

**Bibliographic Reference**  
 Burgess, J., McGrath, N., Andrews, K. and Wright, A. (2015) Agricultural Land Suitability Series, Report 1. Soil and Land Suitability Assessment for Irrigated Agriculture in the Larrimah Area, Sturt Plateau. Technical Report 19/2015D. Department of Land Resource Management, Darwin, NT.

**Technical References**  
 National Committee on Soil and Terrain (2009). Australian Soil Classification. Revised Edition. CSIRO Publishing, Melbourne, Victoria.  
 Isbell, R. F. (2002). The Australian Soil Classification. Revised Edition. CSIRO Publishing, Melbourne, Victoria.  
 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.

**About land resource information**  
 Spatial data descriptions and web links to download spatial data, map products and the technical report are noted in the metadata records.  
 View soil site data and descriptions in the DEPWS web mapping application <http://77mmaps.nt.gov.au/77mmaps.html>  
 See data layer: Land > Land Resources > Soils

**Data Source**  
 Land Resources: Vehicle tracks: Rangelands Division, Department of Environment, Parks and Water Security  
 Note: Vehicle tracks may not be current and should not be relied upon.  
 Cadastre, Roads, Place names: Department of Infrastructure, Planning and Logistics  
 Drainage: 250k Commonwealth of Australia (Bureau of Meteorology) 2009

**POTENTIAL IRRIGATED AGRICULTURAL CROPS**

Irrigated Crop Group	Group No.	Potential Crops
Field crops	1	Cotton, grains (sorghum, maize, sweet corn, rice), pulses (mung bean, soybean)
	2	Peanut
Hay/Forage crops	3	Sub-tropical grass hay/forage (Rhodes grass, panics, forage sorghum)
Tree crops	4	Mango
	5	Citrus (lime, lemon, mandarin)
Row crops	6	Cucurbits (watermelon, hami melon, honeydew melon, rockmelon, pumpkin)
	7	Solanaceae (capsicum, chili, eggplant, tomato), lettuce
Root crops	8T	(Trickle Tap) Carrot, onion, sweet potato
	8S	(Overhead Spray) Carrot, onion, sweet potato

**LAND SUITABILITY CLASS FOR IRRIGATED AGRICULTURE**

- Class 1 Land with negligible limitations**  
Highly productive land requiring only simple management practices to maintain sustainable production.
- Class 2 Suitable land with minor limitations**  
Land with minor limitations that either constrain production or require more than the simple management practices of Class 1 land to maintain sustainable production.
- Class 3 Suitable land with moderate limitations**  
Land with moderate limitations that further constrain production or require more than the management practices of Class 2 land to maintain sustainable production.
- Class 4 Unsuitable land with severe limitations**  
Land with moderate limitations that further constrain production or require more than the management practices of Class 2 land to maintain sustainable production.
- Class 5 Unsuitable land with extreme limitations**  
Land with extreme limitations that preclude any possibility of successful or sustained use, either now or in the future.

**GENERAL LAND CAPABILITY CLASS**

- Class 1 Land with negligible constraints** that require only a basic level of inputs, expertise and investment to develop and manage the land sustainably.  
(Flood free; saline absent; ECo < 2.0‰; ESP < 6%; 0-1% slope; >1.0 m soil depth; rigid to well-drained soil; no surface rock)
- Class 2 Land with minor to moderate limitations** that require a greater level of inputs, expertise and investment than Class 1 to develop and manage the land sustainably.  
(Flooding extremely rare; and/or gipal vertical interval < 0.3 m; and/or ECo 2-4.4‰; and/or ESP 6-15%; and/or 1-2% slope; and/or soil depth 0.5-1.0 m; and/or moderately drained soil; and/or 0-2% surface rock)
- Class 3 Land with severe constraints** that require a high level of inputs, expertise and investment to develop and manage the land sustainably.  
(Flooding rare; and/or gipal vertical interval 0.3-0.6 m; and/or ECo 4-8.4‰; and/or ESP 15-20%; and/or 2-3% slope; and/or 0.25-0.5 m soil depth; and/or imperfectly drained soil; and/or 2-10% surface rock)
- Class 4 Land with extreme constraints** that generally require an unacceptable level of inputs, expertise and investment to develop and manage the land sustainably, making it either impractical, uneconomic or environmentally unsound to proceed.  
(Regular to permanent flooding; and/or gipal vertical interval > 0.6 m; and/or ECo > 8.4‰; and/or ESP > 20%; and/or > 3% slope; and/or > 0.25 m soil depth; and/or poor to very poorly drained soil; and/or > 10% surface rock)

**LAND CAPABILITY ASSESSMENT CRITERIA**  
(used to derive the General Land Capability Class)

<b>Flooding</b>	<b>Soil Salinity</b>	<b>Soil Depth</b>	<b>Soil Drainage</b>
Class 1. Never	Class 1. Non-sodic	Class 1. Deep to very deep (>1m)	Class 1. Well to rigid
Class 2. Extremely rare	Class 2. Sodic *	Class 2. Moderately deep (0.5-1m)	Class 2. Moderately well
Class 3. Rare *	Class 3. Strongly sodic *	Class 3. Shallow (0.25-0.5m)	Class 3. Imperfect
Class 4. Regular to permanent	Class 4. Extremely sodic *	Class 4. Very shallow (<0.25m)	Class 4. Poor to very poor

<b>Gipal Microrelief</b>	<b>Salinity</b>	<b>Surface Rock</b>	<b>Dominant Soil Order</b>
Class 1. None	Class 1. Non-saline	Class 1. None (0%)	Hydrosols
Class 2. Negligible	Class 2. Slightly saline *	Class 2. Negligible (0-2%)	Kandosols
Class 3. Moderate	Class 3. Moderately saline *	Class 3. Moderate (2-10%)	Tenosols
Class 4. Severe *	Class 4. Highly to extremely saline *	Class 4. Abundant (>10%)	Vertosols

**Other Criteria:**

- Slope**: Class 1. Level (0-1%), Class 2. Gentle (1-2%), Class 3. Substantial (2-3%), Class 4. Excessive (>3%)
- Erosion Potential**: Low, Moderate, Moderate to high, High
- LEGEND - OTHER**: Vehicle Tracks, Water Management Zones (in progress), Larrimah survey area, Cadastre (Land Parcell), Aboriginal Land (Scheduled under ALRA), Cadastre - Tenure Type (Freehold, Pastoral Lease, Crown Lease Perpetual)
- Dominant Vegetation Description**: Corymbia dichromophloia and Erythronium chlorostachyus mid open woodland, Corymbia dichromophloia mid open woodland, Erythronium chlorostachyus low to mid open woodland, Eucalyptus microtheca low open woodland, Eucalyptus potteriana low to mid open woodland, Eucalyptus tetradonta and Corymbia dichromophloia mid open woodland, Eucalyptus tetradonta and Corymbia totota mid open woodland, Eucalyptus tetradonta and Erythronium chlorostachyus low to mid open woodland

**Notes:**  
 \* Class is not present in this survey.  
 Landscape criteria Acid Salinity and Wind Erosion were not assessed.

**Survey Area Location**

**Legend**

- Larrimah Study Area 2015
- Larrimah Town Study Area 2019
- Cadastre (Land Parcell)
- NT Parks and Reserves
- Aboriginal Land (Scheduled under ALRA)
- Aboriginal Land (NT enhanced Freehold)

**Scale:** 0, 0.5, 1, 2, 3 km

**Black numbered lines on the map grid are 2 000 metre intervals of Projection - Universal Transverse Mercator (UTM) Map Grid of Australia (MGA), UTM Zone 53 Horizontal Datum - Geocentric Datum of Australia (GDA94)**

**IMPORTANT NOTICE**  
 The Department of Environment, Parks and Water Security has made every reasonable effort to provide current and accurate information, but it does not make any guarantees regarding the accuracy, currency or completeness of the information.  
 This information is intended as a guide only. It does not constitute professional advice and should not be relied upon for legal, development, investment or other decisions. You should obtain professional advice relevant to your specific circumstances and needs.  
 This map does not indicate, imply or ascertain the likelihood of groundwater availability or the granting of appropriate water extraction licensing needed to satisfy potential.

**About this PDF map**  
 This is an interactive PDF map best viewed on screen using Adobe reader.  
 - Using Adobe Reader DC protected view, enable all features.  
 - Open folders in the left panel to view the map layers.  
 - Show or hide map layers.  
 - Turn off color filled layers above, as they will mask the layer below.  
 - Titles will automatically turn on to match the layers.  
 - Only display one layer at a time, so the titles do not merge.  
 - Page size is 114 x 76 cm. To print, use size B0 with no scaling.

**Land Unit Descriptions**  
 Click on the attachment icon in the left panel.  
 Land unit descriptions are attached to this PDF in an Excel spreadsheet.

**For further information, please contact:**  
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 Northern Territory of Australia  
 Phone: (08) 899 4478  
 Email: [range@depws.gov.au](mailto:range@depws.gov.au)  
 Web: <https://depws.nt.gov.au/DevelopmentOpportunities>

Map production: C. Green, November 2021. Drawing Ref: DEPWS2021195

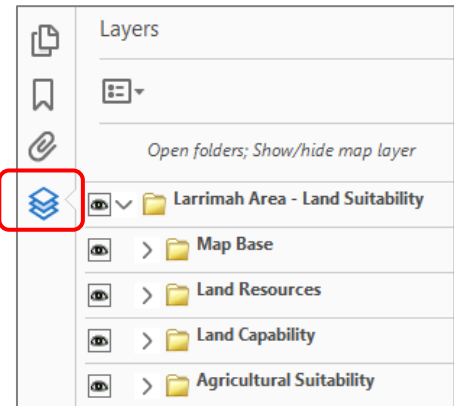
Map layers are not visible via web view. Download the PDF map to your computer. Open with Adobe Reader.

Click here to view the interactive map

## About viewing this interactive PDF map using Adobe Reader

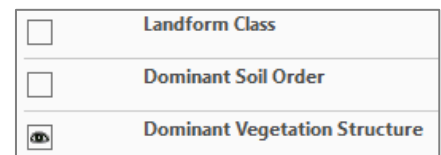
### 1. This interactive PDF map contains layers.

- Using Adobe Reader, open the left side panel.
- Click the Layers icon to reveal the folders of map layers.
- Open each folder to see the individual map layers.
- Click the check box to show or hide map layers.



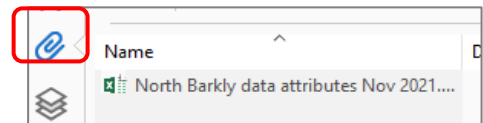
### 2. Turn off colour filled layers above, as they will mask the layer below.

- Titles will automatically display for most layers.
- Only display one layer as the titles will merge.



### 3. View attachments

- Click the attachment icon in the left panel.
- View / download a complete set of land unit attributes in a spreadsheet format.



### 4. How to add new Adobe tools

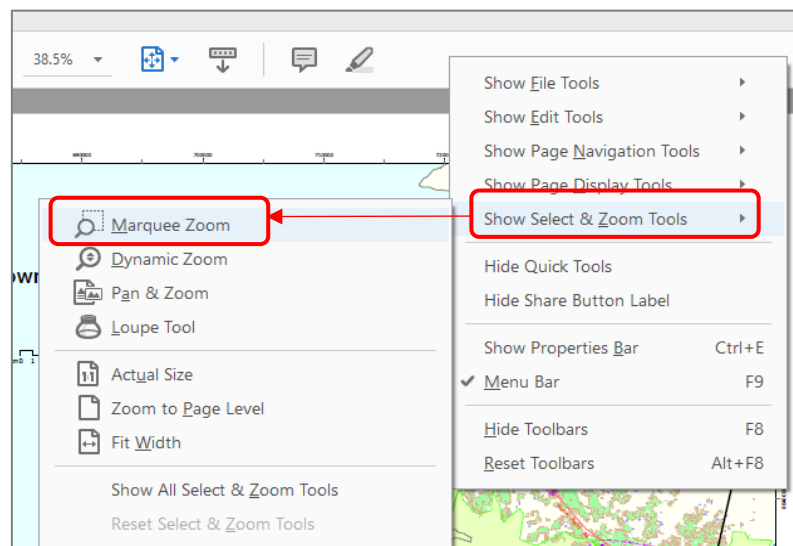
Right mouse click on the grey menu toolbar to see Adobe PDF viewing tools.

Tick the tool to add to the menu bar.

The **Marquee Zoom tool** is useful to zoom to a small area on the map.

Show Select & Zoom Tools > Marquee Zoom

**To use:** Draw a rectangle on the map screen to zoom to that location.



### 5. Printing

This interactive PDF map is best viewed on the computer screen.

The map is 114 x 96 cm. To print to a large format plotter, use page size B0 with no scaling. Only turn on one layer so the titles do not merge.

A smaller area on the map may be printed using the Current View printing option.

