

Appendix C: Data Sources

The boundaries for each Hydrogeological Landscape unit have been derived from a number of data sources. All data is based on the GDA94 coordinate system.

The details of the data sets used and the supplying agencies follow:

Agency	Data set	Description
NSW OEH	Reconnaissance Soil and Land Resources of the Murray CMA	A DVD product comprising reconnaissance level natural resource mapping for the Murray CMA. It integrates numerous soil mapping datasets into a single seamless coverage and provides access to many layers of spatial information. It reports on soil types, terrain and physical constraints to use for the 151 map units.
	Soil Landscapes of the Holbrook-Tallangatta 1:100,000 Sheet (8326-8325) <i>Metadata File Identifier:</i> {BB2DB4AD-C009-4B1C-8D74-B3B3CAA170A9}	The soil landscape mapping program provides a compendium of natural resource information designed to help land managers to make informed environmental planning decisions. The mapping of soil landscapes through the investigation and collection of detailed soil and landscape profiles and analysis of both soil physical and chemical properties provides a powerful natural resource database on which to base informed environmental decisions. Soil landscape mapping also provides an overview of soil and/or landscape limitations for land use practices, and an assessment of both urban and rural land capabilities.
	NSW Soil and Land Information System (SALIS) <i>Metadata File Identifier:</i> {15BF7C54-4F28-4BAB-AFEA-F7A08FE18B3E}	State-wide dataset of soil profiles, comprising (at time of writing) ~70,000 separate observations of soil physical and chemical characteristics, along with, in most cases, information about the landscape in which they occur (including landform, geology, vegetation, hydrology, land use and land degradation). Data are added by NSW Government agencies and members of the wider community using standardised Soil Data Cards.
	BIOCLIM 2009	35 bioclimatic layers have been generated for NSW using supplied climate surfaces at 250 m. They are based on the Geoscience Australia 9 second DEM. These layers were generated using ANUCLIM Beta Version in November 2009.

Agency	Data set	Description
Geoscience Australia	GEODATA TOPO 250K Series 3	Major topographic features appearing on the 1:250 000 scale including cartography, elevation, framework, habitation, hydrography, infrastructure, terrain, transport, utility and vegetation.
	1:1 million Geology of Eastern Australia	The NSW component of this dataset is a detailed seamless geology coverage for the State. The dataset was compiled primarily from the NSW Department of Mineral Resources statewide 1:250 000 and 1:100 000 database, as well as several broader scale regional datasets in the Broken Hill and Murray Basin areas. The work involved edge-matching over 40 individual maps and applying a consistent stratigraphic and regolith classification scheme across the state and into Qld and Vic.
Geological Survey of NSW	Wagga Wagga 1:250 000 Geological Sheet SI/55-15, 1st edition (1966)	Geological Survey of NSW published hard copy geological maps that form part of the 'standard series' maps published at 1:250 000 and 1:100 000 scale. Modern maps have good detail and comprehensive depictions of geology. Note that sheets published prior to 1980 may lack the detail present in later maps.
	Tallangatta 1:250 000 Geological Sheet SJ/55-3, first edition (1966)	
	Jerilderie 1:250 000 Geological Sheet SI/55-14, 2nd edition (1976)	
Land and Property Information	NSW DTDB Landform Theme 50K Digital Terrain Models (ANZLIC Identifier: ANZNS0404000846)	Digital Terrain Models created from existing 10 m and 20 m contours sourced from the NSW Topographic Map Archive. The Data Base contains raster height data in 25 m pixels for the Eastern and Central Divisions of NSW. The Sydney Basin is supplemented by the integration of 2 m contour data.
	NSW Digital Topographic Database DTDB (ANZLIC Identifier: ANZNS0404001262)	Themes include a cultural layer incorporating transportation, facilities and utilities; drainage/hydrography; contours, buildings, built up areas, distinctive land surfaces and a names layer. Data generally correspond to 1:25 000, 1:50 000 and 1:100 000 mapping areas represented on the Australian National Map Sheet Breakdown System.

Appendix D: Dataset Attribute Table Information and Colour Schemes

Attribute Table Header

The attribute table attached to the HGL geodatabase contains the information used to describe Hydrogeological Landscapes. The following table summarises the attributes used and the ranges used for each attribute.

	No	HGL	Salt_land	Xport_Strm	EC_stream	Sodicity	Salt_store	Salt_avail	Haz_impact	Haz_likeli	Haz_ovrall	Data_Sourc	Function	Strategy
Attribute Description (Volumes 2 & 4)	HGL number	HGL name	Impact of land salinity in HGL (pie chart)	Impact of Salt export in HGL (pie chart)	Impact of water quality in HGL (pie chart)	Sodicity hazard in HGL (only recorded if high)	Salt store in HGL (salt mobility table)	Salt availability in HGL (salt mobility table)	Potential impact of salinity in HGL (hazard table)	Likelihood of salinity occurring in HGL (hazard table)	Overall salinity hazard in HGL (hazard table)	Reliability / integrity of boundary definition data sources	Landscape functions of HGL (management options)	Management strategy objectives for HGL (management options)
Attribute Range			High Moderate Low	High Moderate Low	High Moderate Low	High	High, Moderate Low	High, Moderate Low	Severe Significant Limited	High, Moderate Low	Very high High Moderate Low Very low	High, Medium Low	A to I	1 to 11

Colour Ranges

On HGL derivative maps, colours have been used to define attribute ranges for each HGL. These are summarised in the table below.

Attribute	Range	Colour	RGB Colour Scheme
Overall Salinity Hazard	Very High High Moderate Low Very Low	Red Orange Yellow Green Blue	255, 50, 0 255, 150, 0 255, 255, 150 200, 255, 150 200, 255, 255
Land Salinity Salt Export Water Quality Impact Salt Availability Salt Store Likelihood of Salinity Occurrence	High Moderate Low	Red Yellow Blue	255, 0, 0 255, 255, 0 0, 204, 255
Potential Impact of Salinity	Severe Significant Limited	Red Yellow Blue	255, 0, 0 255, 255, 0 0, 204, 255
Sodicity Hazard	High	Red	255, 0, 0

It should be noted that where hill-shading is used on the maps, the attribute colours may appear slightly paler than specified in the table if a transparency factor has been applied.