

Title	Draft NSW Biodiversity Strategy 2010-2015: Formation Priorities
Alternative title(s)	Priorities for Investment in Native Vegetation Management
Abstract	<p>To maximise outcomes for biodiversity over such a large area like NSW, decisions on where to invest need to be made carefully. In response to this, the NSW Government developed a set of draft Priority Areas for investment in native vegetation management as part of the draft NSW Biodiversity Strategy 2010-2015. State scale priorities for investment are presented in the Priority Areas Map in Part A of the draft Strategy. The draft Strategy divides the ecosystems of NSW based on 15 formations described by Keith (2004), and all have been mapped with the exception of 'Arid Acacia Shrublands', 'Arid Chenopod Shrublands', 'Rivers', 'Marine Waters', 'Estuaries and Coastal Lakes' and 'Freshwater Wetlands'. Part B of the draft Strategy presents Priority Areas for each in a series of 15 'ecosystem profiles'. The prioritisation was undertaken using the Biodiversity Forecasting Toolkit (BFT) (NSW DEC 2006), a decision-support system developed by NSW DEC for evaluating biodiversity outcomes and for mapping biodiversity management priorities. Technical detail to support this statement can be obtained from: DECCW (2010) Deriving Priority Areas for Investment: A Technical Report to accompany the draft NSW Biodiversity Strategy This statement describes the data and processes used to produce two interim products to assist the public exhibition of the draft NSW Biodiversity Strategy (2010-15): 1) the derivation of proposed State scale priorities for investment in native vegetation management in NSW; and 2) description of those priorities according to the Keith (2010) vegetation classification. The proposed State scale priorities are described in detail in the draft NSW Biodiversity Strategy 2010-2015. The proposed priorities are subject to comment during public exhibition, and a final version will follow subject to review of comments received on the draft Strategy. The data identifies areas that are a priority for investment in management because they are generally: in moderate-to-good condition; well-connected with the surrounding landscape; part of a highly cleared, and/or degraded type of vegetation; and floristically distinct from other, well-conserved types of vegetation. In other words, priority areas are the best remaining examples of distinctive ecosystems that have been highly cleared or degraded across NSW. It is important to note that the data does not identify individual sites 'on-the-ground' and site assessment is required to confirm site values. The map should be viewed at a scale of 1:250,000.</p> <p>The proposed State scale priorities are described in detail in the draft NSW Biodiversity Strategy 2010-2015. It had been planned that the proposed priorities were subject to comment during public exhibition, and a final version was to follow subject to review of comments received on the draft Strategy. The Strategy was never finalised. The Priority Areas were developed to inform the former CMAs (now LLS) Catchment Action Plans that identified priorities for NRM. LLS don't do these Plans anymore. Several meetings were held with NPWS on how they could use the priorities to inform investment in rehab/reveg in NPWS reserves and how it related to an analysis that Andrew Steed had done with the NatureConservationTool - http://insite.environment.nsw.gov.au/Intranet%20Library/Pages/NatureConservationTool.aspx</p> <p>This spatial data is in the format of Esri GRID in Lamberts Conic Conformal projection.</p>
Resource locator	
Data Quality Statement	<p>Name: Data Quality Statement</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Data quality statement for NSW Biodiversity Strategy 2010-2015: Formation Priorities</p> <p>Function: download</p>
Biodiversity BiodiversityStrategy LCC	<p>Name: Biodiversity BiodiversityStrategy LCC</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Download Shapefile</p> <p>Function: download</p>
Unique resource identifier	
Code	18910bff-69fe-4033-871e-04f265b76adc
Presentation form	Map digital

Edition	01/01/2015
Dataset language	English
Metadata standard	
Name	ISO 19115
Edition	2016
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/18910bff-69fe-4033-871e-04f265b76adc
Purpose	The proposed priorities are intended to be used by Catchment Management Authorities and other natural resource managers to identify landscapes with highest priority for investment to manage native vegetation where greatest biodiversity benefit can be obtained by improving condition. The mapping is intended to be viewed at 1:250,000 scale, and is not designed to be accurate beyond 100-1,000 m. For example, the mapping would require on ground validation and interpretation before it could be applied at property scales.
Status	Completed
Spatial representation type	grid
Spatial reference system	
Code identifying the spatial reference system	4283
Spatial resolution	10 m
Additional information source	<p>DECCW (in prep.) Deriving Priority Areas for Investment: A Technical Report to accompany the draft NSW Biodiversity Strategy REFERENCES: DECCW (2010) Deriving Priority Areas for Investment: A Technical Report to accompany the draft NSW Biodiversity Strategy DILLON, M., MCNELLIE, M. & OLIVER, I. (2009) Technical Background Report NSW State of the Catchments 2008:Native Vegetation. Scientific Services Division, Department of Environment and Climate Change, May 2009. DRIELSMA, M. J., FERRIER, S. & MANION, G. (2007) A raster-based technique for analysing habitat configuration: The Cost-Benefit Approach. Ecological Modelling, 202, 324-332. DRIELSMA, M. J., SMITH, J., BRIGGS, S. & RENNISON, B. (2010) Draft- A map of priorities for the management of terrestrial biodiversity in NSW. Scientific Services Division, Department of Environment, Climate Change and Water. Internal Technical Report 8 pages. FERRIER, S. & DRIELSMA, M. (2010). Synthesis of pattern and process in biodiversity conservation assessment: a flexible whole-landscape modelling framework. Diversity and Distributions, 16., 386-402 FERRIER, S., MANION, G., ELITH, J. & RICHARDSON, K. (2007) Using generalized dissimilarity modelling to analyse and predict patterns of beta diversity in regional biodiversity assessment Diversity and Distributions, 13, 252-264. FERRIER, S., POWELL, G. V. N., RICHARDSON, K. S., MANION, G., OVERTON, J. M., ALLNUTT, T. F., CAMERON, S. E., MANTLE, K., BURGESS, N. D., FAITH, D. P., LAMOREUX, J. F., KIER, G., HIJMANS, R. J., FUNK, V. A., CASSIS, G., FISHER, B. L., FLEMONS, P., LEES, D., LOVETT, J. C. & VAN ROMPAEY, R. S. A. R. (2004) Mapping more of terrestrial biodiversity for global conservation assessment. BioScience, 54, 1101-1109 KEITH, D. and Simpson, C.C. (2010) NSW vegetation formations (version 3.0). Report to the Rural Fire Service. LOGAN, V., FERRIER, S. & MANION, G. (2009) Using modelling of continuous gradients of community composition to assess vulnerability of biodiversity to climate change in New South Wales. Poster presentation to INTECOL 2009 conference, Brisbane. MITCHELL, P. B. (2002) NSW ecosystems study: background and methodology. Hurstville, Unpublished report to the NSW National Parks and Wildlife Service. NEW SOUTH WALES DEPARTMENT OF ENVIRONMENT AND CONSERVATION (2006) Decision Support Tools for Biodiversity Conservation: Biodiversity Forecasting Toolkit. prepared by DEC for the Comprehensive Coastal Assessment (DoP). Armidale, DEC. NEW SOUTH WALES DEPARTMENT OF ENVIRONMENT, CLIMATE CHANGE AND WATER (2010) Derivation of state scale priorities for terrestrial and aquatic ecosystems in NSW. A Technical Report Supporting the New South Wales Biodiversity Strategy 2010-2015. THACKWAY, R & LESLIE, R. (2005) Vegetation, assets, states and transitions: accounting for vegetation condition in the Australian landscape. BRS Technical Report, Bureau of Rural Sciences, Canberra. WALKER, P. J. & Soil Conservation Service of New South Wales. (1991) Land systems of western New South Wales / compiled by P.J. Walker Soil Conservation Service of NSW, [Sydney]</p>

Topic category	
Keyword set	
keyword value	ECOLOGY-Habitat
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	141
East bounding longitude	154
North bounding latitude	-38
South bounding latitude	-28
NSW Place Name	NSW
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	2010-01-01
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
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Responsible party role	pointOfContact

Lineage

For the purpose of the prioritisation NSW was divided into a regular grid of 500 x 500m grid cells. A surrogate for vegetation communities was derived using 572 geomorphology-based spatial units (Mitchell, 2002). Plant species compositional distinctiveness was derived for each unit (Ferrier et al., 2007) using floristic plot sites from DECCW's YETI database and a range of environmental surfaces (Logan et al., 2009). Vegetation condition for NSW was sourced from work undertaken for the DECCW State of the Catchment reporting (SotC) (Dillon et al., 2009). The SotC report mapped vegetation extent and vegetation condition. Vegetation extent was combined with land use to assign a vegetation condition class based on the National Vegetation Condition Classification (VAST, Thackway & Leslie, 2005). The vegetation condition in the Western Division was modified to reflect differences that were not included in the SotC report but were identified through consultation with DECCW staff as worthy of inclusion.

Priority areas identified on the map have a combination of the following four attributes:

- 1. Moderate-to-good condition (relative to the condition of that type of vegetation generally);
- 2. Well-connected (fragmentation may be high for the type of vegetation it belongs to; however at this location there is good connectivity with other vegetation).
- 3. Belongs to a highly-cleared, degraded and/or fragmented type of vegetation.
- 4. Belongs to a type of vegetation that is floristically distinct from other, well-conserved types of vegetation.

In short, the Priority Area map identifies the best remaining examples of native vegetation within ecosystems that have had high rates of past clearing, degradation and/or fragmentation.

Viewing and interpreting the Priority Area map layer

- 1. The map is a draft of the map that will appear in the final version of the NSW Biodiversity Strategy. Priority Areas may change in response to comments received during the public exhibition period.
- 2. The map should be viewed at a 1:250,000 scale
- 3. Given the scale of the map, priority areas marked are indicative only and site assessment is necessary to confirm priority status of sites 'on-the-ground' (see below).
- 4. The map is tenure-blind. Priority areas for investment occur on both public and privately-managed land.
- 5. There are more Priority Areas identified on the map, than current levels of investment would allow us to manage over the 5-year life of the draft Biodiversity Strategy. This provides flexibility to land managers and regional planning bodies by giving a range of options that can be chosen from when investing in priority areas.

Site Assessment

Site assessment is a necessary step to confirm priority status of sites 'on-the-ground'. A site would be considered to be within a priority area if it has most of the following attributes:

- good-to-moderate condition;*
- well-connected with other vegetation in the surrounding landscape;*
- has a type of vegetation that has been highly cleared, degraded or fragmented within the region;*
- a particularly distinctive type of vegetation that is not well-conserved in the region;*
- * located within a larger patch-size for that ecosystem (see Table 1 in the Technical Report for a summary of patch sizes within different ecosystems).*

Decisions about the particular management actions that are most appropriate at the site level are best made by individual land managers; along with decisions about their cost-effectiveness.

Limitations on public access

Scope	dataset
DQ Completeness Commission	
Effective date	2001-01-01
DQ Completeness Omission	
Effective date	2001-01-01
Explanation	Priority areas for Arid Shrublands could not be mapped with existing data. However, an estimated 10% of Arid Shrublands are a priority for investment in management wherever vegetation would significantly benefit from reduced total grazing pressure. Site assessment is required to identify these areas.
DQ Topological Consistency	
Explanation	Original analysis units of priority were analysed at 500 m. Priority areas for each formation were clipped at a resolution of 200 m (formation grid resolution) and stored at a resolution of 200 m. Each formation grid retains a NSW wide extent. All grid cells with the formation present have a priority value and a tag of priority. Grid cells belonging to other formations have a no data value.
DQ Absolute External Positional Accuracy	
Explanation	100 m to 1 km
DQ Non Quantitative Attribute Correctness	
Explanation	No formal assessment of attribute accuracy has been undertaken. The Biodiversity Forecasting Tool identifies priorities based on a number of input layers, assumptions and analytical parameters described in: DECCW (in prep.) Deriving Priority Areas for Investment: A Technical Report to accompany the draft NSW Biodiversity Strategy The individual priority grids have been clipped spatially to the draft version 3 of the pre-1750 NSW vegetation map (produced by Keith and Simpson in 2010). The spatial accuracy and reliability of this mapping is variable, but is generally more reliable in coastal regions than regions in the State's west.
Responsible party	
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Responsible party role	pointOfContact
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Contact position	Data Broker
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Responsible party role	pointOfContact
Metadata date	2024-02-26T12:47:52.194761
Metadata language	