

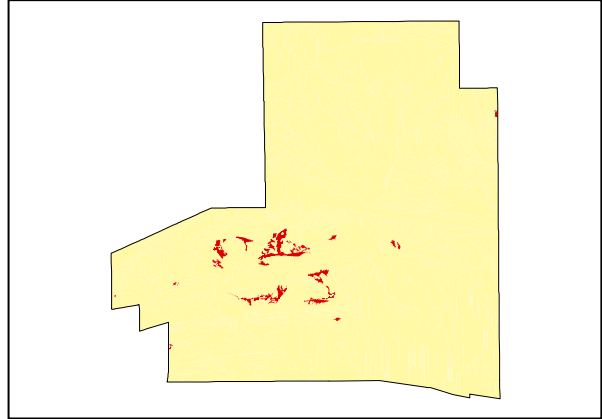
Plains

**LAND UNIT 4.11**  
**Sandy Clay Flats**

**DESCRIPTION:** Sandy clay flats of Cotton Bush over forbs.  
**SITES:** 094, 108



Distribution of land unit.



Area = 3.72 km<sup>2</sup>, 1.13% of mapped area.

**LAND CAPABILITY:**

ATTRIBUTES	
SLOPE (%)	1.00
RELIEF (m)	1.00
SOIL DEPTH (m)	>2.00
SURFACE CONDITION	Cryptogram. Surface flake in parts.
DEPTH TO SUBSTRATE (m)	>2.00
REACTION TREND (pH)	7.0 to 10.0
OUTCROP (%)	-
RUNOFF	Very Slow
PERMEABILITY	Very slowly permeable
DRAINAGE	Poorly drained
SALINITY (µs/cm)	26.5 to 1586.0

DEVELOPMENT RISKS	
EROSION	High
ROCK FALL	None
SHEET FLOODING	Severe
INUNDATION	Severe
SALINITY	High
ALKALINITY	Severe
ACIDITY	None

CAPABILITY CLASS					
Formed Roads	Shallow excavations	Septic Disposal	Horticulture	Building Foundations	Landscaping
Poor	Very Good	Poor	Very Poor	Poor	Very Poor

Plains

**TECHNICAL DETAILS****LAND UNIT 4.11**

**DESCRIPTION:** Low relief sandy clay flats with Cotton bush over forbs.

**GEOLOGY:** Generally Quaternary detrital material, of Holocene age, forms these land units. There is a general accumulation of fine clay and silt sediment material to form the slight depressions. The material is most likely a composite of fine aeolian and erosional wash material from the surrounding mountain ranges and alluvial peneplains.

**LANDFORM:** As for land unit 4.10, this land unit is called a playa - a large, shallow, level-floored closed depression, intermittently water filled, but mainly due to evaporation, bounded as a rule by flats aggraded by sheet flow and channelled stream flow (*Mc Donald, R.C. et. al, 1990*). There is evidence of a very shallow, non-directional drainage system within the land unit.

**SOIL:** Example from **Site 108**  
MGA. Coordinates. 7370867mN, 383159mE

**CLASSIFICATION:** Desert Loam. Dermosol - DE AB, AH, EO, A, E, O, O, X

**SURFACE:** Some areas of slightly lower relief have surface flake but the majority of the area has a cryptogam surface or is loose. Generally the surface soil (top1-2mm) is an incoherent mass of individual particles with occasional loose aggregates that separate when touched. There are occasional (<1%) subangular 20-60mm coarse gravelly quartz fragments on the surface.

DEPTH (m)	HORIZON	TEXTURE	pH	SALINITY (µs/cm)	OTHER DETAILS
0.00 - 0.10	A1	Light clay (LC)	7.0	26.5	Dark reddish brown (5YR3/4). Apedal, massive structure and coherent. Non effervescent.
0.10 - 0.30	A3	Light clay (LC)	8.5	38.7	Dark brown (7.5YR3/4). <1% fine gravelly angular quartz fragments. Moderate 5-10mm polyhedral pedality and coherent. Non effervescent.
0.30 - 0.70	B2	Light clay (LC)	10.0	98.6	Dark brown (7.5YR3/4). <1% fine gravelly angular quartz fragments. Moderate 5-10mm polyhedral pedality and coherent. Non effervescent.
0.70 - 1.10	B2	Light clay (LC)	10.0	179.5	Dark brown (7.5YR3/4). <1% fine gravelly angular quartz fragments. Moderate 5-10mm polyhedral pedality and coherent. Non effervescent.
1.10 - 1.70	B2	Light clay (LC)	10.0	1260.0	Dark brown (7.5YR3/4). <1% fine gravelly angular quartz fragments. Moderate 5-10mm polyhedral pedality and coherent. Non effervescent.
1.70 - 2.00	B2	Light clay (LC)	10.0	1586.0	Dark brown (7.5YR3/4). <1% fine gravelly angular quartz fragments. Moderate 5-10mm polyhedral pedality and coherent. Non effervescent.

**VEGETATION:** **Site 39** (Albrecht, D. & Pitts, B. 1999).

<b>UPPER STRATUM</b> - Absent	
Dominant species	
Other species	
<b>MID STRATUM</b> - Usually absent	
Dominant species	
Other species	Ironwood, Coolabah.
<b>LOWER STRATUM</b> - Open sedgeland	
Dominant species	Cottonbush, Native Millet.
Other species	Bogan Flea, Desert Sneezeweed, <i>Cullen cinereum</i> , Mallee Lovegrass, Mueller's Peppergrass, Munyeroo, Small Yellow Daisy, White Paper Daisy, <i>Swainsona affinis</i> , Hogweed, Narrow-leaf Joyweed, Tar Vine & Yipa, Woolly-headed Burr-daisy, Buffel Grass, Northern Bluebush, Colocynth, Australian Bindweed, Button Grass, Silky Bluegrass, Sickle Lovegrass, Narrow-leaf Neverfail, Woolly Yellow-heads, Malvastrum, Buck Bush, Goathead Burr, Red Spinach, Bindieye, Budda Pea, Climbing Saltbush, Canegrass, <i>Maireana scleroptera</i> , Desert Cassia, Nodding Thread-petal.

(See appendix 3 for botanical names)