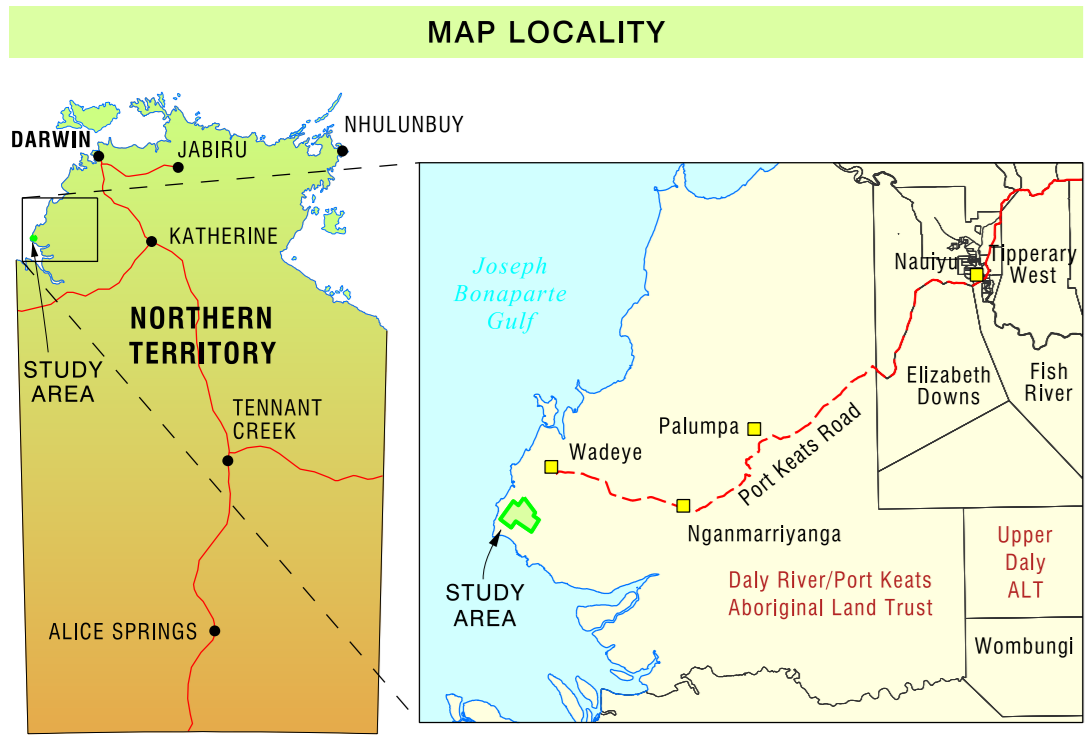


### LAND UNIT DESCRIPTIONS

PLAINS	PLAINS
<b>B1</b> Level to very gently undulating elevated plains: elevations 20-35 m above drainage lines: slopes <0.5% (occasionally 0.5-1.5% near weakly dissected margins); very deep (>1.5 m) soft or firm, sandy surfaced, massive red gradational earths (clay loam sandy subsoil) (Mesotrophic Red Kandosol), <i>Eucalyptus tetradonta</i> (Stringybark), <i>Eucalyptus miniata</i> (Woollybutt) mid woodland over occasional <i>Livistona humilis</i> (Sand Palms) and <i>Acacia</i> spp. (Wattle) over mid tussock or tussock grassland.	<b>B3</b> Gently undulating, weakly dissected sideslopes: elevations up to 20-35 m above drainage lines: slopes 0.5-2.0% (occasionally to 3.0%). Very deep (>1.5 m) soft or firm, sandy surfaced, massive red texture contrast soils (sandy clay loam to light clay subsoil) (Mesotrophic Red Chromosol), <i>Eucalyptus tetradonta</i> (Stringybark), <i>Eucalyptus miniata</i> (Woollybutt) mid woodland over occasional <i>Cycas macranchei</i> (Cycads), <i>Livistona humilis</i> (Sand Palms) and <i>Fernaria fendersoniana</i> (Kakadea Plum) over mid grassland.
<b>B2</b> Gently undulating, weakly dissected margins of the elevated plains that are transitional to adjacent sideslopes: elevations 20-35 m above drainage lines: slopes 1.0-2.0% (occasionally to 3.0%). Very deep (>1.5 m) firm or hardsetting, sandy surfaced, massive red gradational earths (clay loam sandy subsoil) (Mesotrophic Red Kandosol), <i>Eucalyptus tetradonta</i> (Stringybark), <i>Eucalyptus miniata</i> (Woollybutt) mid open forest over occasional <i>Livistona humilis</i> (Sand Palms) over low open formland.	<b>B11</b> Level to gently undulating lower footslopes: elevations 2-15 m above adjacent drainage lines: slopes <0.5-2.0%. Very deep (>1.5 m) soft or firm, sandy surfaced, strongly mottled, massive brown or yellow gradational earths (sandy clay loam to light clay subsoil) (Mesotrophic Brown or Yellow Kandosol), <i>Eucalyptus tetradonta</i> (Stringybark), <i>Eucalyptus miniata</i> (Woollybutt) + <i>r.</i> <i>Acacia lamprocarpa</i> (Acacia), <i>Erythronium chlorostachyus</i> (Ironwood) mid open woodland over <i>Lophostemon latifolius</i> (Red Paperbark) low open woodland over mid tussock grassland.
<b>B3</b> Gently undulating, weakly dissected sideslopes: elevations up to 20-35 m above drainage lines: slopes 0.5-1.5% (occasionally to 2.0%). Moderately deep to deep (0.7-1.5 m) soft or firm, bleached, gravelly, massive brown or yellow earthy sands (loamy sand to sandy loam subsoil); undulating in-situ ferricrete or petrocalcicrete (Petrocalcic Orthic or Yellow-Orthic Tenosol), <i>Eucalyptus miniata</i> (Woollybutt), <i>Eucalyptus tetradonta</i> (Stringybark) mid woodland with lower <i>Corymba parviflora</i> (Grey Bloodwood) over occasional <i>Livistona humilis</i> (Sand Palms), <i>Cycas macranchei</i> (Cycads) and <i>Acacia</i> spp. (Wattle) over mid grassland or formland.	<b>B22</b> Seasonally saturated, level to gently undulating lower footslopes: elevations 2-15 m above adjacent drainage lines: slopes <0.5-2.0%. Very deep (>1.5 m) firm or hardsetting, loamy surfaced, sporadically bleached, strongly mottled, massive to moderately structured, yellow gradational earths (sandy clay loam to light clay) (Dermosolic or Kandosolic Redoxic Hydrosol), <i>Lophostemon latifolius</i> (Red Paperbark), <i>Grevillea pteridifolia</i> (Fern-leaved Grevillea) low woodland with emergent mid high <i>Eucalyptus tetradonta</i> (Stringybark) over low sparse shrubland.
<b>B4</b> Gently undulating, weakly dissected sideslopes: elevations up to 20-35 m above drainage lines: slopes 0.5-2.0% (occasionally to 3.0%). Very deep (>1.5 m) soft or firm, massive red earthy sands (sandy loam subsoil) (Regolithic Red-Orthic Tenosol), <i>Eucalyptus tetradonta</i> (Stringybark), <i>Eucalyptus miniata</i> (Woollybutt) mid open woodland over occasional <i>Livistona humilis</i> (Sand Palms) and <i>Acacia</i> spp. (Wattle) over mid grassland.	<b>B11a</b> Permanently saturated, low-lying swamps and alluvial plains associated with local drainage systems: elevations 20-35 m below the elevated plains: slopes <0.5%, occasionally 0.5-2.0% near alluvial margins. Very deep (>1.5 m) soft or firm, organic, sandy surfaced, bleached, strongly mottled, weakly to moderately structured, grey or grey texture contrast soils (sandy clay loam to sandy light medium clay subsoil) (Chromosolic or Kurosolic Redoxic Hydrosol), <i>Melaleuca vitiflora</i> (Paperbark) mid open woodland over <i>Germania grandiflora</i> (Germania) mid closed tussock grassland.
<b>B5</b> Gently undulating, weakly dissected sideslopes: elevations up to 20-35 m above drainage lines: slopes 0.5-2.0% (occasionally to 3.0%). Very deep (>1.5 m) soft or firm, sandy surfaced, massive red gradational earths (sandy clay loam subsoil) (Regolithic Red-Orthic Tenosol), <i>Eucalyptus tetradonta</i> (Stringybark), <i>Eucalyptus miniata</i> (Woollybutt) mid woodland over occasional <i>Livistona humilis</i> (Sand Palms) and <i>Acacia</i> spp. (Wattle) or <i>Calytrix exstipitata</i> (Turkey Bush) over mid grassland or formland.	



### Mapping the Future Project - Wadeye

The project has identified land capability, water availability and biodiversity values to support land planning and inform development potential over the Wadeye area.

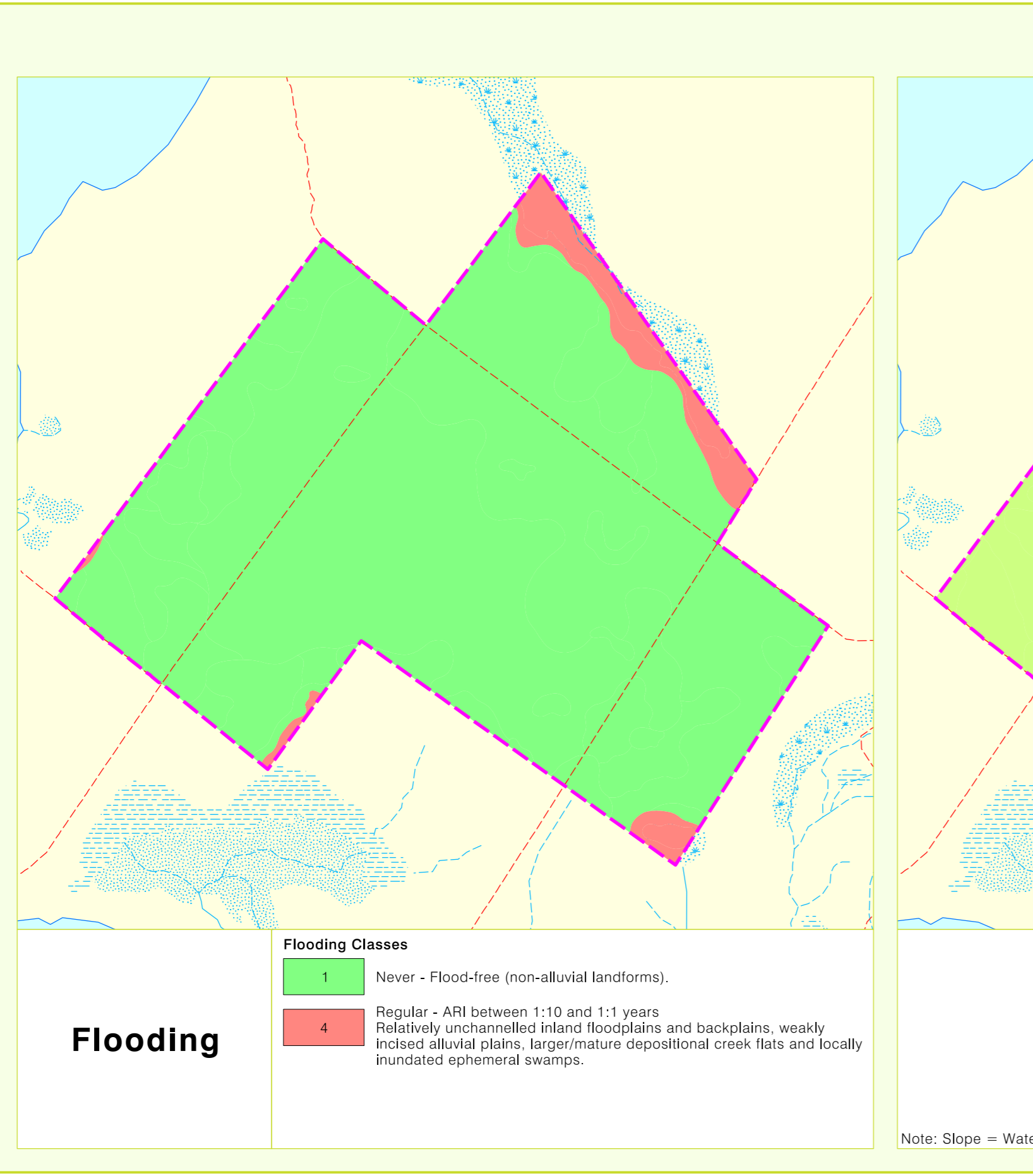
Reports and maps can be viewed from the development opportunities webpage:  
<https://depws.nt.gov.au/DevelopmentOpportunities>

Cruikshank, S. (2021). *Mapping the Future Project - Wadeye. Development Potential of the Wadeye Area.* Technical Report 14/2021. Department of Environment, Parks and Water Security, Darwin, NT.

Stokeld, D., Carl, N., Lalper, J., Lewis, D. and Cowie, I. (2021). *Mapping the Future Project - Wadeye. Biodiversity Assessment of the Wadeye Area.* Technical Report 15/2021. Department of Environment, Parks and Water Security, Darwin, NT.

Zaar, U. and Bruwer, C. (2020). *Wadeye Region Water Resources Investigation.* Technical Report 10/2017D. Department of Environment and Natural Resources, Palmerston, NT.

Burgess, J., McGrath, N., Andrews, K. and Wright, A. (2017). *Agricultural Land Suitability Series, Report 8. Soil and Land Suitability Assessment for Irrigated Agriculture in the Nangur Area, Daly River/Port Keats Aboriginal Land Trust.* Technical Report 16/2017D. Department of Environment and Natural Resources, Darwin, NT.



## Mapping the Future Project - Wadeye

# SOIL and LAND RESOURCES of the WADEYE AREA

For further information contact:  
 Department of Environment, Parks and Water Security  
 Mapping the Future Project  
<https://depws.nt.gov.au/DevelopmentOpportunities>

Rangitahua Division  
 Ph. (08) 8999 4999. Email: rangitahua@nt.gov.au  
 Level 3, Goyder Centre, 25 Chung Wah Terrace, Palmerston, Northern Territory of Australia.

**Bibliographic reference:**  
 Burgess, J., McGrath, N., Andrews, K. and Wright, A. (2017). *Soil and Land Suitability Assessment for Irrigated Agriculture in the Nangur Area, Daly River/Port Keats Aboriginal Land Trust.* Technical Report 16/2017D. Department of Environment and Natural Resources, Darwin, NT.

**Cartography by:**  
 Deborah Mullin  
 Geospatial Services  
 Department of Environment, Parks and Water Security  
 Northern Territory Government.

**Technical references:**  
 National Committee on Soil and Terrain (2009). *Australian Soil and Land Survey Field Handbook, Third Edition.* CSIRO Publishing, Melbourne, Victoria.  
 Isbell, R. F. and National Committee on Soil and Terrain (2016). *The Australian Soil Classification, Second Edition.* CSIRO Publishing, Clayton South, Victoria.

**Map Reference:**  
 Map\_MTFWadeye\_Land-Capability  
 Drawing No. DEPWS021034  
 May 2021

**GENERAL FEATURES**

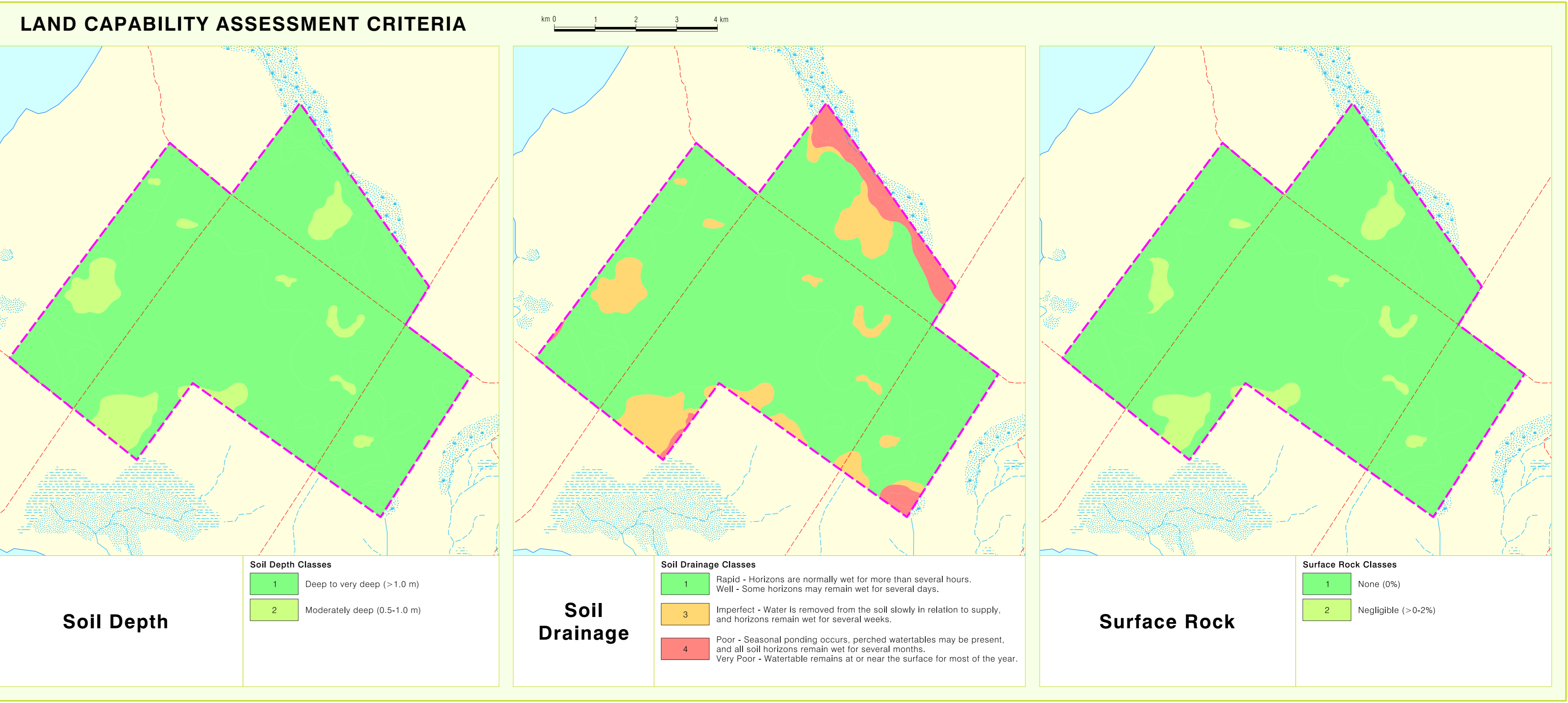
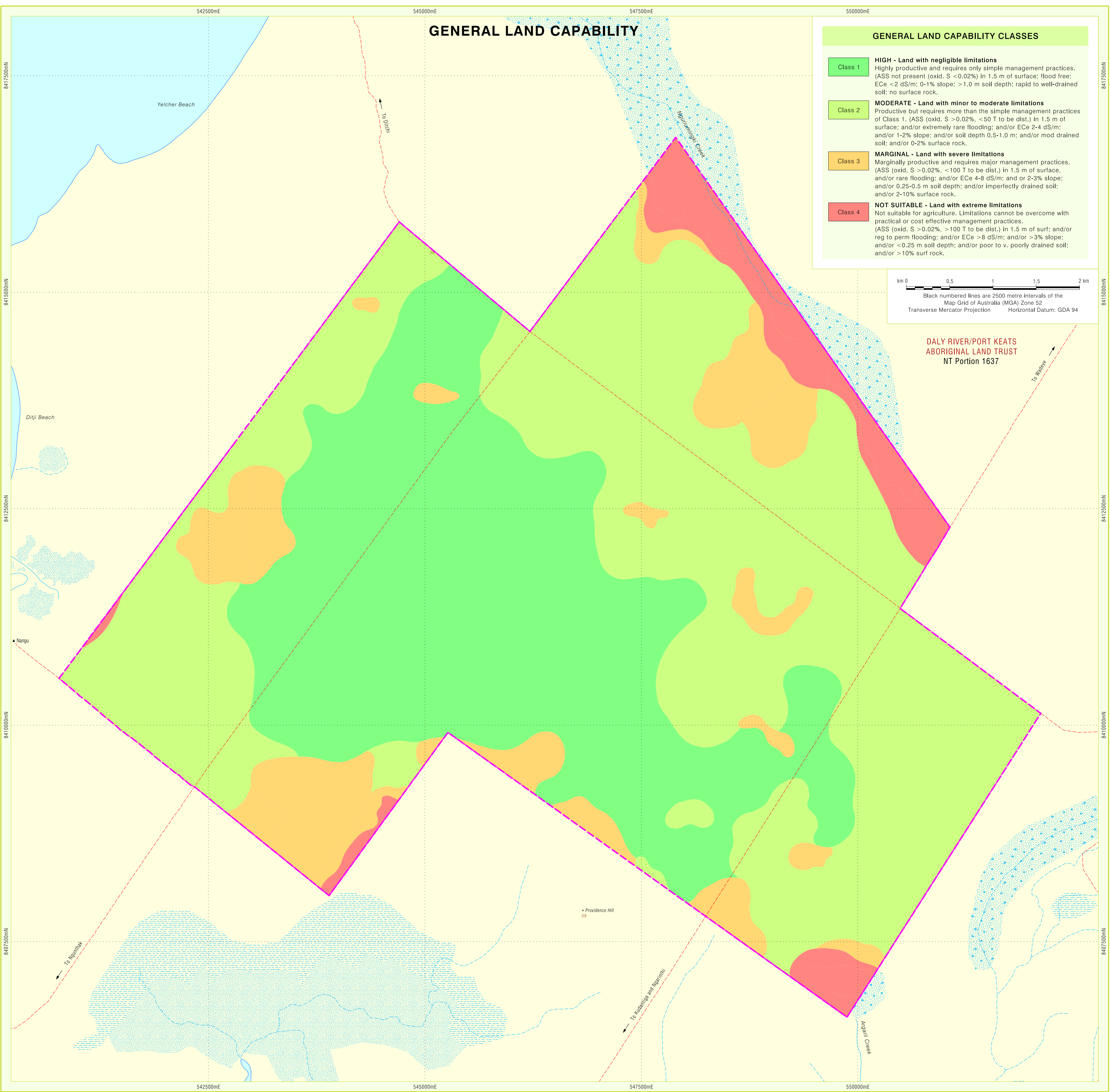
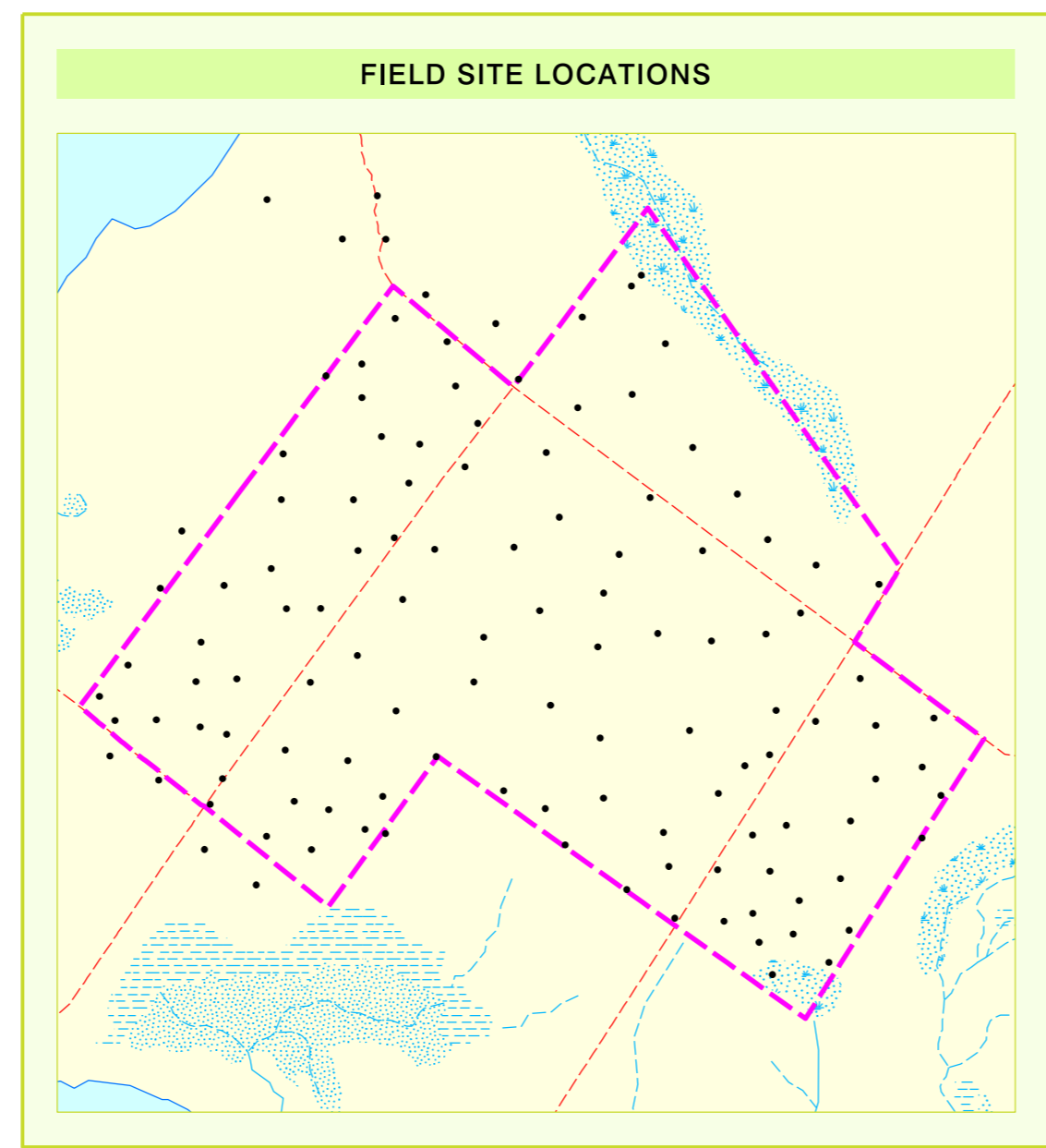
Nangur project area	Spot height (m AHD)	36
Terrestrial	Hydro: Coastline	
Marine	Hydro: Coastal Flat	
Major community	Hydro: Land subject to inundation	
Family outstation	Hydro: Swamp	
Road: minor sealed	Hydro: Drainage (perennial)	
Road: minor unsealed	Hydro: Drainage (non-perennial)	
Road: track	Hydro: Drainage (non-perennial)	
Named relief		

**General features data sources:**  
 Cadastre, roads, place names:  
 Department of Infrastructure, Planning and Logistics, Northern Territory Government.  
 Hydro features:  
 Australian Hydrological Geospatial Fabric (Geofabric) National V2.1.1  
 Commonwealth of Australia (Bureau of Meteorology) 2014.  
 Spot heights:  
 Geodata topo 250K, Series 3,  
 Commonwealth of Australia (Geoscience Australia) 2006.

**Important Notice:**  
 The Department of Environment, Parks and Water Security has made every reasonable effort to provide current and accurate information, but it does not make any guarantees regarding the accuracy, currency or completeness of the information.  
 This information is intended as a guide only. It does not constitute professional advice and should not be relied upon for legal, development, investment or other decisions. You should obtain professional advice relevant to your specific circumstances and needs.

This map was produced in the Geographic Datum of Australia 1984 (GDA 84)

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### GENERAL LAND CAPABILITY CLASSES

<b>Class 1</b>	<b>HIGH - Land with negligible limitations</b> Highly productive and requires only simple management practices. (ASS not present (oxid. S < 0.02%) in 1.5 m of surface; flood free; ECe < 2 dS/m; 0-1% slope; > 1.0 m soil depth; rapid to well-drained soil; no surface rock).
<b>Class 2</b>	<b>MODERATE - Land with minor to moderate limitations</b> Productive but requires more than the simple management practices of class 1. (ASS (oxid. S > 0.02%, < 0.1 to be det.) in 1.5 m of surface; and/or extremely rare flooding; and/or ECe 2-4 dS/m; and/or 1-2% slope; and/or soil depth 0.5-1.0 m; and/or mod drained soil; and/or 0-2% surface rock).
<b>Class 3</b>	<b>MARGINAL - Land with severe limitations</b> Marginally productive and requires major management practices. (ASS (oxid. S > 0.02%, < 100 T to be det.) in 1.5 m of surface; and/or rare flooding; and/or ECe 4-6 dS/m; and/or 2-3% slope; and/or 0.25-0.5 m soil depth; and/or imperfectly drained soil; and/or > 10% surface rock).
<b>Class 4</b>	<b>NOT SUITABLE - Land with extreme limitations</b> Not suitable for agriculture. Limitations cannot be overcome with practical or cost effective management practices. (ASS (oxid. S > 0.02%, < 100 T to be det.) in 1.5 m of surf; and/or reg to perm flooding; and/or ECe > 8 dS/m; and/or > 3% slope; and/or < 0.25 m soil depth; and/or poor to v. poorly drained soil; and/or > 10% surf rock).

Note: Slope = Water Erosion