BEFORE AN EXPERT PANEL **FTAA-2508-1100**
THE POINT SOLAR FARM

Under the	FAST-TRACK APPROVALS ACT 2024
In the matter of	an application for approvals to construct and operate an approximately 670-hectare solar farm to supply electricity to the national grid
By	**FAR NORTH SOLAR FARM LIMITED** Applicant

STATEMENT OF EVIDENCE OF SUSAN WALKER

TERRESTRIAL ECOLOGY

27 February 2026

Environmental Defence Society Inc
PO Box 91736
Victoria Street West
Auckland 1142
Shay Schlaepfer, Chief Operating Officer and In-house Counsel
Email: [redacted]

Counsel Acting: Rob Enright
[redacted]

Introduction

1. My full name is Susan Walker.

2. I have been asked by the Environmental Defence Society to provide supplementary expert evidence on the further survey evidence provided by the Applicant in relation to the Far North Solar Farm's proposed 670-hectare solar farm at the northern shore of Lake Benmore between the Pukaki River and the Ohau C hydro canal.

3. My qualifications and experience are set out in my evidence of 19 February 2026.

Code of Conduct

4. I have read the Environment Court code of conduct for expert witnesses, and I have prepared this evidence in accordance with that code. I confirm that my evidence is within my area of expertise, except where I state I am relying on the evidence of another person. I have acknowledged the material and expertise relied on in the preparation of this evidence and in forming my opinions. To my knowledge I have not omitted to consider any material facts known to me that alter or detract from the opinions I express in this evidence.

The Project site

5. In this evidence I refer to The Point Solar Farm application site as 'the Project site' (it is mapped in Attachment 1 of my evidence in Chief).

6. The Project site is the lowest part of an extensive inland outwash gravel terrace landform ('the Pukaki outwash') extending from near Lake Pukaki to the Lake Benmore delta on the floor of the Mackenzie (or 'upper Waitaki') basin.

7. I refer to the area proposed to be largely covered by solar panels on the flat surface of the outwash terrace as the 'Project site footprint' and to the surrounding areas of terrace surface within the Project site boundary (mapped

as Reserve in the May 2025 Ecological Enhancement Plan[1]) as the 'Project site perimeter'.

8. I also refer to the outwash 'terrace edges' which lie outside but adjacent to the Project site. An outwash terrace edge is the gently sloping zone between the flat outwash terrace surface and the steeply sloping outwash terrace 'risers' which descend to the lower alluvial surfaces cut by the Pukaki and Tekapo rivers to the east and the Twizel and Ohau rivers to the west of the Project site.

Scope

9. This evidence comments on information provided in the report titled "Vegetation and Habitat Surveys of The Point Solar Farm", dated February 2026 and authored by Luke Liddell, Andrew Wells and Sarah Wright of Wildland Consultants (hereafter 'the Report').

10. I also comment briefly on the information provided in the report titled "Draft Vegetation Management Plan for The Point Solar Farm"[2], dated February 2026 and authored by Roland Payne, Luke Liddell, Sarah Wright and Andrew Wells of Wildland Consultants (hereafter the 'Draft Vegetation Management Plan').

February 2026 vegetation survey methodology and areas covered

11. The survey methodology for vegetation and coverage appears to be appropriate. Based on the description and hours spent, total site effort within the Project site also appears to have been reasonable and appropriate.

12. However, while the Project site perimeter was searched closely and thoroughly, terrace edges outside the Project site were not. Section 4.2.1. of the Report states that "...*areas outside of the site boundary were not systematically searched*...". As stated in my evidence in chief, the terrace edges are

[1] Wildland Consultants 2025. Ecological Enhancement Plan for The Point Solar Farm, Twizel, Contract Report No, 6621g. https://www.fasttrack.govt.nz/__data/assets/pdf_file/0018/13626/a0f55ccb50ac3787eb0ab73e151eddeb63abdc6d.pdf

[2] https://www.fasttrack.govt.nz/__data/assets/pdf_file/0014/21551/6621h-iii-The-Point-Solar-Farm-Vegetation-Management-Plan-DRAFT-23-2-26v2_Redacted.pdf

immediately adjacent to the Project site perimeter and are known to support significant indigenous vegetation and significant indigenous fauna habitat. The terrace edge vegetation and fauna habitat is very likely to be adversely affected or erased by activities on the Project site through edge effects.

13. I consider that the survey was not adequate overall because significant terrace edge vegetation and fauna values that are at risk from the Project's activities are still very poorly documented.

February 2026 vegetation survey results: Project footprint and perimeter

14. The plot data appended to the Report show that an indigenous At Risk – Declining lichen was common within much of the Project footprint and perimeter, and the Not Threatened *Microtis uniflora* (onion orchid) was found in two plots. Based on these new data, in my opinion, the vegetation within much of the Project site footprint does not meet the definition of indigenous vegetation in the Mackenzie District Plan (MDP)[3]. I do not think it appropriate to describe an otherwise wholly exotic community with a single indigenous lichen species and occasionally a single orchid species as a '*community* of vascular plants, mosses and/or lichens that includes species native to the ecological district'.

15. Having said that, based on the information in the appended plot sheets, six plots (PT1, PT5, PT12, PT49, PT58 and PT123) do clearly meet the definition of indigenous vegetation. I have mapped the locations of those plots in Attachment 1 to this supplementary evidence, showing that all are either on the Project site perimeter or just outside it. The statement in the Report (Section 4.1) that "*Only five vegetation plots contained additional indigenous plant species, and all were located either in the eastern gullies or outside the property boundary*" is correct except that it appears to overlook one plot.

[3] In the definitions, indigenous vegetation "means a community of vascular plants, mosses and/or lichens that includes species native to the ecological district and may include exotic species." The Report does not refer to the MDP definition of indigenous vegetation in their Section 4.2.3. .

16. Furthermore, plot sheets suggest that not all species were able to be identified. For example, plot 'PT68' within the Project site footprint (also shown on Attachment 1 to this supplementary evidence) records two unidentified grasses (which may be indigenous or exotic) and one unidentified *Rytidosperma* (also a grass species). Several indigenous *Rytidosperma* species, including *R. thompsonii* (At Risk – Declining) grow elsewhere on this outwash terrace in my experience. Therefore Plot PT68 may be within an area of indigenous vegetation.

17. With that caveat I agree that most of the plot data appear to confirm "*low species diversity and exotic-dominant character of the vegetation within the site (excluding the two gullies)*"[4].

18. Section 4.2.1 of the Report suggests that four indigenous vascular species were located within the Project site footprint. One of these is the Nationally Critical *Lepidium solandri* which was recorded at "the southern gully" on the eastern Project site perimeter.

19. I suggest that the plant species identified as *Raoulia apicinigra* (Not Threatened) in Section 4.2.1 of the Report may in fact be *Raoulia beauverdii* (At Risk – Declining), which has been recorded by me and independently by the ecologist Mr Michael Harding. *R. beauverdii* has been included within *R. monroi* Hook.f. or *R. apicinigra* Kirk in flora treatments in the past[5], but is ecologically distinct and characteristic of driest parts of the Mackenzie Basin and central Otago. Plate 7 in the Report shows typical habitat for *R. beauverdii*. *Raoulia apicinigra* does not typically occur on such extremely arid sites and has not previously been recorded here.

20. I agree with the Report authors' corrections that species previously identified as *Carmichaelia monroi* is likely to be *Carmichaelia vexillata*, and that the species

[4] Report Section 4.1 last paragraph.
[5] See for example Ward JM 1993. Systematics of New Zealand Inuleae (Compositae-Asteraceae)—2 A numerical phenetic study of *Raoulia* in relation to allied genera. New Zealand Journal of Botany 31: 29–42; and https://www.nzpcn.org.nz/flora/species/raoulia-beauverdii/.

previously identified as *C. australis* (Not Threatened) within the site is in fact *C. petriei* (which is At Risk - Declining)[6].

21. I do not agree with Point 4 in Section 4.2.3 of the Report which states that the two gullies and lower terraces west of the property boundary (where there is notably higher frequency of indigenous species) "*have been historically cultivated*". This is contrary to my own site knowledge, and with Plates 6 and 7 which show these uncultivated sites. Plate 6 shows mature short tussocks and native broom (which are unlikely to have survived cultivation) and Plate 6 shows the gully profile is unsuitable for machinery. I expect that the statement in the Report is a typographic error with the word "not" missing, because the section's Points 1 to 4 set out to describe "*a clear pattern of increasing indigenous plant diversity in areas that were less modified by cultivation*".

February 2026 vegetation survey results – terrace edge

22. Areas outside of the site boundary and on the terrace edge were not systematically searched[7]. Nevertheless, the authors noted additional indigenous species including Nationally Critical *Lepidium solandri*, At Risk Declining *Rytidosperma exiguum*, and '*Raoulia apicinigra*' (which is probably At Risk – Declining *Raoulia beauverdii* as noted in paragraph 16 above). That information (albeit incomplete) confirms that significant ecological values on the terrace edges (referred to in my evidence in chief) are still present.

February 2026 vegetation survey results – updated species list

23. *Raoulia hookeri* (Not Threatened) is a species identified previously within 'stonefield drylands' in the Project site perimeter. This is generally a mesic-environment or braided river species and is not characteristic of or typically found on the drier Mackenzie Basin floor outwash. Both the unlikely record and Plate 5 on page12 of the 2023 Ecological Assessment by Wildland Consultants[8]

[6] Report Section 4.2.2.
[7] Report Section 4.2.1.
[8] Wildland Consultants 2023. Assessment of ecological effects for the proposed solar farm between the lower reaches of the Tekapo and Twizel rivers, Mackenzie District. Contract Report No. 6621c.

suggest that the species is likely to be *Raoulia parkii* (a true dryland species, which is At Risk - Declining) which I recorded within the site in 2017 and is present elsewhere in the vicinity (including at the Haldon Solar site[9]) in my experience.

Vegetation Management Plan

24. The Draft Vegetation Management Plan proposes to focus on the enhancement and monitoring of existing indigenous dryland habitats on the periphery and adjoining DOC land through targeted weed control, seasonal grazing, and experimental sc[r]ape trials (to remove patches of dense exotic grass)[10].

25. The stated goal of the management of indigenous vegetation at the site is to minimise the risk of introducing pest plants and associated threats to biodiversity values present at the site[11]. It is therefore a significant omission in the Draft Vegetation Management Plan that no mention is made of actions to manage edge effects. Targeted weed control, seasonal grazing, and experimental scrape trials will not manage edge effects which involve changes in the underlying character of the environment and the vegetation community.

26. I have not seen the Landscape Management Plan (LMP) referred to in the Draft Vegetation Management Plan (Section 3.1)[12]. However, the Draft Vegetation Management Plan (Figure 2) shows proposed landscape screening plantings on the Project site perimeter very close to a nationally important population of *Lepidium solandri* on the most southern portion of the terrace edge, and the

---

https://www.fasttrack.govt.nz/__data/assets/pdf_file/0018/13617/29619a7c326dc543f821dcb4f10c8ffa2a4c88de.pdf

[9] Attachment 1 to the Statement of Evidence of Michael Harding for the Director General of Conservation 2 February 2026. https://www.fasttrack.govt.nz/__data/assets/pdf_file/0011/20225/6b05a5eee15715a81bd36858e941c87599290033.pdf

[10] Draft Vegetation Management Plan Section 3.1.

[11] Draft Vegetation Management Plan Section 1.0 states "The AEE identified a need for specific management plans to manage effects on flora and fauna on site, and to inform future management strategies in the context of the development. This included the development of a Vegetation Management Plan (VMP) to manage indigenous vegetation at the site and minimise the risk of introducing pest plants and associated threats to biodiversity values present at the site".

[12] This Plan is not up on the Fast track website as of 11am on 26 February.

applicant's response to the Panel on 9 February[13] indicates that the plantings will be irrigated to reach the desired height[14]. As my evidence in chief noted, irrigation of perimeter screening plantings will cause edge effects beyond those plantings. In my evidence in chief I also described the risk that edge effects will also result from microclimate modification within areas of panels. Those edge effects of the proposed activities pose new and very real threats to the adjacent significant indigenous vegetation.

27. There is a strong likelihood, in my opinion, that the edge effects will cause environmental and vegetation changes that eliminate significant dryland habitats and overwhelm and negate the efforts to manage the dryland vegetation described in the Vegetation Management Plan. Adequate setbacks of dryland management areas from solar panel areas and perimeter screening plantings are required for the proposed actions to be meaningful and effective. Based on measured edge effects in the Mackenzie Basin my evidence suggests the buffer zone should be minimum of 100 metres.

28. Given setbacks behind buffer zones, I recommend the principal vegetation monitoring is undertaken along a set of permanent transects (with multiple quadrats along each) running from the Project site (including footprint, perimeter and buffer zone) across the adjacent terrace edges and down the terrace risers. Transects should have sufficient replication to ensure the statistical power needed to assess changes caused by edge effects. Transects replace the few (minimum of 10) scattered 2 x 2 m plots proposed in the Draft Vegetation

[13] See Attachments 1 and 2 in my evidence in chief, and Fast-track RFI Reponse 1 – Landscape dated 9 February 2026.
https://www.fasttrack.govt.nz/__data/assets/pdf_file/0023/20588/7f97b41d4b02c26d8d17d9c1766156cf35b86dd6.pdf

[14] The response states "*Wildlands have provided further discussion into growth rates in the Mackanzie Basin, leveraging off their experience in the basin, as well as Central Otago, which also has a similar climate. Wildlands have confirmed that Kānuka, Ribbonwood, Olearia and Kowhai (despite kowhai being spindly) are the faster growing plant species selected. When taking into consideration* ***the proposed irrigation scheme*** *and a best-case scenario for weather, Wildlands are comfortable that these faster growing plant species can reach 3m tall within five years. The other chosen plant species will take slightly longer. When considering a poor weather scenario, Wildlands opines that it will take seven to 10 years both the fast and slower plant species to achieve a height of 3m.*
Overall, it is estimated that the proposed native landscape mitigation vegetation will take four to seven-ten years to reach the level of screening shown in the visual simulations."

Management Plan (Section 8.1.3) which would be insufficient to ether detect or monitor effects.

29. The photopoint monitoring method suggested in the Draft Vegetation Management Plan (Section 8.2) would provide a long-term visual record of gross changes at the site but is an inadequate method to assess change in the dryland flora at the site and the effectiveness of any interventions.

30. Quantitative targets for the outcomes of *Lepidium solandri* management are needed in the Vegetation Management Plan. The current Draft Vegetation Management Plan does not provide any measurable deliverables for the proposal to propagate, plant or monitor.

31. There is little detail about how the adaptive seasonal grazing would be managed and to what targets. I could not find detailed methods about how pest plant control or pest plant monitoring would be carried out.

Conclusions

32. The new vegetation survey Report provides me with greater confidence that the indigenous plant biodiversity *within* the Project site footprint and perimeter has now been adequately described. The Report therefore addresses the second matter in my evidence which was that information was too limited to tell whether the eastern part of the Project site continued to support indigenous plant species.

33. The new vegetation survey Report clarifies that vegetation within the Project footprint is mostly of limited value for indigenous plant biodiversity at present. However, the low-stature exotic dryland vegetation described is likely to continue to provide significant habitat for indigenous fauna (notably birds, but also potentially invertebrates which have not been searched for thoroughly). The Report clarifies that significant indigenous vegetation (including Nationally Critical plant species) occurs in some parts of the Project site perimeter (specifically the gullies which are part of the terrace edges).

34. The third matter in my evidence in chief was the potential effects of the Project on significant indigenous vegetation values on the terrace edges. The indigenous plant biodiversity there is ecologically significant and very likely to be adversely affected by the Project's activities. The limited new survey confirmed that significant ecological values on the terrace edge outside the Project site are still present (including Nationally Critical plant species) but did not attempt to adequately document those values.

35. Areas of panels on the terrace surface are likely to cause edge effects on the terrace edge ecosystem if not sufficiently set back. Figure 2 in the Draft Vegetation Management Plan also indicates a continued intent to install landscape screening plantings on the perimeter of the site directly adjacent to terrace edges at the south of the Project site. Those plantings are likely to cause edge effects that remove or substantially degrade the significant ecological values on the terrace edge, especially (but not only) if they are irrigated as set out in my evidence in chief.

36. Sufficiently wide buffer zones between terrace edge ecosystems and both panels and screening plantings will be needed to ensure that the significant terrace edge ecological values are protected from edge effects. Those buffer zones are also a necessary prerequisite for enhancement of existing indigenous dryland habitats through the Vegetation Management Plan, because they are needed for the dryland habitats to persist at all.

37. The vegetation monitoring proposed in the Draft Vegetation Management Plan would not be adequate to detect effects on and changes in the dryland flora and vegetation. I have outlined a more appropriate approach to monitoring based on my experience measuring edge effects in the Mackenzie Basin.

Susan Walker

27 February 2026

Attachments

Attachment 1. Map of The Point Solar Farm (TPSF) Project site showing the six plot locations with indigenous vegetation referred to in this evidence.

Attachment 1

Attachment 1. Map showing the locations of seven plots referred to in the text (paragraphs 12 & 13). Pts PT1, PT5, PT12, PT49, PT58 and PT123 are indigenous vegetation and Pt68 may be indigenous vegetation as the plot sheet shows three unidentified grasses.