Title	CEEC: Monaro and Werriwa Tablelands Cool Temperate Grassy Woodlands v1.4
Alternative title(s)	Critically Endangered Ecological Community: Monaro and Werriwa Tablelands Cool Temperate Grassy Woodlands v1.4
Abstract	The Monaro and Werriwa Tablelands Cool Temperate Grassy Woodlands (respectively Monaro and Werriwa) have been nominated by the NSW Scientific Advisory Committee as Critically Endangered Ecological Communities (NSW Threatened Species Scientific Committee (2019). This data layer delineates the extent of these communities as a single presence surface. The extent is derived first by modelling of the potential extent then refined by rigorous 3-D aerial photo interpretation of high resolution ADS imagery.
Resource loca	tor
Show on SEED Web Map	Name: Show on SEED Web Map
	Protocol: WWW:DOWNLOAD-1.0-httpdownload
	Description:
	Display dataset on SEED's map
	Function: download
<u>Data Quality</u> <u>Statement</u>	Name: Data Quality Statement
	Protocol: WWW:DOWNLOAD-1.0-httpdownload
	Description:
	Data quality statement for CEEC: Monaro and Werriwa Tablelands Cool Temperate Grassy Woodlands v1.4
	Function: download
<u>Metadata</u>	Name: Metadata Summary CEEC Monaro Werriwa v1.4
Summary CEEC Monaro	Protocol: WWW:DOWNLOAD-1.0-httpdownload
Werriwa v1.4	Description:
	Provides a written metadata summary that includes lineage and validation information
	Function: download
<u>Technical</u>	Name: Technical Notes CEEC Werriwa and Monaro v1.4
Notes CEEC Werriwa and	Protocol: WWW:DOWNLOAD-1.0-httpdownload
Monaro v1.4	Description:
	Full technical notes on product lineage and validation
	Function: download
<u>Monaro</u>	Name: Monaro Werriwa CEEC v1.4 Data
Werriwa CEEC v1.4 Data	Protocol: WWW:DOWNLOAD-1.0-httpdownload
	Description:
	The Monaro Werriwa CEEC v1.4 map is provided as a feature class in an ArcGIS 10.4 file geodatabase. An mxd is also included for candidate symbol.
	Function: download
Unique resour	ce identifier
Code	83f9f041-cbe5-4244-99c7-36396b241763
Presentation form	Map digital
Edition	1.4

Dataset language	English		
Metadata standard			
Name	ISO 19115		
Edition	2016		
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/83f9f041-cbe5-4244-99c7-36396b241763		
Purpose	To provide a mapped extent of the determined critically endangered ecological communities.		
Status	Completed		
Spatial representation			
Туре	vector		
Geometric Object Type	composite		
Geometric Object Count	1		
Spatial reference system			
Code identifying the spatial reference system	4283		
Equivalent scale	1:None		
Topic category			

Keyword set					
keyword value	VEGETATION-Floristic				
	ECOLOGY-Community				
Originating controlled vocabulary					
Title	ANZLIC Search Words				
Reference date	2008-05-16				
Geographic location					
West bounding longitude	148.150635				
East bounding longitude	150.05127				
North bounding latitude	-37.07271				
South bounding latitude	-34.966999				
NSW Place Name	Monaro and Werriwa Tablelands				
Vertical extent information					
Minimum value	-100				
Maximum value	2228				
Coordinate reference system					
Authority code	urn:ogc:def:cs:EPSG::				
Code identifying the coordinate reference system	5711				
Temporal extent					
Begin position	2014-01-01				
End position	N/A				
Dataset reference date					
Resource maintenance					
Maintenance and update frequency	Not planned				
Contact info					
Contact position	Data Broker				
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water				
Telephone number	131555				
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Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew				
Responsible party role	pointOfContact				

## Lineage

Community classification determination Determination established by the NSW
 Threatened Species Scientific Committee under the biodiversity Conservation Act 2016.
 A copy of these Determinations are available here:
 https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Scientific-Committee/Determinations/2019/werriwa-tableland-final-determination-CEEC.pdf?

Or by contacting the NSW Threatened Species Scientific Committee, PO Box 1967 Hurstville BC 1481. Tel: (02) 9585 6940 or Fax (02) 9585 6606, or in person at the Office of Environment and Heritage Information Centre, Level 14, 59-61 Goulburn Street, Sydney. Copies of the determination may also be obtained from National Parks and Wildlife Service Area Offices and Visitor Centres, subject to availability.

la=en&hash=92C6D495486B7F36D0F15C133F93E8B5DE5141E8

- 1. Plot Assignment Over 10 000 floristic sites were assessed for allocation to the CEEC. Each site was represented by full floristic vegetation plot that forms part of the OEH Vegetation Information System (VIS) database. All sites were assigned a Plant Community Type (PCT) as part of the new East Coast Vegetation Classification (ECVC). Monaro is represented by the RCP group R4.42E (Monaro -Central-Tablelands frost hollow grassy woodland), which is historically linked to SCIVI Vegetation Types m31/p220 and UMC types m31/u118). Conversely, the Werriwa is represented by the RCP group R4.141 (Werriwa frost-hollow grassy woodland) which is linked to the SCIVI Vegetation Type p24. As part of the development of the ECVC, the floristic data of individual sites were checked and vetted, and sites strongly influenced by disturbance removed. Additional sites that are assumed to represent the CEEC's were also added. These sites came from surveys conducted by OEH threatened species ecologists and other experts that were not included in the ECVC. They include most, but not all sites identified by the Scientific Committee as representative of the TEC.
- 2. CEEC presence modelling A presence-absence (PA) distribution modelling approach was used to create an initial indicative (potential) distribution map of the CEEC's. A total of 84 sites were included in the models as presence sites for Monaro and 59 for Werriwa (Fig 1). While these sets contain an adequate spread of sites over the presumed range of the TECs, the models are strongly influenced by the number of absence sites ascribed to PCTs that are not related to R4.42E and R4.141. The modelling methodology is described in detail in OEH (2016). The Random Forest (RF) technique was used to predict the potential extent of the communities in terms of their probability of occurrence across the South Eastern Highlands and South East Corner Bioregions. All models were run with 10-fold cross validation, using held-out data to calculate performance measures which are used to select optimum model parameters and final model fit. Statistics were derived from a confusion matrix, calculating overall accuracy, user and producer accuracies and standard deviations. Response curves for each predictor to determine if the effect of the variable on the response makes ecological sense reran multiple iterations of models to look at the effects of sequentially removing predictors in an attempt to generate a more parsimonious model. The models show a continuous probability of occurrence surface which varies between 0 and 1. A sensitivity = specificity threshold, which balances the risk of making commission and omission errors, was used to determine the area of the core candidate CEEC. This was subject of further investigation by API. The sensitivity = specificity threshold is 0.4 for the Combined model, 0.48 for the Monaro-only model and 0.33 for the Werriwa only model.
- 3. Pattern derivation The binary core modelled extent was pulled into a net of existing vegetation linework for finer scale manual interrogation and attribution. A multiresolution segmentation algorithm was used to create image objects with low internal variation. Image objects represent patches of vegetation that can later be classified based on attributes such as crown cover, spectral response, or soil type. The segmentation parameters and scale were derived iteratively based on visual inspection. Vegetation recognised in high spatial resolution imagery (ADS40 50cm) were used as a reference point. This process provided the line work for subsequent PCT attribution.
- 4. Fine scale mapping and Aerial Photo Interpretation High resolution expert aerial photographic interpretation (API) was then used to assess CEEC spatial presence within the core extent. Some locally adjacent areas where the community was found to occur were also included. This process referenced 50cm 3-D ADS40/80 imagery. Polygon attribution utilised two software packages, ArcGIS Dektop 10.7 and DAT/EM Summit Evolution Lite Edition (a photogrammetric package enabling 3D stereo viewing of ADS40 imagery).
- 5. Extension of CEEC presence to adjacent candidate native grasslands After rigorous 3-D API, the spatial extent of the CEEC was extended by default into adjacent candidate native grassland as attributed by2-D 50cm ads imagery. This extension was constrained by lot boundaries. Please the technical notes for further details on the manual stage decision logic.

Scope		dataset			
DQ Completeness Commi	DQ Completeness Commission				
Effective date		2019-06-30			
Explanation		Nil.			
DQ Completeness Omissi	on				
Effective date		2019-06-30			
Explanation		Nil			
DQ Conceptual Consisten	су				
Effective date		2019-06-30			
Explanation		Nil			
DQ Topological Consistency					
Effective date		2019-06-30			
Explanation		Nil			
DQ Absolute External Positional Accuracy					
Effective date		2019-06-30			
Explanation		50cm			
DQ Non Quantitative Attril	bute Correctness				
Effective date		2019-06-30			
Responsible party					
Contact position	Data Broker				
Organisation name	NSW Department of Climate	Change, Energy, the Environment and Water			
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Web address	https://www.nsw.gov.au/departr	nents-and-agencies/dcceew			
Responsible party role	pointOfContact				
Metadata point of contact					
Contact position	Data Broker				
Organisation name	Organisation name NSW Department of Climate Change, Energy, the Environment and Water				
Telephone number	131555				
Email address	data.broker@environment.n	sw.gov.au			
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew				
Responsible party role	pointOfContact				
Metadata date	2024-02-26T12:53:08.38899	8			
Metadata language					