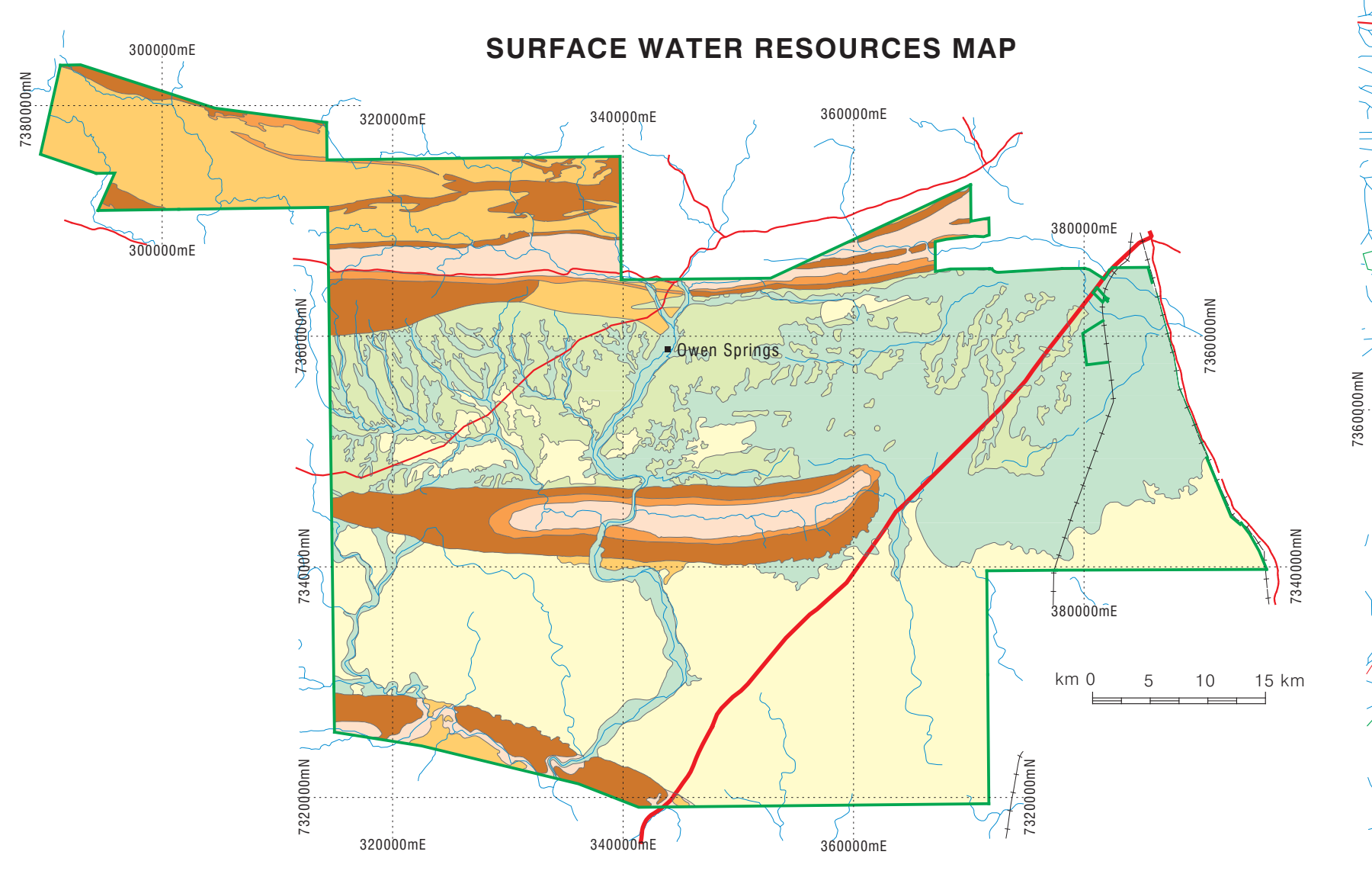
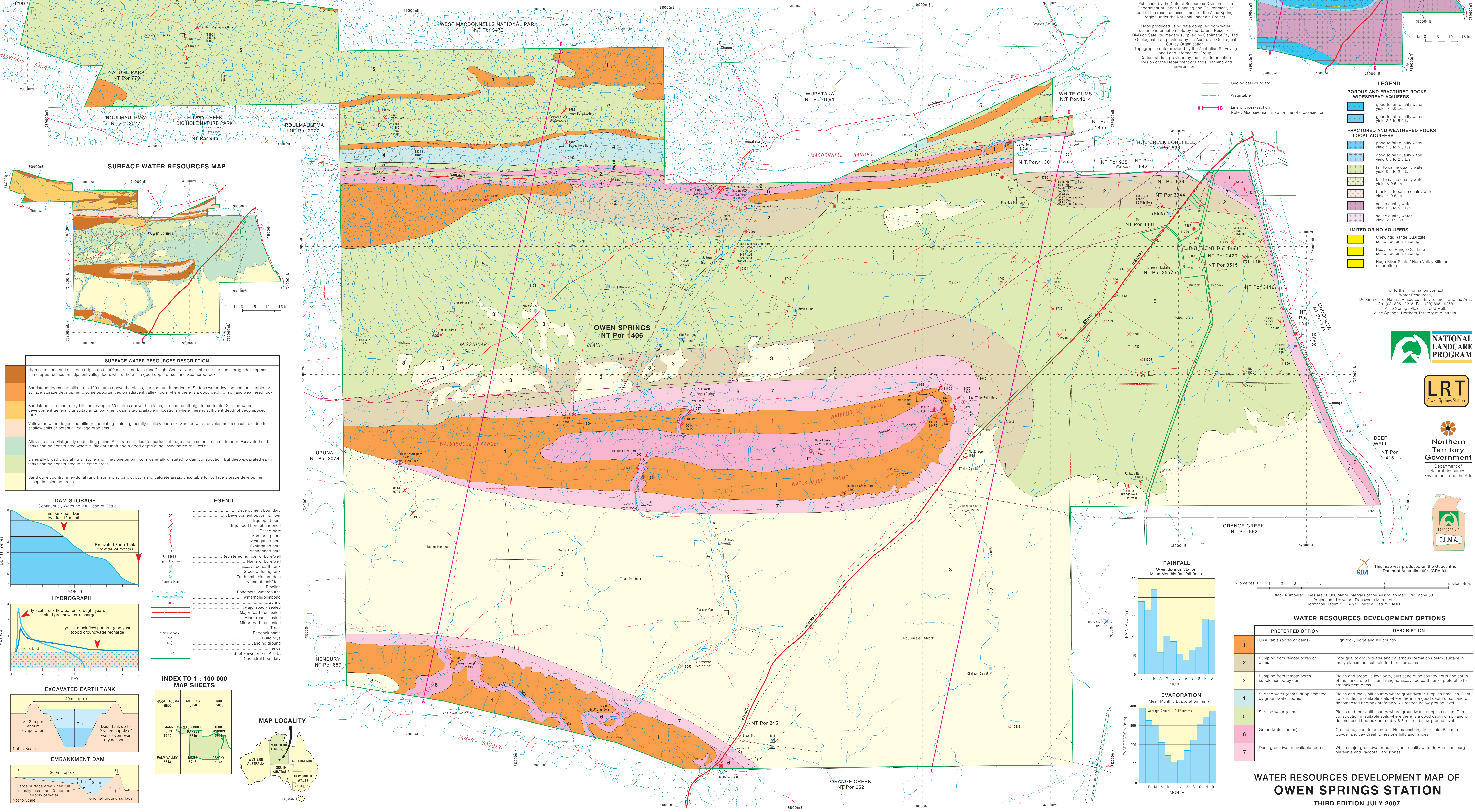
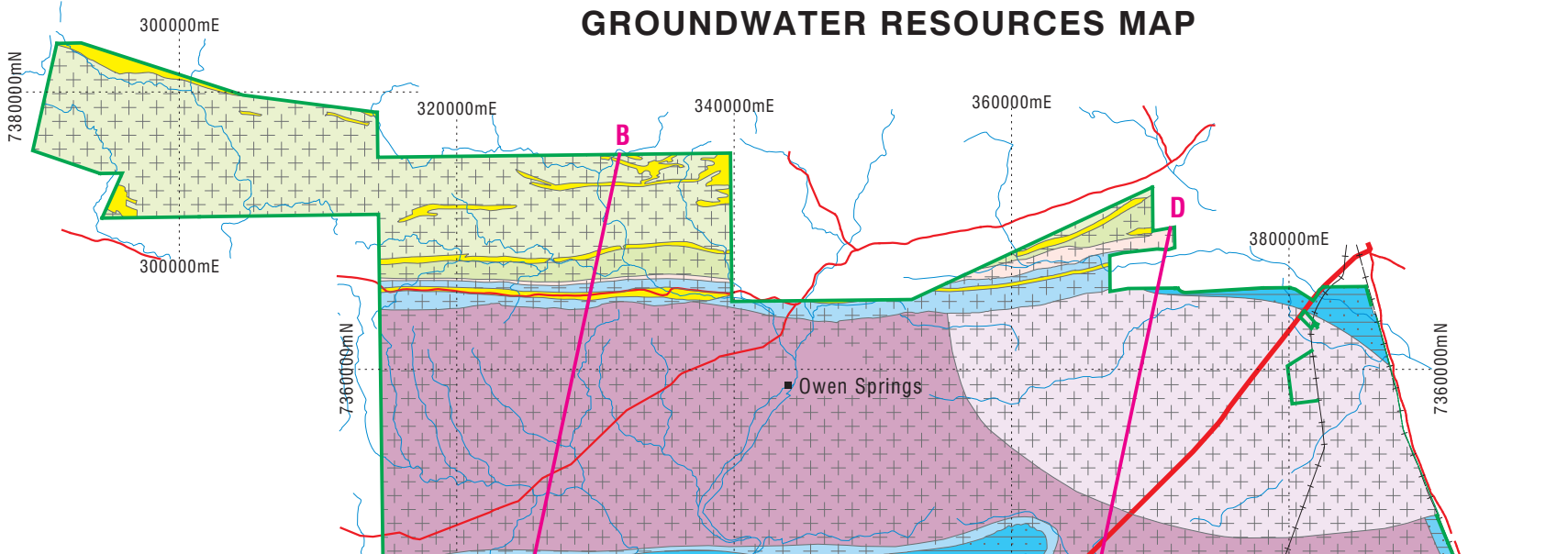
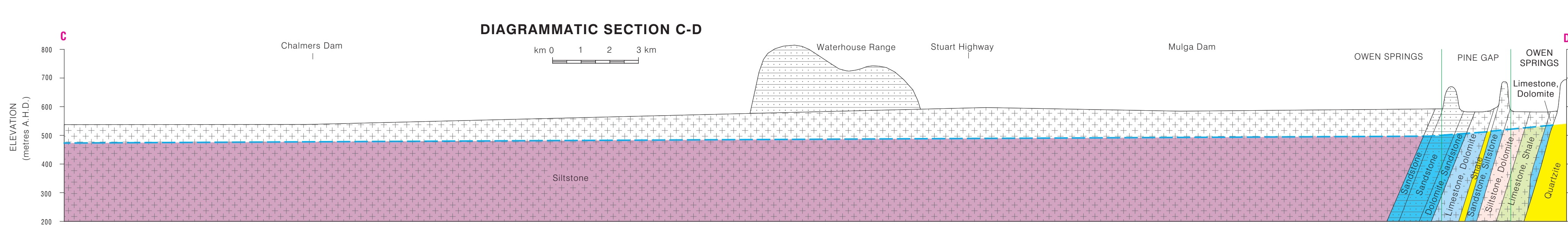
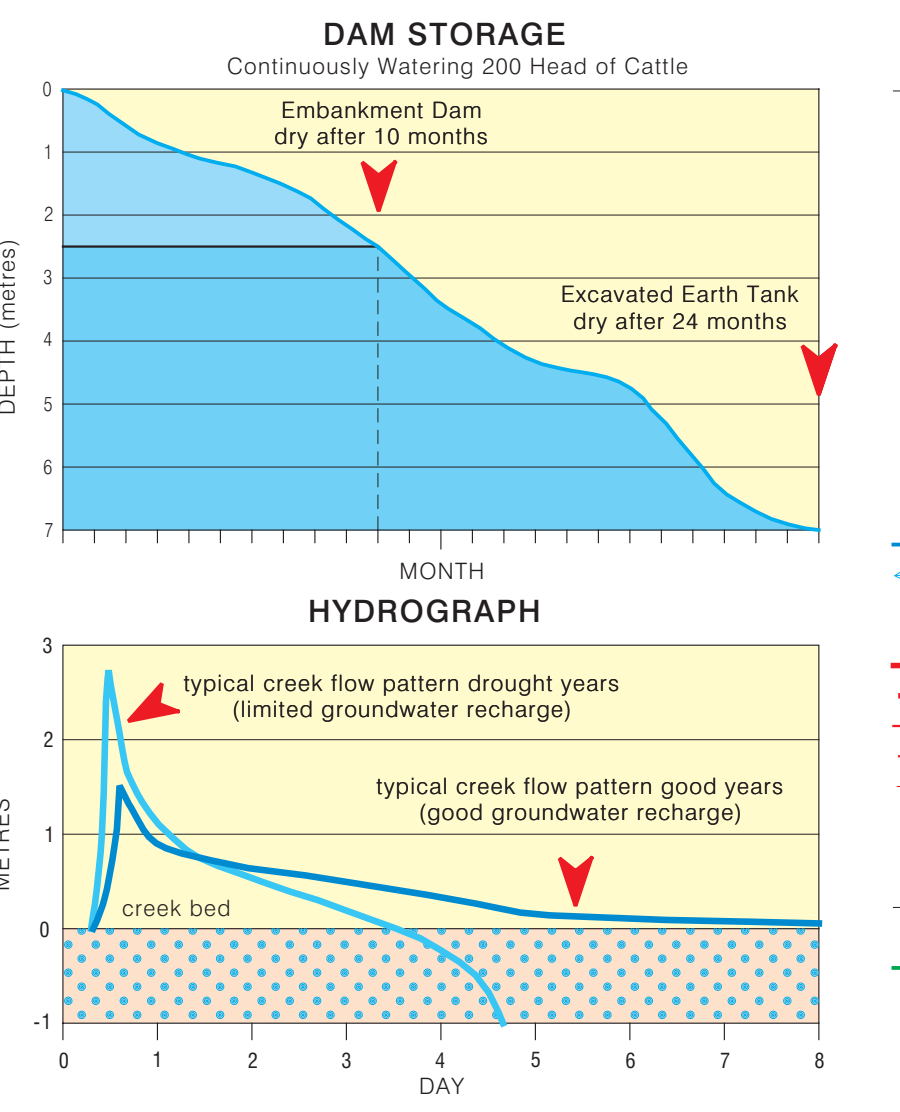


Project management, data compilation and interpretation by Graham Ride, Landcare Engineer, Natural Resources.
 Map compilation by Avis Wiegele, GIS Officer, Natural Resources, April 1998.
 Second Edition prepared and edited by John Hanson, GIS Officer, Natural Resources, June 2000.
 The map has been converted to Geocentric Datum of Australia (GDA94), and Government Department changes updated. Third Edition prepared and edited by Lynton Fritz, Land and Water Division, WREFA, July 2007.
 Design File: Owen Springs, Wrs-Map-100k_m33
 Print File: Owen-Springs-Sin_Water-Resources



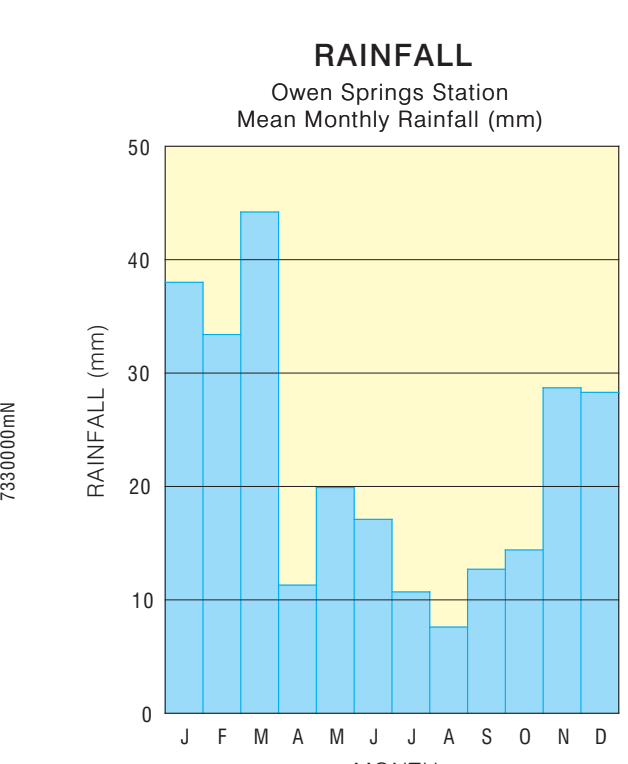
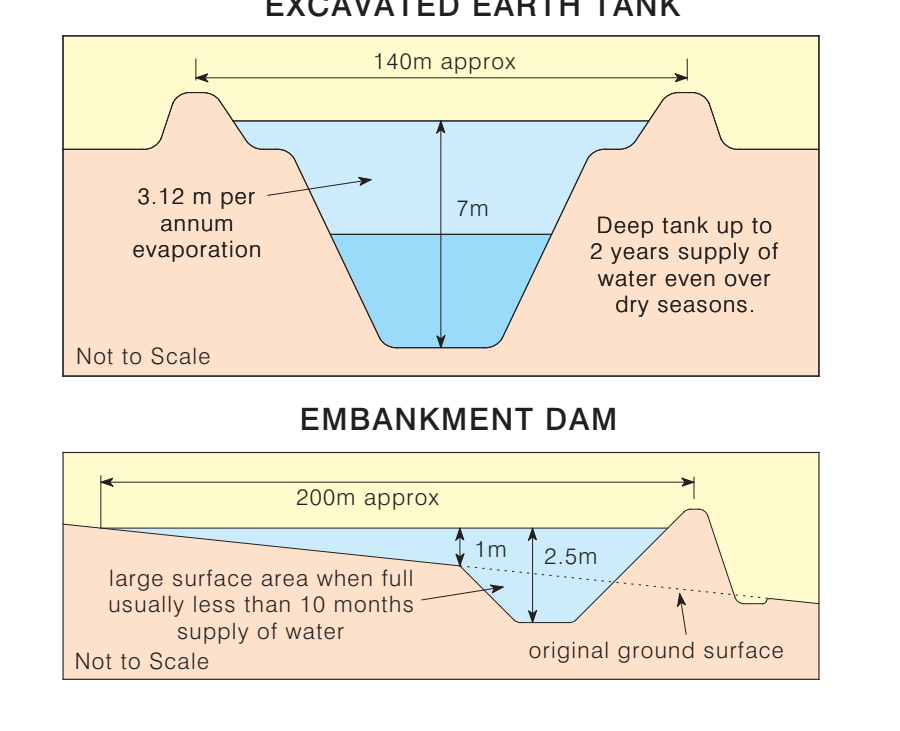
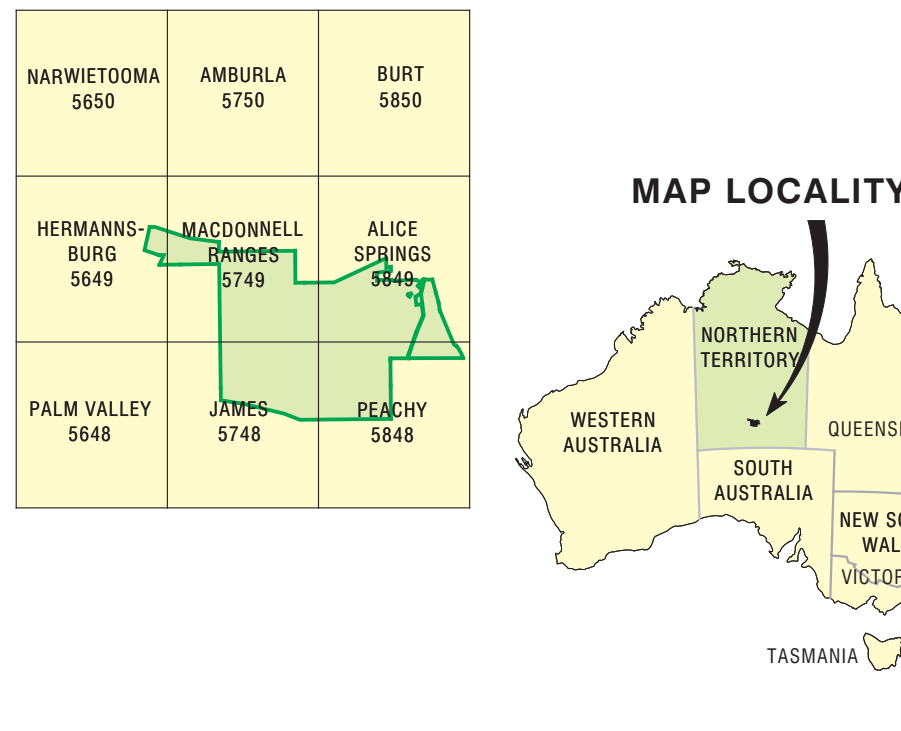
SURFACE WATER RESOURCES DESCRIPTION

- High sandstone and siltstone ridges up to 300 metres, 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.
- Sandstone ridges and hills up to 100 metres above the plains, surface runoff moderate. Surface water development unsuitable for surface storage development, some opportunities on adjacent valley floors where there is a good depth of soil and weathered rock.
- Sandstone, siltstone rocky hill country up to 50 metres above the plains, surface runoff high to moderate. Surface water development generally unsuitable. Embankment dam sites available in locations where there is sufficient depth of decomposed rock.
- 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. Flat gently undulating plains. Soils are not ideal for surface storage and in some areas quite poor. Excavated earth tanks can be constructed where sufficient runoff and a good depth of soil/weathered rock exists.
- Generally broad undulating siltstone and limestone terrain, soils generally unsuitable to dam construction, but deep excavated earth tanks can be constructed in selected areas.
- Sand dune country, inter-dunal runoff, some clay pan, gypsum and calcareous areas, unsuitable for surface storage development, except in selected areas.



LEGEND

- Development boundary
- Development option number
- Equipped bore
- 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/billabong
- Spring
- Major road - sealed
- Major road - unsealed
- Minor road - sealed
- Minor road - unsealed
- Track
- Paddock name
- Building/s
- Landing ground
- Fence
- Spot elevation - m A.H.D.
- Cadastral boundary



WATER RESOURCES DEVELOPMENT OPTIONS

PREFERRED OPTION	DESCRIPTION
1	Unsuitable (bores or dams) High rocky ridge and hill country.
2	Pumping from remote bores or dams. Poor quality groundwater and cavernous formations below surface in many places, not suitable for bores or dams.
3	Pumping from remote bores supplemented by dams. Plains and broad valley floors, plus sand dune country north and south of the sandstone hills and ranges. Excavated earth tanks preferable to embankment dams.
4	Surface water (dams) supplemented by groundwater (bores). Plains and rocky hill country where groundwater supplies brackish. Dam construction in suitable soils where there is a good depth of soil and/or decomposed bedrock preferably 6-7 metres below ground level.
5	Surface water (dams). Plains and rocky hill country where groundwater supplies saline. Dam construction in suitable soils where there is a good depth of soil and/or decomposed bedrock preferably 6-7 metres below ground level.
6	Groundwater (bores). On and adjacent to outcrop of Hermannsburg, Mesenrie, Paccota, Goyder and Jay Creek Limestone hills and ranges.
7	Deep groundwater available (bores). Within major groundwater basin, good quality water in Hermannsburg, Mesenrie and Paccota Sandstones.

WATER RESOURCES DEVELOPMENT MAP OF OWEN SPRINGS STATION
 THIRD EDITION JULY 2007

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