GROUNDWATER FEATURES: Djinaga'puy gapupuy

LOTS OF WATER / LARGE SUPPLY (YIELD): dhaŋaŋ gapu
Widespread aquifer of sandstone and limestone rocks (southwest sector of map). Large quantities of groundwater are available, sufficent for irrigation and domestic purposes. Bore yields typically more than 10 L/s (maximum 50 L/s). High success rate expected. This aquifer provides the base flow for the major rivers.

HOMELAND SUPPLY: gapu märr dhaŋaŋ homelandgu
Local aquifers in fractured sandstone, siltstone, dolomite and volcanic rocks. Stock and domestic quantities 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: gapu märr lurrkun' homelandgu
Narrow zones of thin laterised sandstone occurring across dissected plateau. The areas are underlain by impervious shale and provide the storage of groundwater for the escarpment rainforest vegetation. Low yields to 0.5 L/s are possible at selected locations.

LITTLE CHANCE OF WATER: märr ranhdhak wäŋa
Areas of muds and clays underlain by a thick sequence of black shale. Extremely low to nil prospects are to be expected. The Arafura wetlands are linked to this zone.

gapu dhäkay-murrkthuna
Indicates saline groundwater, generally underlying saline coastal flats.

NOTE : Sand dunes may form a local aquifer.

- Groundwater boundary (main map)
- Geological boundary (cross-section only)
- Geological boundary, inferred (cross-section only)
- Bore (main map)
- RN 25411 — Bore with registered number (cross-section only)
- gapu maŋutji — Small spring, discharge up to 10 L/s
- gapu djïnaga'puy wäŋapuy — Watertable (cross-section only)
- A — B — Line of cross-section

SURFACE WATER FEATURES: Warraŋulpuy gapu

- dhipuŋur lïneŋur ŋuli ga gapu yarrgupthun — Surface water divide
- yindi mayaŋ dhungarra-ŋupan — River with a flow of more than 100 L/s at the end of the Dry season
- mayaŋ ŋuli ga baḏak waggïrr rarranhdharryu yurr gaŋgan — River with a flow of between 10 and 100 L/s at the end of the Dry season
- mayaŋ, yurr gapu ŋuli ga rarranhdharryu dhärra guḻu'guḻunna — River with permanent waterholes and flows of up to 10 L/s at the end of the Dry season
- mayaŋ ŋuli ga baggïnydhïrr rarranhdharryu — River which is dry at the end of the Dry season
- guḻun gapu — Lake, perennial
- guḻun gapu ŋuli ga baḏga'paggïnydhïrr — Lake, intermittent
- maŋutji gapu — Waterhole
- gurrwiliny (dhulgumirr/raŋanmirr) gapu — Swamp or marsh
- gathul' — Mangrove
- wäŋa ŋuli ga luputhun yindly gapuy — Subject to inundation

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

Project co-ordination by P. Jolly.

Cartography by L. J. Fritz, Resource Assessment Mapping Unit, using Microstation graphic applications. Design File: Arn_sector2.dgn.

Translation into Dhuwal and spelling assisted by M. Christie, W. Gaykamangu and M.Y. Guyula from FATSIS, Northern Territory University.

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.

GENERAL FEATURES

- Baratjala — yirralka wäŋa yäku — Homeland name
- BARRAPARRWUY — wäŋa yäku ḏumurru'ŋu — Country name
- Baratjala — wäŋa yäku — Place name
- gapu ŋuli ga djaka'-ŋupan mayaŋbuy ŋal'yunawuy — Stream gauging station - open, closed
- GS 8260134 — Stream gauging station number
- waltjaŋbuy ŋuli ga gapu bothurru — Rainfall station - open, closed
- R 8260053 — Rainfall station number operated by Water Resources Division
- DR 014502 — Rainfall station number operated by Bureau of Meteorology
- retja — Rainforest (may indicate groundwater discharge)
- yindi dhukarr — Road
- dhukarr märr nyumukuginy — Vehicle track
- gundarak — Landing ground
- Landing ground - disused

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

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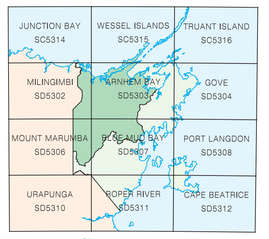
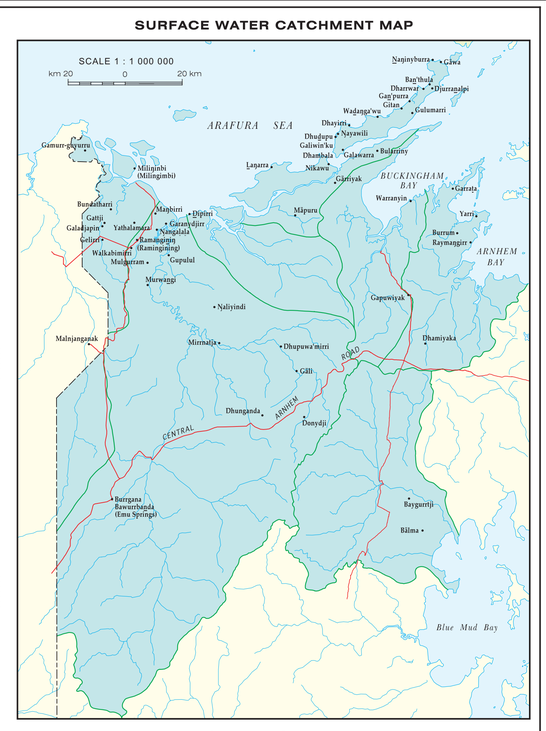
Department of Lands, Planning and Environment
Goyder Centre
25 Chung Wah Terrace, Palmerston
Northern Territory, March 1999

MAP LOCALITY

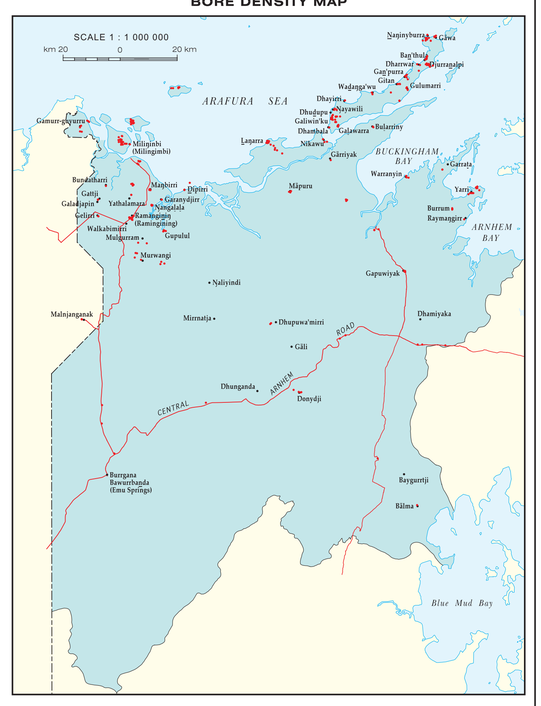
INDEX TO 1 : 250 000 MAP SHEETS



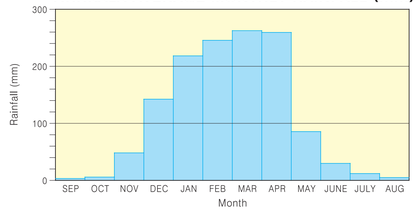
SURFACE WATER CATCHMENT MAP



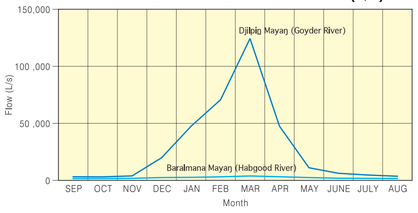
BORE DENSITY MAP



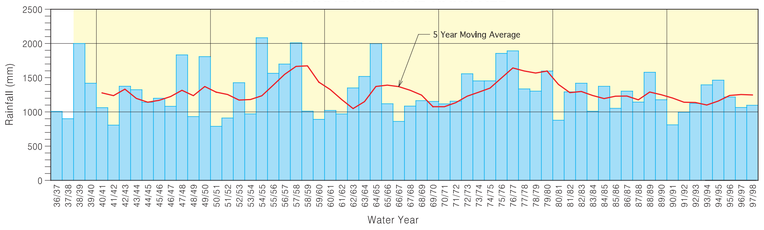
YIRRKALA AVERAGE MONTHLY RAINFALL (mm)



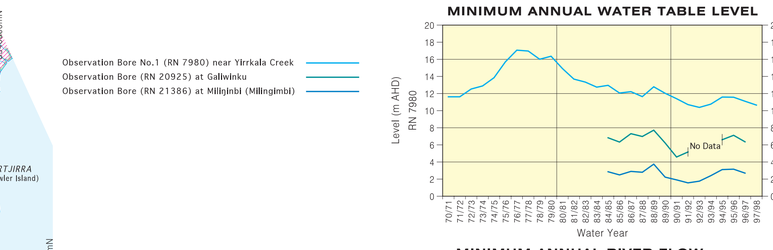
AVERAGE MONTHLY RIVER FLOW (L/s)



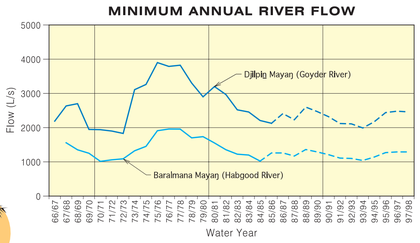
YIRRKALA ANNUAL RAINFALL



MINIMUM ANNUAL WATER TABLE LEVEL

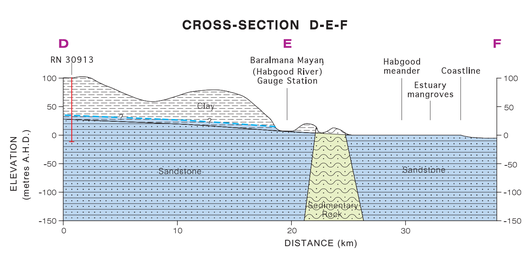


MINIMUM ANNUAL RIVER FLOW

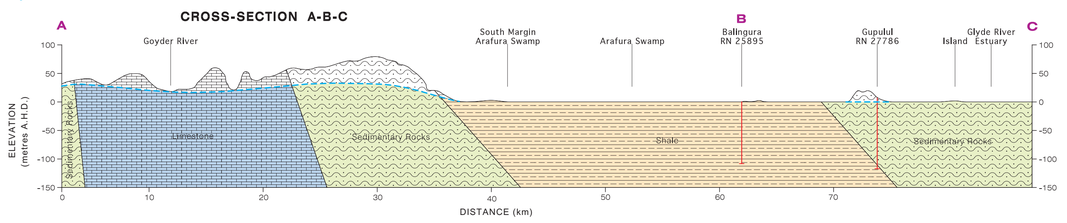


Note:
- Water flows recorded from gauging stations.
- 65/66 means the water year September 1965 to August 1966.
- predicted values based on correlation with Yirrkala 5 year moving average rainfall and shown as broken line.

CROSS-SECTION D-E-F



CROSS-SECTION A-B-C



HORIZONTAL SCALE 1 : 250 000
km 5 0 5 km

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. Pronunication is as follows;
- ŋ - pronounce like the 'ng' in sing.
- ä - (long) like 'a' in father.
- ḏ, ṯ, ḷ, ṉ - point the tip of the tounge backwards towards the roof of the mouth.

NGADUNGGAY HOMELAND RESOURCE CENTRE ABORIGINAL CORPORATION

MARTHAKAL HOMELAND RESOURCE CENTRE

RAMINGINING HOMELANDS RESOURCE CENTRE

NATIONAL LANDCARE PROGRAM

GULIN GULIN ABORIGINAL RESOURCE ASSOCIATION INC

ATSIC ABORIGINAL AND TORRES STRAIT ISLANDER COMMISSION

Northern Land Council

NATURAL RESOURCES LANDS PLANNING ENVIRONMENT Northern Territory Government

MILINGIMBI HOMELANDS & OUTSTATIONS RESOURCE CENTRE

SCALE 1 : 250 000
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

WATER RESOURCES OF EAST CENTRAL ARNHEM LAND