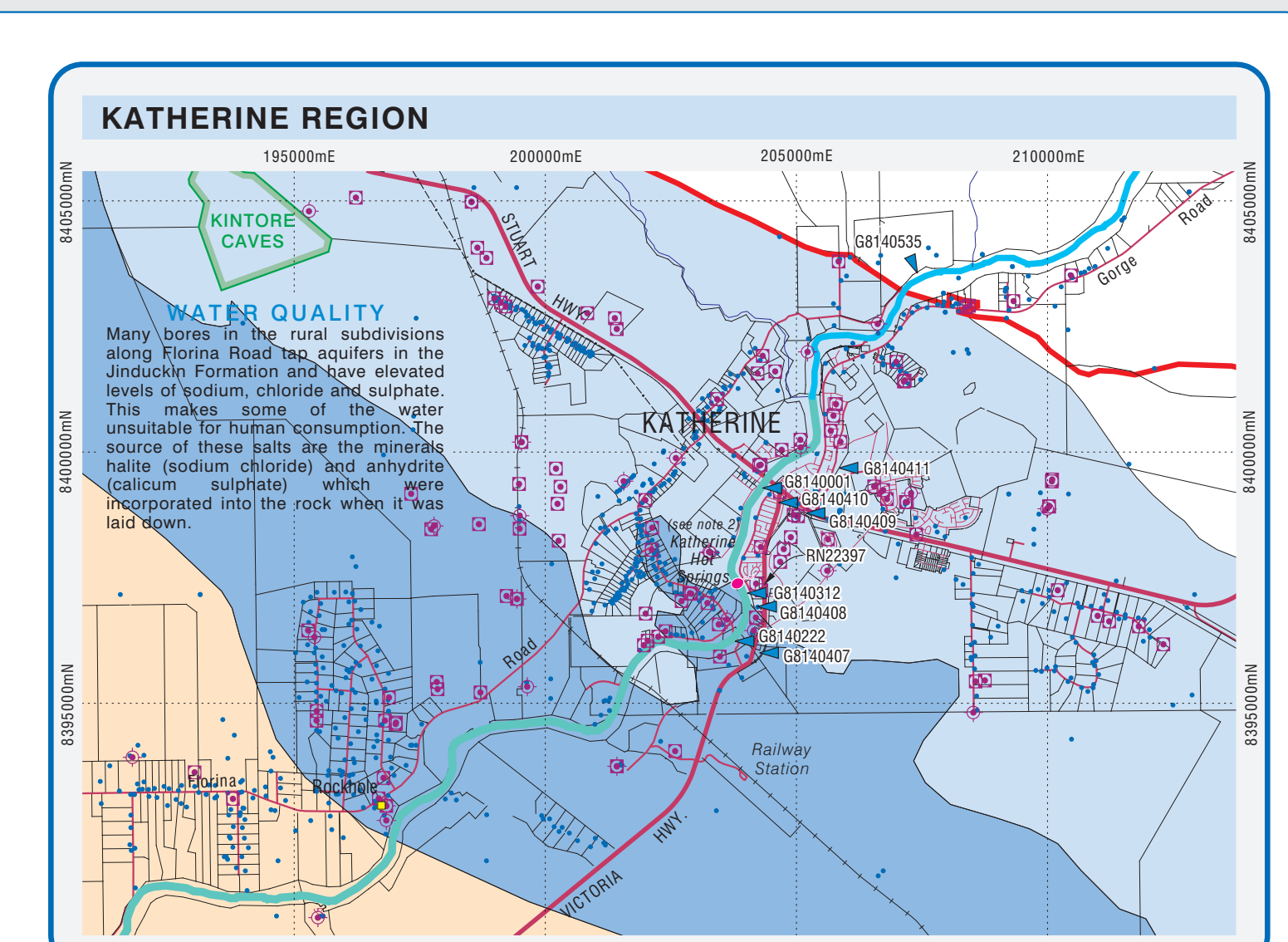


Prepared and Produced
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Revisions and updates have been made since the initial publication of this map in May 2007.

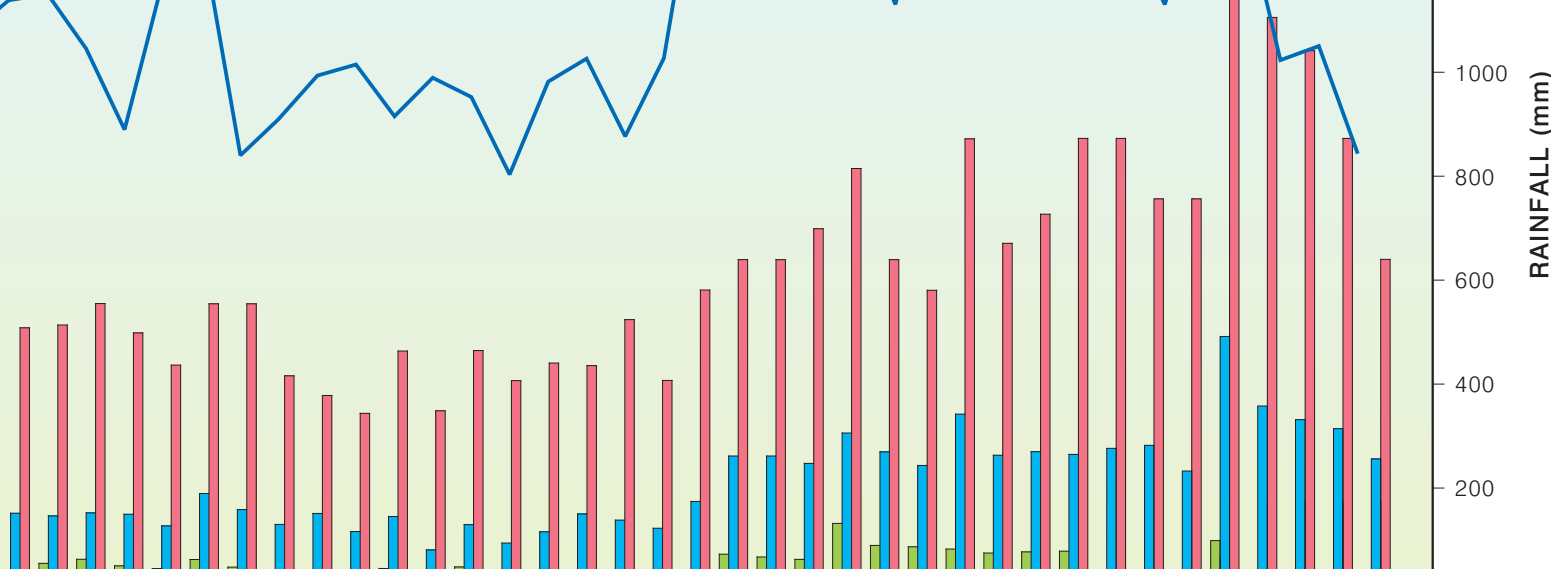


WATER QUALITY

Many boreholes in the rural subdivisions along Florina Road have aquifers in the Jinduckin Formation and have elevated levels of sodium, chloride and sulphate. This makes some of this water unsuitable for human consumption. The source of these salts are the igneous halite (sodium chloride) and anhydrite (calcium sulphate) which were incorporated into the rock when it was laid down.

NOTES:

- DOUGLAS HOT SPRINGS** - This spring issues from a sandstone aquifer that underlies the Daly Basin and is brought to the surface by faulting. The recharge area is some 15km to the north east where the sandstone outcrops. The high temperature of the spring water (50°C) suggests that it comes from a greater depth than other springs in the basin. It also has a low hardness and low Total Dissolved Solids content indicating that the aquifer does not contain limestone.
- KATHERINE HOT SPRINGS** - On a Dry season morning when the air temperature can drop to 15°C or less, the spring water at 32°C feels hot and steam can rise from the water. It is not a true thermal spring however, as the ambient temperature of shallow groundwater throughout the region is also about 32°C. Other springs in the basin range between 32°C to 35°C.
- BITTER SPRINGS** - The slightly bitter taste of these waters is due to a higher than normal content of salts of sulphate. The oxygen poor environment beneath the surrounding swamp converts some of the sulphate to hydrogen sulphide (rotten egg gas) which can often be smelt in the spring area.



END of DRY SEASON FLOWS
The lowest river flow recorded each year occurs just before the first substantial rains of the wet season, typically in October or November. At that time all of the water is sourced from groundwater, via springs and seepage into the river bed. This graph shows how flows progressively increase as the river passes across the Daly Basin. It also shows that the flows are directly related to rainfall and that flows over the past 30 years are probably higher than the long term average.

GENERAL FEATURES

Property Boundary	Highway
Park or Reserve	Major road
FLORINA Pastoral Station name	Minor Road - Sealed
Katherine Major Town	Minor Road - Unsealed
Pine Creek Minor Town	Track
Hayes Creek Roadhouse	Railway
Dorisvale Station Homestead	Gas Pipeline
Nalyulu Major Aboriginal Community	Poweline
Bigal Minor Aboriginal Community	Mt Zwen
Sungary Family Outstation	Mountain

WATER RESOURCES FEATURES

DALY Surfacewater Catchment - Name / Boundary	Line of Cross-section
Water Bore	Dry
Licensed Water Bore (as of 2011)	Up to 0.01 cumecs
Water Level Monitoring Bore	0.01 to 0.1 cumecs
Spring	0.1 to 1.0 cumecs
Stream gauging station	1.0 to 10.0 cumecs

Note: 1 cumec = 1000 litres/second

AQUIFERS

Sedimentary Basin Boundary	JINDUCKIN FORMATION
Minor porous sand aquifers that mostly unsaturated. Sand and clay. Recharge to the underlying Daly Basin is restricted where clay is dominant.	Fractured rock local aquifers, yields up to 5 L/s. Minor interbedded limestone. Fractured and cavernous aquifers, yields up to 20 L/s. Moderate to low success rate.
FLORINA FORMATION	TINDALL LIMESTONE
Fractured rock local aquifers, yields to 20 L/s. Moderate success rate. Limestones locally cavernous. Limestone and gneissic sandstone.	Fractured and cavernous aquifer, yields up to 50 L/s. Moderate to high success rate. The aquifer is largely unconfined in this zone.
OOLLOO DOLOSTONE	
Major widespread cavernous aquifer. Yields to 100 L/s. Moderate to high success rate. Dolostone.	

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Internet: www.lrm.nt.gov.au/mrmapst Map Reference: Daly-Basin-Aquifers