LAND RESOURCES of part of WEST McDONNELL NATIONAL PARK
(previously Simpsons Gap National Park)

GENERAL FEATURES

Property boundary
Park or reserve
Land unit boundary
Property name/number .... NT Por 5997
Family outstation .... ▲ Inbina Atwatye / Mulga Camp
Camp
Building
Minor road: sealed
Minor road: unsealed
Local road / track
Drainage line; water body
Vertical obstruction
Range named .... MACDONNELL
Ridge named .... Euro Ridge / Mt Gillen
Relief or water feature named
Water bore
Spring
Spot Height

MAP LOCALITY & 1:100,000 MAP SHEET INDEX

DARWIN · NHULUNBUY
· JABIRU
KATHERINE

NORTHERN
TERRITORY

TENNANT CREEK

ALICE SPRINGS

NARWIETOOMA 5451	ANBURLA 5551	BURT 5651
HERMANNS- BURG 5450	MACDONNELL RANGES 5550	ALICE SPRINGS 5650
PALM VALLEY 5449	JAMES 5549	PEACHY 5649

LOCALITY MAP

To Halls Creek (WA)
TANAMI
STUART HIGHWAY
Namatjira
West MacDonnell National Park
MAP COVERAGE
previously Simpsons Gap National Park
ALICE SPRINGS
Larapinta
Tnorala (Gosse Bluff) Conservation Reserve
Owen Springs Reserve
To Watarrka
To Uluru

FIELD SITE LOCATIONS

Base Information Data Sources:
Northern Territory Department of Lands, Planning and the Environment,
Geoscience Australia, Australian Government

Cartography by Spatial Data and Mapping, Water Resources NT,
Department of Land Resource Management, (Northern) Territory of Australia September 2014
Web: www.lrm.nt.gov.au/nrmapsnt Map Reference: Simpson-Gap_Land-Resources_50k

kilometres 0   1   2   3   4   5 kilometres

Black numbered lines are 5 000 metre intervals of the Map Grid of Australia (MGA) Zone 53
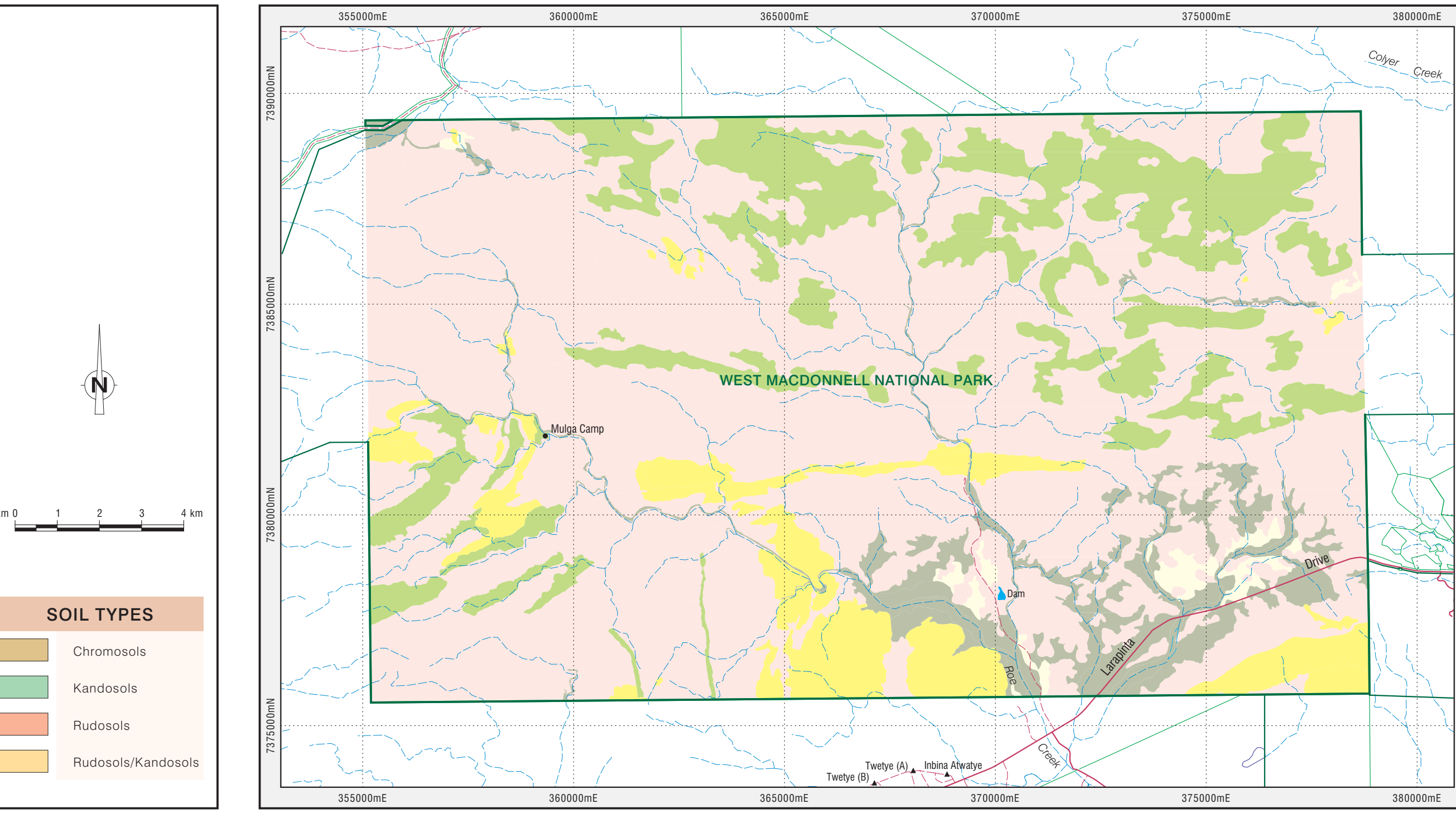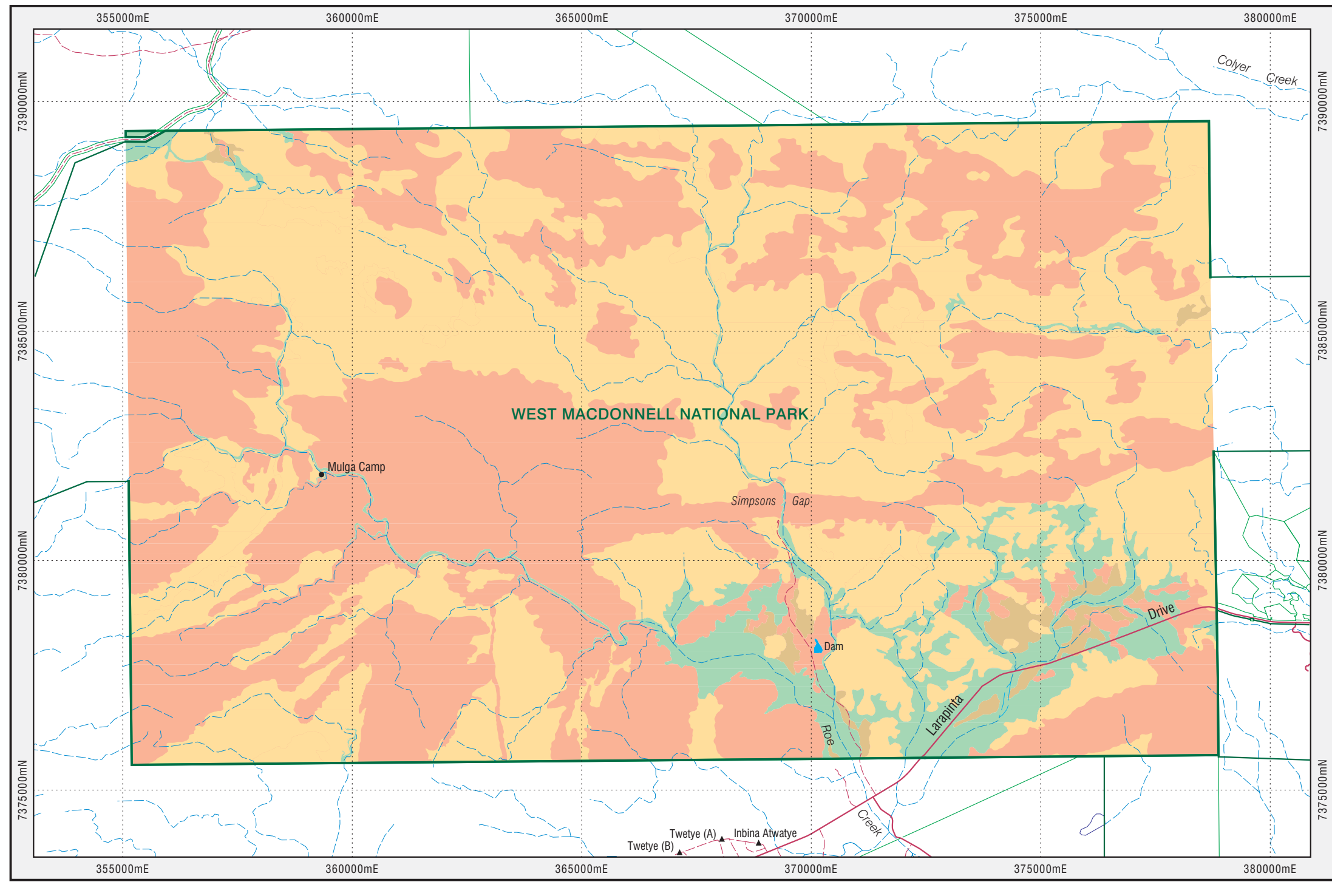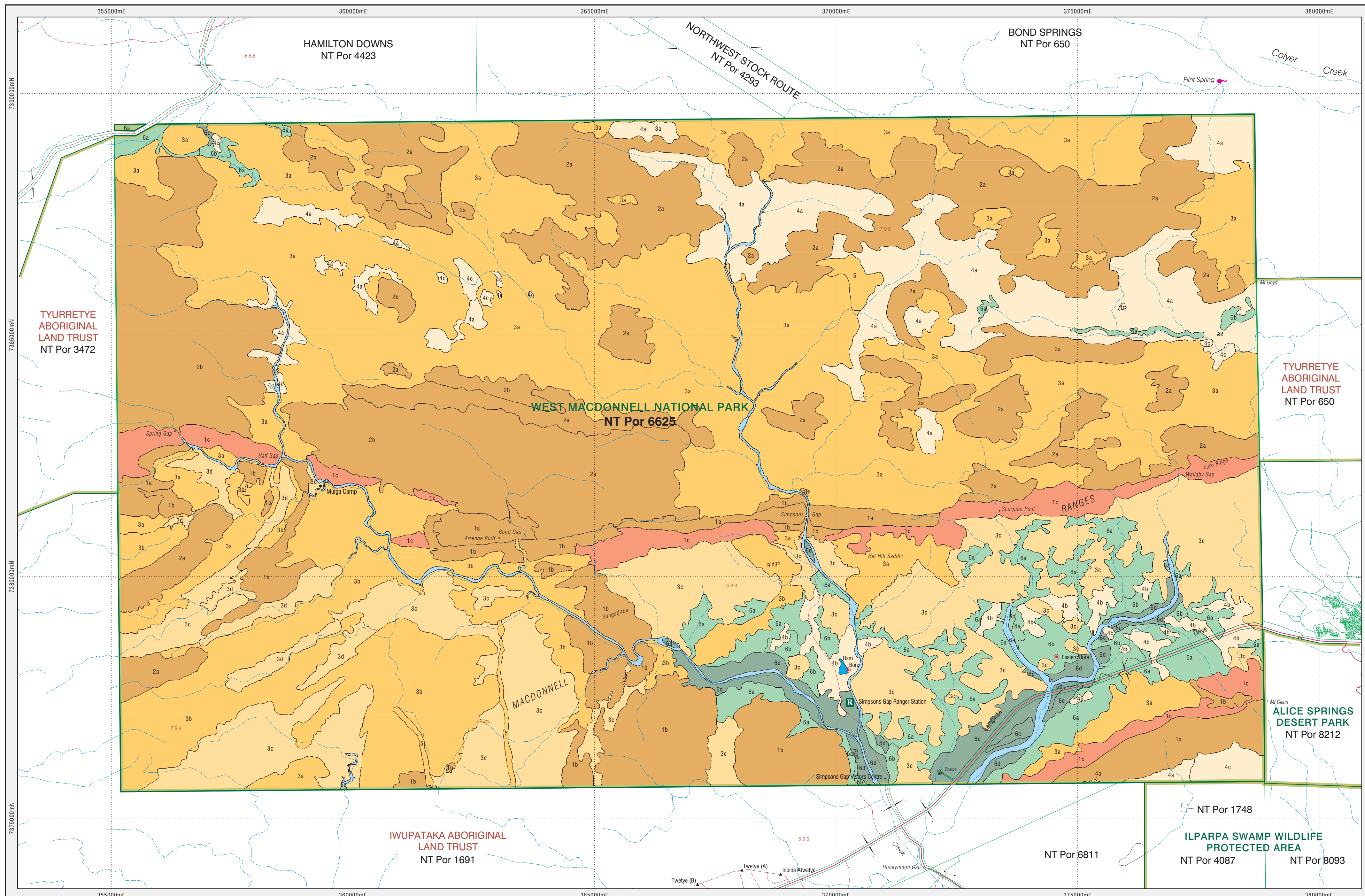Transverse Mercator Projection   Horizontal Datum: GDA 94

GDA This map was produced on the Geocentric Datum of Australia 1994 (GDA 94)

LAND UNIT DESCRIPTIONS

SIDESLOPES

1c Scree slopes associated with 1a and 1b, and scarp faces and backslopes associated with the Charles River Fault. Slopes 45-60%. Extensive rock scree. Small pockets of shallow lithosols (Rudosols). Eremophila freelingii, Cassia spp. and Indigofera spp. low open shrubland over perennial grasses such as Eriachne mucronata, Aristida nitidula and Themeda triandra.

HILLS

1a Major strike ridges and associated scarp faces (cuestas). Slopes 40-70%. Essentially rock outcrop with small areas of shallow lithosols (Rudosols). Triodia clelandii or Triodia hubbardii hummock grassland with scattered mallees Eucalyptus gillenii, E. gamophylla or E. sessilis.

1b High hills often with bevelled ridges, rectilinear dip slopes and steep fault aligned valleys. Extensive rock outcrop and shallow Lithosols (Rudosols). Triodia clelandii hummock grassland with occasional perennial grasses Eriachne mucronata and Cymbopogon spp. with a sparse over-story of Acacia liguiata; Eucalyptus terminalis; E. papuana and scattered mallees of E. intertexta.

2a High hills, often strike aligned ridges, relief of 250 metres, slopes to 50% in places. Extensive rock outcrop, small areas of shallow lithosols (Rudosols). Themeda triandra grassland in better watered areas with Eriachne mucronata, Digitaria brownii and Enneapogon spp. elsewhere with Indigofera low shrubs.

2b High hills with large areas of bare rock slab. Slopes to 50%. Large areas of bare rock slab with pockets of shallow lithosols (Rudosols). Acacia aneura and A. kempeana open-scrub or relatively dense thickets with sparse perennial grasses Digitaria brownii and Eriachne mucronata and small ferns such as Chielanthes spp.

LOW HILLS

3a Rolling hills to 50m local relief, slopes occasionally to 45% usually 10-20%. Lithosols and shallow red massive earths (Rudosols/Red Kandosols). Acacia aneura tall shrubland dominant in places but Acacia kempeana is usually present and may dominate in areas with more alkaline soils. Grasses are generally Enneapogon spp. Aristida contorta and Themeda triandra.

3b Rolling hills, with major ridges often following geological folding. Slopes to 30%, relief to 50m. Lithosols, small areas of shallow red massive earths (Rudosols). Acacia kempeana open-scrub with Eremophila freelingii and Cassia desolata in the mid strata with an understorey of Enneapogon spp. and Digitaria brownii. Themeda triandra and Bothriochloa sp. occur in watercourses.

5 Dyke ridges and hills; slopes to 30%. Lithosols (Rudosols), large areas of rock outcrop. Themeda triandra, Eriachne mucronata, Bothriochloa sp. and Enneapogon sp. grassland with Cassia spp., Indigofera sp. and Acacia kempeana shrubs.

RISES

3c Undulating rounded hills, relief to 30m, slopes to 30% but usually < 20%. Lithosols and shallow red massive earths (Rudosols/Red Kandosols). Acacia aneura tall shrubland dominant in places but Acacia kempeana is usually present and may dominate in areas with more alkaline soils. Generally more open and with a greater diversity of co-dominant shrubs and trees than 3a.

3d Undulating low hills and rises, small depositional flats, relief to 10m, slopes to 10%. Lithosols and shallow red massive earths (Rudosols/Red Kandosols). Enneapogon spp., Sida spp. and Ptilotus obovatus grassland under isolated Eucalyptus terminalis trees. Acacia aneura, Acacia kempeana stands occur along drainage lines and Melaleuca glomerata and/or Eucalyptus camaldulensis occur in watercourses.

LOW RISES

4a Undulating to gently undulating rises and small inter-rise erosional plains, slopes to 10%. Lithosols and shallow to moderately deep red massive earths (Rudosols/Red Kandosols). Acacia aneura, A. kempeana tall shrubland exists on rises. Eucalyptus terminalis, Hakea eyreana and mixed Acacia spp. Low open woodland occurs in the valleys with an Aristida contorta, Digitaria coenicola and Enteropogon sp. grass understorey.

4b Undulating rises, slopes 2-5%, well drained. Lithosols and areas of shallow red massive earths (Rudosols/Red Kandosols). Acacia kempeana with Cassia desolata open shrubland with isolated Eucalyptus terminalis and Hakea subarea trees over a Enneapogon spp. grassland understorey. Enteropogon sp. and Eulalia aurea grasses occur in water-courses.

4c Low rises, slopes 1-2%, excessively well drained. Lithosols (Rudosols). Surface pH values are usually high; 8.0. Triodia longiceps (bull spinifex) hummock grassland with scattered mallee.

PLAINS

6a Colluvial foots lopes and upper drainage flats, slopes 1-6%, well drained. Shallow to moderately deep red massive earths (Red Kandosols), earthy sands and alluvial soils (Kandosols), occasional lithosols (Rudosols). Acacia estrophiolata (ironwood) and/or Acacia aneura low open woodland or tall shrubland over understorey grasses of Enteropogon sp., Enneapogon sp., Aristida contorta and Aristida strigosa.

6b Erosional plains and basins, slopes to 3% but usually 0-2%. Duplex and gradational red massive earths (Chromosols). Variable communities. Enteropogon sp., Fimbristylis dichotoma, Enneapogon avenaceus sparse grassland; occasional Mariana aphylla sparse chenopod shrubland OR Eremophila sturtii low sparse shrubland. Low open woodland communities occur on watercourses.

ALLUVIAL PLAINS

6c Alluvial plains, slope < 1%, rapidly drained. Duplex and gradational red massive earths. (Chromosols). Atriplex nummularia low shrubland with Acacia victoriae and occasional Acacia estrophiolata with a grass understorey of Eragrostis dielsii and E. falcata in degraded areas and Aristida contorta, Enneapogon and Enteropogon spp. in less degraded zones.

6d Alluvial plains and levees. Slopes < 1%, medium to rapidly drained. Earthy sands and gradational red massive earths. (Kandosols). Acacia estrophiolata or Hakea eyreana open woodland with occasional thickets of Acacia victoriae. The grass understorey is dominated by Enteropogon sp., Enneapogon spp. and Aristida contorta, or in degraded areas by Aristida holathera.

DRAINAGE SYSTEMS

6e Stream channels subject to periodic water flow and associated small alluvial terraces. Creek bedload and alluvial soils. (Kandosols). Eucalyptus camaldulensis open woodland with Melaleuca spp. occuring in some areas with a Eulalia aurea and Enteropogon sp. grassland understorey.

Example of Land Unit Descriptions

Landform — Landform description — Soil description

LOW RISES

4c Low rises, slopes 1-2%, excessively well drained. Lithosols (Rudosols). Surface pH values are usually high; 8.0. Triodia longiceps (bull spinifex) hummock grassland with scattered mallee.

Land unit — Vegetation description

Note: Changes to property boundaries, Tenure and land uses have been made since the initial publication of the land resources report in 1982. Cadastre and topography information is current to September 2014.

Main Map Labels

HAMILTON DOWNS NT Por 4423
BOND SPRINGS NT Por 650
NORTHWEST STOCK ROUTE NT Por 4283
Colyer Creek
Flint Spring
TYURRETYE ABORIGINAL LAND TRUST NT Por 3472
TYURRETYE ABORIGINAL LAND TRUST NT Por 650
WEST MACDONNELL NATIONAL PARK NT Por 6625
Spring Gap / Hall Gap / Arrente Bluff / Bond Gap / Mulga Camp / Bungabinna / Hat Hill Saddle / Scorpion Pool
MACDONNELL RANGES
Simpsons Gap Ranger Station
Mt Gillen
ALICE SPRINGS DESERT PARK NT Por 8212
IWUPATAKA ABORIGINAL LAND TRUST NT Por 1691
NT Por 1748
ILPARPA SWAMP WILDLIFE PROTECTED AREA
NT Por 6811   NT Por 4087   NT Por 8093
Twetye (A) / Twetye (B) / Inbina Atwatye / Honeymoon Gap

Land resource information has been derived from aerial photograph interpretation and field data describing landform, soil and vegetation. Mapping has been collected according to the national standards and prepared at a scale of 1:50 000. Enlarging this map beyond this scale will not provide further detail.

A site inspection should always accompany mapping for specific areas.

BIBLIOGRAPHIC REFERENCE:

Wood B., Latz P. and Lucas S. (1982) *THE LAND RESOURCES OF SIMPSONS GAP NATIONAL PARK*
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3rd Edition. CSIRO Publishing, Melbourne

NORTHCOTE, K.H. (1979) *A Factual Key of the Recognition of Australian Soils.*
3rd Edition Rellim Technical Publications, Glenside, SA

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SOIL TYPES

- Chromosols
- Kandosols
- Rudosols
- Rudosols/Kandosols

WEST MACDONNELL NATIONAL PARK
Mulga Camp
Simpsons Gap
Larapinta Drive
Dam

VEGETATION CLASSES

- Open Woodland
- Shrubland
- Grassland
- Hummock Grassland
- Variable

WEST MACDONNELL NATIONAL PARK
Mulga Camp
Dam