Data dictionary

for the

1:500 000 tectonic units of Western Australia, 2017

Data dictionary

In Geographic Information Systems (GIS), data dictionaries are used as a means to record the names of the attributes (items) in each feature class, together with a description of the attribute values. Tables 1 and 2 list the GIS themes or feature classes and lookup tables used in this digital data package, for which this data dictionary has been provided.

Table 3 provides detailed information about the attributes of each feature class included in this digital data package. Each data dictionary table contains the following information: Feature class, File name, Feature category, Spatial type, Description, and details particular to the feature class described. These details are listed under headings: Item name, Key, Optional, Type, Width, and Description. Tabulated information in italics describes the contents of Microsoft Access database lookup tables (LUT).

For Key, a code is used to indicate whether the item or field is a key used to link information:
P = Primary key
F = Foreign key
Null = Not a key

For Optional, a code is used to indicate whether the items or fields may or may not be provided in a data package:
True = Optional
False = Not optional

For item Type, a code is used to describe the field type:
C = Currency values
D = Date field, may include time
F = Decimal number as an internal floating-point number, single or double precision
H = Hyperlink field for storing URL path
I = Integer field, having whole numbers only, short or long format
M = Memo field
T = Text/character field
Y = One bit field that contains only one of two values (e.g. Yes/No, True/False, On/Off)

Table 1: The following is a listing of the feature classes in this digital package.

Feature class:	Description
Geology	
1:500k tectonic units of Western Australia, 2017	1:500 000 tectonic units of Western Australia, 2017

Table 2: The following is a listing of databases used in this digital data package.
Note: Databases are provided in Microsoft Access 2003 format. Database tables are also provided as CSV files.

Database name:	Description
geol_lut.mdb	Geology and interpreted geology lookup tables database

Table 3: The following is a detailed listing of the feature classes and associated lookup tables.

Feature class:	**1:500k tectonic units of Western Australia, 2017**
File name:	500k_tectonicp17
Feature category:	Geology
Spatial type:	Region
Description:	1:500 000 tectonic units of Western Australia, 2017

Item name	**Key**	**Optional**	**Type**	**Width**	**Description**
TECTCODE	F	False	T	30	Tectonic unit code
TECTNAME		False	T	100	Tectonic unit name
CUSTODIAN		False	T	10	Organization holding source data
PUBLISH_DA		False	D		Date the layer was published
DRAWORDER		False	T	50	Representation of unit overlap in the draw order of polygons (A is uppermost)
TECTCOLOUR		False	T	30	Code for grouping and colour design purposes, based on dominant age (codes as in Explanatory Notes database) and characteristic lithologies
SYMBOL		False	T	254	Dominant age and characteristic lithologies, based on TECTCOLOUR for plot purposes

Lookup table:	***500k_tectonicp17_lut***
Description:	*GEOL_LUT tectonic units of Western Australia, 2017 lookup table: Microsoft Access table*

Field name	***Key***	***Optional***	***Type***	***Width***	***Description***
SORT		*False*	*I*		*Sort order for data legend*
TECTNO		*False*	*I*		*Tectonic identifier linking to Explanatory Notes database*
TECTCODE	*P*	*False*	*T*	*30*	*Tectonic unit code*
TECTNAME		*False*	*T*	*100*	*Tectonic unit name*
TECTTYPE		*False*	*T*	*50*	*Tectonic unit type*
LITHOLOGY		*False*	*T*	*50*	*Predominant or characteristic rock type(s) of tectonic unit*
TECTSETTIN		*False*	*T*	*30*	*Tectonic setting of unit*
TSETT_QUAL		*False*	*T*	*50*	*Tectonic setting qualifier*
PARENTCODE		*False*	*T*	*30*	*Code of the parent tectonic unit for the unit displayed in the TECTCODE field*
PARENTNAME		*False*	*T*	*100*	*Name of the parent tectonic unit for the unit displayed in the TECTCODE field*
PARENTTYPE		*False*	*T*	*50*	*Type of the parent tectonic unit for the unit displayed in the TECTCODE field*
STATE		*False*	*T*	*100*	*Western Australia: State-level tectonic unit*
WATECTUNIT		*False*	*T*	*100*	*State-scale tectonic unit*
SSUITE_TEC		*False*	*T*	*100*	*Supersuite tectonic; all igneous rocks related to a specific tectonic event*
SUITE_TEC		*False*	*T*	*100*	*Suite tectonic; all igneous rocks related to a specific parental magmatic composition generated at a specific time*
CRATON		*False*	*T*	*100*	*Geologically stable part of the Earth's crust, mostly older than 2.4 Ga*
SUPERTERRA		*False*	*T*	*100*	*Superterrane; a group of related terranes*
CRATON_TER		*False*	*T*	*100*	*Craton terrane; a fault-bounded body of rock within a craton, with a distinct geological history*
*DOMAIN_*		*False*	*T*	*100*	*A fault-bounded body of rock within a CRATON_TER*
GREENSTONE		*False*	*T*	*100*	*Greenstone belt or granitic complex*
SUPERBASIN		*False*	*T*	*100*	*A group of related basins of a similar age*

BASIN		*False*	*T*	*100*	*Accumulation of sedimentary rocks in a regional crustal depression*
SUBBASIN		*False*	*T*	*100*	*First order subdivision of a BASIN*
SUBBASIN_E		*False*	*T*	*100*	*Sub-basin element; subdivision of a SUBBASIN, generally structural*
OROGEN		*False*	*T*	*100*	*Tectonic belt characterized by regional deformation, metamorphism, magmatism, and related sedimentation*
PROVINCE		*False*	*T*	*100*	*Tectonic unit with a complex deformation, metamorphic, and magmatic history*
PROV_TZONE		*False*	*T*	*100*	*Tectonic subdivision of PROVINCE into terranes or zones*
TECT_SUBDI		*False*	*T*	*100*	*Tectonic subdivision of PROV_TZONE*
OROG_FOR		*False*	*T*	*100*	*Orogenic foreland; an area of craton and/or basin reworked by orogenic events*
OROG_FORSU		*False*	*T*	*100*	*Orogenic foreland subunit; structural feature within an OROG_FOR*
IN_OUTLIER		*False*	*T*	*100*	*Inlier or outlier; older tectonic unit surrounded by younger unit or younger tectonic unit surrounded by older unit*
EVENTS		*False*	*M*		*Tectonic and magmatic events affecting the tectonic unit (ages in brackets indicate maximum and minimum age in millions of years)*
ERA_FROM		*False*	*T*	*30*	*Maximum age of tectonic unit as described by geological timescale (era, e.g. Mesozoic)*
ERA_TO		*False*	*T*	*30*	*Minimum age of tectonic unit as described by geological timescale (era, e.g. Cenozoic)*
MAX_AGE_MA		*False*	*F*		*Maximum possible age of tectonic unit in millions of years*
MIN_AGE_MA		*False*	*F*		*Minimum possible age of tectonic unit in millions of years*
TECTCOLOUR		*False*	*T*	*30*	*Code for grouping and colour design purposes, based on dominant age (codes as in Explanatory Notes database) and characteristic lithologies*
SYMBOL		*False*	*T*	*254*	*Dominant age and characteristic lithologies, based on TECTCOLOUR for plot purposes*