

SPC Spencer Land System

Area: 1.9 km²

Landscape: Coastal landscapes of the western shores of Spencer Gulf, including dunes of Recent Semaphore Sand, beaches, salt flats and low calcreted benches.

Annual rainfall: 250 - 275 mm average

Main soils: Semaphore **H1/H3** (Shelly Rudosol)
Very thick sand comprising mixed shell and quartz grains.
Yamba **N2** (Hypersalic Hydrosol)
Variable highly saline sand and clay of coastal flats and swamps.

Minor soils: Mitchellville **B2** (Petrocalcic Calcarosol)
Calcareous light sandy loam to light sandy clay loam with variable nodular calcrete, over rubbly or sheet calcrete.

Summary: Coastal landscapes are fragile with little productive potential. Coastal dunes are highly infertile and prone to severe wind erosion. Saline flats only support halophytic species, and are significant wetland environments. There is a high likelihood of acid sulfate soils developing if these flats dry out. Remnant calcrete benches have very shallow soils with limited potential for plant growth.

Soil Landscape Unit summary: 3 Soil Landscape Units (SLUs) mapped in the Spencer Land System

SLU	% of area	Component	Main soils	Prop#	Notes
QBA	12.1	Stony flats	Mitchellville	D	Shallow stony soil, limited waterholding capacity, commonly non arable.
WFH	44.7	Low coastal dunes	Semaphore	V	Highly infertile deep coarse sands, wind erosion prone. Includes some beaches. Flats have potentially acid sulfate soils.
		Salt flats	Yamba	L	
ZC-	43.2	Salt flats	Yamba	D	Back lagoons on the landward side of the coastal dunes, comprising highly saline flats and salinas. The land has no productive potential other than occasional light grazing. Soils are potentially acid sulfate.

PROPORTION codes assigned to Soil Landscape Unit (SLU) components:

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

Further information: [DEWNR Soil and Land Program](#)

