

6.3 Description and analysis of coastal cells

Cell EP2 Port Bonython

Cell area is 1,231 ha. Shoreline length 30.24 km.

Landforms

The Point Lowly peninsula is a low plateau, sloping NW - SE, in the Simmens quartzite member, of the Neoproterozoic Tent Hill formation. The southern shore of the peninsula has 20m bluffs over sloping shore platforms and small beaches. The bluffs and cliffs of the eastern side on the peninsula slope down to pebble beaches with some sand at high tide. Fitzgerald Bay is a sand trap, shown by the storage of Holocene sands in wide nearshore low tide sandflats, and small areas of sand ridges at the head of the bay; here the Holocene sand grit has been mixed with the Pleistocene red sands from the Gulf floor. The beach here is narrow high tide reflective in morpho-dynamic terms. Volcanics are exposed in cliffs and platforms at Backy Point. Small areas of sand dune are found near Point Lowly and at Weeroona Bay. At the Weeroona Bay dunes backshore low cobble ridges occur, possibly formerly covered by white Holocene sands that are now immediately inland. No dating is available for these deposits; however, further north in the Gulf similar deposits are Pleistocene in age.



Benthic Habitat

Bare sand is found inshore at Fitzgerald Bay, with some seagrass c.500m offshore. A narrow band of dense seagrass is found inshore from Fitzgerald Bay to Pt Lowly.

Biota

Remnant vegetation is 1,129 ha., 92% of the cell. There are three flora survey sites in beach ridges in Fitzgerald Bay; and four on the cliffs mid-eastern side of the peninsula. The majority of the area within the coastal boundary is arid low acacia shrubland with tussock grass; small areas of low Casuarina woodland and dune shrubland are also represented.

Land Use/ Land Ownership

The coastal reserve between Backy Point and Point Lowly is unallotted Crown land and varies from approximately 50m to >600m wide, with small areas of privately owned land within the reserve area used for shacks/dwellings. Much of this coastal reserve is backed by the Cultana Training Area used by the Department of Defence. The Point Lowly settlement is surrounded by

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unallotted Crown land. However, the tip of Point Lowly that includes the lighthouse complex is owned by the Whyalla City Council. The lighthouse complex, including the cottages is entered in the South Australian Heritage Register as a State Heritage Place, as well as being on the Register of the National Estate. The coastal reserve in front of the Santos hydrocarbon processing plant is owned by the Minister for Transport. The land surrounding Weeroona Bay is Crown land under a Miscellaneous lease and is used as a buffer for the Santos facility. West of the leased area, the coastal reserve (c.130 – 800m wide) is Crown lands Act Reserve under the care, control and management of the Whyalla City Council, backed by privately owned land.

Upper Spencer Gulf Marine Park offshore.



FIGURE 6.1 Stony Point, Point Lowly; Fitzgerald Bay in background. Photo: Coast Protection Board, 2007

Uses (Field visits and local reports)

Industrial (Santos hydrocarbon processing plant)
Shipping (Port Bonython)
Defence training
Offshore aquaculture
Recreation and tourism – fishing, camping, ORV use, diving
Eco tourism- diving with the cuttlefish
Boat launching, from shore and Pt Lowly boat ramp, for professional and recreational purposes

Values (Field visits and local reports)

Cuttlefish breeding area offshore
Stranded shingle beach ridges – important geological feature

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Threats (Field visits and local reports)

Weed infestation from garden escape plants
Dune erosion from vegetation loss
Marine debris
Uncontrolled ORV usage
Uncontrolled camping
Firewood collection
Future industrial expansion, including desalination plant
Development

Opportunities (Field visits and local reports)

Support and expand work currently being undertaken by Cultana Jenkins Shackowners Association and Whyalla City Council to protect shingle beach geological feature.
Support current work by Whyalla City Council to eradicate succulent weeds from Pt Lowly dune area and undertake community education on impact of escaped garden plants that become weeds in coastal environment.
Marine debris surveys currently undertaken by community at Black Point. Use data from surveys to inform actions to address the source of the debris.

Conservation Analysis (GIS)

Total conservation priority values are 107.4, moderate to high for the region, and 44th in ranking. Conservation values are generally low to moderate, with the exception of higher values in the sand dune areas in back of the centre of Fitzgerald Bay, at the back of Weroona Bay and near Point Lowly. (These dunes are the most northerly on the west side of Spencer Gulf and contain locally rare habitat, notably for reptiles).

Small high value areas add to the total value: including, habitat for the Australian Pied Oystercatcher (focal species) on some beaches; the Beach Slider and the Bight Coast Skink (focal species) in the dune areas; and significant geological feature, the Beda Volcanics (Moonabie Formation) at Backy Point.

Widespread moderate to low values for communities and species with threatened status make some contribution to the total, as do endemic plant species and endemic habitat. The low shrubland of almost the entire cell gives high values for vegetation metrics – these are generally low arid acacia shrubland and tussock grassland – but with small areas of low dune shrubland; and widespread sea views assign high viewshed scores.

[Some of the outstanding conservation values of this coastal area are not covered by this analysis, as they lie offshore; however onshore developments within the cell pose clear threats – such as dredging for port facilities and future high saline outflows – to the cuttlefish breeding area.].

Threat Analysis (GIS)

The combined threat total of 50.19 which is high for the region. The largest contributions to this total are from development and land use.

The pattern of medium to high threat totals on the detailed summary is widespread, with the exception of low threat areas of low lying salt marsh and arid shrubland on each flank of Fitzgerald Bay; however the dune areas here have medium to high totals.

The highest concentration of threats is at Point Lowly and < 3km north, in part this is coastal dunes; together with the eastern fringes of Port Bonython.

High individual threat layers include: ORV tracks proliferate throughout the cell, notably through the low arid shrubland and tussock grassland as well as the areas of dune shrubland; development

Cell descriptions – EP2 Port Bonython

zoning is categorised high threat notably for the Special Industry zoning near Point Lowly, and the ‘no zones’ south of Fitzgerald Bay and near Backy Point; land ownership, land use and viewshed have high values through most of the cell.

Adaptation to Climate Change Threats

(see also discussion of scenario in section 4.11)

NOTE: the advice below is indicative of likely change and the direction of change, with implications for ecosystems. Dates, amounts and probabilities cannot be accurately calculated at this time. Thus advice on flood levels, for example, should not be used in engineering or development planning.

Climate change element/ scenario	Impacts and implications (for this cell)	Protect and manage habitat threats	Address landscape issues: fire, connectivity, refuges, hydrology
Combined climate changes and sea level rise throughout this cell	This cell presents a complex pattern of habitats sensitive to change	Create a baseline for shoreline, dune and lake change by establishing a rectified aerial photographic record at an appropriate resolution.	
Sea level rise: 2030 : +c.20cm	Beach recession and dune instability at Fitzgerald Bay and near Port Bonython	Establish and monitor beach profiles	
2070: +c.80cm	Sandy coast has marked recession. Foredune blowouts. Low dune ridges overtopped.	Active management of dune blowouts	
Storms: <i>Frequency</i> continues to show great variation on a decadal scale.	2030: Occasional storm tide flooding above highest known tides.	Beach for recession.	
<i>Intensity</i> of large storms increases. Storm surge heights are high in the northern half of the Gulf	Frequent damage to foredunes. Surge overtopping (and rapid retreat of) low dune ridges during large storms.	Active management of dune blowouts. Dune weed control.	
Warmer average conditions: 2030:+0.3 to.60C 2070:+1.5 to 20C	(Impacts uncertain. Existing terrestrial vegetation is found in warmer conditions elsewhere). There will be an increased risk for species that are already vulnerable. Invasive species may become more dominant.		Maintain NE-SW connectivity of vegetation within the coastal boundary

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Climate change element/ scenario	Impacts and implications (for this cell)	Protect and manage habitat threats	Address landscape issues: fire, connectivity, refuges, hydrology
<p>Drier average conditions: 2030: -2% to 5%</p> <p>2070: - 10% to 20%</p>	Dune habitats adapt well to drier conditions, but recover more slowly from fire, disease and storm damage	Active dune management, including weed control	
<p>‘Flashy’ run off: Drier creeks, but larger rare floods</p>	[Short first and second order creeks dissect the plateau edge]. These creeks will transport a full range of sediment to the shoreline and nearshore waters.		
<p>Groundwater lowering; saline incursion:</p>	Local impact on soil water and vegetation survival	Adaptive management of plant assets	Monitor level and salinity of water table within the plateau and slopes.
<p>Nearshore sea changes - temperature; acidity; wave climate: 2030: +0.3°C to + 0.6°C</p> <p>2070: +1.0°C to + 1.50C</p>	Persistent swell wave climate maintains sediment movement towards the north along the Gulf coast. Local movement of large quantities of sand in the nearshore zone may be accelerated as sea levels rise.	Monitor beaches, see above.	

TABLE 6.3 Recommended Actions and Priority for EP2 Port Bonython

Component	Issue	Proposed Action	Priority of Action	Key Players of Action
Whole cell	Inadequate data on biodiversity and habitat values, particularly fauna.	Undertake coastal flora and fauna surveys to inform future management directions.	Medium (cons)	DENR, EP NRM
	Informal camping appears to occur around much of this coast, with potential impact from soil compaction, vegetation damage – trampling and removal, fauna disturbance, soil erosion, dune instability, increased fire risk, fire wood collection and weed introduction.	Monitor impacts of camping. Review locations, management and need for camping in this location, with consideration to close and sign areas inappropriate for camping and/or formalise, manage & maintain (eg. develop camping management plan, fencing, signs, weed management) areas where camping is to be allowed	Medium (cons/ threat)	DENR, Whyalla City Council, EP NRM, community

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Component	Issue	Proposed Action	Priority of Action	Key Players
	Potential impacts on Aboriginal heritage sites	Ensure future infrastructure avoids Aboriginal heritage sites. Consultation to appropriately manage sites where required.	High (cons)	Traditional owners, DPC, Whyalla City Council, DENR, land owners, community groups, EP NRM
	A very high level of ORV activity shown in multiple tracks and many formal and informal car parks; with impact from soil compaction, vegetation damage, soil erosion, dune instability and weed introduction.	Develop access/traffic management plan – including review of existing access with a view to rationalise unnecessary tracks and car parks. Block access (eg. fencing/rocks) to tracks and car parks to be closed, rehabilitate (where appropriate) and maintain. Upgrade any tracks or car parks that are not well defined, or are causing water run-off erosion. Install directional /educational signage. Maintenance of previous access management works. Community education	High (threat/cons)	DENR, Whyalla City Council, EP NRM, DTEI, community, Tourism SA
	Possible future industrial &/or residential development with potential impact on high conservation values of surrounding area (eg. domestic animals disturbing/destroying native species, vegetation damage, soil compaction, weed escapes, increased tracks, discharges to sensitive marine environment, etc)	Ensure future development is not located in areas of high conservation value or high sensitivity. Ensure future development minimises impact to surrounding environment (eg. limit track creation, limit development footprint, prohibit/minimise discharges to the marine environment). Community education about impacts, eg. regarding garden plants becoming weeds, impacts of uncontrolled pets, etc	High (cons/threat)	Whyalla City Council, DTEI, DENR, DPLG, EP NRM, private land owners, developers, community groups
	Marine debris with potential impact on native fauna species	Support continuation of marine debris surveys. Use information from surveys to develop and implement education program targeting source of debris (eg. professional or recreational fishers, campers, aquaculture operators, etc)	Medium (cons/threat)	EP NRM, community, Whyalla City Council

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Component	Issue	Proposed Action	Priority of Action	Key Players
Dunes at Point Lowly	These dune areas have moderate/ high conservation totals, but are threatened by ‘settlement’ zoning	Review development plan zoning to include these dunes into the Coastal Conservation Zone	Medium (cons)	Whyalla City Council, DPLG, DENR
	Increasing vulnerability to large storm surges as sea level rises More arid conditions slows recovery from damage	Monitor beach recession and dune instability. Weed control. Blow out restoration	Medium (cons)	DENR, EP NRM
Beaches	Vehicles on beaches and beach boat launching with potential impact on meiofauna, shorebirds and intertidal species and/or habitat.	Develop and implement beach driving strategy to minimise impacts, including review/ rationalise locations, monitoring impacts, consistent speed limits, rules and signage. Develop and implement specific shorebird management plans, including consideration to various permanent, temporary and seasonal options for site protection such as seasonal closures of sections of beach / temporary fencing/ dog free or dog on leash areas. Undertake and/or support ongoing shorebird monitoring programs. Raising community awareness through interpretive signage and other programs.	Medium (cons/ threat)	Whyalla City Council, DTEI, EP NRM, DENR, PIRSA, Tourism SA, Birds Australia, community
Backy Point	Significant geological feature present – GSA reference W1.5 (see section 3.4.1)	Interpretive signage	Low (threat)	GSA SA branch, Whyalla City Council, EP NRM, DENR
Stranded shingle beach ridge Backy Point to Stony Point	Important geological feature with damage from ORV and with potential damage from development, collection, removal, etc.	Nominate as a significant geological feature with the GSA. Investigate and implement options and/or actions to protect these features, including track rationalisation, revegetation, interpretive signage, legislative protection, community education.	High (cons)	GSA SA branch, Whyalla City Council, EP NRM, community groups, DENR

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Component	Issue	Proposed Action	Priority of Action	Key Players
Dunes at Fitzgerald Bay	These dune areas have moderate/ high conservation totals and are a locally rare habitat, but are threatened by ORV activity.	Review existing tracks with a view to rationalise unnecessary tracks. Implement actions to control or exclude off-road vehicle activity.	High (cons/ threat)	DENR, EP NRM
	Increasing vulnerability to large storm surges as sea level rises More arid conditions slows recovery from damage	Monitor beach recession and dune instability. Weed control. Blow out restoration	Medium (cons)	DENR, EP NRM
Salt marsh and low lying areas	Salt marsh and low lying areas show the potential for acid sulfate soil following disturbance; in turn this would potentially threaten life forms offshore.	Potential hazard can be avoided by following procedures in CPB ‘Coastline’ on acid sulfate soils.	Medium (hazard)	Whyalla City Council, DENR, developers, private land owners
Fitzgerald Bay and Point Lowly	Existing development, many shacks along the foreshore with surrounding impacts including increased tracks, vegetation damage, soil compaction, feral animals (pets) impact on native fauna and weed escapes	Work with private land owners to minimise impact from existing development, including education, restoration where appropriate and/or negotiation/enforcement to ensure the developments do not encroach on the coastal Crown reserve. Community education about impacts, eg. regarding garden plants becoming weeds, impacts of uncontrolled dogs and cats, etc	Medium (cons/ threat)	DENR, Whyalla City Council, EP NRM, private land owners, community groups
	Weed species identified throughout area, associated with existing development	Support current and future weed control programs. Develop and implement weed control strategy if required. Undertake community education on impacts of garden plants becoming weeds in coastal environments.	Medium (cons/ threat)	Whyalla City Council, EP NRM, DENR, private land owners, community groups
	An area of low current rabbit activity identified approximately 2km north of Pt Lowly; potential impact on vegetation degradation, competition for food and habitat.	Monitor and record existence and impacts of introduced pest animals eg. rabbits foxes, cats. Undertake a control program if required.	Low (threat)	EP NRM, private land owners, DENR, Whyalla City Council

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Component	Issue	Proposed Action	Priority of Action	Key Players
	Registered non-indigenous heritage site (Point Lowly lighthouse complex) with potential impact from recreational activities	Ensure sites managed to protect from damage. Install interpretive educational signage.	Medium (cons/threat)	Whyalla City Council, DENR, community

BIOTA

Flora

Remnant vegetation area (ha)	1,128 ha, 91.67% of cell area
# flora surveys / records	7 surveys, 1 opportune sites, 3 herbarium record sites
# flora in cell	87 (note: includes some marine species)
# conservation rated flora in cell	1
# non-indigenous flora in cell	16
Significant CDCS floristic community	<i>Atriplex vesicaria</i> ssp. shrubland – 71% of SA records in EP <i>Nitraria billardiieri</i> shrubland – 54% of SA records in EP
Protected area	No remnant vegetation protected

Weeds

Species	Common Name	Status	Study rating
<i>Carrichtera annua</i>	Ward's Weed	RA	4
<i>Marrubium vulgare</i>	Horehound	D, RA	5
<i>Aeonium arboreum</i>	Tree Aeonium		1
<i>Anagallis arvensis</i>	Pimpernel		2
<i>Brassica tournefortii</i>	Wild Turnip		3
<i>Cakile maritima</i> ssp. <i>maritima</i>	Two-horned Sea Rocket		1
<i>Carthamus lanatus</i>	Saffron Thistle		0
<i>Erodium cicutarium</i>	Cut-leaf Heron's-bill		0
<i>Holcus lanatus</i>	Yorkshire Fog		0
<i>Hornungia procumbens</i>	Oval Purse		0
<i>Medicago minima</i> var. <i>minima</i>	Little Medic		1
<i>Nicotiana glauca</i>	Tree Tobacco		0
<i>Silene</i> sp.	Catchfly		0
<i>Sisymbrium erysimoides</i>	Smooth Mustard		0
<i>Sonchus oleraceus</i> (NC)	Common Sow-thistle		0
<i>Stellaria media</i>	Chickweed		0

D: Declared weed, RA: Red alert weed

Native flora*

Species	Common Name	Aus status	SA status
<i>Santalum spicatum</i>	Sandalwood		V
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia papyrocarpa</i>	Western Myall		
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush		

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Species	Common Name	Aus status	SA status
<i>Amyema miraculosa ssp. boormanii</i>	Fleshy Mistletoe		
<i>Asparagopsis taxiformis</i>			
<i>Atriplex paludosa ssp. cordata</i>	Marsh Saltbush		
<i>Atriplex paludosa ssp. paludosa</i>	Marsh Saltbush		
<i>Atriplex vesicaria ssp.</i>	Bladder Saltbush		
<i>Austrostipa elegantissima</i>	Feather Spear-grass		
<i>Austrostipa sp.</i>	Spear-grass		
<i>Beyeria lechenaultii</i>	Pale Turpentine Bush		
<i>Bulbine semibarbata</i>	Small Leek-lily		
<i>Calandrinia sp.</i>	Purslane/Parakeelya		
<i>Casuarina pauper</i>	Black Oak		
<i>Crassula sieberiana ssp. tetramera (NC)</i>	Australian Stonecrop		
<i>Cystophora expansa</i>			
<i>Danthonia sp. (NC)</i>	Wallaby-grass		
<i>Dianella brevicaulis</i>	Short-stem Flax-lily		
<i>Dictyota dichotoma</i>			
<i>Dissocarpus biflorus var. biflorus</i>	Two-horn Saltbush		
<i>Dodonaea lobulata</i>	Lobed-leaf Hop-bush		
<i>Dodonaea viscosa ssp. angustissima</i>	Narrow-leaf Hop-bush		
<i>Enchylaena tomentosa var. tomentosa</i>	Ruby Saltbush		
<i>Eremophila deserti</i>	Turkey-bush		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Exocarpos syrticola</i>	Coast Cherry		
<i>Frankenia pauciflora var. gunnii</i>	Southern Sea-heath		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Geranium retrorsum</i>	Grassland Geranium		
<i>Geranium sp.</i>	Geranium		
<i>Laurencia majuscula</i>			
<i>Lichen sp.</i>			
<i>Lobophora variegata</i>			
<i>Lycium australe</i>	Australian Boxtorn		
<i>Lysiana exocarpi ssp. exocarpi</i>	Harlequin Mistletoe		
<i>Maireana erioclada</i>	Rosy Bluebush		
<i>Maireana oppositifolia</i>	Salt Bluebush		
<i>Maireana pyramidata</i>	Black Bluebush		
<i>Maireana sedifolia</i>	Bluebush		
<i>Minuria cunninghamii</i>	Bush Minuria		
<i>Moss sp.</i>			
<i>Myoporum insulare</i>	Common Boobialla		
<i>Myoporum montanum</i>	Native Myrtle		
<i>Myoporum platycarpum ssp.</i>	False Sandalwood		
<i>Myosotis australis</i>	Austral Forget-me-not		
<i>Nicotiana goodspeedii</i>	Small-flower Tobacco		
<i>Nitraria billardierei</i>	Nitre-bush		
<i>Olearia axillaris</i>	Coast Daisy-bush		
<i>Parietaria debilis (NC)</i>	Smooth-nettle		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Podotbecca angustifolia</i>	Sticky Long-heads		
<i>Ptilotus obovatus var. obovatus</i>	Silver Mulla Mulla		
<i>Rhagodia parabolica</i>	Mealy Saltbush		
<i>Rhagodia spinescens</i>	Spiny Saltbush		
<i>Rhodanthe pygmaea</i>	Pigmy Daisy		
<i>Sargassum paradoxum</i>			

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Species	Common Name	Aus status	SA status
<i>Scaberia agardhii</i>			
<i>Scaevola spinescens</i>	Spiny Fanflower		
<i>Sclerolaena obliquicuspis</i>	Oblique-spined Bindyi		
<i>Sclerolaena uniflora</i>	Small-spine Bindyi		
<i>Senecio glossanthus</i> (NC)	Annual Groundsel		
<i>Solanum ellipticum</i>	Velvet Potato-bush		
<i>Stenopetalum lineare</i> (NC)	Narrow Thread-petal		
<i>Tetragonia eremaea</i>	Desert Spinach		
<i>Tetragonia implexicoma</i>	Bower Spinach		
<i>Tbrelkeldia diffusa</i>	Coast Bonefruit		
<i>Wurmbea dioica ssp. dioica</i> (NC)	Early Star-lily		
<i>Zygophyllum apiculatum</i>	Pointed Twinleaf		
<i>Zygophyllum confluens</i>	Forked Twinleaf		

R: Rare, V: Vulnerable, E: Endangered

* note: includes some marine species

Fauna

# of fauna in cell	43 recorded – 31 birds, 0 butterflies, 6 mammals, 6 reptiles, 0 amphibians (an additional 16 reptiles and 19 butterflies identified by experts as possibly occurring)
# of fauna surveys / records	10 opportune sites
# of threatened fauna in cell	4
# of non-indigenous fauna	3 recorded (an additional 1 invertebrate possible)

Non-indigenous fauna

Species	Common Name	Class	Record
<i>Passer domesticus</i>	House Sparrow	Aves	x
<i>Sturnus vulgaris</i>	Common Starling	Aves	x
<i>Pieris rapae rapae</i>	Cabbage White	Invertebrate	p
<i>Mus musculus</i>	House Mouse	Mammalia	x

x: recorded, p: possibly there as suggested by R. Grund

Birds

Species	Common Name	Aus status	SA status
<i>Arenaria interpres</i>	Ruddy Turnstone	M	R
<i>Egretta sacra</i>	Eastern Reef Egret		R
<i>Haematopus longirostris</i>	Australian Pied Oystercatcher		R
<i>Acanthagenys rufogularis</i>	Spiny-cheeked Honeyeater		
<i>Artamus cinereus</i>	Black-faced Woodswallow		
<i>Artamus superciliosus</i>	White-browed Woodswallow		
<i>Charadrius ruficapillus</i>	Red-capped Plover		
<i>Chroicocephalus novaehollandiae</i>	Silver Gull		
<i>Cincloramphus cruralis</i>	Brown Songlark		
<i>Corvus coronoides</i>	Australian Raven		
<i>Corvus mellori</i>	Little Raven		
<i>Coturnix pectoralis</i>	Stubble Quail		

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Species	Common Name	Aus status	SA status
<i>Cracticus tibicen</i>	Australian Magpie		
<i>Cracticus torquatus</i>	Grey Butcherbird		
<i>Eolophus roseicapillus</i>	Galah		
<i>Hirundo neoxena</i>	Welcome Swallow		
<i>Larus pacificus</i>	Pacific Gull		
<i>Lichenostomus virescens</i>	Singing Honeyeater		
<i>Manorina flavigula</i>	Yellow-throated Miner		
<i>Microcarbo melanoleucos</i>	Little Pied Cormorant		
<i>Ocyphaps lophotes</i>	Crested Pigeon		
<i>Phalacrocorax carbo</i>	Great Cormorant		
<i>Phalacrocorax fuscescens</i>	Black-faced Cormorant		
<i>Phalacrocorax varius</i>	Pied Cormorant		
<i>Pomatostomus superciliosus</i>	White-browed Babbler		
<i>Rhipidura albiscapa</i>	Grey Fantail		
<i>Thalasseus bergii</i>	Crested Tern		
<i>Todiramphus pyrrobygius</i>	Red-backed Kingfisher		
<i>Tringa nebularia</i>	Common Greenshank	M	

R: Rare, V: Vulnerable, E: Endangered, M: Migratory

Butterflies

Species	Common Name	Status*	Record
<i>Hesperilla chrysotricha cyclospila</i>	Chrysotricha Sedge-skipper	V	p
<i>Candalides beathi beathi</i>	Rayed Blue	R	p
<i>Cyprotides cyprotus cyprotus</i>	Cyprotus Pencilled-blue	R	p
<i>Delias aganippe</i>	Wood White	R, Va	p
<i>Jamenus icilus</i>	Icilius Hairstreak	R	p
<i>Belenois java teutonia</i>	Caper White	Mi	p
<i>Danaus chrysippus petilia</i>	Lesser Wanderer		p
<i>Erina acasta</i>	Blotched Dusky-blue		p
<i>Eurema (Terias) smilax</i>	Small Grass-yellow	Mi	p
<i>Geitoneura klugii</i>	Common Xenica	LC	p
<i>Hesperilla donnyssa diluta</i>	Donnyssa Sedge-skipper		p
<i>Junonia villida cabybe</i>	Meadow Argus	LC, Mi	p
<i>Lampides boeticus</i>	Long-tailed Pea-blue	LU	p
<i>Motasingha trimaculata trimaculata</i>	Dingy four-spot Sedge-skipper	LU	p
<i>Nacaduba biocellata biocellata</i>	Two-spotted Line-blue	LC	p
<i>Papilio demoleus sthenelus</i>	Chequered Swallowtail	Va	p
<i>Theclinesthes miskini miskini</i>	Wattle Blue	LU	p
<i>Vanessa kershawi</i>	Australian Painted Lady	LC, Mi	p
<i>Zizina labradus labradus</i>	Common Grass-blue	LC	p

Vulnerability as per R. Grund, E: Endangered, V: Vulnerable, R: Rare, Va: Vagrant, Mi: Migrant, LC: Locally common, LU: Locally uncommon
 x: recorded, p: possibly there as suggested by R. Grund

Mammals

Species	Common Name	Aus status	SA status
<i>Macropus fuliginosus</i>	Western Grey Kangaroo		
<i>Macropus robustus</i>	Euro		
<i>Nyctophilus geoffroyi</i>	Lesser Long-eared Bat		

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Species	Common Name	Aus status	SA status
<i>Pseudomys bolami</i>	Bolam's Mouse		
<i>Sminthopsis dolichura</i>	Little Long-tailed Dunnart		

R: Rare, V: Vulnerable, E: Endangered

Reptiles

Species	Common Name	Aus status	SA status	Record
<i>Morelia spilota</i>	Carpet Python		R	x
<i>Acanthophis antarcticus</i>	Common Death Adder			e
<i>Amphibolurus norrisi</i>	Mallee Tree-dragon			e
<i>Aprasia inaurita</i>	Red-tailed Worm-lizard			c
<i>Cryptoblepharus pulcher</i>	Striped Wall Skink			e
<i>Ctenophorus pictus</i>	Painted Dragon			c
<i>Ctenotus orientalis</i>	Spotted Ctenotus			e
<i>Delma australis</i>	Barred Snake-lizard			e
<i>Egernia stokesii</i>	Gidgee Skink			x
<i>Gehyra variegata</i>	Tree Dtella			c
<i>Lerista dorsalis</i>	Southern Four-toed Slider			e
<i>Lerista edwardsae</i>	Myall Slider			c
<i>Lerista terdigitata</i>	Southern Three-toed Slider			c
<i>Menetia greyii</i>	Dwarf Skink			x
<i>Morethia adelaidensis</i>	Adelaide Snake-eye			x
<i>Morethia obscura</i>	Mallee Snake-eye			e
<i>Parasuta spectabilis</i>	Mallee Black-headed Snake			x
<i>Pogona vitticeps</i>	Central Bearded Dragon			c
<i>Pseudonaja affinis</i>	Dugite			c
<i>Pygopus lepidopodus</i>	Common Scaly-foot			e
<i>Tiliqua occipitalis</i>	Western Bluetongue			x
<i>Tiliqua rugosa</i>	Sleepy Lizard			e

R: Rare, V: Vulnerable, E: Endangered

x: recorded, e: potentially everywhere (M. Hutchinson pers. comm), c: could occur (M. Hutchinson pers. comm)

Amphibians

No amphibian species recorded