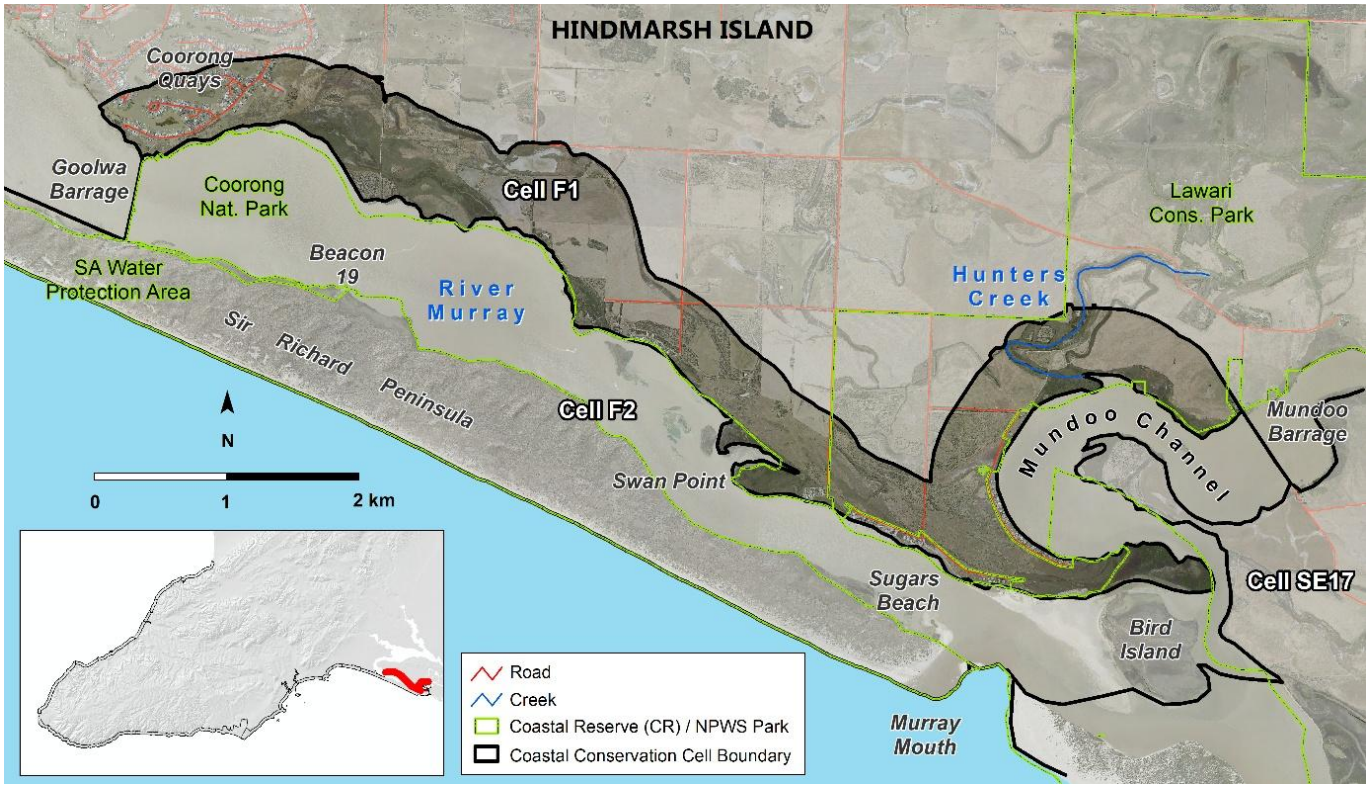
Southern Fleurieu Coastal Action Plan

Murray Mouth (Kandukang (west) and Tapalwora (east)), **and southern shore of Hindmarsh Island** (Kumarangk)

Cell F1

Overview

This cell contains the largest areas of saltmarsh (intertidal and supratidal) in the region and is located within a Ramsar site known as the Coorong and Lakes Alexandrina and Albert Wetland. The areas of this cell support multiple species of conservation concern, and ecological communities, flora and fauna listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Recent inclusion of previously grazed land into Lawari Conservation Park and restoration efforts by land managers and community continue to improve conservation values in this cell. The main threats within the cell are; areas of acid sulfate soil potential, land use and land ownership, the number of exotic plants and the distribution of invasive weeds. This cell sits across several administrative boundaries and there is need for collaborative management in the long term.



Cell Detail

This cell extends from west of the Goolwa Barrage approximately 9.5km on the southern shore of Hindmarsh Island to the Mundoo Barrage. It includes sections of Lawari Conservation Park and is adjacent to the Coorong National Park. This cell is in Alexandrina Council local government area.

Tenure, Land Use and Values

Pasture. Small wetlands and creeks. Homes and holiday homes adjacent coastal reserve. Waters, foreshore and coastal reserves under care and control of NPWS (Lawari Conservation Park and Coorong National Park). Note: Only small parcels of this cell are within Coorong National Park near Mundoo Channel. Since 2012, the waters surrounding this cell, including within the Murray mouth up to Goolwa and Mundoo barrages and the small islands, are within the boundaries of the Encounter Marine Park.

Native title has been determined for Ngarrindjeri people over land and sea Country within this cell under the *Native Title Act 1993 (Cth).*

The estuary and its shores are a wetland of international significance - a “Ramsar” site - and support multiple species listed under the Japan-Australia Migratory Birds Agreement (JAMBA), China-Australia Migratory Birds Agreement (CAMBA), and the Republic of Korea–-Australia Migratory Bird Agreement (ROKAMBA) international treaties. This wetland is a region of outstanding national and international conservation value, particularly for its variety of wetland habitats, and significance for waterbirds (feeding and roosting) and other coastal and beach-nesting birds (Baker, 2004). The whole cell is also listed as a River Murray Protection Area under the *River Murray Act 2003*, which aims to protect, restore and enhance the river and its natural resources (including water, soil, ecosystems and heritage associated with the river).

In 2012, there was widespread agreement across government that a plan was needed to manage our water carefully and protect the Basin for future generations. The Murray–Darling Basin Plan was developed to manage the Basin as a whole connected system. The aim of the Murray–Darling Basin Plan is to bring the Basin back to a healthier and sustainable level, while continuing to support farming and other industries for the benefit of the Australian community. There are many key elements of the plan - but of importance for the ecology is the 'Water for the environment allocation' (MDBA 2012).

The Lower Murray and Darling River system was formally proclaimed a Critically Endangered ecological community in January 2026 under Australia’s EPBC Act. This listing recognises the severe ecological decline of the river system downstream of the Darling River including the interconnected network of wetlands, floodplains, groundwater systems, the Murray Mouth and the Coorong. The proclamation responds to long-term pressures such as over-extraction, reduced flows, salinity, invasive species and climate-driven stress, strengthening national protections to support the recovery of this culturally and ecologically significant system (Department of Climate Change, Energy, the Environment and Water, 2026).

Tourism, including high recreational use walking, recreational shore and boat fishing, birdwatching, boating.

Since 2001, the Hindmarsh Island Landcare Group has coordinated efforts towards restoring the island’s landscapes, with a more recent focus on the Lawari Conservation Park, which now covers 25% of the island. Over 20 years, they’ve planted over 700,000 plants, grown by the group at the Hindmarsh Island Community Nursery, to assist in bringing back local coastal native species and ecosystems. The broader community, including multiple private landowners, has invested great effort in re-planting brackish swales and saltmarsh areas across the cell, particularly within Lawari Conservation Park, previously cleared by grazing. Friends of the Hooded Plover and Fairy Terns Fleurieu Peninsula (supported by BirdLife Australia) and Team Oystercatcher volunteers (SA Shorebird Foundation) monitor and raise awareness of beach nesting and shorebird species within the cell.

Commercial activities include fishing, tour operators (Coorong Cruises, canoeing, First Nations cultural engagement), and agriculture (mainly stock and cropping, e.g. Mundoo Island Station).

Landforms

“The geomorphology of the Murray Mouth and associated sand peninsulas; the flow regime; the significant freshwater and sediment input to the coastal area; and associated variety of freshwater, estuarine and saltwater habitats, make the Murray Mouth estuary a major physical and biological influence in the region.” (Baker, 2004). Low rolling aeolianite plain of Hindmarsh Island, with brackish swampy swales.

Southern coast of Hindmarsh Island and the Murray Mouth (Coast Protection Board, March 2024)

First Nations cultural heritage and connection to land and sea Country

This cell holds high cultural value and significance for the Ramindjeri people of the Ngarrindjeri Nation. It forms part of their Dreaming stories and contains numerous stories, places, and artefacts of cultural importance. Ramindjeri cultural heritage is present throughout the entire cell, everywhere you tread. The Ramindjeri lived, hunted, played, swam, and danced here. Those working within and restoring these areas may encounter artefacts or evidence of cultural significance to the Ramindjeri people and the broader Ngarrindjeri Nation. These areas must be known, recognised, respected, and protected.

Creeks, wetlands, estuaries, dunes, cliff lines, islands and coastal areas are important gathering places that support a variety of habitats and food sources essential for sustaining and protecting Nga:tji. Nga:tji are the personal totems of the Ngarrindjeri people. They embody deep cultural values, symbolising kinship, spiritual protection, and an embedded responsibility to care for the land, waters, and ecosystems they inhabit.

Landscape features and culturally significant sites within this cell include the estuary and saltmarsh habitats of the lower Murray River and the Mundoo Channel. Local creeks provided sheltered campsites, with multiple midden sites located throughout the area.

This cell is also a particularly important site in the Ngurunderi Creation and Dreaming story, which tells of the Ngarrindjeri people's creation of the land and waters, including the River Murray and its mouth, Kandukang (west) and Tapalwora (east). This ancestral narrative extends westward along the southern coast of the Fleurieu Peninsula, encompassing the rugged shoreline, estuaries, and coastal landscapes all the way to Cape Jervis (Parrewar-angk). These areas hold deep cultural and spiritual significance for the Ramindjeri people, with Dreaming tracks, songlines, and important sites embedded throughout the region.

The coastline with its cliffs, beaches, and native vegetation reflects Ngurunderi's journey as he shaped the land, rested at key locations, and followed the tracks of his wives. Cape Jervis (Parrewar-angk) marks an important point in this story, serving as both a physical and spiritual place in the landscape. It connects the mainland to Kangaroo Island (Ngurungaui), continuing the cultural narrative of creation, movement, and connection to Country.

Within this cell, the Dreaming story tells how Ngurunderi crossed the Murray Mouth, creating and shaping the land as he went, establishing camping grounds along the Coorong, and forming waterholes and springs. As he followed the tracks of his wives, he rested at Kutiangk (Goolwa), while his wives passed ahead toward Ratalang (near Port Elliot).

Please respect that cultural concepts and content included in this plan are the Aboriginal Cultural and Intellectual property (ACIP) of the Ramindjeri people of the Ngarrindjeri Nation (provided by Cedric Varcoe, Ramindjeri Cultural Leader living on Country) (cells 1-20). They may not be used or adapted by any other parties without consent.

Terrestrial Biodiversity

Whole cell

The major contributors to the conservation total are high scores for bird and butterfly habitat, remnant vegetation block size, shape and connectivity, numbers of threatened species and species richness. Large numbers of threatened flora and fauna species have been recorded in this cell. Supratidal saltmarsh and Swamp Paper-bark habitats found within this cell are rare within South Australia (Caton et al 2007).

Priority of habitat based on the significance of bird species recorded give a high conservation value for this cell. The state endangered White-bellied Sea Eagle (*Haliaeetus leucogaster*) and Fairy Tern (*Sterna nereis*), the state vulnerable Brown Quail (*Coturnix ypsilophora*), Lewin's Rail (*Rallus pectoralis*), Eastern Curlew (*Numenius madagascariensis*), Banded Stilt (*Cladorhynchus leucocephalus*), Hooded Plover (*Thinornis cucullatus cucullatus*), and multiple state rare bird species have been recorded in this cell.

Migratory shorebird species listed under the EPBC Act found in this cell include the critically endangered Curlew Sandpiper (*Calidris ferruginea*), Eastern Curlew (*Numenius madagascariensis*), the endangered Bar-tailed and Black-tailed Godwit (*Limosa lapponica* and *L. limosa*, respectively), Common Greenshank (*Tringa nebularia*) and the vulnerable Grey Plover (*Pluvialis squatarola*), and Terek Sandpiper (*Xenus cinereus*), among several other species.

High value foraging habitats exist within the cell for migratory species, including Red-necked Stints (*Calidris ruficollis*), Bar-tailed Godwits (*Limosa lapponica*) and beach-nesting birds such as Pied Oystercatcher (*Haematopus longirostris*), Red-capped Plover (*Charadrius ruficapillus*) and Fairy Terns (*Sternula nereis*) at Bird Island.

Suitable foraging and roosting habitats for the Orange-bellied Parrot (*Neophema chrysogaster),* listed as critically endangered under the EPBC Act, exist in the cell and neighbouring lands, with recent local sightings of individuals in 2021, 2023, 2024 and 2025. This species breeds over summer in southwest Tasmania and then migrates to the mainland in winter to coastal habitats in southeastern Australia. Foraging habitat of saltmarsh vegetation associations, tussock grassland and *Gahnia* spp., as well as abundant Emu-grass (*Distichlis distichophylla)* occurs along Hunters Creek and at its estuary on Mundoo Channel (Ehmke et al 2009). Dense Swamp Paper-bark (*Melaleuca halmaturorum*) thickets are valuable roosting habitats and located adjacent to existing saltmarsh foraging habitats. Habitat including Austral Seablite (*Suaeda australis),* Beaded Samphire (*Salicornia quinquefolia ssp. quinqueflora),* Shrubby Samphire (*Tecticornia arbuscula)* and chenopod shrubland with patches of tussock grasses on the southern edge of Hindmarsh Island, extending approximately 5km from the Goolwa barrage to the Murray Mouth, support potentially high quality Orange-bellied Parrot (*Neophema chrysogaster)* foraging habitat (Ehmke et al 2009).

Hunters Creek flowing into the Mundoo channel. (A Casson, Murraylands and Riverland Landscape Board)

Fish species of conservation significance within this cell include the nationally endangered (EPBC Act) Murray Hardyhead (*Craterocephalus fluviatilis*), the Yarra Pygmy Perch (*Nannoperca obscura*), and nationally vulnerable Southern Pygmy Perch (*Nannoperca australis*). Additionally, the Murray Mouth facilitates connectivity and bidirectional movement of several diadromous fish that migrate between freshwater and marine environments to complete their lifecycle. The five diadromous species that inhabit the Coorong, Lower Lakes and Murray Mouth (CLLMM) are the Pouched Lamprey (*Geotria australis*), Short-headed Lamprey (*Mordacia mordax*), Short-finned Eel (*Anguilla australis*), Congolli (*Pseudaphritis urvillii*) and Common Galaxias (*Galaxias maculatus*) (Bice et al 2018).

Local coastal saltmarsh and dune systems provide refuge and likely valued habitat for a range of seabird species, including the White-bellied Sea Eagle (*Haliaeetus leucogaster*), Eastern Osprey (*Pandion haliaetus cristatus*), Little Black Cormorant (*Phalacrocorax sulcirostris*), Black-faced Cormorant (*Phalacrocorax fuscescens*), Pacific Gull (*Larus pacificus georgii*) and Kelp Gull *(Larus dominicanus*). Irregular sightings of a range of pelagic birds are also reported in this cell, including albatrosses, petrels, shearwaters and gannets.

Samphire (*Tecticornia* and *Salicornia*) Low Shrublands within the pre-European mapping extent for this region fall within the Nationally Vulnerable community called *Subtropical and temperate coastal saltmarsh,* as listed in the EPBC Act. This ecological community is the assemblage of plants, animals and micro-organisms associated with saltmarsh in coastal regions of sub-tropical and temperate Australia (DCCEEW 2013). This community is under regular or intermittent tidal influence, including rarely-inundated supratidal areas, intermittently opened or closed lagoons, and groundwater tidal influences. The tidal connection includes areas that are inundated by astronomical tides, and also by weather assisted tides (i.e. storm surges). The plant assemblage comprises salt-tolerant herbs, succulent shrubs or grasses, and may include large areas of bare sediment.

In January 2026, the Lower Murray and Darling River system was listed as a Critically Endangered ecological community under the EPBC Act, recognising its severe long-term decline. The conservation advice stresses the need to restore ecological connectivity from the Darling confluence through the lower River Murray to the Murray Mouth and the Southern Ocean, where disrupted flows have weakened the health of wetlands, floodplains, groundwater systems, the Coorong and the estuary. It highlights securing environmental water, rehabilitating degraded habitats,

improving water quality and managing invasive species as essential actions to rebuild the resilience of this nationally significant freshwater–estuarine–marine system.

Butterfly species of conservation concern known to exist within the cell include Yellowish Sedge-skipper (*Hesperilla flavescens*) and Mottled Grass Skipper (*Anisynta cynone cynone*), as well as multiple common species that are observed across the Fleurieu Peninsula (Stolarski 2024).

Yellowish Sedge-skipper (*Hesperilla flavescens)* has a patchy distribution along the southern half of coastal South Australia and is currently not found present in southern Fleurieu coastal cells. The species is dependent on its host plant, Thatching Grass (*Gahnia filum*), and occurs on Hindmarsh Island in one small site along Captain Sturt Parade. Historically the butterfly's distribution included Goolwa and Sir Richard Peninsula (Stolarski 2024). Mottled Grass Skipper (*Anisynta cynone cynone)* is very localised and restricted to coastal areas where its larval food plants, *Poaceae* (Grasses), both native and introduced, are present. Mottled Grass Skipper (*Anisynta cynone cynone)* has a patchy distribution occurring at Hindmarsh Island, Sir Richard Peninsula, Goolwa foreshore, Surfers to Goolwa Dunes, Port Elliot, Victor Harbor including Granite Island, and Newland Head Conservation Park (Stolarski 2024).

Yellowish Sedge-skipper (Hesperilla flavescens) on Thatching Grass (Gahnia filum) (M Endacott)

Lawari Conservation Park

Lawari Conservation Park was proclaimed under the *National Parks and Wildlife Act 1972* in March 2017 and consists of "two former grazing properties purchased with assistance" from the Australian government's National Reserve System in 2001, originally for the purpose of extending the Coorong National Park onto Hindmarsh Island, covering 1,058 ha.

The conservation park is located within the boundaries of the Ramsar site known as the Coorong and Lakes Alexandrina and Albert Wetland. Lawari Conservation Park covers important wetlands containing a diverse array of habitats that support threatened fish and water bird species of national conservation significance, including the Murray Hardyhead (*Craterocephalus fluviatilis*) and Yarra Pygmy Perch (*Nannoperca obscura)*, as well as numerous bird species, including the Fairy Tern (*Sternula nereis*), Far Eastern Curlew (*Numenius madagascariensis*), Orange-bellied Parrot (*Neophema chrysogaster*), and Cape Barren Goose (*Cereopsis novaehollandiae*).

Cape Barren Goose (Cereopsis novaehollandiae) (M Endacott)

Intertidal areas are critically important feeding and roosting areas for resident and migratory shorebirds. The Murray Mouth estuary (extending to areas outside this cell boundary) is considered a region of outstanding national and international conservation value, particularly for its variety of wetland habitats and significance for waterbirds and other coastal birds. The area regularly supports more than 200,000 birds, including a large number of migratory species and individuals (Baker 2004). Conservation advice for shorebird species recorded in this cell and listed under the EPBC Act including Far Eastern Curlew (*Numenius madagascariensis*), Curlew Sandpiper (*Calidris ferruginea*), Bar-tailed Godwit (*Limosa lapponica*), Black-tailed Godwit (*Limosa limosa*), Common Greenshank (*Tringa nebularia*), Sharp-tailed Sandpiper (*Calidris acuminata*), Great Knot (*Calidris tenuirostris*) and Red Knot (*Calidris canutus*) places a strong emphasis on invasive species management, particularly addressing the threat of encroachment of Grey Mangrove (*Avicennia marina ssp. marina)* into critical wetland habitats.

One of many migratory shorebirds species recorded within this cell, Sharp-tailed Sandpiper (Calidris acuminata) (D Westmoreland)

The draft Lawari Conservation Park Management Plan (2025) highlights:

- A mix of wetlands and channels, providing important feeding grounds for migratory birds. This includes 20 migratory bird species, 32 bird species that are threatened, and at least 27 species listed under the JAMBA, CAMBA and ROKAMBA international treaties.
- Open grasslands which provide habitat for the Cape Barren Goose, listed as vulnerable in Australia under the *EPBC Act 1999*.
- One of the most significant areas for freshwater fish conservation in the South Australian section of the Murray Darling Basin. The park protects 21 native fish species including re-established populations of the Murray Hardyhead (*Craterocephalus fluviatilis*) and the Yarra Pygmy Perch (*Nannoperca obscura*), which are listed as threatened under the EPBC Act.
- Habitat for five species of native frog, including the Brown Toadlet (*Pseudophryne bibronii*), which is listed as rare under the *National Parks and Wildlife Act 1972*. The park may also provide habitat for the Southern Bell Frog (*Ranoidea raniformis raniformis*), which is listed as vulnerable under the EPBC Act.

Vegetation Communities

Four vegetation associations are described within Lawari Conservation Park (previously Wyndgate). They are as follows (Brandle 2002):

Coastal Tea-tree – Swamp Paper-bark (*Melaleuca halmaturorum*) open scrub. Species in this association include Tea-tree Mistletoe *(Amyema melaleucae)* +/- Salt Club-rush *(Bolboschoenus caldwellii)*, Sea Rush (*Juncus kraussii*), Beaded Samphire (*Salicornia quinqueflora ssp. quinqueflora*), Austral Seablite (*Suaeda australis*).

Samphire – Shrubby Samphire (*Tecticornia arbuscula)* – Black-seed Samphire (*Tecticornia pergranulata ssp. pergranulata)* Low Shrubland on saline flats. Species in this association include; Round-leaf Pigface (*Disphyma crassifolium ssp. clavellatum*), Emu-grass (*Distichlis distichophylla*), Ruby Saltbush (*Enchylaena tomentosa var. tomentosa*), Southern Sea-heath (*Frankenia pauciflora var. gunnii*), Hemichroa (*Hemichroa pentandra*), Sea Rush (*Juncus kraussii*), Australian Saltmarsh Grass (*Puccinellia stricta)*, Creeping Brookweed (*Samolus repens*), Beaded Samphire (*Salicornia quinqueflora ssp. quinqueflora*), Annual Groundsel (*Senecio glossanthus*), Austral Seablite (*Suaeda australis*), Narrow-leaf Wilsonia (*Wilsonia backhousei*).

Samphire low shrubland with multiple species coexisting across saline gradients and tidal inundation regimes (R Lewis)

Wetland - freshwater herbland / sedgeland River Club-rush (*Schoenoplectus tabernaemontani)* – Common spike-rush *(Eleocharis acuta)* sedgeland. Species in this association include Berry Saltbush (*Atriplex semibaccata*), Pacific Azolla (*Azolla rubra*), Emu-grass (*Distichlis distichophylla),* Milfoil (*Myriophyllum sp.*), Common Reed (*Phragmites australis*), Australian Saltmarsh Grass (*Puccinellia stricta)*, Creeping Brookweed *(Samolus repens),* Spiky Club-rush (*Schoenoplectus pungens*), Prickly Arrowgrass (*Triglochin mucronata*), Streaked Arrowgrass (*Triglochin striata*).

Wetland - saltwater herbland / sedgeland – Common Reed (*Phragmites australis)* – Narrow-leaf Bulrush (*Typha domingensis)* grassland in areas flooded by River Murray water, in seasonal freshwater wetland. Species in this association include Common Reed (*Phragmites australis*), Narrow-leaf Bulrush (*Typha domingensis*), Salt Couch (*Sporobolus virginicus*), Australian Saltmarsh Grass (*Puccinellia stricta*), Salt Club-rush (*Bolboschoenus caldwellii).*

Estuary habitats, including samphire and saltmarsh mudflats

Estuarine mudflats and rocky outcrops occur along the southern shore of Hindmarsh Island below the barrages and are exposed at low tide. Immediately landward of these mudflats is fringing vegetation of sedges, rushes, samphire and scattered lignum clumps (Brandle, 2002).

Within this plan's area, the majority of saltmarsh species are located within this cell and the adjoining cell SF2, with a total of 205 ha of saltmarsh habitat, compared with a total of 194,000 ha within South Australia (Caton et al 2007).

Within this cell, four habitat classes have been mapped including:

Intertidal samphire habitat – Intertidal flats in sheltered waters occupied by a variety of halophytic plants, herbaceous or shrubby, forming both dense to sparse herblands and dense to sparse shrublands generally fringing the landward edge of the intertidal zone. Plants in this zone have adaptations to cope with frequent seawater inundation. 22,784 ha have been mapped in South Australia, with 69 ha (0.3%) occurring in the study area.

Beaded Samphire (*Salicornia quinqueflora ssp. quinqueflora*) Low Shrubland +/- Lignum (*Duma florulenta*). This samphire low shrub community was most common in the more frequently inundated areas of the Coorong and Goolwa Channels and low areas on Lawari Conservation Park and Myrtle Island. Surface soil textures ranged from heavy clay to sandy clay loam.

Intertidal/estuarine Melaleuca habitat - Intertidal flats with a freshwater influence occupied by Swamp Paper-bark (*Melaleuca halmaturorum*) mid dense to sparse woodland. 22 ha have been mapped in SA, 3.5 ha (16%) occurring within the study area. This is a rare habitat in SA.

Salt Bluebush (*Maireana oppositifolia*)/Marsh Saltbush (*Atriplex paludosa*) Low Shrubland +/- Swamp Paper-bark (*Melaleuca halmaturorum*). This low chenopod shrubland group represents a mix of sites, ranging from tussock grassland to Low Shrubland with or without a woodland overstorey, on the higher infrequently inundated clay loam to sandy loam flats of Hindmarsh Island and Tauwitcherie Island.

Intertidal / estuarine Sedges habitat - Intertidal flats with a freshwater influence occupied by sedges, often in association with Swamp Paper-bark (*Melaleuca halmaturorum*) 431 ha mapped in South Australia, of which 99 ha (23%) occurs in the cell area. This is a rare habitat in South Australia.

Swamp Paper-bark (*Melaleuca halmaturorum*) Low Woodland over Sea Rush (*Juncus kraussii*) +/- Salt Club-rush (*Bolboschoenus caldwellii*) Sedges and Beaded Samphire (*Salicornia quinqueflora ssp. quinqueflora*) / Austral Seablite (*Suaeda australis*) low shrubs. This low woodland community remains as small, isolated fragments on rarely grazed and regularly inundated flats and depressions adjacent to the major estuarine channels of Hindmarsh Island. Surface soil textures are light to medium clays.

Supratidal samphire habitat - Supratidal flats above the reach of astronomical tides but within the zone flooded by storm tides occupied by a variety of halophytic shrubby plants forming mid dense to very sparse shrublands. These plants have to tolerate very high soil salinity and in places long periods of inundation due to ponding during winter months. The halophytes are replaced by saltbush communities at the landward fringe of these habitats. 23,906 ha have been mapped in South Australia, but only 33 ha (0.1%) occur in the study area.

Thick-head Samphire (*Salicornia blackiana*) Marsh Saltbush (Atriplex paludosa) +/- Shrubby Samphire (*Tecticornia arbuscula*) Low Shrubland. This Low Shrubland samphire community is characteristic of flats adjacent to the estuarine waters of the Coorong and Goolwa Channels. Surface soil textures range from clay to sandy loam. On higher sandy loam situations tussock grasses such as Coast Spear-grass (*Austrostipa stipoides*) and Emu-grass (*Distichlis distichophylla*) can be co-dominant to dominant.

Coast Spear-grass (Austrostipa stipoides) and Swamp Paper-bark (Melaleuca halmaturorum) on Hindmarsh Island (R Lewis)

Historical reports of Grey Mangrove (*Avicennia marina ssp. marina)* present on the southern side of Hindmarsh Island have prompted community calls for consideration for expansion of this species into other areas of the island. In assessments (Fitzpatrick et al. 2008) of hundreds of Lower Lakes soil profiles (often to >1.5 m depth), there was no evidence of marine or estuarine organic matter from Mangroves (*Avicennia*), Seagrass (*Posidonia*) or Sea lettuce (*Ulva*). However, there are contemporary Mangrove features containing acid sulfate soils on the seaward side of the Murray estuary, where a very small stand (~200 m^2) of Grey Mangrove (*Avicennia marina ssp. marina)* was planted in the 1960s (Spalding et al. 2010).

Nearshore Habitats

This cell is part of Habitat Protection Zone 7 within the Encounter Marine Park but does not cover the upper reaches to Mundoo Barrage.

The National Benthic Mapping layer indicates that the offshore benthic habitat is predominantly bare sand (NatureMaps). No mapped areas of seagrass or reef occur within this cell. The inshore bare sand is characterised by a high energy beach system with a 500m wide dissipative surf zone and fine sand (Short 2001).

The cell is regionally significant due to the beach (bare sand/ soft bottom) habitat.

Haig et al. (2006) undertook video surveys and made limited specimen collections from grab samples in the region. Bryars (2003) listed ten fish and three macroinvertebrate fisheries taxa for the surf beach habitat between Middleton Beach and Goolwa Beach. However, no habitat condition or systematic biological surveys appear to have been undertaken on the habitat within this cell.

There are no Coast Protection Board Beach Profile Monitoring sites in this cell.

Fishways installed across most barrages in this cell provide a way for native fish to move freely through structures, which would otherwise block their travel for activities such as breeding and accessing new habitats. A vertical slot fishway was installed in the Goolwa Barrage in 2003, and upgraded in 2015 and 2017, and at Tauwitchere barrage in 2004 and 2008 and had an additional trapezoidal fishway fitted in 2018. Dual vertical slot fishways were installed at Mundoo Barrage and Ewe Island in 2016. Fish found to be using the fishways on the Murray barrages include freshwater species such as Australian Smelt (*Retropinna semoni*), Bony Herring (*Nematalosa erebi*) and Golden Perch (*Macquaria ambigua*), as well as diadromous species like Congolli (*Pseudaphritis urvillii*), which must move between the ocean and river to complete their lifecycle.

Congolli (Pseudaphritis urvillii) one of many species of fish moving throughout the estuarine and freshwater habitats through fishways (D Schmarr)

Water - the barrages are managed by SA Water. Five barrages were constructed near Goolwa by 1940 to prevent saltwater entering into the Lower Lakes and Lower River Murray. Today the barrages are used to help manage water levels in the Lower Lakes and to help deliver freshwater to the Coorong and estuary. The system consists of five barrages, extending from Sir Richard Peninsula in the west, to Pelican Point on the northern side of the mouth of the Coorong in the east, crossing five channels between the mainland and three islands. From west to east, the five barrages are named Goolwa, Mundoo, Boundary Creek, Ewe Island and Tauwitchere.

The Barrage and Water Level Management Policy (2019) guides water level and barrage management and includes optimal water levels to get the best environmental, social, economic and water security outcomes, while managing associated risks and trade-offs. The operation of the barrages is undertaken via the Barrage Operating Strategy (2019) to achieve ecological outcomes for the Lower Lakes and Coorong, through management tools, rules and procedures for the operation of barrages under different operating conditions.

Dredging is used to remove the build-up of sand at the Murray Mouth and two adjacent water channels, ensuring a clear passage of water flow and exchange between the Southern Ocean and River Murray system. SA Water procures the dredging services at the Murray Mouth on behalf of the Murray Darling Basin Authority (MBDA), under the *Murray-Darling Basin Act (2008)*. The dredge activities started in 2002 due to the threat of the Mouth closing during the Millennium Drought and ceased with the breaking of the drought in 2010. Dredging recommenced in January 2015, due to the return of low flows in 2014 and the deteriorating condition and openness of the Murray Mouth. Since then, two dredges were operating in the Goolwa and Tauwitchere Channels until the 2022–23 River Murray flood, which resulted in the cessation of dredging in November 2022. Dredging recommenced in November 2023 and will be undertaken by one larger dredge located at Tauwitchere Barrage (EPA 2023).

Maintaining an open mouth is critical to ensure estuarine connectivity between the fresh and marine environments, allowing migration of many fish species and tidal volume changes to ensure greater areas of feeding habitats for shorebirds.

Management Comments

The estuary and its shores are a wetland of international significance - a “Ramsar” site - considered to be a region of outstanding national and international conservation value, particularly for its variety of wetland habitats and significance for waterbirds and other coastal birds. Other relevant international agreements include the CAMBA and the JAMBA. Nationally, the Murray Mouth has been designated part of the Terminal Lakes and Coorong “Significant Ecological Asset” by the Murray Darling Basin Authority (MDBA).

Management of Ramsar sites is guided by the following key documents developed using the National framework and guidance for describing the ecological character of Australia's Ramsar wetlands (DEWHA, 2008) and the Australian Ramsar management principles (EPBC, 2000).

The cell, or parts thereof, is subject to a number of management plans, including:

- *The Coorong National Park Management Plan, 1990*, (NPWS SA);
- *The Coorong Lakes Albert and Alexandrina, Murray Mouth Ramsar Management Plan, 2000* (NPWS SA), (a *revised draft of this plan is currently in progress, see DEW 2024);*
- *The Lower Lakes, Coorong and Murray Mouth Asset Environmental Management Plan 2005* (MDBC), and;
- *Coorong Migratory Shorebird Site Action Plan* (BirdLife Australia 2021).
- *Basin Plan 2012*. Murray–Darling Basin Authority. 2012. Canberra: Commonwealth of Australia.

There are also fisheries and tourism management plans for the area.

Red-necked Stints (Calidris ruficollis) are one of many migratory bird species that feed and roost in the Coorong as part of their annual cycle of migration. (M Stokes)

Effects during the peak of the Millennium Drought (1997- 2009) required implementation of a number of emergency measures, with funding assistance from the Australian Government and the Murray-Darling Basin Ministerial Council, and the Government of South Australia. River Murray flows were at historically low levels due to the combined impacts of extreme drought and over-allocation across the Murray-Darling Basin. As a result, inflows into the Lakes were not able to replenish evaporative losses and average lake levels dropped to unprecedented lows. In April 2009 average water levels were at their lowest in Lake Alexandrina, at just below -1.0m AHD, and the two lakes were disconnected.

Low water levels in the Lakes, disconnection of the wetlands, exposure of 20,000ha of acid sulfate soils and increased salinity levels severely impacted the ecological character of the site. Wetlands dried out and they, along with exposed lakebed areas, were colonised by terrestrial plants, many of which were introduced species. Much of the region's submerged aquatic habitat, particularly in local channels, was significantly reduced or eliminated. Diadromous fish species, the life-cycles of which require movement between freshwater, estuarine and marine habitats, were unable to pass through the barrages to complete their life cycle due to the low water levels in Lake Alexandrina. Connectivity (both hydrological and ecological) was lost between Lake Alexandrina and the Goolwa Channel and Lake Albert due to the temporary construction of regulators and a bund (MDBA, 2016).

Yellow-billed Spoonbill (Platalea flavipes) forages amongst low saltmarsh shrublands (R Lewis)

Since 2010, significant flows over the barrages, combined with increased flows from the Southeast, have reduced salinity in the Coorong South Lagoon and helped to maintain it generally below 100ppt (112,471 EC). However, the ecosystem has been slow to respond, demonstrating the long-term nature of impacts associated with periods of low River Murray flows and extreme salinity (DEW 2024).

Towards the end of the drought, the Coorong, Lower Lakes and Murray Mouth (CLLMM) Recovery Project was developed and implemented. This comprised a suite of management actions aimed to restore key ecological features of the Ramsar site, build resilience within the site, and share knowledge and understanding across communities, including collaboration with the community and the Ngarrindjeri (DEW 2024).

The CLLMM Research Centre, established in 2023, is bringing together First Nations, local community, management agencies and scientists to create and share knowledge to investigate the significant challenges posed by climate change to the region. The research and community projects supported through the centre are designed to be locally specific, ensure increased understanding of the whole of the CLLMM ecosystem, and inform decision making for the region.

Threats

Whole cell

The main threats within the cell are increased visitation, land use and land ownership, numbers of exotic plants and the distribution of aggressive weeds, and areas of acid sulfate soil potential. Fragmented remnant vegetation patch size, shape and isolation raises connectivity issues and relatively high threat to conservation outcomes for the cell. However, the dominating threat for all features of this coastline is the flow of the Murray and the management of the barrages (Caton et al 2007). Goolwa Channel is also impacted by coastal storm surge through the Murray Mouth, which combine with Murray flows to impact on shoreline erosion.

Increased visitation and population growth are applying increased pressure upon natural environments including sites and surroundings with significant cultural heritage (e.g. increased formal and informal access, dogs on beaches or high value conservation areas, off road vehicle use, drone use etc.). Recent increases in use of Sugars beach as a tourism destination (car park and outdoor café) increases potential disturbance on local fauna, particularly foraging shorebirds.

The threat of land ownership and land use identifies some land parcels as potential threats to coastal areas due to factors like proximity to the coast or vulnerability to hazards. This highlights land parcels for potential intervention, such as zoning changes, restrictions or land purchase, to mitigate risks like erosion, inundation (storm surges, or sea-level rise), or the potential impact of current or future land use on coastal ecosystems, such as development or agriculture.

Water quality changes through increased salinity, increased turbidity, high nutrient loads and exposure of acid sulfate soils have occurred in this cell. In addition, inadequate and inconsistent levels of environmental flows from water diversions upstream contribute to reduced inflows and altered hydrological regimes. Management of environmental flows to the lakes and spilled beyond the barrages affect river mouth closure, significant wading bird sites, fish habitat, as well as local ground waters. Movement of sand into the Murray Mouth leads to sand smothering of tidal mudflats, reducing feeding areas for waders. Also, constriction of the mouth reduces the tidal prism and, hence, the area of tidal flats and wader habitat.

Multiple resident and migratory shorebirds feed across the tidal flats that emerge with tidal changes (R Lewis)

Fragmented remnant vegetation through land clearance and grazing, residential development and infrastructure have reduced connectivity of high value conservation areas. Tidal incursion and flow across previously inundated areas have also changed, affecting plant communities reliant on these flow patterns.

Introduced weeds threaten the diversity and structure of the native vegetation in this cell, with a large number of declared and red alert species recorded. Weeds threaten significant flora and faunal habitats including Grey Buloak (*Casuarina glauca*), Skeleton Weed (*Chondrilla juncea*), New Zealand Mirror-bush (*Coprosma repens*), Aleppo Pine (*Pinus halepensis*), Radiata Pine (*Pinus radiata),* Pyp Grass (*Ehrharta villosa),* Gazania *(Gazania linearis),* African Boxthorn *(Lycium ferocissimum),* Coastal Wattle *(Acacia cyclops),* Boneseed (*Chrysanthemoides monilifera ssp. monilifera),* Coast Tea-tree *(Gaudium laevigatum),* Golden Wreath Wattle *(Acacia saligna*), Sea Spurge *(Euphorbia paralias),* False Caper *(Euphorbia terracina),* Coastal Galenia *(Aizoon pubescens),* Marram Grass *(Ammophila arenaria),* Cape Weed *(Arctotheca calendula),* Onion Weed *(Asphodelus fistulosus),* Kikuyu *(Cenchrus clandestinus),* Pampas Grass *(Cortaderia selloana),* Perennial Veldt Grass *(Ehrharta calycina),* Dwarf Sea-lavender *(Limonium binervosum),* Sea-lavender (*Limonium companyonis),* Tree Mallow (*Malva arborea),* Pincushion *(Sixalix atropurpurea),* Buffalo Grass (*Stenotaphrum secundatum),* Aster-weed (*Symphyotrichum subulatum),* Sea Wheat-grass (*Thinopyrum junceiforme),* Soursob *(Oxalis pes-caprae)* and Horehound *(Marrubium vulgare).*

Increased weed incursions due to residential growth, garden encroachments, dumping of garden waste and deliberate planting of invasive garden plants by local residents are occurring. Garden escapes, such as Gazania and succulents from local residences, threaten coastal biodiversity by degrading condition and habitat values. Increased visitation and the resultant potential for transporting weeds threatens remnant and revegetated areas.

Modification of the coastline of the island has occurred, (see image above and below) with the construction of a plethora of private jetties, and illegal land reclamation. Beyond local changes, the effects of these activities are unstudied. The impacts of existing Sea level rise (SLR) changes at a local scale are little known. Shack and infrastructure management in conservation area poses anthropogenic and infrastructure threats.

Mundoo Channel (Coast Protection Board, March 2024)

Native vegetation clearance for lawn establishment occurs within the cell, which has accelerated shoreline erosion during storm surge and high flow events from the Murray. Locations along Sugars Beach show where native vegetation has provided natural protection to the shoreline, and where clearance has led to shoreline retreat and brought forward the need for construction of 'last resort' hard shoreline protection works. There are a prevalence of unauthorised protection works that can exacerbate coastal flooding of neighbouring properties, as well as numerous examples of land reclamation.

Diseases, such as Avian cholera, are a threat to waterbirds in the cell (sea bird, shorebirds, waterfowl, penguin). Zoonotic threats to marine wildlife from humans (and vice versa). Refer to National Wildlife health and biosecurity plans (Wildlife Heath Australia (2018 and 2022).

Red-necked Avocet (Recurvirostra novaehollandiae) wading on the shores of Sugars Beach (M Stokes)

Several butterfly and skipper species that have localised populations are limited in capacity for dispersal and/or colonisation of new sites. The lack of suitable habitats and interconnectivity between habitats prohibits movements and, therefore, creates localised isolation of populations. Urbanisation of coastal areas reduces the efficiency of species movements that could otherwise occur. Several species are now restricted to pockets of isolated habitats, resulting in some being vulnerable to population collapse (Stolarski 2024).

Disturbance to migratory and residential shorebirds foraging, nesting, and refuge habitats from people, dogs off leashes, illegal motorbikes, and horses. Potential incursion of Grey Mangrove (*Avicennia marina* ssp. *marina*) from plantings will impact migratory and resident shorebird habitat by reducing foraging habitat.

Pied Oystercatchers (Haematopus longirostris) forage on Sugars beach with flocks of terns flying above (M Stokes)

Pest animal threats to coastal fauna and flora from foxes (*Vulpes vulpes)*, feral cats (*Felis catus*), European Brown Hare (*Lepus europaeus*) and Fallow Deer (*Cervus dama*). Recent observations of Rabbits (*Oryctolagus cuniculus)* on Hindmarsh Island have been reported by community, but not in this cell. Prior to these reports, the island was thought to be free of Rabbits (*Oryctolagus cuniculus)* but known to be occupied by European Brown Hares (*Lepus europaeus*). Coordinated collaboration between landowners and managers is required to manage pest animals (refer to Regional Pest Management Strategies).

Opportunities

Whole cell

The management of this cell is set within an international, national and regional context, and many significant issues exist, requiring a coordinated and collaborative approach. Commitment is needed at all levels of government to invest effort in the Murray Mouth for its symbolic value and as a Ramsar site. Support development of partnerships, collaboration and funding to care for the Ramsar site, including First Nations, government (including across administrative arrangements), research institutions, not-for-profit organisations and community (Oceanwatch Australia 2023).

Manage visitor numbers and impacts to ensure coastal areas can support growing demand while maintaining and improving the quality of experiences without diminishing the values of the cell. Investigate informal camping issues, improve infrastructure and fencing to ensure for environmentally sensitive path formalisation and low-impact walking trails, and further opportunities to reduce impacts on the coastal environment. Education, restrictions and compliance regarding off road vehicle and informal camping. Work with First Nation communities, tourism operators and agencies to support visitor education about coastal ecological and cultural values and appropriate behaviors.

Community education opportunities regarding:

- Migratory and residential shorebirds and sea birds (dogs on leads, nesting sites, citizen science projects, managing visitor disturbance)
- Fragile nature of coastal areas that are sensitive to foot traffic, soil compaction and erosion.
- Education and targeted communications regarding marine parks, nearshore habitats and estuary values.
- Increased cultural awareness training and knowledge of culturally appropriate processes to respect known cultural heritage sites for land managers and coastal community groups.
- Citizen science monitoring to contribute to intertidal reef monitoring, Seagrass restoration, dolphin watch, beach pole monitoring, Fleurieu seabird monitoring program and beach nesting birds.
- Coastal gardens and resident/business owner education
- Local coastal values and responsible beach use
- Education for private property owners on living shoreline protection values

Explore opportunities with local commercial fisheries (marine algae, scalefish fisheries, Pipi) to collaborate and raise awareness of supporting valuable habitats, species of conservation concern and monitoring. Explore opportunities to review fisheries management plans across the Murray Mouth, Lakes, and Coorong regions to help strengthen wild catch monitoring efforts for coastal fauna species and potential pressures on conservation listed species.

Weed management is a key priority to help retain the biodiversity values of the cell. While many introduced plants are only a problem in disturbed parts of the cell or remain in open country with a history of grazing, declared and red alert weeds are a high priority for control, as they are actively invading intact native vegetation and displacing or choking out native plant species. Ongoing control and investment are critical to addressing high priority weeds and maintaining conservation values for the cell.

Maintain and expand coastal restoration actions, including revegetation with local native plants and priority weed control. Increase suitable habitat for coastal butterfly populations including planting of host plants (including Thatching Grass (*Gahnia filum)* and *Poa spp.*) in coastal areas to increase habitat suitability for local introductions.

Targeted interventions for threatened/rare plant species and communities, including weed control and reintroductions and translocations of rare plants. Engagement and collaboration with private landowners of high value remnant vegetation communities and opportunities for increased protection from stock, weed incursion and potential future development.

Monitor the impacts and effects of total grazing pressure that are adversely affecting native vegetation and revegetation programs, reducing plant diversity and habitat quality for other important and conservation rated species. Implement measures to reduce grazing pressure and erosion on creek lines, estuaries and high conservation value pockets of remnant vegetation. Replace, repair and maintain existing fencing with private land to restrict stock access to areas of conservation values.

This cell is important for coastal raptors and ongoing monitoring and management is critical to minimise visitor disturbance and to support habitat condition for raptor populations. Investigate opportunities to support and implement the recovery plan for Eastern Osprey and White-bellied Sea-Eagles (2022). Monitor, maintain and improve the quality of vegetation for the provision of wildlife habitat for priority species.

White-bellied Sea Eagle (Haliaeetus leucogaster) has suitable foraging and roosting habitats within the cell but is vulnerable to disturbance (D Westmoreland)

Further investigation of the presence and potential spread of existing planted Grey Mangrove (*Avicennia marina* ssp. *marina*) across tidal flats and creeks is required to prevent incursion of high value feeding and roosting sites for EPBC Act listed shorebird species.

There are opportunities for collaboration between partners, such as National Parks, Marine Parks, First Nations, landscape boards, volunteer groups, community and nature-based tourism operators, for monitoring of sea bird, coastal raptors, marine mammals and other wildlife.

Supporting community volunteer, First Nations and private landowner efforts to undertake priority restoration and conservation work in this cell. Strengthening partnerships with lessees, adjoining landowners, volunteer organisations, researchers, and the wider community to foster collaboration and long-term management benefits for biodiversity protection and restoration. Continuing to develop and maintain good relationships with privately owned land neighbours.

Implementation of the Coastal Adaptation Study and Plan and Community Coastal Flood Planning and Engagement with stakeholders from the Murray estuary settlements by Alexandrina Council should be encouraged and resourced for this cell. Further and ongoing monitoring of impacts related to climate change to coastal biodiversity to plan for and increase resilience at a local scale.

Collaborate with the SA Climate Ready Coasts program to enhance, resource, and implement coastal management initiatives and accelerate coastal hazard adaptation planning across South Australia. This program supports the development and delivery of Coastal Hazard Adaptation Plans (CHAPs), led by the Local Government Association (LGA) of South Australia in partnership with the SA Coast Protection Board, the Department for Environment and Water, the Adelaide Coastal Councils Network, and the SA Coastal Councils Alliance.

As part of the *Coastal Dune and Clifftop Vegetation Surveys* (1995–1997) (Opperman 1999), long-term monitoring sites were established across South Australia and the Southern Fleurieu region to assess the structure and composition of coastal dune and clifftop plant communities, and their relationships to regional and environmental factors. Given that nearly 30 years have passed since these surveys were undertaken, there is strong potential for shifts in geographical range and changes in species composition due to the long-term impacts of climate change. The *Survey of Remnant Vegetation of the Southern Fleurieu Peninsula* involved biological surveys conducted

between 1987 and 1991 to establish baseline data on remnant vegetation and swamps in the region south of Adelaide, South Australia.

During the development of this plan, and through the assessment of flora and fauna (both native and introduced) species lists available via the Biological Database of South Australia (BDBSA), significant gaps were identified between recorded species and known species distributions within cells. To address these data deficiencies and improve the accuracy of long-term ecological records, both above foundational vegetation survey projects should be repeated and incorporated into an ongoing monitoring program. Fauna assessments across cells to establish population baselines, update existing records and species distribution, particularly of underrepresented groups (reptiles and invertebrates) should be undertaken.

Climate change threats to coastal biodiversity (see BMT 2025)

Potential climate change threats to coastal biodiversity

Cell F1 includes estuarine, saltwater, and wetland (freshwater) habitats associated with the Murray Mouth. These ecosystems are supported by native vegetation, including dune, saltmarsh, and mangrove habitats.

Biodiversity assets potentially vulnerable to climate change in this cell include:

- Ramsar wetland of international importance
- Lower Murray River/Murray Mouth entrance
- Coastal groundwater dependent ecosystem (GDE)

These ecosystems may be particularly vulnerable to the direct impacts of climate change specifically sea level rise, increased drought, higher temperatures and more intense storms.

In this cell, intertidal mudflat, mangrove and saltmarsh are closely dependent on tide heights and may need to migrate upslope. Supratidal samphire and Swamp paper-bark stands may be similarly affected.

Climate change may also impact this cell indirectly. For example, the Coorong district is underlaid by aquifers of varying suitability for domestic and agricultural uses. Increased extraction of groundwater for these uses due to longer periods of aridity under climate change projections could result in changes in groundwater levels and water lenses as soaks, that may alter the salinity and water quality of coastal wetlands, leading to stress or loss of species in these habitats.

A review of state and local government planning will be necessary to define buffer zones for habitat migration and to review procedures for the development approval of flood levee bank construction (Caton et al 2007). The same process will allow more close specification of the flooding hazard threat to shacks and homes near the Murray Mouth (see photograph above).

Cell Action Table

Component	Issue	Proposed Action	Priority	Key Players
Whole cell	Threats and opportunities to improve protection of cultural heritage within cell	Cultural consultation and collaboration to appropriately manage cultural heritage within this area. Prevent damage, disturbance, or interference to cultural heritage by adhering to the Aboriginal Heritage Act 1988.	High (cons/ threat)	NAC, Council, LHF, Coastal Community groups, Aboriginal Affairs and Reconciliation - Department of Premier and Cabinet
	Increased visitation and recreational pressure on dunes and viewing points due to increased local population and tourist promotion.	Assess increased visitation capacity at known sites, repair or upgrade fencing to restrict unauthorised access and review car parking capacity. Manage visitor numbers within sustainable limits in ecologically and culturally sensitive and significant areas - consult with First Nations groups.	High (cons/ threat)	Council, NPWSSA, NAC, land managers
		Investigate opportunities for community education and engagement regarding unique and valuable coastal landscape and fragile nature of coastal areas. Dedicated cultural education and training for land managers, agency staff and land stewards.	High (Cons/ Soc)	DEW, NPWSSA, Council, LHF, Community groups, NAC
		Development of consistent signage and messaging for coastal values and compliance for conservation areas (public managed lands, coastal reserves) across the Fleurieu Peninsula coast. Co-design signage with First Nations/ knowledge holders.	Medium (Soc/ Cons)	Council, land managers, NAC, NPWSSA, coastal community groups
		Monitor, educate, and advocate to ensure that recreational activities (e.g., boating, paddleboarding, jet-skiing) do not increase interactions with marine wildlife or place additional pressure on coastal species and habitats.	High (threat)	DIT, Council and land managers, NPWSSA, coastal community groups
		Events on beaches and coastal habitats must not impact on natural values, especially listed threatened species and communities, in the area or vicinity of events. Event organisers should be informed, where appropriate via permits, on their obligations to not inflict environmental harm and to undertake actions in accordance with relevant legislation and by-laws.	Medium (threat)	Council, DEW, NPWSSA, BirdLife Australia, event managers
		Opportunity to work with nature-based tourism operators to enhance education and stewardship of local coastal environments, including opportunities to partner with First Nations groups who hold cultural obligations and authority to Sea Country	Medium (Cons)	Council, land managers, NAC, NPWSSA, coastal community groups
	Increase in illegal camping.	Monitor public land, crown reserves and undertake compliance where required. Seek resourcing to support implementation.	High (threat)	Council, tourism body
		Increase public awareness of legal camping areas and responsible use. Support areas set aside for free camping and correct information. Seek resourcing and build partnerships to support implementation.	Medium (threat)	Council, tourism bodies, Crown Lands, DEW
	New weed incursions in reserves adjacent to residential areas.	Monitor for new weed incursions, record incursions via public database (e.g. BDBSA) and control new incursions as a priority.	High (threat)	Council, NPWSSA, land managers, coastal community groups
		Identify potential funding sources to repeat these long-term flora monitoring sites and fauna assessments.	High (cons/ threat)	DEW, LHF, councils.

Component	Issue	Proposed Action	Priority	Key Players
Whole cell	New weed incursions in reserves adjacent to residential areas.	Identify potential funding sources to repeat these long-term flora monitoring sites and fauna assessments.	High (cons/ threat)	DEW, LHF, council.
	Monitoring of wild catch requirements for coastal fauna including conservation rated species and related fisheries activities.	Explore opportunities to review fisheries management plans across the Murray Mouth, Lakes, and Coorong regions to help strengthen wild catch monitoring efforts.	Medium (cons)	PIRSA, DEW, NAC business/ contractors/rangers.
	Threat to coastal fauna and flora from pest animals (rabbits (*Oryctolagus cuniculus)*, foxes (*Vulpes vulpes*) and cats (*Felis catus*)).	Coordinated collaboration between landowners and managers is required to manage pest animals.	High (threat)	Council, NPWSSA, land owners, LHF, NAC business/ contractors/rangers
	Increasing grazing pressure from native and introduced species.	Coordinate with regional grazing pressure programs to monitor populations and control as required.	High (threat)	NPWSSA, DEW, PIRSA, LHF, NAC business/ contractors/rangers
	Diseases, such as, Avian cholera are a threat to waterbirds in the cell (sea bird, waterfowl, penguin). Zoonotic threats to marine wildlife from humans (and vice versa).	Implement actions in National Wildlife Health and biosecurity plans to minimise risk of infection and spread.	High (threat)	PIRSA, DEW, NPWSSA, LHF, Council
	Development of unapproved private jetties and illegal land reclamation.	Assessment of existing jetties and land boundaries to determine incursion areas for removal.	Low (threat)	Council, LHF
	Shack and infrastructure management within broader conservation areas poses threat with impacts of sea-level rise (SLR).	Community awareness and education with local residents regarding Community Coastal Flood Emergency Plan and management of impacts- Goolwa and Mundoo channels.	Medium (threat)	Council, DEW, CPB
	Multiple land managers, stakeholders and administrative boundaries across this cell.	Determine mechanisms for long term collaborative management.	Medium (cons)	Council, DEW, NPWSSA, LHF, NAC business/ contractors/rangers.
		Support partnerships for funding and care of Ramsar site.	Medium (cons)	DEW, Council, NPWSSA, LHF, NAC business/ contractors/rangers, NGO's, community
	Multiple community groups and volunteers across coastal areas.	Facilitate opportunities for increased coordination and sharing of skills and information between community groups and volunteers to support landscape scale approach to coastal conservation and management.	High (Cons)	Council, land managers, LHF, coastal community groups.
		Continue to support private land owners and community efforts to undertake priority restoration and conservation work in this cell.	High (Cons)	Council, LHF, DEW,
Intertidal and supratidal saltmarsh communities	Tide dependent habitats are threatened by climate change induced accelerated sea level rise. Some of the communities are rare in South Australia.	Review of buffer zone provisions to allow for species migration within the *Planning, Development and Infrastructure Act 2016*. Also review of flood hazard issues for shacks.	High (Cons / Threat)	PlanSA, DEW, CPB, Council.
		Leverage recent advancements in technology (e.g. LiDAR, high-resolution imagery) and updated data to revise DEW's Coastal Saltmarsh/Mangrove Habitat spatial mapping. Identify areas containing a coastal acid sulfate soils hazard.	Medium (cons/threat	DEW, CPB, research institutions and Universities, consultancies.
		Acquisition of additional data (e.g. topographic/bathymetric LiDAR, imagery) and hydrodynamic modelling to support improved coastal hazard assessment and planning under various sea level rise scenarios. Data layer to be made publicly available on NatureMaps SA.	Medium (cons/threat	DEW, CPB, research institutions and Universities, consultancies, Climate Ready Coasts Program
	Physical changes on the coast and natural assets from sea level rise (such as coastal squeeze, erosion, vegetation loss, marine turbidity and light reduction).	Implementation of the Coastal Adaptation Plan, including key locations, recommendations and priorities for funding.	High (Cons. Threat)	DEW, CPB, Council, community, university and research agencies, consultancies, Climate

Component	Issue	Proposed Action	Priority	Key Players
Intertidal and supratidal saltmarsh communities	Physical changes on the coast and natural assets from sea level rise (such as coastal squeeze, erosion, vegetation loss, marine turbidity and light reduction).	Support partnerships for ongoing investigation and monitoring in the coastal zone, working with the Coast Protection Board to identify adaptation options and pathways for the future.	High (Cons. Threat)	Ready Coasts Program
	Potential incursion of Grey Mangrove (*Avicennia marina* ssp. *marina*) will impact migratory and resident shorebird habitats.	Determine suitability and historical presence of Grey Mangrove (*Avicennia marina* ssp. *marina*) in area to determine if removal is needed.	High (cons/ threat)	DEW, LHF
		Monitor spread of existing Grey Mangrove (*Avicennia marina* ssp. *marina*) populations.	High (cons/ threat)	DEW, NPWSSA, BirdLife Australia, coastal community groups
Low coastal dunes	Likely beach and dune recession consequent on coastal and riverine flooding and climate change effects.	Use advances in technology (e.g. LiDAR and improved imagery capture), and more recently available information to update DEW Coastal Hazard Mapping spatial layer identifying the change in extent and stability of coastal dunes across South Australia since the previous hazard mapping was undertaken approximately 20 years ago.	Medium (hazard, Cons/threat)	DEW, CPB, Research Institutes, Universities
Marshy swales	Need for stock exclusion and revegetation of numerous small remnant wetlands on the island.	Continue priority support for ongoing restoration program of wetlands. Focusing on connecting, restoring, and increasing remnant Samphire patches.	High (Cons / threat)	Land owners, LHF, Landcare, DEW, NPWSSA
	Lack of vegetation block connectivity that could enhance resilience.	Explore opportunities to establish vegetation corridors linking remnant vegetation blocks.	Medium (Cons)	Land owners, DEW, LHF, Landcare
Migratory and resident shorebirds, Beach-nesting birds	Disturbances to migratory and resident shorebirds foraging, nesting and refuge habitats.	Provide education opportunities to raise awareness and protection of Migratory, resident shorebirds, beach-nesting birds, (dogs on leads, nesting sites, citizen science projects, managing visitor numbers and behaviour).	High (cons/ threat)	Council, DEW, NPWWSA, LHF, NAC business/ contractors/rangers, Council, BirdLife Australia, Friends of the Hooded Plover, Fleurieu Peninsula volunteers coastal community groups, Oystercatcher monitoring volunteers
		Increased compliance in areas affected by activities such as off-leash dogs and other disturbances to wildlife	High (threat)	Council, NPWSSA, DEW
		Education and enforcement of council bylaws and National Parks regulations for these sites. Compliance efforts to ensure disturbance is limited in isolated sites and seasonal protection of breeding sites.	Medium (cons)	Council, NPWSSA, LHF, BirdLife Australia
		Regional pest control strategies implemented.	High (cons)	Council, NPWSSA, LHF, BirdLife Australia, NAC business/ contractors/rangers,
		Investigate opportunities for artificial roosting/breeding floating platforms at Mundoo Channel or 19 Beacon. To reduce impact of pest species (fox and cat).	Low (threat)	Council, NPWSSA, LHF, BirdLife Australia
	Nests and breeding areas threatened by disturbance by walkers and dogs.	Community monitoring, fences to mark nests. Signage and awareness raising activities to alert dog walkers.	High (Cons / threat)	Council, BirdLife Australia, LHF, Friends of the Hooded Plover, Fleurieu Peninsula volunteers coastal community groups, Oystercatcher monitoring volunteers

Component	Issue	Proposed Action	Priority	Key Players
Climate (Estuary & Wetlands)	More intense rainfall events likely to lead to increased pollutants washed into the estuary during first flush from the landward end.	Monitor stormwater quality for pollutants that may contribute to algal blooms.	High (hazard)	DEW, EPA, land owners, LHF
	Higher temperatures likely to lead to increased algal blooms with impacts on estuarine fauna.	Monitor stormwater quality for pollutants that may contribute to algal blooms.	Medium (threat)	DEW, EPA, land owners, LHF
	Sea level rise will threaten tidally dependent species.	Monitor the impacts of tidally dependent species following inundation of low-lying land. Identify opportunities for landward movement of species and facilitate migration where appropriate.	High (cons/threat)	DEW, CPB, land owners, coastal community groups
		Review buffer zones for species migration. Advocate for the broader spatial application of the Coastal Areas Overlay, in the Planning and Design Code to protect coastal habitat, flora and fauna.	High (cons/threat)	Council, CPB, Planning SA, LHF, landowners
	Groundwater may become more saline and pollutants in groundwater may be driven upwards due to saline ocean water displacing freshwater in sediments.	Undertake assessment of groundwater to monitor change and impacts on areas of conservation value.	High (hazard)	DEW, CPB, Land owners.

Relevant management plans

- Alexandrina Council Environmental Action Plan 2030.
- Baker-Gabb, D., and Manning, C., (2011) Local Action Plan the Coorong fairy tern *Sternula nereis*, South Australia. Final Plan for the Department of Environment and Natural Resources
- Bjornsson (2007) Hindmarsh Island Wetlands Management Plan.
- Caton B. Fotheringham D. Lock C. Royal M, Sandercock R. Taylor R. (2007). Southern Fleurieu Coastal Action Plan and Conservation Priority Study. Prepared for Adelaide and Mount Lofty NRM Board, Alexandrina Council, City of Victor Harbor, District Council of Yankalilla, Goolwa to Wellington Local Action Plan and Department for Environment and Heritage.
- Coorong National Park Management Plan (1990, amended in 1995 and 2020), Department for Environment and Water.
- Landscapes Hills and Fleurieu (2024) Hills and Fleurieu Regional Pest Plant and Animal Strategy 2024 - 2029.
- DEW (2025) Lawari Conservation Park Draft Management Plan. Prepared by Department for Environment and Water.
- DEW (2024). Ramsar Management Plan: The Coorong and Lakes Alexandrina and Albert Wetland– draft for public consultation 2022. Government of South Australia, Department for Environment and Water, Adelaide.
- Department of Climate Change, Energy, the Environment and Water (2026). *Approved Conservation Advice for the River Murray downstream of the Darling River and associated aquatic and floodplain systems.* Canberra: Department of Climate Change, Energy, the Environment and Water.
- Subtropical and temperate coastal saltmarsh Conservation Advice, *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (s266B) (2013)**.** Department of Climate Change, Energy, the Environment and Water.
- Encounter Marine Park Management Plan (2012, amended 2020). Department for Environment and Water.
- Lawari Conservation Park Management Plan (DRAFT in prep), Department for Environment and Water.
- MDBA (2012) The Basin Plan, prepared by the Murray-Darling Basin Authority. Australian Government.
- National Recovery Plan for the Australian Fairy Tern (*Sternula nereis nereis*), Commonwealth of Australia 2020.
- South Australian Recovery Plan for Eastern Osprey and White-bellied Sea Eagle (2022) Department for Environment and Water
- Wavelength (2022) Coastal Adaptation Plan prepared for Alexandrina Council.
- Western, M, Hesp, P, Bourman, R 2019, Coastal Adaptation Study for Alexandrina Council, Integrated Coasts, South Australia

- URPS (2024) Community Coastal Flood Emergency Plan for the Goolwa and Mundoo Channel communities.
- Towards Ngarrindjeri Comanagement of Yarluwar-Ruwe (Sea Country- Lands, Waters and all Living Things) Chapter 4.5 in Mosley, L., Ye, Q., Shepherd. S, Hemming, S., Fitzpatrick, R. (2018) Natural History of the Coorong, Lower Lakes, and Murray Mouth Region (yarluwar-ruwe). Royal Society of South Australia, University of Adelaide Press
- Ngarrindjeri Nation (2007) Ngarrindjeri Nation Yarluwar-Ruwe Plan. Caring for Ngarrindjeri Sea Country and Culture. (Ngarrindjeri Tendi, Ngarrindjeri Heritage Committee and Ngarrindjeri Native Title Management Committee, Ngarrindjeri Land and Progress Association, Meningie).
- Ngarrindjeri and Others Native Title Claim (Part A) settlement Indigenous Land Use Agreement (ILUA) (2017) Government of SA Attorney General's Department
- Kungun Ngarrindjeri Yunnan Agreement (2009) between South Australian Government and the Ngarrindjeri Regional Authority (NRA).
- Ehmke, G., Herrod, A., Green R. and Tzaros, C. (2009), Habitat Protection and Restoration Plan for the Orange-bellied Parrot *Neophema chrysogaster* in the South East of South Australia, Birds Australia, Melbourne
- Stolarski A., (2024) Southern Fleurieu Peninsula coastal butterfly species assessment, A revision of the Butterfly Section of the Southern Fleurieu Coastal Action Plan and Conservation Priority Study 2007.
- BMT (2025), Climate Change Threats to Coastal Biodiversity in the Southern Fleurieu Region. Report prepared for Hills and Fleurieu Landscape Board as part of the review of the Southern Fleurieu Coastal Action Plan and Conservation Priority study (2007). BMT, Adelaide.
- Coorong Migratory Shorebird Site Action Plan (2021), Prepared by Ferenczi, M., Formby, M., Kidd, L., Weller, D., Rhodes, L. and Klose, S. (BirdLife Australia) for the Limestone Coast Landscape Board.
- Oceanwatch Australia (2023) National Marine NRM Plan 2023-2028.

References

Baker, J. L. (2004). *Towards a System of Ecologically Representative Marine Protected Areas in South Australian Marine Bioregions - Technical Report.* Prepared for Coast and Marine Conservation Branch, Department for Environment and Heritage, South Australia.

Bice CM, Hammer MP, Wedderburn SD, Ye Q & Zampatti BP (2018) Fishes of the Lower Lakes and Coorong: an Inventory and Summary of Life History, Population Dynamics and Management, Natural History of the Coorong, Lower Lakes and Murray Mouth region (Yarluwar-Ruwe). L. Mosely, Q. Ye, S. A. Shepard, S. Hemming and R. Fitzpatrick, Royal Society of South Australia, Adelaide, 371-399.

BirdLife Australia (2021), Coorong Migratory Shorebird Site Action Plan. Prepared by Ferenczi, M., Formby, M., Kidd, L., Weller, D., Rhodes, L. and Klose, S. for the Limestone Coast Landscape Board.

BMT (2025), Climate Change Threats to Coastal Biodiversity in the Southern Fleurieu Region. Report prepared for Hills and Fleurieu Landscape Board as part of the review of the Southern Fleurieu Coastal Action Plan and Conservation Priority study (2007). BMT, Adelaide.

Brandle, R. (2002) A Biological Survey of the Murray Mouth Reserves, South Australia March 2002 (Biodiversity Survey and Monitoring, National Parks and Wildlife, South Australia, Department for Environment and Heritage)

Bryars, S. (2003) An Inventory of Important Coastal Fisheries Habitats in South Australia. Fish Habitat Program, (Primary Industries and Resources South Australia: Adelaide).

Caton, B., Fotheringham, D., Lock C., Royal, M., Sandercock, R., Taylor, R., 2007. *Southern Fleurieu coastal action plan and conservation priority study*, prepared for Adelaide & Mount Lofty Ranges Natural Resources Management Board, Alexandrina Council, City of Victor Harbor, District Council of Yankalilla, Goolwa to Wellington Local Action Plan and Department for Environment & Heritage.

Department of Climate Change, Energy, the Environment and Water (2013). Subtropical and temperate coastal saltmarsh Conservation Advice, *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (s266B).

Department of Climate Change, Energy, the Environment and Water (2026). *Approved Conservation Advice for the River Murray downstream of the Darling River and associated aquatic and floodplain systems.* Canberra: Department of Climate Change, Energy, the Environment and Water.

Department for Environment and Water (2022) South Australian Recovery Plan for Eastern Osprey and White-bellied Sea Eagle.

Department for Environment and Water (2024). Ramsar Management Plan: The Coorong and Lakes Alexandrina and Albert Wetland– draft for public consultation 2022. Government of South Australia, Department for Environment and Water, Adelaide.

DEWHA, 2008. National Framework and Guidance for Describing the Ecological Character of Australia's Ramsar Wetlands. Module 2 of the national Guidelines for Ramsar Wetlands - Implementing the Ramsar Convention in Australia, Canberra: Australian Government Department of the Environment, Water, Heritage and the Arts.

Ehmke, G., Herrod, A., Green R. and Tzaros, C. (2009), Habitat Protection and Restoration Plan for the Orange-bellied Parrot *Neophema chrysogaster* in the South East of South Australia, Birds Australia, Melbourne.

EPA (2023) State of the Murray, Lower Lakes and Murray Mouth in State of the Environment Report 2023.

EPBC, 2000. Environment Protection and Biodiversity Conservation Regulations 2000, Canberra: Australian Government.

Fitzpatrick, R.W., Marvanek, S., Shand, P., Merry, R.H. et al. (2008) Acid sulfate soil maps of the River Murray below Blanchetown (Lock 1) and Lakes Alexandrina and Albert when water levels were at pre-drought and current drought conditions. CSIRO Land and Water Science Report 12/08 (CSIRO, Adelaide)

Haig J., Russell B. and Murray-Jones S. (2006). Offshore marine habitat mapping and near–shore marine biodiversity within the Coorong bioregion. Report to Murray–Darling Basin NRM Board. 74 pp. Department for Environment and Heritage, Adelaide.

Murray–Darling Basin Authority. 2012. *Basin Plan 2012*. Canberra: Commonwealth of Australia.

MDBA, 2016. Since the Millenium Drought - the River Murray System lessons learnt and changes made, Adelaide: Murray-Darling Basin Authority Mosley, L., Ye, Q., Shepherd. S, Hemming, S., Fitzpatrick, R. (2018) Natural History of the Coorong, Lower Lakes, and Murray Mouth Region (yarluwar-ruwe). Royal Society of South Australia, University of Adelaide Press

Oceanwatch Australia (2023) National Marine NRM Plan 2023-2028.

Opperman, A.,1999, A Biological Survey of the South Australian Coastal Dune and Clifftop Vegetation, Environment Protection Agency, Department for Environment, Heritage and Aboriginal Affairs, Adelaide.

Short, A.D. (2001) Beaches of the South Australian Coast and Kangaroo Island: A guide to their nature, characteristics, surf and safety. Australian Beach Safety and Management Program, Sydney.

Spalding, M., Kainuma, M. &Collins, L. (2010) 'World Atlas of Mangroves' (Gutenberg Press, Oregon).

Stolarski A., (2024) Southern Fleurieu Peninsula coastal butterfly species assessment, A revision of the Butterfly Section of the Southern Fleurieu Coastal Action Plan and Conservation Priority Study 2007.

Wildlife Health Australia (2018) National Wildlife Biosecurity Guidelines, Sydney NSW.

Wildlife Health Australia (2020) National Guidelines for Management of Disease in Free-ranging Australian Wildlife, Sydney NSW.

Cell Biota (Flora and Fauna)

Lists provided are specific to this cell from Biological Database of South Australia (BDBSA), technical updates, review of publications and local input. Conservation ratings (National, State and Sub regional) are included for flora and fauna.

Note: Restricted species as per Department for Environment and Water (DEW) specifications have been omitted from the tables due to the size of cells and requirement for 10km^2 buffering of data. However, records are included in the total species numbers per cell. Please contact DEW directly for restricted data requests.

FLORA Summary

Vegetation Block Metrics	Lawari Conservation and Coorong National Park Coastal Crown Reserves Heritage Agreement (no 1201)- 6.6Ha Encounter Marine Park (Habitat Protection zone 7)			
Terrestrial Habitat Description/s	See Terrestrial biodiversity vegetation communities in cell description.			
# Flora in cell	261			
# Native Flora in cell	173			
# Introduced Flora in cell	88			
# Conservation Rated Flora in cell	3 (0 National, 3 State)			
# Threatened Ecological Communities (EPBC Act)	2 (Subtropical and Temperate Saltmarsh) (River Murray downstream of the Darling River and associated aquatic and floodplain systems)			
Conservation Rated Flora	**Species**	**Common Name**	**EPBC Act Status**	**NPW Status**
	Acacia dodonaeifolia	Hop-bush Wattle		R
	Atriplex australasica	Native Orache		R
	Myoporum parvifolium	Creeping Boobialla		R

All Native Flora in cell

Species	Common Name	EPBC Status	NPW Act Status	Subregional Status*
Acacia cupularis	Cup Wattle			LC
Acacia dodonaeifolia	Hop-bush Wattle		R	RA
Acacia dodonaeifolia X Acacia paradoxa				
Acacia leiophylla	Coast Golden Wattle			LC
Acacia longifolia ssp. sophorae	Coastal Wattle			LC
Acacia myrtifolia	Myrtle Wattle			LC
Acacia paradoxa	Kangaroo Thorn			LC
Acacia pycnantha	Golden Wattle			LC
Acaena echinata	Sheep's Burr			LC
Actites megalocarpus	Coast Sow-thistle			NT
Adriana quadripartita	Coast Bitter-bush			LC
Allocasuarina verticillata	Drooping Sheoak			NT
Althenia cylindrocarpa	Long-fruit Water-mat			LC
Amyema melaleucae	Tea-tree Mistletoe			LC
Angianthus preissianus	Salt Angianthus			LC

Species	Common Name	EPBC Status	NPW Act Status	Subregional Status*
Apium annuum	Annual Celery			LC
Apium prostratum var.	Native Celery			
Apium prostratum var. prostratum	Native Celery			LC
Atriplex australasica	Native Orache		R	VU
Atriplex cinerea	Coast Saltbush			LC
Atriplex paludosa ssp.	Marsh Saltbush			
Atriplex paludosa ssp. cordata	Marsh Saltbush			LC
Atriplex paludosa ssp. paludosa	Marsh Saltbush			LC
Atriplex semibaccata	Berry Saltbush			LC
Austrostipa drummondii	Cottony Spear-grass			NT
Austrostipa elegantissima	Feather Spear-grass			LC
Austrostipa eremophila	Rusty Spear-grass			RA
Austrostipa flavescens	Coast Spear-grass			LC
Austrostipa mollis	Soft Spear-grass			RA
Austrostipa mollis group	Soft Spear-grass			
Austrostipa nodosa	Tall Spear-grass			RA
Austrostipa stipoides	Coast Spear-grass			LC
Avicennia marina ssp. marina	Grey Mangrove			VU
Azolla pinnata	Ferny Azolla			LC
Azolla rubra	Pacific Azolla			LC
Banksia ornata	Desert Banksia			NT
Billardiera cymosa ssp.	Sweet Apple-berry			
Billardiera cymosa ssp. cymosa	Sweet Apple-berry			LC
Bolboschoenus caldwellii	Salt Club-rush			LC
Boronia coerulescens ssp. coerulescens	Blue Boronia			RA
Bursaria spinosa ssp.	Bursaria			
Bursaria spinosa ssp. spinosa	Sweet Bursaria			LC
Callitris gracilis	Southern Cypress Pine			NT
Carpobrotus rossii	Native Pigface			LC
Centrolepis polygyna	Wiry Centrolepis			NT
Clematis microphylla	Old Man's Beard			LC
Cotula vulgaris var. australasica	Slender Cotula			LC
Crassula colligata ssp.				
Cynoglossum australe	Australian Hound's-tongue			LC
Dianella brevicaulis	Short-stem Flax-lily			LC
Dianella brevicaulis/revoluta var.	Black-anther Flax-lily			
Dianella revoluta var.				
Disphyma crassifolium ssp. clavellatum	Round-leaf Pigface			LC
Distichlis distichophylla	Emu-grass			LC
Dodonaea viscosa ssp.	Sticky Hop-bush			
Dodonaea viscosa ssp. cuneata	Wedge-leaf Hop-bush			RA

Species	Common Name	EPBC Status	NPW Act Status	Subregional Status*
Dodonaea viscosa ssp. spatulata	Sticky Hop-bush			LC
Duma florulenta	Lignum			LC
Einadia nutans ssp.	Climbing Saltbush			
Eleocharis acuta	Common Spike-rush			LC
Enchylaena tomentosa var.	Ruby Saltbush			
Enchylaena tomentosa var. tomentosa	Ruby Saltbush			LC
Enneapogon nigricans	Black-head Grass			LC
Enteromorpha paradoxa				
Epilobium pallidiflorum	Showy Willow-herb			NT
Eragrostis dielsii	Mulka			
Eucalyptus diversifolia ssp. diversifolia	Coastal White Mallee			LC
Eucalyptus incrassata	Ridge-fruited Mallee			LC
Eucalyptus porosa	Mallee Box			LC
Exocarpos syrticola	Coast Cherry			LC
Ficinia nodosa	Knobby Club-rush			LC
Frankenia pauciflora var.	Southern Sea-heath			
Frankenia pauciflora var. gunnii	Southern Sea-heath			LC
Gahnia filum	Thatching Grass			LC
Gahnia trifida	Cutting Grass			VU
Geranium potentilloides var. potentilloides	Downy Geranium			LC
Geranium retrorsum	Grassland Geranium			LC
Gnaphalium indutum ssp. indutum	Tiny Cudweed			LC
Goodenia arguta	Toothed Velleia			RA
Goodenia ovata	Hop Goodenia			
Hakea mitchellii	Heath Needlebush			LC
Hakea rugosa	Dwarf Hakea			LC
Hakea vittata	Limestone Needlebush			LC
Heliotropium europaeum	Common Heliotrope			
Hemichroa pentandra	Trailing Hemichroa			LC
Hydrocotyle capillaris	Thread Pennywort			LC
Hydrocotyle medicaginoides	Medic Pennywort			NT
Isolepis hookeriana	Grassy Club-rush			RE
Juncus bufonius	Toad Rush			RA
Juncus kraussii	Sea Rush			LC
Juncus pauciflorus	Loose-flower Rush			RA
Kennedia prostrata	Scarlet Runner			LC
Kunzea pomifera	Muntries			LC
Lachnagrostis filiformis	Common Blown-grass			
Lawrencia squamata	Thorny Lawrencia			RA
Leucophyta brownii	Coast Cushion Bush			LC
Leucopogon parviflorus	Coast Beard-heath			LC

Species	Common Name	EPBC Status	NPW Act Status	Subregional Status*
Limosella australis	Australian Mudwort			RA
Linum marginale	Native Flax			NT
Lomandra effusa	Scented Mat-rush			LC
Lycopus australis	Australian Gipsywort			RA
Lythrum hyssopifolia	Lesser Loosestrife			LC
Maireana brevifolia	Short-leaf Bluebush			LC
Maireana oppositifolia	Salt Bluebush			LC
Melaleuca acuminata ssp. acuminata	Mallee Honey-myrtle			RA
Melaleuca halmaturorum	Swamp Paper-bark			LC
Melaleuca lanceolata	Dryland Tea-tree			NT
Muehlenbeckia gunnii	Coastal Climbing Lignum			LC
Myoporum insulare	Common Boobialla			LC
Myoporum parvifolium	Creeping Boobialla		R	NT
Myriophyllum caput-medusae	Coarse Milfoil			LC
Myriophyllum salsugineum	Lake Milfoil			LC
*Myriophyllum sp.^*	Milfoil			
Nitraria billardierei	Nitre-bush			LC
Olearia axillaris	Coast Daisy-bush			LC
Ozothamnus turbinatus	Coast Bush-everlasting			LC
Pauridia glabella var. glabella	Tiny Star			LC
Pelargonium australe	Austral Stork's-bill			LC
Phragmites australis	Common Reed			LC
Picris angustifolia ssp. angustifolia	Coast Picris			
Pimelea glauca	Smooth Riceflower			LC
Pimelea humilis	Low Riceflower			RA
Pimelea serpyllifolia ssp. serpyllifolia	Thyme Riceflower			LC
Platylobium obtusangulum	Holly Flat-pea			
Poa poiformis var. poiformis	Coast Tussock-grass			LC
Pomaderris paniculosa ssp. paniculosa	Mallee Pomaderris			LC
Potamogeton crispus	Curly Pondweed			NT
Potamogeton pectinatus	Fennel Pondweed			NT
Puccinellia stricta	Australian Saltmarsh-grass			LC
Rhagodia candolleana ssp.	Sea-berry Saltbush			
Rhagodia candolleana ssp. candolleana	Sea-berry Saltbush			LC
Roepera billardierei	Coast Twinleaf			LC
Rumex bidens	Mud Dock			LC
Ruppia megacarpa	Widgeon Grass			LC
Ruppia tuberosa	Widgeon Grass			LC
Rytidosperma caespitosum	Common Wallaby-grass			
Sagina maritima	Sea Pearlwort			LC
Salicornia blackiana	Thick-head Samphire			LC

Species	Common Name	EPBC Status	NPW Act Status	Subregional Status*
Salicornia quinqueflora ssp. quinqueflora	Beaded Samphire			LC
Salsola australis	Buckbush			LC
Samolus repens	Creeping Brookweed			LC
Schoenoplectus pungens	Spiky Club-rush			LC
*Schoenoplectus tabernaemontani^*	River Club-rush			LC
Schoenus nitens	Shiny Bog-rush			LC
Senecio glossanthus	Annual Groundsel			
Senecio halophilus				NE
Senecio pinnatifolius group	Variable Groundsel			
Sonchus hydrophilus	Native Sow-thistle			LC
Spergularia marina	Salt Sand-spurrey			NT
Spergularia tasmanica	Coast Sand-spurrey			
Spinifex hirsutus	Rolling Spinifex			LC
Sporobolus virginicus	Salt Couch			LC
Suaeda australis	Austral Seablite			LC
Tecticornia arbuscula	Shrubby Samphire			NT
Tecticornia halocnemoides ssp.	Grey Samphire			
Tecticornia halocnemoides ssp. halocnemoides	Grey Samphire			LC
Tecticornia indica ssp. bidens	Brown-head Samphire			LC
Tecticornia indica ssp. leiostachya	Brown-head Samphire			LC
Tecticornia pergranulata ssp. pergranulata	Black-seed Samphire			LC
Tetragonia implexicoma	Bower Spinach			LC
Themeda triandra	Kangaroo Grass			NT
Threlkeldia diffusa	Coast Bonefruit			LC
Thyridia repens	Creeping Monkey-flower			LC
Triglochin mucronata	Prickly Arrowgrass			RA
Triglochin nana	Dwarf Arrowgrass			
Triglochin striata	Streaked Arrowgrass			LC
Typha domingensis	Narrow-leaf Bulrush			LC
Vittadinia australasica var.	Sticky New Holland Daisy			
Wilsonia backhousei	Narrow-leaf Wilsonia			NT
Wilsonia humilis	Silky Wilsonia			NT
Wilsonia rotundifolia	Round-leaf Wilsonia			NT
Xanthorrhoea caespitosa	Sand-heath Yacca			LC
Xanthorrhoea semiplana ssp.	Yacca			

^ denotes records from technical updates, review of publications and local input
*See Appendices for subregional map

Regional Conservation status, Mount Lofty Ranges IBRA (Interim Biogeographical Regionalisation for Australia) subregion (Gillam & Urban (2014). Regional Species Conservation Assessment Project, Phase 1 Report - Regional Species Status Assessments, Adelaide and Mount Lofty Ranges NRM Region. DEWNR: SA)

RE = Regionally Extinct CR = Critically Endangered EN = Endangered
VU = Vulnerable RA = Rare NT = Near Threatened
LC = Least Concern DD = Data Deficient NE = Not Evaluated

All Introduced Flora in cell

Species	Common Name	Red Alert Weeds	Declared Weeds	WONS
Acacia cyclops	Western Coastal Wattle	IC		
Acacia saligna	Golden Wreath Wattle	HP		
Aizoon pubescens	Coastal Galenia	IC		
Ammophila arenaria	Marram Grass	HP		
Arctotheca calendula	Cape Weed	HP		
Asphodelus fistulosus	Onion Weed	HP		
Atriplex prostrata	Creeping Saltbush			
Avena barbata	Bearded Oat			
Berula erecta	Water Parsnip			
Brassica tournefortii	Wild Turnip			
Bromus catharticus	Prairie Grass			
Bromus diandrus	Great Brome			
Bromus rubens	Red Brome			
*Buglossoides arvensis**	Sheepweed			
Bupleurum semicompositum	Hare's Ear			
Cakile maritima ssp. maritima	Two-horned Sea Rocket			
Casuarina glauca	Grey Buloak	IC	Yes	
Catapodium rigidum	Rigid Fescue			
Cenchrus clandestinus	Kikuyu	HP		
Centaurea calcitrapa	Star Thistle			
Centaurium tenuiflorum	Branched Centaury			
Chenopodium murale	Nettle-leaf Goosefoot			
Chondrilla juncea	Skeleton Weed	HP	Yes	
Chrysanthemoides monilifera ssp. monilifera	Boneseed	IC	Yes	Yes
Cirsium vulgare	Spear Thistle			
Coprosma repens	New Zealand Mirror-bush	IC	Yes	
*Cortaderia selloana**	Pampas Grass			
Cotula coronopifolia	Water Buttons			
Cynodon dactylon var. dactylon	Couch			
Dittrichia graveolens	Stinkweed			
Ehrharta calycina	Perennial Veldt Grass	HP		
Ehrharta villosa	Pyp Grass	IC		
Erigeron bonariensis	Flax-leaf Fleabane			
Euphorbia paralias	Sea Spurge	HP		
Euphorbia terracina	False Caper	HP	Yes	
Galium murale	Small Bedstraw			
Gaudium laevigatum	Coast Tea-tree		Yes	
Gazania linearis	Gazania	IC	Yes	
Hordeum marinum	Sea Barley-grass			
Hornungia procumbens	Oval Purse			
Hypochaeris glabra	Smooth Cat's Ear			
Hypochaeris radicata	Rough Cat's Ear			
Juncus usitatus	Common Rush			
Lactuca saligna	Willow-leaf Lettuce			
Lactuca serriola f. serriola	Prickly Lettuce			
Lagurus ovatus	Hare's Tail Grass			
Limonium binervosum	Dwarf Sea-lavender	IC		
Limonium companyonis	Sea-lavender	IC		

Species	Common Name	Red Alert Weeds	Declared Weeds	WONS
Lolium rigidum	Wimmera Ryegrass			
Lycium ferocissimum	African Boxthorn	IC	Yes	Yes
Malva arborea	Tree Mallow	HP		
Malva parviflora	Small-flower Marshmallow			
Marrubium vulgare	Horehound	IC	Yes	
Medicago polymorpha	Burr-medic			
Medicago sativa	Lucerne			
Medicago scutellata	Snail Medic			
Medicago truncatula	Barrel Medic			
Melilotus indicus	King Island Melilot			
Moraea setifolia	Thread Iris			
Oxalis pes-caprae	Soursob			
Parapholis incurva	Curly Ryegrass			
Paspalum distichum	Water Couch			
Paspalum vaginatum	Salt-water Couch			
Phoenix canariensis	Canary Island Palm			
Pinus halepensis	Aleppo Pine	IC	Yes	
Pinus radiata	Radiata Pine	IC		
Plantago coronopus ssp. coronopus	Bucks-horn Plantain			
Plantago lanceolata var. lanceolata	Ribwort			
Polygonum aviculare	Wireweed			
Polypogon maritimus	Coast Beard-grass			
Polypogon monspeliensis	Annual Beard-grass			
Puccinellia distans	Reflexed Poa			
Puccinellia fasciculata	Borrer's Saltmarsh-grass			
Reichardia tingitana	False Sowthistle			
Rostraria cristata	Annual Cat's-tail			
Sabulina mediterranea	Slender Sandwort			
Salvia verbenaca var. verbenaca	Wild Sage			
Senecio pterophorus	African Daisy			
Silene nocturna	Mediterranean Catchfly			
Sinapis arvensis	Charlock			
Sixalix atropurpurea	Pincushion	IC		
Sonchus asper ssp. glaucescens	Rough Sow-thistle			
Sonchus oleraceus	Common Sow-thistle			
Stenotaphrum secundatum	Buffalo Grass	HP		
Symphyotrichum subulatum	Aster-weed	HP		
Thinopyrum junceiforme	Sea Wheat-grass	IC		
Vulpia fasciculata	Sand Fescue			
Vulpia myuros f. myuros	Rat's-tail Fescue			

WONS = Weeds of National Significance.

Declared = Declared under the Landscape South Australia Act 2019. Pest plants that are a significant threat to agriculture, the natural environment and public health and safety are called declared plants. Land owners have a legal responsibility to manage these plants.

Red Alert = Weed Threat Level of four or greater out of nine. Plants in this categorised are either designated as requiring immediate control (IC – 6-9) or as a high priority for control (HP – 4-5). See Department for Environment and Water (2024)

Reference – Department for Environment and Water (2024). Threatening Processes - Environmental and Priority Weed Species. Southern Fleurieu Coastal Action Plan Review 2024. Prepared by SA Herbarium

FAUNA Summary

# Fauna in cell	247
# Native Fauna in cell	228
# Introduced Fauna in cell	19
# Conservation Rated Fauna in cell	60* (28 National, 51 State)

Conservation Rated Fauna				
Species Name	**Common Name**	**Class**	**EPBC Act Status**	**NPW Act Status**
Craterocephalus fluviatilis	Murray Hardyhead	ACT	EN	
Nannoperca australis	Southern Pygmy Perch	ACT	VU	
Nannoperca obscura	Yarra Pygmy Perch	ACT	EN	
Pseudophryne bibronii	Brown Toadlet	AMP		R
Actitis hypoleucos	Common Sandpiper	AVES		R
Anhinga novaehollandiae novaehollandiae	Australasian Darter	AVES		R
Ardea intermedia plumifera	Plumed Egret	AVES		R
Arenaria interpres interpres	Ruddy Turnstone	AVES	sp	R
Biziura lobata menziesi	Musk Duck	AVES		R
Bubulcus ibis coromandus	Eastern Cattle Egret	AVES		R
Calidris acuminata	Sharp-tailed Sandpiper	AVES	VU	
Calidris alba alba	Sanderling	AVES		R
*Calidris canutus^*	Red Knot	AVES	VU	ssp
Calidris canutus rogersi	Red Knot (ssp. rogersi)	AVES	sp	E
Calidris ferruginea	Curlew Sandpiper	AVES	CR	E
Calidris tenuirostris	Great Knot	AVES	VU	E
Cereopsis novaehollandiae novaehollandiae	Cape Barren Goose	AVES		R
Charadrius leschenaultii leschenaultii	Greater Sand Plover	AVES	sp	R
Charadrius mongolus mongolus	Lesser Sand Plover	AVES	sp	E
Cladorhynchus leucocephalus	Banded Stilt	AVES		V
Coturnix ypsilophora australis	Brown Quail	AVES		V
Egretta garzetta nigripes	Little Egret	AVES		R
Falco peregrinus macropus	Peregrine Falcon	AVES		R
*Gallinago hardwickii^*	Latham's Snipe	AVES	VU	R
Haematopus fuliginosus fuliginosus	Sooty Oystercatcher	AVES		R
Haematopus longirostris	Pied Oystercatcher	AVES		R
Haliaeetus leucogaster	White-bellied Sea Eagle	AVES		E
Hieraaetus morphnoides	Little Eagle	AVES		V
Larus dominicanus dominicanus	Kelp Gull	AVES		R
*Lewinia pectoralis pectoralis^*	Lewin's Rail	AVES		V
Limosa lapponica	Bar-tailed Godwit	AVES	ssp	ssp
Limosa limosa melanuroides	Black-tailed Godwit	AVES	sp	R
Melanodryas cucullata cucullata	Hooded Robin (YP, MN, AP, MLR, MM, SE)	AVES	EN	R
Melithreptus brevirostris	Brown-headed Honeyeater	AVES	ssp	
*Neophema chrysogaster^*	Orange Bellied Parrot	AVES	CE	E
Neophema elegans elegans	Elegant Parrot	AVES		R
Neophema petrophila zietzi	Rock Parrot	AVES		R

Conservation Rated Fauna				
Species Name	**Common Name**	**Class**	**EPBC Act Status**	**NPW Act Status**
Numenius madagascariensis	Far Eastern Curlew	AVES	CR	E
Numenius phaeopus variegatus	Whimbrel	AVES		R
*Pandion haliaetus cristatus^*	Eastern Osprey	AVES		E
Parvipsitta pusilla	Little Lorikeet	AVES		E
Platycercus elegans	Crimson Rosella	AVES	ssp	
Plegadis falcinellus	Glossy Ibis	AVES		R
Pluvialis fulva	Pacific Golden Plover	AVES		R
Pluvialis squatarola squatarola	Grey Plover	AVES	sp	
Podiceps cristatus australis	Great Crested Grebe	AVES		R
Spatula rhynchotis	Australasian Shoveler	AVES		R
*Stagonopleura bella samueli^*	Western Beautiful Firetail (MLR, KI)	AVES	EN	SP
Sterna hirundo longipennis	Common Tern	AVES		R
Sternula nereis nereis	Fairy Tern	AVES	VU	E
Stipiturus malachurus polionotum	Southern Emuwren (South East)	AVES		R
Thinornis cucullatus cucullatus	Hooded Plover	AVES	VU	V
Tringa nebularia	Common Greenshank	AVES	EN	
Xenus cinereus	Terek Sandpiper	AVES	VU	R
*Zanda funerea whiteae^*	Yellow-tailed Black Cockatoo	AVES		V
Zapornia tabuensis	Spotless Crake	AVES		R
*Pteropus poliocephalus^*	Grey-headed Flying-fox	MAM	VU	R
Rattus lutreolus	Swamp Rat	MAM		R
*Tachyglossus aculeatus^*	Short-beaked Echidna	MAM	ssp	ssp
Notechis scutatus	Tiger Snake	REP	ssp	

All Native Fauna in cell

Species Name	**Common Name**	**Class**	**EPBC Act Status**	**NPW Act Status**	**Subregional Status**
Afurcagobius tamarensis	Tamar River Goby	ACT			
Aldrichetta forsteri	Yelloweye Mullet	ACT			
Ammotretis rostratus	Longsnout Flounder	ACT			
Arenigobius bifrenatus	Bridled Goby	ACT			
Atherinosoma microstoma	Smallmouth Hardyhead	ACT			LC
Craterocephalus fluviatilis	Murray Hardyhead	ACT	EN		CR
Craterocephalus fulvus	Unspecked Hardyhead	ACT			EN
Favonigobius lateralis	Southern Longfin Goby	ACT			
Galaxias maculatus	Common Galaxias	ACT			VU
Gracilimugil argentea	Goldspot Mullet	ACT			
Gymnapistes marmoratus	Soldier	ACT			
Hyperlophus vittatus	Sandy Sprat	ACT			
Macquaria ambigua ambigua	Murray-Darling Golden Perch	ACT			NT
Nannoperca australis	Southern Pygmy Perch	ACT	VU		CR
Nannoperca obscura	Yarra Pygmy Perch	ACT	EN		CR

Species Name	Common Name	Class	EPBC Act Status	NPW Act Status	Subregional Status
Nematalosa erebi	Bony Bream	ACT			LC
Philypnodon grandiceps	Big-headed Gudgeon	ACT			LC
Philypnodon macrostomus	Dwarf Flathead Gudgeon	ACT			LC
Pseudaphritis urvillii	Congolli	ACT			EN
Pseudogobius olorum	Swan River Goby	ACT			LC
Retropinna semoni	Australian Smelt	ACT			LC
Rhombosolea tapirina	Greenback Flounder	ACT			
Tasmanogobius lasti	Lagoon Goby	ACT			LC
*Anguilla australis^*	Short-finned Eel	ACT			
*Geotria australis^*	Pouched lamprey	ACT			
*Mordacia mordax^*	Short-headed lamprey	ACT			
Crinia signifera	Common Froglet	AMP			NT
Limnodynastes dumerilii	Banjo Frog	AMP			NT
Limnodynastes fletcheri	Long-thumbed Frog	AMP			VU
Limnodynastes tasmaniensis	Spotted Marsh Frog	AMP			NT
Rawlinsonia calliscelis	South Australian Tree Frog (MLR MN)	AMP			NT
Pengilleyia peronii	Peron's Tree Frog	AMP			RA
Neobatrachus pictus	Burrowing Frog	AMP			NT
Pseudophryne bibronii	Brown Toadlet	AMP		R	EN
Acanthagenys rufogularis	Spiny-cheeked Honeyeater	AVES			LC
Acanthiza chrysorrhoa	Yellow-rumped Thornbill	AVES			LC
Acanthiza pusilla samueli	Brown Thornbill (MLR)	AVES			
Accipiter cirrocephalus cirrocephalus	Collared Sparrowhawk	AVES			RA
Acrocephalus australis australis	Australian Reed Warbler	AVES			LC
Actitis hypoleucos	Common Sandpiper	AVES		R	RA
Anas castanea	Chestnut Teal	AVES			LC
Anas gracilis gracilis	Grey Teal	AVES			
Anas superciliosa	Pacific Black Duck	AVES			LC
Anhinga novaehollandiae novaehollandiae	Australasian Darter	AVES		R	RA
Anthochaera carunculata	Red Wattlebird	AVES			LC
Anthochaera chrysoptera chrysoptera	Little Wattlebird (mainland SA)	AVES			
Anthus australis	Australian Pipit	AVES			LC
Aquila audax audax	Wedge-tailed Eagle	AVES			RA
Ardea alba modesta	Great Egret	AVES			RA
Ardea intermedia plumifera	Plumed Egret	AVES		R	RA
Arenaria interpres interpres	Ruddy Turnstone	AVES	sp	R	RA
Artamus cyanopterus	Dusky Woodswallow	AVES			NT
Artamus personatus	Masked Woodswallow	AVES			RA
Artamus superciliosus	White-browed Woodswallow	AVES			RA
Aythya australis	Hardhead	AVES			LC
Biziura lobata menziesi	Musk Duck	AVES		R	
Bubulcus ibis coromandus	Eastern Cattle Egret	AVES		R	RA
Cacatua sanguinea gymnopis	Little Corella	AVES			LC
Cacomantis flabelliformis flabelliformis	Fan-tailed Cuckoo	AVES			LC

Species Name	Common Name	Class	EPBC Act Status	NPW Act Status	Subregional Status
Cacomantis pallidus	Pallid Cuckoo	AVES			NT
Calidris acuminata	Sharp-tailed Sandpiper	AVES	VU		NT
Calidris alba alba	Sanderling	AVES		R	RA
*Calidris canutus^*	Red Knot	AVES	VU	ssp	
Calidris canutus rogersi	Red Knot (ssp. rogersi)	AVES	sp	E	RA
Calidris ruficollis	Red-necked Stint	AVES			NT
Calidris ferruginea	Curlew Sandpiper	AVES	CR	E	VU
Calidris tenuirostris	Great Knot	AVES	VU	E	RA
Chalcites basalis	Horsfield's Bronze Cuckoo	AVES			NT
Charadrius bicinctus bicinctus	Double-banded Plover	AVES			RA
Cereopsis novaehollandiae novaehollandiae	Cape Barren Goose	AVES		R	
Charadrius leschenaultii leschenaultii	Greater Sand Plover	AVES	sp	R	RA
Charadrius ruficapillus	Red-capped Plover	AVES			RA
Cheramoeca leucosterna	White-backed Swallow	AVES			RA
Chlidonias hybrida javanicus	Whiskered Tern	AVES			LC
Chroicocephalus novaehollandiae novaehollandiae	Silver Gull	AVES			LC
Cincloramphus cruralis	Brown Songlark	AVES			LC
Cincloramphus mathewsi	Rufous Songlark	AVES			RA
Circus approximans	Swamp Harrier	AVES			RA
Circus assimilis	Spotted Harrier	AVES			RA
Cisticola exilis exilis	Golden-headed Cisticola	AVES			VU
Charadrius mongolus mongolus	Lesser Sand Plover	AVES	sp	E	RA
Colluricincla harmonica	Grey Shrikethrush	AVES			LC
Coracina novaehollandiae	Black-faced Cuckooshrike	AVES			LC
Corvus mellori	Little Raven	AVES			LC
Coturnix pectoralis	Stubble Quail	AVES			LC
Cladorhynchus leucocephalus	Banded Stilt	AVES		V	VU
Cracticus torquatus leucopterus	Grey Butcherbird	AVES			NT
Cygnus atratus	Black Swan	AVES			LC
Dicaeum hirundinaceum hirundinaceum	Mistletoebird	AVES			NT
Coturnix ypsilophora australis	Brown Quail	AVES		V	
Egretta novaehollandiae	White-faced Heron	AVES			LC
Elanus axillaris	Black-shouldered Kite	AVES			LC
Elseyornis melanops	Black-fronted Dotterel	AVES			RA
Eolophus roseicapilla	Galah	AVES			LC
Epthianura albifrons	White-fronted Chat	AVES			LC
Erythrogonys cinctus	Red-kneed Dotterel	AVES			RA
Eudyptula minor novaehollandiae	Little Penguin	AVES			
Falco berigora berigora	Brown Falcon	AVES			LC
Falco cenchroides cenchroides	Nankeen Kestrel	AVES			LC
Falco longipennis murchisonianus	Australian Hobby	AVES			NT
Egretta garzetta nigripes	Little Egret	AVES		R	RA
Fulica atra australis	Eurasian Coot	AVES			NT

Species Name	Common Name	Class	EPBC Act Status	NPW Act Status	Subregional Status
Gallinula tenebrosa tenebrosa	Dusky Moorhen	AVES			RA
Gavicalis virescens	Singing Honeyeater	AVES			LC
Gelochelidon macrotarsa	Australian Tern	AVES			RA
Geopelia placida placida	Peaceful Dove	AVES			LC
Glossopsitta concinna	Musk Lorikeet	AVES			LC
Grallina cyanoleuca cyanoleuca	Magpielark	AVES			LC
Gymnorhina tibicen	Australian Magpie	AVES			LC
Falco peregrinus macropus	Peregrine Falcon	AVES		R	RA
*Gallinago hardwickii^*	Latham's Snipe	AVES	VU	R	RA
Haematopus fuliginosus fuliginosus	Sooty Oystercatcher	AVES		R	VU
Haliastur sphenurus	Whistling Kite	AVES			LC
Haematopus longirostris	Pied Oystercatcher	AVES		R	VU
Himantopus leucocephalus	Pied Stilt	AVES			NT
Hirundo neoxena neoxena	Welcome Swallow	AVES			LC
Hydroprogne caspia	Caspian Tern	AVES			LC
Lalage tricolor	White-winged Triller	AVES			RA
Haliaeetus leucogaster	White-bellied Sea Eagle	AVES		E	EN
Larus pacificus georgii	Pacific Gull	AVES			LC
Hieraaetus morphnoides	Little Eagle	AVES		V	VU
Larus dominicanus dominicanus	Kelp Gull	AVES		R	RA
Malacorhynchus membranaceus	Pink-eared Duck	AVES			LC
Malurus cyaneus	Superb Fairywren	AVES			LC
Malurus cyaneus leggei	Superb Fairywren (Mainland SA)	AVES			
Manorina melanocephala	Noisy Miner	AVES			LC
*Lewinia pectoralis pectoralis^*	Lewin's Rail	AVES		V	EN
Limosa lapponica	Bar-tailed Godwit	AVES	ssp	ssp	RA
Merops ornatus	Rainbow Bee-eater	AVES			RA
Microcarbo melanoleucos melanoleucos	Little Pied Cormorant	AVES			LC
Milvus migrans affinis	Black Kite	AVES			NT
Limosa limosa melanuroides	Black-tailed Godwit	AVES	sp	R	RA
Melanodryas cucullata cucullata	Hooded Robin (YP, MN, AP, MLR, MM, SE)	AVES	EN	R	
Melithreptus brevirostris	Brown-headed Honeyeater	AVES	ssp		NT
*Neophema chrysogaster^*	Orange Bellied Parrot	AVES	CE	E	
Nycticorax caledonicus australasiae	Nankeen Night Heron	AVES			RA
Ocyphaps lophotes lophotes	Crested Pigeon	AVES			LC
Pachycephala fuliginosa fuliginosa	Western Whistler	AVES			
Pachycephala rufiventris rufiventris	Rufous Whistler	AVES			
Pardalotus punctatus	Spotted Pardalote	AVES			NT
Pardalotus striatus substriatus	Striated Pardalote	AVES			NT
Neophema elegans elegans	Elegant Parrot	AVES		R	RA
Pelecanus conspicillatus	Australian Pelican	AVES			LC
Petrochelidon ariel	Fairy Martin	AVES			RA
Petrochelidon nigricans	Tree Martin	AVES			LC
Phalacrocorax carbo	Great Cormorant	AVES			LC

Species Name	Common Name	Class	EPBC Act Status	NPW Act Status	Subregional Status
Phalacrocorax fuscescens	Black-faced Cormorant	AVES			NT
Phalacrocorax sulcirostris	Little Black Cormorant	AVES			LC
Phalacrocorax varius hypoleucos	Australian Pied Cormorant	AVES			LC
Phaps chalcoptera	Common Bronzewing	AVES			LC
Phaps elegans elegans	Brush Bronzewing	AVES			LC
Phylidonyris novaehollandiae	New Holland Honeyeater	AVES			LC
Phylidonyris novaehollandiae novaehollandiae	New Holland Honeyeater (mainland SA)	AVES			
Platalea flavipes	Yellow-billed Spoonbill	AVES			RA
Platalea regia	Royal Spoonbill	AVES			RA
Neophema petrophila zietzi	Rock Parrot	AVES		R	
Numenius madagascariensis	Far Eastern Curlew	AVES	CR	E	EN
Numenius phaeopus variegatus	Whimbrel	AVES		R	RA
*Pandion haliaetus cristatus^*	Eastern Osprey	AVES		E	
Parvipsitta pusilla	Little Lorikeet	AVES		E	
Poliocephalus poliocephalus	Hoary-headed Grebe	AVES			RA
Pomatostomus superciliosus	White-browed Babbler	AVES			NT
Poodytes gramineus goulburni	Little Grassbird	AVES			LC
Porphyrio melanotus melanotus	Australasian Swamphen	AVES			NT
Porzana fluminea	Australian Crake (Australian Spotted Crake)	AVES			RA
Psephotus haematonotus	Red-rumped Parrot	AVES			LC
Psephotus haematonotus haematonotus	Red-rumped Parrot (eastern SA except NE)	AVES			
Ptilotula penicillata	White-plumed Honeyeater	AVES			LC
Recurvirostra novaehollandiae	Red-necked Avocet	AVES			NT
Rhipidura albiscapa	Grey Fantail	AVES			LC
Rhipidura leucophrys leucophrys	Willie Wagtail	AVES			LC
Sericornis frontalis rosinae	White-browed Scrubwren (MLR)	AVES			
Smicrornis brevirostris	Weebill	AVES			RA
Platycercus elegans	Crimson Rosella	AVES	ssp		LC
Plegadis falcinellus	Glossy Ibis	AVES		R	VU
Sterna paradisaea	Arctic Tern	AVES			RA
Sterna striata	White-fronted Tern	AVES			RA
Pluvialis fulva	Pacific Golden Plover	AVES		R	RA
Pluvialis squatarola squatarola	Grey Plover	AVES	sp		RA
Tachybaptus novaehollandiae novaehollandiae	Australasian Grebe	AVES			RA
Tadorna tadornoides	Australian Shelduck	AVES			LC
Thalasseus bergii cristatus	Greater Crested Tern	AVES			LC
Podiceps cristatus australis	Great Crested Grebe	AVES		R	NT
Threskiornis molucca molucca	Australian White Ibis	AVES			LC
Threskiornis spinicollis	Straw-necked Ibis	AVES			LC
Tribonyx ventralis	Black-tailed Nativehen	AVES			LC
Trichoglossus moluccanus moluccanus	Rainbow Lorikeet	AVES			LC
Spatula rhynchotis	Australasian Shoveler	AVES		R	NT

Species Name	Common Name	Class	EPBC Act Status	NPW Act Status	Subregional Status
Tringa stagnatilis	Marsh Sandpiper	AVES			RA
Vanellus miles	Masked Lapwing	AVES			LC
Vanellus tricolor	Banded Lapwing	AVES			VU
*Stagonopleura bella samueli^*	Western Beautiful Firetail (MLR, KI)	AVES	EN	SP	
Zapornia pusilla palustris	Baillon's Crake	AVES			DD
Sterna hirundo longipennis	Common Tern	AVES		R	RA
Zosterops lateralis	Silvereye	AVES			LC
Sternula nereis nereis	Fairy Tern	AVES	VU	E	EN
Stipiturus malachurus polionotum	Southern Emuwren (South East)	AVES		R	VU
Thinornis cucullatus cucullatus	Hooded Plover	AVES	VU	V	EN
Tringa nebularia	Common Greenshank	AVES	EN		NT
Xenus cinereus	Terek Sandpiper	AVES	VU	R	RA
*Zanda funerea whiteae^*	Yellow-tailed Black Cockatoo	AVES		V	RA
Zapornia tabuensis	Spotless Crake	AVES		R	RA
Cherax destructor	Common Yabbie	INV			
*Anisynta cynone cynone^*	Mottled Grass Skipper	INV			
*Danaus petilia^*	Lesser Wanderer	INV			
*Danaus plexippus plexippus^*	Monarch	INV			
*Hesperilla flavescens^*	Yellowish Sedge-skipper	INV			
*Junonia villida calybe^*	Meadow Argus	INV			
*Lampides boeticus^*	Long-tailed Pea-blue	INV			
*Nacaduba biocellata biocellata^*	Two-spotted Line-blue	INV			
*Ocybadistes walkeri hypochlora^*	Southern Grass-dart	INV			
*Pieris rapae rapae^*	Cabbage White	INV			
*Taractrocera papyria papyria^*	White-banded Grass-dart	INV			
*Theclinesthes miskini miskini^*	Wattle Blue	INV			
*Theclinesthes serpentatus serpentatus^*	Salt-bush Blue	INV			
*Vanessa itea^*	Australian Admiral	INV			
*Vanessa kershawi^*	Australian Painted Lady	INV			
*Zizina otis labradus^*	Common Grass-blue	INV			
Austrochiltonia australis	n/a	INV			
*Pteropus poliocephalus^*	Grey-headed Flying-fox	MAM	VU	R	
*Hydromys chrysogaster^*	Water Rat	MAM			NT
Rattus lutreolus	Swamp Rat	MAM		R	RA
*Tachyglossus aculeatus^*	Short-beaked Echidna	MAM	ssp	ssp	
Chelodina longicollis	Eastern Long-necked Turtle	REP			NT
Pseudemoia entrecasteauxii	Southern Grass Skink	REP			LC
Tiliqua scincoides	Eastern Bluetongue	REP			LC
Notechis scutatus	Tiger Snake	REP	ssp		VU

Class: ACT = Actinopteri, **AMP** = Amphibia, **AVES** = Aves, **INV** = Invertebrates, **MAM** = Mammalia, **REP**= Reptilia

All Introduced Fauna in cell

Species	Common Name
Gambusia holbrooki	Eastern Gambusia
Cyprinus carpio	European Carp
Carassius auratus	Goldfish
Perca fluviatilis	Redfin Perch
Turdus merula merula	Common Blackbird
Sturnus vulgaris vulgaris	Common Starling
Alauda arvensis arvensis	Eurasian Skylark
Chloris chloris	European (Common) Greenfinch
Carduelis carduelis britannica	European Goldfinch
Columba livia	Feral Pigeon
Passer domesticus domesticus	House Sparrow
Anas platyrhynchos platyrhynchos	Mallard
Spilopelia chinensis	Spotted Dove
Rattus rattus	Black Rat (Ship Rat, Roof Rat)
*Felis catus^*	Domestic Cat (Feral Cat)
Lepus europaeus	European Brown Hare
*Cervus dama^*	Fallow Deer
Vulpes vulpes	Fox (Red Fox)
Mus musculus	House Mouse

Scan or click here to view the full
Southern Fleurieu Coastal Action Plan
hf.landscape.sa.gov.au/SFCAP
Published by the Hills and Fleurieu Landscape Board
2026 | FIS 1107263