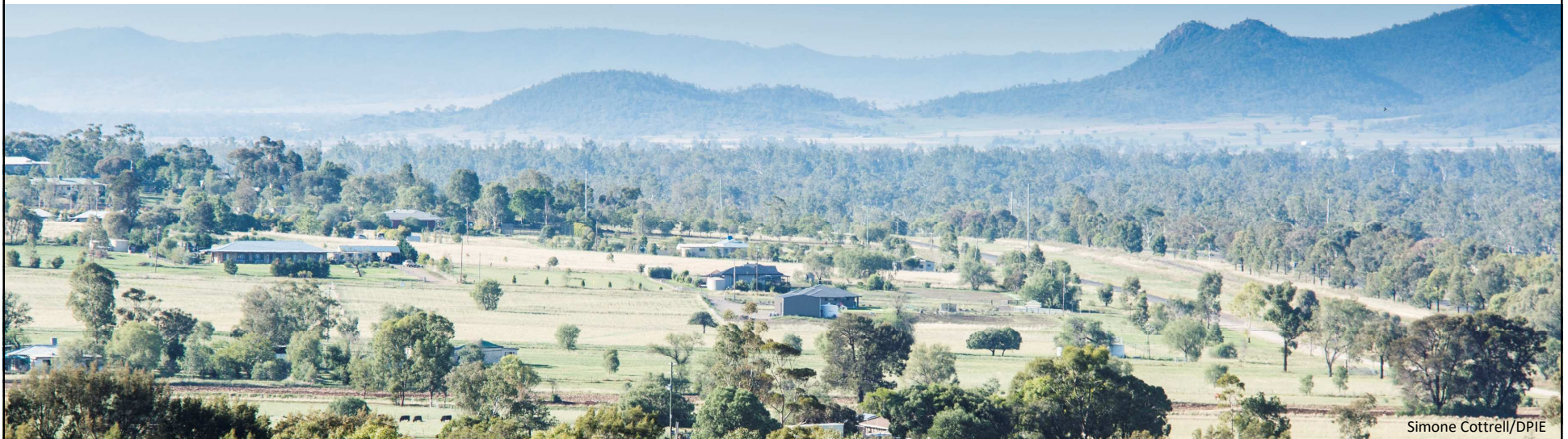




DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT

BAM Support for Accredited Assessors

A series of webinars to support the role of accredited BAM assessors in the Biodiversity Offset scheme (BOS)



Simone Cottrell/DPIE

For more information, go to the [BAM Support Webinar webpage](#) or contact us via the [BOS Online Enquiry Form](#)



Department of Planning, Industry and Environment

BAM SUPPORT WEBINAR 3

BOAMS and BAM Calculator system support

Thursday 3rd October 2019
11:00am-12:00pm



Phil Wood
Principal Project Officer
Ecosystem Assessment

For more information, go to the [BAM Support Webinar webpage](#) or contact us via the [BOS Online Enquiry Form](#)



Overview

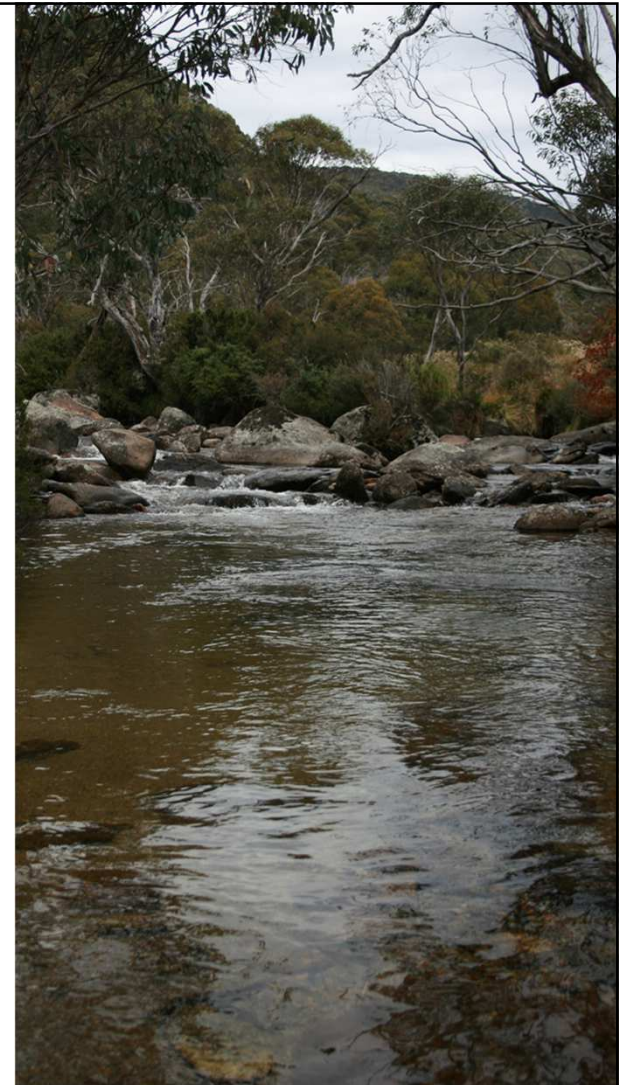
TIME	ITEM	DESCRIPTION	DURATION
11:00	Introduction	Acknowledgment of Country Introduction and house keeping	10 mins
11:10	Content Presentation	System support and troubleshooting: 1. Biodiversity Offset and Agreement Management System (BOAMS) 2. BAM Calculator	25 mins
11:35	Q & A session	Presenter and SME panel address participants' questions	20 mins
11:55	Wrap-up and Close	Upcoming sessions Access to webinar recordings Post-webinar feedback	5 mins

This webinar will be recorded and published for future reference



Biodiversity Offset and Agreement Management System (BOAMS)

- Manages BAM assessments for developments and biodiversity stewardship agreements
- Access point for the BAM Credit Calculator (BAM-C)
- Manages credit obligations and holdings
- Expressions of interest for BSAs, credit wanted listing
- Links to BOS public registers
- Will process credit transfers and retirements





BOAMS Landing Page

NSW GOVERNMENT

Search... SEARCH

BAAS ASSE...

CASES TRAININGS HOW TO

Welcome back BAAS Assessor (C-005807) !
You had last logged in on : 23/09/2019.

The first step in the process is to complete your profile - [Go to Profile](#)
Please go through FAQ's to make your online experience better.

My Profile Development Assessments Stewardship Assessments

My Cases FAQ

As an Assessor what would you like to do today ?

STEWARDSHIP ASSESSMENT

DEVELOPMENT/CLEARING ASSESSMENT

EXPRESSION OF INTEREST

WANTED

Biodiversity Offset and Agreement Management System (BOAMS)
User Guide



Parent and child cases

Parent Case – “master folder” which holds all information relating to a case – landholder details, assessor name, property details

Child Case – BAM assessments and applications that contain supporting information for the case

As an Assessor what would you like to do today ?

STEWARDSHIP ASSESSMENT

DEVELOPMENT/CLEARING ASSESSMENT

EXPRESSION OF INTEREST

CREDIT WANTED

NEW DEVELOPMENT ASSESSMENT CASE

Type
Development

*Subject

Description

CONFIRM

Give the case a unique name:

7	<input type="checkbox"/>	00012739	EABAM ASSESSOR	Development assessment case
8	<input type="checkbox"/>	00013861	EABAM ASSESSOR	Development assessment case
9	<input type="checkbox"/>	00013990	EABAM ASSESSOR	Development assessment case
10	<input type="checkbox"/>	00015540	EABAM ASSESSOR	Development assessment case
11	<input type="checkbox"/>	00015546	EABAM ASSESSOR	Development assessment case



Adding landholder/proponent and property

New Case Party

Select a record type

- Individual Landholder
- Assessor
- Contact Person
- Corporation Landholder
- Credit Buyer
- Interest Holders

New Properties

Property Address

*Street

*City

*State

*PostCode

*Case

Property Name

Location details

* Hectare area of proposed site

* Local government area (LGA)

Alert

Couldn't retrieve proponent details for this case. Please make sure proponent is set in BOAM.

= "add a proponent case party"



Re-allocating cases between assessors

1: Add new assessor as a case party:

New Case Party

Select a record type

- Individual Landholder
- Assessor
- Contact Person
- Corporation Landholder
- Credit Buyer
- Interest Holders

2: Complete assessor details, including BAAS number and valid email. Tick “Current Owner” box:

New Case Party: Assessor

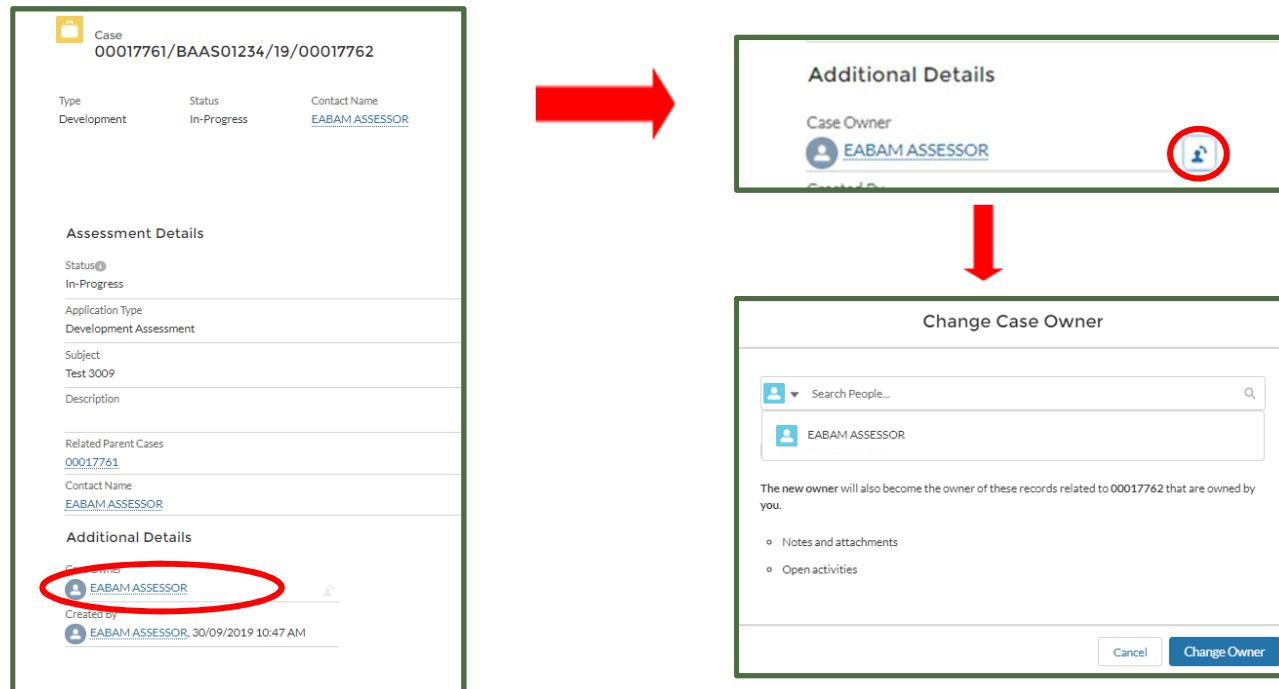
Individual Assessor Details

<p>Salutation <input type="text" value="--None--"/></p> <p>Middle Names <input type="text"/></p> <p>Phone <input type="text"/></p> <p>Mobile <input type="text"/></p> <p>Fax <input type="text"/></p> <p>Preferred contact method <input type="text" value="--None--"/></p> <p>Show Contact Details in Public Register <input type="checkbox"/></p>	<p>First Name <input type="text"/></p> <p>Last Name <input type="text"/></p> <p>Person Email <input type="text"/></p> <p>* Case <input type="text" value="00017762"/></p> <p>* Role <input type="text" value="Assessor"/></p> <p>* Assessor accreditation number ⓘ <input type="text"/></p> <p>Current Owner <input checked="" type="checkbox"/></p>
--	---



Re-allocating cases between assessors

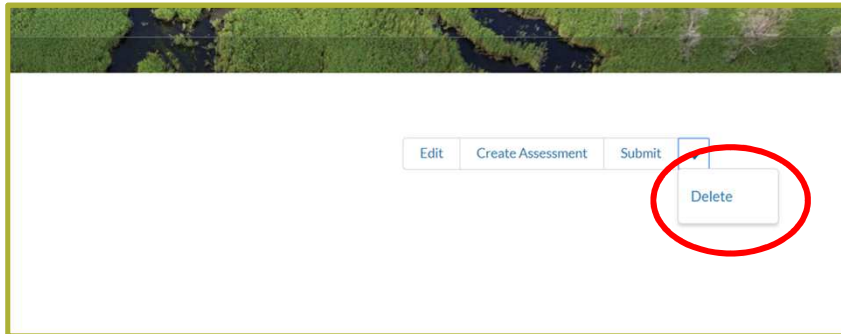
3: Change case owner to new assessor:





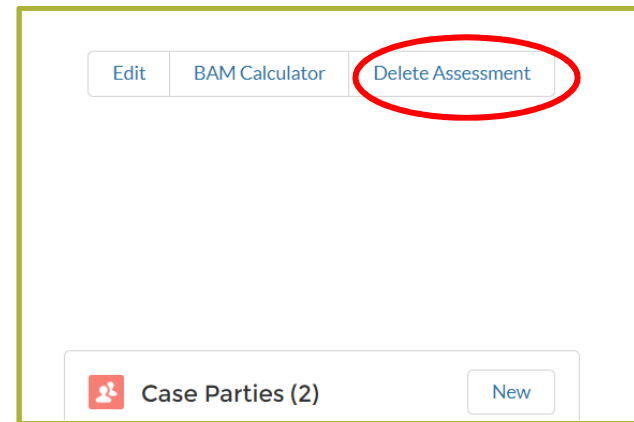
Deleting cases

Parent case:



(Must be the case owner to delete the parent case)

Child case:





The BAM Calculator (BAM-C)

BAM Calculator
BAM data last updated *: 27/09/2019 (Version: 15) * [Disclaimer](#)

OPEN SAVE SAVE AS NEW VERSION CANCEL DELETE FINALISE PRINT
00017761/BAAS01234/19/00017762 / Revision: 1
LOGOUT

1. Assessment details 2. Site context 3. Vegetation 4. Habitat suitability 5. Habitat survey 6. Credits 7. Credit classes 8. Price

Welcome to the Biodiversity Assessment Calculator

The 'OEH BAM Calculator' is an online application of the Biodiversity Assessment Method (BAM). The calculator uses the rules and calculations outlined in the BAM, and allows the user to apply the BAM at a site and observe the results of the assessment.

The BAM and the calculator provides:

- a consistent method for the assessment of the impact on biodiversity on a proposed development or major project, or clearing site
- a scientific and repeatable calculation of how the biodiversity impacts need to be the offset for biodiversity impacts (quantified as biodiversity credits) as required to achieve a standard of 'no net loss' of biodiversity
- a consistent method for the assessment of the biodiversity values of a stewardship site and how those values will change under conservation management

Biodiversity Assessment Calculator

By using this Biodiversity Assessment Calculator, you agree to the terms and conditions as specified by the disclaimer below.

START NOW

Disclaimer

The use of this Biodiversity Assessment Method Calculator (App) is subject to the following terms and conditions:

Office of Environment and Heritage (OEH) endeavours to make sure all the information provided in this App is correct at the time of its publication or posting.

To the extent legally permitted, OEH gives no warranty about and accepts no responsibility for the accuracy, completeness or suitability of information, or for advice given in this App or any linked site, or for any error or omission in that information. The data available from the BAM Calculator has been prepared in good faith, exercising all due care and attention, but no representation or warranty express or implied, is made to the relevance, accuracy, completeness or fitness for purpose of this information in respect of any particular user circumstances. With respect to the biodiversity data and biodiversity credit outcomes determined using the BAM, it should be noted that some data values are subject to change.

Additional information on the BAM data

Benchmark values for Plant Community Types

The benchmark data in the BAM Calculator have been prepared for more than 650 bioregional vegetation classes. Bioregional vegetation classes are an amalgamation of IBRA regions and Keith Vegetation Classifications. Benchmarks describe the reference state to which sites are compared to assess the biodiversity values of native vegetation and threatened species habitat. The reference state relates to best-on-offer sites with high numbers of native plant species, greater structural complexity and replete with functional components, relative to other sites of the same vegetation type.

Richness and foliage cover benchmarks have been created by modelling data from more than 36,000 full-floristic 0.04 ha plots (approximately 1.25 million records) and represent the 75th percentile of the grass-like, forbs ferns and other growth forms. They assume average prior rainfall conditions and represent the average benchmark value over 12 months.

Function benchmarks were generated from approximately 14,000 records from 0.1 ha plots, and were created at a variety of classification levels (up to Formation) based on numbers of available plots. The benchmarks represent the 75th percentile of the data distributions.

Threatened species

The data for many threatened entities used in the BAM Calculator have been reviewed and/or generated via a consensus-based expert elicitation process involving OEH and external species experts. However, data review for a subset of entities (primarily threatened plants) is on-going.

Queries relating to threatened species data should be directed to bionet@environment.nsw.gov.au.

This website is working to conform to Level AA of the [Web Content Accessibility Guidelines version 2](#). If you encounter accessibility difficulties, please contact us.

Biodiversity Assessment Method Calculator User Guide

Biodiversity Assessment Method (BAM) Calculator
User guide

DOWNLOAD

Species with specific survey requirements

Species	Survey Requirements
...	...
...	...
...	...

DOWNLOAD

Native species by growth form list

Species	Growth Form
...	...
...	...
...	...

**BAM-C
resources and
supporting data**



Assessment details and Site Context

BAM Calculator App last updated: 04/07/2019
BAM data last updated *: 27/09/2019

OPEN RE-OPEN PRINT 00017772/BAAS01234/19/00017773 / Revision: 0

1. Assessment details 2. Site context 3. Vegetation 4. Habitat suitability 5. Habitat survey 6. Credits 7. Credit classes 8. Price

All fields marked with an asterisk (*) are mandatory

Message!
You have selected 'Part 4 Developments (General)' as the 'Assessment Type' so we now have enough information to proceed to the 'Site Context'.

Assessment type * Part 4 Developments (General) ▼

Proposal name Report Test

Assessment ID 00017772/BAAS01234/19/00017773

Assessment Revision 0

Sydney Basin' as the 'IBRA Region' so we now have enough information to proceed.

Interim Biogeographic Regionalisation for Australia (IBRA) * Sydney Basin ▼

IBRA Sub Region * Hunter ▼

NSW Landscape Bogan Swamps and Lagoons ▼

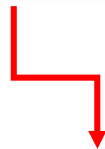
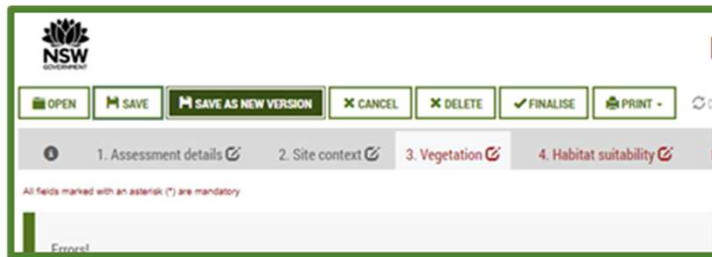
% Native vegetation cover * 78

Linear Development

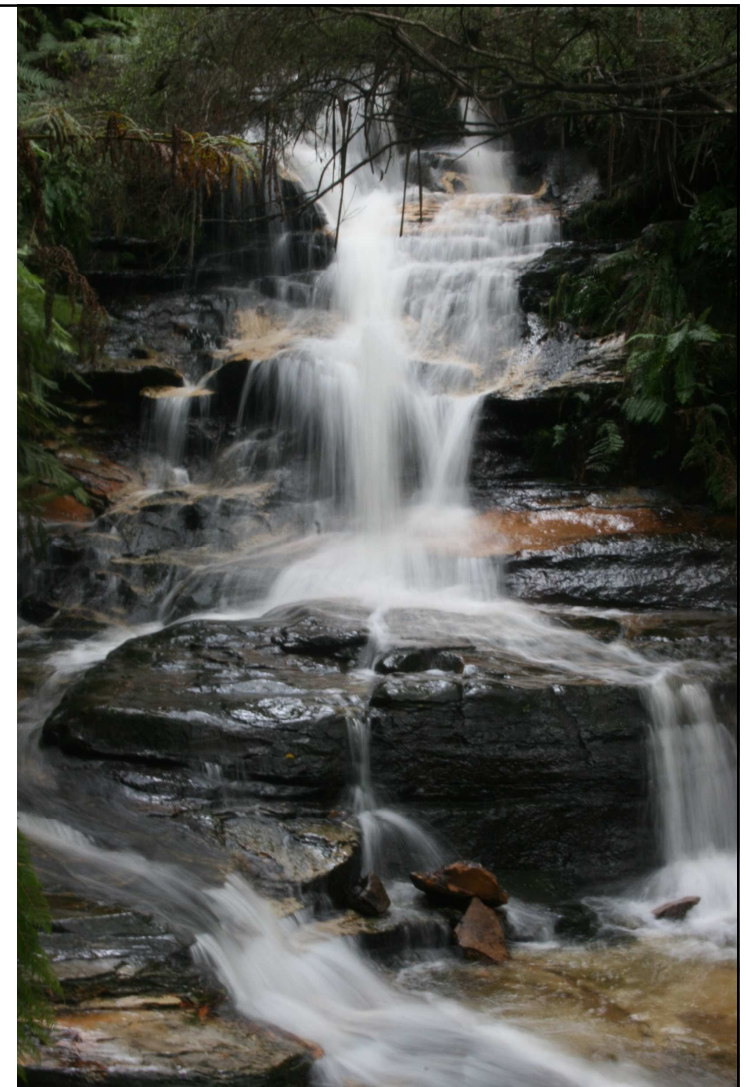


Creating assessment versions

Saving versions allows creation of copies of an assessment to test scenarios:



Assessment ID	Proposal Name	Status	Revision	Updated on
00017761/BAAS01234/19/00017762	Test	Open	1	30/09/2019 13:56:59
00017761/BAAS01234/19/00017762	Test	Open	0	30/09/2019 13:56:53





Adding vegetation zones

BAM Calculator
BAM data last updated *: 27/09/2019

OPEN SAVE SAVE AS NEW VERSION CANCEL DELETE FINALISE PRINT
00017761/BAAS01234/19/00017762 / Revision: 1

1. Assessment details 2. Site context 3. Vegetation 4. Habitat suitability 5. Habitat survey 6. Credits 7. Credit classes 8. Price

All fields marked with an asterisk (*) are mandatory

Information!

As you have selected 'Development' as your 'Assessment Type', you will only need to identify the dominant Plant Community Type on the site.

Errors!

Please address the errors listed below. Note: you will not be able to finalise and submit the assessment until the errors are addressed.

At least one vegetation zone is required to proceed with this application

Plant community types (PCT) & ecological communities

Formation *	Class *	Plant community type *	PCT % cleared	Associated TEC *	BC Act listing status	EPBC Act listing status	Action	Delete
Forested Wetlands	Eastern Riverine Forests	42 - River Red Gum / River Oak riparian woodland wetland in the Hunter Valley	95	Hunter Lowland Redgum Forest in the Sydney Basin and New South Wales North Coast Bioregions	Endangered Ecological Community	Not Listed	ADD VEG ZONE	✕

IMPORT SITE Vegetation zones (Current vegetation integrity score)

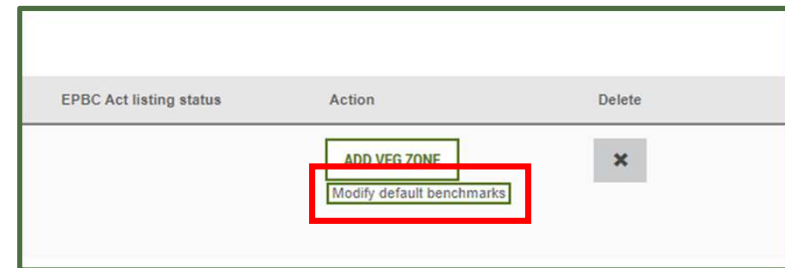


BAM Calculator – modifying benchmarks

Assessors may use more appropriate local data, including benchmarks, if the consent authority is of the opinion that the data more accurately reflects local environmental conditions.

To amend the benchmarks:

1. Tick “Modify default benchmarks”
2. Click “Unlock”, enter the amended data and “Update” the benchmarks



Assessors may modify structure, composition and function elements of the benchmarks.





Importing Plot Data

1: Enter data into the template file - found in



2: Copy the data from the template file. Copy all text, including the headers in rows 1 and 2, **BUT NOT** the empty cells beyond cell "AF"

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	plot	pct	area	patchsize	conditionclass	zone	easting	northing	bearing	compTree	compShru	compGras	compFort	compFerr	compOth	strucTree	strucShru	strucGras	strucFort
2	Text[Maximum 10 characters]	Number	Number with 2 decimal point	Number	Text[Letters, numbers, underscores and hyphens] Please fill condition-class name in all plots (Maximum 54 or 55 or 56)	Range in	Number	Number	Number	Number	Number	Number	Number	Number	Number v	Number v	Number v	Number v	Number v
3																			
4																			
5																			
6																			
7																			
8																			

3: **Note:** All Vegetation zone data already present in the VI fields will be cleared during the import



Adding management zones

Management zones allow identification of areas of differing treatment within a VZ, such as areas to be partially cleared (i.e. APZs).

1: Click on 

Management Zones [CANCEL] [OK]

Name *: Area *:

Total vegetation area size = 2 ha

Name *	Area (ha) *	Remove
2	1.5	<input type="button" value="X"/>
1	0.5	<input type="button" value="X"/>

The first MZ created must equal the area of the whole VZ. Rename the first MZ, enter the area and click “ADD ZONE”.

2: Create new MZs and adjust areas

Management Zones [CANCEL] [OK]

Name *: Area *:

Total vegetation area size = 2 ha

Name *	Area (ha) *	Remove
Cleared	1	<input type="button" value="X"/>
IPZ	0.5	<input type="button" value="X"/>
OPZ	0.5	<input type="button" value="X"/>

Once the first MZ has been added, enter the name of the next MZ and its area. Adjust the area of the first MZ so that the total MZ area = VZ area.



Using management zones

Once created, the management zones will appear in the future vegetation integrity score section. Where partial clearing or other management is proposed, assessors may enter separate scores for each of the components of vegetation integrity.

Vegetation zones (Current vegetation integrity score)													
#	Import	PCT code	Condition class *	Vegetation zone name	Patch Size*	Area (ha)*	Location	Composition condition score	Structure condition score	Function condition score	Current vegetation integrity score	Management zones	Delete
1		624	Classname1	624_Classname1	23	2		96.8	55.2	44.1	61.8		

Vegetation zones (Future vegetation integrity score)												
#	PCT code	Condition class	Vegetation zone name	Patch Size	Management zone	Area (ha)	Composition condition score	Structure condition score	Function condition score	Vegetation integrity (VI) score	Change in VI score	Total Change in VI score
1	624	Classname1	624_Classname1	23	Cleared	1	0	0	0	0	-61.8	
					IPZ	0.5	27.6	14.6	8.9	15.3	-46.5	-49.5
					OPZ	0.5	37.1	34.9	29.4	33.6	-28.1	

CLEAR NEXT



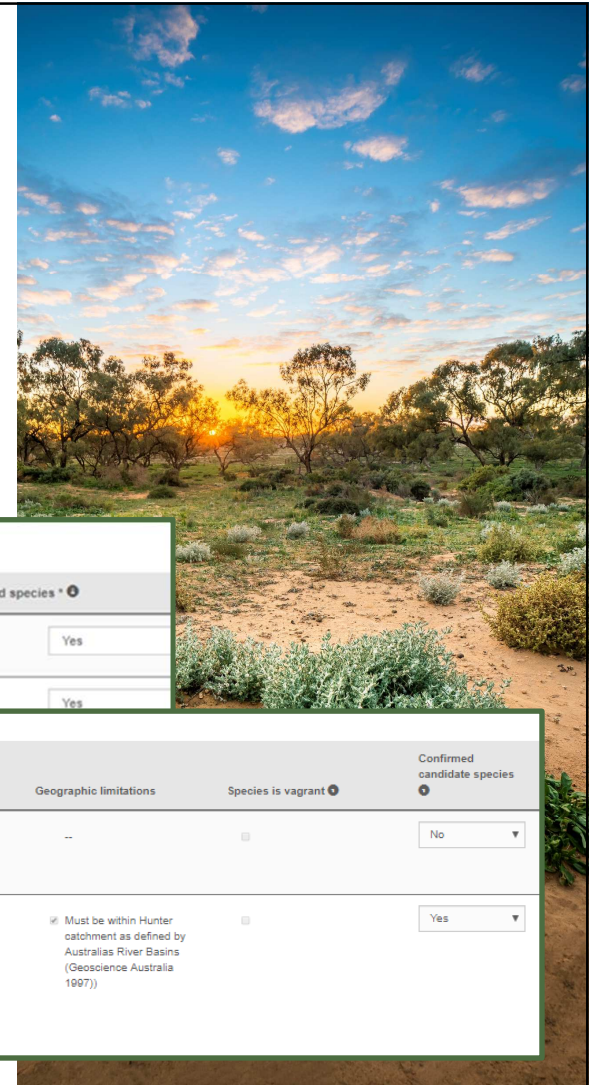
BAM Calculator - Habitat suitability

Assessors may remove a species from the candidate list where:

- habitat constraints listed in the TBDC are not present on site
- the species is vagrant to the area.

Species credit species may also be removed where the identified habitat for the species is degraded.

Species removal **must** be justified in the BDAR



Predicted threatened species (Ecosystem credits)

Species	Habitat constraints	Geographic limitations	Species is vagrant	Veg Zone - Confirmed predicted species
★ <i>Glossopsitta pusilla</i> Little Lorikeet	--	--	<input type="checkbox"/>	624_Classname1 <input type="text" value="Yes"/>
★ <i>Neophema pulchella</i> Turquoise Parrot	--	--	<input type="checkbox"/>	624_Classname1 <input type="text" value="Yes"/>

SEARCH PREDICTED SPECIES

Candidate threatened species (Species credits)

Species	Habitat constraints	Habitat degraded	Geographic limitations	Species is vagrant	Confirmed candidate species
<i>Acacia pendula</i> - endangered population Acacia pendula population in the Hunter catchment	--	<input checked="" type="checkbox"/>	--	<input type="checkbox"/>	No
<i>Cymbidium canaliculatum</i> - endangered population Cymbidium canaliculatum population in the Hunter Catchment	<input checked="" type="checkbox"/> Epiphytes <input checked="" type="checkbox"/> Epiphytic in a range of eucalypts and Angophora Fallen/standing dead timber including logs	<input type="checkbox"/>	<input checked="" type="checkbox"/> Must be within Hunter catchment as defined by Australias River Basins (Geoscience Australia 1997)	<input type="checkbox"/>	Yes

SEARCH CANDIDATE SPECIES



Credit summary and credit classes

Ecosystem credits for plant communities types (PCT), ecological communities & threatened species habitat

Zone	Vegetation zone name	Vegetation integrity loss	Area	Species sensitivity to gain class (for BRW)	Biodiversity risk weighting	Potential SAIL	Ecosystem credits
Weeping Myall - Coobah - Scrub Wilga shrubland of the Hunter Valley							
1	116_High	46.3	2 hectares	Moderate Sensitivity to Potential Gain	2.25	TRUE	52
							Subtotal: 62
							Total: 52

Species credits for threatened species

Vegetation zone name	Habitat condition (vegetation integrity) loss	Area / Count	Biodiversity risk weighting	Potential SAIL	Species credits
Cymbidium canaliculatum - endangered population / Cymbidium canaliculatum population in the Hunter Catchment (Flora)					
116_High	N/A	5 individuals	2	False	10
Dluris tricolor / Pine Donkey Orchid (Flora)					
116_High	46.3				

Ecosystem credit classes

Ecosystem credit summary

PCT	TEC	Area	Credits
116-Weeping Myall - Coobah - Scrub Wilga shrubland of the Hunter Valley	Hunter Valley Weeping Myall Woodland in the Sydney Basin Bioregion	2	52

Credit classes for 116

Like-for-like options

TEC	HBT	IBRA region
Hunter Valley Weeping Myall Woodland in the Sydney Basin Bioregion This includes PCT's: 116	Yes	Hunter , Ellerston, Karuah Manning, Kerrabee, Liverpool Range, Peel, Tomalla, Upper Hunter, Wyong and Yengo. or Any IBRA subregion that is within 100 kilometers of the outer edge of the impacted site.



Re-opening finalised cases

BAM Calculator

App last updated: 04/07/2019
BAM data last updated *: 27/09/2019

00017772/BAAS01234/19/00017773 / Revision: 0

1. Assessment details 2. Site context 3. Vegetation 4. Habitat suitability 5. Habitat survey 6. Credits 7. Credit classes 8. Price

All fields marked with an asterisk (*) are mandatory

Message!
You have selected 'Part 4 Developments (General)' as the 'Assessment Type' so we now have enough information to proceed to the 'Site Context'.

Assessment type * Part 4 Developments (General)
Proposal name Report Test
Assessment ID 00017772/BAAS01234/19/00017773
Assessment Revision 0

Alert

Application re-opened!

OK



Finalising BAM-C cases and importing credits

Related Parent Cases
[00017772](#)

Contact Name
[EABAM ASSESSOR](#)

Additional Details

Case Owner
[EABAM ASSESSOR](#)

Created By
[EABAM ASSESSOR](#), 30/09/2019 4:33 PM

PRO...	STREET	STATE	CITY
PN-0...	2	2	2

[View All](#)

Assessed Lots (0)

Credits (4)

CRE...	AVAIL...	APPR...	ASSES...
CR-1...	52	52	52
CR-1...	17	17	17
CR-1...	35	35	35
CR-1...	10	10	10


[View All](#)

Once BAM-C is finalised, the BDAR must be submitted to the consent authority with 14 days (BC Act s6.15).

Email BAM support (bam.support@environment.nsw.gov.au) if you need a case re-opened.



Credit reports



BAM Biodiversity Credit Report (Like for like)

Proposal Details

Assessment Id 00017772/BAAS01234/19/00017773	Proposal Name Report Test	BAM data last updated * 27/09/2019
Assessor Name [REDACTED]	Assessor Number	BAM Data version * 15
Proponent Names Fred Test	Report Created 30/09/2019	BAM Case Status Finalised
Assessment Revision 0	Assessment Type Part 4 Developments (General)	Date Finalised 30/09/2019

* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.

Potential Serious and Irreversible Impacts

Name of threatened ecological community	Listing status	Name of Plant Community Type/ID
Hunter Valley Weeping Myall Woodland in the Sydney Basin Bioregion	Critically Endangered Ecological Community	116-Weeping Myall - Coobah - Scrub Wilga shrubland of the Hunter Valley

Nil

Additional Information for Approval

PCTs With Customized Benchmarks

Assessment Id
00017772/BAAS01234/19/00017773
Proposal Name
Report Test
Page 1 of 4



BOAMS and BAM-C support

Biodiversity Offsets Scheme

How the Scheme works

Biodiversity Offsets Scheme support

Entry requirements

Rules

Serious and irreversible impacts

Biodiversity Offsets and Agreement Management System

Offsets payment calculator

Fees

Total fund deposit - discount rate

Public registers

Brokers

Experts

Topics > Animals and plants > Biodiversity reform
> Biodiversity Offsets Scheme > Biodiversity Offsets Scheme support

f t p e

Biodiversity Offsets Scheme support

Use this form if you need support or want more information about the Biodiversity Offsets Scheme. You can also use it to send us your feedback.

Need help?

This form replaces the Land Management and Biodiversity Conservation (LMBC) Service Centre. Your enquiry will be sent directly to the appropriate team and actioned.

Biodiversity Offsets Scheme enquiry form

Your enquiry relates to:*

-- Please Select --

What would you like to ask about?*

-- Please Select --

Tell

- Please Select --
- Applying to become an accredited assessor
- Exports to prepare species reports for the BAM**
- Biodiversity Assessment Method Support (including BAM-C/BOAMS)**
- A development application or other planning approval
- Biodiversity Offset Payment Calculator
- Spot Price Index
- BioBanking including BBAM credit transactions
- Native Vegetation Regulatory Map (NVR Map)
- Biodiversity Values Map and Threshold Tool
- Uplic
- NSW BioNet, including Vegetation Classification database, benchmarks, Atlas of NSW Wildlife
- Wildlife Licencing Reforms
- Biodiversity Offsets Scheme Credit Transactions, public registers
- Credit equivalence (BBAM to BAM) conversion
- Compliance and Enforcement
- Yo
- General Enquiry

First name:*

Contact us

Department of Planning, Industry and Environment

☎ 1300 361 967 ✉ Email

🌐 Online

21 <https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/biodiversity-offsets-scheme/biodiversity-offsets-scheme-support>



Q&A

This session will not be included in the webinar recording.

Unanswered questions or those taken on notice will be addressed after the webinar. Important or frequently asked questions will contribute to the development of the [Assessor Q&A page](#), future webinars and other BOS support resources.



Consultation on the proposed changes to Biodiversity Assessment Method

Public exhibition runs until 16th October

The revised BAM, summary of proposed amendments and the submission form can be found here:
<https://www.environment.nsw.gov.au/biodiversity/biodiversity-assessment-method-consultation.htm>





Upcoming Webinars



BAM Support: Vegetation Integrity and Condition Benchmarks

Monday 21 October 2019, 01:00 PM - 02:00 PM

This webinar provides an overview of vegetation integrity assessment and the development of vegetation condition benchmarks.

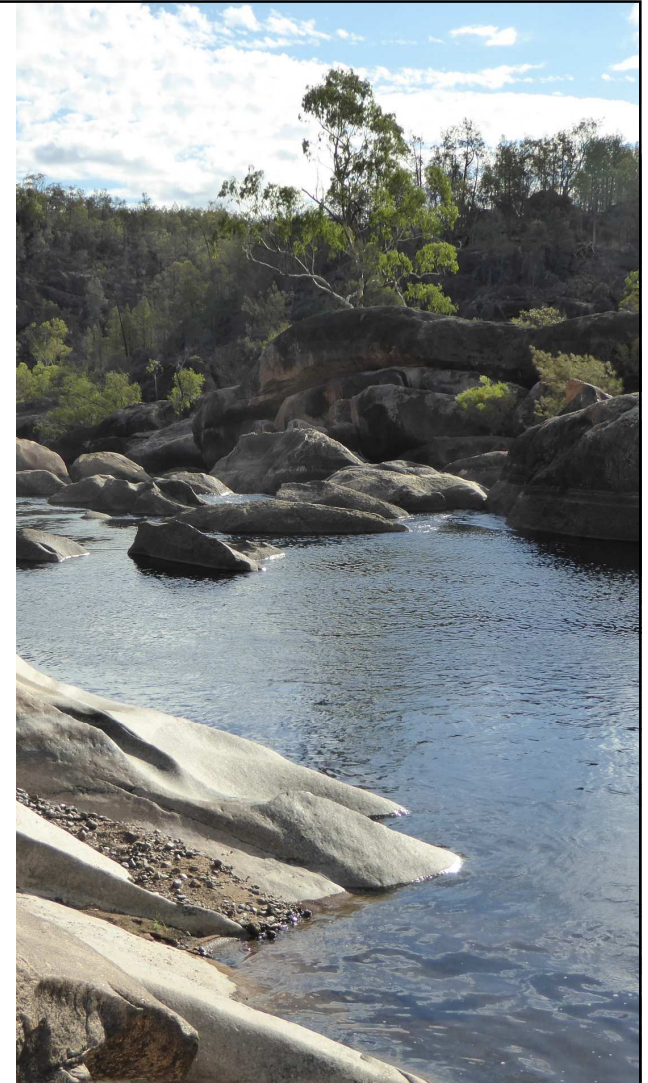
Tags: [BAM assessors](#)

Register

Event Details

<https://events-apac1.adobeconnect.com/content/connect/c1/1403042193/en/events/catalog.html>

More sessions coming soon!





Thank you for your participation

Webinar recordings will be available to view online on the BOS Vimeo Showcase at vimeo.com/showcase/6271450
and via the assessor resource page www.environment.nsw.gov.au/biodiversity/assessors

Contact us at www.environment.nsw.gov.au/biodiversity/bos-help-advice