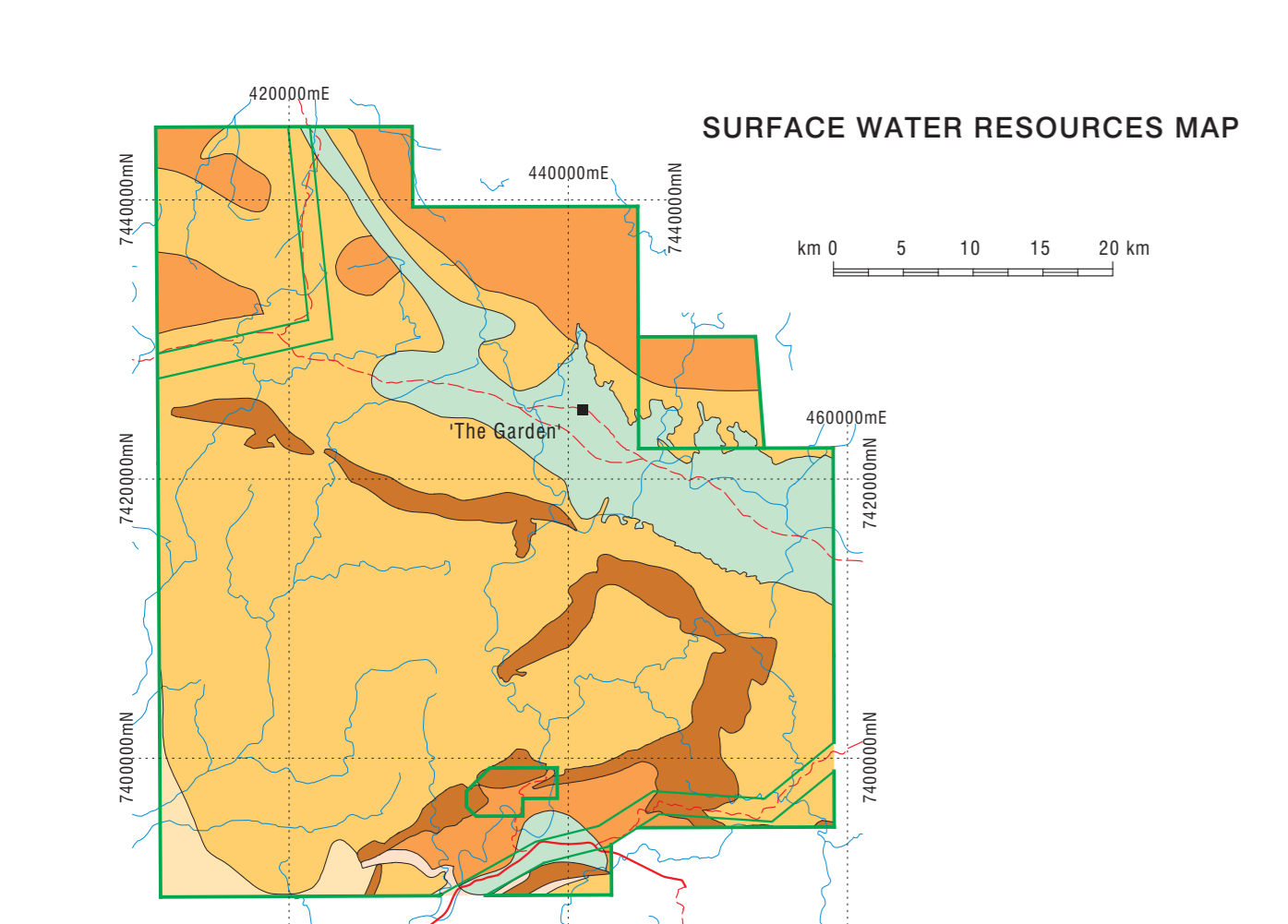
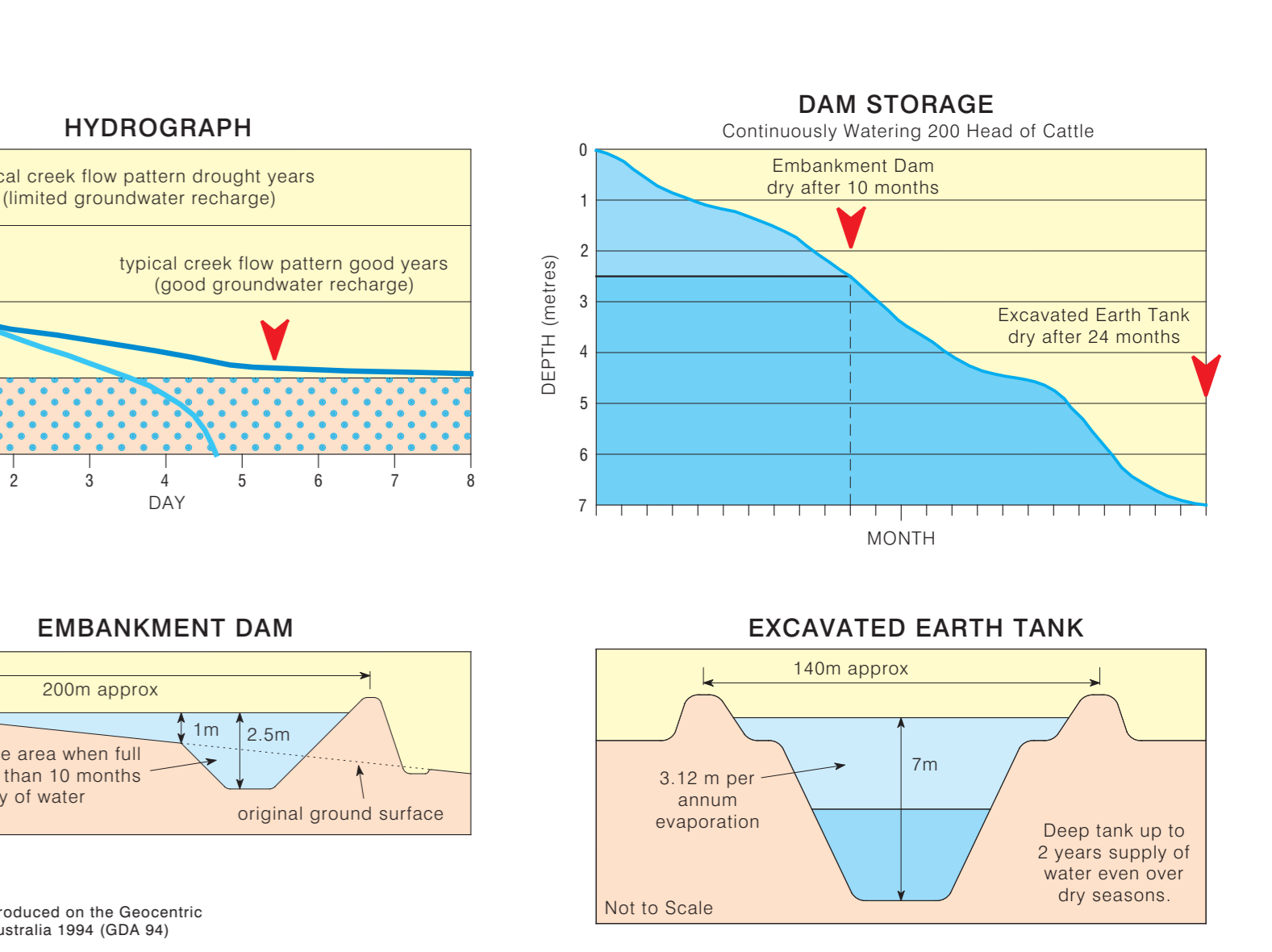
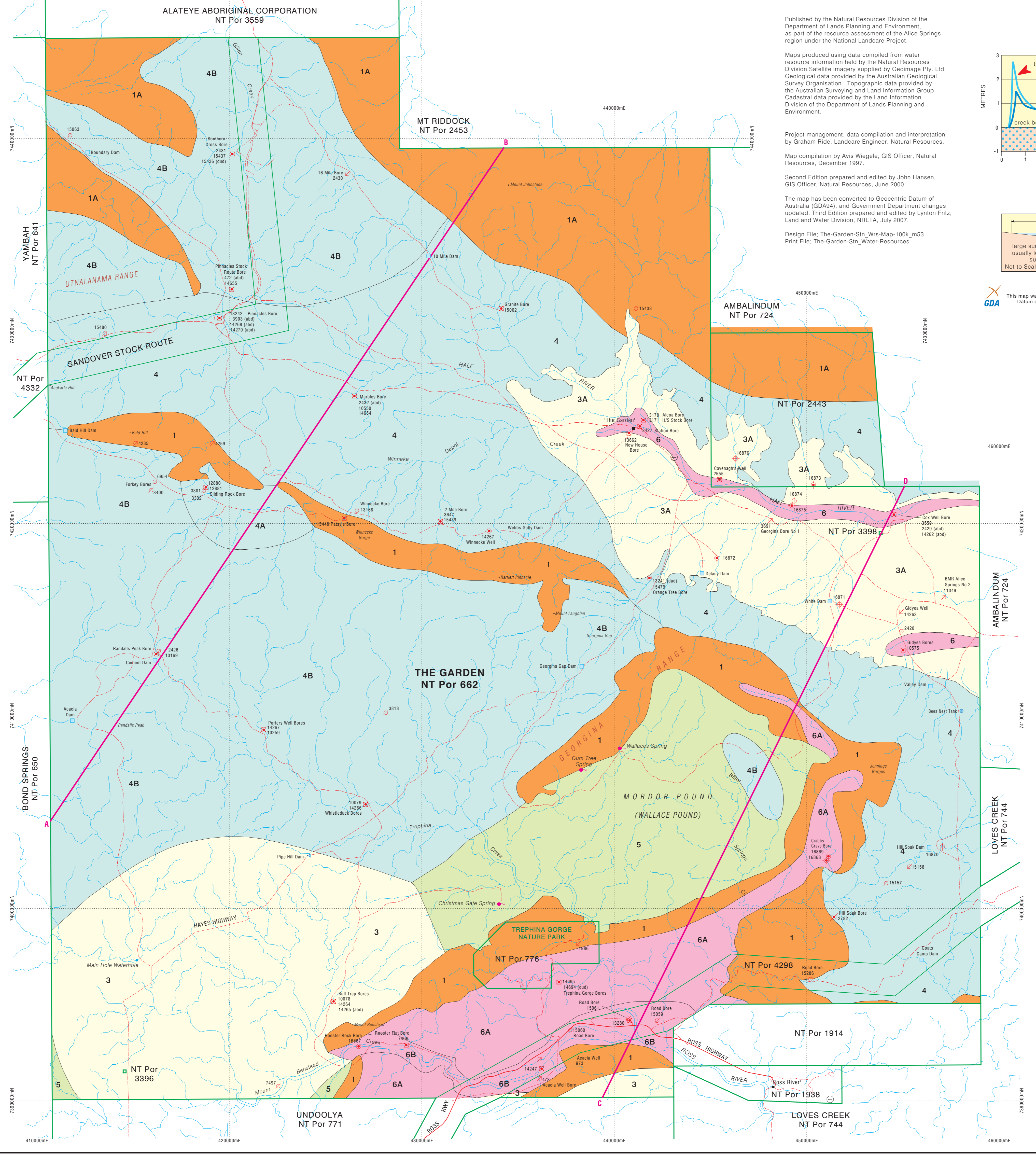


- POROUS AND FRACTURED ROCKS - WIDESPREAD AQUIFERS**
- Good to fair quality water, brackish & saline at depth & at a distance from recharge zones. Yield >5.0 L/s, much higher yields available in many locations. Bitter Springs Formation: limestone, dolomite
 - Brackish quality water. Yield <0.5 L/s.
- FRACTURED AND WEATHERED ROCKS - LOCAL AQUIFERS**
- Good to fair quality water. Yield 2.5 to 5.0 L/s.
 - Good to saline quality water. Yield >0.5 to 1.0 L/s, but difficult to locate open fractures which are also recharged. Arunta Complex Basement Rock: gneiss, granite.
 - Fair to saline quality water. Yield <0.5 L/s.
- ALLUVIAL AQUIFERS - LOCAL AQUIFERS**
- Good to fair quality water. Yield 5.0 to 10.0 L/s, in some locations higher. Sand, gravel & underlying aquifers. Benstead Creek.
 - Good to fair quality water. Yield 2.5 to 5.0 L/s.
 - Shallow alluvial aquifers of sand, gravel & sandy clay.
 - Fair to brackish quality water. Yield generally <0.5 L/s. Sand & sandy clay aquifers.
- NO AQUIFERS**
- Heavytree Quartzite Formation. Some rockholes and springs. Yield 0.0 to 0.1 L/s.
- Geological Boundary
Water table
Line of cross-section. Note: Also see main map for line of cross-section



DESCRIPTION

- High quartzite, sandstone and dolomite ranges and rocky ridge country of the MacDonnell Ranges, up to 430 metres above the plains; surface runoff high. Generally unsuitable for surface storage development, some opportunities on adjacent valley floors where there is a good depth of soil and weathered rock.
- Rugged ridges and hills up to 300 metres above the plains; surface runoff moderate to high. Surface water development generally unsuitable. Hillside dams suitable in locations where there is a good depth of soil and weathered rock, leakage can be a problem.
- Rocky hill country up to 100 metres above valley floors; extensive outcrop of basement rock on both hills and valley floors. Runoff moderate to high. Excavated earth tanks can be constructed where there is sufficient soil and decomposed rock. The best sites are where a minimum of 7 metres below surface level is available.
- Rugged terrain, hills up to 40 metres with narrow plains and valleys.
- Valleys between ridges and hills or undulating plains, generally shallow bedrock. Surface water developments unsuitable due to shallow soils or potential leakage problems.
- Alluvial plains including the Hale River Plain and the Hale River Valley. Surface runoff moderate, soils are not ideal for surface storages and in some areas quite poor. Excavated earth tanks can be constructed where there is sufficient runoff and a good depth of soil/weathered rock exists but generally require more maintenance than normal.



LEGEND

- Development boundary
- Development option number
- Equipped bore abandoned
- Cased bore
- Monitoring bore
- Investigation bore
- Exploration bore
- Abandoned bore
- Registered number of bore/well
- Name of bore/well
- Excavated earth tank
- Stock watering tank
- Earth embankment dam
- Name of tank/dam
- Pipeline
- Ephemeral watercourse
- Waterhole/spring
- Major road - sealed
- Major road - unsealed
- Minor road - sealed
- Minor road - unsealed
- Track
- Paddock name
- Paddock number
- Building
- Landing ground
- Fence
- Spot elevation - m A.H.D.
- Cadastral boundary

WATER RESOURCES DEVELOPMENT OPTIONS

PREFERRED OPTION	DESCRIPTION
1	Unsuitable (bores or dams)
1A	Generally unsuitable for dam or bore construction
2	Pumping from remote bores or dams
3	Pumping from remote bores supplemented by surface water (dams)
3A	Pumping from remote bores supplemented by surface water (dams)
4	Surface water (dams) supplemented with pumping from remote bores and seasonal bores
4A	Surface water (dams) supplemented with pumping from remote bores and seasonal bores
4B	Surface water (dams) supplemented with seasonal groundwater (bores)
5	Surface water (dams)
6	Groundwater (bores)
6A	Groundwater (bores)
6B	Groundwater (bores)

For further information contact:
Water Resources,
Department of Natural Resources, Environment and the Arts,
Ph. (08) 8951 9215, Fax. (08) 8951 9268,
Alice Springs Plaza 1, Todd Mall,
Alice Springs, Northern Territory of Australia.

NATIONAL LANDSCAPE PROGRAM

XJT The Gardens Station

Northern Territory Government
Department of Natural Resources, Environment and the Arts