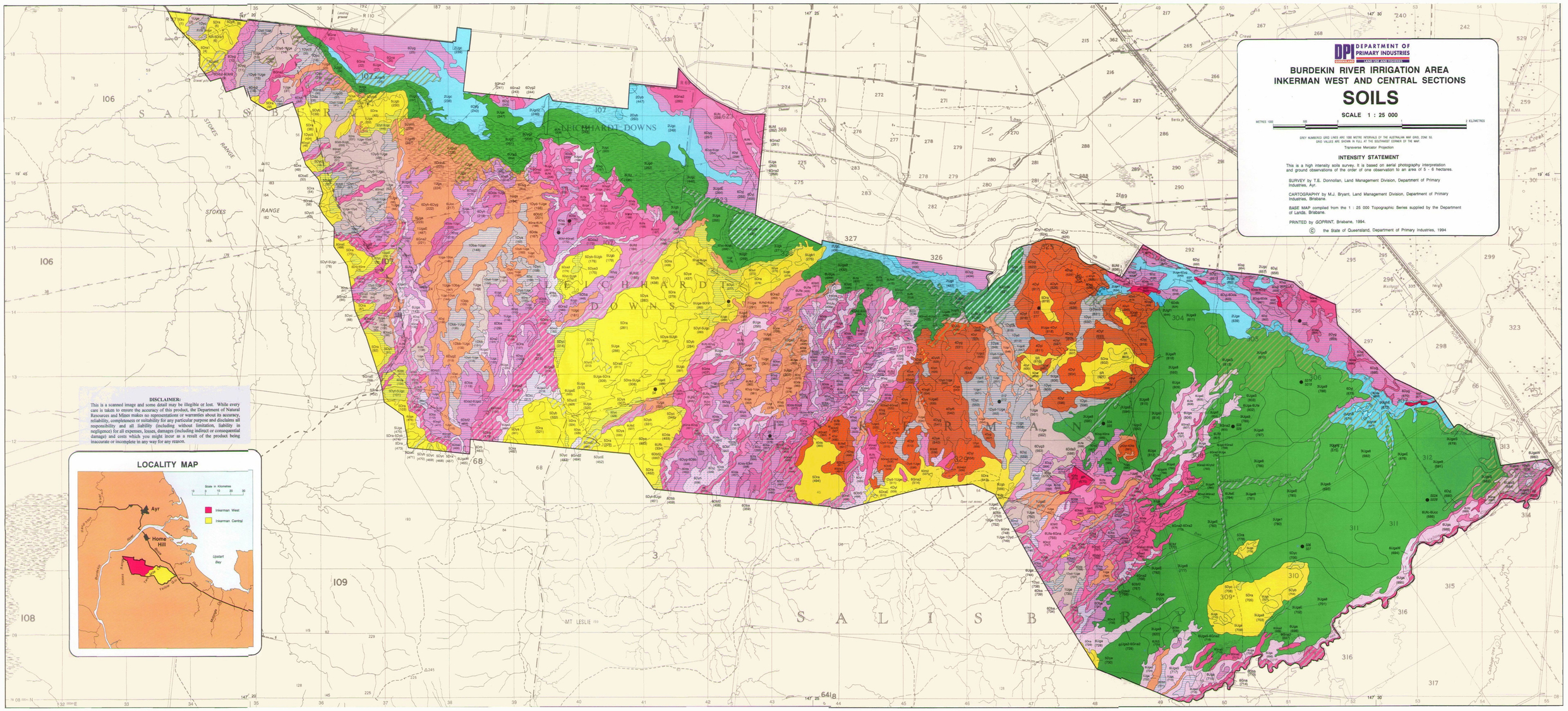

REFERENCE

SOILS OF THE BURDEKIN RIVER ALLUVIAL PLAINS AND ASSOCIATED PEDIMENTS (Landscape Unit 1)

LOW LYING FLATS AND DRAINAGE DEPRESSIONS

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
1Ugs	Barrunga	0.02 m moderate self-mulch over dark to grey medium clay to 0.05 - 0.15 m over alkaline dark to grey medium to heavy clay to 1.5 - m. Normal gilgai. 0.1 - 0.3 m vertical interval.	Black earth-grey clay	Ug1.16 Ug1.24
1Ugo	Barrunga	Hard setting surface over brown-mottled dark light to light medium clay to 0.05 - 0.1 m A1 horizon frequently over bleached A2 horizon to 0.08 - 0.15 m over alkaline dark to grey medium to heavy clay to 1.5 m. Normal gilgai. 0.05 - 0.1 m vertical interval.	Black earth (bleached)+ black earth (bleached) grey clay	Ug1.16 Ug3.1 Ug3.2
1Ugd	Barrunga	0.02 m weak self-mulch over brown-mottled grey light medium to medium clay to 0.08 - 0.15 m over alkaline grey to yellow grey medium to heavy clay to 1.5+ m. Normal gilgai. 0.1 - 0.3 m vertical interval	Grey clay	Ug1.28 Ug1.24
1Ugr	Barrunga	Weakly self-mulching to hard setting surface over grey to dark brown mottled medium clay to 0.05 - 0.15 m over bleached A2 horizon to 0.15 - 0.3 m over grey-brown clay to 0.4 - 0.8 m over alkaline grey to yellow-brown medium to heavy clay to 1.5+ m. Normal gilgai. 0.1 - 0.3 m vertical interval.	(Bleached) grey clay	Ug3.2 Ug2
2Ugs	Barratta	0.02 m moderate self-mulch over brown-mottled light medium to medium clay to 0.1 - 0.2 m over grey medium to heavy clay to 1.2 - 1.4 m over yellow-brown to grey medium to heavy clay to 1.5+ m. Normal gilgai. 0.1 - 0.3 m vertical interval.	Grey clay - (bleached) grey clay	Ug1.29 Ug5.25 Ug1.28 Ug3.2
2Ugd	Barratta	0.05 - 0.25 m over brown - mottled grey medium to heavy clay to 0.8 - 1.3 m over brown to grey light to medium clay to 1.5+ m. strongly alkaline above or at 0.6 m. Normal gilgai. 0.1 - 0.3 m vertical interval.	Grey clay	Ug1.28
2Ugo	Barratta	0.01 - 0.02 m moderate self-mulch over brown-mottled grey medium clay to 0.08 - 0.2 m over brown-mottled grey medium heavy clay to 0.9 - 1.3 m over grey to brown medium clay to 1.5+ m. strongly alkaline at 1.2 - 1.5 m. Normal gilgai. 0.1 - 0.3m vertical interval.	Grey clay	Ug1.29 Ug5.25
2Ugw	Barratta	0.01 - 0.02 m moderate self-mulch over grey medium to heavy clay to 0.1 - 0.2 m over grey medium heavy clay to 1.2 - 1.4 m over yellow-brown to grey medium to heavy clay to 1.5+ m. strongly alkaline at, and below 0.6 - 0.9 m. Normal gilgai. 0.1 - 0.3 m vertical interval.	Grey clay	Ug1.29 Ug3.4 Ug1.28
4Dyd	Barratta	0.01 - 0.02 m moderate self-mulch over brown-mottled grey medium to heavy clay to 0.1 - 0.3 m over grey medium heavy clay to 1.5+ m. strongly alkaline at, and below 0.6 - 0.9 m. Normal gilgai. 0.1 - 0.3 m vertical interval.	Grey clay	Ug1.28 Ug5.28
4Dyc	Barratta, clay loam variant	0.05 - 0.1 m brown-mottled dark to grey clay loam A1 horizon over bleached A2 horizon to 0.12 - 0.25 m over alkaline brown-mottled grey medium to heavy clay B horizon to 1.1 - 1.3 m over grey to yellow-brown light to medium heavy clay to 1.5+ m. Normal gilgai. 0.1 - 0.3 m vertical interval.	Solodic soil-solodized solonetz	Dy3.33 Dy3.43

SLIGHTLY ELEVATED FLATS

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
2Dyb	Oakey	0.05 - 0.1 m brown-mottled dark grey to brown loam to clay loam A1 horizon over bleached A2 horizon to 0.12 - 0.2 m over grey medium to heavy clay B horizon to 0.9 - 1.5+ m over brown light to medium clay D horizon to 1.5+ m. strongly alkaline above or at 0.6 m.	Solodic soil - solodized solonetz	Dh1.33 Dh1.43

SOILS OF THE LOCAL ALLUVIAL PLAIN (Landscape Unit 3)

PLAIN

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
8Ugs	Koberinga	0.02 m moderate self-mulch over dark to grey heavy clay to 0.9 - 1.2 m over grey heavy clay to 1.5+ m. strongly alkaline above or at 0.6 m. carbonate present above or at 0.6 m. Normal gilgai. 0.1 - 0.3 m vertical interval.	Black earth-grey clay	Ug1.16 Ug5.16 Ug5.28
8Ugd	Koberinga	0.02 weak self-mulch over dark light to light medium clay to 0.1 - 0.3 m over neutral to alkaline dark to grey medium to heavy clay to 1.5+ m. Normal gilgai. 0.1 to 0.3 m vertical interval.	Black earth - grey clay	Ug1.16 Ug5.24
8Ugo	Koberinga	0.02 weak self-mulch over dark light medium to heavy clay to 0.1 - 0.2 m over dark to grey heavy clay to 0.8 - 1.2 m over grey heavy clay to 1.5+ m. Normal gilgai. 0.1 - 0.3 m vertical interval.	Black earth - grey clay	Ug1.16 Ug5.24
8Ugw	Koberinga	0.02 m strong coarse self-mulch over dark heavy clay to 0.75 - 1.2 m over grey heavy clay to 1.5+ m. strongly alkaline at or below 0.9 m. carbonate present below 0.75 m. Normal gilgai. 0.1 - 0.3m vertical interval.	Black earth	Ug1.16
9Ugs	Wygong	0.02 m moderate to strong self-mulch over dark medium to heavy clay to 0.09 - 0.12 m over alkaline dark to grey medium to heavy clay to 1.5+ m. Normal gilgai. 0.1 - 0.3 m vertical interval.	Black earth	Ug5.12 Ug5.14
9Ugd	Wygong	Weakly self-mulching to hard setting surface over grey to dark light to light medium clay A1 horizon to 0.1 - 0.2 m occasionally over bleached A2 horizon to 0.25 m over alkaline grey to dark medium clay to 0.4 - 0.8 m over grey to yellow-brown medium clay to 0.7 - 1 m over decomposing rock	Grey clay - black earth - (bleached) grey clay	Ug5.22 Ug6.14 Ug2.2

CRESTS, UPPER AND MID SLOPES

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
5Dra	Dalrymple	0.1 - 0.2 m dark to brown clay loam A horizon over acid to neutral red medium clay B horizon to 0.7 - 1.2 m over decomposing rock.	Non-calcic brown soil	Dr2.12 Dr2.11
5Dya		0.15 - 0.25 m dark to brown sandy clay loam to clay loam A horizon over acid to neutral yellow-brown medium clay B horizon to 0.7 - 1.5+ m over decomposing rock	No suitable group yellow equivalent of non-calcic brown soil	Dy2.12 Dy2.11

PLAIN MARGINS BORDERING OTHER LANDSCAPE UNITS

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
		0.01 - 0.02 m weak to moderate self-mulch over brown-mottled grey medium clay to 0.1 - 0.15 m over alkaline grey to yellow-grey medium clay to 1.2 - 1.5 m over yellow light/medium to medium clay 28C horizon to 1.5+ m. Normal gilgai. 0.1 - 0.3 m vertical interval.	Grey clay	Ug5.2 Ug5.28

SOILS OF THE GENTLY UNDULATING RISES ON ACID INTRUSIVE ROCKS, PEDIMENTS AND PRIOR STREAMS (Landscape Unit 4)

UPPER AND MID SLOPES

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
4Dyb	Latham	0.1 - 0.3 m of grey to brown sandy loam A horizon over bleached A2 horizon to 0.4 - 0.6 m over neutral yellow to yellow brown light clay B horizon to 0.9 - 1.3 m over decomposing rock	Grey clay	Ug5.28 Ug5.29
4Dyd	Latham	0.15 - 0.3 m dark to brown sandy loam to clay loam sandy clay loam A1 horizon over grey to yellow brown A12 or A2 horizon to 0.25 - 0.5 m over acid to neutral yellow brown to yellow light to medium clay B horizon to 0.8 - 1.5+ m over decomposing rock.	(Bleached) grey clay	Dy2.12 Ug2
4Dyo	Latham	0.1 - 0.2 m of grey loamy sand to sandy loam A1 horizon over bleached or non-bleached A2 horizon to 0.35 - 0.65 m over neutral brown-mottled light grey light medium clay B horizon to 0.85 - 1 m over sandy clay loam D horizon or decomposing rock.	Grey clay	Ug5.28
4Dya	Vendava	0.15 - 0.3 m dark to grey sandy clay loam to clay loam sandy A1 horizon over bleached A2 horizon to 0.3 - 0.4 m over alkaline yellow or brown-mottled grey to yellow medium clay to 0.9 - 1.5+ m over decomposing rock.	Solodic soil-solodized solonetz	Dy3.29 Dy3.33
4Dyr	Barratta	0.15 - 0.3 m grey to brown sandy loam to sandy clay loam A1 horizon over A12 or A2 horizon to 0.25 - 0.5 m over neutral to alkaline red to grey mottled yellow medium clay to 0.8 - 1.2 m over decomposing rock.	No suitable group, affinities with solodic soil.	Dy3.22 Dy3.12 Dy3.13
4Dzy	Mulgrave Yoda	0.05 - 0.3 m of grey to yellow brown sandy loam to sandy clay loam A horizon over bleached A2 horizon to 0.4 - 0.6 m over alkaline yellow-mottled grey to yellow grey light to medium clay to 0.9 - 1.5+ m over decomposing rock	Solodic soil-solodized solonetz	Dy3.43 Dy3.33

LOWER SLOPES

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
4Dyg	Bambave	0.1 - 0.2 m dark to yellow-brown loam to clay loam A1 horizon over bleached A2 horizon to 0.15 - 0.3 m over grey to yellow-brown medium clay B horizon to 0.8 - 1.5+ m over sandy clay to light clay D horizons or rock. alkaline at and below 0.6 m.	Solodic soil-solodized solonetz	Dy2.43 Dy2.33
4Dyh	Yoda	0.1 - 0.2 m dark to grey light sandy clay loam to clay loam A1 horizon over bleached A2 horizon to 0.3 - 0.4 m over brown-mottled grey medium clay B horizon to 0.75 - 1.5+ m over gravelly sandy clay or light clay D horizon or rock. alkaline at and below 0.3 m	Solodic soil-solodized solonetz	Dy3.43 Dy3.33

SOILS OF THE GENTLY UNDULATING RISES ON AN INTRUSIVE ROCK COMPLEX (Landscape Unit 5)

MID TO LOWER SLOPES

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
5Dyb	Kyanoota	0.2 m dark to brown clay loam A horizon over alkaline yellow-brown light medium to medium clay B horizon to 0.9 - 1.3 m over decomposing rock.	Yellow podzolic soil	Dy2.42 Dy2.32
5Dye	Yaboota	0.05 - 0.15 m dark sandy clay loam A1 horizon over A2 horizon to 0.35 - 0.3 m over neutral to alkaline yellow-brown light medium to medium heavy clay B horizon to 1.05 - 1.5 m over decomposing rock.	No suitable group, affinities with yellow podzolic soil	Dy2.12 Dy2.22 Dy2.11
5Dyd-5Ugo	Underly	Linea gilgai complex with shelf, depression and narrow mound		
5Dyr	Shelf	0.1 - 0.15 m grey to brown sandy clay loam A1 horizon over bleached A2 horizon to 0.15 - 0.2 m over alkaline grey to brown medium clay B horizon to 0.8 - 1.1 m over decomposing rock.	Solodic soil - solodized solonetz	Dy2.33 Dy2.43
5Ugo	Depression	Weakly self-mulching to hard setting surface over light to light medium clay A1 horizon to 0.1 - 0.15 m occasionally over bleached A2 horizon to 0.15 - 0.2 m over alkaline dark medium clay to 0.5 - 0.9 m over grey to brown clay to 0.9 - 1.1 m over decomposing rock	Black earth - (bleached) black earth	Ug1.14 Ug6.1 Ug6.13
5Dyo	Ranly	0.1 - 0.2 m brown-mottled dark to brown sandy clay loam to clay loam A1 horizon over bleached A2 horizon to 0.15 - 0.3 m over alkaline grey medium clay B horizon to 0.4 - 1.2 m over grey to yellow-grey medium clay to 0.8 - 1.5+ m over decomposing rock or colluvia.	Solodic soil - solodized solonetz	Dy2.33 Dy2.43 Dh1.33
5Dyz		0.05 - 0.1 m dark to grey sandy clay loam to clay loam A1 horizon over bleached A2 horizon to 0.1 - 0.12 m over strongly alkaline yellow-mottled grey to yellow light to medium clay to 0.9 - 1.5+ m over decomposing rock	Solodic soil-solodized solonetz	Dy2.42 Dy2.32

SOILS OF MISCELLANEOUS ALLUVIAL LANDFORMS (Landscape Unit 6)
A. SOILS PRIMARILY OF CREEK AND RELICT ALLUVIAL LANDFORMS

PRIOR STREAMS

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
6Ucc	Miskin	0.05 - 0.5 m dark to brown sand to fine sandy loam A1 horizon over grey, brown or yellow A12 or A2 horizon to 0.5 - 1 m over acid to neutral brown to yellow sand to sandy clay loam B horizon to 1.5+ m.	Solodic soil-solodized solonetz	Uc5.21 Uc5.11 Uc5.22 Uc4.22

FLOODOUTS, FANS AND LEVEES

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
6Uhs		0.1 - 0.3 m brown to dark sandy clay to light clay A horizon over alkaline dark medium clay B horizon to 1.5+ m.	No suitable group, affinities with chernozem	Uf6.32
6Ufb		0.15 - 3 m dark to grey sandy clay to light clay A horizon over neutral to alkaline grey light medium to medium clay to 1.5 - 1.8 m over alkaline yellow-mottled brown to yellow light medium clay.	No suitable group.	Uf6.33
6Uhi		0.3 dark, 0.5 m dark silty clay to light clay over acid to neutral brown light medium clay to 0.8 - 1.2 m over brown to grey clay to 1.5+ m.	No suitable group, affinities with prairie soil	Uf6.31 Uf6.32
6Uhl		0.15 - 0.45 m dark light to light-medium clay A horizon over acid to neutral brown light to light medium clay B horizon to 0.7 - 1 m over brown to yellow sand to loamy sand D horizon to 1.5+ m.	Prairie soil	Uf6.32 Uf6.31
6Uhe		0.05 - 0.3 m brown-mottled dark to grey light to medium clay A horizon over acid to alkaline grey to brown sand D1 horizon to 0.7 m over neutral to alkaline sand to clay D horizons to 1.5+ m.	Alluvial soil	Uf6.22 Uf6.23
6Uhm	Burdekin	0.2 - 0.3 m dark to grey loam to clay loam A1 horizon over neutral to yellow-brown A2 or A3 horizon to 0.2 - 0.8 m over neutral to dark clay loam to light clay to 0.6 - 1.2 m over neutral to alkaline yellow-brown to yellow clay loam to clay to 1.5+ m.	No suitable group.	Uf6.3 Um5.52 Gn3.7
6Uhs	Farencer	0.4 m dark clay loam A horizon over neutral to alkaline brown to dark light to medium clay B horizon to 0.9 - 1.2 m. brown sandy clay loam to clay loam D horizon to 1.5+ m.	No suitable group	Db1.12 Db1.13 Gn3.42 Db1.12

SOILS OF MISCELLANEOUS ALLUVIAL LANDFORMS (Landscape Unit 6) (Continued)
A. SOILS PRIMARILY OF CREEK AND RELICT ALLUVIAL LANDFORMS

FLOODOUTS, FANS AND LEVEES

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
6Uhz	Elkin	0.15 - 0.3 m grey to brown sandy loam to clay loam A1 horizon over brown to yellow-brown fine sandy loam to clay loam A2 or A3 horizon to 0.5 - 1.2 m over neutral brown to yellow clay loam to light clay B horizon to 1.5+ m.	No suitable group, affinities with yellow podzolic soil.	Gn3.75 Gn3.72 Gn3.22
6Dra	Lancer	0.15 - 0.2 m dark to brown sandy loam to light sandy clay loam A1 horizon over a non-bleached, brown to red-brown sandy loam to light sandy clay loam A2 horizon to 0.2 - 0.3 m over neutral red to red-brown sandy clay to medium clay B horizon to 0.85 - 1.5+ m over red-brown to brown sandy clay to light medium clay D horizon to 1.5+ m.	Red podzolic soil.	Dr2.22
6Dro	Lancer	0.1 - 0.2 m dark to grey loam to clay loam A1 horizon over bleached A2 horizon to 0.2 - 0.45 m over neutral red medium clay B horizon to 1 - 1.35 m over red-brown clay loam D horizon to 1.5+ m.	Red podzolic soil.	Dr2.32 Dr2.42
6Dzc	Lanona	0.1 - 0.2 m dark to grey loam to clay loam A1 horizon over bleached A2 horizon to 0.2 - 0.5 m over alkaline yellow-mottled red to red-brown medium to heavy clay B horizon to 1 - 1.35 m over red-brown sandy clay to medium clay D horizon to 1.5+ m.	Solodic soil - solodized solonetz	Dy3.33 Dy3.43
6Dba	Embie	0.1 - 0.2 m dark to brown sandy loam to sandy clay loam A1 horizon over bleached A2 horizon to 0.15 - 0.3 m over alkaline brown medium clay B horizon to 1.5+ m.	Solodic soil - solodized solonetz	Db1.33 Dh1.43
6Dbb	Kelona	0.1 - 0.25 m dark to brown loam to clay loam A1 horizon over bleached A2 horizon to 0.2 - 0.4 m over alkaline grey to brown medium to heavy clay B horizon to 1.2 - 1.5 m over brown to yellow-brown light to light medium clay D horizon to 1.5+ m	Solodic soil	Dy2.43 Dy2.33 Dy3.33 Dy3.43 Dd1.33
6Dbh	Nobo	0.05 - 0.15 m grey to brown loam to clay loam A1 horizon over bleached A2 horizon to 0.1 - 0.25 m over alkaline brown to yellow-brown medium to heavy clay B horizon to 0.8 - 1.1 m over brown light to medium clay BD horizon to 1.5+ m.	Solodic soil - solodized solonetz	Dy2.43 Dh1.33
6Dvb		0.15 - 0.30 m dark to grey coarse sand to sandy loam A1 horizon over alkaline yellow-mottled brown to yellow light to medium clay B horizon to 1.5+ m.	Solodic soil	Dd1.43 Dd2.43
6Dyb	Clare	0.15 - 0.3 m dark to brown sandy loam A1 horizon over bleached A2 horizon to 0.3 - 0.8 m over neutral brown-mottled yellow-brown sandy clay to medium clay B horizon to 1.5+ m.	South - solodic soil	Dy3.32 Dy3.42
6Dye	Kelona	0.2 - 0.4 m dark to brown loamy sand to sandy loam A1 horizon over bleached A2 horizon to 0.3 - 0.8 m over alkaline yellow-mottled grey to yellow medium clay B horizon to 1.5+ m.	Solodic soil - solodized solonetz	Dy3.43 Dy3.33
6Dyf	Lanona	0.1 - 0.25 m grey to dark sandy loam A1 horizon over bleached A2 horizon to 0.25 - 0.5 m over alkaline brown-mottled yellow-brown to brown medium clay B horizon to 1.2 - 1.5+ m over brown light to light medium clay D horizon to 1.5 m.	Solodic soil - solodized solonetz	Dy3.43 Dy3.33 Dd2.43
6Dyh	Almana	0.15 - 0.3 m dark to brown sand to sandy loam A1 horizon over bleached A2 horizon to 0.2 - 0.5 m over alkaline yellow-mottled grey medium clay B horizon to 1.5+ m.	Solodic soil - solodized solonetz	Dy3.43 Dy3.42
6Dyj	Jacuna-Embie	0.05 - 0.2 m dark to grey sandy loam to clay loam A horizon over bleached A2 horizon to 0.3 - 0.6 m over grey to yellow-brown to heavy clay B horizon to 1 - 1.5+ m over grey to yellow-brown sandy loam to medium clay D horizon to 1.5+ m. strongly alkaline at and below 0.3 m.	Solodic soil - solodized solonetz	Dy2.43 Dy3.33

SOILS OF MISCELLANEOUS ALLUVIAL LANDFORMS (Landscape Unit 6) (Continued)
A. SOILS PRIMARILY OF CREEK AND RELICT ALLUVIAL LANDFORMS

BACKPLANE AND DEPRESSIONS

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
6Uga	Welona	Hard setting to weakly self-mulching surface over dark light to light medium clay to 0.05 - 0.2 m over alkaline dark to grey medium clay to 1 - 1.5+ m over grey sandy clay to medium clay D horizon to 1.5+ m.	Black earth - grey clay	Ug5.17 Ug5.16 Ug5.2
6Ddb	Wikey	0.1 - 0.15 m dark to brown clay loam A1 horizon over bleached A2 horizon to 0.15 - 0.25 m over alkaline dark medium clay B horizon to 0.7 - 1.1 m over grey to dark clay loam to light medium clay D horizon to 1.5+ m.	Solodic soil - solodized solonetz	Dd1.33 Dd1.43

SOILS OF MISCELLANEOUS ALLUVIAL LANDFORMS (Landscape Unit 6)
B. SOILS PRIMARILY OF THE BURDEKIN DELTA

Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
6Gna	Elkin	0.15 - 0.35 m dark to grey clay loam A1 horizon over bleached A2 horizon to 0.25 - 0.5 m over alkaline dark to grey light clay B horizon to 1.5+ m.	No suitable group	Gn3.49 Gn3.03 Gn3.06
6Gnp	Kelona	0.05 - 0.1 m grey to brown or dark loam to clay loam A1 horizon over bleached A2 horizon to 0.1 - 0.2 m over alkaline brown-mottled grey to yellow medium to heavy clay B horizon to 0.7 - 1.2 m over yellow-brown to grey fine sandy clay loam to light medium clay D horizon to 1.5+ m.	Solodic soil - solodized solonetz	Dy3.43 Dy3.33

x MAPPING UNIT CODE EXPLANATION

Example code: 6Dvy

6 Landscape Unit.
Dv Subdivision of the Primary Profile Form (Northcote 1979).
y Distinguishes a modal soil type within the same primary profile form subdivision and landscape unit.

Notes

1 Within areas of intense soil variability, the mapping unit is a soil complex and is named after the two most frequently occurring soil types, for example, 1Dyb-1Ugo.
2 Variants and phases of soil types may occur, for example, 3Ugsb, 6UNd. Such mapping units are described by the major attributes of the modal soil type modified by the description of the variant or phase concerned. Variants and phases are described below

OTHER MAPPING UNITS

SR	Areas of rock outcrop or boulders.
SP	Closed depression excavated by human activity.
SE	Areas of a range of soils of Landscape Unit 6 affected by severe erosion.
SW	Swamp.

VARIANTS AND PHASES

1	Depth to underlying rock or decomposing rock is significantly less than that of the modal soil type.
2	Buried soils or D horizons of contrasting or coarser texture at depths less than 1.5 m or at depths less than that specified in the major attributes.
3	Significant variation in depth or field texture of the A horizon to that of the modal soil type.
4	Significant variation in colour of the B horizon to that of the modal soil type.
5	Significantly higher pH in the B horizon than that of the modal soil type.
6	Significant amounts of small pebbles within B horizon. These coarse fragments are absent from the modal soil type.
7	Grey yellow or brown mottles in lower B horizon. Mottling is absent from the modal soil type.
	Areas with sufficient rock outcrop, boulders, cobble or gravel cover to make tillage difficult or impractical.
E	Areas affected by severe erosion.
S	Areas affected by secondary salinisation.
W	Areas which are subject to seasonal inundation and require substantial drainage and reclamation works before any production is possible.

MISCELLANEOUS SYMBOLS

● S4	Soil sampling sites
(4)	Unique map area (UMA) number.
*	Values of attributes are described in terms of the dominant values in the Inkerman sections only. The full range of values within each soil type in the Lower Burdekin Valley does not necessarily occur in this area.
**	These bracketed qualifiers are not an official part of great soil group names.

BURDEKIN RIVER IRRIGATION AREA
INKERMAN WEST AND CENTRAL SECTIONS
SOILS

DPI Ref. No. 94-IMC/BRW-I-P3063