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Environmental Consultants

MEMORANDUM

To:	Tracey Morse, NZClean Energy Limited
cc:	
From:	Dr Gary Bramley
Date:	20 March 2025
Re:	Selwyn District Council RC245775 – Proposed Darfield Solar Farm

1. Introduction

NZ Clean Energy Limited has applied to Selwyn District Council and Environment Canterbury Regional Council for resource consents to construct and operate a solar farm near Darfield, mid Canterbury (Application RC245775). The application was informed by an ecological impact assessment prepared by Ecological Solutions Limited.

On 12 November 2024 Selwyn District Council requested further information in relation to a number of matters, including ecological matters, in accordance with Section 92 of the Resource Management Act 1991. The applicant responded on 17 January 2025.

On 3 February 2025 a second further information request was received by the applicant requesting (in Section 4.5) an assessment of the 'likelihood' of the bird species identified as being present in the vicinity based on their habitat preferences. The second request also noted that the list of species potentially present provided in the earlier response did not include South Island fantail (which was observed on the site during field surveys to inform the ecological impact assessment).

Also in Section 4.5, the second further information request notes that there is the potential for lizard habitat to be present on the site, and recommended that lizard surveys be undertaken in the potentially suitable habitat (a hedgerow comprised of exotic pampas grass) by an appropriately qualified and permitted herpetologist prior to works commencing.

Each of these matters is addressed below.

2. Birds Present

As set out in Attachment 2 of Ecological Solutions' response to the November 2024 request for further information (dated 13 December 2024), there are records of 53 bird species within 10km of the site on the eBird database. Table 1 of that response lists 13 indigenous species which may use habitats at the site. Four of these species (New Zealand pipit, black billed gull, New Zealand falcon and South Island pied oystercatcher) are of conservation concern. Section 4.2 of the original Ecological Solutions Limited Ecological Impact Assessment notes that six species were observed at the site, including four exotic species, spur-winged plover and South Island fantail. The presence of South Island fantail was inadvertently omitted from Table 1 of the December response, Table 1 should therefore have included 14 species as set out in Table 1 below.

Table 1. Native birds recorded within 10km of the NZClean Energy Limited site at Darfield which might use habitats present within the site.

Species	Common name	Biostatus	Threat status	Habitat	Likelihood of being present
Anthus novaeseelandiae	New Zealand pipit	Endemic	At Risk - Declining	Widespread in rough open habitats, including low producing grassland to c.1900 m asl.	Low. Intensively grazed areas are not preferred pipit habitat.
Bubulcus coromandus	Cattle egret	Native	Migrant	Seasonal visitors to damp pasture	Very low.
Chroicocephalus bulleri	Black-billed gull	Endemic	At Risk - Declining	Breed on sparsely-vegetated gravels on inland riverbeds, migrate to the coast following breeding	Very low. May visit areas of disturbed soil to feed. Can reach high numbers if large enough area of soil exposed
Circus approximans	Swamp harrier	Native	Not Threatened	Widespread in rural areas. Uncommon in forest and urban areas	Likely present year- round in low numbers
Falco novaeseelandiae	NZ falcon (Eastern)	Endemic	Threatened - Nationally Vulnerable	Wide variety of habitats, in intensively farmed areas breed in forest remnants	Possibly. Site may form part of foraging habitat for a low number of individuals
Gerygone igata	Grey warbler	Endemic	Not Threatened	Widespread in rural and urban areas.	Likely present year-round in low numbers
Haematopus finschi	South Island pied oystercatcher	Endemic	At Risk - Declining	Occur in most estuaries and harbours. Breed inland, can use rough pasture.	Very low. Site not suitable for breeding. May visit areas of disturbed soil to feed. Can reach high numbers if large enough area of soil exposed.
Hirundo neoxena	Welcome swallow	Native	Not Threatened	Occur in most habitats other than dense forest or alpine areas	Likely seasonal visitors in low numbers
Larus dominicanus	Southern black-	Native	Not Threatened	Widespread throughout New	Very low. May visit areas of

Species	Common name	Biostatus	Threat status	Habitat	Likelihood of being present
	backed gull			Zealand. Sparse in farmland	disturbed soil to feed. Can reach high numbers if large enough area of soil exposed
Rhipidura fuliginosa	South Island fantail	Endemic	Not Threatened	Use a wide variety of habitats, including both native and exotic forest and shrubland. Common in rural and urban areas	Confirmed, likely low numbers of permanent residents
Tadorna variegata	Paradise shelduck	Endemic	Not Threatened	Pastoral areas	Likely seasonal visitors in varying numbers
Todiramphus sanctus	Sacred kingfisher	Native	Not Threatened	Use a wide variety of habitats, including anywhere where there is water or open country with adjacent elevated perches	Likely low numbers of permanent residents
Vanellus miles	Spur-winged plover	Native	Not Threatened	Widespread in open habitats, including farmland	Confirmed. Likely low numbers of permanent residents
Zosterops lateralis	Silvereye	Native	Not Threatened	Widespread in rural and urban areas to c. 1200m asl.	Likely low numbers of permanent residents.

3. Herpetofauna

The second request for information states “In Section 4.3 Herpetofauna, there has been no assessment made of the species that could potentially be present on site.

The only lizard records from within 8km of the site where the species detected was known were Canterbury grass skink (*Oligosoma* aff *polychroma* Clade 4), which are regarded as “At Risk – Declining”. Other skinks with a known distribution that includes the mid-Canterbury area include McCann’s skink (*O. maccanni*) (“Not Threatened”), and Canterbury spotted skink (*O. lineoocellatum*), which are regarded as “Threatened – Nationally Critical”

Given the location, the types of habitat present and the nearest records, the most likely species to be present at the site, if lizards are present, is the Canterbury grass skink. We agree with Wildland Consultants Limited that the pampas (*Cortaderia selloana*) hedgerow on the site may provide habitat for skinks and that the extent of lizard habitat at the site is very limited. A search prior to clearance would require a Wildlife Act Authority and a location where any captured lizards could be translocated to. This is most easily addressed via a lizard management plan.

4. Assessment of Effects

The project will result in the removal of shelterbelt exotic trees and limited areas of rough pasture that have the potential to provide nesting habitat for common native and exotic birds typically found in rural environments. While vegetation clearance or trimming (particularly of mature trees) can adversely affect native species when completed during the breeding season (September-February inclusive), we have recommended that vegetation clearance be undertaken outside that time period. If vegetation clearance occurs during the breeding season, we have recommended other mitigation techniques including pre-clearance surveys to ensure that trees containing nests can be avoided until either the nest fails for unrelated reasons or the chicks have fledged, to minimise effects. With the appropriate level of mitigation, the level of effect on avifauna is assessed as ‘low’ and protected species would be safeguarded appropriately. This matter can easily be addressed via appropriate conditions of consent.

The ecological impact assessment identifies the level of effects on lizards as being ‘very low’. Lizards have not been confirmed as present at the site, and the likelihood of their being there is low. The pampas hedgerow which could provide habitat for lizards would be removed as part of construction of the solar farm. It is unlikely that lizards have persisted at the site, but a lizard management plan which requires pre-clearance search, salvage and relocation of any lizards collected would be sufficient to protect any lizards present. This matter can also be addressed via appropriate conditions of consent.

4. Conclusion

The requirement to avoid vegetation clearance between September and February, or undertake pre-clearance surveys to identify and protect nests and a requirement for a lizard management plan to enable the salvage and relocation of any lizards found would be sufficient to address the ‘low’ and ‘very low’ level of effects on birds and lizards respectively.

We trust that this is sufficient to inform your response to the request for further information, please don’t hesitate to contact the writer if we can be of further assistance.