# Appendix A

## Biosis Letter Response

**Limondale Sun Farm**

**Overland Sun Farming**

29 June 2017

Mr John Zammit
Development Manager
OVERLAND Sun Farming Company
L1, 23 Milton Parade
Malvern VIC 3144.
Sent via email to: john.zammit@overlandsunfarming.com.au

Dear John

## Response to OEH submission for Limondale Sun Farm EIS (SSD 8025), Balranald LGA, NSW

**Project no. 24031**

This letter provides a response and supplementary information to address comments provided by the Office of Environment and Heritage (OEH) on the Limondale Sun Farm EIS Aboriginal cultural heritage and biodiversity assessments. The OEH submission is dated 30 May 2017 and signed by Peter Ewin from the South West Branch. We also provide a response to a number of the proposed conditions of approval.

### Aboriginal cultural heritage

The OEH submission noted the Aboriginal cultural heritage assessment consultation stage was not finalised when the ACHA was submitted with the EIS. Biosis has since completed the consultation and the updated ACHA has been provided to Overland for submission to OEH for their final assessment. No further action is required here.

### Biodiversity

Office of Environment and Heritage's submission noted the following key requirements for biodiversity. A response is provided to each requirement below.

*Data provision response*

1. A high resolution PDF map of vegetation types and the development footprint were provided in Figure 4 of the BAR. Geographic Information System (GIS) files of vegetation mapping and the development footprint can be provided to OEH, if required.
2. Biosis collects plot and transect data using electronic data collection methods with ArcCollector software and the Survey123 App on GPS-enabled hand-held tablets. These data are post-processed to derive site value scores for vegetation zones. Raw data outputs are available in excel spreadsheets, if required. Summaries of plot and transect species records, cover and abundance values can be found in Appendix 1 of the BAR. Biosis is happy to work with OEH to provide these data in an appropriate format that allows checking of potential data entry errors. Floristic data entry in the VIS Flora Survey Module is not a mandatory requirement of the FBA. Under Biosis' data licencing agreement for BioNET all our floristic records are uploaded annually. Although this does

not resolve the issue of VIS Flora Survey module data entry, it ensures that flora records are appropriately captured in government databases. In our experience, entry of floristic data from plots and transects into the VIS module is time consuming, and as it is a not a mandatory requirement, is generally beyond the scope of a standard biodiversity assessment. We are happy to work with OEH to enter the Limondale data into the VIS module but this will require some cost-recovery between Biosis and OEH.

*BAR comments*

*Section 1 – development proposal and information sources*

- The Biosis (2016) report titled '*Balranald Sun Farm site: Ecological Constraints assessment*' was a preliminary assessment of the development site and included collection of foundational flora and fauna data to inform the PEA for the SEARs. All relevant information in that report was used in the final BAR and supplemented by additional fieldwork to address SEARs and FBA requirements. The preliminary report does not provide any additional information not included in the final BAR submitted with the EIS.
- Biosis is aware the SIXX map website has been decommissioned and we now access all relevant native vegetation mapping via the OEH data portal. It should be noted that there is no recent vegetation mapping projects or mapping to PCT level for the region where the Limondale sun farm occurs.

*Section 3 – Landscape score*

- The final landscape score is 12. The credit calculator was allocated to OEH on 1 May 2017 and Miranda Kerr from OEH was advised of this via email. In future, Biosis will ensure that BARs include the final landscape score.

*Section 4 – Native vegetation*

- Biosis and Overland Sun Farming agree with the conditional consent requirement for the final access from Yanga Way to be assessed in accordance with the FBA. This assessment will be undertaken by an accredited assessor prior to any vegetation clearing and any offset requirements will be include in the biodiversity offset strategy for the project.

*Section 5 – Threatened species*

- Biosis and Overland Sun Farming agree that targeted survey of the final access from Yanga Way will be undertaken prior to vegetation clearing.
- Biosis and Overland Sun Farming agree with the conditional consent requirement that all vegetation removal be undertaken in accordance with a fauna rescue protocol and timed, where possible, to avoid the key breeding seasons for woodland birds (July-November).

*Section 6 – Impact assessment (biodiversity values)*

- The BAR provides impact mitigation recommendations in text and bullet point format. OEH has requested this information be tabulated. Rather than updating the BAR we have provided the requested tabulation, with OEH's recommended inclusions, in Attachment 1 of this letter. This table will be included in the project Construction Environmental Management Plan.
- Biosis and Overland Sun Farming also agree with the conditional consent requirements related to weed control, monitoring and supplementary planting (if planting is required). The OEH recommended conditions of consent in included in the Attachment 1 table.

*Section 9 – Biodiversity offset strategy*

Biosis and Overland Sun Farming will consult with OEH in an ongoing manner to finalise the biodiversity offset strategy.

*SEARs – Species for further consideration*

The SEARs provided for the project include the Office of Environment and Heritage's requirements for the project, including a list of threatened biota requiring further consideration under the FBA (Attachment B of their submission dated 3 November 2016). The species/communities listed in Attachment B included:

- *Acacia melvillei* shrubland
- A Spear Grass *Austrostipa metatoris*
- Black Falcon
- Little Eagle
- Spotted Harrier
- Bitter Quandong *Santalum murrayanum*.

The BAR (sections 5.1 and 5.2) deals with targeted surveys and findings for these species.

We note that OEH's recent submission on the EIS has raised the issue of Major Mitchell's Cockatoo *Lophochroa leadbeateri* as a species requiring further consideration. This species was not included in Attachment B of OEH's requirements on 3 November 2016, and therefore, an assessment was not included in the BAR. However, we note that this species is mentioned in the Environmental Assessment Requirements table included in DPE's letter to the proponent dated 4 November 2016. This has most likely lead to the Major Mitchell's Cockatoo not being included in the BAR despite the species being recorded on the site.

Major Mitchell's Cockatoo may occasionally utilise the paddock trees on the site as a foraging and nesting habitat and the species was observed on the site in July 2016 feeding on crop weeds, such as Wild Melon *Citrullus* sp. In accordance with Section 9.2.5 of the FBA, we have provided an assessment and further information for Major Mitchell's Cockatoo in Attachment 2.

We trust the response included in this letter satisfies OEH's information requirements and allows approval of the EIS and subsequent issue of development consent for the Limondale sun farm. Please contact me on 0400 263 235 if you would like to discuss further.

Yours sincerely

Matt Looby
Senior Consultant Ecologist
0400 263 235

## Attachment 1 Tabulated mitigation measures to be included in the project CEMP

| | Actions | Timing | Responsibility |
|---|---|---|---|
| **Site selection and project planning stage** | | | |
| **Avoid and minimise removal of native vegetation and fauna habitat for solar panel array** | General site responsiveness during design phase of the project, consultation with project ecologists based on preliminary mapping of biodiversity values | Competed during design phase | Overland and Biosis |
| **Site access (general)** | Locate all tracks, where possible, on existing cleared areas or farm tracks | Competed during design phase | Overland and Biosis |
| **Site access (Yanga Way)** | Preliminary road access design will be subject to further detailed surveys as part of conditional approval. Consult with OEH as required. | To be completed prior to vegetation clearing | Overland and Biosis |
| **Electricity transmission connection** | Minimise vegetation removal and locate connection near existing electricity transmission easements | Competed during design phase | Overland and Biosis |
| **Construction** | | | |
| **Construction Environmental Management** | CEMP to be prepared | Prior to construction | Overland and/or construction contractor |
| **No go areas to protected retained vegetation** | Installation of appropriate exclusion fencing around trees and vegetation to be retained in, or directly adjacent to, the development site:<br>• The radius of the tree protection zone (TPZ) is calculated for each tree by multiplying its diameter at breast height (DBH) by 12 (i.e. TPZ = DBH x 12) in accordance with the Standards Australia Committee (2009).<br>• A TPZ should not be less than 2 metres or greater than 15 metres, except where crown protection is required (Standards Australia Committee 2009).<br>• Appropriate signage such as 'No Go Zone' or 'Environmental Protection Area' should be installed.<br>• Identify the location of any 'No Go Zones' in site inductions.<br>• Fencing should be star pickets with high visibility bunting. | Prior to construction | Overland and/or construction contractor |
| **Stockpiles & laydown areas** | All material stockpiles, vehicle parking and machinery storage will be located within cleared areas or areas proposed for clearing, and not in areas of retained native vegetation. | Prior to and during construction | Overland and/or construction contractor |

| | Actions | Timing | Responsibility |
|---|---|---|---|
| **Wildlife rescue during vegetation removal** | A licenced wildlife salvage team should be on-site during vegetation and paddock tree removal to catch and relocate (if appropriate) any wildlife encountered in vegetation or hollow-bearing trees. | During construction | Overland and/or construction contractor |
| **Supplementary habitat** | Where practical and if unlikely to damage retained vegetation, all scattered hollow-bearing trees to be removed should be placed in areas of retained vegetation to provide additional fauna habitat. | During construction | Overland and/or construction contractor |
| **Soil erosion/sedimentation** | • Dust suppression measures should be implemented during construction.<br>• Implementation of temporary stormwater controls during construction is necessary to ensure that discharges to the drainage channels are consistent with existing conditions.<br>• Sediment and erosion control measures should be implemented prior to construction works commencing (e.g. silt fences, sediment traps), to protect drainage channels to the west and to the south. These should conform to relevant guidelines, should be maintained throughout the construction period and should be carefully removed following the completion of works.<br>• Sediment controls should be monitored weekly or after rainfall events. | Prior to and during construction | Overland and/or construction contractor |
| **Weed control on site and to protect the adjacent travelling stock route (TSR)** | • Sterile exotic crops or native ground cover species should be considered, where practical, if plantings are required beneath solar panels to minimise the impact of weed incursion into retained native vegetation<br>• Control of woody weeds, including African Boxthorn, should occur in retained native vegetation<br>• Weed control measures should be monitored annually to assess their effectiveness. | During construction and operation of the sun farm | Overland, construction contractor |

## Attachment 2 – Assessment of Major Mitchell's Cockatoo in accordance with Section 9.2.5 of the FBA

| Information required | Response |
|---|---|
| **(a) the size of the local population directly and indirectly impacted by the development** | The Major Mitchell's Cockatoo is a wide-ranging species found across arid and semi-arid inland areas from Queensland to Victoria. Given the wide-ranging nature of the species the local population is considered to be the known population of the species. The population has not been reliably quantified, but is estimated at more than 50,000 individuals. |
| **(b) the likely impact (including direct and indirect impacts) that the development will have on the habitat of the local population, including but not limited to:**<br>**(i) an estimate of the change in habitat available to the local population as a result of the proposed development**<br>**(ii) the proposed loss, modification, destruction or isolation of the available habitat used by the local population, and**<br>**(iii) modification of habitat required for the maintenance of processes important to the species' life cycle (such as in the case of a plant – pollination, seed set, seed dispersal, germination), genetic diversity and long-term evolutionary development.** | Major Mitchell's Cockatoo was observed in the study area and development site foraging amongst cereal crops. The species may occasionally utilise trees as a foraging and nesting, and crops and crop weeds as a food source.<br><br>The project will result in the removal of 18 hollow bearing trees and cropping areas. Hollow bearing trees may provide nesting resources for the species.<br>Given the extent of similar habitats available to the local population this represents a negligible level of impact. |
| **(c) the likely impact on the ecology of the local population. At a minimum, address the following:**<br>**(i) for fauna:**<br>**– breeding**<br>**– foraging**<br>**– roosting, and**<br>**– dispersal or movement pathways** | As outlined above, the loss of hollow-bearing trees may result in a loss of nesting resources for the species. However, given the wide range of the species the loss of this small amount of nesting resources would be considered negligible.<br><br>The loss of cropping areas would also be considered a negligible level of impact given the availability of such resources for the local population. |
| **(d) a description of the extent to which the local population will become fragmented or isolated as a result of the proposed development** | The project will not result in any fragmentation or isolation of the local population. |
| **(e) the relationship of the local population to other population/populations of the species. This must include consideration of the interaction and importance of the local population to other population/populations for factors such as breeding, dispersal and genetic viability/diversity, and whether the local population is at the limit of the species' range** | As outlined above, given the broad range and high level of mobility of the species, the local population is considered to be the known population of the species. The project will not result in any impacts to the broader population of the Major Mitchell's Cockatoo. |

| Information required | Response |
| --- | --- |
| **(f) the extent to which the proposed development will lead to an increase in threats and indirect impacts, including impacts from invasive flora and fauna, that may in turn lead to a decrease in the viability of the local population** | Key threats to the Major Mitchell's Cockatoo include:<br>• Clearing of woodlands.<br>• Heavy grazing of feeding areas resulting in the removal of seeding grasses and preventing regeneration of food plants.<br>• Loss of existing and future hollow-bearing trees.<br>• Illegal nest-robbing and trapping.<br>The project will result in clearing of 18 hollow bearing trees. Once operational it is not expected that the Limondale Sun Farm will increase the operation of any of these threats. |
| **(g) the measure/s proposed to contribute to the recovery of the species in the IBRA subregion.** | Given the negligible level of impacts to the species, no mitigation measures are considered warranted. |