

Ecology and Restoration

Our Ref: 7422b

10 April 2025

Selwyn District Council C/o - Jane Anderson Consultant planner

Dear Jane

7422B RC245775 – PROPOSED CONDITION AMENDMENTS, ECOLOGICAL PEER REVIEW

Regarding the applicant's response memorandum, prepared by Ecological Solutions Ltd.¹ and the applicant's proposed condition amendments², prepared to address the issues raised our initial peer review³, we have the follow further comments.

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General Comment

A summary of the management plans that are currently to be prepared as conditions of consent should be submitted prior to consenting, to ensure they are appropriate and consider all the possible effects of the works on freshwater and herpetofauna.

It has become commonplace for the preparation and approval of many management plans to be carried out as a condition of consent. However, this is not always appropriate as it means that decision-makers do not have a full understanding of the effects management actions to be applied when consents are granted. The consenting authority must be satisfied that the specific contents of each management plan, that will be prepared as a condition of consent, does not need to be considered up front in order to make an informed decision on the outcome of the application.

<u>Avifauna</u>

The responses supplied have addressed our concerns around avifauna.

Herpetofauna

Concerns around lizard habitat on the site have been largely addressed, but the proposed approach (Condition 25) is irregular. It would be much simpler for the applicant conduct a lizard survey before preparing a Lizard Management Plan (LMP). A lizard survey would determine the need for an LMP. If there are no lizards present then the LMP would not be needed. If lizards were present, a Wildlife Act Authority (WAA) would be required, which would cause significant delays.

¹ NZClean Energy Limited Darfield – Response to further RFI. Selwyn District Council RC245775 – Proposed Darfield Solar Farm. Memorandum prepared by Ecological Solutions. 20 March 2025. 4pp.

² NZCE Responses and Proposed Condition Amendments in reply to Ecological Peer Review (Wildlands). 12 March 2025. 5 pp.

³ Wildland Consultants (2025). *Peer Review - Darfield Solar Farm & Battery Storage AEE.* Wildland Consultants Contract Report No. 7422. Prepared for Selwyn District Council. 12pp.

Additionally, there is some overlap between the lizard and avifauna habitat and it needs to be clear that no vegetation clearance or site preparation work should be undertaken until the lizard survey has been completed. Even if the lizard habitat was preserved, while other vegetation (i.e. avifauna habitat) was cleared, this could constitute lizard disturbance requiring a WAA. Noting that the lizard survey season and avifauna breeding season also overlap, this has the potential to cause further delays, and seems like a counterintuitive approach, but not unworkable if the all the protocols are followed.

Freshwater

The proposed approach to fish management is also highly irregular (Considtion 22 and 23). It is not recommended to forego a full assessment of effects for the affected environments, prior to works in favour of generalised consent conditions reliant on the development and implementation of management plans. The assessment and risks should be identified and grouped prior to these stages. Cognizant of that, the collection and analysis of eDNA specifically to detect the presence of Canterbury mudfish should be undertaken prior to any works commencing and before the Fish Management Plan (FMP) is developed. The results of the eDNA fish survey will impact the FMP and how in-stream works are carried out. This is the minimum that should be done.

In consultation with Selwyn District Council (SDC) we have reviewed and are satisfied with the following amendments to the consent conditions:

Herpetofauna

XX. At least 30 working days prior to the commencement of vegetation clearance or earthworks (whichever is the sooner), the Consent Holder shall provide a lizard survey carried out by a suitably qualified ecologist/herpetologist with at least five years' experience, in order to determine whether indigenous lizard species are present within the solar array footprint.

XX. The survey required by Condition XX shall be targeted to potentially suitable habitat and must be undertaken during the lizard active season (October-April).

XX. In the event that lizard species are identified in accordance with Condition XX, at least 30 working days prior to the commencement of vegetation clearance or earthworks (whichever is the sooner), the Consent Holder shall submit a Lizard Management Plan (LizMP) to the Selwyn District Council for certification. The LizMP shall meet the objective of "avoiding, remedying or mitigating any adverse effects of vegetation clearance or earthworks on any lizard species.". The Lizard Management Plan LizMP shall address the following matters:

- (a) Details of a site survey to be carried out by a suitably qualified ecologist/herpetologist with at least five years' experience conducting lizard surveys, in order to determine whether indigenous lizard species are present within the solar array footprint; and
- (b) Procedures for the capture and relocation of any lizards that may be found.

XX. Should lizards be discovered in any area, then they must be relocated in accordance with the Lizard Management Plan prior to any vegetation clearance or earthworks in that area.

Advice note: Authorisation is required under the Wildlife Act for the relocation of any lizards found. The Department of Conservation should be contacted in this regard.

Freshwater

XX. At least 45 working days, prior to the commencement of vegetation clearance or earthworks (whichever is the sooner), the consent holder shall undertake the collection and analysis of eDNA specifically to detect the presence of Canterbury mudfish to inform a FMP to meet the objectives of:

(a) preventing injury/mortality to fish during installation of the culverts; and

(b) providing for fish passage post-installation.

XX. At least 30 working days prior to the commencement of vegetation clearance or earthworks (whichever is the sooner), the consent holder shall submit the FMP to SDC for certification. The FMP must include:

- (a) a methodology for the collection and analysis of eDNA specifically to detect the presence of Canterbury mudfish within/upstream of the site; and
- (b) provision for the use of a de-fishing methodology suitable for the capture and relocation of any Canterbury mudfish present.
- XX. All works to install culverts must be:
- (a) Undertaken in accordance with the certified FMP and under the guidance of a Suitably Qualified and Experienced Freshwater Ecologist;
- (b) To a standard compatible with Regulation 70(2) of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020; and
- (c) Scheduled and undertaken in a manner that avoids unnecessary disturbance to any Canterbury mudfish present.

Advice Note 2: Avoiding unnecessary disturbance to any Canterbury mudfish present may be achieved by undertaking river crossing works in close succession/at the same time, thus avoiding affecting the same fish multiple times.

Yours sincerely

Roland Payne Senior Ecologist

Wildland Consultants Ltd

Reviewed and approved for release by:

Des Smith

Senior Principal Ecologist/South Island Regional Manager

Wildland Consultants Ltd

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Appendix 1: Plant species recorded during the survey

Species	Common Name	Plant Type	Status
Achillea millefolium	Yarrow	Forb	Exotic
Agrostis capillaris	Browntop	Graminoid	Exotic
Agrostis stolonifera	Creeping bent	Graminoid	Exotic
Arrhenatherum elatius	Tall oat grass	Graminoid	Exotic
Cirsium vulgare	Scotch thistle	Forb	Exotic
Conium maculatum	Hemlock	Forb	Exotic
Crepis capillaris	Hawksbeard	Forb	Exotic
Dactylis glomerata	Cocksfoot	Graminoid	Exotic
Elytrigia repens	Couch	Graminoid	Exotic
Erigeron sumatrensis	Broad-leaved fleabane	Forb	Exotic
Hedera helix	lvy	Forb	Exotic
Holcus lanatus	Yorkshire fog	Graminoid	Exotic
Lolium perenne	ryegrass	Graminoid	Exotic
Malva sylvestris	Large-flowered mallow	Forb	Exotic
Plantago lanceolata	Narrow-leaved plantain	Forb	Exotic
Populus nigra	Lombardy poplar	Tree	Exotic
Ranunculus repens	Creeping buttercup	Forb	Exotic
Rumex obtusifolius	Broad-leaved dock	Forb	Exotic
Sambucus nigra	Elder	Shrub	Exotic
Senecio glomeratus	Pukatea	Forb	Indigenous
Solanum chenopodioides	Velvety nightshade	Sub shrub	Exotic
Solanum laciniatum	Poroporo	Shrub	Indigenous
Solanum nigrum	Black nightshade	Sub shrub	Exotic
Taraxacum officinale	Dandelion	Forb	Exotic
Trifolium pratense	Red clover	Forb	Exotic
Trifolium repens	White clover	Forb	Exotic

Appendix 2: Site Photographs

Plate A2-1 – View of the site from McTeigue Road looking south.

Plate A2-2 — View of the centre of the site looking west.



Plate A2-3 – View of the centre of the site looking east.

Plate A2-4 — Area of historic surface water pooling (identified in 1940-1945 historical aerial imagery). Now dry and devoid of any sign of wetness.