Title	Soil and land constraint assessment maps: Hawkesbury Nepean Catchment
Abstract	This dataset contains maps and data on soil and land constraints that may impact on a range of land uses throughout the Hawkesbury Nepean Catchment. It reveals the physical capability of the land for different land uses, together with a broad indication of potential economic costs associated with overcoming the constraints. It should assist in many planning and natural resource management processes throughout the catchment. Land uses dealt with include: development – standard residential, medium density, high density and rural residential agriculture – cropping and grazing wastewater disposal – surface irrigation, trench absorption and pump-out methods. Background information and methodology is provided in the accompanying Technical Report DECCW (2010) Soil and land constraint assessment for urban and regional planning.

Resource locator

Data Quality Statement	Name: Data Quality Statement Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data quality statement for Soil and land constraint assessment maps: Hawkesbury Nepean Catchment Function: download
GIS maps: soil and land constraint assessment	Name: GIS maps: soil and land constraint assessment Protocol: WWW:DOWNLOAD-1.0-http--download Description: GIS constraint maps of 9 land uses and management processes over Hawkesbury Nepean Catchment (25 m raster) Function: download
PDF maps: soil and land constraint assessment	Name: PDF maps: soil and land constraint assessment Protocol: WWW:DOWNLOAD-1.0-http--download Description: PDF copies of the maps for 9 land uses and management processes over the catchment Function: download
Technical Report: DECCW (2010), Soil and land constraint assessment for urban and regional planning	Name: Technical Report: DECCW (2010), Soil and land constraint assessment for urban and regional planning Protocol: WWW:DOWNLOAD-1.0-http--download Description: Technical report describing the background, methodology, use and interpretation of the constraint assessment process Function: download
Notes on map interpretation and other related publications	Name: Notes on map interpretation and other related publications Protocol: WWW:DOWNLOAD-1.0-http--download Description: (i) interpretation notes; (ii) Australian Planner journal paper (2011); (iii) conference paper for domestic wastewater disposal Function: download

Unique resource identifier

Code	8b7ac8f7-56c0-4ae0-8f43-603321b00ce6

Presentation form	Map digital
Edition	1
Dataset language	English
Metadata standard	
Name	ISO 19115
Edition	2016
Dataset URI	https://www.planningportal.nsw.gov.au/opendata/dataset/8b7ac8f7-56c0-4ae0-8f43-603321b00ce6
Purpose	Assist Local Councils and regional planning bodies in urban and regional planning in Hawkesbury-Nepean Catchment, including western Sydney
Status	Completed
Spatial representation type	grid
Spatial reference system	
Code identifying the spatial reference system	4283
Spatial resolution	25 m
Topic category	planningCadastre

Keyword set

keyword value	SOIL LAND LAND-Use HUMAN-ENVIRONMENT-Planning
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16

Geographic location

NSW Place Name	Hawkesbury Nepean Catchment

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	2000-01-01
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

Concepts and methodology of the product are presented in DECCW (2010) and Gray et al (2011). The product builds on the soil landscape data contained in Soil and Land Resources of the Hawkesbury Nepean Catchment (DECCW 2009). This contains descriptions of all soil-landscape units in the Catchment, including details on their qualities and constraints, derived from mapping programs predominantly carried out at 1:25 000 scale but published at 1:100 000 scale.
Spatial modelling of the soil-landscape units down to facet level was achieved using GIS techniques with a 25 m digital elevation model (DEM) as described in Yang et al (2008). Erosion hazard mapping using methodology described in Yang et al. (2006) was also applied.

References Department of Environment and Climate Change, 2009, Soil and Land Resources of the Hawkesbury-Nepean Catchment interactive DVD, Department of Environment and Climate Change NSW, Sydney. https://datasets.seed.nsw.gov.au/dataset/soil-and-land-resources-of-the-hawkesbury-nepean-catchment2bef0 DECCW 2010. Constraint Assessment for Urban and Regional Planning, DECCW Technical Report, prepared by JM Gray, GA Chapman, X Yang, M Young, NSW Department of Environment, Climate Change and Water, Sydney. Gray JM, Chapman GA, Yang X, Young M, 2011. Constraint Assessment for Urban and Regional Planning, Australian Planner, 48:1, 12-23 Yang, X, Chapman, GA, Gray, JM. and Young, MA (2007). Delineating soil-landscape facets from digital elevation models using compound topographic index and terrain analysis. Australian Journal of Soil Research, 45(8):569–576. Yang, X, Chapman, G and Heemstra, S 2006, Estimating soil erosion hazard for NSW coastal catchments using RUSLE in a GIS environment, in 10th Annual SIA Conference on Urban Stormwater Management, Parramatta, 27–30 June 2006

Constraint set

Use constraints	This data is provided under a Creative Commons Attribution 4.0 licence http://creativecommons.org/licenses/by/4.0. Attribute 'NSW Department of Climate Change, Energy, the Environment and Water' in publications using this data.
Limitations on public access	

Scope	dataset

DQ Topological Consistency

Effective date	2011-06-01
Explanation	The polygons of the original soil landscape products had been checked with GIS methods

DQ Absolute External Positional Accuracy

Effective date	2011-06-01
Explanation	Observations and soil profiles used for original soil mapping were located using handheld GPS (accurate to 50m) or using 1:25,000 topographic maps. Soil boundaries on this 1:100,000 scale map is generally accurate to within 100m on the ground but variations will occur especially where soil boundaries are gradual. Extensive field checking of soil landscape boundaries had been undertaken prior to finalising the original mapping.

DQ Non Quantitative Attribute Correctness

Effective date	2011-06-01
Explanation	The land and soil constraints in the original soil-landscape map products were predominately assessed using field observations, remote sensing interpretation (satellite, radiometric and aerial photos) and laboratory analysis of dominant soil materials. Further checking of representative facet boundaries and final constraint results was undertaken prior to finalisation of the product

Responsible party

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Telephone number	131555
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Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew
Responsible party role	pointOfContact

Metadata point of contact

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Responsible party role	pointOfContact

Metadata date

2024-02-26T13:55:28.537587

Metadata language