

**Soil and Land Suitability Assessment  
for Irrigated Agriculture**  
**TENNANT CREEK WEST AREA**  
 Map 2 of 3  
**GENERAL LAND CAPABILITY  
of the  
TENNANT CREEK WEST AREA**

For further information contact:  
 Department of Environment and Natural Resources  
 Director, Land Assessment, Rangelands Division  
 Ph. (08) 8999 4443 Email: rangelands@nt.gov.au Web: http://denr.nt.gov.au  
 Level 3, Goyder Centre, 25 Chung Wah Terrace, Palmerston  
 Northern Territory of Australia.  
 Web: http://nrmmaps.nt.gov.au Map Reference: Tennant-Ck-West\_Land-Capability\_Map-2

GENERAL LAND CAPABILITY	
<b>Class 1</b>	<b>HIGH - Land with negligible limitations.</b> Highly productive and requires only simple management practices. (0-1% slope; low wind erosion hazard; no surface rock; >1.0 m soil depth; rapid to well-drained soil; and flood free) <b>472 km<sup>2</sup></b>
<b>Class 2</b>	<b>MODERATE - Land with minor to moderate limitations.</b> productive but requires more than the simple management practices of Class 1. (1-2% slope; and/or moderate wind erosion hazard; and/or 0-2% surface rock; and/or 0.5-1.0 m soil depth; and/or moderately drained soil; and/or extremely rare flooding) <b>73.2 km<sup>2</sup></b>
<b>Class 3</b>	<b>MARGINAL - Land with severe limitations.</b> Marginally productive and requires major management practices. (2-3% slope; and/or high wind erosion hazard; and/or 2-10% surface rock; and/or 0.25-0.5 m soil depth; and/or imperfectly drained soil; and/or rare flooding) <b>12.2 km<sup>2</sup></b>
<b>Class 4</b>	<b>Land not suitable for agriculture.</b> Limitations cannot be overcome with practical or cost effective management practices. (>3% slope; and/or very high to extreme wind erosion hazard; and/or >10% surface rock; and/or <0.25 m soil depth; and/or poor to very poorly drained soil; and/or regular to permanent flooding) <b>21.1 km<sup>2</sup></b>

Map unit boundaries were derived using satellite imagery in association with digital elevation model, geological and topographic data. Landform, soil and vegetation field assessments conform to national standards and support mapping at a scale of 1:50 000. When assessing specific areas within the mapping it is recommended a site inspection be undertaken to establish unmapped variation and confirm mapping accuracy on the ground.  
 This map does not indicate, imply or ascertain the likelihood of groundwater availability or the granting of appropriate water extraction licensing needed to satisfy the irrigation requirements of the potential agricultural development options indicated.

**BIBLIOGRAPHIC REFERENCE:**  
 Carnavas M, Grealish G and Burley P  
 SOIL AND LAND SUITABILITY ASSESSMENT FOR IRRIGATED AGRICULTURE in the TENNANT CREEK WEST AREA  
 Northern Territory Nov 2016 DENR Technical Report 10/2016D Land Assessment Branch  
 Rangelands Division, Department of Environment and Natural Resources, Palmerston, Northern Territory.

**TECHNICAL REFERENCES:**  
 National Committee on Soil and Terrain (2009).  
 AUSTRALIAN SOIL AND LAND SURVEY FIELD HANDBOOK, 3rd Edition.  
 Canberra, Australian Collaborative Land Evaluation Program. CSIRO Publishing, Melbourne.  
 Isbell, RF (2002). THE AUSTRALIAN SOIL CLASSIFICATION.  
 CSIRO Publishing, Melbourne.  
 Executive Steering Committee for Australian Vegetation Information (ESCAVI) (2003).  
 AUSTRALIAN VEGETATION ATTRIBUTE MANUAL NATIONAL VEGETATION INFORMATION SYSTEM, VERSION 6  
 Department of Environment and Heritage, Canberra.



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. <http://creativecommons.org/licenses/by-nc-sa/4.0/>  
 This map was produced on the Geocentric Datum of Australia 1994 (GDA 94)

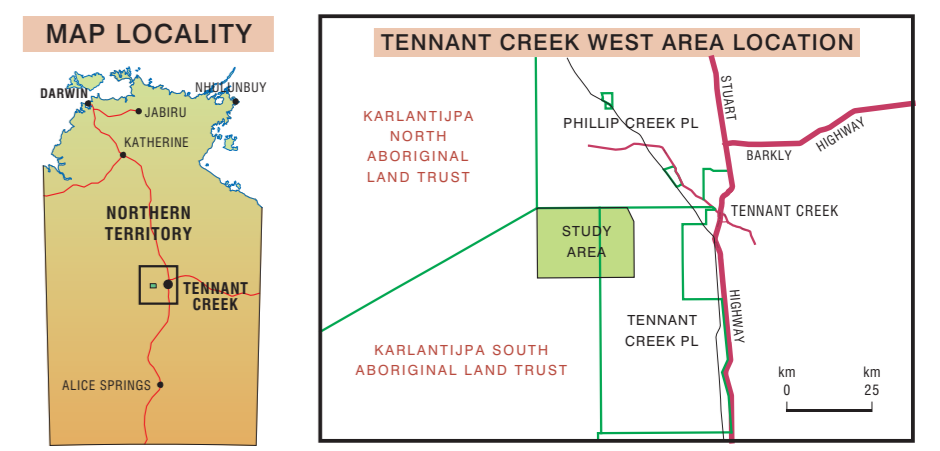
**TENNANT CREEK WEST AREA MAP SERIES**

Map	Map Title
1	LAND RESOURCES of the TENNANT CREEK WEST AREA
2	GENERAL LAND CAPABILITY of the TENNANT CREEK WEST AREA
3	LAND SUITABILITY for IRRIGATED CROP GROUPS 1 - 7 of the TENNANT CREEK WEST AREA

**GENERAL FEATURES**

.....	Limit of mapping	.....	Fence
.....	Property boundary	.....	Water bore
.....	Local road / track	.....	Water tank
.....	Family outstation	.....	Drainage line
.....	Gas pipeline	.....	Spot height (m AHD)

Cartography by L. Fritz & R. Lim, Spatial Data and Mapping, Water Resources, Department of Environment and Natural Resources, Northern Territory of Australia  
 NOVEMBER 2016



© Northern Territory of Australia  
 This product and all material forming part of it is copyright belonging to the Northern Territory of Australia. You may use this material for your personal, non-commercial use or use it within your organisation for non-commercial purposes, provided that an appropriate acknowledgement is made and the material is not altered in any way. Subject to the fair dealing provisions of the Copyright Act 1968, you must not make any other use of this product (including copying or reproducing it or part of it in any way) unless you have the written permission of the Northern Territory of Australia to do so.  
 The Northern Territory of Australia does not warrant that the product or any part of it is correct or complete and will not be liable for any loss damage or injury suffered by any person as a result of its inaccuracy or incompleteness.