



Memorandum

TO: Sara Westcott

FROM: James Lambie

Date: 15 June 2026

Subject: Review of Foxton Solar Application for effects on wetlands and terrestrial ecology

Dear Sara,

I have read the Foxton Solar Farm substantive application and associated assessment of effects with respect to wetlands and terrestrial ecosystems and potential adverse effects on flora and fauna. I visited the site on 28 April 2026.

Wetlands

I concur with the assessment of the extent and value of natural inland wetlands within the solar farm platform. I concur with the assessment laid out in Section 4.1.1 of the Ecological Impact Assessment (Appendix I) that none of the affected wetlands meet the One Plan SCHED 6 criteria.

The assessment presented in Section 4.2.2.2 that the wetlands are “*not habitat for indigenous flora or fauna*” is not technically correct. During the field visit, I noted the presence of at least ten of each of native black-back gulls (*Larus dominicanus*) and white-faced heron (*Egretta novaehollandiae*). These birds are more than likely using the paddocks and associated wetland features for foraging. However, in terms of faunal use, I am of the view that it is fair to conclude that the wetlands are not significant native vegetation or significant habitats for native fauna or flora. In this regard, I agree with the overall assessment that the value lies “...*only in the remnant wetland hydrology [and] potential of these wetlands for future restoration*” (Appendix I, Section 4.2.2.2, paragraph 1).

I note that the approach (as directed in the proposed conditions) is to avoid affecting the hydrosystems where they can be avoided and reduce the effect on wetlands down to as far as practicable. The assessment describes that under these circumstances there may be subtle effects on 0.79 hectares of wetland habitat.

It is not anticipated that the project will directly affect wetland extent¹, and the existing wetland vegetation will more than likely persist under lower-intensity sheep grazing as posed. There is potential for a subtle change to hydrology, but this is a residual that, in my view is not ecologically significant.

I am of the view that the strategies undertaken to limit the effect on wetlands is reasonable and that the assessment of magnitude and scale of effect on wetland habitats as being very low is a fair assessment.

Very low levels of ecological effect rarely require further strategies to manage them. However, I am of the understanding that the National Environmental Standards for Fresh Water (NES-F) requires that any adverse effects (significant or otherwise) that arise from wetland disturbance remain effects to be managed. The proposed 1-hectare of wetland vegetation restoration is much larger than the affected area and I believe this will result in a significant improvement in the form of indigenous vegetation dominance in the recipient wetlands. As there are no significant residual adverse effects within the affected wetlands to be managed in the first instance, I am of the view that the strategy results in a demonstrable gain in wetland quality. I agree with the conclusion reached by the applicant's ecologists (Appendix I, section 4.2.6) that this is a positive outcome.

With regard to certification of the Landscape Management Plan

I observe that it is normally the case that Horizons has a certifying role on plans that prescribe wetland planting designed to manage adverse effect on natural inland wetlands. Without delving into my understanding of how the relevant policy instruments (namely the NES-F and NPS-FM) work, I cannot see any reason why this application should be any different.

I am of the view that Horizons has a certifying role with regard to the Landscape Management Plan with respect to the wetland planting. I recommend that the Manawatū-Whanganui Regional Council also be listed as an agency for technical certification of the LMP under proposed condition B22.

Terrestrial habitats and indigenous flora

The impression I ascertained over my site visit in April 2026 that there is no significant terrestrial native vegetation and no at risk or rare flora within the site

With respect to faunal use, there does not appear to be any significant terrestrial habitats of fauna. The conclusion that can be drawn from the assessment of each of birds (4.1.2), bats (4.1.3), and lizards (4.1.4) is that the site offers very little habitat value to these faunae. I add that the same is very likely to be true for at risk or threatened invertebrates.

I am therefore of the view that the proposed 16 hectares of general native vegetation planting is over and above that which would be required to address residual effects relating to native terrestrial vegetation and habitats of native fauna and flora. I agree with the conclusion reached by the applicant's ecologists (Appendix I, section 4.2.6) that this is a positive outcome.

Indigenous fauna

The potential for direct impacts on native fauna is highly limited due to the limited nature of valuable faunal habitat.

The assessment of potential for bat roosting habitat (little to none) with no detection of bats leads to the conclusion that potential harm to bats is very low. The assessment is fair and I agree that no further response is necessary although note that bat collision monitoring is a feature of the Avifauna Monitoring condition suite. I support this approach as once that remains cautious of unanticipated effects on native bats.

¹ I have disregarded the effect of removing irrigation. To my mind, this is an effect that could happen irrespective of whether the solar farm proceeds or not, as the farmer is entitled to surrender the consent at any stage.

Some potential lizard habitat has been noted (Appendix I, section 3.4.4), but the potential for direct effects on lizards is assessed as very low due to the likelihood that lizards are not present, or that if they are present, they are in very low numbers. The assessment that the effect on lizard populations is likely to be low is fair with respect to common species. With regard to rarer lizard species, it should be anticipated that the levels of detection are likely to be very low but (unlike bats) I believe it remains possible that they are present. A non-detect is not proof of absence and so some precaution is warranted. I note that the summary of effects and proposed mitigation (Appendix I, Table F) identifies that an incidental discovery condition, while not required, is recommended. I concur with this recommendation.

A recent review of the potential for bird collisions with solar farms (presented by Dr Colin O'Donnell at the recent Ecological Society Conference (November 2025)) identifies that collision is plausible but there is insufficient information to establish the level of risk. Dr O'Donnell's recommendations are to avoid establishing large solar farms along known migratory pathways and to establish a research-like approach to monitoring collisions at solar farms.

The site lies near (7km) the Manawatū Estuary which is a recognised hot spot for migratory wading birds. However, as far as I can ascertain, the proposed solar farm does not lie along a known fly way, is not located between areas of high value native migratory bird habitat, or located near any large wetlands or open bodies of water that provide habitat linkages for waterfowl. The conclusion that the potential effects are likely to be very low is reasonable, acknowledging that there is a residual risk associated with uncertainty. To manage the uncertainty, I support the proposal to include incidental avifauna monitoring mortality check following the Avifaunal Monitoring condition suite as proposed.

I don't support a more structured approach to refine and control the level of search activity for two reasons:

- The anticipated level of effect does not justify the cost of the perceived increase rigour that might arise from more structured monitoring;
- An empirical approach, while good at controlling bias, could lead to missing irregular or rare collision events.

As far as I understand staff movement around the site, there will be someone permanently on-site undertaking solar farm maintenance checks, managing sheep, and maintaining the plantings. I believe there is a good chance that incidental avifaunal monitoring will identify a rare collision event, particularly of a large rare bird such as Australasian heron | matuku-hūrepo (*Botaurus poiciloptilus*). What is proposed is sufficiently robust to inform adaptive management.

While I support the intent of the avifaunal monitoring conditions, there are aspects of the wording of condition B34 that causes me concern. The way the condition is worded restricts all future effects management to "...*recommendations about on-going mitigation, if required*". The condition lacks certainty and does not commit to any more than making recommendations.

One suggestion is that the scope of the condition be broadened to require the SQEP to develop an avifaunal management plan, should trigger values for such a plan be met. In this way, the intended flexibility of "*if required*" is retained but is tied to an agreed set of circumstances where effects would be managed if they are deemed significant.

The following trigger values have been proposed for another solar farm application within Horizons' region.

Threat classification	Threshold to trigger management actions to mitigate against more than minor effects
Threatened - Nationally Critical and Nationally Endangered species	1 carcass detected at any time
Threatened - Nationally Vulnerable Species	2 carcasses detected within any single survey; or 5 carcasses cumulatively over an annual period
Threatened - Nationally Increasing and At-Risk species	5 carcasses cumulatively over an annual period
Non threatened native species	5 carcasses detected within any single survey, 20 carcasses cumulatively over an annual period.

In that application, the need for an avifaunal management plan (AMP) is a given and the trigger values are the criteria to be contained within the AMP that identify when effects are deemed more than 'low' (i.e. effects that require some kind of response).

In the case of the Foxton Solar Farm, I am not suggesting that an AMP be conditioned in the first instance. Rather, I suggest that these trigger values be used to determine if an AMP is warranted. The content and structure of the AMP would be determined by a future SQEP as warranted by them. A future avifaunal management plan could be as simple or as complex as deemed necessary by the SQEP with approaches to remedy, mitigate, offset, or compensate (or all four) the effects as warranted.