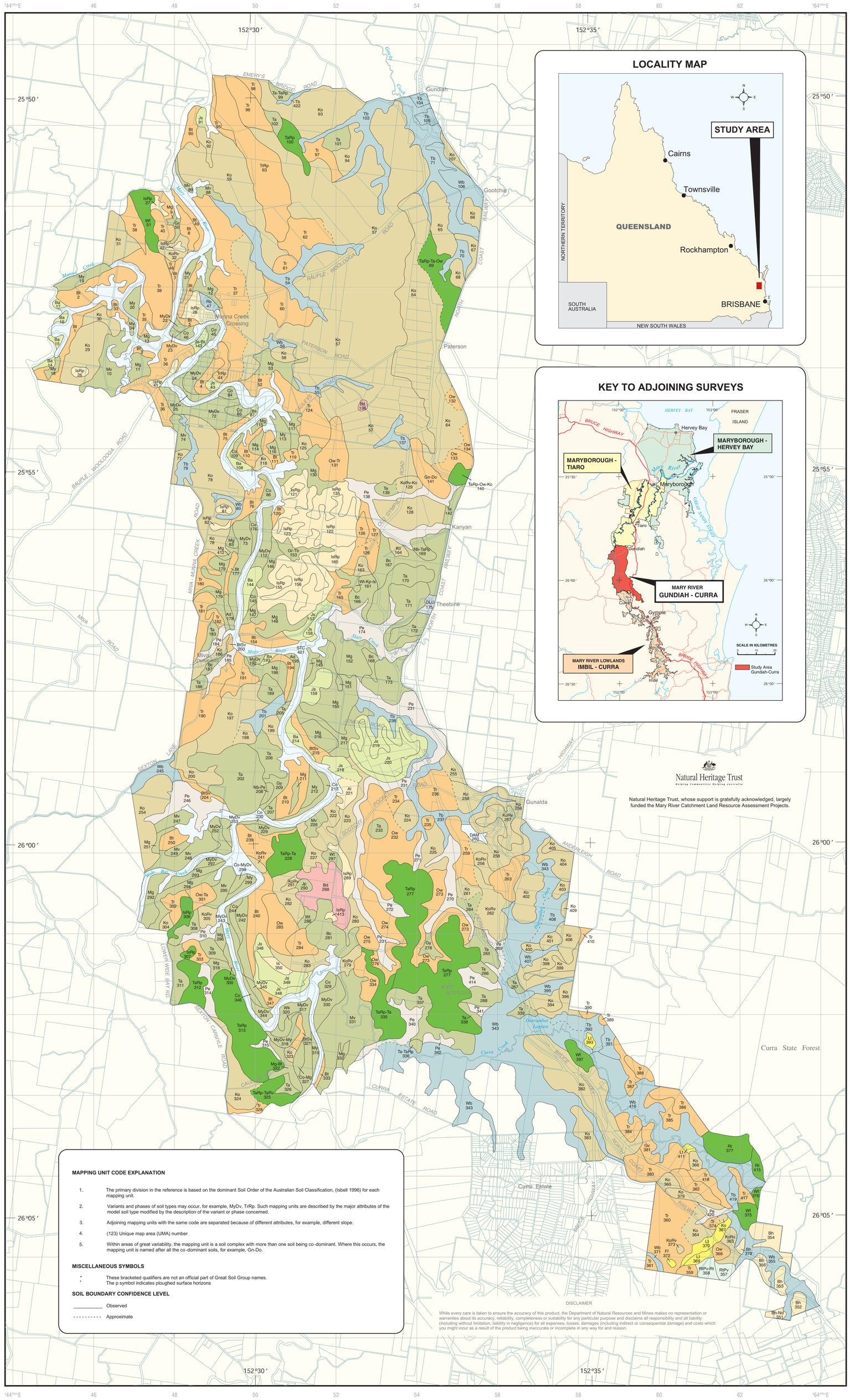

LOCALITY MAP

KEY TO ADJOINING SURVEYS

MAPPING UNIT CODE EXPLANATION

1. The primary division in the reference is based on the dominant Soil Order of the Australian Soil Classification, (Isbell 1996) for each mapping unit.
2. Variants and phases of soil types may occur, for example, MyDv, TrRp. Such mapping units are described by the major attributes of the model soil type modified by the description of the variant or phase concerned.
3. Adjoining mapping units with the same code are separated because of different attributes, for example, different slope.
4. (123) Unique map area (UMA) number
5. Within areas of great variability, the mapping unit is a soil complex with more than one soil being co-dominant. Where this occurs, the mapping unit is named after all the co-dominant soils, for example, Gn-Do.

MISCELLANEOUS SYMBOLS

* These bracketed qualifiers are not an official part of Great Soil Group names.
* The p symbol indicates ploughed surface horizons

SOIL BOUNDARY CONFIDENCE LEVEL

———— Observed
- - - - - - - - - Approximate

Natural Heritage Trust
Helping Communities Helping Australia

Natural Heritage Trust, whose support is gratefully acknowledged, largely funded the Mary River Catchment Land Resource Assessment Projects.

INTENSITY STATEMENT

This is a medium intensity soils survey. It is based on aerial photography interpretation and ground observations of the order of one observation to an area of 50 hectares.

SURVEY by Peter R. Zund, Department of Natural Resources and Mines, Gympie.

CARTOGRAPHY by Sheryl F. Crofts, Department of Natural Resources and Mines, Brisbane.

BASE MAP Digital Cadastral Data Base, Department of Natural Resources and Mines, 2002

Queensland Government
Natural Resources and Mines

MARY RIVER
GUNDIAH - CURRA
SOILS

SCALE 1 : 50 000

metres 1000 0 1 2 3 4 5 kilometres

UNIVERSAL TRANSVERSE MERCATOR PROJECTION

GREY NUMBERED GRID LINES ARE AT 2000 METRE INTERVALS OF THE MAP GRID OF AUSTRALIA, ZONE 56 GDA94
GRID VALUES ARE SHOWN IN FULL AT THE CORNERS OF THE SHEET

GDA

REFERENCE

Mapping Unit	Major Attributes of Dominant soil	Australian Classification	Great Soil Group	Principle Profile Form	Area (ha)
PODOSOLS					
HILLSLOPES ON MODERATELY WEATHERED COARSE GRAINED SEDIMENTARY ROCKS					
RtPv Rothchild Podozolic variant	Black to grey sand to loamy sand surface with a bleached A2 horizon (0.6 to 0.9m) over an acid, single grain, grey to yellow sand (0.8 to 1.15m) over a brown or yellow ortstein pan (1.10 to 1.60m) over weathered sandstone.	Aeric Podosol	Podzol	Uc2.32 Uc2.12	38
VERTOSOLS					
ALLUVIAL PLAINS AND SWAMPS					
Pe Pelion	Root mat (O1 horizon) (in undisturbed areas) overlying a black to grey light medium to medium clay surface (0.12 to 0.23m) over a neutral to alkaline, black, brown to grey, light medium clay to medium clay subsoil (0.5 to 1.15m) over a alkaline, mottled, grey light medium to medium clay.	Aquic Vertosol Brown Vertosol Grey Vertosol	Weisenboden Brown clay Grey clay	Ug5.33 Ug5.16	899
HYDROSOLS					
LOWER SLOPES ON DEEPLY WEATHERED COARSE GRAINED SEDIMENTARY ROCKS					
Rb Robur	Grey loamy sand to sandy loam surface over a conspicuously bleached A2 horizon (0.5 to 1.0m) over an acid, mottled, sodic, grey sandy light clay to heavy clay.	Redoxic Hydrosol Grey Sodosol	Soloth	Dy3.41 Dg2.41 Dy5.41 Dg4.41	12
ALLUVIAL PLAINS OF THE MARY RIVER					
Tb Timbrell	Black to grey silty clay loam, silty clay to light medium clay surface over a bleached A2 horizon (0.2 to 0.4 m) over a neutral to alkaline, mottled, grey to brown light medium clay to medium heavy clay.	Redoxic Hydrosol Oxyaquic Hydrosol Brown Dermosol	No suitable group, affinity with solodic soils	Gn3.03 Gn3.06 Gn3.93 Uf2 Uf3 Uf6.41	838
Wb Woober	Black to grey clay loam, silty clay loam, silty clay to light medium clay surface over a bleached A2 horizon (0.2 to 0.3m) over an acid, mottled, grey light medium clay to heavy clay.	Redoxic Hydrosol	No suitable group, affinity with soloth	Uf2 Uf3 Gn3.04 Gn3.05	1434
KUROSOLS					
HILLSLOPES ON MODERATELY WEATHERED SEDIMENTARY ROCKS					
Ko Kolan	Black to grey fine sandy clay loam to clay loam fine sandy surface over a bleached A2 horizon (0.15 to 0.3m) over a strongly acid to acid, mottled, sodic, grey to brown medium clay to heavy clay (0.5m +) over weathered rock.	Grey Kurosol Brown Kurosol Brown Sodosol Grey Sodosol	Soloth	Dy3.41 Dy3.31	5907
KoRp Kolan rocky phase	As above with > 20% rock fragments on the surface.	Grey Kurosol Grey Sodosol	Soloth	Dy3.41	Co-dominate soil
KoRv Kolan red variant	As above with red B2 horizon with 20-50% grey mottles.	Red Kurosol	Soloth	Dr3.41	301
SODOSOLS					
HILLSLOPES ON MICRODIORITE ROCKS					
Gn Gigoon	Black or grey loamy sand to sandy loam surface over a conspicuously bleached A2 horizon (0.2 to 0.6 m) over an acid to alkaline, mottled, brown or grey sandy clay to sandy medium heavy clay (0.5 to 1.2m) over weathered microdiorite.	Brown Sodosol Grey Sodosol	Soloth Solodic soil Solodized solonetz	Dy3.42 Dy5.41 Dy3.41 Dy3.43 Dg4.41	61
Do Doongul	Black to grey light sandy clay loam to clay loam sandy surface over a bleached A2 horizon (0.1 to 0.25m) over a acid to neutral, frequently mottled, grey to brown medium clay (0.2 to 0.85m) over weathered rock.	Grey Sodosol Brown Sodosol	Soloth Solodic soil Solodized solonetz	Dy2.41 Dy3.42 Dy3.41 Dy2.32	Co-dominate soil
HILLSLOPES ON MODERATELY WEATHERED ANDESITE AND MICRODIORITE ROCKS					
Ow Owanyilla	Black to grey fine sandy loam to clay loam surface over a conspicuously or sporadically bleached A2 horizon (0.03 to 0.35) over a acid to neutral mottled, brown to grey light medium clay to heavy clay (0.35 to 0.95) with ferromanganiferous nodules frequently over a mottled, neutral to alkaline, brown, grey to yellow medium clay to heavy clay with andesite fragments.	Brown Sodosol Grey Sodosol	Solodic soil Minor soloth	Dy3.32 Dy3.33 Dy3.43 Dy3.42	743
HILLSLOPES ON MODERATELY WEATHERED SEDIMENTARY ROCKS					
Gv Givelda	Black or grey fine sandy clay loam to clay loam fine sandy surface over a conspicuously bleached A2 horizon (0.15 to 0.3m) over an acid to neutral, mottled, brown or yellow medium clay to heavy clay (0.45 to 1.3m) over weathered rock.	Brown Sodosol Yellow Sodosol	Soloth Solodic soil	Dy3.41 Dy3.42	30
Tr Tirroan	Black to grey sandy loam to fine sandy loam surface over a conspicuously bleached A2 horizon (0.25 to 0.5m) over an acid to neutral, mottled, grey or brown sandy medium clay (0.45 to 1.2m) over weathered rock.	Grey Sodosol Brown Kurosol	Soloth Solodic soil	Dy3.41 Dy3.42	2273
ALLUVIAL PLAINS OF THE MARY RIVER					
Bt Butcher	Black to grey fine sandy clay loam to clay loam fine sandy surface over a conspicuously bleached A2 horizon (0.15 to 0.3m) over an acid to alkaline, mottled, grey to brown light medium clay to heavy clay.	Grey Sodosol Brown Sodosol Redoxic Hydrosol	Soloth Solodic soil	Dy3.41 Dy3.42 Dy3.43	720
BtSv Butcher sandy variant	Black to grey sandy loam to fine sandy loam surface over a conspicuously bleached A2 horizon (0.15 to 0.3 m) over an acid to neutral, mottled, grey to brown light medium clay to heavy clay.	Grey Sodosol Brown Sodosol	Soloth Solodic soil	Dy5.41 Dy5.43 Dy2.43	66
CHROMOSOLS					
HILLSLOPES ON PHYLLITE ROCKS					
Bh Beenham	Black to grey loam to clay loam surface over a conspicuously bleached A2 horizon (0.2 to 0.3m) over acid, mottled, grey, yellow or brown light medium to medium to medium clay.	Grey Chromosol Yellow Chromosol Brown Chromosol Grey Dermosol	Soloth Gleyed podzolic soil Yellow podzolic soil	Dy3.41 Dy2.41	118
HILLSLOPES AND PLAINS ON DEEPLY WEATHERED COARSE GRAINED SEDIMENTARY ROCKS					
Al Alloway	Grey loamy sand to sandy loam surface over a conspicuously bleached A2 horizon (0.5 to 0.8m) over an acid, mottled, non-sodic, grey light clay to medium clay.	Grey Chromosol Redoxic Hydrosol	Gleyed podzolic soil	Dg2.41 Dg4.41 Dy3.41	27
Is Isis	Grey to occasionally black sandy loam surface over a conspicuously bleached A2 horizon (0.3 to 0.7m) over an acid, mottled, yellow to brown light clay to medium clay.	Yellow Chromosol Yellow Dermosol Brown Chromosol Brown Dermosol	Yellow podzolic soil	Dy3.41 Gn3.84	14
IsRp Isis Rocky Phase	As above with >10% course fragments, >0.06m and/or >10% surface course fragments, >0.06m in size throughout A2 and/or B horizons.	Yellow Chromosol Yellow Dermosol Clastic Tenosol	Yellow podzolic soil	Dy3.41 Gn3.84	679
FERROSOLS					
HILLCRESTS AND PLAINS ON DEEPLY WEATHERED ANDESITE ROCKS					
Bd Bidwell	Red to occasionally black, acid or neutral, light clay to light medium clay surface (0.1 to 0.4m) over a red light clay to light medium clay (>1.5m) frequently with manganiferous nodules over weathered rock.	Red Ferrosol	Krasnozem	Uf5.21 Uf5.22	120
DERMOSOLS					
HILLSLOPES ON MODERATELY WEATHERED ANDESITE OR MICRODIORITE ROCKS					
Nb Netherby	Black to grey clay loam to light medium clay surface over sporadically bleached clay loam to light clay A2 horizon (0.1 to 0.2m) over a brown to grey light medium clay to medium clay (0.3 to 0.45m) over a mottled, brown to grey light medium clay to medium clay (0.5 to 1.7m) with manganiferous soft segregations or nodules over weathered rock.	Brown Dermosol Grey Dermosol	No suitable group, affinity with prairie soil	Gn3.63 Gn3.83	30
Ta Tiaro	Black to brown clay loam to light medium clay surface (0.05 to 0.35m) over neutral to alkaline, black to brown light clay to medium clay (0.2 to 0.65m) over a grey light clay to medium heavy clay (0.55 to 0.85m) with rock fragments and occasional carbonate nodules over weathered rock.	Black Dermosol Brown Dermosol	Prairie soil	Uf6.32 Gn3.92 Gn3.22	1105
TaRv Tiaro red variant	Black to brown clay loam to light medium clay surface (0.05 to 0.35m) over neutral to alkaline, red light clay to medium clay (0.2 to 0.65m) over a brown light clay to medium heavy clay (0.55 to 0.85m) with rock fragments over weathered rock.	Red Dermosol	Prairie soil	Gn3.12 Uf6.31	Co-dominate soil
HILLSLOPES ON DEEPLY WEATHERED ANDESITE ROCKS					
Jp Jumpo	Grey to brown clay loam to light medium clay surface (0.1 to 0.3m) over a mottled, neutral, brown to yellow light clay to medium heavy clay with manganiferous nodules.	Brown Dermosol Yellow Dermosol	No suitable group, affinities with xanthozem	Uf6.41 Uf4.42 Uf4.43 Gn3.72	10
HILLSLOPES ON PHYLLITE ROCKS					
Nd Neerdie	Black to brown clay loam to light clay surface occasionally over a A2 horizon (0.2 to 0.3m) over acid, mottled, grey or yellow light medium to medium clay.	Brown Dermosol Yellow Dermosol Grey Dermosol	No suitable group	Uf6.4 Uf4.4 Gn3.21	Co-dominate soil
HILLSLOPES ON MODERATELY WEATHERED SEDIMENTARY ROCKS					
Bc Bucca	Grey, brown to black light clay to medium clay surface (0.15 to 0.2m) over a mottled, acid, grey to brown medium clay to heavy clay (0.7 to 1.3m) frequently with ferruginous nodules over a acid, grey, light clay to heavy clay (0.7 to 1.5m) with course fragments over weathered rock.	Grey Dermosol Brown Dermosol Yellow Dermosol Grey Vertosol	No suitable group, affinities with grey clay	Uf3 Uf6.41 Ug5.24 Ug5.35	272
HILLCRESTS ON DEEPLY WEATHERED FINE GRAINED SEDIMENTARY ROCKS					
Kp Kepnock	Grey to black fine sandy clay loam to clay loam surface over a bleached A2 horizon (0.3 to 0.45m) over an acid, mottled, yellow to brown light clay to medium clay with ferruginous nodules.	Yellow Dermosol Brown Dermosol Yellow Chromosol Brown Chromosol	Yellow podzolic soil	Gn3.84 Gn3.81 Dy3.41	Co-dominate soil
Wt Watalgan	Black to brown clay loam surface over an acid, red light clay to medium clay with ferruginous nodules.	Red Dermosol Red Ferrosol	Red podzolic soil	Gn3.14 Gn3.11p* Dr2.21 Uf6.31p*	43
ALLUVIAL PLAINS OF THE MARY RIVER					
Ad Aldershot	Grey, black to brown fine sandy loam to fine sandy clay loam surface (0.1 to 0.35m) over a neutral, red light clay to light medium clay frequently with manganiferous nodules.	Red Dermosol	Red brown earth	Dr2.21 Gn3.22 Gn3.72	28
Co Copenhagen	Brown to black, loam to clay loam surface (0.05 to 0.5m) over neutral, brown loam to fine sandy light clay A3/B1 horizon (0.5 to 0.95m) over a brown or black, neutral, sandy clay loam to fine sandy light clay (0.95 to 1.5m) over a brown alluvial sand or loam.	Brown Dermosol Black Dermosol Orthic Tenosol	Prairie soil Alluvial soil	Gn3.22 Um5.52 Um6.31 Um6.32 Uf6.31	182
Gr Granville	Black to grey light clay to light medium clay surface over a sporadically bleached A2 horizon (0.1 to 0.25m) over an acid, mottled, grey to brown medium clay to heavy clay.	Grey Dermosol Brown Dermosol Redoxic Hydrosol Brown Vertosol	No suitable group, affinities with grey clay	Uf3 Ug3.2	35
Mg Mungar	Black to grey silty light clay to silty light medium clay over a sporadically bleached light to light medium clay A2 horizon (0.1 to 0.25m) over a alkaline grey to brown light medium clay to medium heavy clay with manganiferous and/or calcareous nodules.	Brown Dermosol Grey Dermosol	No suitable group, affinities with grey clay	Uf3	1366
Mv Miva	Black to grey clay loam to light clay over a sporadically bleached light to light medium clay A2 horizon (0.1 to 0.25m) over a alkaline black light medium clay to medium heavy clay with manganiferous and/or calcareous nodules.	Black Dermosol	No suitable group, affinities with black clay	Uf3	130
My Mary	Black to brown silty clay loam to silty light clay surface (0.1 to 0.25m) over an acid to neutral, brown light clay to medium clay.	Brown Dermosol	Prairie soil	Gn3.21 Uf6.31	171
MyDv Mary Dark Variant	Black silty clay loam to silty light clay surface (0.1 to 0.25 m) over an acid to neutral, black light clay to medium clay.	Black Dermosol	Prairie soil	Uf6.32	520
Wk Walker	Black to occasionally grey silty clay loam to light medium clay surface (0.05 to 0.25m) over an acid to neutral, mottled, grey to black light medium clay to heavy clay (0.4 to 1.2m) becoming greyer at depth.	Grey Dermosol Brown Dermosol Black Dermosol	Humic gley	Gn3.91 Gn3.92 Uf6.41	15
ALLUVIAL PLAINS OF LOCAL CREEKS					
Gy Gutchy	Black to grey light medium clay surface (0.2 to 0.4m) over an alkaline, black, grey to brown medium clay to medium heavy clay (1.2 to 1.5m) over strongly alkaline, grey medium heavy clay with calcareous nodules, gravels and grit.	Grey Dermosol Redoxic Hydrosol Oxyaquic Hydrosol	No suitable group, affinities with prairie soil	Uf6.32 Uf6.33	39
KANDOSOLS					
HILLCRESTS ON DEEPLY WEATHERED COARSE GRAINED SEDIMENTARY ROCKS					
Ff Farnsfield	Red to brown loamy sand to sandy clay loam surface (0.35 to 0.5m) over an acid to neutral, red sandy clay loam to light clay.	Red Kandosol	Red Earth	Gn2.11 Gn2.12 Um5.52	3
ALLUVIAL PLAINS OF LOCAL CREEKS					
Lt Littabella	Black to grey sandy loam to loam fine sandy surface (0.4 to 0.9m) over an acid to neutral, yellow, grey to red sandy loam to clay loam sandy.	Yellow Kandosol Grey Kandosol Red Kandosol Orthic Tenosol	Yellow earth No suitable group Earthy sand	Um5.52 Um4.23 Gn2.71 Gn2.94 Uc5.22	59
RUDOSOLS					
ALLUVIAL PLAINS OF THE MARY RIVER					
Ba Baddow	Brown sand to sandy loam surface (0.1 to 0.25m) over layered brown sand to loamy sand.	Stratic Rudosol	Siliceous sand Alluvial soil	Uc1.23 Uc1.21	101
Js Johnson	Grey or brown sandy loam to clay loam sandy surface (0.1 to 0.4m) over cobbles.	Clastic Rudosol Bleached-leptic Tenosol	Lithosols	Uc1.21	475
TENOSOLS					
HILLSLOPES ON DEEPLY WEATHERED FINE GRAINED SEDIMENTARY ROCKS					
Rt Rothchild	Black to grey sand to sandy loamy surface usually with an A2 horizon (0.4 to 0.9m) over an acid, massive, red, brown to yellow loamy sand to sandy loam (0.6 to 1.15m) over weathered sandstone.	Bleached-Orthic Tenosol Orthic Tenosol	(Bleached) Earthy sand Earthy sand	Uc2.21 Uc4.21 Uc4.22	91
Wf Winfield	Grey sand to loamy sand surface over a conspicuously bleached A2 horizon (0.3 to 0.85 m) over acid, mottled, massive, grey loamy sand to sandy loam.	Bleached-Orthic Tenosol	(Bleached) Earthy Sand	Uc2.23 Uc2.22	115
TrRp Tirroan rocky phase	Black or grey loamy fine sand or a loamy sand surface over a bleached A2 horizon (0.2 to 0.3m) over rock.	Bleached-Orthic Tenosol Clastic Rudosol	Lithosol	Uc2.12	279
MISCELLANEOUS UNITS					
DLU Urban	Urban, suburban, and rural residential areas with land parcels less than 5 ha in size.				
DAM Water storage	Large water storages				
STC Stream Channel	Rivers, major creeks				

MARY RIVER
GUNDIAH - CURRA
SOILS
NR&M Ref No. GCL-I-A0 3334