

**BEFORE AN EXPERT PANEL
THE POINT SOLAR FARM**

FTAA-2508-1100

Under the **FAST-TRACK APPROVALS ACT 2024**

In the matter of an application for resource consent approvals for The Point Solar Farm

By **Far North Solar Farm Ltd**
Applicant

COMMENTS ON THE DRAFT AVIFAUNA MANAGEMENT PLAN
RACHEL KATHERINE MCCLELLAN
27 February 2026

Royal Forest and Bird Protection Society of New Zealand

Solicitor Acting:

T C T Williams

Email: [REDACTED]

Phone: [REDACTED]

1. My full name is Rachel Katherine McClellan.
2. I have been asked by the Royal Forest and Bird Protection Society to provide comment on the draft Avifauna Management Plan¹, prepared by Wildland Consultants for The Point Solar Farm, Mackenzie Basin.
3. My qualifications and experience are as set out in my evidence dated 19 February 2026.
4. The Applicant's ecologists have undertaken a follow-up survey on 11-13 February 2026. Three further walking transects were completed, and 12 15-minute flight height surveys. Also completed were eight 5-minute bird counts off site at adjacent areas of potential importance to avifauna, including Lake Benmore, the Ōhau River, and Twizel River.
5. The new survey work on birds has produced no further information on Threatened and At Risk bird species using the site, largely due to its timing outside of the breeding season when most key species of interest are no longer present inland (e.g. black-fronted tern, black-billed gull, wrybill, South Island pied oystercatcher, and banded dotterel).
6. It is not clear why eight five-minute bird counts were undertaken outside the site in areas of "potential importance to avifauna". The proposed solar facility is surrounded on two sides by an internationally recognised important bird area comprising the Ōhau, Pūkaki, and Takapō rivers. Combined with the Ōhau C Ponds and Lake Benmore, these sites support 13 Threatened and At Risk bird species; they are very important to avifauna.
7. Recommendations for the management of effects in Sections 7.1-7.5 are appropriate.
8. Recommendations to reduce the potential for bird strike (Section 7.6) is limited to impacts with solar panels and does not include mitigation for the risk of collision with overhead cables, buildings, fences and other structures. This should be addressed given the location of the proposed facility in an area of high activity by Threatened and At Risk bird species.
9. As discussed in my evidence, the efficacy of spacings between panels and anti-reflective coatings at reducing collisions with solar panels has not been tested in the field.

¹ Wildland Consultants 2026: Avifauna management plan for The Point Solar Farm at Twizel, Canterbury. Wildland Consultants Contract Report No. 6621h-i. Prepared for Far North Solar Farms Ltd. 19p.

10. No mention is made of the use of panel coatings that reduce the ‘polarisation trap’ caused by solar panels, whereby aquatic insects such as mayflies, caddisflies, and dragonflies are attracted to the surfaces of panels, cannot escape, and often lay eggs on to such surfaces which then perish². The facility is proposed for a location directly adjacent to multiple habitats for aquatic insects. These insect groups are a primary food source for bird species such as black-fronted terns. If aquatic insects are strongly attracted to the panels, causing significant population impacts, this could have flow on effects on bird species, including potentially increasing the risk of collision.
11. Panels will be stowed at 55 degrees from after sunset until before sunrise to reduce the potential for the polarisation of moonlight. Presumably these panels cannot be stowed vertically, which would likely reduce reflection more – this was discussed as a potential mitigation action at the Glorit Solar Farm avifauna hearing³.
12. Recommendations for the management of effects in Sections 7.7-7.11 are appropriate.
13. The objectives of on-site bird monitoring (Section 7.12) are unclear, and no method is stipulated. It appears that the purpose is to detect changes in abundance or behaviour, but there is no baseline from which to assess changes. Weekly monitoring is proposed during construction, reducing to fortnightly post-construction, for at least two years. This is particularly high intensity monitoring given the lack of a clear objective and the absence of a baseline. No discussion on what the “proactive response” will be if changes in abundance or behaviour are detected during construction or the first two years of operation.
14. Also proposed is off-site monitoring in important bird areas, all of which are rivers. Birds in these rivers have been surveyed since the 1960s and continue to be surveyed by the Department of Conservation on a relatively regular basis. Recent analysis of data for the Takapō, Ōhau, and Pūkaki rivers is available⁴. No objective for this monitoring is stated, and its purpose is unclear.
15. Much more informative would be bird monitoring in similar adjacent terrestrial habitats to provide a comparison with bird use within the solar farm, as well as vegetation, invertebrate, and lizard changes. This also has the potential to provide

² Fritz B., Horváth G., Hünig R., Pereszlényi A., Egri A., Guttman M., Lemmer U., Kriska G., Schneider M. and Gomard G. 2020: Bioreplicated coatings for photovoltaic solar panels nearly eliminate light pollution that harms polarotactic insects. PLoS ONE 15(12): e0243296. <https://doi.org/10.1371/journal.pone.0243296>

³ Joint Statement of Experts: Ecology (Avifauna), 21 May 2025. For the applications for resource consents by Glorit Solar P LP for activities associated with the Glorit Power Scheme.

⁴ Population analyses of all waterbird species in the Waitaki Catchment in: Whitehead A., Hoyle J. Bind J. and Sykes J. 2023: Freshwater birds and riverbed vegetation in the Waitaki catchment – Current state of knowledge. NIWA Client Report No. 2020122CH. Prepared for Meridian Energy. 171p.

data on background mortality levels of birds in terrestrial habitats to compare with mortality rates within the solar farm.

16. Post-construction carcass monitoring protocols lack detail (Section 7.13) such as:
 - Size of survey area, that is, proportion of solar farm.
 - Habitats surveyed.
 - Are survey areas repeated or altered each iteration.
 - Carcass detection trials.
 - Carcass persistence trials.
 - Frequency of surveys including seasonality.
 - Method used to determine species identification and cause of death.
17. The proposed solar farm is in an area that supports kakī, one of the world's rarest bird species. It is imperative that if a kakī collides with structures at the solar farm, it is found through carcass monitoring. The protocol for carcass searches must have this as its core focus.
18. Searching only a section of a solar or wind facility each time is standard practice but inevitably leads to carcasses being missed. Carcasses found within the search area are used to estimate the rate of mortality across the facility (various methods exist to calculate this). However, if one of the key species of interest is very rare, only sampling a proportion of the facility each time may result in not detecting incidents of mortality, each of which is of critical importance. In my opinion, it is very important that the whole site is sampled at sufficiently short intervals that a carcass will not deteriorate or be scavenged in the interim.
19. This interval is determined by undertaking carcass persistence trials. The absence of these trials in the Avifauna Management Plan is unacceptable.
20. The Avifauna Management Plan also makes no mention of carcass detection trials. These are used to assess the rate at which a searcher can detect carcasses that are present, and form part of the calculation of mortality rates across the facility. These also must be a component of a robust carcass monitoring protocol.
21. The Avifauna Management Plan does not specify if carcass monitoring will be undertaken throughout the year for the first three years of operation. In my opinion it should be as species such as Australasian bittern and kakī will be present year-round.
22. The Avifauna Management Plan indicates that if Threatened or At Risk species are found dead at the facility, the Suitably Qualified Avifauna Ecologist *may* recommend that monitoring continue. This is inappropriate. Monitoring must continue for a specified period if any trigger levels are met.

23. As I set out in my evidence, carcass detection dogs should be trained to undertake searches. Trained dogs have a much higher rate of carcass detection than people, and can cover ground considerably faster, leading to reduced monitoring costs⁵. Given the training and certification requirements for conservation dogs, it may be necessary to begin carcass searches with people and change to using dogs at a later date. This is preferable to not using dogs at all.
24. As I set out in my evidence, major issues with carcass monitoring at solar facilities include high proportions of carcasses that cannot be identified to species in the field, and for which a cause of death cannot be assigned. The protocol set out in the Avifauna Management Plan states that the searcher should record details of the carcass including “Species (if known)”, and “Cause of death (if known)”. This will lead to the inevitable classifications of ‘unknown’. This is inadequate in a location with high activity of multiple Threatened and At Risk bird species.
25. It seems likely to me that the people employed to search the solar facility will not necessarily have the skills to identify carcasses – which may be reduced to only ‘feather spots’ – to species, or determine if a carcass has injuries indicative of collision. For this reason, all carcasses must be collected and sent for independent autopsy. This will allow for DNA analysis if required, and examination of carcasses for internal trauma or broken bones. As such, protocols must include how carcasses will be collected and conserved for transit.
26. Finally, carcass monitoring protocols must be reviewed by the Department of Conservation.

Rachel McClellan
27 February 2026

⁵ For example, Smallwood K.S., Bell D.A. and Standish S. 2020: Dogs detect larger wind energy effects on bats and birds. *The Journal of Wildlife Management* 84: 852-864.