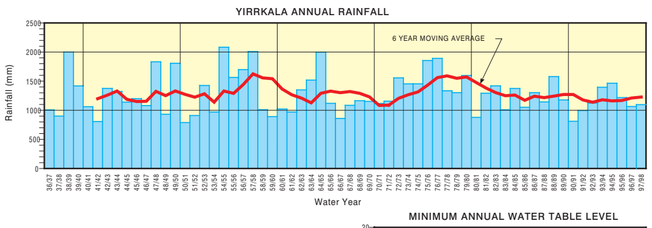
WATER RESOURCES OF EAST ARNHEM LAND

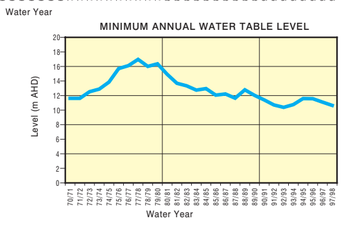
kilometres 0 2 4 6 8 10 20 30 40 kilometres

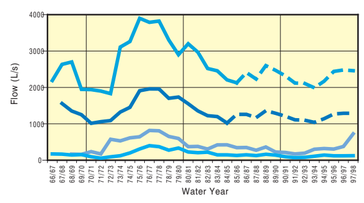
BLACK NUMBERED LINES ARE 10000 METRE INTERVALS OF THE AUSTRALIAN MAP GRID, ZONE 53
PROJECTION : UNIVERSAL TRANSVERSE MERCATOR
HORIZONTAL DATUM : AUSTRALIAN GEODETIC DATUM 1966

YIRRKALA ANNUAL RAINFALL



MINIMUM ANNUAL WATER TABLE LEVEL





Note:
- 66/67 means the water year September 1966 to August 1967.
- predicted values based on correlation with Yirrkala Creek and shown as broken line.

GROUNDWATER FEATURES:

- Groundwater boundary
- Bore
- Small spring, discharge up to 10 L/s

LOTS OF WATER/LARGE SUPPLY

Widespread aquifer of poorly consolidated sandstone in the north-east and south; limestone in the west and vuggy sandstone on Groote Eylandt.
Large quantities of groundwater exist, sufficient for irrigation and industrial purposes.
Bore yields typically more than 10 L/s with a maximum of 50 L/s.
High success rate expected. This aquifer provides the base flow for the major streams.

HOMELAND SUPPLY

Local aquifers in sand and fractured sandstone, siltstone, dolomite and volcanic rocks.
Stock and domestic quanities of groundwater are available at selected sites.
Bore yields typically range from 0.5 to 5.0 L/s. Moderate success rate expected.

SMALL HOMELAND SUPPLY

Narrow zones of high yielding sand aquifers occuring as valley infill in the north-east; thin, lateritised sandstone occurring across a dissected plateau, inthe north-west and hard sedimentary rocks and poorly consolidated sandstone in the south. Yields generally up to 0.5 L/s with moderate to low success rate expected. Occasional higher yields with careful bore site selection.

LITTLE CHANCE OF WATER

Small, isolated aquifers in weathered granite, cemented sandstone, volcanic rocks and sand layers within clay in the north-east and south. Bore yields up to 1.0 L/s. Small supplies with low success rate expected. In the north-west, muds and clays are underlain by a black shale with low to nil groundwater prospects.

Indicates saline groundwater, generally underlying saline coastal flats.

NOTE : Sand dunes may form a local aquifer.

SURFACE WATER FEATURES

- Surface water divide
- River with a flow of more than 100 L/s at the end of the Dry season
- River with a flow of between 10 and 100 L/s at the end of the Dry season
- River with permanent waterholes and flows up to 10 L/s at the end of the Dry season
- River which is dry at the end of the Dry season
- Lake, perennial
- Lake, intermittent
- Waterhole
- Swamp or marsh
- Mangrove
- Subject to inundation

GENERAL FEATURES

- Baratjala — Homeland name
- BARRAPARRWUY — Country name
- Baratjala — Place name
- Stream gauging station - open, closed
- GS 8260134 — Stream gauging station number
- Rainfall station - open, closed
- R 8260053 — Rainfall station number operated by Water Resources Division
- DR 014502 — Rainfall station number operated by Bureau of Meteorology
- Rainforest (may indicate groundwater discharge)
- Road
- Vehicle track
- Landing ground
- Landing ground - disused

ARAFURA SEA
BUCKINGHAM BAY
ARNHEM BAY
ULUNDURWI BAY
GULARRI GAPU
MONUK GAPU
CADELL STRAIGHT
BLUE MUD BAY
GULF OF CARPENTARIA

INDEX TO 1 : 250 000 MAP SHEETS

JUNCTION BAY SC5314 · WESSEL ISLANDS SC5315 · TRUANT ISLAND SC5316 · MILINGIMBI SD5302 · ARNHEM BAY SD5303 · GOVE SD5304 · MOUNT MARUMBA SD5306 · DRUMMOND SD5307 · PORT LANGDON SD5308 · URAPUNGA SD5310 · UPPER RIVER SD5311 · CAPE BEATRICE SD5312

MAP LOCALITY

WESTERN AUSTRALIA · NORTHERN TERRITORY · QUEENSLAND · SOUTH AUSTRALIA · NEW SOUTH WALES · VICTORIA · TASMANIA

Notes:

Yolŋu (Aboriginal people of east Arnhem Land) place names marked have been given with the permission of the traditional owners specifically for use on this map. If they are to be used elsewhere, it is necessary to gain approval from the traditional owners. The Northern Land Council can be contacted in this regard.

All Yolŋu place names relate to the people, their ancestors, and the country. The names on the map represent a small percentage of known place names.

Considerable time and care has been taken to locate and spell Yolŋu place names. Consultations have been broad but discrepancies may occur. If there any concerns please contact the Natural Resources Division of the Department of Lands, Planning and Environment.

Yolŋu place names have been written in Yolŋu orthography which is phonetic. Pronunciation is as follows:
ŋ - pronounce like the 'ng' in sing.
a - (long) like 'a' in father.
d, t, l, n - point the tip of the tongue backwards towards the roof of the mouth.

Map compiled by G. Prowse, U. Zaar, S. Tickell and I. Matthews.

Project co-ordination by P. Jolly.

Cartography by L. J. Fritz, Resource Assessment Mapping Unit, using Microstation graphic applications.

Microstation Design File: East_Arnhem_Wrs_500k_m53

Plot File: East_Arnhem_Wrs_500k

Geology modified from maps of the Northern Territory Geological Survey, Department of Mines and Energy, and the Australian Geological Survey Organisation, Canberra, Australian Capitol Territory.

AUSLIG TOPO-250K data supplied through the Land Information Division, Department of Lands, Planning and Environment, Northern Territory

Published and available from:
Natural Resources Division
Department of Lands, Planning and Environment
Goyder Centre
25 Chung Wah Terrace, Palmerston
Northern Territory, July 1999

NATURAL RESOURCES · LANDS PLANNING ENVIRONMENT Northern Territory Government · NATIONAL LANDCARE PROGRAM · ATSIC · Northern Land Council · LAYNHAPUY HOMELANDS ASSOCIATION · NUMBULWAR HOMELANDS COUNCIL ASSOC. INCORP.

NGADUNGGAY HOMELAND RESOURCE CENTRE ABORIGINAL CORPORATION · MILINGIMBI HOMELANDS & OUTSTATIONS RESOURCE CENTRE · MARTHAKAL HOMELAND RESOURCE CENTRE · RAMINGINING HOMELANDS RESOURCE CENTRE · GUMATJ ASSOCIATION INCORPORATED · GULIN GULIN ABORIGINAL RESOURCE ASSOCIATION INC