



**MEMORANDUM OF UNDERSTANDING
TO APPLY THE THREATENED
ECOLOGICAL COMMUNITY (TEC)
PRODUCTS FROM THE EPA'S TEC
MAPPING PROJECT.**

**Between the NSW Environment Protection
Authority (EPA)**

and the

Forestry Corporation of NSW (FCNSW)

TABLE OF CONTENTS

Contents

1. PARTIES TO THIS MOU	3
2. OBJECTIVES.....	3
3. PURPOSE	3
4. ROLE OF FCNSW	3
5. ROLE OF EPA.....	3
6. OPERATING FRAMEWORK	3
7. IDENTIFICATION OF TECs	
8. OPERATIONAL BOUNDARIES	
9. AGREED TERMS	6
10. RESOLUTION PROCESS	7
11. IMPLEMENTATION	7
12. TERM AND VARIATION OF THIS MOU	7
13. SIGNATORIES TO THIS MEMORANDUM OF UNDERSTANDING	8
ANNEXURE 1	9
i. CONDITIONS	
ii. FORESTRY OPERATIONS WITHIN TEC BOUNDARIES	
iii. MAPPING OF FIELD IDENTIFIED UNMAPPED AREAS	
iv. UPDATING A TEC DATASET	
ANNEXURE 2	11
ANNEXURE 3	13
i. BACKGROUND	13
ii. LEGISLATIVE CONTEXT	13
iii. DEFINITIONS and ABBREVIATIONS	14

1. PARTIES TO THIS MOU

- 1.1 The parties to this MOU are the NSW Environment Protection Authority (EPA) and Forestry Corporation of NSW (FCNSW).

2. OBJECTIVES

- 2.1 The objective of this MOU is to:
- a) set the agreed terms for use of the products arising from the EPA's Threatened Ecological Community (TEC) Mapping Project (the Project) prior to commencement of the remade coastal Integrated Forestry Operations Approval (IFOA).
 - b) ensure TECs will be identified and protected from harm caused by forestry operations.

3. PURPOSE

- 3.1 The purpose of this MOU is to support the application of products arising from the Project prior to the commencement of the remade coastal IFOA. The Project's certified products are to be applied immediately with the objective of reducing the ambiguity and subjectivity in the identification of the distribution and extent of the assessed TECs during FCNSW planning and operations and the EPA's regulation of specified forestry activities. The certified products will be listed in Annexure 1 to this MOU.

4. ROLE OF FCNSW

- 4.1 The role of FCNSW is to apply the EPA certified products subject of this MOU for FCNSW planning and operations work. The products are to be implemented in accordance with Annexure 2.

5. ROLE OF EPA

- 5.1 The role of EPA is to adopt the completed Project products and administer the conditions of this MOU with the aid of the certified products.

6. OPERATING FRAMEWORK

- 6.1 The project products will be adopted by the EPA Chief Environmental Regulator. The certification of products is complete at that adoption date.
- 6.2 The certified project products and their adoption date will be provided in Annexure 2 to this MOU. The EPA is responsible for keeping an up-to-date record in Annexure 2.
- 6.3 This MOU establishes an agreement between the EPA and FCNSW that FCNSW will use the certified products from this Project for planning and operational purposes involving specified forestry activities.
- 6.4 This MOU establishes that the EPA will use the certified products including the application of any operational map line to establish compliance with the *National*

Parks and Wildlife Act 1974 (NPW Act), the IFOA and the TSL during the regulation of FCNSW activities.

- 6.5 This MOU requires the certified products to be applied in accordance with Annexure 1.
- 6.6 Nothing in this MOU prejudices the content or function of the remade coastal IFOA.

7 IDENTIFICATION OF TECS

- 7.1 Assessment for the presence of TECS must be undertaken prior to conducting forestry operations. This assessment must consider all TECS with potential to occur in the operational area. Clauses 7.3 to 7.6 of this Annexure must be applied to identify and map the presence of TECS within operational areas.
- 7.2 When an amendment to a TEC determination occurs, Certification is voided until the impact of the amendment is reviewed by the EPA and a decision is made on the adequacy of the mapping, and where relevant, the field guide key, to reflect the amended determination.
- 7.3 For areas of a TEC mapped in an Operational Map listed at Annexure 1:
 - a) The boundary and extent of the TEC identified in the certified operational map must be applied as a TEC exclusion zone.
 - b) FCNSW are not required to undertake surveys to identify additional areas of a specified TEC within the assessed area of that specified TEC, unless an indicative map applies, in which case clauses 7.4 and 7.5 apply.
 - c) The boundary of a TEC mapped in an operational map at Annexure 2 must not be changed unless
 - i. Additional areas have been identified in the field in accordance with clauses 7.4, 7.5, 7.6; or
 - ii. Gross errors in mapping have been identified and a suitable revised map boundary has been developed in accordance with the agreed TEC interpretation in the relevant technical report; and
 - iii. Written approval has been sought and obtained from the EPA to change the boundary.
 - d) FCNSW are required to apply clauses 7.4, 7.5 and then 7.6 for all other TECS that may occur within an operational area.
- 7.4 For areas mapped in an indicative map listed at Annexure 2:
 - a) A suitably experienced or qualified person must undertake surveys for the specified TEC(s) within the area indicated as such on the map.
 - b) Surveys must be undertaken in accordance with the relevant TEC field key if listed at Annexure 2.

Note: supplementary guidelines prepared by the EPA, in consultation with the FCNSW, must be implemented to support this clause.

- c) The boundary and extent of all TEC(s) identified in accordance with clauses 7.4 (a) and 7.4(b) must be mapped in accordance with Annexure 1
- d) The boundary and extent of the TEC identified under clause 7.4(c) must be applied as a TEC exclusion zone.
- e) FCNSW are not required to undertake surveys to identify additional areas of the specified TEC(s) external to areas identified as Indicative TEC on the relevant map at Annexure 2.
- f) Once a survey has been completed for a specific TEC in an area under clauses 7.4(a) and 7.4(b) and maps updated under 7.4(c) then no additional surveys are required for that TEC in the specified area; and the EPA may add the area to an operational map at Annexure 2.
- g) FCNSW are required to apply clause 7.6 for all other TECs that may occur within the specified area.

7.5 For TECs in areas where a published TEC field key listed at Annexure 2 may be relevant:

- a) Surveys must be undertaken in accordance with the relevant TEC field key.
- b) A suitably experienced or qualified person must undertake surveys for the specified TEC(s) within an identified area in the relevant Indicative Map listed at Annexure 2.
- c) The boundary and extent of all TEC(s) identified in accordance with clause 7.5(b) must be mapped in accordance with Annexure 1.
- d) The boundary and extent of the TEC identified under clause 7.5(b) must be applied as a TEC exclusion zone.

7.6 For all other TECs in areas where a TEC may occur and where clauses 7.3-7.5 do not apply:

- a) the relevant Scientific Committee determination for that community must be applied
- b) The boundary and extent of all TEC(s) identified in accordance with clause 7.6(a) must be mapped in accordance with Annexure 1.
- c) The boundary and extent of the TEC identified under clause 7.6(a) must be applied as a TEC exclusion zone.

7.7 For unmapped TECs that have been identified and mapped in accordance with clauses 7.4, 7.5 and 7.6, the maps of TECs and their associated exclusion zones must be provided to the EPA for incorporation into the TEC spatial dataset and may be certified as an Operational Map at Annexure 2 by the EPA.

8 OPERATIONAL BOUNDARIES

8.1 The location and mapped extent of any TEC(s) identified under clause 7 must be clearly identified on the operational map for a forestry operation prior to the commencement of that forestry operation.

- 8.2 The location and mapped extent of the boundary of a TEC must be field identified prior to the commencement of a forestry operation in an area in accordance with Annexure 1
- 8.3 The location of the field boundary of a TEC must match the location of the mapped extent of the boundary of that TEC, as displayed on a certified TEC map held by the EPA
- 8.4 The extent of a TEC boundary extends to the outer edge of the boundary on the certified electronic TEC map held by the EPA

9 AGREED TERMS

- 9.1 The operating framework outlined in Appendix 1 of this MOU only applies to project products certified by the Chief Environmental Regulator of the EPA (summarised in Annexure 2).
- 9.2 The MOU only applies to the regulation of specified forestry operations from the date of certification onwards. The EPA will not use the certified products to conduct a backwards-looking review of forestry operations that occurred prior to product certification by the Chief Environmental Regulator of the EPA. Notwithstanding this, the EPA will not be prevented from taking any form of regulatory action for instances where specified forestry operations in a TEC has occurred as defined by the NSW scientific committee determination and the offence provisions under s118A or 118D of the *NPWS Act 1974*.
- 9.3 This MOU does not apply to specified forestry activities subject of an existing harvest plan where such a plan has been approved prior to the MOU certification date. This MOU does not require FCNSW to redraft approved harvest plans.
- 9.4 For TECs in all unassessed areas, and for unassessed TECs in assessed areas, the current framework for the relevant IFOA and TSL applies. That is – consistent with s118A and 118D of the *NPWS Act 1974* and the relevant TSL, this MOU does not authorise the carrying out of an activity that is likely to result in harm to, or picking of, or damage to any habitat of a threatened ecological community. The location and extent of these TECs must be determined by FCNSW with reference to the final determination of the NSW Scientific Committee.
 - 9.4A This MoU does not apply to any bushfire hazard reduction works planned and carried out in accordance with the *Regional Fires Act 1997* and the Bush Fire Environmental Assessment Code, or any emergency bushfire activities as set out in the *Rural Fires Act 1997*.
 - 9.4B Notwithstanding clause 9.4A, any bush fire hazard reduction works planned and carried out in accordance with the IFOA, then this MoU applies.

9.5 Any communication from parties external to this MOU, on or involving the Project products, will be referred to the EPA for response.

9.6 All Project products are provided under the terms of a data licence agreement which may be amended from time to time.

10. RESOLUTION PROCESS

10.1 The Manager Forestry Strategic Regulation and Reform EPA and the Senior Manager Planning FCNSW will work to cooperatively resolve any issue or dispute.

10.2 If agreement at this level is not achieved, the Director Forestry EPA and the General Manager Hardwood Forests Division FCNSW will work to cooperatively resolve any issue or dispute.

10.3 If agreement at this level is not achieved, the matter will be referred to the FCNSW CEO and the EPA Chair & CEO.

10.4 If agreement at this level is not achieved, the matter will be referred to the appropriate Ministers.

11. IMPLEMENTATION

11.1 The Director Forestry EPA and the General Manager Hardwood Forests Division FCNSW will implement and monitor this MOU.

12. TERM AND VARIATION OF THIS MOU

12.1 This MOU is effective when both parties have signed this document from the date below. It may be amended by joint written agreement of both parties.

12.2 This MOU will apply until such time as the coastal IFOA is gazetted.

13. SIGNATORIES TO THIS MEMORANDUM OF UNDERSTANDING

This MOU is made on the day 3rd of May 2017 between the FCNSW and EPA.


Signed by:

~~Chief Executive Officer, FCNSW~~

~~GM HARWOOD FORESTS FCNSW~~

Nick Roberts

~~DEAN ANDERSON~~

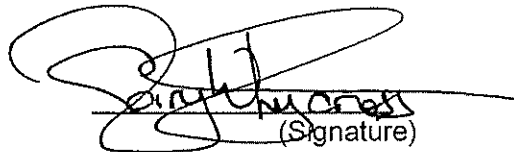

(Signature)

3.5.17
(Date)

and

A/Chief Environmental Regulator, EPA

Gary Whytcross


(Signature)

15/1/17
(Date)

ANNEXURE 1

1 CONDITIONS

- 1.1 A TEC exclusion zone must be applied to a:
- a) TEC
 - b) certified area identified in an operational map listed in Annexure 2.
- 1.2 An additional TEC exclusion zone buffer must be applied to each mapped TEC as per Annexure 2. The additional TEC exclusion zone buffer applied to each mapped TEC must be:
- a) Measured from the outside boundary of the TEC exclusion zone of the mapped TEC.
 - b) Treated as a TEC exclusion zone buffer in accordance with clause 2.2 of this Annexure.
- 1.3 The location of all TECs must be identified in accordance with Part 7 of this MOU and clause 4 of this Annexure.
- 1.4 For TECs in all unassessed areas, and for unassessed TECs in assessed areas, this MOU does not authorise the carrying out of any activity that is likely to:
- a) Harm a threatened ecological community, and/or
 - b) Result in the picking of a plant that is part of threatened ecological community.

2 FORESTRY OPERATIONS WITHIN TEC OPERATIONAL BOUNDARIES

- 2.1 Forestry operations are prohibited within a TEC exclusion zone:
- a) machinery entry into the TEC exclusion zone is prohibited,
 - b) trees must not be felled into the TEC exclusion zone;
 - c) existing roads, tracks and drainage feature crossings may be maintained and used;
 - d) construction or upgrading of roads, tracks or drainage feature crossings in a TEC exclusion zone is prohibited.
- 2.2 Forestry operations are prohibited within a TEC exclusion zone buffer:
- a) machinery is not permitted into the TEC exclusion zone buffer unless
 - i. the machinery is within the outer 5 metres of the TEC exclusion zone buffer for the purpose of felling a tree located within the harvest area, and
 - ii. the tree cannot be safely felled from within the harvest area, and
 - iii. provided the tree is felled away from the TEC exclusion zone and the TEC exclusion zone buffer.
 - b) trees must not be felled into the TEC exclusion zone buffer unless there is no practical alternative available for felling the tree into the harvest area, in which case no more than 6 trees in any 200 metre length of the TEC exclusion zone buffer boundary may be felled.
 - c) existing roads, tracks and drainage feature crossings may be maintained and used in the TEC exclusion zone buffer;

- d) construction or upgrading of roads, tracks or drainage feature crossings in a TEC exclusion zone buffer is prohibited, except where approved by the EPA using the Schedule 6 mechanism of the TSL

3 MAPPING OF FIELD IDENTIFIED UNMAPPED AREAS OF TEC

- 3.1 The boundary of any field identified unmapped area and any associated exclusion zone of a TEC under Part 7 must be mapped in accordance with clauses 3.2, 3.3 and 3.4 of this Annexure 1.
- 3.2 The boundary of any area mapped under Part 7 must be incorporated into TEC data layer and provided to the EPA on request or an agreed data exchange frequency for inclusion into the TEC Spatial Data set.
- 3.3 For each field identified unmapped area of TEC, FCNSW must
 - a) Determine the field location of the boundary of the TEC
 - b) Record the boundary of the TEC using a geographic positioning system (GPS) enabled device or any other device that can accurately record the spatial location of the boundary.
 - c) Create a geographic information system (GIS) digital record that
 - i. Identifies the boundary of the TEC
 - ii. Identifies the boundary of any associated buffer and/or exclusion zone
 - iv. contains attribute information as specified by the EPA
- 3.5 All TEC spatial data sets and associated metadata may be made available to the public
- 3.6 The EPA is the custodian of all IFOA spatial datasets and associated metadata

4 UPDATING AN EXISTING TEC DATASET

- 4.1 Any update to a TEC dataset must be consistent with the interpretation of that TEC made under the TEC Mapping Project
- 4.2 Any addition, variation or exception to a TEC dataset may only be made by agreement of the parties to this MOU.

ANNEXURE 2

TEC	TEC Guideline	Indicative Map	Operational Map	TEC exclusion zone buffer	Endorsed by FCNSW	Date	Certified by the Chief Environmental Regulator of the EPA	Date
Riverflat Eucalypt Forest on Floodplains	N/A	N/A	completed	10m	Yes	03 June 2016	Yes	04 Nov 2016
Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland	N/A	N/A	completed	20m	Yes	03 June 2016	Yes	04 Nov 2016
Swamp Oak Floodplain Forest	N/A	N/A	completed	20 m (or relevant wetland buffer – whatever is larger) ¹	Yes	03 June 2016	Yes	04 Nov 2016
Swamp Sclerophyll Forest on coastal Floodplains	N/A	N/A	completed	20 m (or relevant wetland buffer – whatever is larger) ¹	Yes	03 June 2016	Yes	04 Nov 2016
Montane Peats and Swamps	N/A	N/A	completed	20 m (or relevant wetland buffer – whatever is larger) ¹	Yes	03 June 2016	Yes	04 Nov 2016
Coastal Saltmarsh on floodplains	N/A	N/A	completed	20 m (or relevant wetland buffer – whatever is larger) ¹			Yes	04 Nov 2016
Subtropical coastal floodplain forest	N/A	N/A	completed	0m			Yes	04 Nov 2016
Lowland Rainforest on Floodplain	N/A	N/A	completed	10m			Yes	04 Nov 2016
Lowland Rainforest	N/A	N/A	completed	0m			Yes	04 Nov 2016
Grey Box - Grey Gum wet sclerophyll forest	Y	N/A	completed	0m			Yes	04 Nov 2016
White Gum Moist Forest	Y	Y	N/A	20m ²			Yes	04 Nov 2016
McKies Stringybark/Blackbutt Open Forest	N/A	N/A	completed	20m			Yes	04 Nov 2016
Lowland Grassy Woodland	Y	Y	N/A	0m			Yes	04 Nov 2016
Bangalay Sand Forest	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Littoral Rainforest	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

¹ Where the TEC overlaps with any area meeting the definition of a wetland as per the TSL, the buffering of the feature must reflect the greatest extent of either the wetland feature or TEC. The width of the buffering should reflect the widest buffer triggered by either the wetland conditions in the TEC or the TECs listed in Annexure 2 of this MOU.

² Applied to TEC identified with reference to clauses 7.4 and 7.5

Milton Ulladulla Subtropical Rainforest	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dry Rainforest of the South East Forests	N/A	N/A	completed	20m				04 Nov 2016
Brogo Wet Vine Forest	N/A	N/A	completed	20m				04 Nov 2016

NOTE: buffering applied in annexure 2 is for the term of this MOU only and does not prejudice the content or function of the remade coastal IFOA. This MOU may be subject to periodic review and may be amended by joint written agreement of both parties.

ANNEXURE 3

1. BACKGROUND

- 1.1 The Project was established by the EPA to resolve long standing issues surrounding the identification, extent and location of priority TECs that occur on the NSW State Forest estate within the eastern Regional Forest Agreements.
- 1.2 A TEC Business Plan was jointly prepared by the EPA Forestry Section and the Office of Environment and Heritage (OEH) Native Vegetation Information Science Branch to support the delivery of the TEC Mapping Project. The Plan was reviewed by FCNSW and co-signed (by the EPA, FCNSW and the OEH), on the 28th August 2015. This includes provision for review of the Project's completed products prior to their approval and adoption by the EPA.
- 1.3 A TEC Project Reference Panel was established to guide the interpretation of assessed TECs and has ensured that these are, as far as practicable, consistent with the relevant Final Determinations. The TEC Project Reference Panel is chaired by the EPA and includes the participation of FCNSW and OEH in addition to regional experts.
- 1.4 The development of the project products (including associated technical reports) has involved extensive field survey, rigorous analysis and high resolution mapping and has included review and approval by the TEC Project Reference Panel.
- 1.5 The certified products will be listed in Annexure 2 to this MOU.

2. LEGISLATIVE CONTEXT

- 2.1 The *Forestry Act 2012* provides for the IFOAs, which integrate the regulatory regimes for environmental planning and assessment, for the protection of the environment and for threatened species conservation. An IFOA describes the forestry operations and conditions covered by the approval. The approvals contain the terms of a licence under the *Protection of Environment Operations Act 1997*, the *Threatened Species Conservation Act 1995* and the *Fisheries Management Act 1994*.
- 2.2 Threatened Ecological Communities (TECs) and endangered ecological communities (EECs) are defined under the *Threatened Species Conservation Act 1995* (TSC Act).
- 2.3 Enforcement of the relevant Threatened Species Licence (TSL) under each IFOA is the responsibility of the EPA.
- 2.4 The relevant TSL under each IFOA does not authorise harm or picking of any plant or endangered ecological community under Section 118A, or damage to

the habitat of an endangered ecological community under Section 118D, of the *National Parks and Wildlife Act 1974* (NPW Act).

- 2.5 The intent under a remade coastal IFOA is for the Project's operational maps to represent the assessed TECs for the purposes of planning and operations by FCNSW. They would also be the foundation for regulation by the EPA.
- 2.6 The intent under a remade coastal IFOA is for the Project's indicative maps to represent the assessment area for a TEC for the purpose of undertaking survey and applying a field guide key (where produced under the project) to identify the boundary and extent of the TEC.
- 2.7 For all TECs in unassessed areas, and for unassessed TECs in assessed areas, the relevant Scientific Committee determination for that community must be applied.

3. DEFINITIONS and ABBREVIATIONS

EPA is the NSW Environment Protection Authority.

FCNSW is the Forestry Corporation of NSW.

TEC Mapping Project (the "Project") is the EPA initiated project to identify the distribution and extent of priority NSW Threatened Ecological Communities (TECs) that occur on the NSW State Forest estate within the eastern Regional Forest Agreements (RFAs).

Project products may include:

- A set of operational maps of priority TECs distribution and extent on the NSW State Forest estate in assessed areas (and their associated reports), and/or
- TEC indicative maps that indicate an assessment area for a TEC for the purpose of undertaking survey and applying a field guide key (where produced under the project) in order to identify the boundary and extent of the TEC and/or
- Guidance to support identification of a subset of priority unmapped TECs.

Priority TECs for this Project are defined in the TEC Business Plan (co-signed by the EPA on 20 February 2015 and FCNSW on the 28 August 2015).

IFOA is an Integrated Forestry Operations Approval.

MOU - Memorandum of Understanding.

Remake of the coastal IFOA - The NSW Government is currently remaking the IFOAs for the Eden, Southern, Upper and Lower North East coastal regions of NSW into a single IFOA with the goal of no erosion of environmental values and with no net change to wood supply. The Minister for the Environment and the Minister for Primary Industries are jointly responsible for making and amending IFOAs under the Forestry Act 2012.

OEH is the NSW Office of Environment and Heritage.

TEC Project Reference Panel is the expert panel established to guide the ecological interpretation of TEC determinations, provide advice on methods and suitability of products, and includes representatives from FCNSW, EPA and OEH.

NSW Scientific Committee is established under the *Threatened Species Conservation Act 1995* (TSC Act). It is an independent committee of scientists appointed by the Minister for the Environment. The NSW Scientific Committee lists and describes species, populations, ecological communities and key threatening processes under the TSC Act.

Specified Forestry Activities as per the definition of the relevant Threatened Species Licence.

Certified means the final products adopted by the EPA's Chief Environmental Regulator and provided in Annexure 1 to this MOU.

Threatened Ecological Community (TEC) means

- a) Any certified operational map as set out in Annexure 2, and
- b) an endangered ecological community as described in a determination of the NSW Scientific Committee (including preliminary determinations)

Note: for the purposes of this MoU, vulnerable ecological communities (VEC) as per the TSC Act and final determinations of the NSW Scientific Committees do not apply. For any VEC that may occur on State Forest or other Crown timber lands subject to forestry operations, the specific requirements of the NPW Act must continue to be implemented.

Assessed Area means an area

- i. identified and assessed under the TEC Mapping Project 2016 for the occurrence of a specific TEC
- ii. identified in any TEC occurrence matrix or assessed area map held by the EPA

Unassessed Areas means all other areas outside of Assessed Areas

Unassessed TECs means all TECs

- i. other than those assessed under the TEC Mapping Project 2016
- ii. other than those identified in any TEC occurrence matrix or assessed area map held by the EPA

