and many other bird species.
Short term stress of captured birds.	Skilled and experienced operators using demonstrated protocols for safe short-term (<15 minutes) holding. Use of falcon hood and quiet handling sites to minimise stimulation.
By-catch of other species in traps.	This is unlikely as individual kārearea / falcons will be targeted.

Potential and actual wildlife effects of the proposed activity	Measures to avoid or minimise actual or potential effects of the proposed activity
	However, if additional species are caught, they will be immediately removed from the trap by experienced operators and released at the point of capture.
Trail Cameras Setting up trail cameras near active falcon nests to monitor breeding success	This does not normally require a WAA. However, for the avoidance of doubt the installation of the trail cam will be carried out by the operators to minimise disturbance to nesting adults and chicks.

3.10 Wildlife Act Offences

2(1)(l) State whether the applicant or any company director, trustee, partner, or anyone else involved with the application has been convicted of any offense under the Wildlife Act 1953

No person involved with the application has been convicted of an offence under the Wildlife Act.

2(1)(m) State whether the applicant or any company director, trustee, partner or anyone else involved with the application has any current criminal charges under the Wildlife Act 1953 pending before a court

No person involved with the application has any current criminal charges under the Wildlife Act pending before a court.

3.11 Consultation

2(1)(n) provide proof and details of all consultation, including hapū or iwi, on the application specific to wildlife impacts

TWP has engaged with Te Rūnanga o Ōtakou (TroO) since early 2025. This has included multiple hui detailing the project and sharing of technical assessment and management plans on all ecological matters including the Avifauna Assessment and associated Avifauna Management Plan.

The Ngāi Tahu Claims Settlement Act 1998 includes obligations in relation to the Wildlife Act. Falcon is identified as a taonga species in the Settlement Act and in this respect TRoO have been keen to understand how falcon will be impacted by the project.

Noting the Avifauna Management Plan outlines the methods required to address the potential effects on falcon resulting from the construction and operational phases of Stage 2 of the MWF, engagement is ongoing with TRoO and TWP is awaiting feedback on this plan. TWP will continue to engage with TRoO through the Fast-track Approvals process.

3.12 Additional Supporting Documentation

2(1)(o) provide any additional written expert views, advice or opinions the applicant has obtained concerning their proposal.

The proposed methods for capture, handling and fitting of transmitters to falcon has been determined in consultation with Chifuyu Horikoshi. Dr. Horikoshi is a falcon specialist with extensive experience capturing, and handling falcon, including the three techniques described in the New Zealand Bird Banders Manual for capturing Kārearea / NZ falcon.

Dr Horikoshi is the raptor ecologist that will undertake the proposed activities outlined in this wildlife approval report.

Relevant Experience

Dr. Chifuyu Horikoshi conducted extensive research on Kārearea/ NZ Falcon during her Ph.D. studies from 2011 to 2015. She enhanced the effectiveness of Bal Chatri trap and noose hat techniques for capturing falcons and improved the safety of transmitter harnesses for falcons. In 2016, she shared her techniques with Graham Parker. Additionally, Dr. Horikoshi played a significant role in the Coastal Otago Falcon Project during its first four years, from 2016 to 2020. In 2021, she trained DOC biologists on trapping, handling, and attaching GPS transmitters using backpack harnesses with weak links for falcons. To date, she has successfully captured over 75 adult falcons and has leg-banded more than 130 adult and juvenile falcons. Address: [redacted]

4.0 References

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Appendix 1: Wildlife Approval Checklist

Relevant Documents

- Avifauna Effects Assessment (AEA)
- Avifauna Management Plan (AMP)
- Mammalian Pest Control Plan (MPCP)
- Technical Evaluation for Wildlife Approval – Falcon (WA-F)

Clause, Schedule 7	Information required for an approval described in section 42(4)(h) (Wildlife Act approval), clause 2 of Schedule 7	Application Reference (Name of document, section and page)	EPA office use only
2(1)(a)	Specify the purpose of the proposed activity	Technical Evaluation for Wildlife Approval, Section 3.1, Page 2.	
2(1)(b)	Identify the actions the applicant wishes to carry out involving protected wildlife and where they will be carried out (whether on or off public conservation land) Guidance note: Under clause 2(2) if the substantive application is to be lodged by more than 1 authorised person, the reference to the applicant in subclause (1)(b) is to the authorised person who is identified in the application as the proposed holder of the wildlife approval.	Avifauna Management Plant, Section 4.1, page 14. Technical Evaluation for Wildlife Approval, Section 3.1, page 2.	
2(1)(c)	An assessment of the activity and its impacts against the purpose of the Wildlife Act	Avifauna Management Plant, Section 4.1, page 14-17. Technical Evaluation for Wildlife Approval, Section 3.3, Page 7.	
2(1)(d)	List protected wildlife species known or predicted to be in the area and, where possible, the numbers of wildlife present and numbers likely to be impacted	Avifauna Assessment, Section 6.3, page 44 – 46. Technical Evaluation for Wildlife Approval, Section 3.4, page 7.	
2(1)(e)	An outline of impacts on threatened, data deficient, and at- risk wildlife species (as defined in the New Zealand Threat Classification System)	Avifauna Assessment, Section 9.1.2, page 53. Technical Evaluation for Wildlife Approval, Section 3.4, page 8.	
2(1)(f)	A statement of how the methods proposed to be used to conduct the actions involving protected wildlife will ensure that best practice standards are met.	Technical Evaluation for Wildlife Approval, Section 3.4, page 8-9	

Clause, Schedule 7	Information required for an approval described in section 42(4)(h) (Wildlife Act approval), clause 2 of Schedule 7	Application Reference (Name of document, section and page)	EPA office use only
2(1)(g)	A description of the methods to be used to safely, efficiently, and humanely catch, hold, or kill the animals and identify relevant animal ethics processes:	Avifauna Management Plant: Section 4.1.3, page 15-17. Technical Evaluation for Wildlife Approval, Section 3.5, page 9-10.	
2(1)(h)	A statement of the location or locations in which the activity will be carried out, including a map (and GPS co- ordinates if available)	Technical Evaluation for Wildlife Approval, Section 3.6, page 10.	
2(1)(i)	A statement of whether authorisation is sought to temporarily hold or relocate wildlife	Technical Evaluation for Wildlife Approval, Section 3.7, page 12.	
2(1)(j)	A list of all actual and potential wildlife effects (adverse or positive) of the proposed activity, including effects on the target species, other indigenous species, and the ecosystems at the site	Avifauna Management Plant: Section 4, page 14-17. Technical Evaluation for Wildlife Approval, Section 3.8, page 12.	
2(1)(k)	Where adverse effects are identified, state what methods will be used to avoid and minimise those effects, and any offsetting or compensation proposed to address unmitigated adverse effects (including steps taken before the project begins, such as surveying, salvaging, and relocating protected wildlife)	Avifauna Assessment, Section 9.1.2, page 53. Avifauna Management Plan, Section 6.1, page 17-18. Mammalian Pest Control Plan: Section 3.0, page 4 – 6. Technical Evaluation for Wildlife Approval, Section 3.9, page 12-13.	
2(1)(l)	A statement of whether the applicant or any company director, trustee, partner, or anyone else involved with the application has been convicted of any offence under the Wildlife Act	Technical Evaluation for Wildlife Approval, Section 3.10, page 14.	
2(1)(m)	A statement of whether the applicant or any company director, trustee, partner, or anyone else involved with the application has any current criminal charges under the Wildlife Act pending before a court	Technical Evaluation for Wildlife Approval, Section 3.10, page 14.	
2(1)(n)	Provision of proof and details of all consultation, including with hapū or iwi, on the application specific to wildlife impacts	Technical Evaluation for Wildlife Approval, Section 3.11, page 14.	
2(1)(o)	Provision of any additional written expert views, advice, or opinions the applicant has obtained concerning their proposal	Technical Evaluation for Wildlife Approval, Section 3.12, page 14-15.