SRG Stewarts Range Land System

Area: 15,457 ha

Annual rainfall: 525 - 625 mm average

Geology: The land system is formed on ancient coastal dune sand which has become indurated at the surface to form calcarenite (Bridgewater Formation). The system is primarily a continuous single range with a smaller discontinuous range to the west of the main range.

Topography: The land system is limestone ridges that runs in a NNE – SSE direction. There is frequent outcropping of limestone and shallow stony soils with extensive sand spreads and flats, depressions and swamps within the rises.

Elevation: 40 – 70 m

Relief: Maximum relief 30 m

Soils:

Sandy soils (dunes, rises and flats)

H3 Bleached siliceous sand
G2 Bleached sand grading to sandy clay loam
G3 Thick sand over clay
G4 Sand over poorly structured clay
G5 Sand over acidic clay
I1 Highly leached sand
I2 Wet highly leached sand

Stony soils (rises and flats)

B2 Shallow calcareous loam on calcrete
B3 Shallow sandy loam on calcrete
B4 Shallow red loam on calcrete
B5 Shallow dark clay loam on limestone
B6 Shallow loam over red-brown clay on calcrete
B7 Shallow sand over clay on calcrete
B8 Shallow sand on calcrete
B9 Shallow clay loam over brown or dark clay on calcrete
RR Limestone outcrop

Heavy soils

F1 Loam over brown or dark clay
F2 Sandy loam over poorly structured brown or dark clay
M2 Deep friable gradational clay loam
M4 Deep hard gradational sandy loam

Other soils

N1 Peat
N2 Saline soil
N3 Wet soil (non to moderately saline)
A7 Calcareous clay loam on marl

Main features: The Stewarts Range Land System is a single linear calcarenite range that runs parallel with the Harper Range to the east. There is also discontinuous range (isolated rises) to the west of the main range. The land system is characterised by shallow and/or stony soils and deep sandy soils. The shallow stony soils have limited waterholding capacity and moderately low to moderate fertility. Within these shallow soils are some deeper loamy soils over limestone which have moderate waterholding capacity and high fertility. The deep sands have low fertility and moderate waterholding capacity and are prone to water repellence, soil acidity and wind erosion.

Soil Landscape Unit summary: 32 Soil Landscape Units (SLUs) mapped in the Stewarts Range Land System:

SLU	% of area	Main features #
MGX	0.31	Depression with 10-50% non-saline swampy depressions or swales. Main soils: thick sand over clay - **G3** (E), shallow loam over red-brown clay on calcrete – **B6** (L), shallow sand over clay on calcrete - **B7** (L) and saline soil - **N2** (L). These soils are deep with moderate fertility, high waterholding capacity and are imperfectly to very poorly drained. Salinity levels are moderate and will affect the productive potential of pastures and crops.
MHB MHC MHH MHb MHt	18.5 8 61.1 6 0.2 1.75 1.14	Series of parallel ridges with a NNW-SSE orientation, up to 30 m high with slopes of 3 – 6%. The ridges are formed on calcreted calcarenite. They are partially overlain by sand spreads which tend to be more extensive on the eastern slopes. There is variable surface stone on the non sandy slopes. **MHB** Gently sloping undulating rises **MHC** Undulating rises to low hills **MHH** Gently sloping undulating rises with up to 10% non-saline non-swampy depressions **MHb** Undulating rises with less than 10% marginally saline land **MHt** Undulating rises with 10-50% saline land Main sandy soils: bleached siliceous sand - **H3**, highly leached sand - **I1** and thick sand over clay - **G3**. These soils are deep with low to very low fertility, moderate waterholding capacity and rapid drainage. Severe water repellence, soil acidity and the susceptibility for wind and water erosion are limitations. Soils in swales and depressions: sand over poorly structured clay - **G4**, saline soil - saline soil - **N2**, thick sand over clay - **G3** and shallow sand over clay on calcrete - **B7**. These soils are deep, have moderately low fertility and moderately low waterholding capacity. Drainage is variable, ranging from well drained to imperfectly drained depending on elevation. Shallow soils on rises: shallow calcareous loam on calcrete - **B2**, shallow sandy loam on calcrete - **B3**, shallow loam over red-brown clay on calcrete – **B6**, shallow sand over clay on calcrete - **B7**, shallow calcareous loam on calcrete - **B2**, shallow sand on calcrete - **B8**, limestone outcrop - **RR** and sandy loam over poorly structured brown or dark clay - **F2**. These soils are shallow to very shallow and/or stony and have moderately low to low waterholding capacity and moderate to moderately low fertility. These soils are well drained. Surface rockiness may be a slight limitation to cropping.
MRB MRC	0.35 4.12	Series of parallel ridges with a NNW-SSE orientation, up to 20 m high with slopes of 3 – 6%. The ridges are formed on calcreted calcarenite. They are partially overlain by sand spreads which tend to be more extensive on the eastern slopes. There is variable surface stone on the non sandy slopes. **MRB** Undulating rises **MRC** Undulating rises to low hills Sandy soils: bleached siliceous sand - **H3** (E), sand grading to sandy clay loam - **G2** (C), thick sand over clay - **G3** (L) and highly leached sand - **I1**. These soils are deep with low fertility, moderate waterholding capacity and rapid drainage. Severe water repellence, soil acidity and the susceptibility to wind and water erosion are limitations. Loamy soils: loam over brown or dark clay - **F1**, shallow loam over red clay on calcrete - **B6** (L) and shallow sandy loam on calcrete - **B3**. These soils are shallow to moderately deep, have moderate fertility, moderate to high waterholding capacity and rapid drainage. These soils have high productive potential. There may be a water repellence limitation.

		Shallow stony soils on rises: shallow calcareous loam on calcrete **- B2** (M), limestone outcrop - **RR** (M) and **B6**. These soils are very shallow, have moderate fertility, low waterholding capacity and are well drained. These soils can be calcareous throughout and alkaline at depth. Surface rockiness may be a slight limitation to cropping.
MSC	0.69	Undulating rises to low hills with a NNW-SSE orientation formed on calcreted calcarenite. They are partially overlain by sand spreads which tend to be more extensive on the eastern slopes. Main soils: bleached siliceous sand - **H3** (E) and sand grading to sandy clay loam - **G2** (C). These soils are deep with very low fertility, moderate waterholding capacity and rapid drainage. Severe water repellence, soil acidity and the susceptibility to wind and water erosion are limitations.
MYB	0.70	Gently sloping undulating rise with less than 3% slope and maximum relief of 5-10m., which is formed on calcreted calcarenites of ancient coastal dunes. They are partially overlain by sand spreads which tend to be more extensive on the eastern slopes. There is variable surface stone (10-20%) on the non sandy slopes (60-90%) and 20-30% sand rises. Main soils: shallow loam over red clay on calcrete - **B6** (E), loam over brown or dark clay - **F1** and friable gradational clay loam - **M2**. These soils are moderate to shallow in depth, have moderate fertility and high waterholding capacity. These soils have high productive potential. There may be a water repellence limitation. The sandy rise soils are similar to **MRB** landscape unit. These soils are deep with moderately low fertility, moderate waterholding capacity and rapid drainage. Severe water repellence, soil acidity and the susceptibility to wind and water erosion are limitations. Shallow and outcrop soils: limestone outcrop – **RR**, shallow calcareous loam on calcrete **- B2**, shallow sandy loam on calcrete - **B3** and **B6**. These soils are very shallow with low fertility, very low waterholding capacity and are well drained. Rockiness may be a limitation with up to 50% rock in concentrated areas.
NSG	0.49	Closed drainage depression within the undulating rises to rolling hills formed on calcreted calcarenite. There can be up to 30 m relief. Groundwater tables are often within two metres of the surface. Main soils: thick sand over clay - **G3** (E), wet soil - **N3** (E) and shallow dark clay loam on limestone - **B5** (C). These soils are deep, have moderately low fertility and high waterholding capacity. Drainage is imperfect to poor. The flats are dominated by soils with sandy surfaces and dispersive subsoil clays that are a slight limitation to root growth. The heavier clay loam surfaces are slightly more fertile however moderately low waterholding capacity.
NTG	0.43	Closed drainage depression within the undulating rises to rolling hills formed on calcreted calcarenite. There can be up to 50 m relief. Groundwater tables are often within two metres of the surface. Main soils: thick sand over clay - **G3** (E) and wet soil - **N3** (E). These soils are deep, have moderately low fertility and high waterholding capacity. Drainage is imperfect to poor. The flats are dominated by soils with sandy surfaces and dispersive subsoil clays that are a slight limitation to root growth.
NUA NUG	0.46 0.10	Deeper sandy surfaces plains with depressions within the range system. **NUA** Level plain **NUG** Drainage depression Main soils: thick sand over clay - **G3**, loam over brown or dark clay - **F1** and shallow sandy loam on calcrete - **B3**. The plains are moderately deep, have moderate fertility, high waterholding capacity and are slightly imperfectly drained. There are small areas of shallow soil which have moderately low waterholding capacity. Depression soils: **G3** and wet soil - **N3**. They are deep, have moderately low fertility and are imperfect to poorly drained There is a slight limitation to root growth due to the dispersive subsoil clays.
NvG	0.22	Closed depressions and flats within the undulating rises to rolling hills formed on calcreted calcarenite. Groundwater tables are often within two metres of the surface. Main soils: thick sand over clay - **G3** (E), wet soil - **N3** (E), shallow dark clay loam on limestone - **B5** (L). These soils are moderately deep, have moderately low fertility and high waterholding capacity. There may be a slight limitation to root growth due to the dispersive subsoil clays. Drainage is imperfectly to poorly drained.
OFB OFC OFD	1.33 0.36 0.19	Sandy dune ranges with up to greater than 90% sand dune coverage and 0-10% saline swales or swamps. **OFB** High dunes with greater than 90% sand dune coverage

OFN	0.67	**OFC** Dunes with greater than 90% sand dune coverage **OFD** Low dunes with greater than 90% sand dune coverage **OFN** Dunes with 60-90% sand dune coverage and 0-10% saline swales Main soils: highly leached sand - **I1**, wet highly leached sand - **I2**, bleached siliceous sand - **H3**, sand grading to sandy clay loam - **G2** (L), sand over acidic clay - **G5**, shallow sand over clay on calcrete - **B7** (M), wet soil - **N3** (M), and saline soil - **N2** (M). The sandy rise soils are deep with low to very low fertility, moderate waterholding capacity and rapid drainage. Severe water repellence, soil acidity and the susceptibility to wind and water erosion (especially the high dunes) are limitations. The minor stony soils are very shallow and/or stony and have moderately low to low waterholding capacity and fertility. The swale soils are deep with moderate fertility and high waterholding capacity. Drainage is very poor and the area is seasonally inundated for greater than 3 months. There is a slight limitation to root growth due to the dispersive subsoil clays. Salinity levels are high. Productivity potential is reduced on this land as salt tolerant species are evident.
OHA OHB	0.50 3.40	Sandy dune ranges with up to greater than 90% sand dune coverage formed on calcreted calcarenite with 0-10% stony rises. **OHA** Very high dunes with greater than 90% sand dune coverage **OHB** High dunes with greater than 90% sand dune coverage and 0-10% stony outcrops Main soils: highly leached sand - **I1** and bleached siliceous sand - **H3**. These soils are deep with very low fertility, moderate waterholding capacity and rapid drainage. Severe water repellence, soil acidity and the susceptibility to wind and water erosion (especially the high dunes) are limitations. Stony soils: shallow sandy loam on calcrete - **B3**, shallow loam over red clay on calcrete - **B6** and limestone outcrop – **RR**. These soils are very shallow with moderately low fertility, very low waterholding capacity and are rapidly drained. Rockiness and exposure may be a limitation in these concentrated areas. These soils are calcareous throughout.
OQD OOF OQG	0.45 0.20 0.19	Sandy dune ranges with up to greater than 90% sand dune coverage formed on calcreted calcarenite with 10-20% stony rises and up to 30% flats. **OQD** Low dunes with greater than 90% sand dune coverage **OQF** Dunes with 60-80% sand dune coverage, 10-20% stony rises and 0-10% flats **OQG** Low dunes &/or sand spreads with 60-80% sand dune coverage and 20-30% flats Main soils: bleached siliceous sand - **H3**, thick sand over clay - **G3**, bleached sand over sandy clay loam - **G2** and highly leached sand - **I1**. The sandy rise soils are deep with low to very low fertility, moderate waterholding capacity and rapid drainage. Moderate to severe water repellence and the susceptibility to wind erosion is a limitation. Soils found in the swales are deep, have moderately low fertility and high waterholding capacity. The main limitation is the dispersive subsoil clays which are a moderate limitation for root growth and the susceptibility to wind erosion. Drainage is imperfect. Stony rise soils: shallow sandy loam on calcrete - **B3** and shallow loam over red clay on calcrete - **B6**. These soils are very shallow, have moderately low fertility and very low waterholding capacity.. Drainage is rapid. The soils are calcareous throughout.
XRC	0.27	Closed freshwater wetland within the range system. Main soils: wet soil - **N3**. These soils are deep, have moderately low fertility and high waterholding capacity. Drainage is poor to very poor and seasonally inundated for greater than 3 months. This landscape unit is not suitable for agricultural production.
Xl-	0.28	Fresh water lake???
Xq-	0.07	Fresh swamps, at least seasonally inundated. Main soils: wet soil - **N3**. These soils are deep with high fertility and waterholding capacity. Drainage is poor. The swamps are seasonally inundated for greater than 3 months.
XuC	0.47	Depressions that are seasonally waterlogged and non-saline and found within the undulating rises to rolling hills formed on calcreted calcarenite. Main soils: wet soil - **N3** and peat - **N1**. These soils are deep, have high fertility and waterholding capacity. Drainage is poor to very poor. The swamps are seasonally inundated for greater than 3 months. This landscape unit is not suitable for

		agricultural production only opportunity grazing.
Xw- XwC	0.09 0.17	Wetlands of variable salinity and swamps (**XwC**). Main soils: wet soil - **N3**, saline soil - **N2** and sand grading to sandy clay loam - **G2**. These soils are deep, have high fertility and waterholding capacity. Drainage is very poor and seasonally inundated for greater than 3 months. There is dispersive subsoil clay within 30-60 cm of the soil surface. Salinity levels are moderately high and salt tolerant species are evident. This landscape unit is not suitable for agricultural production, only opportunity grazing
ZK-	0.30	Swampy plain complex with 30-50% lunettes. Main swampy soils: saline soil - **N2**, wet soil - **N3**, deep hard gradational sandy loam - **M4** and calcareous clay loam on marl - **A7**. The plains and swamps are deep, have high fertility and waterholding capacity. Drainage is very poor and seasonally inundated for greater than 3 months. There is dispersive subsoil clay within 30-60 cm of the soil surface. Salinity levels are high and salt tolerant species are evident. This landscape unit is not suitable for agricultural production, only opportunity grazing. Lunette soils: shallow dark clay loam on limestone - **B5**, shallow clay loam over brown or dark clay on calcrete - **B9**, shallow sandy loam on calcrete - **B3** and shallow calcareous loam on calcrete **- B2**. The soils are very shallow, have high fertility and low waterholding capacity. Drainage is rapid. The soils are calcareous throughout. Surface rockiness may be a limitation for cropping.
Zrv	0.38	Sandy surfaced swampy flat with 10-20% sandy rises and 10-20% stony rises. Main soils: saline soil - **N2**, wet soil - **N3** and shallow dark clay loam on limestone - **B5**. These swampy flats are deep with high fertility and waterholding capacity. Drainage is very poor and seasonally inundated for greater than 3 months. Salinity levels are high to very high and greater than 50% of land surface has salt tolerant species only. This landscape unit is not suitable for agricultural production, only opportunity grazing.

PROPORTION codes assigned to soils within Soil Landscape Units (SLU):

(D) Dominant in extent (>90% of SLU)
(V) Very extensive in extent (60–90% of SLU)
(E) Extensive in extent (30–60% of SLU)
(C) Common in extent (20–30% of SLU)
(L) Limited in extent (10–20% of SLU)
(M) Minor in extent (<10% of SLU)

Detailed soil profile description:

(In alphabetic order)

B2 Shallow calcareous loam on calcrete (Petrocalcic, Supracalcic Calcarosol)
Dark coloured clay loam over a structured dark clay directly overlying calcrete or calcarenite within 30 cm.

B3 Shallow sandy loam on calcrete (Petrocalcic, Orthic Tenosol)
Loamy sand to loam with variable rubble and slight clay increase with depth overlying calcreted calcarenite shallower than 50 cm. Extensive on stony rises.

B4 Shallow red loam on calcrete (Haplic, Petrocalcic, Red Dermosol)
Medium thickness red loam to clay loam over a red structured clay directly overlying calcarenite within 50 cm.

B5 Shallow dark clay loam on limestone (Haplic, Petrocalcic, Black Dermosol)
Thin to medium thickness black clay loam grading to black well structured clay directly overlying calcrete within 50 cm.

B6 Shallow loam over red-brown clay on calcrete (Haplic Petrocalcic, Red Chromosol)
Thin to medium thickness brownish sandy loam to loam over a well structured red to red-brown clay loam to clay on calcrete or calcarenite within 50 cm.

B7 Shallow sand over clay on calcrete (Petrocalcic, Yellow/Brown/Grey Sodosol)
Medium thickness sand overlying poorly structured clay on limestone or calcreted sandy clay within 50 cm.

B8 Shallow sand on calcrete (Bleached-Leptic Tenosol)
Thin to medium organically darkened sand over bleached sand over calcarenite within 50 cm.

B9 Shallow clay loam over brown or dark clay on calcrete (Petrocalcic, Mesonatric Brown Sodosol)
Thin brown to dark sandy loam to clay loam over a sodic brown poorly structured clay directly overlying calcrete within 50 cm.

F1 Loam over brown or dark clay (Melanic, Hypercalcic, Black/Brown Chromosol)
Medium thickness dark brown sandy loam over a thin to medium sand layer over a structured brown to black clay grading to a brown mottled clay with limestone segregations at depth.

F2 Sandy loam over brown or dark poorly structured clay (Mottled, Mesonatric, Grey/Black Sodosol)
Medium thickness brown sandy loam over a thin to medium thickness pale sand layer over a columnar structured dispersive grey to black clay grading to brown mottled clay with depth.

G2 Bleached sand over sandy clay loam (Mesotrophic, Haplic, Kandosol/Chromosol)
Medium to thick loose non-calcareous grey sand with a bleached A2 layer grading to yellowish sand, clear change, overlying an orange/brown sandy clay loam.

G3 Thick sand over clay (Subnatric, Brown Sodosol/Chromosol)
Thick sand with a bleached A2 layer, clearly overlying a weak to moderate structured brown clay to sandy clay.

G4 Sand over poorly structured clay (Subnatric, Brown Sodosol)
Medium sand with a bleached A2 layer clearly overlying a hard columnar structured dispersive brown mottled clay.

H3 Bleached siliceous sand (Arenic , Bleached-Orthic Tenosol)
Thick to very thick bleached sand, organically darkened at the surface over yellow sand continuing below 150 cm. Common on rises.

I1 Highly leached sand (Fragic, Pipey, Aeric Podosol)
Grey sand with a very thick bleached A2 layer, over dark brown and yellow massive soft to semi-hard clayey sand (coffee rock), grading to softer yellow and brown sand to sandy clay loam from about 80 cm.

I2 Wet highly leached sand (Fragic, Humic, Aquic Podosol)
Grey sand with a thick bleached A2 horizon, overlying a thin to thick layer of coffee rock, grading to pale brown sand sharply overlying a grey, brown and yellow mottled sandy clay loam to light clay.

M4 Deep hard gradational sandy loam (Hard Brown-Dark Kandosol- Dermosol)
Deep dark brown loamy to clay loamy soil grading to clay at depth. Hardsetting surface often with prismatic structures in the subsoil.

N2 Saline soil (Calcarosolic, Salic Hydrosol)
Grey very highly calcareous loam grading to a pale grey clay loam over a white very highly calcareous silty clay loam by about 30 cm, with a water table within 100 cm.

N3 Wet soil (non to moderately saline) (Sodosolic, Eutrophic Hydrosol)
Organically stained sandy surface over a pale brown sand overlying a yellowish brown sandy clay on calcrete.

RR Limestone outcrop (Petrocalcic, Leptic Rudosol)
Organically stained sandy to loamy sand surface over a sandy sub-soil with very little development on limestone or calcrete.

WW Water.

(Grouped on landscape position)

Sandy soils (dunes, rises and flats)

H3 Bleached siliceous sand (Arenic, Bleached-Orthic Tenosol)
Thick to very thick bleached sand, organically darkened at the surface over yellow sand continuing below 150 cm. Common on rises.

G2 Bleached sand over sandy clay loam (Mesotrophic, Haplic, Kandosol/Chromosol)
Medium to thick loose non-calcareous grey sand with a bleached A2 layer grading to yellowish sand, clear change, overlying an orange/brown sandy clay loam.

G3 Thick sand over clay (Subnatric, Brown Sodosol/Chromosol)
Thick sand with a bleached A2 layer, clearly overlying a weak to moderate structured brown clay to sandy clay.

G4 Sand over poorly structured clay (Subnatric, Brown Sodosol)
Medium sand with a bleached A2 layer clearly overlying a hard columnar structured dispersive brown mottled clay.

G5 Sand over acidic clay (Sandy Brown Kurosol)
Sandy texture contrast soil with a friable brown strongly acidic clayey to clay loamy subsoil. Very acidic soil; incipient Bh horizons; moderate depth topsoils. Some with ironstone.

H3 Bleached siliceous sand (Arenic , Bleached-Orthic Tenosol)
Thick to very thick bleached sand, organically darkened at the surface over yellow sand continuing below 150 cm. Common on rises.

I1 Highly leached sand (Fragic, Pipey, Aeric Podosol)
Grey sand with a very thick bleached A2 layer, over dark brown and yellow massive soft to semi-hard clayey sand (coffee rock), grading to softer yellow and brown sand to sandy clay loam from about 80 cm.

I2 Wet highly leached sand (Fragic, Humic, Aquic Podosol)
Grey sand with a thick bleached A2 horizon, overlying a thin to thick layer of coffee rock, grading to pale brown sand sharply overlying a grey, brown and yellow mottled sandy clay loam to light clay.

Stony soils (rises and flats)

B2 Shallow calcareous loam on calcrete (Petrocalcic, Supracalcic Calcarosol)
Dark coloured clay loam over a structured dark clay directly overlying calcrete or calcarenite within 30 cm.

B3 Shallow sandy loam on calcrete (Petrocalcic, Orthic Tenosol)
Loamy sand to loam with variable rubble and slight clay increase with depth overlying calcreted calcarenite shallower than 50 cm. Extensive on stony rises.

B4 Shallow red loam on calcrete (Haplic, Petrocalcic, Red Dermosol)
Medium thickness red loam to clay loam over a red structured clay directly overlying calcarenite within 50 cm.

B5 Shallow dark clay loam on limestone (Haplic, Petrocalcic, Black Dermosol)
Thin to medium thickness black clay loam grading to black well structured clay directly overlying calcrete within 50 cm.

B6 Shallow loam over red-brown clay on calcrete (Haplic Petrocalcic, Red Chromosol)
Thin to medium thickness brownish sandy loam to loam over a well structured red to red-brown clay loam to clay on calcrete or calcarenite within 50 cm.

B7 Shallow sand over clay on calcrete (Petrocalcic, Yellow/Brown/Grey Sodosol)
Medium thickness sand overlying poorly structured clay on limestone or calcreted sandy clay within 50 cm.

B8 Shallow sand on calcrete (Bleached-Leptic Tenosol)
Thin to medium organically darkened sand over bleached sand over calcarenite within 50 cm.

B9 Shallow clay loam over brown or dark clay on calcrete (Petrocalcic, Mesonatric Brown Sodosol)
Thin brown to dark sandy loam to clay loam over a sodic brown poorly structured clay directly overlying calcrete within 50 cm.

RR Limestone outcrop

Heavy soils

F1 Loam over brown or dark clay (Melanic, Hypercalcic, Black/Brown Chromosol
Medium thickness dark brown sandy loam over a thin to medium sand layer over a structured brown to black clay grading to a brown mottled clay with limestone segregations at depth.

F2 Sandy loam over brown or dark poorly structured clay (Mottled, Mesonatric, Grey/Black Sodosol)
Medium thickness brown sandy loam over a thin to medium thickness pale sand layer over a columnar structured dispersive grey to black clay grading to brown mottled clay with depth.

M2 Deep friable gradational clay loam (Red-Brown-Grey- Black Dermosol)
Deep well structured red clay loamy soil.

M4 Deep hard gradational sandy loam (Hard Brown-Dark Kandosol- Dermosol)
Deep dark brown loamy to clay loamy soil grading to clay at depth. Hardsetting surface often with prismatic structures in the subsoil.

Other soils

N1 Peat (Organosol)
Peaty soil.

N2 Saline soil (Calcarosolic, Salic Hydrosol)
Grey very highly calcareous loam grading to a pale grey clay loam over a white very highly calcareous silty clay loam by about 30 cm, with a water table within 100 cm.

N3 Wet soil (non to moderately saline) (Sodosolic, Eutrophic Hydrosol)
Organically stained sandy surface over a pale brown sand overlying a yellowish brown sandy clay on calcrete.

A7 Calcareous clay loam on marl.

Further information: DEWNR Soil and Land Program