



Fast-Track Applications Manager

Acting pursuant to delegated authority on behalf of the Director-General of Conservation.

Date: 19/02/2026

Note: A copy of the Instrument of Delegation may be inspected at the Director-General's office at Conservation House Whare Kaupapa Atawhai, 18/32 Manners Street, Wellington 6011

Comments on a fast-track consenting application

Fast-track Approvals Act 2024 section 53

To: The Expert Panel

From: Director-General of Conservation

Regarding fast-track project: The Point Solar Farm

Fast track Reference: FTAA-2509-1100

1. Overview

- 1.1. Far North Solar Farm Limited ('FNSF' or 'the Applicant') has applied for the relevant approvals that would otherwise be applied for under the Resource Management Act 1991 (RMA) and the Conservation Act 1987 to construct, operate, maintain and decommission a utility scale photovoltaic solar farm (solar farm) across approximately 670 hectares at the northern shore of Lake Benmore between the Pūkaki River and the Ōhau C hydro canal.
- 1.2. The proposed solar farm will comprise photovoltaic solar arrays, power station (comprising an inverter and transformer), reticulation cables and a substation facilitating a connection to the National Grid. The solar farm is expected to generate approximately 450 megawatts-peak (MWp) of renewable electricity.
- 1.3. In accordance with sections 53(2)(k) and 53(2)(m)(i) of the Fast-track Approvals Act 2024, the Director-General of Conservation has been invited to comment on the substantive application. Statutory delegations are in place for the Department of Conservation (DOC / the Department) to provide commentary on behalf of the Director-General.
- 1.4. The proposed solar farm is not on public conservation land, but access and telecommunications cables to service the solar farm will cross the Bendrose Stream Marginal Strip. Lake Ruataniwha Conservation Area is adjacent to the proposed site.
- 1.5. The Applicant has facilitated discussions with their experts and DOC staff (including its ecology experts) and assisted the Department in developing its understanding of the Project. The proposal was the subject of a previous application under the RMA, which DOC also engaged in.
- 1.6. DOC is supportive in principle of renewable energy generation proposals but considers that adverse effects on conservation values, including indigenous biodiversity, that arise as a result must be appropriately managed. This is of particular importance where the species affected are Threatened or At-Risk and where those effects may be cumulative.

- 1.7. These comments were prepared prior to further ecological field survey results being available (due 23 February 2026). It is therefore possible that there may be further ecological values or effects that need to be considered, which DOC will address in further comments as provided for in Minute 5 of the Expert Panel.

2. Department of Conservation advice

- 2.1. This advice provides comments on the application relating to the actual and potential ecological effects of the Project, but only high-level commentary on the proposal's consistency with the wider statutory framework.
- 2.2. The site that will be occupied by the footprint of the solar farm has relatively low terrestrial ecological values, but there are threatened indigenous plants close to the footprint, as well as habitat for indigenous invertebrates and lizards. The effects of the development on these values will need to be managed, and there are opportunities for ecological enhancement outside the farm footprint.
- 2.3. FNSF has proposed development of an ecological enhancement area, comprising of a predator exclusion fence and active management for vegetation, invertebrate and lizard values. DOC is generally supportive of this approach, subject to further development of the proposal.
- 2.4. The site is used, and flown over, by a range of indigenous birds, including by three Threatened - Nationally Critical species ((kakī / black stilt, matuku-hūrepo / Australasian bittern and kōtuku / white heron), the Nationally Endangered tarapirohe / Black-fronted tern, and 14 other Threatened or At-Risk species. Tracking data and sighting records show high numbers of kakī and tarapirohe in particular traversing the site. If birds of these species are killed in collisions with the solar farm, it could have significant impacts at a species level.
- 2.5. FNSF has proposed funding towards large-scale predator control to provide compensation for avifauna impacts. DOC is also generally supportive of this approach, subject to further development of the proposal.
- 2.6. If consent is granted, DOC considers that compensation will be required to address residual adverse effects on terrestrial and avifauna values. As noted above, DOC is generally supportive of the Applicant's current approaches to enhancement and compensation. However, these measures would still need to sit within a wider set of consent conditions, management plans, monitoring and reporting as part of overall effect management.
- 2.7. DOC is also concerned about the cumulative effects that may arise on the sensitive values in the wider Mackenzie Basin due to the on-going development of utility scale solar farms.
- 2.8. DOC has relied on the advice and technical expertise of Technical Advisor Warren Chinn, Principal Science Advisor Dr Colin O'Donnell ONZM, Technical Advisor Richard Ewans and

consultant lizard ecologist Dr Mandy Tocher. Site visits were generally undertaken as part of the earlier RMA application, although Dr Tocher visited the site on 6 February 2026.

- 2.9. DOC notes that separate approvals will be required under the Wildlife Act 1953. The information DOC has received to date is that the site contains a number of species of protected wildlife (McCann's skink, Southern Alps gecko, southern grass skink, and robust grasshopper). Wildlife Act approval will be required to catch, kill, hold or release individuals of these species. As Wildlife Act approval was not included in the Fast-track listing, we understand that FNSF will seek this through the standard Wildlife Act process.
- 2.10. FNSF has also applied for a concession under the Conservation Act 1987, for easements over the Bendrose Stream Marginal Strip for right of way and right to convey telecommunications. DOC has provided a separate report addressing this under s51 of the FTAA, which concludes that the application can be granted subject to standard conditions for such easements. DOC considers there are no issues in terms of that concession application that need to be addressed under these s53 comments.

3. Ecological Context

- 3.1. The floor of the Mackenzie Basin is dominated by moraines, outwash terraces, alluvial terraces and riverbeds. The fluvio-glacial landforms form extensive sequences stretching from the main upper valleys and lakes to the lower part of the Basin at the Waitaki River. They are exceptional nationally¹ for their scale, connectedness and lack of modification. Nowhere else in the eastern South Island are intact fluvio-glacial landforms present to this extent.
- 3.2. These depositional landforms are classified as 'historically rare' (aka 'naturally uncommon') ecosystems. The national importance of these landforms is recognised by their threat status: outwash gravels (critically endangered), braided riverbeds (endangered), and moraine (vulnerable).²
- 3.3. The site of the proposed solar farm lies on inland outwash gravels (late Otiran outwash surface). It is an integral part of an outwash terrace sequence extending from near Lake Pukaki to the Lake Benmore delta. Parts of the terrace support indigenous vegetation, notably the northern end which is protected as Ben Ohau Conservation Area. Other parts are highly modified, such as the areas beneath pivot irrigators. Nevertheless, the overall outwash terrace landform is intact, and the low-stature vegetation continues to provide important habitat for indigenous fauna (notably birds).

¹ Statement of evidence of Michael Harding, Terrestrial Ecology, Haldon Solar Farm FTAA application, 2 February 2026.

² Dry moraines such as those in the Mackenzie Basin would be considered to be critically endangered: Holdaway RJ, Wiser SK, Williams PA. 2012. Status Assessment of New Zealand's Naturally Uncommon Ecosystems. Conservation Biology 26(4).

4. Assessment

Flora values and assessment

- 4.1. The site is a Naturally Uncommon Ecosystem (Inland Outwash Gravels)³ classified as Critically Endangered⁴. Therefore, any indigenous vegetation is ecologically significant under NPS-IB⁵ and Canterbury RPS⁶ significance criteria.
- 4.2. Initially, in both RMA and Fast-track contexts, the project proposed large scale ecological restoration plantings (c. 82 hectares), a position held until very recently. The latest proposal has substantially reduced the scale of restoration plantings. In addition, further ecological survey work is currently being undertaken, the results of which will not be available to DOC prior to these comments being due.
- 4.3. It also appears that the eastern part of the site has been further developed into pasture since the previous RMA proposal. This may have altered some of the values previously recorded on the site, which will presumably be confirmed by the current ecological surveys.
- 4.4. Therefore, these comments are broad and subject to update based on the results of further ecological survey work and redesign of the ecological restoration plantings.
- 4.5. Further information is contained in Appendix B, which provides comments on the terrestrial flora and ecosystems components of the proposal by Richard Ewans, Senior Technical Advisor Ecology, Flora & Ecosystems.

Vegetation within the development footprint

- 4.6. Current vegetation is described in the May 2023 Wildlands ecological assessment (EA) based on a single day's field work by one person and subsequently verified by a Wildlands site visit on 20 January 2026. DOC considers this is inadequate for Threatened and At-Risk plants species on and adjacent to the property, an issue identified by the Panel and being addressed by the further survey work currently being undertaken.
- 4.7. There was also a one-page undated report prepared by AgScience provided to the Panel. The conclusions of that report have been contradicted by the Wildlands updated surveys as reported in the 9 February information request response, and DOC considers the AgScience report has no probative value and should bear no weight in the Panel's considerations. We do not consider it any further in these comments.

³ Williams PA, Wiser S, Clarkson B, Stanley MC. 2007. New Zealand's historically rare terrestrial ecosystems set in a physical and physiognomic framework. *NZ Journal of Ecology* 31: 119-128.

⁴ Holdaway RJ, Wiser SK, Williams PA. 2012. Status Assessment of New Zealand's Naturally Uncommon Ecosystems. *Conservation Biology* 26(4).

⁵ Ministry for the Environment. 2023. National Policy Statement for Indigenous Biodiversity (Appendix 1).

⁶ Environment Canterbury. 2021. Canterbury Regional Policy Statement 2013 (Appendix 3).

[CanterburyRegionalPolicyStatement2013July2021 \(1\).PDF](#). Accessed 26/11/2025.

- 4.8. The EA found the site to be dominated by exotic pasture and herbfield. This is broadly correct, with some small gullies on the east of the property and stony ground on site margins supporting indigenous vegetation.
- 4.9. The EA identified one At-Risk – Declining species (matagouri; *Discaria toumatou*) within the project footprint. This species is now classified as Not Threatened in the latest New Zealand Threat Classification report.⁷ Survey work on 20 January 2026 confirmed the presence of the At-Risk – Declining scabweed (*Raoulia australis*) within the property.
- 4.10. Most of the site has been substantially modified by physical clearance of indigenous vegetation and is now 'converted land' (land where indigenous vegetation has been fully removed and replaced with exotic pasture species or crops). However, small pockets of indigenous vegetation remain, and the time spent on site is yet to be sufficient to find occurrences of Threatened or At-Risk plant species that were missed initially, may have recolonised since the initial survey work 3 years ago, or lie close to the boundary and may be subject to cross-boundary edge effects.

Threatened and At-Risk species close to the development footprint

- 4.11. Then EA recorded the following Threatened and At-Risk plant species just outside the site boundary:
- *Lepidium solandri* (Threatened - Nationally Critical)
 - scabweed/*Raoulia australis* (At-Risk – Declining)
 - stout dwarf broom/*Carmichaelia monroi* (At-Risk – Declining)⁸
- 4.12. A nationally important population of *Lepidium solandri* (Threatened - Nationally Critical) occurs immediately adjacent to the property on the terrace edges (see Appendix B). These plants are within between 20 m and 100 m of the property boundary, so at risk of being impacted by edge effects from construction activities, landscape plantings and irrigation.
- 4.13. Such edge effects alter indigenous vegetation composition by increasing exotic grass cover beyond development footprints and are associated with intensifying land development, particularly irrigation and exotic forest. These effects can extend 10's to 100's of metres by altering microclimate, soil moisture and seed input, favouring exotic pasture species which outcompete low growing indigenous plant species.
- 4.14. In this case, the solar farm itself is highly likely to result in greater exotic grass biomass across the site and irrigation of plantings on the boundary will likely elevate soil moisture and promote exotic grass across the boundary.
- 4.15. Several other low growing (and vulnerable to habitat modification) At-Risk plants typical of inland outwash gravel terraces are known to be located immediately adjacent to the property.

⁷ de Lange PJ, Gosden J, Courtney SP, Fergus AJ, Barkla JW, Beadel SM, Champion PD, Hindmarsh-Walls R, Makan T and Michel P. 2024. Conservation status of vascular plants in Aotearoa New Zealand, 2023. New Zealand Threat Classification Series 43. 105 p.

⁸ This is more likely *Carmichaelia vexillata* which has the same threat status.

These include *Xanthoparmelia semiviridis*, *Raoulia monroi*, *Raoulia parkii*, *Convolvulus verecundus* f *verecundus*, *Muehlenbeckia ephedroides*, *Poa maniototo*, and *Carex resectans* (all At-Risk – Declining).⁹ It is likely *Pimelea sericeovillosa* subsp. *pulvinaris* (Threatened – Nationally Vulnerable) is also present.

- 4.16. Landscape screening planting is proposed along the southern boundary and lower eastern boundary (and northern boundary). It is proposed to use irrigation to facilitate growth of the plantings. The addition of water will facilitate exotic grass and weed growth around the plantings and spray irrigation could carry water significant distances in north-westerly strong winds which are a common climatic feature in the Mackenzie Basin. These effects do not appear to have been considered or addressed by the Applicant at this stage (subject to the further ecological reports).
- 4.17. DOC considers that this issue requires further assessment, but as a starting point no irrigation should be undertaken within 100m of the property boundary due to the risk of edge effects, and detailed monitoring of adjacent Threatened and At-Risk plant populations should be included in conditions of consent, including baseline monitoring.

Ecological restoration plantings

- 4.18. Although the approach to ecological restoration planting is currently under re-consideration (Applicant's 9 February 2026 response to the Panel's request for further information), the following principles should be applied to whatever planting is finally proposed:
- Ecological restoration plantings should be ecologically appropriate to the site as per advice provided to the Applicant by DOC in mid-2024, to design plantings that are compositionally similar to nearby short tussock grassland and shrubland areas (see Appendix B for further details).
 - Irrigation should not be used, to avoid edge effects beyond the plantings.
 - Use of properly eco-sourced and hardened off ecologically appropriate plants is essential to minimise losses without irrigation.

Landscape screening plantings

- 4.19. DOC considers that landscape screening plantings should also be ecologically appropriate to the site, so subject to the same principles as above for ecological restoration plantings (see further recommendations in Appendix B)
- 4.20. The landscape mitigation plant palette in the Landscape Assessment Report by RMM Landscape Architects dated 25 May 2023 included several species that DOC would consider inappropriate, which could result in establishment of spreading native 'weeds' e.g. kānuka (*Kunzea robusta*), or visual effects less desirable than no screening e.g. tall rows of lowland ribbonwood.

⁹ Mike Harding Environmental Consultant, pers. comm., 11 February 2026.

4.21. DOC recommends that the planting lists for landscape screening plantings therefore should be reviewed in line with the recommendations in Appendix B.

Terrestrial invertebrate values and assessment

4.22. Invertebrate values are assessed in the Wildlands EA. Mr Chinn, an expert invertebrate ecologist with DOC, has reviewed the EA, and the subsequent revised approach to ecological restoration provided on 9 February. He considers the revised approach is appropriate and, subject to final design and management, can provide benefits for invertebrate conservation.

4.23. As with the vegetation survey, the EA section on invertebrates was based on only one day of field survey, and Wildlands have noted that survey effectiveness was likely impacted by the lateness of the season and hot conditions at the time of the visit. It is therefore likely that more species are present within and close to the site than currently recorded. This would potentially include a number of Threatened and At-Risk species (Robust grasshopper *Brachaspis robustus*, minute grasshopper *Sigauss minutus*, short-horned grasshopper *Phaulacridium otagoense*, and Tekapo ground wētā *Hemiandrus fabella*).

4.24. Potential effects of the solar farm development on invertebrates include direct mortality and injury due to vehicle movement and pile driving, and alteration of invertebrate habitats due to earthworks, compaction of road surfaces and creation of building pads.

4.25. It is also likely that shading during the solar farm operation will reduce incident solar radiation at ground level leading to changes in microclimatic conditions such as soil moisture levels, humidity, snow retention period and temperature. These changes can directly affect invertebrate activity, behaviour, metabolism, reproduction and life stage survival and indirectly affect the quality of habitat for invertebrates.

4.26. The Applicant has proposed the following measures to address impacts on invertebrates:

- Creation of a predator-fenced reserve, which will be actively managed for ecological values, including for invertebrates. Initial details of this were included in the 9 February further information, with further details to be provided on 23 February; and
- Preparation of a Robust Grasshopper Management Plan.

4.27. DOC is generally supportive of these measures, subject to the results of the current further ecological surveys, and the further detail to be provided on ecological enhancement.

Lizard values and assessment

4.28. The Wildlands EA recorded two species of lizards on the site - McCann's skink (*Oligosoma maccanni*; Not Threatened) and Southern Alps gecko (*Woodworthia "Southern Alps"*; At-Risk – Declining). The main habitat recorded for lizards was in rock piles and dense vegetation.

4.29. The field survey undertaken for DOC (see Appendix D) also recorded southern grass skink (*Oligosoma aff. Polychroma* Clade 5, At-Risk – Declining). Note that the survey found

Southern grass skink relatively more common than McCann's skink, raising the possibility that some of Wildlands' McCann's skinks were mis-identified southern grass skinks.

- 4.30. The best habitat for lizards was considered to be the stonefields over the eastern margin of the site, in the vicinity of the updated ecological enhancement proposal.
- 4.31. Potential effects of the solar farm development on lizards include direct mortality and injury due to vehicle movement and pile driving, alteration and permanent removal of habitats due to earthworks, and potential changes to microclimate conditions / predator loading over restoration areas.
- 4.32. The Applicant has proposed the following measures to address impacts on lizards:
- Creation of a predator-fenced reserve, which will be actively managed for ecological values. Initial details of this were include in the 9 February further information, with further details to be provided on 23 February; and
 - Preparation of a Lizard Management Plan; and
 - Seeking Wildlife Act approval for impacts on lizards (noting this will be through 'business as usual' processes as it was not included in the Fast-track listing).
- 4.33. DOC is generally supportive of these measures, subject to the results of the current further ecological surveys, and the further detail to be provided on ecological enhancement.

Avifauna values and assessment

- 4.34. The proposed solar farm is at one of the busiest known bird flyways in the Mackenzie Basin; being located adjacent to numerous breeding sites on the Twizel, Pūkaki, Tekapo and Ōhau Rivers, and comprising a complex mosaic of wetlands and braided river breeding habitats, with many breeding sites located within 100 m of the proposed solar farm site (see Figures 1-6 in Appendix C).
- 4.35. In comparison with the other Mackenzie Basin solar farm under current consideration (Haldon Solar Farm), this site sits directly on many flyways rather than adjacent to them.
- 4.36. At least 18 Threatened and At-Risk bird species have been recorded on or in the vicinity of the proposed solar farm. These species may be adversely affected by construction and/or ongoing operation of the solar farm.
- 4.37. The Threatened and At-Risk species present include three Threatened - Nationally Critical bird species, which are on the brink of extinction (kakī / black stilt, matuku-hūrepo / Australasian bittern and kōtuku / white heron). Also of concern is the proximity of the proposed solar farm site to the largest known black-fronted tern (Nationally Endangered) breeding colony in Aotearoa (>7% of national population), which has been subject to intensive conservation management by DOC over the last 15 years. If collisions between solar infrastructure and birds occur, these will likely have a significant impact on population viability and recovery of these Threatened species.

- 4.38. It is possible other species might be affected, including non-threatened species. The Wildland EA was based on only one day of field survey, which occurred after the core breeding season of the species mentioned, so is likely to underestimate the number of bird species interacting with the site.
- 4.39. DOC's assessment that 18 species are at risk of collision is explained at page 2 of Appendix C. In short, overseas research demonstrates ecologically similar birds to those likely to be traversing The Point are colliding with solar arrays.¹⁰ "Ecologically similar" means the species have similar body shapes and adaptations, look similar, have similar habitat requirements, feed using the same techniques, have similar roosting and flight behaviours and are mobile across the landscape. This comparison is explained on page 2 of Dr O'Donnell's memorandum.
- 4.40. Based on the overseas literature, the potential adverse effects on birdlife through construction and operation of the proposed solar farm would be:
- a) Deaths and injury of birds, particularly waterbirds, Threatened and At-Risk species, and mobile species, during the construction phase (all species listed in Table 1 of Appendix C).
 - b) Degradation and loss of local feeding and breeding habitats for species resident during the breeding season following construction and land use change (likely banded dotterel, black-fronted tern, South Island pied oystercatcher, NZ pipit).
 - c) Long-term, ongoing, deaths and injury of birds, particularly waterbirds, Threatened and At-Risk species, and mobile species, through collisions with solar farm infrastructure (fences and/or cables and/or solar panels) (all species listed in Table 1 of Appendix C).
 - d) Disturbance of, or abandonment by, resident birds through construction phase and ongoing operation of the solar farm.
- 4.41. Collision risk is likely to vary between different species. However, as there has been no monitoring of bird displacement or mortality associated with photovoltaic solar farms in New Zealand, it is currently impossible to estimate the scale of adverse effects that may occur at each site and the long-term impact on bird populations.
- 4.42. In addition, the only information available is limited reporting on adverse effects from a few published studies from overseas. These studies indicate that adverse effects are highly likely and potentially significant for Threatened and At-Risk species. Given circumstances (e.g. habitat use patterns, risk profiles) may be different in New Zealand, it is challenging to

¹⁰ Karl Kosciuch, Daniel Riser-Espinoza, Michael Geringer, and Wallace Erickson "A summary of bird mortality at photovoltaic utility scale solar facilities in the Southwestern U.S." (2020) Public Library of Science ONE 15(4); K Shawn Smallwood "Utility-scale solar impacts to volant wildlife" (2022) The Journal of Wildlife Management 86(4); Tara Conkling, Amy Fesnock, and Todd Katzner "Numbers of wildlife fatalities at renewable energy facilities in targeted development region" (2023) Public Library of Science ONE 18(12); D Riser-Espinoza, K Russell, N Bartok, J Sullivan, and K Kosciuch "Emerging trends in bird mortality at photovoltaic solar in the United States and Canada." (Presentation at the Proceedings of the 2nd Solar Power and Wildlife/Natural Resource Symposium, Washington, DC, 14-16 November 2023).

determine the level to which we can infer effects from overseas. In the absence of New Zealand data, DOC's position is that a precautionary approach to consenting solar farms in areas with high usage by Threatened and At-Risk bird species is appropriate.

Threatened and At-Risk birds – Risk Profiles

4.43. Dr O'Donnell has outlined the risk profile of 18 Threatened and At-Risk bird species traversing the Point Solar site in Appendix C. Below is a brief summary covering the most threatened species, which are also those that we have the most data on use of the area for:

Kakī / black stilt

4.44. Kakī only breed in the Mackenzie Basin where the wild population only numbers 141 adults with a current breeding population of 28 productive pairs as per 04/06/2025. Kakī have been individually colour banded since 1984 so that the locations and survival of birds could be monitored over time. The Figures in Appendix C indicate:

- a) Kakī occur in the vicinity of the proposed solar farm.
- b) Kakī are highly mobile throughout the Mackenzie Basin.
- c) Birds occurring near the proposed solar farm include birds that breed throughout the Mackenzie Basin, so the solar farm could potentially influence the breeding birds in other parts of the Basin.
- d) Although we don't know which flight paths kakī take among all these locations, it is fair to assume that birds will be flying over the proposed solar farm site at some time and therefore would be at risk of collisions.

4.45. Wading birds (similar ecologically and related to kakī) were recording colliding with PV solar farms at a rate of 0.055 bird/MW/yr in California.¹¹

Black-fronted tern

4.46. The national population of black-fronted terns was thought to number up to c.10,000 birds in 2010.¹² However, given colonies were generally declining at rates of 5 – 15% per annum, that figure may be lower now.

4.47. Tern species, which included the black tern *Chlidonias niger* (similar ecologically and related to black-fronted terns) were recording colliding at a rate of 0.023 birds/MW /yr in California.¹³

4.48. The proposed solar farm is located near what may be the most significant site for black-fronted terns nationally. It is on a major flyway between a breeding colony on the upper Ōhau River and the delta of the Tekapo, Ōhau, and Pūkaki Rivers where birds roost at night. In addition, birds generally feed regularly across this dryland landscape. The Ōhau breeding colony is by

¹¹ Smallwood (2022), above n 20.

¹² Colin F.J. O'Donnell and Joanne M. Hoare "Meta-analysis of status and trends in breeding populations of black-fronted terns (*Chlidonias albostrigatus*) 1962" (2011) New Zealand Journal of Ecology 35(1) 30.

¹³ Smallwood (2022), above n 20.

far the largest known and harbours >7% of the national population of black-fronted terns. This colony is also managed intensively by DOC using predator control.

- 4.49. Thirty-six of 39 black-fronted terns tracked from the Ōhau colony between 6 November 2020 and 28 February 2022 were recorded flying frequently over the proposed farm site or within 1 km of it (3,445 fixes) (Figure 3 in Appendix C). Most tern movements over the site are at night, and during periods of low light around dusk and dawn (Figure 4 in Appendix C), a period when birds could conceivably be disorientated by the solar panels (see above).
- 4.50. We know that >500 birds roost each night at the Tekapo River delta from different nesting colonies from the Ahuriri, Ōhau, Pūkaki and Tekapo Rivers at least. This figure is likely a large underestimate, because most birds are active at the site in the middle of the night when observers cannot count them (Gray 2024¹⁴). The terns using major roost sites like this begin to arrive at dusk and continue to arrive after dark into the small hours of the morning. Departures start before dawn and continue until approximately an hour after it gets light. Most terns arrive and depart roost sites in flocks of 3-30 birds, but there are some pairs and individuals and also some flocks of up to 50. Therefore, it is reasonable to assume that movement data from tracking single birds is likely to indicate there are multiple birds flying to/from the roost on that path at that time (Gray 2024).

Matuku-hūrepo / Australasian bittern

- 4.51. The national population of matuku-hūrepo numbers perhaps 500 breeding birds.¹⁵ DOC's database contains 106 records from the Mackenzie Basin, which includes many sightings around the Ōhau, Twizel, Pūkaki and Tekapo Rivers (Figure 5 in Appendix C) and elsewhere in the Mackenzie Basin (Figure 6 in Appendix C).¹⁶ Matuku-hūrepo are highly mobile among networks of wetlands and most fly at dawn or dusk or at night, making their detection challenging.¹⁷
- 4.52. Related bittern species (similar ecologically to matuku-hūrepo) were recording colliding at a rate of 0.017birds/MW /yr in California.¹⁸

¹⁴ Gray KE 2024. Movements and habitat use of black-fronted terns and banded dotterels in the Mackenzie Basin. MSc thesis, University of Otago, Dunedin.

¹⁵ Hugh A. Robertson, Karen A. Baird, Graeme P. Elliott, Rodney A. Hitchmough, Nikki J. McArthur, Troy D. Makan, Colin M. Miskelly, Colin F. J. O'Donnell, Paul M. Sagar, R. Paul Scofield, Graeme A. Taylor and Pascale Michel "Conservation status of birds in Aotearoa New Zealand" (2021) New Zealand Threat Classification Series 36; NZTCS data files.

¹⁶ Colin F.J. O'Donnell & Hugh A. Robertson "Changes in the status and distribution of Australasian bittern (*Bolaurus poiciloptilus*) in New Zealand, 1800s - 2011" (2016) 63 Notornis at 152-166.

¹⁷ Emma M. Williams "Conservation Management of the critically endangered matuku-hūrepo / Australasian bittern" (2024) Science for Conservation 341.

¹⁸ Smallwood (2022), above n 20.

5. Effects Management

- 5.1. Effects on ecological values will occur both during construction and operation.
- 5.2. Construction activities, including pile driving, panel placement, vehicle movements and construction of the security fence, would directly impact any flora or fauna within the construction footprint by crushing, disturbance and displacement.
- 5.3. However, some of the most significant effects are likely to arise following construction. In general, any threatened species, particularly plants and invertebrates, within or near the solar farm footprint will be there because they naturally live in extreme environments – this both meets their ecological needs and reduces competition from other species which are not adapted for those conditions.
- 5.4. The solar farm would significantly change the environment for those species, by providing shading from sunlight, protection from frost, and altering moisture and microclimate conditions. This will make conditions less suitable for the threatened species themselves and enable competition from other species.
- 5.5. We therefore expect that any threatened plants and invertebrates currently found on the site would not persist long term after solar farm construction.
- 5.6. There will also be terrestrial effects beyond the solar farm footprint itself, from the landscape plantings and associated edge effects including shading and moisture changes. These are potentially significant, given the ecological values located on the uncultivated areas around the margins of the footprint.
- 5.7. There will also be effects on avifauna. These are addressed in more detail in Appendix C, but the most significant effect in the long term is the risk of birds colliding with solar panels or associated structures. The level of this risk is uncertain due to a lack of New Zealand data and will likely vary between different bird species. However, tracking data and sighting records show that large numbers of threatened species use or traverse the site. Any collisions fatalities for kakī, Australasian bittern or black-fronted tern could have a significant impact on the species' viability and recovery.
- 5.8. The Applicant has proposed two main approaches to addressing these effects. As proposed in the 9 February further information response, we understand that these are:
 - Targeting terrestrial restoration at a smaller area (12-15 ha) with more intensive management. This would include a predator-proof enclosure, and would be managed to provide benefits for vegetation, invertebrate and lizard values within the enclosure; and
 - Providing avifauna compensation through support for wide-area predator control measures, which would build on pest control work already being undertaken by DOC and community groups. This would help improve kakī survival to breeding for birds raised through the captive rearing programme and would also provide benefits to a wider range of birds and other fauna.

- 5.9. There would be some ecological benefits from the use of indigenous plantings around the margins of the site. However, these would be secondary to the landscape screening purpose of those plantings.
- 5.10. As has previously been advised by the Applicant, DOC is in principle supportive of these proposed approaches. This is on the basis that these measures will need to be further developed, and will need to sit within a wider set of consent conditions, management plans, monitoring and reporting as part of overall effect management.
- 5.11. Those wider matters will be particularly important for avifauna – so that monitoring and management can ensure that the benefits of predator control are not outweighed by impacts on the species from collisions.
- 5.12. For the predator-proof enclosure, the attached report by Dr Tocher (Appendix D) raises concerns with the site constraints and potential effectiveness of the enclosure. DOC would expect the Applicant to address these matters in their further ecological information and subsequent development of the proposal. Consent conditions will also need to ensure that if it eventuates that this particular proposal is not achievable, equivalent measures will be implemented.
- 5.13. For the avifauna compensation predator control proposal, DOC staff involved in the current captive rearing and predator control programmes are now assessing options and effectiveness of this proposal, and will work with FNSF to support their response to the Panel's recent request for further information on the matter.

Statutory considerations

- 5.14. The substantive application included a detailed statutory assessment. However, since the application was lodged, the National Policy Statement for Renewable Electricity Generation 2011 (NPS-REG) was amended in December 2025. The general effect of this is to strengthen the weighting to be given to the benefits of renewable electricity generation. In this regard, DOC agrees that the proposal will have significant benefits, as recognised particularly in the NPS-REG Objective and Policies A and B.
- 5.15. However, it is also clear that the development will have an adverse effect on RMA section 6(c) matters, given the various threatened species present within and near the site. As a result, NPS-REG Policy F(2) is also relevant:

Where REG assets and activities are proposed to locate in or are likely to have adverse effects on environments and values provided for in section 6 of the Act, the provisions of this policy must be read alongside other relevant national direction, regional policy statements and regional and district plans.

5.16. This means that under the NPS-REG, while the benefits of the proposal must be recognised and provided for, the adverse effects on significant indigenous vegetation and habitats are still to be managed in accordance with the usual statutory framework.

Canterbury Regional Policy Statement (CRPS)

5.17. The application took the approach that development would avoid any areas which meet the ecological significance criteria in Appendix 3 of the CRPS. However, given the presence of Threatened and At-Risk species of flora and fauna both within the site and within the potential zone of edge effects, DOC considers that there would be effects on Appendix 3 values.

5.18. Objective 9.2.3 and Policy 9.3.1.3 are therefore relevant. Objective 9.2.3 aims to protect areas that qualify as significant under the CRPS criteria.

5.19. Policy 9.3.1.3 implements Objective 9.2.3 by requiring that “*Areas identified as significant will be protected to ensure no net loss of indigenous biodiversity or indigenous biodiversity values as a result of land use activities*”.

Mackenzie District Plan (MDP)

5.20. The substantive application reviewed the provisions of the MDP as they applied at that time. Since then, Plan Change 26 has become operative. As a result, the Renewable Electricity Generation chapter of the MDP excludes the Ecosystems and Indigenous Biodiversity provisions from applying to Renewable Electricity Generation (other than for the existing Waitaki Hydro Scheme and Opuha Scheme).

5.21. Instead, indigenous biodiversity is to be managed under the provisions of the Renewable Electricity Generation chapter itself. Of note is that REG-P6 requires that:¹⁹

“regard is had to any proposed offsetting measures or environmental compensation (including considering Policy 4 in Section 19 and Appendix Z), where there are significant residual adverse effects that cannot be avoided, remedied or mitigated”.

5.22. DOC therefore considers that the nature and adequacy of offsetting and compensation measures are relevant matters for the Panel to consider, given that there will be direct impacts on a range of threatened species, and potentially significant avifauna collision risk.

Cumulative effects

5.23. The Panel has sought comment from parties on cumulative effects. DOC addresses this in three parts – firstly to understand the potential scale of solar farm development in the Mackenzie Basin, then to understand the cumulative ecological effects that could arise if multiple of those solar farms are developed, and then to consider the legal framework that would apply to considering those effects.

¹⁹ Mackenzie District Plan 2004 (revised November 2025), part 2, Renewable Energy Generation, policy 6(5).

Scale of potential development

- 5.24. The potential cumulative impact of solar development within the Mackenzie Basin is large. At the time of preparing these comments, DOC was aware of at least nine solar proposals within the Basin (see Appendix A – note that DOC has only become aware of the Kākāriki Renewables proposal since lodging comments on the Haldon Solar Farm application). If all of those proposals went ahead, they could total around 4,500 hectares in area and would have a peak generation capacity of almost 3,000 MW (compared to the Waitaki HEPS total capacity of about 1,500 MW).
- 5.25. Apart from the current application, four other solar farms are listed or have been referred under the Act.²⁰ A substantive application has only been lodged for one of those – the Haldon Solar Farm, for which DOC has already provided s53 comments.
- 5.26. None of those projects has progressed to a proposed grant.
- 5.27. There are also four other potential projects that DOC is aware of: Ohau A, Irishmans Creek, Twizel Solar Farm Ltd, and Kākāriki Renewables.
- 5.28. It is unlikely that all projects would proceed, at least in the short-medium term. DOC understands that transmission constraints mean that only a few of the proposed projects could currently be accommodated. However, neither DOC nor the Panel has any control over which projects do get funded, connected and built, nor any control over Transpower's future plans for transmission infrastructure. DOC therefore consider it must be assumed that any and all of the proposed projects could eventually be built.

Cumulative ecological effects

- 5.29. In terms of terrestrial ecology, the loss of some indigenous vegetation and habitat for invertebrates and lizards, would add to the extensive loss of indigenous vegetation and habitat on depositional landforms in the Mackenzie Basin over recent years through land-use change, notably conversion to dairy farms. The main threat to terrestrial ecology is habitat loss through land-use change and the edge/off-site effects of intensive land use on adjacent land.
- 5.30. The loss of extent of vegetation/habitat contributes to the ranking of the outwash terrace ecosystem as Threatened (Nationally Critically) and the very high number of At-Risk and Threatened plant species present in the Mackenzie Basin (more than 100 species).
- 5.31. In terms of avifauna, the risk of population level adverse effects becomes greater as they will fly over more solar farms as they are developed. The Point Solar Farm development would have a particularly significant contribution to the cumulative total, given the very high bird activity in the area. Because many of the avifauna species of conservation concern have small population sizes, even low collision rates can quickly accumulate to an overall significant effect. This is likely to be exacerbated by the fact that solar farms (as shown in the map in Appendix A) are clustered along the Ōhau River / Ōhau Canal through to the confluence with

²⁰ The other listed projects in the Act, Schedule 2 are Balmoral Station Solar Array and The Point Solar Farm; and referred projects are – Grampians Solar Project and Twizel Solar Project.

the Tekapo River and Haldon Arm, which is an area of high avifauna activity (see maps and tracking data in Appendix C).

- 5.32. For lizards, southern grass skink and Southern Alps gecko may also experience significant impact at the local scale, in the absence of mitigation. (see Appendix D). Local-level impacts across multiple solar farms will exacerbate local level effects generated by The Point Solar Farm.

Legal considerations

- 5.33. DOC considers that the legal considerations for cumulative effects in this context are potentially complex – the Act is new legislation, and decisions under it are subject to different tests to the RMA so existing caselaw cannot be assumed to apply. Further discussion of the legal complexities is set out below. Notwithstanding that, DOC considers that there are some initial points relevant to the Panel's considerations:

- a) None of the proposed solar farms are currently consented, so the existing environment is without solar development, and all effects arising from new solar farms would therefore contribute to potential cumulative effects;
- b) Five of the known projects have already been listed or referred under the FTAA, so the potential for cumulative impacts is not fanciful;
- c) Cumulative effects need to be considered at different levels i.e. the likely projects in the short-medium term within Grid constraints, and long-term if Grid capacity increased to allow all projects.

- 5.34. DOC understands that solar farm applicants are taking the stance that the potential for cumulative effects should be limited to reflect the transmission constraints. We note that this consideration acts in two directions – if transmission constraints mean that only a few proposals will be built, then that does reduce the total scope of cumulative effects. However, it also means that for any particular proposal, less weighting can be applied to the benefits, as if the project was not approved it would be expected that another proposal would take its place within the available block of capacity. Put another way, if the generation benefits are to be considered in full, then so must the cumulative adverse impacts, or if the cumulative impacts are to have a discount applied reflecting transmission constraints, that same discount must also apply to the benefits.

- 5.35. The Panel should also consider that the precautionary approach would be a relevant consideration, given the large number of Threatened and At-Risk species that could be affected by this proposal and others.

An overview of the legal complexities

- 5.36. The Panel is currently seized of the application by Far North Solar Farm Ltd for The Point solar farm. A similarly constituted Panel is also seized of the application by Lodestone Energy Ltd for Haldon Solar Farm.
- 5.37. Lodestone has filed legal submissions dated 10th February in respect of the Haldon Solar Farm application, that address the assessment of effects, and that directly reference and impact the current application by FNSF²¹.
- 5.38. In determining each application, ss 104 and 3 of the Resource Management Act 1991 (RMA) apply. The Panel should have regards to (amongst other things) the cumulative effects (s 3(d) RMA) and potential effects (s 3(e), (f) RMA) of allowing the respective activities on the environment.
- 5.39. A complicating 'real world' factor concerns the potential for the combined ecological and landscape effects of the farms to exceed the sum of their individual effects, if both applications are consented to and built.
- 5.40. Legally, there is little doubt that if one application is consented the Panel can have regard to any cumulative effects of the existing consented application in conjunction with the second proposal, in considering the second application.
- 5.41. However, significant legal complexity arises in relation to whether:
- a) the Panel deciding the *first application* should have regard to the *potential effects* – or perhaps more accurately, *potential cumulative effects* – from the combination of the first and second applications;
 - b) the 'first in first served' approach (developed by RMA caselaw) applies to the FTAA and if so, how priority should be determined, given the 'completeness' test under the FTAA is possibly not equivalent to that concept as used in the RMA caselaw;
 - c) the FTAA prevents applications from being determined together, simultaneously, and / or being compared.
- 5.42. Accordingly, the Panel would be assisted by receiving fulsome legal submissions from parties in respect of both applications. These comments briefly touch upon some of the more salient issues. They do not however reach a definitive conclusion given the complexity and nuance of this area of law, taken in conjunction with the restricted timeframes for submitting these comments.
- 5.43. The Supreme Court's decision in *Sustainable Otakiri Incorporated v Whakatāne District Council* [2025] NZSC 158 ('*Sustainable Otakiri*'), provides the basis for considering the issue of effects – and potential cumulative effects – for both applications. *Sustainable Otakiri*

²¹ See Lodestone Energy Ltd Legal Memorandum dated 10th February filed in respect of the Haldon Solar Farm application

discusses the meaning of effects in the RMA at length. Relevant parts of the majority opinion (with which the minority agreed) include paragraphs [71-74] and [98]:

[71] Stepping back, the words of the RMA make clear that in many cases— including this one— the question will not be whether a given effect on the environment is excluded as a matter of principle, but rather as a matter of fact and degree. This is reflected in some basic propositions that emerge from the interlinking definitions of “environment”, “effect” and “sustainable management”.

[72] One such proposition is that if allowing an activity would either adversely affect the ability of natural and physical resources to meet the reasonably foreseeable needs of future generations or compromise the life-supporting capacity of an ecosystem, those effects are very likely to be relevant under s 104.⁹⁴ Another is that where allowing the activity may have that effect, this may be a relevant potential effect.⁹⁵ Whether that is so in any particular case will depend on considerations of “fact and degree”.⁹⁶ A third proposition is that the effect need not necessarily be likely, at least not if its potential impact will be high.⁹⁷ This means that the relevance and weight of less likely effects will also be application-specific matters of fact and degree. A fourth proposition is that where effects on the life-supporting capacity of an ecosystem or on natural resources or human communities may only arise over time or in combination with other effects, they may be relevant cumulative effects.⁹⁸ A fifth is that if the “scale, intensity, duration, or frequency” of the effect is relatively small, that will not necessarily rule it out of consideration; effects are potentially relevant

92 At [102]–[105] per Lord Leggatt, Lord Kitchin and Lady Rose SCJJ.

93 At [97].

94 RMA, s 5(2)(a)–(b).

95 Sections 3(e)–(f) and 104(1)(a).

96 Buller Coal, above n 36, at [119].

97 RMA, s 3(f).

98 Sections 3(d) and 5(2)(b). “regardless” of their magnitude.⁹⁹ So it is not the case that only big, intense, continuing or repetitive effects will be relevant.

[73] There can therefore be no hard and fast rule excluding indirect effects of allowing an activity—in other words, effects to which the applicant contributes but which occur only after some additional intervening act such as burning coal (Buller Coal) or oil (Finch). As the majority in Buller Coal accepted, there will be questions of fact and degree. The Court was careful not to express any concluded view on the question of whether scope 3 emissions engaged the general words of s 104(1)(a).¹⁰⁰ And as noted in Finch, exclusion on contingency grounds alone would be potentially illogical if it is clear on the facts that the independent action will inevitably be taken. In any event, as the appellants submitted, if positive effects involving contingent behaviour by third parties are in scope—for example, economic growth and job creation from proposed activities—then there is no good reason to exclude indirect or contingent adverse effects.

[74] Further, effects that when viewed in isolation appear very small cannot be automatically ruled out, particularly where they accumulate or combine with other effects over time.¹⁰¹ It follows that what makes an effect tangible enough in Buller Coal terms to be cognisable for the purposes of s 104(1)(a) is also likely to be application-specific and require evidence.¹⁰²

99 Section 3.

100 Buller Coal, above n 36, at [115] per McGrath, William Young and Glazebrook JJ.

101 Compare *Dye v Auckland Regional Council* [2002] 1 NZLR 337 (CA) at [49] but note that the potential cumulative effect at issue in *Dye* was the precedent effect of a subdivision consent in a rural zone on the integrity of that zone; it did not relate to the sorts of physical effects at issue in this case.

102 The same applies when determining whether effects are minor for the purposes of satisfying the non-complying activity gateway in s 104D(1)(a).

...

[98] In s 104(1)(a), effects are factual things constrained only by the express carve-outs in the RMA.¹²⁶ They are the actual or potential consequences of defined activities—consequences that are ascertainable (with varying degrees of confidence) through evidence.¹²⁷ And the environment—the thing that receives those effects—is a complex factual phenomenon, not a legal construct. If the definitions of effect and environment in the RMA convey anything, it is a striving to describe dynamic phenomena as comprehensively as their reduction into statutory language permits. In this case, there is nothing to suggest the environmental effects of plastic bottle disposal are irrelevant in principle; the real question is whether these effects are relevant in fact.

126 See, for example, s 104(3)(a)(i).

127 This is so even in relation to effects on more subjective social, economic, aesthetic and cultural conditions of ecosystems, resources and amenities per the definition of environment in s 2(1). For example, an effect on the social or cultural well-being of a community may be ascertained through expert evidence or by objective assessment of the evidence of members of the affected community.

- 5.44. A question for the Panel is whether it *can* have regard to potential cumulative effects in the **s 104(1)(a)** test for the *first application* to be determined.
- 5.45. Caselaw supports the contention that the Panel *may* have regard to potential cumulative effects under **s 104(1)(c)** of the RMA for both applications, *if* the Panel determines that they are relevant and reasonably necessary to determine the application/s²².
- 5.46. It may also be the case that the Panel can have regard to potential cumulative effects under **s 104(1)(b)** for both applications *if* the relevant plan provisions make reference to potential

²² The Environment Court confirmed that potential cumulative effects can be taken into account under s 104(1)(c), e.g. *Clifford Bay Marine Farm Ltd v Marlborough District Council* C131/03, *R J Davidson Family Trust v Marlborough District Council* [2016] NZEnvC 81 (upheld on appeal). See also *Dye v Auckland Regional Council* [2002] 1 NZLR 337 (NZCA) [42] where the Court of Appeal accepted that the precedent effect could be considered under what is now s 104(1)(c) (previously s 104(1)(i))

cumulative effects (noting that we have not been able to undertake this assessment in the timeframe provided).

- 5.47. If potential cumulative effects are to be taken into account under s 104, the test for potential effects found in **s 3(e) and (f)** of the RMA and associated caselaw must be applied, i.e. consideration must be given to the likelihood of effects occurring and the severity of those effects if they did occur (discussed further below)²³.
- 5.48. Of note, Lodestone’s legal submissions of 10th February 2026 do not address potential effects, potential cumulative effects, or the relevance of s 104(1)(c) of the RMA.
- 5.49. They do however reference *Rodney District Council v Gould* [2006] NZRMA 217 (NZHC)(‘*Gould*’) that followed *Dye v Auckland Regional Council* [2002] 1 NZLR 337 (NZCA)(‘*Dye*’). *Gould* and *Dye* were both concerned with the precedent effect of the application for consent on “possible future applications which may or may not be made” i.e. would the application, if consented to, **encourage future applications?**²⁴
- 5.50. In *Dye*, the Court of Appeal found that the precedent effect did not constitute an (actual) cumulative effect, although it may constitute a potential effect (depending on whether it met the s 3(e), (f) test/s) to be considered under what is now s 104(1)(a), or it could be considered under what is now s 104(1)(c), or under what is now s 104(1)(b) if the relevant plans included the need to consider the precedent effect of applications.
- 5.51. *Dye* and *Gould* are distinguishable on the facts from the current scenario. The current issue is not whether a precedent effect would occur. Rather, there are live applications and information in relation to both Haldon and The Point solar farms, and the potential cumulative effects of the projects are clearly capable of assessment.
- 5.52. This distinguishing factor is even more pertinent in the context of the FTAA, particularly if Lodestone’s legal submissions as to weighting are accepted (see paragraph [2.11]). Lodestone submits that, “once a project’s benefits have been established, it is clear that the FTAA strongly orientates decision-makers towards granting the approval – not declining it”, which must also suggest The Point Solar Farm may be ‘strongly oriented’ towards approval. If accepted, these submissions inevitably impact the foreseeability of The Point being consented to and feeds into the foreseeability of potential cumulative effects for Haldon.
- 5.53. Lodestone’s legal submissions also refer to *Queenstown Lakes District Council v Hawthorn Estate Ltd* [2006] NZRMA 424 (NZCA)(‘*Hawthorn*’). *Hawthorn* is concerned with the future environment part of the s 104(1)(a) test (“effects on the environment”), that is: how the environment will change in the future, that effects from the application will continue to impact

²³ See in particular *Dye* at [39] (discussing the precedent effect but of equally applicability): “If the precedent effect of granting a resource consent is to fit within the definition [of effect] at all, it must do so by dint of its potential effect and it would then have to satisfy the probability and, if applicable, the potential impact criteria.”

²⁴ *Gould* [114] and *Dye* [38-39]

upon. *Hawthorn* does not directly address how potential effects or potential cumulative effects are to be assessed.

- 5.54. There is a clear theme in RMA caselaw that decision-makers must adopt a pragmatic, real-world assessment when assessing the future environment²⁵.
- 5.55. Lodestone submits that the 'first-in first served' approach (developed in RMA caselaw) where competing applications to the same resource are dealt with sequentially, should apply to applications under the FTAA. Lodestone also submits that Haldon must receive priority, because even though both applications were listed in the legislation and both applications were lodged on 1st September 2025, Haldon passed the s 46(2) completeness test in the FTAA before The Point. Lodestone submits that RMA caselaw supports Haldon receiving priority. In support of its submission that the 'first in first served' approach applies to the FTAA, Lodestone draws upon the FTAA Decision for the Drury Metropolitan Centre. There is no analysis of the 'first in first served' principle in that Decision (see para [111]). Rather, that Panel relies upon and references the Independent Legal Memorandum of Vanessa Hamm, Holland Beckett, dated 12 September 2025. Critically, Lodestone's submissions on this issue omit an important part of Ms Hamm's Legal Memorandum, where she states at para [22] that even applying 'a first in first served' approach,

consideration of the application on its merits will of course include consideration of any actual and potential effects on the environment of allowing the activity...

- 5.56. Adopting a 'first in first served' approach in the context of the FTAA without properly assessing the full range of effects from that first application is problematic. Such an approach could encourage rushed, shoddy applications where information is inadequate, for example, where the 'first in time' applicant has provided inadequate ecological information, in a desire to be heard first. This problem was precisely what the RMA cases were trying to avoid.
- 5.57. It should be noted that 'complete' in the RMA sense (and as it is used in the RMA cases) may not be equivalent to a completeness assessment under s 46(2) of FTAA. If that is the case, and if the 'first in first served approach' is applicable, then the question of priority may not be as clear cut as Lodestone suggests.
- 5.58. Further, there is nothing explicit in the FTAA preventing simultaneous decision-making by the Panel/s, and / or the reservation of the decision in the first application pending determination of the second application. Whether either of these procedures are legally permissible will be an issue for the Panel/s to consider.

Potential effects / potential cumulative effects

- 5.59. As explained above, if potential cumulative effects are relevant to the s 104 test (in respect of the first application to be determined), then they are subject to the test for potential effects set

²⁵ e.g. *Speargrass Holdings Ltd v Queenstown Lakes District Council* [2018] NZHC 1009 at [64]; *Burgess v Selwyn District Council* [2014] NZEnvC 11; *Save Kapiti Inc v New Zealand Transport Agency* [2013] NZHC 2104; *Meridian Energy Ltd v Tararua DC* [2025] NZEnvC 44 at [59-60])

out in s 3(e), (f) of the RMA and caselaw – i.e. likelihood of effect and severity of effect must be considered.

- 5.60. In assessing potential cumulative effects, the question of likelihood of effects may include: the likelihood of whether both farms will be built in addition to the likelihood of adverse ecological and landscape effects through their construction and operation, including cumulative effects, and the commensurate severity of those effects.
- 5.61. Regardless, the legal tests for considering potential effects are clearly relevant to the determination of both applications.
- 5.62. In *R J Davidson Family Trust v Marlborough District Council* [2017] NZHC 52 at [129], the High Court outlined the way in which the Environment Court is to have regard to the potential effects on the environment of allowing an activity. The High Court confirmed that the word 'potential' in s 3(f) denotes something other than proof and includes effects that carry a less than 50 per cent chance of eventuating. So, in assessing future effects, the Panel is not required to satisfy itself that an effect is more likely than not; simply that it is likely, even if the effect is of low probability.
- 5.63. The Environment Court has described the test for potential effects as a 'credible' or 'plausible' effect (*Jack Shaw Ltd v Western Bay of Plenty DC A/19 2000* at [60]). This includes 'scientifically possible effects' (*Shirley Primary School v Christchurch City Council* [1999] NZRMA 66 (NZEnvC) at [142]), i.e. based on 'real evidence', which may include expert opinion that is 'reliable' (*McIntyre v Christchurch City Council* [1997] NZRMA 289 (PT), 104 citing *R v Mohan* [1994] SCR 9).
- 5.64. The High Court in *R J Davidson* confirmed that an assessment of potential effects can be based on a foundation of existing facts. While those existing facts must be proven on the balance of probabilities, potential effects are not required to meet that standard of proof (*R J Davidson Family Trust v Marlborough District Council* [2017] NZHC 52 at [125], [129]).
- 5.65. Further, in considering ecological and landscape impacts, the more serious the potential harm, the less probability may be required to meet the relevant evidential test. What probability of occurrence should suffice in any given case will depend upon the context. In *Clifford Bay Farms Ltd*, the Environment Court stated that, 'there is no Procrustean – one size fits all – principle for risk assessment and the standard of proof of risks under the RMA': ecological context helps form the legal response (*Clifford Bay Farms Ltd v Marlborough District Council* C131/2003 (unrep) (NZEnvC), [68]).
- 5.66. Expert opinion evidence as to hypotheses that have 'analogic evidential backing' is more persuasive (*Clifford Bay Farms Ltd v Marlborough District Council* C131/2003 (unrep) (NZEnvC), [79] and [81]).
- 5.67. As the Supreme Court has stated, '[c]onsistently with para (f) of the definition of "effect" in s 3, the higher the potential impact of a potential effect the less readily can it be dismissed as a

remote possibility.’ (*Westfield (New Zealand) Ltd v North Shore City Council* [2025] NZSC 17 at [108] and footnote 61).

5.68. In *Clearwater Mussels Ltd v Marlborough DC* [2019] NZHC 961 – a case where the decision to decline consent was upheld, as the Proposal would have an adverse on the endangered King Shag – the High Court said:

[84] In summary, Clearwater argues it was unreasonable for the Court to conclude that that the Proposals would have an adverse impact on the King Shag. It further says that any effect from passing boats could be dealt with as a condition on the consent. Clearwater suggests that the condition could have been that no vessel associated with the farm could travel within one kilometre of the breeding colony or 300 meters of the roosting site. In its submission there could be no risk of an adverse impact on the King Shag with these parameters and for the Court to conclude otherwise was unreasonable.

[85] The assessment of risk of future events is difficult generally. In this case the adverse effects are uncertain, but they may result in a significant loss to an endangered species. The Environment Court is required to take the evidence, expert and otherwise and reach a view on possible adverse effects and determine how best to deal with them within the requirements of the Act and planning documents. (Emphasis added).

5.69. In *Shirley Primary School v Telecom Mobile Communications Ltd*, the Environment Court found that,

[142] ... Before an hypothesis can be considered by any Court, there must be a basic minimum of evidence to support it. But in the case of any hypothesis about a high impact risk a scintilla of evidence may be all that needs to be established in the Court's mind to justify the need for rebuttal evidence. In other words that evidence, slight as it may be, is enough to raise a reasonable doubt in the mind (*Shirley Primary School v Telecom Mobile Communications Ltd* [1999] NZRMA 66, at [142]).

5.70. Most recently, in *Remediation NZ Ltd v Taranaki Regional Council*, the Environment Court stated that the *Shirley Primary School* case had “stood the test of time” and been further explained in *R J Davidson* (and the cases discussed above) (*Remediation NZ Ltd v Taranaki Regional Council* [2024] NZEnvC 213 at [459]-[460]).

6. Comments on conditions

6.1. Should the Panel decide to grant consent, DOC considers that effective and enforceable conditions will be required, in order to adequately manage adverse effects.

6.2. DOC provided comments to the Applicant on their updated condition set, dated 5 February 2026 as included in the 9 February RFI response, and the Applicant then provided updated conditions on 18 February. The Panel has also directed use of a specialist condition writer to review condition drafting. Given the short timeframe, and the potential for further changes, DOC is not able to now provide a response to the Panel on that latest set of conditions. However, we set out some key principles below and suggest it would be useful for the Panel to request that conditions be workshopped by the Applicant, the specialist condition writer,

and commenting parties. This would allow more considered input into the drafting and content of conditions.

- 6.3. In principle however, we note that conditions will need to address the following matters:
- a) Effects basis – conditions will need to be clearly linked to the actual and potential ecological effects.
 - b) Compensation - there should be a clear distinction between conditions designed to avoid, minimise and/or remedy adverse effects and those designed to offset or compensate for residual effects. The current proposals for terrestrial and avifauna compensation appear appropriate in principle but will require further refinement and definition within the conditions.
 - c) Management Plans - management plan conditions should be in accordance with section 21 of the July 2025 Panel Convenors' Practice and Procedure Guidance document.²⁶ DOC considers that comprehensive draft management plans should be submitted to the Panel for review and/or certification prior to approval of the application.²⁷ Management plan conditions must be subject to clear objectives, and performance standards that are specified in the conditions. Administrative detail can be contained within the management plans.
 - d) A clear process for certification of any management plan must be conditioned.
 - e) Ecology management plans should be prepared in consultation with DOC, iwi and the relevant Councils.
 - f) Avifauna - a bird collision monitoring program with appropriate carcass detection methods should be designed in consultation with a biostatistician and implemented over an appropriate duration. The relevant condition should specify the minimum requirements and duration of the monitoring and its objective. Monitoring data should be shared with the Department.
 - g) Bird-sensitive anti-reflective coatings and/or applications to the panels, use of deterrent devices or visual warning devices/markings (flags, streamers, or visually distinctive markings on panels) to deter attempted landing on panels and limitations on angle or orientation of solar panels over defined spatial, temporal scales, or environmental conditions should be considered as mitigation measures under a condition/s.
 - h) Triggers/thresholds for pre-determined intervention/additional effects management, based on bird carcass detections should be included in the conditions to ensure adverse effects are addressed if Threatened or At-Risk species are being killed or

²⁶ Fast-track Approvals Act 2024: Panel Convenors' Practice and Procedure Guidance (22 July 2025) at section 21.

²⁷ Certification by the council/s that will enforce the conditions is also appropriate, but the management plan should be reviewed by the Panel at the application stage.

injured by collision with solar infrastructure.²⁸ Noting this approach is reflected in the Applicant's proposed conditions, dated 05 February 2026.

- i) Consideration should be given to staging of the solar farm, whereby a smaller part of the farm is constructed under intensive ecology monitoring conditions, and the next stage can only proceed if effects meet pre-determined criteria.
- j) Review conditions under sections 128 – 129 of the RMA should explicitly reference ecology effects that can be detected by monitoring (such as breach of carcass thresholds) and be able to be implemented at any time those effects are engaged (without limiting the ability to review the consent for other unforeseen adverse effects).

7. Conclusions

- 7.1. The site has significant biodiversity values, with some Threatened and At-Risk species of plants, invertebrates and lizards both within the development footprint, and within the zone of potential effects outside the footprint. Further surveys may detect additional At-Risk or Threatened species.
- 7.2. The site has very high bird activity, including by three Threatened - Nationally Critical bird species, and the Nationally Endangered black-fronted tern.
- 7.3. If consent is granted, DOC considers that compensation will be required to address residual adverse effects on terrestrial and avifauna values.
- 7.4. DOC is in principle supportive of the Applicant's current proposals for enhancement and compensation.
- 7.5. However, given the uncertainty that remains about effects, especially for avifauna, DOC considers that these measures would still need to sit within a wider consent framework of management plans, monitoring and reporting, intervention triggers, and review conditions as part of overall effects management.
- 7.6. Further work is required to refine both the compensation measures and the wider consent framework. DOC remains available to engage in that process.

²⁸ See for example, the recent decision of independent commissioners to grant a 550,000 panel solar farm at 48 Ranfurly-Naseby Road - Helios OTA Op LP – [240065 Decision.pdf](#). See the relevant bird management Conditions 36 – 43. We note these conditions were adopted following a risk assessment of bird collisions at that site. The bird risk profile for The Point and other Mackenzie solar proposals is higher.

Appendix A - Currently-known Mackenzie solar farm proposals at 19 February 2026

Appendix B - Flora and Ecosystems comments – R Ewans

**Appendix C – Advice Note Risks to Birds of Construction of
Operation of the proposed The Point Solar Farm – C O'Donnell**

Appendix D – Lizard Assessment – M Tocher