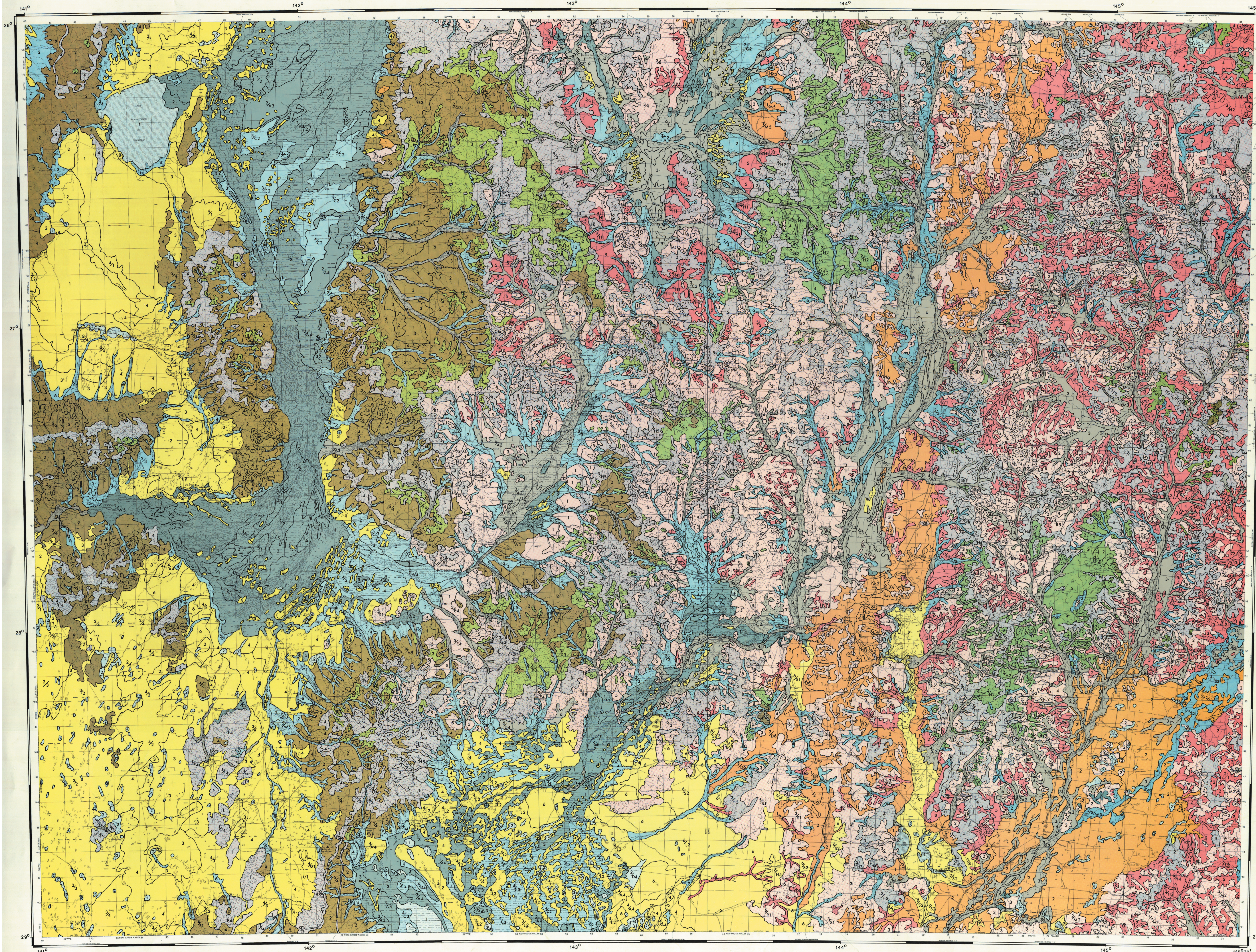


DIVISION OF LAND UTILISATION
 QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
 WESTERN ARID REGION LAND USE STUDY - PART 1

LAND SYSTEMS



LAND ZONE	LAND SYSTEM	REFERENCE
DUNEFIELDS (D)	1	ARRABURY (2,250 km ²). Plains with longitudinal dunes 5-10 metres high, some converging and diverging, with mobile crests; spikely shrubby hummock grassland; sandy red earths and red earthy sands occur on the interdune crests with red siliceous sands on the dunes.
	2	POONGAMULLA (3,070 km ²). Plains with converging and diverging dunes 5-12 metres high, with mobile crests; spikely hummock grassland; red siliceous sands on the mobile crests and red earthy sands and sandy red earths on the interdune crests with grey clays on the interdune claypans.
	3	SANTOS (4,400 km ²). Plains with converging and diverging dunes 4-8 metres high, sporadic mobile crests; spikely shrubby hummock grassland; red earthy sands and sandy red earths and red siliceous sands with grey clays and texture contrast soils on the interdune claypans.
	4	NARYLCO (9,500 km ²). Plains with reticulate sand dunes 3-5 metres high; mulga, whitewood, silver acacias, wood/leaf grass, bahiawoods tall open shrubland; red earthy sands, red siliceous sands and vegetated and bare interdune claypans.
	5	KYBARA (940 km ²). Isolated dunes or small groups of rounded dunes 5-10 metres high with mobile crests on alluvial plains; lumpy (sparsely) tall open shrubland; red and yellow siliceous sands with some red earthy sands.
	6	CLYDE (3,320 km ²). Flat to gently undulating sand plains with low dunes less than 3 metres high; mulga, white wood, western bloodwood, lumpy (sparsely) tall open shrubland; red earthy sands with some sandy red earths.
	7	DYNEVOR (970 km ²). Low dunes less than 4 metres high on old alluvial plains; mulga shrubby tall open shrubland; deep to very deep red and brown clays on the claypans and saltpans.
	8	BINDOOLLY (150 km ²). Concretic and near concretic dunes less than 4 metres high fringing the major lakes (salinas); saltbush, batisse, soft moly-poly forbs and with some low open shrubland; gypsum and calcareous sands and claylike grey clays.
MULGA SAND PLAINS (S)	1	GREENMULLA (3,740 km ²). Flat to gently undulating plains; mulga, woollybutt grass tussock tall open shrubland, low shrubs and trees; acid to neutral sandy red earths.
	2	EULO (4,800 km ²). Flat plains with low slopes on the edges; mulga, poplar box shrubby tall open shrubland; sandy red earths with siliceous and residual soil textures.
	3	BORAN (1,210 km ²). Flat plains (run-on areas); mulga/poplar box tall shrubland; moderately deep to deep loamy red earths.
SOFT MULGA LANDS (SHRUBLANDS - OPEN SHRUBLANDS) (M)	1	BIERBANK (3,900 km ²). Flat to gently undulating plains; mulga tall open shrubland, diffuse grasses; moderately deep to deep loamy red earths.
	2	HUMBERBURN (1,150 km ²). Flat plains of low relief; mulga, poplar box shrubby tall shrubland to tall open shrubland; deep to very deep red and brown clays with texture contrast soil and loamy red earths.
	3	NORAH PARK (2,550 km ²). Gently undulating to undulating plains; mulga shrubby tall shrubland; moderately deep to deep loamy red earths.
	4	BERRELLA (1,450 km ²). Flat to very low sloping plains; mulga tall open shrubland, diffuse grasses; soil complex, with shallow to moderately deep loamy red earths, loamy surfaced red earth texture contrast soils and red clays, with lakes on crests.
	5	HARD MULGA LANDS (SPARSE SHRUBLANDS) (H)
DISSECTED RESIDUALS (R)	1	BUNDEENA (2,200 km ²). Flat to gently undulating plains; mulga (sparsely) tall open shrubland; shallow to moderately deep loamy red earths, and red texture contrast soils with ferruginous horizons common.
	2	KYEENE (8,470 km ²). Gently undulating plains; mulga (sparsely) tall open shrubland; shallow loamy red earths.
	3	VANKO (5,580 km ²). Gently undulating to undulating convex plains; mulga (sparsely) tall open shrubland; shallow to moderately deep red earths with siliceous cover.
	4	BINGARAH (8,400 km ²). Gently undulating convex plains; rockgrasses, mulga, western bloodwood shrubby tussock grassland; shallow stony red earths with siliceous cover.
	5	NOCCUNDA (6,320 km ²). Gently undulating to undulating plains; mulga/bastard mulga (sparsely) tall open shrubland; very shallow to shallow stony red earths with siliceous cover.
UNDULATING GIDGEE LANDS (G)	1	ORONTOS (1,480 km ²). Dissected undulating plains and low hills; bastard mulga, mulga (sparsely) low to tall open shrubland; shallow to very shallow red earths and lithosols.
	2	MAVSON (3,130 km ²). Eroded tops of dissected low hills and undulating plains; bastard mulga/gawf needlewood low open shrubland, lithosols with exposed rock common.
	3	GREY (4,430 km ²). Gently undulating to flat tops and slopes of dissected tablelands, mesas and buttes; mulga, bastard mulga shrubby tall open shrubland; lithosols and shallow red earths with siliceous cover.
	4	DURHAM (2,560 km ²). Slopes and flat to gently undulating tops of dissected tablelands, mesas and buttes; bastard mulga (sparsely) low shrubland with herbfield; lithosols and shallow red earths with dense siliceous cover.
	5	WILLIES (4,570 km ²). Dissected tablelands, mesas and buttes; mulga, lancewood, bastard mulga, tall open shrubland; lithosols and shallow red earths.
	6	GUMBARDO (3,500 km ²). Dissected tablelands, mesas and buttes; bowdee, lancewood, bastard mulga; mulga tall shrubland to tall open shrubland; lithosols and shallow red earths.
UNDULATING DOWNS (T)	1	CROTTO (1,000 km ²). Lower slopes and scarp retreat zones of the dissected residials; complex of gidgee and mulga tall open shrubland; shallow loamy lithosols and red earths, shallow cracking clays and texture contrast soils.
	2	TILBOOROO (2,550 km ²). Mottled pediments and scarp retreat zones; complex of gidgee tall open shrubland to low woodland and mulga tall open shrubland; shallow to deep red and brown cracking clays commonly gippled, and texture contrast soils and shallow red earths.
	3	BELLALIE (2,890 km ²). Undulating mottled pediments and scarp retreat zones; gidgee tall open shrubland; moderately deep to very deep, stony, red and brown clays.
	4	BUNGHEERY (850 km ²). Gently undulating to undulating plains; bowee, gidgee tall open shrubland to low woodland; moderately deep to very deep stony red cracking clays.
	5	SPRING CREEK (240 km ²). Gently undulating to flat plains; gidgee, bigtop, mountain yoponyah, mulga, tall shrubland to low woodland; gippled grey and brown cracking clays, red texture contrast soils and red earths.
ALLUVIAL PLAINS, WOOLLANDS (W)	1	BRANSBY (890 km ²). Flat to gently undulating plains; fluctuating climax of Mitchell grass, other short grasses, saltbush and batisse herbfield; very deep stony red and brown cracking clays.
	2	PLEVNA (8,230 km ²). Gently undulating to undulating plains; fluctuating climax of Mitchell grass, other short grasses, saltbush and batisse herbfield; very deep to deep widely gippled stony red and brown cracking clays.
	3	MT. HOWITT (700 km ²). Gently undulating to undulating plains; fluctuating climax of Mitchell grass, other short grasses, saltbush and batisse herbfield; very deep to deep red and brown cracking clays, with loose, self-cleaning surface.
	4	NAPPAMERRY (3,110 km ²). Undulating to gently undulating plains, fluctuating climax of Mitchell grass, other short grasses, saltbush and batisse herbfield; stony shallow to moderately deep desert loams and stony moderately deep to very deep red cracking clays.
CHANNEL COUNTRY (C)	1	WINBIN (1,000 km ²). Seasonally flooded alluvial plains with batisse channels; gidgee low woodland; very deep grey clays with some brown clays and texture contrast soils.
	2	DARTMOUTH (220 km ²). Flat alluvial plains; gidgee shrubby low woodland with some yoponyah woodland and bigtop low woodland; loamy surfaced texture contrast soils and grey cracking clays.
	3	NORLEY (3,880 km ²). Flat alluvial plains; yoponyah, gidgee gussy woodland; grey cracking clays commonly with associated claypan areas.
	4	BEECHAL (2,560 km ²). Alluvial plains with batisse channels; coolibah, river red gum, yoponyah, gidgee low open woodland to woodland; alluvial grey clays and texture contrast soils on the channels and terraces, grey and brown clays on the flat plains.
	5	TICKALARA (700 km ²). Alluvial plains with a main channel and some batisse channels; river red gum, coolibah fringing woodland on the main channel, and herbfield on the plains; alluvial grey soils, texture contrast soils and grey and brown clays.
	6	COOLOO (3,830 km ²). Flat alluvial plains; gidgee low woodland to tall open shrubland; very deep, grey and brown cracking clays with weak to moderate gipps.
	7	PAROO (1,480 km ²). Alluvial plains with well developed batisse channels; river red gum, coolibah fringing woodland on the main channels and gidgee, yoponyah low woodland on the alluvial plains; alluvial clay soils on the terraces and main channels, grey clays and texture contrast soils on the plains.
OTHER ALLUVIA (A)	1	COMONGIN (700 km ²). Occasionally flooded alluvial plains; saltbush, batisse and short grass herbfield; brown and grey clays, loamy surfaced texture contrast soils interspersed with scalded areas.
	2	EROMANGA (5,580 km ²). Occasionally flooded alluvial plains; saltbush, batisse and short grass herbfield; brown, red and grey clays with scalded areas.
	3	NOOYAH (1,790 km ²). Flat alluvial plains; sparse vegetation; scalded brown and grey clays, and claypans.
	4	BULLOO (1,760 km ²). Flooded alluvial plains with eroded low dunes less than 1.5 metres high, shrubby herbfield of short grass, batisse, saltbush and bluebush in the depression, herbfield and sparse vegetation on the low dunes; grey clays and claypans on the plains, scalded sandy loam surfaced texture contrast soils and yellow sands on the low dunes.
MISCELLANEOUS (L)	1	LAKE PURE (1,140 km ²). Major lakes subject to infrequent flooding; sparse vegetation with small area of herbfield and low open shrubland fringed with coolibah and river red gum woodland; massive and structured grey clays.
	2	EPILON (1,060 km ²). Claypans, saltpans and small seasonal lakes; sparse vegetation, swamp conopsea hummock grassland and batisse; massive surfaced grey clays, structured grey clays and texture contrast soils.

IMPORTANT NOTES

- In some mapping units mixtures of two or more land systems may occur. In these cases component land systems are indicated on the land system map.
 e.g. (i) represents a complex of Arrabury (D1) and Poongamulla (D2) land systems, Arrabury being the dominant land system.
 (ii) represents a complex of Narylico, Dunefields (D) and Epilon, Miscellaneous (L) land systems, Narylico being the dominant land system.
- / means with or without.
- Terms such as siliceous and mottled pediment are defined in the text.

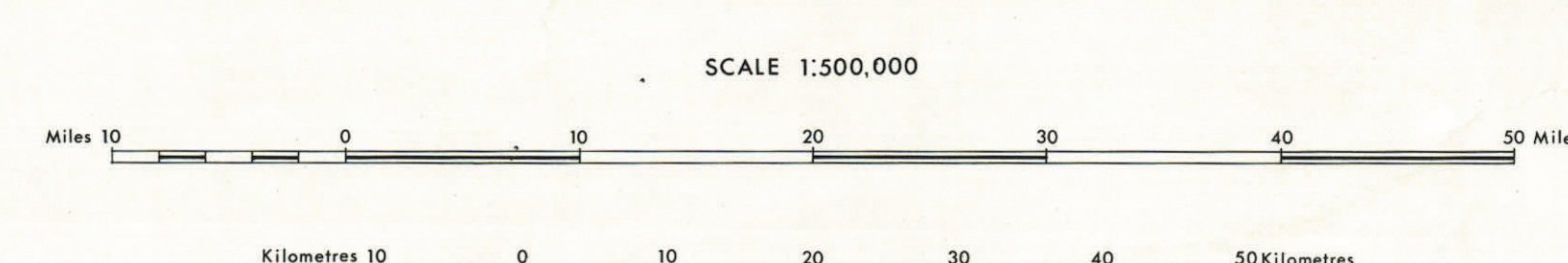
AERIAL PHOTOGRAPH INTERPRETATION, MAPPING AND GROUPING OF LAND SYSTEMS
 by N.M. Dawson.

DESCRIPTION OF LAND SYSTEMS
 by N.M. Dawson and D.E. Boyland.

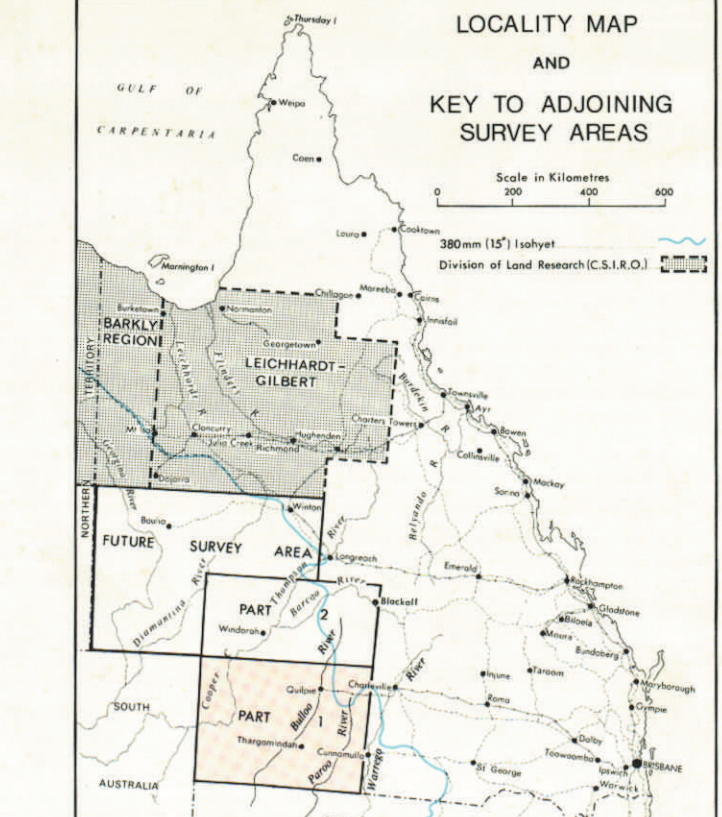
COMPILED AND DRAWING
 by R.H. Scott, C.M. Ellis and R.J. Bellero.

BETOOTA	CANTERBURY	WINDORAH	ADAVALE	AUGHATELLA
CORDILLO	BARROLKA	EROMANGA	QUILPHE	CHARLEVILLE
INNAMINCKA	DURHAM DOWNS	THARGOMINDAH	TOOMPINE	WYANDRA
STRZELECKI	TICKALARA	BULLOO Q.L.D.	EULO	CUNNAMULLA
CALLABONNA	MILPARINKA	N.S.W. URSINO	VANTABULLA	ENNGONIA

KEY TO 1:250,000 AREAS



Topographic base by the Division of National Mapping, Department of National Development, Canberra.
 Land Systems compiled by the Division of Land Utilisation, Queensland Department of Primary Industries from field traverses (1970-71), and photo-interpretation of 1969-70 aerial photographs.
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 Printed at the Government Printing Office, Brisbane.



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