# Δlternativ

Title

Assessment of Grey Box Grey Gum Wet Sclerophyll Forest TEC on NSW Crown Forest

# Alternative title(s)

Grey Box Grey Gum Wet Sclerophyll Forest: Survey, Classification and Mapping Completed for the NSW Environment Protection Authority

# **Abstract**

#### Operational map:

The operational map for Grey Box Grey Gum Wet Sclerophyll Forest (GBWS) was constructed to resolve long-standing issues surrounding its identification, location and extent within the NSW State Forest estate covered by the eastern Regional Forest Agreements. The project's Threatened Ecological Community (TEC) Reference Panel (the Panel) interpreted the determination for GBWS and agreed that GBWS TEC is defined from quantitative floristic analyses of systematic plot data. Based on a strong association with the determination assemblage list and documented occurrences referenced in the determination, we have interpreted GBWS to be equivalent to a community described in a recent classification study in the Northern Rivers (OEH, 2012); 1000-1665: (Grey Gum - Grey Box - Hoop Pine shrubby open forest on hinterland hills of the Richmond and Clarence catchments, South Eastern Queensland Bioregion and NSW North Coast Bioregion). We conducted plot-based floristic comparison to assess whether GBWS or the equivalent Community 1000-1665 was present within 800 000 hectares of State Forest in the North Coast area. A map was developed based on plot assignments, aerial photography interpreted map polygons delineated from overstorey and understorey patterns, and results of predictive modelling. In total, we identified approximately 2936 hectares of GBWS TEC in State forests north from Cherry Tree State Forest. Another state forest area has been identified as potentially supporting GBWS forest and is presented in a separate Indicative map.

#### Indicative map:

The indicative map for Grey Box Grey Gum Wet Sclerophyll Forest (GBWS) was constructed to resolve long-standing issues surrounding its identification, location and extent within the NSW State Forest estate covered by the eastern Regional Forest Agreements. The project's Threatened Ecological Community (TEC) Reference Panel (the Panel) interpreted the determination for GBWS and agreed that GBWS TEC is defined from quantitative floristic analyses of systematic plot data. Based on a strong association with the determination assemblage list and documented occurrences referenced in the determination, we have interpreted GBWS to be equivalent to a community described in a recent classification study in the Northern Rivers (OEH, 2012); 1000-1665: (Grey Gum - Grey Box - Hoop Pine shrubby open forest on hinterland hills of the Richmond and Clarence catchments, South Eastern Queensland Bioregion and NSW North Coast Bioregion). We conducted plot-based floristic comparison to assess whether GBWS or the equivalent Community 1000-1665 was present within 800 000 hectares of State Forest in the North Coast area. A map was developed based on plot assignments, aerial photography interpreted map polygons delineated from overstorey and understorey patterns, and results of predictive modelling. In total, we identified approximately 2936 hectares of GBWS TEC in State forests north from Cherry Tree State Forest. However, we also assigned three plots to GBWS, which are disjunct from and well outside the previously known distribution, to the south. Of the three disjunct plots, only one is in our state forest study area, in Nymboida state forest. We have no evidence that GBWS occurs south of Nymboida state forest. We identify Nymboida and Kangaroo River state forests in this Indicative Map, as plausible locations for the GBWS TEC. We recommend the GBWS TEC in these areas be diagnosed on a site-by-site basis using our field key until further survey and mapping can be completed in these forests.

Operational TEC Mapping have been derived by API at a viewing scale between 1-4000 using ADS40 50 cm pixel imagery and 1 m derived LIDAR DEM grids for floodplain EECs.

Indicative TEC Mapping have been generated from best available composite environmental data layers - standardised to 30 m pixels.

## Resource locator

<u>Data Quality</u> Statement Name: Data Quality Statement

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

NSW Government standards direct that data should be made available with a statement regarding its quality, a so-called "Data Quality statement (DQS)", to enable potential users to determine whether the data is suitable for their requirements.

Function: download Name: Assessment of Grey Box Grey Gum Wet Sclerophyll Forest TEC on NSW Crown Assessment of Forest Estate **Grey Box Grey Gum Wet** Protocol: WWW:DOWNLOAD-1.0-http--download Sclerophyll Forest TEC on Description: **NSW Crown** Report on the Assessment of Grey Box Grey Gum Wet Sclerophyll Forest TEC on NSW Forest Estate Crown Forest Estate Function: download <u>Operational</u> Name: Operational Map for Grey Box Grey Gum Wet Sclerophyll Forest Threatened Map for Grey Ecological Community on NSW Crown Forest Estate **Box Grey Gum** Wet Sclerophyll Protocol: WWW:DOWNLOAD-1.0-http--download Forest Description: **Threatened Ecological** Shapefile - Operational map for the Assessment of Grey Box Grey Gum Wet Sclerophyll Forest TEC on NSW Crown Forest Estate Community on **NSW Crown** Function: download **Forest Estate** Indicative Map Name: Indicative Map for Grey Box Grey Gum Wet Sclerophyll Forest Threatened for Grey Box Ecological Community on NSW Crown Forest Estate **Grey Gum Wet** Protocol: WWW:DOWNLOAD-1.0-http--download <u>Sclerophyll</u> **Forest** Description: **Threatened Ecological** Shapefile - Indicative map for the Assessment of Grey Box Grey Gum Wet Sclerophyll Forest TEC on NSW Crown Forest Estate Community on **NSW Crown** Function: download Forest Estate Name: Operational and Indicative Maps for the Assessment of Threatened Ecological **Operational** Communities on NSW Crown Forest Estate and Indicative Maps for the Protocol: WWW:DOWNLOAD-1.0-http--download Assessment of Description: **Threatened Ecological** ESRI ArcGIS Layer File - Operational and Indicative Maps for the Assessment of Communities Threatened Ecological Communities on NSW Crown Forest Estate on NSW Crown **Forest Estate** Function: download Name: Native Forestry Map Viewer **Native Forestry** Map Viewer Protocol: WWW:DOWNLOAD-1.0-http--download Description: The EPA Native Forestry Map Viewer enables users to view our Koala and Threatened Ecological Community mapping without the need to access a GIS system. The map viewer allows users to perform searches to locate areas of interest and export resulting map views into various image file formats. Function: download Unique resource identifier Code b7b14bec-9730-4763-8d66-7ca48ac370f5 Presentation Map digital form Edition Version 1 Dataset **English** 

language		
Metadata standard		
Name	ISO 19115	
Edition	2016	
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/b7b14bec-9730-4763-8d66-7ca48ac370f5	
Purpose	Native Forestry Regulation on State Forest	
Status	Completed	
Spatial representation		
Туре	vector	
Geometric Object Type	curve	
Spatial refere	nce system	
Code identifying the spatial reference system	4283	
Equivalent scale	1:None	
Topic categor		

Keyword set			
keyword value	Threatened Ecological Community		
	Endangered Ecological Community		
	Vegetation		
	State Forest		
	Grey Box Grey Gum Wet Sclerophyll Forest		
	EEC		
	TEC		
	Environment Protection Authority		
	EPA ————————————————————————————————————		
Originating controlled vocabulary			
Title	ANZLIC Search Words		
Reference date	2008-05-16		
Geographic location			
West bounding longitude	152.54238		
East bounding longitude	152.77148		
North bounding latitude	-29.02019		
South bounding latitude	-28.33562		
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	2016-10-01		
End position	N/A		
Dataset reference date			
Resource maintenance			
Maintenance and update frequency	Irregular		
Contact info			
Contact position	Data Broker		
Organisation name	Environment Protection Authority (EPA)		
Responsible party role	pointOfContact		

## Lineage

Operational map: Linework has been derived from manual interpretation of stereoscopic 3D ADS-40 imagery collected at a 50cm resolution. Date of photography varies across eastern NSW between 2009-2015. Interpretation has collected a range of floristic attributes including canopy species dominance, understorey attributes and assessment of landscape characteristics. Lines have been interpreted using a viewing scale between 1:2000- 1: 5000. Interpretation has been supported by field traverse (except bogs and saltmarsh), and existing field based observation data held by OEH. Final linework was assembled using combinations of aerial photo patterns, predictive TEC models, systematic plot data and where relevant fine scale topographic data derived from 1 metre resolution digital elevation model.

Indicative map: Line Work has been derived from the interpolation of Random Forest models based on the combination of 30m gridcell resolution climatic, topographic, substrate and remotely sensed variables. Individual grid cells represent probabilities of occurrence based on unique combinations and thresholds applied to selected variables. The lineage of model data has been drawn from a set of 158 individual data layers representing the NSW environmental data coverage.

# Limitations on public access

Scope dataset

## **DQ Conceptual Consistency**

Explanation Standard API mapping pathways have been established for mappers to apply consistent

interpretation of vegetation features including, size criteria and polygon attribution

#### DQ Topological Consistency

Explanation Not assessed

#### DQ Absolute External Positional Accuracy

Explanation

Operational maps: Positional accuracy has been measured using independent assessment of interpreted lines as a mean of 8.5 metres. Other influence on positional accuracy include the accuracy of field based GPS records currently tested at a mean of 9.2 metres. Some error with interpreted line from 2D to 3D environment can result in a positional shift of up to 10 metres. Indicative maps: Positional accuracy may vary depending on the selected layers chosen in the statistical model. These may vary from source data but include 1:250000 substrate layers, 30m DEM derived topographic and climatic indices. Positional accuracy may exceed 200m with minimum polygon sizes of some environmental selected layers reaching 50 hectares.

# **DQ Non Quantitative Attribute Correctness**

Explanation Attribution is consistent

#### Responsible party

Contact position Data Broker

Organisation name Environment Protection Authority (EPA)

Responsible party role pointOfContact

#### Metadata point of contact

Contact position Data Broker

Organisation name Environment Protection Authority (EPA)

Responsible party role pointOfContact

Metadata date 2024-02-26T13:46:21.223493

# Metadata language