



DOC18/354117
SSD 8882

Ms Tatsiana Bandaruk
Environmental Assessment Officer
Resource and Energy Assessments
Department of Planning and Environment
tatsiana.bandaruk@planning.nsw.gov.au

Dear Ms Bandaruk

Orange Grove Sun Farm - SSD 8882

I refer to your email dated 1 June 2018 seeking comments from the Office of Environment and Heritage (OEH) on the environmental impact statement (EIS) for the Orange Grove Sun Farm.

OEH has reviewed the EIS and in summary:

- OEH recognises the efforts of the proponent to redesign the development footprint to avoid areas of higher biodiversity value and known threatened species records. Mitigation measures are also proposed to reduce the remaining direct and indirect impacts.
- The Biodiversity Assessment Methodology (BAM) has been applied to the project. Due to a site value score of less than 15 for the two Plant Community Types (PCTs) mapped within the revised development site, no ecosystem credits have been generated by the proposal.
- Minor discrepancies between the Biodiversity Development Assessment Report and the Biodiversity Assessment Method calculator should be resolved, along with clarification of the candidate threatened species assessed and survey extent.
- OEH is satisfied that the proponent has complied with the project Secretary's Environmental Assessment Requirements and adequately undertaken an Aboriginal cultural heritage assessment, including Aboriginal consultation. OEH is also satisfied with the proposed actions of the Heritage Management Plan.
- Further discussion is required on the impact of the development on flooding, especially the impact due to fencing and debris which may collect on the fences.

Detailed comments and recommendations are provided in **Attachment A**.

If you have any enquiries, please contact Erica Baigent, Conservation Planning Officer on 6883 5311 or email erica.baigent@environment.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, reading "Thomas Celebrezze". The signature is written in a cursive, flowing style.

TOM CELEBREZZE

Director Regional Operations

North West

28 June 2018

Contact officer: ERICA BAIGENT
6883 5311

Attachment A

OEH review of Orange Grove Sun Farm EIS

1 Discrepancies exist between the patch size stated in the Biodiversity Development Assessment Report (BDAR) and the calculator

Whilst the patch size determined during the assessment is not mapped, the BDAR states '*the two vegetation zones within the development site both form part of large patches of connecting vegetation having patch sizes larger than 100ha*' (page 22). However, in the Biodiversity Assessment Method (BAM) calculator the patch size has been set at zero. When the patch size is set at over 100ha, two additional species credit species are included in the potential candidate list – Barking Owl (*Ninox connivens*) and Eastern Cave Bat (*Vespadelus troughtoni*). The BDAR should document assessment of habitat suitability for these species in tables 5.1 and 5.2.

Recommendation

- 1.1 The assessor should resolve the inconsistency between the stated patch size in the BDAR and the data entered in the BAM calculator. The consideration of species credit species should then be updated accordingly.

2 Discrepancies exist between the candidate species list in the BDAR and the calculator

There are some discrepancies in the consideration of candidate species credit species between the BDAR and the BAM calculator.

In Table 5.2 of the BDAR the following species are listed as candidate species credit species:

- Bluegrass (*Dichanthium setosum*)
- Finger Panic Grass (*Digitaria porrecta*)
- Belson's Panic (*Homophalis belsonii*)
- Slender Darling Pea (*Swainsona murrayana*)
- Squirrel Glider (*Petaurus norfolcensis*)
- Koala (*Phascolarctos cinereus*)

Table 5.4 clarifies that suitable habitat for the flora species above is located within the roadside portions of the development site only (which will be impacted by shoulder widening).

However only three of these flora species are carried forward as 'confirmed' candidate species in the BAM calculator, with the Slender Darling Pea excluded. No reason is provided for this exclusion.

For all confirmed candidate flora species in the calculator, the assessor states that surveys within the survey timetable for each species did not confirm their presence within the development footprint (we note that whilst Finger Panic Grass was detected, the project will not involve impacts within a 30m buffer of this record).

A species survey must be undertaken for all candidate species (identified based on steps 1-3 of section 6.4 of the BAM) unless there is a documented reason to exclude them, or an expert report has been obtained or the species is presumed to be present. We note that the surveys undertaken for the project do not align with the BAM survey timetable for *S. murrayana* (if it is a candidate species).

Recommendation

- 2.1 The BDAR should clarify whether or not *S. murrayana* is considered a candidate threatened species on the development site, in accordance with the steps set out in section 6.4 of the BAM. The assessment must proceed to Step 4 of section 6.4 of the BAM at a minimum for all candidate species identified for further assessment.

3 Threatened fauna survey extent should be justified within the BDAR

Whilst not completely clear, it appears that the northern lot within the development site (the area mapped as 'disturbed/cropped' with scattered trees) was not included in the threatened fauna surveys, following the redesign of the project footprint (BDAR Figure 5.1).

The BDAR carried forward two species credit fauna species as candidate species for further assessment. The BAM provides scope for an assessor to determine that suitable habitat is only located on specific portions of a development site and to provide justification for this, and therefore the associated survey design, within the BDAR.

In the case of the Squirrel Gilder, the BDAR states that Squirrel Gilders were only included as a candidate species as a precautionary measure, as the current development site does not actually contain suitable habitat. OEH concurs with this assessment therefore the omission of the northern lot from surveys for this species is of no consequence.

The BDAR should clarify the survey effort and survey design for the Koala.

Recommendation

- 3.1 The BDAR should clarify whether the fauna surveys (eg koala scat searches) extended to the northern portion of the site.
- 3.2 If the northern lot was not included in the threatened fauna surveys, the BDAR should present justification for limiting the threatened fauna surveys to the southern portion of the site (to satisfy Section 6.4 of the BAM).

4 Minimal harm to Aboriginal cultural heritage

OEH note the following ACH assessment results:

- No sites were identified within the proposed footprint that have socio-cultural or historic significance value.
- The assessment survey findings identified 2 isolated stone artefacts of limited value one of which (OG-IF1), is located in the proposed development footprint.
- Two possible Aboriginal scarred trees were recorded one of which is in the proposed footprint (OG PST 2) but will be avoided during construction works.

OEH is satisfied with the survey coverage undertaken across the project area noting that 11.2 kilometres of the project area was sampled for Aboriginal objects. OEH further recognise that the landscape location of the project area is not associated with landforms commonly associated with Aboriginal sites and that the land has an extensive land use disturbance history.

OEH accept the unmitigated recommendation for Aboriginal object OG-IF1 which has been disturbed from previous land use. OEH consider the recommendation proportionate.

5 Project impacts on flood behaviour require further discussion

The Carroll to Boggabri Floodplain Management Plan and flood study have identified a flow path or flood runner which traverses across the north-east portion of the development area. Fencing which collect debris may have impact on flood behaviour.

The assessment only looked at a flood level in the Namoi River adjacent to the development and did not consider the two-dimensional nature of flooding and previous studies which identify a flow path travelling to the north west from the Namoi River.

Recommendations

- 5.1 Further discussion is required on the impact of the development on flooding, especially the impact due to fencing and debris which may collect on the fences.