Title	NSW Native Vegetation Area Clearing Estimate (NVACE)
Alternative title(s)	NSW NVACE

Abstract

The NSW Native Vegetation Area Clearing Estimate (NVACE) is a statewide spatial vector layer estimating the presence and absence of native vegetation at 2020. The NVACE does not discriminate different types of native vegetation.

The dataset was first published by NSW Department Planning and Environment (DPE) in 2023 and will be updated intermittently.

The NVACE uses best available primary and supplementary datasets to identify areas where native woody and non-woody vegetation occurs. Due to datasets being of different ages and resolution, errors of commission and omission may be included.

Primary published datasets used in the creation of NVACE Version 1 include:

1. **NSW Native Vegetation Extent 5m raster**
2. **NSW Landuse 2017**

The NVACE is refined using a combination of datasets to remove known areas of clearing, for example, Statewide Landcover and Tree Survey (SLATS) data for woody vegetation and non woody vegetation change clearing events from Non-Woody Landcover Disturbance Program (NWD).

The Geoscape Surface Cover raster is used to refine native vegetation in urban areas. Components are used to remove roads and swimming pools and add increased resolution tree canopies.

Land identified as Category 1 exempt under the amended Local Land Services act 2013 has been removed from NVACE as per the Biodiversity Conservation Act 2016.

Small polygons resulting from editing the NVACE are removed as artefacts.

A more detailed description of the methodology is published and provided on the DPE website.

The NVACE dataset has been developed by DPE to provide guidance on whether a development exceeds the Area Clearing Threshold for entry into the Biodiversity Offsets Scheme (BOS), as guided by ***Biodiversity Conservation Regulation 2017 s7.2***.

Together with the Biodiversity Values Map, the NVACE forms the basis for determining whether a local development (***Part 4 NSW EP&A Act***) should be assessed for inclusion in the Biodiversity Offsets Scheme. A development which is required to be assessed for clearing of native vegetation in the Biodiversity Offsets Scheme may then potentially require biodiversity offsets against any losses undertaken as part of the development.

The dataset is primarily available to be displayed at a property scale when preparing a Biodiversity Map and Threshold (BMAT) report but may be provided on application to users in a spatial data format.

More information on the Biodiversity Offsets Scheme can be viewed here:

About the Biodiversity Offsets Scheme | NSW Environment and Heritage

The Biodiversity Values Map homepage, containing links to the BMAT tool and other related BOS information can be viewed here:

Biodiversity Values Map | NSW Environment and Heritage

Resource locator

Data Quality Statement	Name: Data Quality Statement Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data quality statement for NSW Binary Native Vegetation Extent Function: download
Download	Name: Download Package

Package	Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data (Esri Geodatabase 1.97GB) Function: download

Unique resource identifier

Code	55c09dff-93d1-4cc9-8267-4dc91f69825c

Presentation form	Map digital
Edition	1
Dataset language	English

Metadata standard

Name	ISO 19115
Edition	2016

Dataset URI	https://datasets.seed.nsw.gov.au/dataset/55c09dff-93d1-4cc9-8267-4dc91f69825c
Purpose	Together with the Biodiversity Values Map, the NVACE forms the basis for determining whether a local development should be assessed for inclusion in the Biodiversity Offsets Scheme.
Status	On going

Spatial representation

Type	vector

Spatial reference system

Code identifying the spatial reference system	4283

Spatial resolution	5 m

Topic category

Keyword set

keyword value	VEGETATION
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16

Geographic location

West bounding longitude	140.405273
East bounding longitude	155.786133
North bounding latitude	-37.752258
South bounding latitude	-27.72122
NSW Place Name	statewide

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	2022-06-30
End position	N/A

Dataset reference date

Resource maintenance

Maintenance and update frequency	As needed
Contact info	
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/departments-and-agencies/dcceew
Responsible party role	pointOfContact

Lineage

The NSW Native Vegetation Area Clearing Estimate (NVACE) is a polygon feature class stored in a single ESRI geodatabase. If NVACE polygons are mapped in an area, then native vegetation is determined to be present. The NVACE has been constructed to provide an indicative estimate of the area of native vegetation with potential to be cleared in a property development, which guides Councils and proponents in determining whether a local development triggers the **Biodiversity Offsets Scheme (BOS)**.

The NVACE is developed and built upon the NSW Native Vegetation Extent (NVE) 5m raster and NSW land use 2017, sourcing the most temporal and high-resolution data available to maximise the dataset's currency and accuracy in areas where development is most likely to occur. All the source datasets and mapping processes were completed in ArcGIS environment. The NVACE uses MGA Cartesian coordinate system, with input data being reprojected as necessary.

The mapping process is split into the following two stages.

- Stage 1 – Creating a Native Vegetation Indicator Layer

The NVE Raster is spatially combined with NSW Landuse 2017 v1.3 (subsequently published as version 1.4, referred to in this report as Landuse) and the State Vegetation Type Grassland Plant Community Types to create an interim native vegetation layer. Where the layers intersect with conflicting native/non-native attributes, the Landuse attribute is retained due to its currency and resolution.

The interim native vegetation layer is refined to remove known non-native vegetation using the Geoscape Australia's Buildings layer (used to identify building developments), a State Forest Plantation layer used to remove non-native forest and a NSW Hydro Area layer which removes known non-native water infrastructure. This creates the Native Vegetation Indicator layer (Stage 1).

- Stage 2 – Refining the Native Vegetation Indicator Layer

The Native Vegetation Indicator (NVI) Stage 1 is refined using a combination of datasets used to remove known areas of clearing, for example, Statewide Landcover and Tree Survey (SLATS) data for woody vegetation and non woody vegetation change clearing events from Non-Woody Landcover Disturbance Program.

The Geoscape Surface Cover raster is used to refine native vegetation in urban areas. Components are used to remove roads and swimming pools and add increased resolution tree canopies.

Small polygons resulting from editing the NVI are removed as artefacts.

- Stage 3 – Creating the NVACE

Lands mapped in the Transitional Native Vegetation Regulatory Map as draft Category 1 – exempt land (NVR Map Draft Category 1) are excluded from the Biodiversity Offsets Scheme and are removed from the final NVACE layer.

The individual mapping tiles are merged into a single binary statewide geodatabase file. The NVACE layer is a binary layer depicting the presence of native vegetation. If NVACE polygons are present in an area, it is highly likely native vegetation is present. The resolution of NVACE is inherited from the datasets used to build the layer. Although the minimum resolution of the input datasets is 2 × 2 m (Geoscape Surface Cover raster), it is only applied to urban and peri-urban area within Geoscape data coverage. The majority of the NVACE has a resolution of 5 × 5 m.

The detailed mapping method is published and provided by DPE.

Limitations on public access

Responsible party

Contact position	Data Broker
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Telephone number	131555
Email address	data.broker@environment.nsw.gov.au
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew
Responsible party role	pointOfContact

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