



# Guidance for local government on undertaking a critical review of a Biodiversity Development Assessment Report

Department of Climate Change,  
Energy, the Environment and Water



## Acknowledgement of Country

Department of Climate Change, Energy, the Environment and Water acknowledges the Traditional Custodians of the lands where we work and live.

We pay our respects to Elders past, present and emerging.

This resource may contain images or names of deceased persons in photographs or historical content.

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# Contents

Shortened forms	iv
Purpose of this document	1
Checklist of key inputs and decision points in Biodiversity Development Assessment Reports	3
Guidance for use of the checklist	20
1. Getting started	20
Stage 1: Biodiversity assessment	22
2. Establishing the site context – landscape features and native vegetation cover	22
3. Assessing native vegetation, threatened ecological communities and vegetation integrity	23
4. Assessing the habitat suitability for threatened species	26
5. Identifying prescribed additional biodiversity impacts	29
Stage 2: Impact assessment (biodiversity values and prescribed impacts)	31
6. Avoiding or minimising impacts on biodiversity values	31
7. Assessing the impacts of the proposal on biodiversity values	32
8. Thresholds for assessing and offsetting serious and irreversible impacts	35
9. Applying the no net loss standard	36
10. Biodiversity credit report	37
Additional guidance and resources	38

## List of tables

Table 1	Minimum number of plots required per vegetation zone area	25
Table 2	Vegetation integrity thresholds	26

# Shortened forms

Shortened form	Description
BAM	Biodiversity Assessment Method
BAM-C	Biodiversity Assessment Method Calculator
BC Act	<i>Biodiversity Conservation Act 2016</i> (NSW)
BC Regulation	Biodiversity Conservation Regulation 2017 (NSW)
BDAR	Biodiversity Development Assessment Report
BOAMS	Biodiversity Offsets and Agreement Management System
BRW	biodiversity risk weighting
the department	NSW Department of Climate Change, Energy, the Environment and Water
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cwlth)
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
EP&A Regulation	Environmental Planning and Assessment Regulation 2021 (NSW)
GPS	Global Positioning System
IBRA	Interim Biogeographic Regionalisation for Australia
LLS Act	<i>Local Land Services Act 2013</i> (NSW)
MNES	matters of national environmental significance
NVR map	native vegetation regulatory map
NSW	New South Wales
PCT	plant community type
SAII	serious and irreversible impact/s
the Scheme	Biodiversity Offsets Scheme
SEED Portal	Sharing and Enabling Environmental Data Portal
SMART	Specific, Measurable, Achievable, Relevant, Timebound
TBDC	Threatened Biodiversity Data Collection
TEC	threatened ecological community
VI	vegetation integrity

# Purpose of this document

This guidance is for consent authorities who determine development applications under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) (not including state significant development) to which the Biodiversity Offsets Scheme (the Scheme) applies.

The Scheme will apply if the proposed development is likely to ‘significantly affect threatened species.’

Section 7.2 of the Biodiversity Conservation Act 2016 (BC Act) states that a development will ‘significantly affect threatened species’ if:

- a. it is likely to significantly affect threatened species or ecological communities, or their habitats, according to the test in section 7.3, or
- b. the development exceeds the biodiversity offsets scheme threshold if the biodiversity offsets scheme applies to the impacts of the development on biodiversity values, or
- c. it is carried out in a declared area of outstanding biodiversity value.

Further information on the Scheme and entry requirements is available on the Department of Climate Change, Energy, the Environment and Water (the department) website under Biodiversity Offsets Scheme.

The BC Act requires a Biodiversity Development Assessment Report (BDAR), prepared by an accredited assessor (assessor), to be submitted with a development application when the Scheme applies. The consent authority will determine the development application having regard to the BDAR. The BDAR will support the consent authority to make key decisions in determining a development application, including whether:

- impacts on biodiversity values have been avoided, minimised and mitigated to their satisfaction
- impacts are serious and irreversible
- to impose the credit requirement returned by the BDAR or increase or reduce the credit requirement.

A comprehensive table of requirements for the BDAR appears in Appendix K (and Appendix L for streamlined assessments) of the Biodiversity Assessment Method 2020 (BAM). This guidance document does not replace the requirement for a BDAR to comply with Appendix K or L of the BAM.

The guidance is comprised of:

- a checklist for key inputs and decision points to support decision-making
- guidance material to support use of the checklist.

Note that development applications that are not subject to the Scheme will still be assessed under section 4.15 of the EP&A Act. This guidance does not consider assessment requirements beyond the requirements of the Scheme.

This document can be used in combination with any additional guidance to support local government in application of the Scheme that is listed in the resources section at the end of the document.

Links to guidance notes are in the checklist – mouse click to jump to relevant guidance. To return to the checklist, use ALT with the left arrow key. To check a box, double click on it and select the 'Highlight text' tool. Right-click on supporting resources links to open in a new tab or window.

# Checklist of key inputs and decision points in Biodiversity Development Assessment Reports

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
<b>Getting started</b>			
Was the report prepared by an accredited assessor?	<input type="checkbox"/>	<p><u><a href="#">Accredited Assessor public register.</a></u></p> <p>If the report has not been prepared by an accredited assessor, please advise the department at <u><a href="mailto:BAM_accreditation@environment.nsw.gov.au">BAM_accreditation@environment.nsw.gov.au</a></u>.</p> <p>BDAR Template – Details and experience of author/s and contributors page x.</p>	<a href="#">1.1</a>
Is the <i>finalised</i> biodiversity credit report from the BAM Calculator (BAM-C) attached and submitted with the report?	<input type="checkbox"/>	<p>BAM Appendix K.</p> <p>BDAR Template Section 11.</p> <p>If the report is submitted as a draft, please advise the department at <u><a href="mailto:BAM_accreditation@environment.nsw.gov.au">BAM_accreditation@environment.nsw.gov.au</a></u>.</p> <p>Confirm the BAM-C case has been finalised and the Biodiversity Offsets and Agreement Management System (BOAMS) case has been submitted to the consent authority within 14 days of the date the credit report was finalised.</p>	<a href="#">1.2</a>
Has the report been finalised and certified as BAM compliant within 14 days of the submission date?	<input type="checkbox"/>	<p><u><a href="#">BC Act – section 6.15.</a></u></p> <p>BDAR Template – Declarations page ix.</p>	<a href="#">1.3</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
Has the proponent proposed to meet their offset obligation using the variation rules?	<input type="checkbox"/>	<p>The development application must include the reasonable steps taken to obtain the like-for-like biodiversity credits.</p> <p>Refer to the <u><a href="#">Ancillary rules: Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules.</a></u></p>	<a href="#">1.4</a>
Does the development application seek a reduced credit requirement?	<input type="checkbox"/>	<p>A request for a reduced credit obligation requires the department's concurrence in accordance with clause 51 of the <u><a href="#">Environmental Planning and Assessment Regulation 2021</a></u> (EP&amp;A Regulation).</p> <p>Advise the department at <u><a href="mailto:pos.helpdesk@environment.nsw.gov.au">pos.helpdesk@environment.nsw.gov.au</a></u> within 10 days of receiving a development application seeking a reduced credit obligation, and notify the department, within 30 days of receiving the development application, of council's decision to support/not support the reduced credit obligation.</p> <p>Alternatively, if the development application does not indicate a reduced credit obligation is requested and the consent authority seeks a credit reduction, notify the department and forward the application within 14 days.</p> <p>Check the development application is accompanied by a letter detailing the request in accordance with the information requirements listed on the department's website, <u><a href="#">Seeking concurrence for a reduced credit obligation.</a></u></p>	<a href="#">1.5</a>



Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
Does the development overlap with category 1–exempt land (within the meaning of the LLS Act)?	<input type="checkbox"/>	<p>The draft native vegetation regulatory map (NVR map) is available in some areas. In some areas, the draft NVR tool can be used to identify if the development site is located on category 1–exempt land – <a href="#">Native Vegetation Regulatory map</a>. In areas where the draft NVR map is not yet published, the <a href="#">transitional NVR map tool</a> can be used, or application of the NVR category criteria described in the <a href="#">guidance documents</a> below.</p> <p><a href="#">Determining native vegetation land categorisation for application in the Biodiversity Offsets Scheme.</a></p> <p><a href="#">Guidance for local government on applying the biodiversity offset scheme thresholds.</a></p>	<a href="#">1.6</a>
Has a streamlined BAM assessment been applied? If so, does the proposal qualify for a streamlined assessment?	<input type="checkbox"/>	<p>BAM Appendix B outlines when the streamlined assessment module for scattered trees can be applied.</p> <p>Clearing area limits apply to the streamlined assessment module for small areas– BAM Appendix C, Table 12.</p> <p>BAM Appendix D provides a decision-making key for the assessment of planted native vegetation.</p> <p><a href="#">Streamlined Assessment Module Planted Native Vegetation – Operational Manual.</a></p>	<a href="#">1.7</a>
Does the application include all required digital shape files for maps?	<input type="checkbox"/>	<p>BAM Appendix K, or Appendix L for a streamlined assessment.</p> <p>BDAR Template Appendix A.</p>	<a href="#">1.8</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
Is the proposal considered a controlled action under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and require approval from the Commonwealth Government?	<input type="checkbox"/>	If the proposed development is deemed a controlled action or needs referral under the EPBC Act, matters of national environmental significance (MNES) assessment requirements will apply throughout the BDAR.  <a href="#">Aligning Biodiversity Assessments</a> [PDF 70KB].	
<b>Stage 1: Biodiversity assessment</b>			
<b>Establishing the site context – landscape features and native vegetation cover</b>			
Is an appropriate Site Map included?	<input type="checkbox"/>	BAM Section 2(3.) and Subsection 3.1.1.	<a href="#">2.1</a>
Does it identify the boundary of the subject land including the operational footprint and construction footprint including any additional clearing associated with temporary/ancillary construction facilities and infrastructure?	<input type="checkbox"/>	BDAR Template Figure 1.	
Is an appropriate Location Map included?	<input type="checkbox"/>	BAM Subsection 3.1.2.	<a href="#">2.1</a>
Does it identify the assessment area including the subject land and a 1,500 m buffer, or 500 m buffer for linear-shaped proposals?	<input type="checkbox"/>	BDAR Template Figure 2.	

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
Are landscape features included on the Site and Location maps?	<input type="checkbox"/>	BAM Subsection 3.1.3. BDAR Template Figures 1 and 2.	<a href="#">2.1</a>
Does the introduction to the report describe the proposal and indicate what triggered entry to the Scheme?	<input type="checkbox"/>	BAM Section 2(3.c.). <u><a href="#">Guidance for local government on applying the biodiversity offset scheme thresholds.</a></u> BDAR Template Section 1.2.	<a href="#">2.2</a>
Are the correct Interim Biogeographic Regionalisation for Australia (IBRA) bioregion and subregion identified?	<input type="checkbox"/>	BAM Subsection 3.1.3. BDAR Template Subsection 3.2.1. <u><a href="#">Interim Biogeographic Regionalisation for Australia (IBRA), Version 7 (Regions).</a></u> <u><a href="#">Interim Biogeographic Regionalisation for Australia (IBRA), Version 7 (Subregions).</a></u>	<a href="#">2.3</a>
Has the percentage of native vegetation cover within the assessment area (including the subject land and a 1,500 m buffer, or 500 m buffer for linear-shaped proposals) been determined?	<input type="checkbox"/>	BAM Section 3.2. This is not required for assessments that only apply the streamlined assessment module for scattered trees or planted native vegetation. BDAR Template Section 3.3 and Table 2.	<a href="#">2.4</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
<b>Assessing native vegetation, threatened ecological communities and vegetation integrity</b>			
Is the extent of all native vegetation cover within the subject land correctly mapped on an aerial image?	<input type="checkbox"/>	BAM Section 4.1. BDAR Template Figure 7.	<a href="#">3.1</a>
Has planted native vegetation been included (if applicable)?	<input type="checkbox"/>	<a href="#">Streamlined Assessment Module Planted Native Vegetation – Operational Manual.</a>	
Are any differences between the actual native vegetation extent and imagery identified and reasonably justified?	<input type="checkbox"/>	BAM Section 4.1(1–3.) and Subsection 4.1.1. BDAR Template Subsection 4.1.1.	<a href="#">3.1</a>
Is there a map of PCTs on the subject land?	<input type="checkbox"/>	The PCTs identified must conform to the BioNet classification and naming system for PCTs in New South Wales. BAM Section 4.2(1). State vegetation type maps – where available – can be accessed in the NSW Government’s SEED portal – <a href="#">NSW State Vegetation Type Map.</a> <a href="#">BioNet Vegetation Classification.</a> <a href="#">BioNet Resources.</a> BDAR Template Figure 8.	<a href="#">3.2</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
Is there an evidenced-based justification for PCT selections?	<input type="checkbox"/>	BAM Section 4.2(1–5.), Subsections 4.2.1(3–6.) and 4.2.3. BDAR Template Subsection 4.2.2.3. <a href="#">Plot to PCT Assignment Tool.</a> <a href="#">Plot to PCT Assignment Tool User Guide.</a>	<a href="#">3.3</a>
For non-threatened vegetation, is the estimated extent to which the PCT has been cleared within New South Wales recorded in the report?	<input type="checkbox"/>	BAM Subsection 4.2.1(5.). <a href="#">BioNet Vegetation Classification.</a> BDAR Template Subsection 4.2.2.1 and Table 4.	<a href="#">3.4</a>
Is there a map of threatened ecological communities (TECs) on the subject land?	<input type="checkbox"/>	BAM Subsection 4.2.2(3.). Listed TECs – <a href="#">BC Act – Schedule 2.</a> BDAR Template Figure 9.	<a href="#">3.5</a>
Is there a map of vegetation zones that delineate PCTs and broad condition state on the subject land?	<input type="checkbox"/>	BAM Subsection 4.3.1. Recent local vegetation mapping if relevant. <a href="#">State Vegetation Type Map</a> if relevant. BDAR Template Figure 10.	<a href="#">3.6</a>
Do the vegetation integrity (VI) scores of the plots in each vegetation zone indicate the same broad condition state?	<input type="checkbox"/>	BAM Subsection 4.3.4(2.). BDAR Template Section 4.4 and Table 6.	<a href="#">3.6</a>
Has the patch size of each vegetation zone been correctly determined?	<input type="checkbox"/>	BAM Subsection 4.3.2. BDAR Template Section 4.4 and Table 6.	<a href="#">3.6</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
Is there a map of survey plot locations relative to vegetation zones and PCTs?	<input type="checkbox"/>	BAM Subsections 4.2.1 and 4.3.3. BDAR Template Figure 6.	<a href="#">3.7</a>
Is there evidence of sufficient survey effort (i.e. number of VI survey plots)?  Is plot placement representative, with plots randomly distributed across vegetation zones, and not clustered close to boundaries?	<input type="checkbox"/>  <input type="checkbox"/>	BAM Subsection 4.3.4 and Table 3. BDAR Template Section 4.5 and Table 7.	<a href="#">3.7</a>
Is there a table of current VI scores for each vegetation zone including:  <ul style="list-style-type: none"> <li>• composition condition score</li> <li>• structure condition score</li> <li>• function condition score</li> <li>• presence of hollow bearing trees?</li> </ul>	<input type="checkbox"/>	BAM Section 4.4 and Appendix K, Table 24. BDAR Template Table 7.	<a href="#">3.7</a>
Has an offset been determined for all impacts on PCTs with a vegetation zone that has a VI above the thresholds listed in BAM Subsection 9.2.1(1)?	<input type="checkbox"/>	BAM Subsection 9.2.1.	<a href="#">3.8</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
<b>Assessing the habitat suitability for threatened species</b>			
Is there a list of ecosystem credit species autogenerated from the BAM-C?	<input type="checkbox"/>	BAM Subsections 5.1.1 and 5.2.1. BDAR Template Subsection 5.1.1 and Table 9.	<a href="#">4.1</a>
Is there justification and supporting evidence for exclusion of any autogenerated ecosystem credit species based on geographic limitations, habitat constraints or vagrancy?	<input type="checkbox"/>	BAM Subsections 5.2.1 and 5.2.2. BDAR Template Subsection 5.1.1. Note all remaining predicted ecosystem credit species are considered likely to have suitable habitat on the subject land and must be assessed.	<a href="#">4.2</a>
Is there a list of species credit species autogenerated from the BAM-C?	<input type="checkbox"/>	BAM Subsection 5.1.2 and Appendix K or L. BDAR Template Subsection 5.1.2 and Tables 10 and 11.	<a href="#">4.3</a>
Is there justification and supporting evidence for exclusions of any species credit species based on geographic limitations, habitat constraints or vagrancy and/or degraded habitat constraints or microhabitats on which the species depends? Or addition of species?	<input type="checkbox"/>	BAM Subsections 5.2.1, 5.2.2 and 5.2.3. BDAR Template Subsection 5.1.2. Note all remaining species credit species are referred to as 'candidate species credit species' and are considered likely to have suitable habitat on the subject land. Further assessment is required.	<a href="#">4.3</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
Where threatened species survey has been undertaken to determine presence of a candidate species credit species, are the methods compliant with the department's guidance or best practice?	<input type="checkbox"/>	BAM Section 5.3 and Box 3. BDAR Template Section 5.3, Tables 14 and 15. <u>Department's field survey methods.</u> Review the BAM-C case in BOAMs for correct survey months.	<a href="#">4.4</a>
Were the surveys conducted in the correct survey months?	<input type="checkbox"/>	Optimal survey months are recorded in the BioNet Threatened Biodiversity Data Collection (TBDC).	
Where an expert report has been used to determine presence of a candidate species credit species, has the expert been approved by the Secretary of the department or anyone authorised by the Secretary?	<input type="checkbox"/>	BAM Section 5.3(1.a.) and Box 3. BDAR Template Section 5.4. <u>Department-approved biodiversity experts.</u> Note evaluation of the BDAR should stop if the expert has not been approved by the Secretary of the department or anyone authorised by the Secretary.	<a href="#">4.5</a>
Does an expert report include an evidenced-based justification for species presence and estimates on area or count?	<input type="checkbox"/>	BAM Section 5.3(1.a.) and Box 3. BDAR Template Section 5.4.	<a href="#">4.6</a>
Are the conclusions reasonable?	<input type="checkbox"/>		



Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
<p>Is there an accurate species polygon for each candidate species credit species:</p> <ul style="list-style-type: none"> <li>• assumed to be present</li> <li>• confirmed to be present or</li> <li>• likely to use suitable habitat, and</li> <li>• including flora species assessed by count of individuals?</li> </ul> <p>Is the species polygon correctly drawn?</p>	<input type="checkbox"/>          <input type="checkbox"/>	<p>BAM Subsection 5.2.5 and Box 2. BDAR Template Section 5.6.</p>	<p><a href="#">4.7</a></p>
<p>Is there a map showing the species polygon for each candidate species confirmed or assumed to be present?</p>	<input type="checkbox"/>	<p>BAM Subsection 5.2.5. BDAR Template Figure 11.</p>	<p><a href="#">4.7</a></p>
<p>Is there a table presenting all the relevant information for assessing habitat suitability for threatened species that satisfies the requirements in Appendix K?</p>	<input type="checkbox"/>	<p>BAM Section 5.2. BDAR Template Tables 17 and 18.</p>	<p><a href="#">4.8</a></p>
<p><b>Identifying prescribed additional biodiversity impacts</b></p>			
<p>Have all relevant prescribed biodiversity impacts on threatened entities been identified?</p>	<input type="checkbox"/>	<p>BAM Section 6. BDAR Template Section 6.</p>	<p><a href="#">5.1</a></p>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
Is there a list of threatened entities that may be dependent upon or may use habitat features associated with any of the prescribed impacts?	<input type="checkbox"/>	BAM Section 6. BDAR Template Section 6 and Table 19.	<a href="#">5.2</a>
Is there a description of the importance of habitat connectivity including, where relevant, impacts on life cycle or movement patterns?	<input type="checkbox"/>	BAM Subsection 6.1.3. BDAR Template Section 6.	<a href="#">5.3</a>
Where the proposed development is for a wind farm, is there a list of protected animals that may use the site as a flyway or migration route?	<input type="checkbox"/>	BAM Subsection 6.1.5 and Appendix K. BDAR Template Section 6 and Table 20.	<a href="#">5.4</a>
Are details of targeted species surveys for these animals provided?	<input type="checkbox"/>		
Are flight paths for nomadic and migratory species and habitat for resident aerial and raptor species mapped?	<input type="checkbox"/>		
Where the proposed development may result in vehicle strike, is there a list of threatened fauna or protected fauna species that are part of a TEC, which are at risk of vehicle strike?	<input type="checkbox"/>	BAM Subsection 6.1.6 and Appendix K. BDAR Template Section 6.	<a href="#">5.5</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
Is there a map showing locations of any prescribed impact features including maps for the specific requirements for wind farm developments?	<input type="checkbox"/>	BAM Subsection 6.1.5. BDAR Template Figure 13.	<a href="#">5.6</a>
<b>Stage 2: Impact assessment (biodiversity values and prescribed impacts)</b>			
<b>Avoiding or minimising impacts on biodiversity values</b>			
Are there sufficient efforts to avoid and minimise impacts on biodiversity values (including prescribed impacts) associated with the proposal location?	<input type="checkbox"/>	BAM Subsections 7.1.1 and 7.2.1 and Appendix K, Table 25. BDAR Template Section 7.	<a href="#">6.1</a>
Is there a description of efforts to avoid and minimise impacts (including prescribed impacts) to biodiversity values through proposal design?	<input type="checkbox"/>	BAM Subsections 7.1.2 and 7.2.2. BDAR Template Section 7.	<a href="#">6.2</a>
Is there a map of alternative footprints considered to avoid or minimise impacts on biodiversity values; and of the final proposal footprint, including construction and operation?	<input type="checkbox"/>	BAM Section 7. BDAR Template Section 7.3.	<a href="#">6.3</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
Is there a table of measures to be implemented to avoid and minimise the impacts of the proposal, including action, outcome, timing and responsibility?	<input type="checkbox"/>	BAM Section 7. BDAR Template Table 21.	<a href="#">6.3</a>
<b>Assessing the impacts of the proposal on biodiversity values</b>			
Have all the impacts on native vegetation and threatened species habitat been determined, including a description of the direct impacts of clearing to native vegetation, TECs and threatened species habitat?	<input type="checkbox"/>	BAM Section 8.1. BDAR Template Section 8.1 and Table 22.	<a href="#">7.1</a>
Is there a summary of residual direct impacts?	<input type="checkbox"/>		
Is there a table showing change in VI score for each vegetation zone as a result of identified direct impacts?	<input type="checkbox"/>	BAM Subsection 8.1.1. BDAR Template Table 23.	<a href="#">7.2</a>
Is there an assessment of indirect impacts on vegetation and threatened species and their habitat?	<input type="checkbox"/>	BAM Section 8.2. BDAR Template Section 8.2.	<a href="#">7.3</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
Is there an assessment of prescribed biodiversity impacts including the nature, extent and duration of impacts on the habitat of threatened species or ecological communities?	<input type="checkbox"/>	BAM Section 8.3. BDAR Template Section 8.3.	<a href="#">7.4</a>
Are there maps demonstrating indirect impact zones where applicable?	<input type="checkbox"/>	BAM Section 7. BDAR Template Figure 12.	<a href="#">7.5</a>
Do the mitigation measures address the identified impacts to describe the BAM recommendations?	<input type="checkbox"/>	BAM Section 8.4 and Appendix K, Table 25. BDAR Template Section 8.4.	<a href="#">7.6</a>
Is there a table of measures to be implemented to mitigate and manage impacts of the proposal, including action, outcome, timing and responsibility?	<input type="checkbox"/>	BAM Section 8.4. BDAR Template Tables 27 and 28.	<a href="#">7.6</a>
Are details provided of the adaptive management strategy proposed to monitor and respond to impacts on biodiversity values that are uncertain?	<input type="checkbox"/>	BAM Section 8.5. BDAR Template Section 8.5.	<a href="#">7.7</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
<b>Thresholds for assessing and offsetting impacts of development</b>			
Is there identification and assessment of impacts on TECs and threatened species that are at risk of serious and irreversible impacts? (SAll, in accordance with BAM Section 9.1)	<input type="checkbox"/>	BAM Section 9.1 and Appendix K, page 125. BDAR Template Section 9. <u><a href="#">Guidance to assist a decision-maker to determine a serious and irreversible impact.</a></u>	<a href="#">8.1</a>
Is there a map showing the extent of TECs at risk of a SAll within the subject land?	<input type="checkbox"/>	BAM Subsection 9.1.1. BDAR Template Figure 14.	<a href="#">8.2</a>
Is there a map showing the location of threatened species at risk of a SAll within the subject land?	<input type="checkbox"/>	BAM Subsection 9.1.2. BDAR Template Figure 14.	<a href="#">8.2</a>
Is there a map showing the location of: <ul style="list-style-type: none"> <li>• impacts requiring offset</li> <li>• impacts not requiring offset</li> <li>• areas not requiring assessment?</li> </ul>	<input type="checkbox"/>	BAM Section 9.2. BDAR Template Figure 15.	<a href="#">8.3</a>

Key feature in BDAR	Tick	Supporting references and information	Link to guidance note
<b>Applying the no net loss standard</b>			
Is there information provided concerning ecosystem credits and species credits that measure the impact of the development on biodiversity values?	<input type="checkbox"/>	<p>This information should include:</p> <ul style="list-style-type: none"> <li>• future VI score for each vegetation zone within the subject land (Equation 25 and Equation 26 in BAM Appendix H).</li> <li>• change in VI score (BAM Subsection 8.1.1).</li> <li>• number of required ecosystem credits for the direct impacts of the proposal on each vegetation zone within the subject land (BAM Section 9).</li> <li>• number of required species credits for each candidate threatened species that is directly impacted on by the proposal (BAM Subsection 10.1.3).</li> </ul> <p>BAM Appendix K, page 126. BDAR Template Section 10.</p>	<a href="#">9.1</a>
<b>Biodiversity credit report</b>			
Is there a table detailing impacted PCTs (and ecosystem credit species) and the associated credit obligation?	<input type="checkbox"/>	BAM Appendix K. BDAR Template Section 11.1 and Table 39.	<a href="#">10.1</a>
Is there a table detailing impacted species credit species and the associated credit obligation?	<input type="checkbox"/>	BAM Appendix K. BDAR Template Section 11.2 and Table 40.	<a href="#">10.2</a>

# Guidance for use of the checklist

## 1. Getting started

Check and confirm upfront the following key requirements to ensure the BDAR can be accepted.

1.1 Check that an accredited assessor has prepared the BDAR (refer to section 6.12 of the BC Act). Check the accredited assessor number provided in the Declaration section of the BDAR (BDAR template Declarations i.) and confirm their name is listed in the [accredited assessor register](#).

1.2 Check that the BDAR includes a finalised credit report from the BAM-C. Draft BDARs cannot be accepted. Refer to [Biodiversity Offsets Scheme Local Government Update 14](#) [PDF 250KB], item 3.

No further assessment can be carried out after the BDAR is submitted to the consent authority; for example, further targeted threatened species survey to refine the credit requirement. To change the credit requirement, the development application would need to either be withdrawn or proposed as a modification under the EP&A Act.

1.3 Check the BDAR is certified by the assessor as complying with the BAM, and the credit report status 'finalised', with a date that is within 14 days of the date of the BDAR being lodged to ensure currency of assessment information (refer to section 6.15 of the BC Act). The BDAR can be certified; for instance, by the assessor signing the first page. The date the assessor signs the BDAR does not need to match the date on the finalised credit report; however, the BDAR must be submitted within 14 days of the date the credit report was finalised to be considered valid.

1.4 When a proponent proposes to meet their offset obligation using the variation rules under the Biodiversity Conservation Regulation 2017 (BC Regulation), check that the development application includes the reasonable steps taken to obtain like-for-like biodiversity credits in accordance with the [Ancillary rules: Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules](#).

1.5 If the proponent makes a request to reduce a credit obligation, concurrence is required from the department under section 7.12 of the BC Act. Check that the development application includes all the relevant information to form a request for concurrence from the department should council decide to approve the development with a lower credit obligation. Detailed information requirements can be found on the Scheme website – [Seeking concurrence for a reduced credit obligation](#).



- 1.6 In cases where category 1-exempt land may occur, check that the BDAR includes details and justification for the categorisation of category 1-exempt land. Clearing of native vegetation and loss of habitat on category 1-exempt land does not require assessment under the BAM; however, prescribed impacts must be assessed. Prescribed impacts are listed in clause 6.1 of the BC Regulation. The BAM outlines how prescribed biodiversity impacts should be identified and assessed in the BDAR (BAM Sections 6, 7.2, 8.3).

In determining whether a proposal exceeds the Scheme threshold, any part of the development footprint (including ancillary facilities) that involves clearing of native vegetation on category 1-exempt land (under the LLS Act) is to be disregarded (section 7.4(2) BC Act); that is, excluded from the total area of clearing. However, the test of significance still applies.

While the Native Vegetation Regulatory map is being finalised, landowners will be responsible for determining the categorisation of their land, in accordance with the LLS Act. This is set out on the Local Land Services [Land Management in NSW](#) webpage and further guidance is provided in [Determining native vegetation land categorisation for application in the Biodiversity Offsets Scheme](#).

Where category 1-exempt land is impacted, the BDAR will only contain information relevant to prescribed impacts for category 1-exempt land. Impact assessment and offset calculations relating to VI and habitat suitability are not required for impacts on category 1-exempt land.

- 1.7 For certain proposals, a streamlined assessment may be appropriate. Eligibility is set out within BAM Appendices B, C and D. Minimum information requirements are provided in BAM Appendix L. The streamlined BDAR should include an evidenced-based justification to show eligibility to apply a streamlined assessment.

- 1.8 It is a legal requirement to submit all field plot data and spatial data with the BDAR. These files may be submitted BOAMS or another suitable large file transfer application.

Once satisfied the BDAR meets these requirements, commence a BDAR review. Review of the BDAR can occur at the same time as public exhibition.

# Stage 1: Biodiversity assessment

## 2. Establishing the site context – landscape features and native vegetation cover

2.1 The BDAR must include a Site Map and a Location Map based on digital aerial photographs showing (at a recommended scale of 1:1,000 or finer):

- the property boundary
- the boundary of the subject land
- the assessment area
- the cadastre boundaries within the subject land
- landscape features identified in Subsection 3.1.3
- local government and LLS boundaries.

The subject land is land subject to a development, activity or clearing. It excludes the assessment area that surrounds the subject land (i.e. the area of land in the 1,500 m buffer zone around the subject land, or 500 m buffer zone for linear proposals).

Check that a range of landscape features that may occur on the subject land or within the surrounding assessment area have been identified. These features may contain biodiversity values that are important for:

- establishing the context of the subject land in relation to the surrounding area
- identifying the likely habitat suitability of the subject land for threatened entities.

2.2 The introduction to the BDAR must provide a brief description of the proposal and indicate the threshold that triggered the requirement for the proposal to be assessed under the Scheme.

2.3 IBRA bioregions and subregions establish the framework for the assessment of impacts on VI and habitat suitability. They filter threatened species likely to occur on the site. They also set boundaries around credit trading and form part of the information needed to establish compliance.

Version 7 of the IBRA identifies 17 IBRA regions and 135 IBRA subregions in New South Wales. Use the most current version of the IBRA to identify the IBRA bioregions and IBRA subregions in which the subject land and assessment area is located.

- 2.4 Native vegetation cover is one of several filters that will be used to assess habitat suitability for threatened species. The greater the native vegetation extent, the greater the number of threatened species likely to be able to use the vegetation as habitat. The estimate of percent native vegetation cover needs to include all planted native vegetation.

### 3. Assessing native vegetation, threatened ecological communities and vegetation integrity

- 3.1 Native vegetation maps or aerial imagery may not reflect recent lawful clearing. If the proponent claims that an area has been recently cleared, request evidence of the lawful clearing. The estimate of percent native vegetation cover should be reasonable, based on the maps provided.

- 3.2 Native vegetation extent defines the boundaries of the impact assessment of VI and habitat suitability for ecosystem credit species. Conversely, areas not within the native vegetation extent are considered cleared and excluded from credit calculations. The BDAR must include a map of native vegetation extent and identify the distribution of the most likely PCTs, and all TECs on the subject land. The identification must be in accordance with the NSW PCT classification as described in the BioNet Vegetation Classification.

The NSW PCT classification was developed in 2011 to establish an unambiguous master community-level classification. A revised PCT classification is being released from 2022 and will be implemented in stages across New South Wales. Further information on changes to the NSW PCT classification and the Scheme is available on the Scheme website at [Introduction of revised Plant Community Types in eastern NSW to the Biodiversity Offsets Scheme](#).

The PCT is the foundational unit for the BAM:

- Vegetation integrity is measured relative to condition scores standardised for PCTs within the same class (known as benchmarks).
- Threatened species likely to occur within a site are filtered by the PCTs that are present.
- Sensitivity class is one element of an offset ‘multiplier’ and is set at PCT (or TEC) level.

Each of the above factors contributes to determining the ecosystem credit obligation for a proposal.

Like-for-like credit retirement options are defined relative to the PCT (or TEC). Note that sometimes groups of PCTs (vegetation class) will share the like-for-like options.

- 3.3 **Incorrect identification of PCTs can influence credit outcomes.** The BAM requires that assessors justify, with evidence, their choice of PCT in the BDAR (BAM Section 4.2(1–3)).

Evidence would include:

- quantitative analysis of existing and new site survey data to identify the PCT
- matching the outputs of the quantitative analysis of existing and new site survey data to PCTs in the Flora Survey (BioNet)
- outputs generated by the [Plot to PCT Assignment Tool](#) (for the revised quantitative PCT classification only).

The BDAR must include justification for areas mapped as exotic vegetation with plot data and a description of the vegetation in that zone to justify exclusion from assessment.

Failure to provide an evidenced-based justification for PCT selection (including condition classes) with the support of quantitative data is a failure to comply with the BAM.

3.4 The BDAR must include the estimated extent of clearing for each the PCT, using data from the BioNet Vegetation Classification. This is automatically populated in the BAM-C.

3.5 The BAM requires that TECs are also mapped (Subsection 4.2.2(3.)).

The relationship between PCTs and TECs is explained on the [NSW Plant Community Type classification](#) webpage.

TEC status will affect the biodiversity risk weighting (offset multiplier) used to determine offset requirements and offset trading rules.

Failure to recognise a TEC could reduce the credit obligation for a development and result in inappropriate offsets.

Some TECs listed under the BC Act may also be components of EPBC Act listed TECs. There are also TECs that are only listed under the EPBC Act. Requirements to assess an EPBC Act species are subject to a controlled action for which the Commonwealth Government is the consent authority. Credit obligations are not required for EPBC Act only listed TECs.

TECs may also be potential entities at risk of a SAI. Further information on SAI is provided below in note 8.1.

3.6 The BAM requires that PCTs are delineated into vegetation zones (Subsection 4.3.1). A vegetation zone delineates different condition states within a PCT. Vegetation in a zone should be in the same broad condition state. The BDAR must justify the delineation of vegetation zones based on condition with the support of appropriate data and evidence. If the site condition is a result of a disturbance event, whether natural or anthropogenic, details need to be provided.

A vegetation zone can be composed of patches that are not connected, provided these patches are the same PCT and broad condition state.

3.7 The BAM establishes minimum plot numbers for vegetation zones based on area (Table 1). Edge effects and ecotonal areas may distort the VI score. Wherever possible, plots should be located greater than 50 m from ecotones, roads, disturbed areas (including watering points and along fence lines) or the zone boundary. A review of the VI scores for each plot in a zone can be used to indicate similar broad state of condition.

**Table 1 Minimum number of plots required per vegetation zone area**

Vegetation zone area (ha)	Minimum number of plots
<2	1 plot
>2-5	2 plots
>5-20	3 plots
>20-50	4 plots
>50-100	5 plots
>100-250	6 plots
>250-1,000	7 plots; more plots may be needed if the condition of the vegetation is variable across the zone
>1,000	8 plots; more plots may be needed if the condition of the vegetation is variable across the zone

Source: BAM, Table 3

Check that plot locations appear to be randomly and reasonably distributed across vegetation zones.

The BAM requires that plots are appropriately placed within vegetation zones to accurately assess broad condition state and ensure a representative sample (Subsection 4.3.4 of the BAM).

Clustering of plots in poorer quality vegetation and concentration of plots along vegetation zone boundaries are examples of practices that may result in misrepresentation of vegetation condition.

**Failure to complete the required number of plots and satisfy requirements for representativeness is a failure to comply with the BAM. Misrepresentation of vegetation condition has the potential to influence credit obligations.**

3.8 An offset must be determined for all impacts of proposals on PCTs that are associated with a vegetation zone that has a VI score above the thresholds outlined in Table 2.

**Table 2 Vegetation integrity thresholds**

Vegetation	VI score threshold
Land does not contain native vegetation	N/A
PCT is an endangered or critically endangered ecological community	<15
PCT associated with threatened ecosystem species habitat or a vulnerable ecological community	<17
PCT is not a TEC or associated with threatened ecosystem species habitat	<20

Vegetation below these thresholds does not require an offset in the form of ecosystem credits (see BAM Subsection 9.2.1(1)).

If the entity is at risk of a SAll the assessor will need to address the relevant criteria in Section 9.1 and include this in the BDAR.

Undervaluing the condition of a vegetation plot has the potential to influence credit obligations. Inconsistency in plot values within a vegetation zone can bias condition score and influence credit obligations. Appropriate justification is required for vegetation zone stratifications.

## 4. Assessing the habitat suitability for threatened species

- 4.1 Ecosystem credit species are threatened species whose occurrence can generally be predicted by vegetation surrogates and/or landscape features, or that have a low probability of detection using targeted surveys. The BAM-C will produce a list of threatened species predicted to occur on the site, filtered on IBRA subregion, PCTs, patch size and vegetation cover (where relevant). The species least able to respond to improvements in habitat as a result of management actions will play an important role in contributing to the biodiversity risk weighting, part of the metric that calculates credit obligations.
- 4.2 The BDAR must include a detailed justification for removing species from the list of autogenerated ecosystem credit species. Reasons and justification may include lack of habitat constraints, disturbed microhabitats or geographic constraints.

### **Removal of species has the potential to influence credit obligations and therefore appropriate justification is required.**

It is permissible to add species to the list of autogenerated ecosystem credit species. The BAM requires the assessor to check databases (e.g. the TBDC) and include any species as candidate species, that have been recorded in the area and are likely to occur on the subject land, but have not been autogenerated by the BAM-C.

4.3 Species credit species are threatened species for which vegetation surrogates and/or landscape features cannot reliably predict the likelihood of their occurrence or components of their habitat. These species require survey or expert report to determine presence on the development site (presence can also be assumed). The BAM-C will produce a list of species credit species predicted to occur, filtered on IBRA subregion, PCTs, patch size and vegetation cover. These are referred to as candidate species. It is permissible to remove candidate species from the list of species credit species. A candidate species credit species can only be excluded if:

- after field assessment the habitat constraints or microhabitats are deemed absent (if there are multiple constraints or microhabitats all need to be absent for the species to be removed from the list), and/or
- the assessor concludes that the habitat constraints or microhabitats are substantially degraded such that the species is unlikely to use the habitat, and/or
- the species is a vagrant in the IBRA subregion, and/or
- an expert report concludes that the species is unlikely to be present (Section 5.3 and Box 3 of the BAM).

The BDAR must include an evidenced-based justification for removing candidate species based on the reasons listed above.

4.4 For the remaining species considered likely to occur on the site the BAM requires presence of each species credit species to be determined. For each species, the BDAR must either:

- assume presence
- confirm (or otherwise) presence with targeted survey
- confirm (or otherwise) presence with an expert report
- where the TBDC indicates that an important habitat map identifies the species credit component, the assessor must confirm whether the subject land is within an area identified on the map.

If a targeted survey is undertaken, the BDAR must include details of the survey applied to each species credit species.

Note that the department has published survey guides for a subset of taxa.

Surveys should be undertaken in accordance with these guidelines and if not, then justification based on published evidence or written advice from the department's Biodiversity Conservation Division should be provided in the BDAR. Further guidance on survey is on the Scheme [Field survey methods](#) webpage.

4.5 Only the Secretary of the department or anyone authorised by the Secretary can form the opinion that a person is qualified to prepare an expert report for a particular species. Some experts will be identified in an expert register.

In the context of a Part 4 development, it is advisable that expert status is confirmed prior to the development application being submitted. An expert who is not on the register (or has not otherwise been confirmed as an expert by the Secretary) should submit their credentials to [bos.helpdesk@environment.nsw.gov.au](mailto:bos.helpdesk@environment.nsw.gov.au) for confirmation. Credentials can include:

- qualifications
- experience in research for the relevant species and in the relevant ecological survey method
- work history detailing survey of the relevant species in the previous 10 years
- peer-reviewed publications
- evidence of 'expert' status within the scientific community, for the relevant species.

4.6 Where an expert report is used in place of targeted survey, the BDAR must include the report. The expert report should do the following:

- identify the relevant species or population
- justify the use of an expert report
- indicate and justify the likelihood of presence of the species or population, information considered in making this assessment and prepare a species polygon as per BAM Subsection 5.2.5
- where species are present, estimate the number of individuals or area of habitat (whichever unit applies) for the development site including a justification of the estimation
- identify the expert and provide evidence of their credentials.

4.7 The BDAR must include a mapped species polygon to record species presence following targeted survey or expert report. The species polygon must:

- use the unit of measurement identified for that species in the TBDC to show the locations of individual flora species, or the area of suitable fauna/flora species habitat
- contain the habitat constraints or other suitable microhabitats or features associated with that species, and any buffer area identified for species in the TBDC
- take into consideration information within the TBDC for the species in regard to any requirements on the size or shape of the species polygon, including the buffer area around breeding habitat features such as nest trees or caves
- be established by adding a 30 m buffer around the individuals or groups of individuals for flora species assessed by count on the subject land
- include the entire area of the subject land that is identified by an important habitat map for a species
- use GPS to confirm the location of the species polygon on the best available ortho-rectified aerial image of the subject land.



- 4.8 A table should be presented with the following information:
- species removed from the list of autogenerated ecosystem credit species and species credit species based on geographic limitations, habitat constraints or vagrancy
  - candidate species credit species unlikely to occur on the subject land based on absence or degradation of microhabitats
  - candidate species credit species not recorded on the subject land as determined by species survey or expert report
  - candidate species credit species determined to be present on the subject land and the method used: assumed presence, species survey, expert report or important habitat map (dual credit species)
  - for each candidate species credit species determined to be present, the area or count of individuals
  - sensitivity to gain class for each predicted species and biodiversity risk weighting for each candidate species credit species.

## 5. Identifying prescribed additional biodiversity impacts

- 5.1 Prescribed additional biodiversity impacts (prescribed impacts) are the impacts of development on the following habitats or features of the environment for threatened species or ecological communities:
- karst, caves, crevices, cliffs, rocks and other geological features of significance
  - human-made structures
  - non-native vegetation
  - habitat connectivity (that facilitates the movement of those species across their range and that maintains their life cycle)
  - waterbodies, water quality and hydrological processes
  - the impacts of wind turbine strikes on protected animals
  - the impacts of vehicle strike on threatened species of animals or on animals that are part of a TEC.

An assessor should use professional judgement when identifying prescribed impacts. Habitat features and the processes needed for the feature to continue to exist should be identified.

Prescribed impacts can be direct or indirect impacts and are additional to the impacts of native vegetation clearing (BAM Chapter 6).

- 5.2 The BDAR must include a list of threatened entities that may be dependent on, use or are likely to use these habitat features on the subject land and within the surrounding assessment area.

- 5.3 The BDAR should provide a description of the importance of habitat features to each of the species, including where relevant:
- how these features provide habitat for, or are used by, each threatened entity
  - impacts on life cycle or movement patterns (based on published literature and other reliable sources).
- 5.4 Where the proposed development is for a wind farm, the BDAR must provide:
- a list of protected animals that may use the development site as a flyway or migration route
  - details of targeted survey for candidate species
  - predicted habitual flight paths for nomadic and migratory species likely to fly over the subject land.
- 5.5 Where the proposed development may result in vehicle strike, the BDAR must provide a list of threatened fauna or protected fauna species that are part of a TEC and at risk of vehicle strike due to the proposal.
- 5.6 Information relating to prescribed impacts should be included on the Site Map and documented in the BDAR. Where information on prescribed impacts is captured elsewhere in the BDAR, reference can be made to these sections to minimise repetition.

## Stage 2: Impact assessment (biodiversity values and prescribed impacts)

### 6. Avoiding or minimising impacts on biodiversity values

- 6.1 The BDAR must include details of the measures to avoid, minimise and mitigate biodiversity impacts as required in BAM Chapters 7 and 8. Efforts to avoid and minimise impacts should be considered in the context of the site suitability. There should be a demonstrated effort to avoid and minimise impacts on native vegetation, threatened species habitat and prescribed impacts during project planning, including the location and design of the project.
- 6.2 Avoidance should be demonstrated through site selection such as locating the development footprint in areas away from biodiversity values. The BDAR should demonstrate an analysis of alternative options for location, routes and sites within the property and why they were not suitable, with a justification for selecting the proposed location. The BDAR should include details of how avoided lands will be managed to maintain their biodiversity values.

The BDAR should include specific design measures, such as adapting density, design and layout of the project, to avoid and minimise impacts from the proposal, including temporary and permanent ancillary facilities required for the proposal. Options for avoiding impacts (e.g. alternative locations, engineering solutions, modes of technology) and measures taken to minimise impacts should be provided with a justification for final design selection. Scheduling the timing of activities to account for species' behaviours such as breeding and migration should also be considered.

The [Guidance on preparing conditions of consent from the Biodiversity Development Assessment Report](#) contains information about conditioning measures taken to avoid and minimise impacts.

- 6.3 Documentation of how impacts on biodiversity values were avoided and minimised must include spatial identification of relevant avoided areas (including maps and digital files), analyses (including data), and explanations or justifications for measures that avoid and minimise.

A map of alternative footprints considered to avoid or minimise impacts on biodiversity values should be included, and a map of the final proposal footprint, including construction and operation.

A table of measures to be implemented to avoid and minimise the impacts of the proposal, including action, outcome, timing and responsibility should be included.

## 7. Assessing the impacts of the proposal on biodiversity values

- 7.1 The BDAR must describe the direct impacts of the proposal on native vegetation, TECs and threatened species habitat that were identified on the subject land. Direct impacts include all activities, development phases and structures that impact on biodiversity. The development footprint will include all buildings and ancillary use such as asset protection zones, landscaping, fence lines, driveways, services and temporary works and facilities. For any entity at risk of a SAIL, the BDAR must include the extra information set out in BAM Section 9.1.
- 7.2 The change in VI score is a key component in calculating the baseline number and type of biodiversity credits (ecosystem and some species credits) for the direct impacts of the proposed development. The baseline number of credits is those determined by the BAM that are required to be retired by the proponent.
- Most projects will result in complete clearing of vegetation and threatened species habitat within the development footprint. In this scenario, the proposed future value of each of the VI attributes is set at zero in the BAM-C.
- In circumstances where partial clearing of vegetation is proposed and remaining vegetation will be maintained (i.e. not degraded further over time), the assessor may determine that the future values of the relevant VI attributes are below the current condition but greater than zero. Where the future VI scores are proposed to be greater than zero, an evidence-based justification must be provided.
- The assessor must provide a clear outline of the ongoing management to be undertaken to maintain the expected future value where only partial clearing of native vegetation is proposed.
- 7.3 All indirect impacts to native vegetation, threatened species and their habitat within or beyond the development footprint must be identified. The BDAR must identify the type of indirect impact that is likely to occur and describe the nature, extent, duration and consequences of the indirect impact on biodiversity values.
- Indirect impacts may occur at different stages of the development (e.g. construction or operation) or post-development because of changed land-use patterns (e.g. increased likelihood of threats or changed hydrological processes).
- Credit obligations for indirect impacts are not a minimum requirement under the BAM. However, the consent authority has the discretion to increase the number of biodiversity credits to be retired, or other conservation measures to be undertaken, if the increase is justified based on environmental, social and/or economic impacts of the proposed development (BC Act section 7.13(4)).

- 7.4 The BDAR must include details of the types of impacts that could occur from the construction and operational phases of the development and whether these impacts will be permanent or temporary. For temporary prescribed impacts, the duration of the impact must be documented.

For many prescribed impacts the biodiversity values may be difficult to quantify, replace or offset, making avoiding or minimising prescribed impacts critical. Consequently, prescribed impacts are likely to be a specific point of consideration by the consent authority in forming their decision on whether to approve a proposal, and what conditions of consent could be applied to mitigate these impacts.

- 7.5 The BDAR must include a map of the location of the indirect and prescribed impacts, including polygons identifying the extent of the impact.
- 7.6 The BDAR must clearly present information on how the residual impacts on biodiversity values will be mitigated and managed. Where an impact cannot be avoided then reasonable measures must be identified to mitigate or manage the proposed impact. Any measures proposed to mitigate or manage impacts must include an evidence-based justification.

Mitigation measures should address the identified impacts to biodiversity. A summary of proposed mitigation and management measures should:

- document mitigation measures proposed to manage impacts, including:
  - type of action
  - detailed method to implement the action
  - schedule for implementation (location, timing and frequency)
  - person/organisation responsible for undertaking the action
  - ecological measures for assessing if the mitigation has been successful that adhere to SMART (Specific, Measurable, Achievable, Relevant, Timebound) principles
  - reporting requirements (timing and frequency)
  - how to determine when the action is complete (ecologically-based completion criteria) including the expected response from the threatened species, habitat component or TEC that is at risk from impact
  - triggers for remedial actions leading to adaptive management
- identify any measures for which there is risk of failure
- evaluate the risk and consequence of any impacts likely to remain after mitigation measures are applied
- identify mitigation measures for MNES where relevant.

- 7.7 Management of uncertain impacts or any remaining impacts where mitigation measures have not been proposed requires the development of an adaptive management plan. An adaptive management plan can be used to address impacts that are infrequent or difficult to measure. These include indirect or prescribed impacts, or other remaining biodiversity impacts.

Adaptive management is an adjustment of actions based on results, to achieve a specified outcome. It requires a trigger for necessary remedial action to be taken, such as adjusting the activity causing the impact or adjusting the mitigation measure. Monitoring enables the proponent to determine if measures are being implemented as planned and provide an early warning of measures that are ineffective and/or the uncertain impact is being realised.

An adaptive management plan must identify and describe:

- the threatened species and/or TECs likely to be impacted
- a monitoring program of sufficient scope and duration to provide data that can inform when direct and indirect impacts on biodiversity occur. Where relevant, this should include:
  - baseline data collected pre-impact to monitor change
  - seasonal changes or relevant impacts to be measured
  - monitoring techniques and effort based on best practice
  - frequency and type of reporting
  - performance criteria that adhere to the SMART principles, and are ecologically-based
- thresholds or triggers associated with the monitoring program that identify when a prescribed impact has occurred or is likely to occur
- suite of potential adaptive management actions to be implemented during the construction or operational phases.

For uncertain impacts that cannot be adaptively managed or where the risk of management failure is high the BDAR must include options to compensate for the loss in biodiversity values. Any biodiversity credits proposed are then additional to the baseline number of biodiversity credits determined by the BAM and will not be part of the baseline credit report generated by the BAM-C.

The consent authority also has the discretion to increase the number of biodiversity credits to be retired (or other conservation measures to be undertaken) in relation to an uncertain impact, if the increase is justified having regard to the environmental, social and economic impacts of the proposed development (see section 7.13(4) BC Act).

## 8. Thresholds for assessing and offsetting serious and irreversible impacts

- 8.1 The concept of a serious and irreversible impact (SAIL) is fundamentally about protecting threatened entities that are most at risk of extinction from potential development. The BDAR must identify the entities at risk of a SAIL and include all the relevant information required for the consent authority to make the determination on whether the proposed impact will be a SAIL. The assessment criteria for impacts on TECs at risk of a SAIL are in Subsection 9.1.1 of the BAM and for species, Subsection 9.1.2. The BDAR must address all the assessment criteria for each entity at risk of a SAIL.

The consent authority is responsible for deciding whether an impact is serious and irreversible. This decision is made in accordance with the principles set out in clause 6.7 of the BC Regulation. An impact is to be regarded as serious and irreversible if it is likely to contribute significantly to the risk of a threatened species (including endangered populations) or ecological community becoming extinct based on the following 4 principles:

**Principle 1:** The impact will cause a further decline of a species or ecological community that is currently observed, estimated, inferred or reasonably suspected to be in a rapid rate of decline.

**Principle 2:** The impact will further reduce the population size of the species or ecological community that is currently observed, estimated, inferred or reasonably suspected to have a very small population size.

**Principle 3:** The impact is made on the habitat of the species or ecological community that is currently observed, estimated, inferred or reasonably suspected to have a very limited geographic distribution.

**Principle 4:** The impacted species or ecological community is unlikely to respond to measures to improve its habitat and VI, and therefore its members are not replaceable.

The *Guidance to assist a decision-maker to determine a serious and irreversible impact* includes criteria and supporting information to assist with the application of these principles. The [Serious and irreversible impacts](#) webpage identifies threatened entities that are considered most vulnerable to a SAIL. All critically endangered TECs are considered at risk of a SAIL. The list is not exhaustive, where there is evidence that a threatened entity meets one or more of the principles but it is not currently listed as at risk of a SAIL, the BDAR must include additional assessment information for the entity in accordance with Section 9.1 of the BAM. Further, the consent authority may require additional entities to be assessed under Section 9.1.

Development applications should not be routinely rejected because the development impacts upon an entity at risk of a SAll. If the consent authority determines, after considering all relevant information, that the impact to the SAll entity is likely to be serious and irreversible, the development cannot be approved.

The BDAR must not include a recommendation on whether the impact is serious and irreversible.

8.2 For each entity at risk of a SAll, the BDAR must include geo-referenced maps illustrating the location of TECs and threatened species at risk of a SAll, derivation of data to address assessment criteria relating to the extent, fragmentation or isolation of the TEC or species population within the development site and more broadly.

8.3 The BDAR must include a detailed map to show where impacts do not require an offset or do not require assessment.

An assessment of ecosystem credits is not required for areas on the subject land without native vegetation, in accordance with Subsection 4.1.2 of the BAM.

Areas of the subject land that do not contain native vegetation or that contain native vegetation below the condition thresholds, must still be assessed for species credit species, in accordance with Chapter 5 of the BAM. Similarly, if the vegetation is a TEC that is at risk of a SAll then the criteria in Subsection 9.1.1 of the BAM must be addressed even if no offset is generated.

## 9. Applying the no net loss standard

9.1 The net ecological outcome, or standard, of the BAM is no net loss of biodiversity. The standard is achieved by ensuring that the quantity of credits required from an impact is at least equivalent to the quantity of credits generated from an offset. The BDAR should include:

- the biodiversity risk weighting (BRW) for each ecosystem and species credit requirement generated
- the number of ecosystem credits for each PCT/TEC
- the number of species credits for each species credit species impacted by the proposal
- a finalised biodiversity credit report from the BAM-C, which defines the number and class of ecosystem and species credits from the proposed impact.



## 10. Biodiversity credit report

10.1 The biodiversity credit class assigned to ecosystem credits determines the type of credits that can be used to offset the impacts of developments under the offset rules. The like-for-like rules seek to ensure biodiversity values lost from development are offset with the same or very similar biodiversity.

The ecosystem credit rules require that impacts on native vegetation must be offset with vegetation that is in the same area as the impact (based on near or adjacent IBRA subregion), and:

- if a TEC was impacted, the offset must be for the same TEC
- if native vegetation that is not a TEC was impacted, the offset must be vegetation that is the same vegetation class and in the same or higher offset trading group (defined in Table 5 of the BAM).

10.2 Species credits must be offset with the same threatened species that was impacted and may be sourced from a biodiversity stewardship site located anywhere in New South Wales.

# Additional guidance and resources

- [Accredited assessor public register](#)
- [Aligning biodiversity assessments](#) [PDF 70KB]
- [Ancillary rules: Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules](#)
- [Approved biodiversity experts](#)
- [BAM 2020 operational manual – Stage 1](#)
- [BAM 2020 operational manual – Stage 2](#)
- [Biodiversity Assessment Method 2020](#) [PDF 1.8MB]
- [Biodiversity Assessment Method 2020](#) – webpage
- [Biodiversity Conservation Act 2016](#)
- [Biodiversity experts](#)
- [Biodiversity Offsets Scheme – when does it apply?](#)
- [Biodiversity Offsets Scheme local government update 14](#) [PDF 250KB]
- [Biodiversity Offsets Scheme](#) webpage
- [BioNet Vegetation Classification](#)
- [Environment Protection and Biodiversity Conservation Act 1999](#)
- [Environmental Planning and Assessment Act 1979](#)
- [Environmental Planning and Assessment Regulation 2021](#)
- [Field survey methods](#)
- [Determining native vegetation land categorisation for application in the Biodiversity Offsets Scheme](#)
- [Guidance for local government on applying the biodiversity offset scheme thresholds](#)
- [Guidance for the Biodiversity Development Assessment Report template](#)
- [Guidance on determining whether a development exceeds the Scheme threshold](#)
- [Guidance on determining whether a development is likely to significantly affect threatened species or ecological communities, or their habitats, according to the test of significance in section 7.3 of the BC Act](#)
- [Guidance on preparing conditions of consent from the Biodiversity Development Assessment Report](#)
- [Guidance on seeking concurrence for a reduced credit obligation](#)
- [Guidance to assist a decisionmaker to determine a serious and irreversible impact](#) [PDF 747KB]
- [Interim Biogeographic Regionalisation for Australia \(IBRA\), Version 7 \(Regions\)](#)
- [Interim Biogeographic Regionalisation for Australia \(IBRA\), Version 7 \(Subregions\)](#)

- [Introduction of revised plant community types in eastern NSW to the Biodiversity Offsets Scheme](#)
- [Land management in NSW](#)
- [Local Land Services team](#)
- [Local Land Services website](#)
- [Native vegetation regulatory map](#)
- [NSW plant community type classification](#)
- [NSW State Vegetation Type Map](#)
- [Plot to PCT assignment tool](#)
- [Plot to PCT assignment tool user guide](#)
- [Seeking concurrence for a reduced credit obligation](#)
- [Serious and irreversible impacts of development on biodiversity](#)
- [State Vegetation Type Map](#)
- [Streamlined assessment module planted native vegetation – Operational manual](#)
- [Threatened species field survey methods](#)
- [Transitional native vegetation regulatory map](#)