



Biodiversity Mapping

Given rapid growth and development of the region in recent decades, biodiversity conservation has been a major program area for member councils and the Hunter JO Environment team. We have actively worked with researchers, academic institutions, government agencies, Hunter Local Land Services (LLS) and a wide range of stakeholder organisations to:

- Survey and map biodiversity values and threatening processes
- Undertake conservation assessments
- Identify regional priorities for conservation
- Provide input to planning and management strategies
- Deliver capacity building initiatives to Councils around the use and application of technical data and mapping, management strategies, legislative compliance, market-based instruments, and new research
- Deliver strategic on ground restoration and rehabilitation works particularly focussing on Threatened Species, Endangered Ecological Communities and areas of high biodiversity conservation value
- Deliver a comprehensive regional Roadside Environment Program

Date	Title	Resource
2000	Lower Hunter Central Coast Vegetation	Classification & Mapping
2003	Regional Biodiversity Conservation Assessment	<ul style="list-style-type: none">• Report and mapping• LHCC vegetation map update• Pre-1750 vegetation modelling
2005	LHCC Vegetation	Map update
2006	HCRCMA Vegetation Survey and Mapping Project STAGE 1	<ul style="list-style-type: none">• SPOT5 Pilot Study• Catchment-wide Vegetation Survey & Mapping (surveys and preliminary vegetation mapping work)• Central Coast Regionally Significant Vegetation



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| <p>2007 HCRCMA Vegetation Survey and Mapping Project STAGE 2</p> | <ul style="list-style-type: none"> • Evaluation of API & SPOT5 Imagery for Vegetation Mapping in the Hunter and Central Coast Region of NSW • Aerial Photography Based Vegetation Mapping Sub-Project Report • Soil Landscapes and Soil Landscape Facets of the Hunter Councils Region • Predictor Variables |
| <p>2009 HCRCMA Vegetation Survey and Mapping Project STAGE 3</p> | <ul style="list-style-type: none"> • Hunter, Central & Lower North Coast Region Vegetation Mapping Program – Methods Review and Recommendations • Hunter, Central & Lower North Coast Vegetation Classification & Mapping VOLUME 1 – Vegetation Classification Technical Report • Hunter, Central & Lower North Coast Vegetation Classification & Mapping VOLUME 2 – Vegetation Community Profiles • Hunter, Central & Lower North Coast Vegetation Classification & Mapping VOLUME 3 – Vegetation Survey Data Audit • Data audit and gap filling |
| <p>2010 Hunter Region Vegetation Mapping Program handed over to the NSW Office of Environment & Heritage</p> | <ul style="list-style-type: none"> • 2011 Greater Hunter Native Vegetation Mapping v3 draft released for review • 2012 Greater Hunter Native Vegetation Mapping v4 <ol style="list-style-type: none"> 1. Vegetation Mapping 2. 5000+ survey sites 3. Canopy Mapping 2.5m resolution • 2012 – 2013 mapping review undertaken in collaboration with HCRCMA & Councils • Hunter, J.T. (2014) Review of the Upper Hunter Strategic Assessment. Unpublished Report Prepared for the Environmental Division, Hunter Councils. • Hunter, J.T. (2015) Assessment of the Upper Hunter Mapping. Unpublished report to the Environmental Division, Hunter Councils • Hunter, J.T. (2016) Validation of Greater Hunter Native Vegetation Mapping as it pertains to the Upper Hunter region of NSW. Ecological Management & Restoration Vol 17 no. 1 pg 40 – 46. |



- Roff, A. Lyons, M. Jones, H. and Thonell, J. (2016) Reliability of map accuracy assessments: A comment on Hunter et al. (2016). Ecological Management & Restoration Vol 17 no. 2 pg 124 – 127.
- Hunter, J.T. and Lechner, A.M. (2016) Reliability of map accuracy assessments: A reply to Roff et al. (2016). Ecological Management & Restoration Vol no. 2 pg 128 – 123.

2012 Biodiversity Investment Prospectus Project

Interim Biodiversity Investment Prospectus data release (2015):

- Biophysical Agricultural Lands Mapping
- Climate Change Projections up to 2080
- Connectivity Assessment
- EEC points and Models (21)
- Species Distribution Modelling (including threatened species)(600+)
- Red Flag Areas
- Tenure
- Application of Interim Biodiversity Data Report

2016 NSW State Government Biodiversity Reforms



Best available vegetation mapping within the Hunter Region

The most recent, best available mapping for the Lower Hunter is the 2013 Parsons Brinkerhoff Lower Hunter Vegetation Mapping (LH PB 2013). It covers the Port Stephens, Cessnock, Maitland, Newcastle and Lake Macquarie council areas. This is a composite map, which uses the LHCCREMS 2003 mapping as a base and overrides those polygons with more recent/accurate/fine scale polygons from other datasets where available. The LHCCREMS 2003 mapping extends to the central coast, although there is more recent work that is preferable for the Gosford and Wyong areas.

The Hunter Valley Remnant Vegetation Mapping extends across the Hunter Valley floor, and has partial coverage across the Singleton, Muswellbrook and Upper Hunter LGAs. Several fine scale vegetation maps localised within the Great Lakes area are held by Mid Coast Council.

LGA	Layer	Source
Central Coast (Gosford, Wyong)	1. Gosford LGA Vegetation 2. Vegetation Map of the Wyong LGA	1. http://mapdata.environment.nsw.gov.au/geonetwork/srv/en/metadata.show?id=562&currTab=simple 2. http://mapdata.environment.nsw.gov.au/geonetwork/srv/en/metadata.show?id=341&currTab=simple
Lower Hunter (Cessnock, Lake Macquarie, Port Stephens, Maitland, Newcastle)	Parsons Brinkerhoff 2013 Lower Hunter Vegetation Mapping (with 2014 OEH updates)	The associated report for the LH PB 2013 is on this website: https://www.environment.gov.au/sustainability/regional-development/lower-hunter http://www.environment.gov.au/fed/catalog/search/resource/details.page?uuid=%7BAA39C775-DBB5-4AB9-B30D-BB5DD9B826A7%7D
MidCoast (Great Lakes, Greater Taree, Gloucester)	1. Fine scale API 2. Coastal Vegetation of North East NSW 3. Mid North Coast Vegetation 4. Great Lakes LGA Vegetation 2003	The updated data may be accessible through the OEH data broker – Data.broker@environment.nsw.gov.au 1. Multiple sources – through council 2. http://mapdata.environment.nsw.gov.au/geonetwork/srv/en/metadata.show?id=179&currTab=simple 3. http://mapdata.environment.nsw.gov.au/geonetwork/srv/en/metadata.show?id=11&currTab=simple 4. http://mapdata.environment.nsw.gov.au/geonetwork/srv/en/metadata.show?id=567&currTab=simple



**Upper Hunter
(Dungog,
Muswellbrook,
Singleton, Upper
Hunter)**

1. Hunter Valley
Remnant
Vegetation
mapping
2. Vegetation of the
Singleton Military
Area
3. The Native
Vegetation of
Yengo and Parr
Reserves and
Surrounds, 2008
4. Mid North Coast
Vegetation

1. <http://mapdata.environment.nsw.gov.au/geonetwork/srv/en/metadata.show?id=92&currTab=simple>
2. <http://mapdata.environment.nsw.gov.au/geonetwork/srv/en/metadata.show?id=404&currTab=simple>
3. <http://mapdata.environment.nsw.gov.au/geonetwork/srv/en/metadata.show?id=261&currTab=simple>
4. <http://mapdata.environment.nsw.gov.au/geonetwork/srv/en/metadata.show?id=11&currTab=simple>

Other useful datasets:

Landscapes & soils – <http://www.environment.nsw.gov.au/soils/>

Drainage lines & Roads – http://www.ga.gov.au/metadata-gateway/metadata/record/gcat_63999