Drainage Features

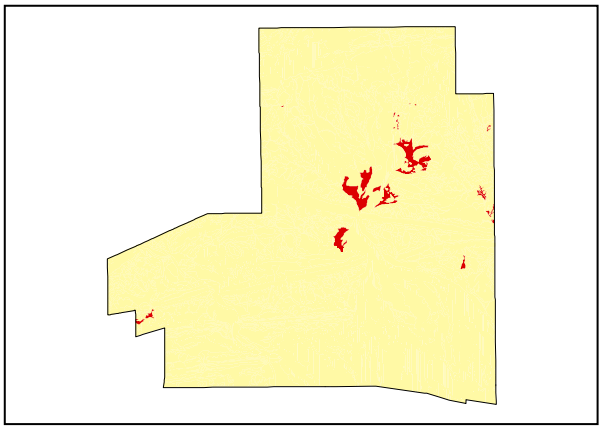
LAND UNIT 5.03

Saline Drainage Floors

DESCRIPTION: Drainage areas of predominantly saline soils with Saltbush over Buffel Grass and Goathead Burr.

SITES: 029, **053**, 057, 122

Distribution of land unit.



Area = 4.62 km^2, 1.40% of mapped area.

LAND CAPABILITY:

ATTRIBUTES	
SLOPE (%)	2
RELIEF (m)	2
SOIL DEPTH (m)	1.20
SURFACE CONDITION	Soft
DEPTH TO SUBSTRATE (m)	>1.20
REACTION TREND (pH)	6.5 to 9.5
OUTCROP (%)	-
RUNOFF	Moderately rapid
PERMEABILITY	Moderately permeable
DRAINAGE	Moderately well drained
SALINITY (µs/cm)	47.9 to 1114

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

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

Drainage Features

TECHNICAL DETAILS — LAND UNIT 5.03

DESCRIPTION: Drainage areas of predominantly saline soils with Saltbush over Buffel Grass and Goathead Burr.

GEOLOGY: Quaternary, most likely Holocene, sediments are the major infill material of the drainage depressions that represent this land unit. In most cases, salinity accumulation would be a result of a high level of salinity in the original sediments or the local water table, high in salt loads, fluctuating with seasonal changes. Relic salinity from prior climatic conditions may also contribute to the high salinity soils.

LANDFORM: This land unit generally forms within a broad drainage depression that is often associated with a floodout landform pattern. The floodout landform pattern is characterised by frequently active erosion and aggradation by channelled or overbanks sheet flow.

SOIL: Example from **Site 053**
MGA. Coordinates: 7375128mN, 391917mE

CLASSIFICATION: Desert loam. Dermosol - DE, AA, BJ, HB, A, E, L, M, W

SURFACE: Most of the areas surveyed as part of land unit 5.03 had visible salt inflorescence. A thin surface flake was evident in some areas and had a distinctive “crunching” sound when walked on. When dry, this surface quickly turned to dust when disturbed and when wet, became very sticky.

DEPTH (m)	HORIZON	TEXTURE	pH	SALINITY (µs/cm)	OTHER DETAILS
0.00 - 0.10	A1	Sandy loam (SL)(F)	6.5	47.9	Dark reddish brown (5YR3/4). 1% 2-6mm angular tabular quartz fragments. Massive apedal structure and non-effervescent.
0.10 - 0.20	A2	Sandy loam (SL)(F)	7.0	169.0	Yellowish red (5YR4/6). 1% 2-6mm angular tabular quartz fragments. Weak polyhedral (5-10mm) pedality with a light reddish brown (2.5YR6/4) bleached appearance Non-effervescent.
0.20 - 0.40	A3	Sandy loam (SL)(F)	7.5	612.0	Dark reddish brown (5YR3/4). 1% 2-6mm angular tabular quartz fragments. Weak polyhedral (5-10mm) pedality. Non-effervescent.
0.40 - 0.60	B21	Sandy clay loam (SCL)	9.0	1114.0	Dark reddish brown (2.5YR2.5/3). 1% 2-6mm angular tabular quartz fragments. Moderate polyhedral (5-10mm) pedality. Non-effervescent.
0.60 - 1.20	B22	Sandy clay loam (SCL)(K)	9.5	561.0	Dark reddish brown (2.5YR2.5/4). 1% 2-6mm angular tabular quartz fragments. Moderate polyhedral (5-10mm) pedality. Slightly effervescent.

VEGETATION: **Site 303** (Albrecht, D. and Pitts, B. 1999).

UPPER STRATUM - Absent	
Dominant species	
Other species	
MID STRATUM - Isolated shrubs	
Dominant species	Harlequin Fuchsia-bush.
Other species	Spreading Saltbush, Old man Saltbush.
LOWER STRATUM - Isolated forbs and sedges	
Dominant species	
Other species	Yellow Billybuttons, Buffel Grass, Rat Tails, Goathead Burr, Succulent Copper Burr, Tomato Plant, Mulga Trefoil, Yellow Rattlepod, Woollyoat Grass, Silky Browntop, Sand Sunray, *Schoenia ayersii*, Poison Peach, Hairy Armgrass.

(See Appendix 3 for botanical names)