



**Planning &  
Environment**

**Planning Services  
Resource Assessments**

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Our Ref: 13/12736

Mr Ibrahim Eid  
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Level 5, 44 Miller Street  
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Dear Mr Eid

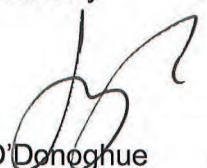
**Jupiter Wind Farm (SSD 13\_6277)  
Supplementary Environmental Assessment Requirements**

As you are aware, the Jupiter Wind Farm has been determined to be a controlled action under the *Environment Protection Biodiversity Conservation Act 1999*. The Commonwealth Department of the Environment has provided the NSW Department of Planning and Environment with input on the Secretary's Environmental Assessment Requirements (SEARs).

The Department provides the Commonwealth's requirements as a supplement to the SEARs issued on 31 January 2014 and updated on 3 June 2014. The additional matters should be considered in the Environmental Impact Statement for the project.

If you wish to discuss the matter further please contact Nicole Brewer on 9228 6374.

Yours sincerely

 10/9/15.  
Steve O'Donoghue  
**A/Director, Resource Assessments**  
(as nominee of the Secretary)

## **Guidelines for preparing Assessment Documentation relevant to the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)***

These Guidelines are intended to inform the development of Assessment Documentation for projects assessed under an assessment bilateral agreement. If a separate chapter is not provided in the Assessment Documentation, the Table at Attachment 1 detailing where the information is located must be completed.

### **References:**

- *Environment Protect and Biodiversity Conservation Act 1999* - section 51-55, section 96A(3)(a)(b), 101A(3)(a)(b), section 136, section 527E;
- Environment Protect and Biodiversity Conservation Regulations 2000 - Division 3.2, 3.02(a)(b)(ii)(iii), Division 5.2, Schedule 4;
- Bilateral Agreements - Item 18.1, Item 18.5, Schedule 1; and
- Policy - *Environment Protect and Biodiversity Conservation Act 1999* Environmental Offsets Policy October 2012

## **1 BACKGROUND AND DESCRIPTION OF THE ACTION**

The Assessment Documentation must provide background to the action and describe in detail all components of the action for example (but not limited to), the construction, operation and (if relevant) decommissioning components of the action. This must include the precise location of all works to be undertaken (including associated offsite works and infrastructure), structures to be built or elements of the action that may have impacts on matters of national environmental significance (MNES).

The description of the action must also include details on how the works are to be undertaken (including stages of development and their timing) and design parameters for those aspects of the structures or elements of the action that may have relevant impacts.

The Assessment Documentation must include how the action relates to any other actions (of which the proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action.

The Assessment Documentation must also provide details on the current status of the action, alternatives to the action, as well as the consequences of not proceeding with the action.

## **2 THE ENVIRONMENT INCLUDING MNES**

The Assessment Documentation must include a description of the environment and management practices of the proposal site and the surrounding areas and other areas that may be affected by the action. Include all relevant MNES protected by controlling provisions of Part 3 of the EPBC Act (see Attachment 2 for MNES specific to the project):

- (a) A description of the World Heritage values of the World Heritage property relevant to the action.
  - a. Including Outstanding Universal Value, relevant plans

- (b) A description of the National Heritage values of the National Heritage Place relevant to the action.
  - a. Including any relevant plans
- (c) A description of the ecological character of the Ramsar Wetland relevant to the action.
  - a. Including any relevant plans
- (d) Listed threatened species and communities (including suitable habitat) that are or are likely to be present in the vicinity of the site, including the following details:
  - i. Details of the scope, timing/effort (survey season/s) and methodology for studies or surveys used to provide information on the listed species/community/habitat at the site (and in areas that may be impacted by the project). Include details of:
    - o best practice survey guidelines are applied; and
    - o how they are consistent with (or a justification for divergence from) published Australian Government guidelines and policy statements.
  - ii. Include any relevant plans/agreements
- (e) Listed migratory species (including suitable habitat) that are or are likely to be present in the vicinity of the site, including the following details:
  - i. Details of the scope, timing/effort (survey season/s) and methodology for studies or surveys used to provide information on the listed species/habitat at the site (and in areas that may be impacted by the project). Include details of:
    - a. best practice survey guidelines are applied;
    - b. how these are consistent with (or a justification for divergence from) published Australian Government guidelines and policy statements.
  - ii. Include any relevant plans/agreements
- (f) A description of the environment relevant to the nuclear action.
- (g) A description of the Great Barrier Reef Marine Park environment relevant to the action.
  - a. Including Outstanding Universal Value
- (h) A description of the water resource environment relevant to the coal seam gas development or large coal mining development.
  - a. Refer to the Independent Expert Scientific Committee's (IESC) Information Guidelines for Proposals Relating to the Development of Coal Seam Gas and Large Coal Mines where there is a Significant Impact on Water Resources, available at <http://www.iesc.environment.gov.au/publications/information-guidelines-independent-expert-scientific-committee-advice-coal-seam-gas>
  - b. Note: Advice will be requested from the IESC in regards to the proposal.

- (i) A description of the environment relevant for part of the Commonwealth Marine (for actions outside the Commonwealth marine area that may impact the environment in the Commonwealth marine area).
  - a. Note: whole of the environment must be considered –refer to the Significant Impact Guidelines 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies.
- (j) A description of the environment relevant for Commonwealth Land (for actions outside Commonwealth Land that may impact on the environment on Commonwealth Land).
  - a. Note: whole of the environment must be considered –refer to the Significant Impact Guidelines 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies.

### **3 IMPACTS**

- (a) The Assessment Documentation must include a description of all of the relevant impacts of the action on MNES (identified in Section 2). Impacts during the construction, operational and (if relevant) the decommissioning phases of the project must be addressed, and the following information provided:
  - i. a description of the relevant impacts of the action;
  - ii. a detailed analysis of the nature and extent of the likely direct, indirect and consequential impacts relevant to MNES, including likely short-term and long-term impacts – refer to the Significant Impact Guidelines 1.1 - Matters of National Environmental Significance for guidance on the various types of impact that need to be considered;
  - iii. a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;
  - iv. any technical data and other information used or needed to make a detailed assessment of the relevant impacts;
  - v. an explanation of how Indigenous stakeholders' views of the action's impacts to biodiversity and cultural heritage have been sought and considered in the assessment. Including where relevant, how guidelines published by the Commonwealth in relation to consulting with Indigenous peoples for proposed actions that are under assessment have been considered and applied; and
  - vi. where the proposal is a coal seam gas development or large coal mining development and likely to significantly impact on a water resource – refer to the IESC's Information Guidelines for Proposals Relating to the Development of Coal Seam Gas and Large Coal Mines where there is a Significant Impact on Water Resources, available at <http://www.iesc.environment.gov.au/publications/information-guidelines-independent-expert-scientific-committee-advice-coal-seam-gas>

- (b) The Assessment Documentation should identify and address cumulative impacts, where potential project impacts are in addition to existing impacts of other activities (including known potential future expansions or developments by the proponent and other proponents in the region and vicinity).
- (c) The Assessment Documentation should also provide a detailed assessment of any likely impact that this proposed action may facilitate on the relevant MNES at the local, regional, state and national scale.

#### **4 AVOIDANCE AND MITIGATION MEASURES / ALTERNATIVES**

##### Avoidance and Mitigation Measures

The Assessment Documentation must provide information on all proposed avoidance and mitigation measures to manage the relevant impacts of the action on MNES.

The Assessment Documentation also must take into account relevant agreements and plans that cover impacts on MNES including but not limited to:

- any recovery plan, conservation advice for the species or community;
- any threat abatement plan for a process that threatens the species;
- any wildlife conservation plan for the species;
- any management plan for a Ramsar wetland;
- any management plan for a World Heritage property and National Heritage place;
- any Marine Bioregional Plans;
- any Strategic Assessment;
- Outstanding Universal Value; and
- the IESC Information Guidelines for Proposals Relating to the Development of Coal Seam Gas and Large Coal Mines where there is a Significant Impact on Water Resources available at <http://www.iesc.environment.gov.au/publications/information-guidelines-independent-expert-scientific-committee-advice-coal-seam-gas>.

The Assessment Documentation must include, and substantiate, specific and detailed descriptions of the proposed avoidance and mitigation measures, based on best available practices and must include the following elements:

- (a) A consolidated list of avoidance and mitigation measures proposed to be undertaken to prevent or minimise for the relevant impacts of the action on MNES, including:
  - i. a description of proposed avoidance and mitigation measures to deal with relevant impacts of the action, including mitigation measures proposed to be taken by State/Territory governments, local governments or the proponent;

- ii. assessment of the expected or predicted effectiveness of the mitigation measures, including the scale and intensity of impacts of the proposed action and the on-ground benefits to be gained through each of these measures;
  - iii. a description of the outcomes that the avoidance and mitigation measures will achieve;
  - iv. any statutory or policy basis for the mitigation measures; and
  - v. the cost of the mitigation measures.
- (b) A detailed outline of a plan for the continuing management, mitigation and monitoring of relevant MNES impacts of the action, including a description of the outcomes that will be achieved and any provisions for independent environmental auditing.

Where appropriate, each project phase (construction, operation, decommission) must be addressed separately. It must state the environmental outcomes, performance criteria, monitoring, reporting, corrective action, contingencies, responsibility and timing for each environmental issue.

- (c) the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program.

#### Alternatives

The Assessment Documentation must include any feasible alternatives to the action to the extent reasonably practicable, including:

- (a) if relevant, the alternative of taking no action;
- (b) a comparative description of the impacts of each alternative on the triggered MNES protected by controlling provisions of Part 3 of the EPBC Act for the action; and
- (c) sufficient detail to make clear why any alternative is preferred to another.

Short, medium and long-term advantages and disadvantages of the options must be discussed.

## **5 RESIDUAL IMPACTS / OFFSETS**

The Assessment Documentation must provide details of:

- (a) the likely residual impacts on MNES that are likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account.
  - i. Include the reasons why avoidance or mitigation of impacts is not reasonably achieved; and
  - ii. Identify the significant residual impacts on MNES.

#### Offset Package (if relevant)

The Assessment Documentation must include details of an offset package proposed to be implemented to compensate for the residual significant impact of the project, as well as an analysis about how the offset meets the requirements in the Department's *Environment Protect and Biodiversity Conservation Act 1999* Environmental Offsets Policy October 2012 (EPBC Act Offset Policy), or an endorsed state offsets policy (see [www.environment.gov.au/protection/environment-assessments/bilateral-agreements/condition-setting-assessment](http://www.environment.gov.au/protection/environment-assessments/bilateral-agreements/condition-setting-assessment)).

The offset package can comprise a combination of direct offsets and other compensatory measures, so long as it meets the requirements of the EPBC Act Offset Policy, or an endorsed offsets policy. Offsets should align with conservation priorities for the impacted protected matter and be tailored specifically to the attribute of the protected matter that is impacted in order to deliver a conservation gain.

Offsets should compensate for an impact for the full duration of the impact.

Offsets must directly contribute to the ongoing viability of the MNES impacted by the project and deliver an overall conservation outcome that improves or maintains the viability of the MNES as compared to what is likely to have occurred under the status quo, that is if neither the action nor the offset had taken place.

Note offsets do not make an unacceptable impact acceptable and do not reduce the likely impacts of a proposed action. Instead, offsets compensate for any residual significant impact.

The Assessment Documentation must provide:

- (a) Details of the offset package to compensate for significant residual impacts on MNES; and
- (b) An analysis of how the offset package meets the requirements of the EPBC Act Offsets Policy, a discussion on the feasibility and the workings outlined in Attachment 3; or
- (c) Details of how the offset meets an endorsed state offsets policy.

## **6 ENVIRONMENTAL RECORD OF PERSON(S) PROPOSING TO TAKE THE ACTION**

The information provided must include details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:

- (a) the person proposing to take the action; and
- (b) for an action for which a person has applied for a permit, the person making the application.

If the person proposing to take the action is a corporation, details of the corporation's environmental policy and planning framework must also be included.

## **7 ECONOMIC AND SOCIAL MATTERS**

The economic and social impacts of the action, both positive and negative, must be analysed. Matters of interest include:

- (a) details of any public consultation activities undertaken, and their outcomes;
- (b) details of any consultation with Indigenous stakeholders.
- (c) projected economic costs and benefits of the project, including the basis for their estimation through cost/benefit analysis or similar studies;
- (d) employment opportunities expected to be generated by the project (including construction and operational phases).

Economic and social impacts should be considered at the local, regional and national levels. Details of the relevant cost and benefits of alternative options to the proposed action, as identified in Section 4 above, should also be included.

Identification of affected parties is required, including a statement mentioning any communities that may be affected and describing their views.

## **8 INFORMATION SOURCES PROVIDED IN THE ASSESSMENT DOCUMENTATION**

For information given in the Assessment Documentation, state:

- (a) the source of the information;
- (b) how recent the information is;
- (c) how the reliability of the information was tested;
- (d) what uncertainties (if any) are in the information; and
- (e) what guidelines, plans and/or policies did you consider.

## **9 CONCLUSION**

An overall conclusion as to the environmental acceptability of the proposal on each MNES, including:

- (a) a discussion on the consideration with the requirements of the EPBC Act, including the objects of the EPBC Act, the principles of ecologically sustainable development and the precautionary principle;
- (b) reasons justifying undertaking the proposal in the manner proposed, including the acceptability of the avoidance and mitigation measures; and
- (c) if relevant, a discussion of residual impacts and any offsets and compensatory measures proposed or required for significant residual impacts on MNES, and the relative degree of compensation and acceptability.

## Attachment 1 – Reference Table for EPBC Act Assessment Documentation

Table 1: Assessment Requirements addressed in proponent Assessment Documentation (e.g. EIS)  
[only include this table if a separate chapter on MNES is not applied]

[illegible]

## ATTACHMENT 2 – Controlling provisions for Jupiter Wind Farm (EPBC 2015/7518)

The Jupiter Wind Farm was determined to be a controlled action under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 8 September 2015.

The controlled action is likely to have a direct and indirect impact on matters of national environment significance, in particular, listed threatened species and ecological communities (sections 18 and 18A) and migratory species (sections 20 and 20A).

Relevant matters of national environmental significance that have been identified as having the potential to be impacted by the proposed action are listed threatened species, including but not limited to:

- White box-yellow box-Blakely's red gum grassy woodland and derived native grassland ecological community – critically endangered

The proposed action involves clearing a minimum of 3.39 ha of the community and potentially impacting additional areas of derived native grassland that meets the requirements of the EPBC Act listed ecological community. Based on the information provided in the referral the Department has concerns that areas mapped as derived native grasslands abutting mapped areas of the EC could be the EPBC listed community. Thus the quantum of impact could be higher. This potential discrepancy is only of critical importance if the proponent relies on the EPBC offsets calculator to determine the offset requirements for the EPBC listed community. If the proponent uses accredited approaches such as the NSW Framework for Biodiversity Assessment (FBA) or BioBanking Assessment Methodology (BBAM) then these should be used to determine the impacts and offsets for the NSW listed EEC.

- Swift Parrot (*Lathamus discolor*) – endangered

The abundance of Swift Parrots in NSW fluctuates markedly between regions and years and the species could migrate in large numbers through the site or occasionally utilise the area for feeding. The species population is declining and loss of adult birds through blade strike could contribute to the long-term decrease in the population and interfere with the recovery of the species.

- Curlew Sandpiper (*Calidris ferruginea*) – critically endangered

The species is declining and loss of adult birds through blade strike could contribute to the long-term decrease in the size of the population and interfere with the recovery of the species.

- Hoary Sunray (*Leucochrysum albicans* var. *tricolor*) – endangered

The proposed action involves clearing of an unknown number of individuals or estimated proportion of local subpopulation. Thus there is insufficient information to determine the significance of impacts to this species. As this species is not listed under NSW threatened species legislation, any significant residual impacts to this species and/or its habitat will require offsetting using the EPBC offsets calculator.

- The following listed migratory species,  
Sharp-tailed Sandpiper (*Calidris acuminata*)  
Common Sandpiper (*Actitis hypoleucos*)

There are known sites of significance nearby at Lake George and Lake Bathurst and the loss of adults birds through blade strike has the potential to seriously disrupt the lifecycle of an ecologically significant proportion of the population.

### Attachment 3 - Offset calculator and workings (remove tables if irrelevant)

[Inset calculator spreadsheet]

**Table 1 - EPBC Act Offsets Assessment Guide – Area of Community or Area of Habitat**

| Threatened species or ecological community | Listing status               |
|--------------------------------------------|------------------------------|
| <i>Insert species or community</i>         | <i>Insert listing status</i> |

#### Impact Site - Area of Habitat or Area of Community

|                 |                                                      |                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size (ha)       | <i>Insert the area in ha of the proposed impact</i>  |                                                                                                                                                                                                                                                                                                                                                                        |
| Description     | <i>Insert a brief description of the impact site</i> |                                                                                                                                                                                                                                                                                                                                                                        |
| Guide component | Assessed value                                       | Discussion                                                                                                                                                                                                                                                                                                                                                             |
| Quality         | 1 - 10                                               | <p><i>Outline the basis for the quality score on the impact site. This should include an outline of the <b>condition</b>, <b>context</b> and <b>stocking rates</b> for the site and relative weightings for each of these features if a published quality framework is not available.</i></p> <p><i>Include specific references to justify the assessed value.</i></p> |

#### Offset Site - Area of Habitat or Area of Community

|             |                                                          |
|-------------|----------------------------------------------------------|
| Size (ha):  | <i>Insert the area in ha of the proposed offset</i>      |
| Description | <i>Insert a brief description of the proposed offset</i> |

#### Averted loss Component

|                                            |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Guide component                            | Assessed value     | Discussion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Time over which loss is averted            | 0 – 20 years (max) | <p><i>Describe the duration of the proposed offset.</i></p> <p><i>Include specific references to justify the assessed value.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Risk of loss without offset:<br>(0 – 100%) | 0 – 100%           | <p><i>Outline the key information for calculating risk of loss. Information should provide a greater understanding about the level of development intent on the target site and the likelihood of this leading to measurable impacts in the foreseeable future. Key risk of loss indicators include: background rates of loss; geophysical, economic or social data that indicates likely destruction of the offset site; zoning, leases and broad planning instruments that demonstrate possible development intent; and development applications / approvals over the offset site.</i></p> |

|                                                   |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                   |                | <p><i>Degradation to the quality of a site due to current management practices and use should not be incorporated into the risk of loss. These factors should be incorporated in the 'future quality' scores.</i></p> <p><i>Include specific references to justify the assessed value.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Guide component                                   | Assessed value | Discussion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <p>Risk of loss with offset</p> <p>(0 – 100%)</p> | 0 – 100%       | <p><i>Outline information regarding tenure treatments that reduce any risks referred to in the <b>Risk of loss without offset</b>.</i></p> <p><i>Where relevant, this should include information on the legal mechanism that is being used to secure the offset and the types of anthropogenic activities that this legal mechanism will prevent. For example, a conservation covenant may protect a site from timber extraction, but may not treat the risk of the site being used for mineral resource extraction. The difference between the <b>Risk of loss without offset</b> and this value is a function of the legal mechanism to reliably reduce the risk posed to a site.</i></p> <p><i>Include specific references to justify the assessed value.</i></p> |
| <p>Confidence (Risk related)</p>                  | 0 – 100%       | <p><i>Outline the confidence in the risk of loss scores. Confidence is a measure of certainty and probability of success. Where there is high uncertainty as to the basis of a risk assessment, confidence should be low. The opposite applies for robust evidence and high certainty.</i></p> <p><i>Include specific references to justify the assessed value.</i></p>                                                                                                                                                                                                                                                                                                                                                                                              |

| <b>Quality Improvement Component</b> |                |                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Guide component                      | Assessed value | Discussion                                                                                                                                                                                                                                                                                                                                           |
| <p>Time until ecological benefit</p> | 0 – 200+       | <p><i>Describe the time it will take for the quality to change from the start quality to the proposed future quality with offset.</i></p> <p><i>Include specific references to justify the assessed value.</i></p>                                                                                                                                   |
| <p>Start quality</p> <p>(0 – 10)</p> | 0 – 10         | <p><i>Outline the basis for the quality score on the offset site at present. This should outline the <b>condition</b>, <b>context</b> and <b>stocking rates</b> for the site and relative weightings for each where a published quality framework is not available.</i></p> <p><i>Include specific references to justify the assessed value.</i></p> |

|                                           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Future quality without offset<br>(0 – 10) | 0 – 10   | <p>Outline the basis for the future quality without offset score on the offset site over the time until ecological benefit. This is an assessment of the value of the site in the <u>absence</u> of the offset occurring. This score could remain static or could capture natural degradation impacts on habitat where there are known degrading threats – such as increasing prevalence of ferals and weeds.</p> <p>Development impacts from clearing of a site should be captured in the averted loss component.</p> <p>Include specific references to justify the assessed value.</p> |
| Future quality with offset<br>(0 – 10)    | 0 – 10   | <p>Outline the future quality score on the offset site over the <b>time until ecological benefit</b> as a direct result of the proposed offset. This improvement should outline how the habitat on the offset site will be maintained or improved, noting the <b>condition, context and stocking rates</b> for the site. Quality improvements may result from management interventions such as weed control, erosion control or revegetation.</p> <p>Include specific references to justify the assessed value.</p>                                                                      |
| Confidence (Quality related)              | 0 – 100% | <p>Outline the confidence in the quality improvement being realised. Confidence scores are a measure of evidence, certainty and probability of success. Where there is limited evidence of a management action being effective or high uncertainty as to an ecological outcome, confidence should be low. The opposite applies for robust evidence and high certainty.</p> <p>Include specific references to justify the assessed value.</p>                                                                                                                                             |

## Summary

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final % of impact offset                  | Insert the % of impact offset score.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Cost of offset (\$)                       | Insert the value of the proposed offset. Include specific references to justify the cost.                                                                                                                                                                                                                                                                                                                                                                                                       |
| Other compensatory measures (if proposed) | <p>Outline any other compensatory measures that are proposed by the proponent, including information on how these address key priorities for threatened species or ecological communities.</p> <p>Where these measures involve the funding by the proponent of a third party, include a brief description of how this funding will be managed – including governance arrangements, relevant milestone and timeframes etc.</p> <p>Include specific references to justify the assessed value.</p> |

## References

Provide a consolidated list of all references used as sources in the tables above.

**Table 2 - EPBC Act Offsets Assessment Guide – Number of Individuals/Features**

|                           |                              |
|---------------------------|------------------------------|
| <b>Threatened species</b> | <b>Listing status</b>        |
| <i>Insert species</i>     | <i>Insert listing status</i> |

**Impact – Number of Individuals/Features**

|        |                                                                       |
|--------|-----------------------------------------------------------------------|
| Impact | <i>Insert the number of individual/features that will be impacted</i> |
| Source |                                                                       |

**Offset – Number of Individuals/Features**

|                             |                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description                 | <i>Insert a brief description of the proposed offset</i> |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Guide component             | Assessed value                                           | Discussion                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Time horizon                | 0 – 200+                                                 | Describe the time it will take for the proposed number of individuals/features to be created under the proposed offset<br><br>Include specific references to justify the assessed value.                                                                                                                                                                                                                                    |
| Start value                 | 0 – 200+                                                 | Identify the number of individuals/features on the offset site at present, if any.<br><br>Include specific references to justify the assessed value.                                                                                                                                                                                                                                                                        |
| Future value without offset | 0 – 200+                                                 | Identify the number of individuals/features on the offset site, if any, without the proposed offset, at the nominated time horizon. Outline the basis for this score. This score could remain static or could capture natural degradation impacts on habitat where there are known degrading threats – such as increasing prevalence of invasive species.<br><br>Include specific references to justify the assessed value. |
| Future value with offset    | 0 – 200+                                                 | Identify the future number of individuals/features on the offset site at the nominated time horizon, as a direct result of the proposed offset. Outline how this increase will occur. The increase may result from propagation, captive breeding and release programs or other management interventions.<br><br>Include specific references to justify the assessed value.                                                  |
| Confidence                  | 0 – 100%                                                 | Outline the confidence in the proposed increase in individuals/features on the offset site at the nominated time horizon being realised. Confidence scores are a measure of evidence, certainty and probability of success. Where there is limited evidence of an action being effective or high                                                                                                                            |

|  |  |                                                                                                                                                                                                                        |
|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  | <p><i>uncertainty as to an ecological outcome, confidence should be low. The opposite applies for robust evidence and high certainty.</i></p> <p><i>Include specific references to justify the assessed value.</i></p> |
|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Summary

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final % of impact offset                  | <i>Insert the % of impact offset score</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Cost of offset (\$)                       | <i>Insert the value of the proposed offset</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Other compensatory measures (if proposed) | <p><i>Outline any proposed other compensatory measures that are proposed by the proponent, including information on how these address key priorities for the relevant threatened species.</i></p> <p><i>Where these measures involve the funding by the proponent of a third party, include a brief description of how this funding will be managed – including governance arrangements, relevant milestone and timeframes etc.</i></p> <p><i>Include specific references to justify the assessed value.</i></p> |

## References

*Provide a consolidated list of all references used as sources in the tables above.*

**Table 3 - EPBC Act Offsets Assessment Guide – Condition of habitat**

| Threatened species or Ecological Community    | Listing status               |
|-----------------------------------------------|------------------------------|
| <i>Insert species or ecological community</i> | <i>Insert listing status</i> |

*NB: The 'condition of habitat' row does not currently account for differences in area between the impact site and the offset site. Where the impact site is of a different size to the offset site, the final offset requirement should be calculated by multiplying the '% of impact offset' score by the ratio of the offset site area to impact site area (eg where the impact site is 200ha and the offset site is 100ha, the '% of impact offset' score should be multiplied by 50%).*

### Impact – Change in condition (% benchmark)

|        |                                                                                                                                                                            |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Impact | <i>Insert the condition at the impact site which is predicted as a result of the proposed action, as a % of the site's original condition (ie the condition benchmark)</i> |
| Source |                                                                                                                                                                            |

### Offset – Change in condition (% benchmark)

|                             |                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description                 | <i>Identify the projected increase in condition resulting from the proposed offset. Insert a brief description of how this increase in quality will be achieved.</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Guide component             | Assessed value                                                                                                                                                       | Discussion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Time horizon                | 0 – 200+                                                                                                                                                             | <i>Describe the time it will take for the proposed increase of quality at the offset site to be realised.</i><br><br><i>Include specific references to justify the assessed value.</i>                                                                                                                                                                                                                                                                                                                 |
| Start value                 | 0 – 100+ %                                                                                                                                                           | <i>Outline the start condition of the offset site as a % of the condition benchmark.</i><br><br><i>Include specific references to justify the assessed value.</i>                                                                                                                                                                                                                                                                                                                                      |
| Future value without offset | 0 – 100+ %                                                                                                                                                           | <i>Outline the modelled future condition of the offset site at the time horizon as a % of the condition benchmark in the absence of any offset occurring.</i><br><br><i>Include specific references to justify the assessed value.</i>                                                                                                                                                                                                                                                                 |
| Future value with offset    | 0 – 100+ %                                                                                                                                                           | <i>Outline the modelled future condition of the offset site at the time horizon as a % of the condition benchmark with the offset being implemented.</i><br><br><i>Include specific references to justify the assessed value.</i>                                                                                                                                                                                                                                                                      |
| Confidence                  | 0 – 100%                                                                                                                                                             | <i>Outline the confidence in the modelled changes in condition at the offset site being realised over the nominated time horizon. Confidence scores are a measure of evidence, certainty and probability of success. Where there is limited evidence of an action being effective or high uncertainty as to an ecological outcome, confidence should be low. The opposite applies for robust evidence and high certainty.</i><br><br><i>Include specific references to justify the assessed value.</i> |

## Summary

|                                           |                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final % of impact offset                  | <i>Insert the % of impact offset score</i>                                                                                                                                                                                                                                                                                                                                               |
| Cost of offset (\$)                       | <i>Insert the value of the proposed offset</i>                                                                                                                                                                                                                                                                                                                                           |
| Other compensatory measures (if proposed) | <i>Outline any proposed other compensatory measures that are proposed by the proponent, including information on how these address key priorities for threatened species or ecological communities.</i><br><br><i>Where these measures involve the funding by the proponent of a third party, include a brief description of how this funding will be managed – including governance</i> |

|  |                                                                                                                               |
|--|-------------------------------------------------------------------------------------------------------------------------------|
|  | <p>arrangements, relevant milestone and timeframes etc.</p> <p>Include specific references to justify the assessed value.</p> |
|--|-------------------------------------------------------------------------------------------------------------------------------|

## References

Provide a consolidated list of all references used as sources in the tables above.

## EPBC Act Offsets Assessment Guide – Birth rate/mortality rate

| Threatened species    | Listing status               |
|-----------------------|------------------------------|
| <i>Insert species</i> | <i>Insert listing status</i> |

## Impact – Birth rate/mortality rate

|        |                                                                          |
|--------|--------------------------------------------------------------------------|
| Impact | <i>Insert the projected % change in rate for the impacted population</i> |
| Source |                                                                          |

**Table 4 - Offset – Birth rate/mortality rate**

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                    |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description     | <p><i>Insert a brief description of how the % change in rate will be achieved for the offset. Where the % change in rate will be affecting a different population from the impacted population, it is important to demonstrate that any difference in the relative sizes of the two populations has been adequately considered in quantifying the required scale of the offset (eg a reduction in birth rate of 10% for a population of 2000 would be equivalent to a reduction of 20% for a population of 1000).</i></p> |                                                                                                                                                                                                                                                                                    |
| Guide component | Assessed value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Discussion                                                                                                                                                                                                                                                                         |
| Time horizon    | 0 – 200+                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p><i>Specify the amount of time required before the projected % change in rate is achieved.</i></p> <p><i>Include specific references to justify the assessed value.</i></p>                                                                                                      |
| Start value     | 1-100+%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p><i>Identify the existing rate for the population to be affected by the proposed offset. The percentage in this cell should represent the existing offset rate as a function of the population.</i></p> <p><i>Include specific references to justify the assessed value.</i></p> |

|                             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Future value without offset | 1-100+%  | <p>Identify the rate for the targeted population without the proposed offset, at the nominated time horizon. Outline the basis for this score. This score could remain static or could capture natural degradation impacts on habitat where there are known degrading threats – such as increasing prevalence of invasive species.</p> <p>Include specific references to justify the assessed value.</p>                                                                              |
| Future value with offset    | 1-100+%  | <p>Identify the future rate on the offset site at the nominated time horizon, as a result of the proposed offset. Outline how this change will occur.</p> <p>Include specific references to justify the assessed value.</p>                                                                                                                                                                                                                                                           |
| Confidence                  | 0 – 100% | <p>Outline the confidence in the change in rate being realised for the offset population at the nominated time horizon. Confidence scores are a measure of evidence, certainty and probability of success. Where there is limited evidence of an action being effective or high uncertainty as to an ecological outcome, confidence should be low. The opposite applies for robust evidence and high certainty.</p> <p>Include specific references to justify the assessed value.</p> |

## Summary

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final % of impact offset                  | Insert the % of impact offset score                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Cost of offset (\$)                       | Insert the value of the proposed offset                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Other compensatory measures (if proposed) | <p>Outline any proposed other compensatory measures that are proposed by the proponent, including information on how these address key priorities for the relevant threatened species.</p> <p>Where these measures involve the funding by the proponent of a third party, include a brief description of how this funding will be managed – including governance arrangements, relevant milestone and timeframes etc.</p> <p>Include specific references to justify the assessed value.</p> |

## References

Provide a consolidated list of all references used as sources in the tables above.