

Review of the Far North Solar ‘Preliminary Design’ plans for the predator-proof reserve area (invertebrate reserve) and lizard habitat enhancement area

Warren Chinn
Technical Advice
Invertebrate ecology
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Introduction

The following short report was written in response to additional information provided by Fast Track applicant, Far North Solar in regard to their solar farm application in the Mackenzie Basin. My component to this process relates to invertebrate ecology and is closely linked to the Wildlands Terrestrial Invertebrate Management Plan (TIMP) (Wildlands 2026). The following discusses information on the Fast Track web page dated 18 May, 2026 (request No. 10), <https://www.fasttrack.govt.nz/projects/the-point-solar-farm/reports-and-advice>.

My experience and qualifications are included in my statement to the panel dated March 19, 2026. I continue to comply with the Code of Conduct for expert witnesses as set out in the March statement.

Material reviewed

Attachment 2 – Landscape Mitigation Plan Response (RMM 2026)

Attachment 4 – Erosion Sediment Control Plan

Attachment 6 – Predator Proof Reserve and Lizard Habitat Plan

Assessment and commentary of the above plans

1) Landscape Mitigation Plan

The landscape report produced by Rough, Milne, Mitchell Landscape Architects provides a useful overview of the predator proof reserve layout. This should be used in conjunction with the TIMP which lists plant species to be used for the reserves.

2) Erosion Sediment Control Plan.

This was a useful document because it provides information about silt and soil control during the solar farm construction. On sheet 1 of the sediment plan, the location of two silt ponds is shown, immediately adjacent and up-slope of the proposed lizard and invertebrate reserves. I have concerns about the location, duration and effects of the sediment control ponds on the (proposed) reserve habitat. I have produced a diagram (below) showing the two plans, side-by-side and the location of the silt ponds and reserves.

In my view, the silt ponds may be in conflict with the reserve areas, particularly in regard to the single, deep drainage channel within the invertebrate reserve area (second figure). This ‘reserve channel’ will currently have a very low and irregular flow regime, which has cut down through stony outwash gravels such that suitable basking habitat has been produced for rare grasshoppers, should they be introduced to the area.

My concerns are the potential for increased water flow into the dry channel (during solar farm construction) and the potential for additional silt build-up and concentration into the proposed reserve, compromising the habitat, either during or after construction is complete.

I appreciate why the silt ponds are being proposed for that location – it is the obvious outlet for surface runoff, but that could also conflict with the reserve design, fencing and hydrology.

3) Predator Proof Reserve and Lizard Habitat Plan

This Fast Track attachment number 6

(https://www.fasttrack.govt.nz/_data/assets/pdf_file/0020/28028/Attachment-6.pdf), provides two overview scale maps of the farm perimeter and details the two reserve areas. Both diagrams have omitted the location of the silt ponds (mentioned above) and neither show any build / engineering detail for the deep gully that cuts through the proposed invertebrate reserve.

This is an important point because on the one hand the gully provides what appears to be excellent habitat for *Sigaus robustus* (the threatened robust grasshopper), while also posing a fencing challenge in order to retain the habitat characteristics and hydrology (if water ever flows through the gully).

Additional points

The applicant's scale diagrams could benefit from orthographic images of the reserve proposals, including vegetation mock ups, fence configuration and actual site photographs and diagrams showing the details.

The design and engineering of the invertebrate and lizard reserve could be better coordinated in conjunction with the runoff and hydrology report. At present, it appears the two are unaware of each other and it looks as though there could be some technical and environmental conflict between the position of the sediment retention ponds and the invertebrate reserve.

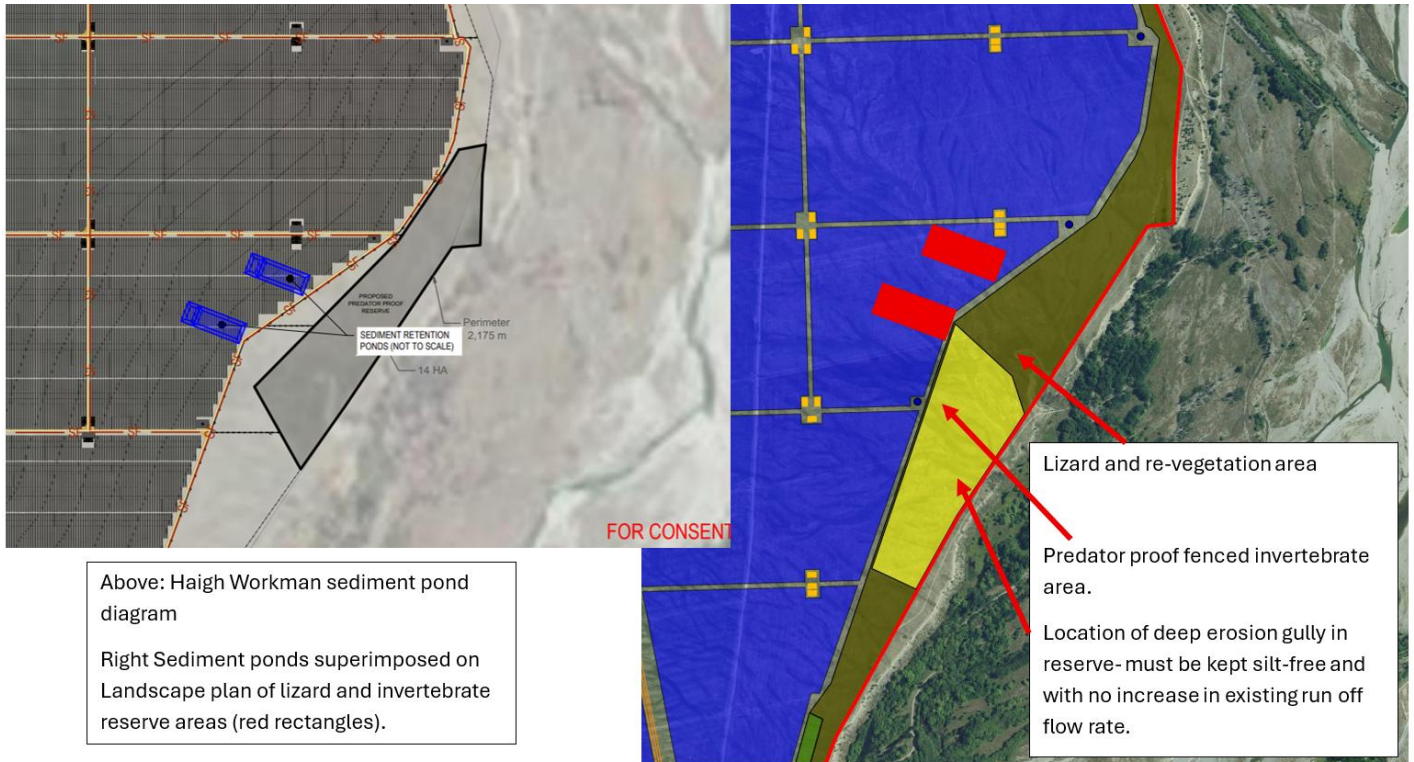
Unless otherwise included elsewhere in the solar farm plans, I would also include a telemetry meteorological station at the reserve area.

References

RMM 2026. Fast-track – Response to DoC – Landscape. Proposed Solar Farm the Point, Mackenzie Basin. Rough Milne Mitchell Landscape Architects unpublished internal client report. 10pp.

Wildlands 2026. Draft Terrestrial Invertebrate Management Plan for the Point Solar Farm at Twizel, Canterbury. Contract Report No. 6621h-ii. Unpublished internal client report, February 2026. 31pp.

Figures



Side-by-side plans from the sediment plan and the landscape plan, for the areas proposed for lizard and invertebrate habitat reserves. At left the blue rectangles are two sediment containment and run-off management ponds. At right are the locations of the two reserves. It appears that neither is aware of the other and there could be a conflict in the design of both elements.



Google Earth image of the historic drainage braids and stream channels across the surface proposed for the solar farm. The large gully (marked G) is proposed for inclusion in the invertebrate reserve and will remain the lowest drainage point for any runoff after the solar farm is established. There is the potential here for fencing complexity and hydrology management complexity.