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13 December 2024

Attention:

Darfield Solar - Section 92 Response to Items 7, 8, 9 and 10

Introduction

Selwyn District Council issued a further information request relating to the resource consent application at 1352 Homebush Road, Darfield. Four of the items queried (Items 7 to 10) relate to ecological matters. This letter responds to each of these matters with the query by the Council italicised, and a response provided below.

Response to Items

7. Please provide a complete vegetation species list and descriptions of the habitats present.

The description included within the AEE was considered appropriate due to the low ecological value and homogenous nature of the four exotic dominated vegetation types identified within the site. These vegetation types are described further below with a species list included in Attachment 1.

- Grassland of shortly grazed cocksfoot (*Dactylis glomerata*) with lucerne (*Medicago sativa*) and white clover (*Trifolium repens*). Paddocks were either permanent or resown following seasonal cropping and associated tillage.
- Forage crops of ungrazed kale remaining in some paddocks at the time of visit.
- Shelterbelts of hedge trimmed exotic conifers; Leyland cypress (*Cupressus x leylandii*), macrocarpa (*Hesperocyparis macrocarpa*) and radiata pine (*Pinus radiata*) and the exotic deciduous broadleaf sweet gum (*liquidambar styraciflua*).
- Hedgerows of the exotic clump forming grass pampas (*Cortaderia selloana*) and widely spaced silver birch (*Betula pendula*).

Each of these vegetation types did not warrant further classification lacking both the complexity or diversity that would necessitate use of a standard methodology such as Atkinson (1985).

8. Please provide a full list of bird species found in the desktop survey and an assessment of the likelihood of these species being present at the site.

A full species list of birds recorded within 10km of the site is included in Attachment 2, all of which were considered in the assessment of effects. The common native birds, spur winged plover and fantail were observed at the site during walkthrough surveys. The species listed in Table 1 below are considered potentially present, though the site would provide only occasional, low value habitat, abundantly available in the surrounding landscape. Various exotic birds listed in Attachment 2 may also be present.

Table 1. Native species potentially present at site.

Common name	Biostatus	Threat status
New Zealand pipit	Endemic	At Risk - Declining
Cattle egret	Native	Migrant
Black-billed gull	Endemic	At Risk - Declining
Swamp harrier	Native	Not Threatened Threatened - Nationally
NZ falcon (Eastern)	Endemic	Vulnerable
Grey warbler	Endemic	Not Threatened
South Island pied oystercatcher	Endemic	At Risk - Declining
Welcome swallow	Native	Not Threatened
Southern black-backed gull	Native	Not Threatened
Paradise shelduck	Endemic	Not Threatened
Sacred kingfisher	Native	Not Threatened
Spur-winged plover Silvereye	Native Native	Not Threatened Not Threatened
	New Zealand pipit Cattle egret Black-billed gull Swamp harrier NZ falcon (Eastern) Grey warbler South Island pied oystercatcher Welcome swallow Southern black-backed gull Paradise shelduck Sacred kingfisher Spur-winged plover	New Zealand pipit Endemic Cattle egret Native Black-billed gull Endemic Swamp harrier Native NZ falcon (Eastern) Endemic Grey warbler Endemic South Island pied oystercatcher Endemic Welcome swallow Native Southern black-backed gull Native Paradise shelduck Endemic Sacred kingfisher Native Spur-winged plover Native

9. Please provide results from fish surveys (either as a standalone methodology), or in combination with eDNA metabarcoding, following the 6-replicate methodology.

Fish surveys were not deemed necessary due to the low level of effects of the proposed activity on the water race present.

10. Please provide evidence of an assessment of species potentially present within the area, and surveys for lizards or justification as to why this is not necessary at the site. Surveys should be undertaken using DOC approved methods by an appropriately qualified and permitted herpetologist.

A walk-through survey of the site found habitat on site to be unsuitable for lizards, as described in Section 4 of the Assessment of Environmental Effects.

Concluding Statement

On Only

I trust that this addresses the matters raised. Please don't hesitate contact us if we can be of further assistance.

Yours sincerely

Ecologist

Attachment 1

Plant species list

Species Common name Biostatus Agrostis capillaris Exotic Brown top Anthoxanthum odoratum Sweet vernal Exotic Azolla rubra Red azolla Native - Not threatened Bellis perrenis Daisy Exotic Betula pendula Silver birch Exotic Kale Brassica oleracea var. acephala Exotic Cedrus atlantica Atlas cedar Exotic Circsium arvense Creeping thistle Exotic Cortaderia selloana Pampas Exotic Cupressus x leylandii Leyland cypress Exotic Dactylis glomerata cocksfoot Exotic Hesperocyparis macrocarpa Macrocarpa Exotic Hypochaeris radicata Catsear Exotic Leontodon taraxacoides Hawkbit Exotic Liquidambar styraciflua Sweet gum Exotic Lolium arundinaceum Tall fescue Exotic Medicago sativa Lucerne Exotic Mentha pulegium Penny royal Exotic Pinus radiata Radiata Exotic Plantago lanceolata Plantain Exotic Trifolium repens White clover Exotic Ranunculus repens Creeping buttercup Exotic

Attachment 2 Bird species list

Species	Common name	Biostatus	Threat status
Acanthis cabaret	Lesser redpoll	Introduced and Naturalised	
Alauda arvensis	Eurasian Skylark	Introduced and Naturalised	
Anarhynchus frontalis	Wrybill	Endemic	Threatened - Nationally Increasing
•	-		-
Anas gracilis	Grey Teal Mallard	Native	Not Threatened
Anas platyrhynchos Anas platyrhynchos x superciliosa	Mallard x grey duck hybrid	Introduced and Naturalised	
Anser anser	Greylag goose	Introduced and Naturalised	
Anthornis melanura	Bellbird	Endemic	Not Threatened
Anthus novaeseelandiae	New Zealand pipit	Endemic	At Risk - Declining Threatened -
Ardea alba	Kōtuku	Native	Nationally Critical
Athene noctua	Litlle owl	Introduced and Naturalised	
Branta canadensis	Canada goose	Introduced and Naturalised	
Bubulcus coromandus	Cattle egret	Native Introduced , Not	Migrant
Cairina moschata	Muscovy duck	Established	
Callipepla californica	California quail	Introduced and Naturalised	
Carduelis carduelis	European goldfinch	Introduced and Naturalised	
Charadrius bicinctus	Double-banded Plover	Endemic	T
			Threatened - Nationally
Chlidonias albostriatus	Black-fronted tern	Endemic	Endangered
Chloris chloris	Greenfinch	Introduced and Naturalised	
Chroicocephalus bulleri	Black-billed gull	Endemic	At Risk - Declining
Circus approximans	Swamp harrier	Native	Not Threatened
Columba livia	Rock dove	Introduced and Naturalised	
Corvus frugilegus	Rook	Introduced and Naturalised	
Egretta novaehollandiae	White-faced heron	Native	Not Threatened
Emberiza citrinella	Yellowhammer	Introduced and Naturalised	
			Threatened -
Falco novaeseelandiae	Eastern falcon	Endemic	Nationally Vulnerable
Fringilla coelebs	Chaffinch	Introduced and Naturalised	
Gerygone igata	Grey warbler	Endemic	Not Threatened
Gymnorhina tibicen	Australian magpie	Introduced and Naturalised	
Haematopus finschi	South Island pied oystercatcher	Endemic	At Risk - Declining
Haematopus unicolor	Variable oystercatcher	Endemic	At Risk - Recovering
Hemiphaga novaeseelandiae	Kererū	Endemic	Not Threatened
Himantopus leucocephalus	Pied stilt	Native	Not Threatened
Hirundo neoxena	Welcome swallow	Native	Not Threatened
	Southern black-backed		
Larus dominicanus	gull	Native	Not Threatened
Meleagris gallopavo	Wild turkey	Introduced and Naturalised	At Disk Disk
Microcarbo melanoleucos	Little shag	Native	At Risk - Relict
Passer domesticus	House sparrow	Introduced and Naturalised	At Disk Disk
Phalacrocorax carbo	Black shag	Native	At Risk - Relict

			At Risk -
Phalacrocorax varius	Pied shag	Native	Recovering
Phasianus colchicus	Common pheasant	Introduced and Naturalised	
Porphyrio melanotus	Pūkeko	Native	Not Threatened
Prunella modularis	Dunnock	Introduced and Naturalised	
Rhipidura fuliginosa	Fantail	Endemic	Not Threatened
Spilopelia chinensis	Spotted dove	Introduced and Naturalised	
Sterna striata	White-fronted tern	Native	At Risk - Declining
Sturnus vulgaris	Starling	Introduced and Naturalised	
Tadorna variegata	Paradise shelduck	Endemic	Not Threatened
Todiramphus sanctus	Sacred kingfisher	Native	Not Threatened
Turdus merula	Blackbird	Introduced and Naturalised	
Turdus philomelos	Song thrush	Introduced and Naturalised	
Vanellus miles	Spur-winged plover	Native	Not Threatened
Zosterops lateralis	Silvereye	Native	Not Threatened