



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)



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 8

Catastrophic bushfire and the assessment of biodiversity values: guidance on applying the BAM to severely burnt sites



Penelope Rogers
Senior Project Officer
Ecosystem Assessment Team
Conservation Programs Branch

Wednesday 18th March 2020

12:00pm - 1:00pm

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



Overview

TIME	ITEM	DESCRIPTION	DURATION
12:00	Introduction	Acknowledgment of Country Introduction and house keeping	10 mins
12:10	Content Presentation	Catastrophic bushfire and the assessment of biodiversity values: guidance on applying the BAM to severely burnt sites	25 mins
12:35	Q & A session	Presenter and SME panel address participants' questions	20 mins
12:55	Wrap-up and Close	Closing remarks Upcoming sessions Post-webinar feedback	5 mins



DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT

Catastrophic bushfire and the assessment of biodiversity values

Guidance on applying the BAM to severely burnt sites



environment.nsw.gov.au



Context

The Department is considering other strategies, related to the application of the biodiversity offsets scheme (BOS), to support bushfire affected communities in re-building.



David Croft/DPIE



Scope

Within scope:

- High – extreme intensity bushfires.
- Part 4 and Part 5 developments (incl. SSD and SSI) and biodiversity certification.
- New developments and partially completed assessments.

Out of scope:

- Controlled, management and traditional burns, or low intensity bushfires.
- Stage 3 of BAM - biodiversity stewardships sites
- Rainforest or alpine complex: assessed case by case, guidance from Department.





Limitations

- Not field tested – expecting feedback (review scheduled for 3 months).
- Tools and resources to support assessment – more under development.
- Relies on reasoned evaluation and professional judgement by assessors to estimate the biodiversity values prior to severe bushfire.





Entry to using the guideline



Rosie Nicolai/DPIE



Step 1.

Was the subject land burnt in the 2019-2020 bushfires?








Sean Parry/DPIE



Was the subject land burnt in the 2019/2020?

- Check the GEEBAM mapping (or assessor knowledge).
- The subject land is further assessed (Step 2) as severely burnt when the following burnt area classes are within the subject land boundary:
 1. canopy fully affected
 2. canopy partially affected
 3. canopy unburnt

GEEBAM Burnt Area Class	
	Not yet assessed
	Little change
	Canopy unburnt
	Canopy partially affected
	Canopy fully affected





Case example: drone footage interpretation

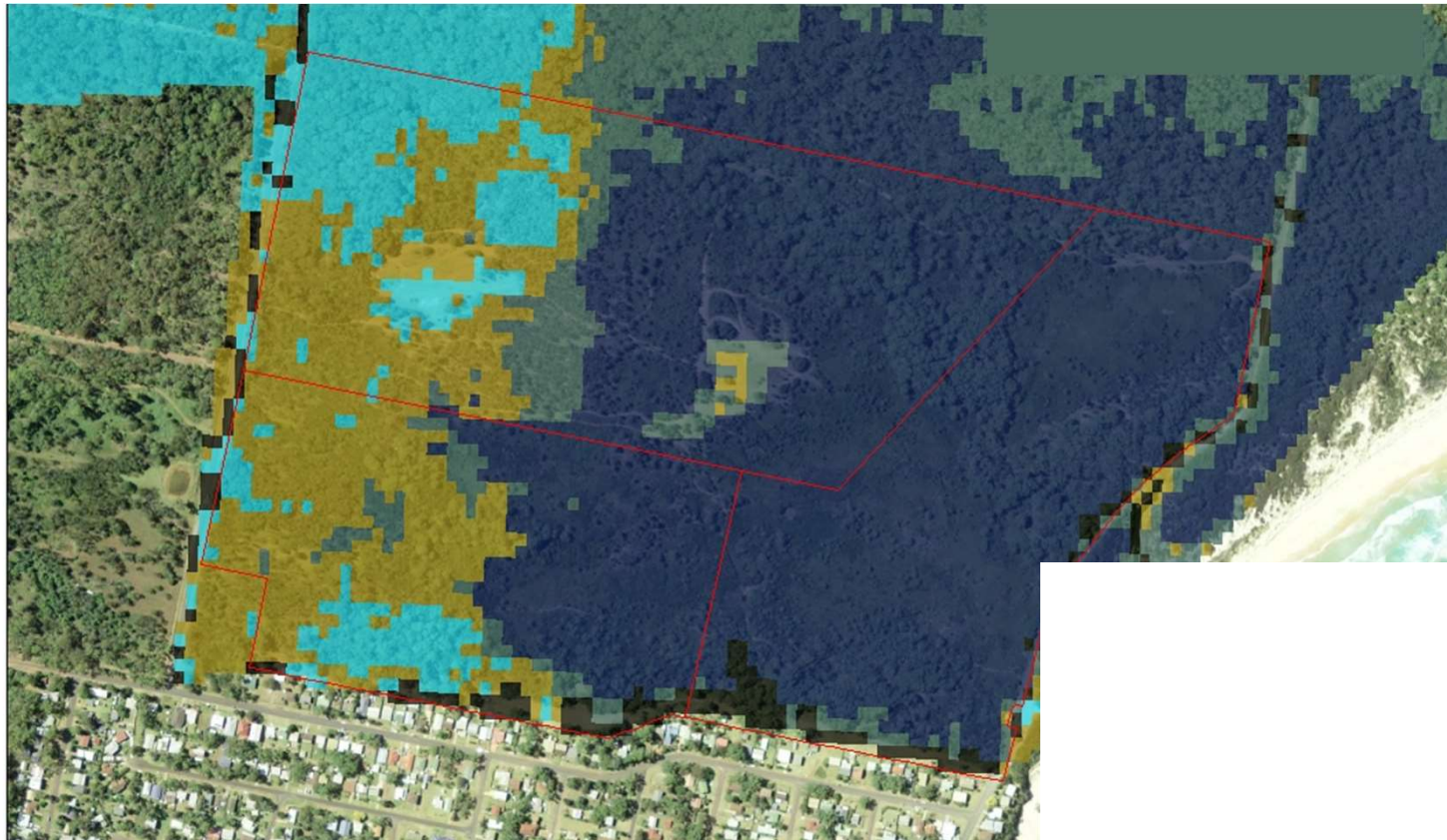


Severe Canopy Fire Area
Understorey Fire area.
Not Burnt.

Legend
Biocertification area
Site boundary
Cadastral
Watercourse



Case example: GEEBAM interpretation





Step 2.

**Is there any severely burnt native
vegetation on the subject land?**

Ian Brown/DPIE



2. Is the vegetation severely burnt?

- Field assessment of the native vegetation to determine burnt severity.
- Using expected vegetation characteristics as a guide – requires judgement and justification by the assessor.





Table 1. Decision support criteria to help evaluate if native vegetation is severely burnt.

Feature	Descriptive characteristics for severely burnt vegetation
Species richness	The range of species present before the fire are burnt and/or cannot be identified. Dominant species cannot be easily identified until regeneration occurs.
Growth form: trees	Canopy trees are killed and/or canopy is consumed or largely consumed with most leaf material charred/scorched. Epicormic growth, if present, is not well developed (<1m long).
Growth form: shrubs, forbs, ferns and other	All understorey plants are consumed or largely consumed (some charred). Re-growth, if present, is immature (very few species have attained full height).
Growth form: grasses and grass-like	Ground cover is consumed, or largely consumed. Evidence of ground scorch is present. Re-growth, if present, consists predominately of new re-sprouting growth (native vegetation).
Logs	Logs (if expected to have been previously on site) are absent or largely consumed.
Litter cover	Pre-fire surface litter (if expected) is consumed. Soil organic layer is consumed or largely consumed. New leaf may be occurring where the canopy was burnt but not scorched
Ash	White ash deposition and charred organic matter is present to several centimetres depth.



Decision Maker Agreement

- Recommend agreement is obtained from the consent authority to apply the guideline and specific approach to use prior to full site assessment.
- Important: if any native vegetation is considered severely burnt, the guideline applies to the whole assessment.



Which sections of the BAM?

- Chapter 4 – Landscape context
- Chapter 5 – Assessing native vegetation, threatened ecological communities and vegetation integrity
- Chapter 6 – Assessing habitat suitability for threatened species
- Chapter 10 – Thresholds for the assessment and offsetting of impacts of development (SAII)
- Streamlined assessment modules





Key Principle

Assessing biodiversity values that existed prior to severe bushfire:

- Vegetation cover/extent/condition is determined pre-fire.
- Mapping should be based on pre-fire imagery.





Key Principle

PCT / TEC identification:

- This will be challenging – many of the common indicators are not present. Instead a suite of attributes/resources should be used to support choices.
- Use pre-fire condition to determine vegetation zones. Where condition cannot be determined – allocate vegetation zones by PCT only.
- Important: a vegetation zone may include burnt and unburnt vegetation.



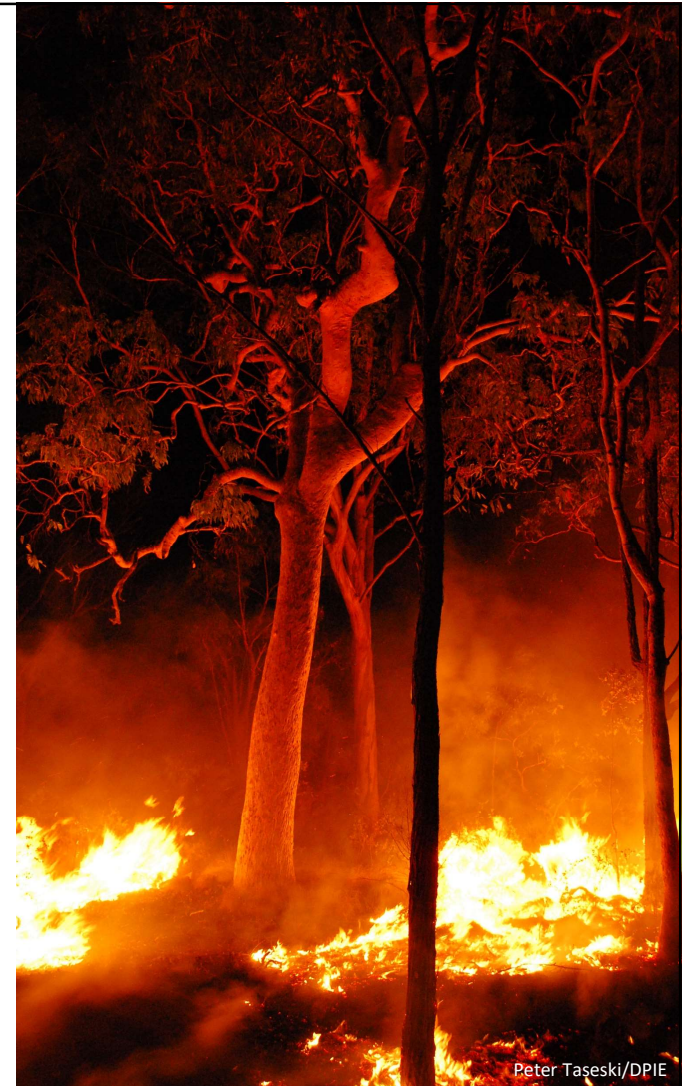
Peter Taseski/DPIE



Key Principle

Vegetation integrity:

- Use of the guidelines for VI assessment is based on burn severity in the vegetation zone – apply Table 1 again.
- If the vegetation zone has any severely burnt vegetation: apply guideline for assessing VI.
- If the vegetation zone no severely burnt vegetation: apply the BAM for assessing VI.



Peter Taseski/DPIE



Key Principle

Vegetation integrity assessments:

- Option 1 – Use unburnt section(s) of the vegetation zone and replicate plot data in the BAM-C.
- Option 2 – Locate surrogate plots for vegetation zones.
- Option 3 – Use of existing VIS data.
- Option 4 – Assume benchmark condition.



Helen Jessup/DPIE



Key Principle

Hollow bearing trees:

- Assessed on the severely burnt site



Simone Cottrell/RBG



Key Principle

Habitat suitability for threatened species:

- Important: where the site has any severely burnt vegetation, the guidelines apply to habitat suitability assessments for the entire site (burnt and unburnt native vegetation).
- Assumed presence or expert reports.
- For threatened plants only (that known early fire responders): can survey, with agreement from consent authority.



Sue Brookhouse/DPIE



Key Principle

SAII:

- Assumed presence or expert reports.
- Cannot rely on degraded habitat to exclude.
- Must consider – SAII assessment criteria based on best current knowledge of the threatened entity, i.e. the status of threatened entity post-bushfire season.



Sue Brookhouse/DPIE



Next Steps

- Monitoring enquiries and feedback, and technical issues.
- Keeping abreast of tools/resources developed – advice on new tools and resources provided via the Assessor Update.
- Scheduled review: 3 months





Q&A

This session will not be included in the webinar recording.

Written questions and answers will be attached to the webinar recording soon after the event.

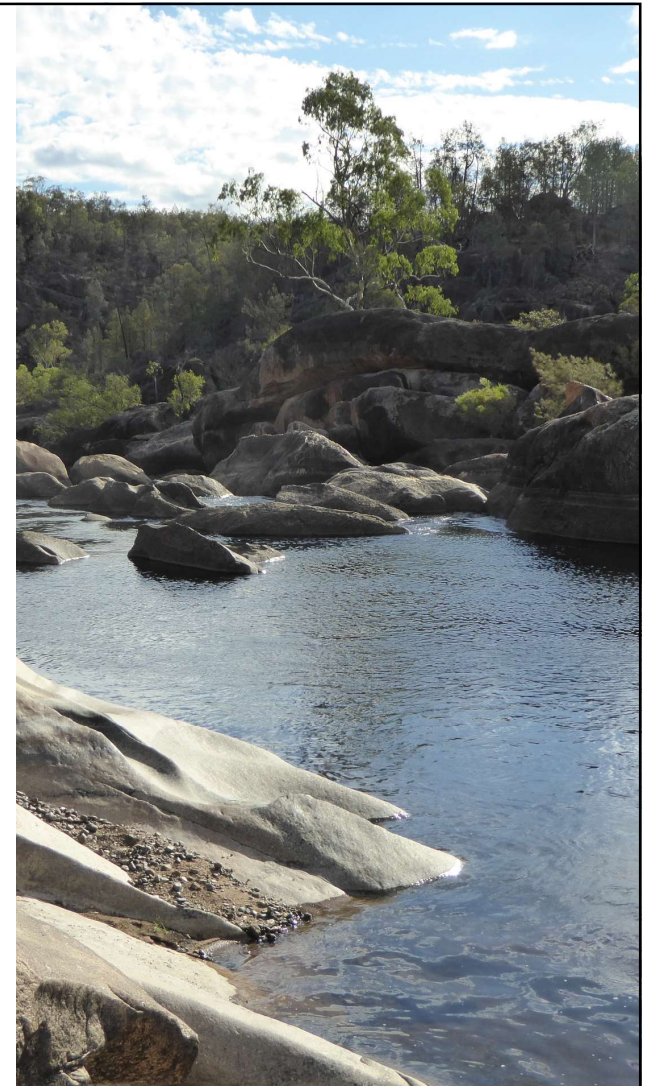
Questions asked during these webinars also contribute to the development of the [Assessor Q&A](#) page, future webinars and other Biodiversity Offsets Scheme supporting resources.



Upcoming Webinars

How does the BAM gain model apply at a biodiversity stewardship site?

Registration opening 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 [BAM Support Webinar webpage](#)

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

Simone Cottrell/DPIE