

Carrickalinga (Karrakalingga)¹ Head

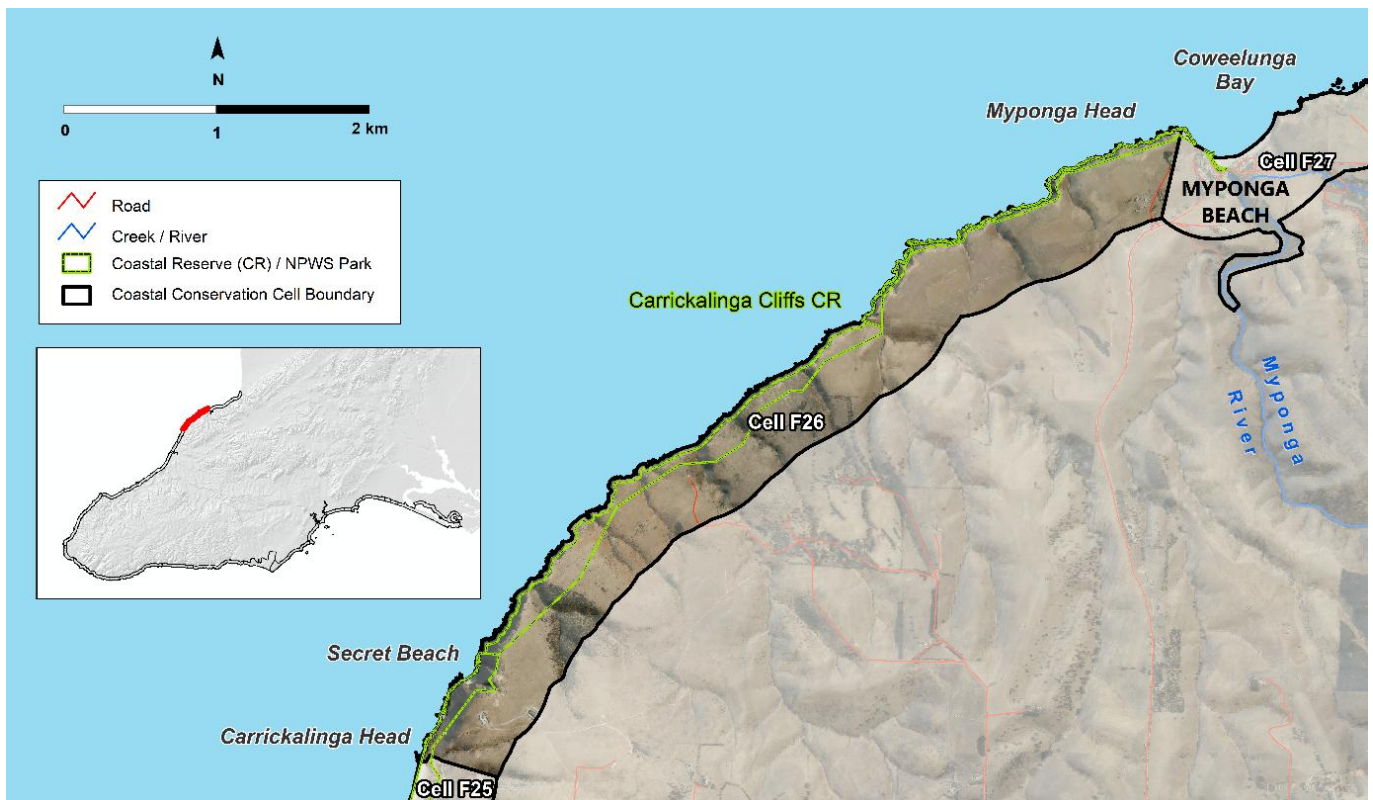
to Myponga (Maitpangga) Head

Cell F26

Overview

This stretch of coastline is dominated high rocky coastal cliffs with highly isolated pockets of remnant vegetation, limited to the seaward side of cliffs or where stock is unable to graze. Otherwise, relatively bare coastal slopes to the boundary of the cell. Protection of a few small areas of low coastal woodland are of high biodiversity value areas within the cell. Butterfly and bird habitats support a small diversity of species within the cell and potential habitats exist for coastal raptors.

Nearshore reef habitats line the length of the cell and include sheltered reef systems with diverse flora and fauna species, particularly within the sanctuary zone of Encounter Marine Park. Areas of erosion along the cliff line are potential threats to these ecosystems and should be stabilised following fencing to restrict grazing pressures.



¹ “Karrakalinga was the earliest recorded traditional language word (Kaurna Meyunna) in 1840. Maitpangga was first recorded in 1837 by Protector William Wyatt during a journey to Encounter Bay with Mullawirraburka’s family, my apical ancestor” (Karl Winda Telfer, personal communications, December 2025).

Traditional Owner and First Nations cultural heritage and connection to land and sea Country

This cell is of high cultural value and significance to the Kurna Patpangga Meyunna people. The Country is part of several Dreaming stories, including Tjilbruke/Tjirbuki, which is a coast and sea songline story. The area features places, artefacts, plants and animals of high cultural and human value, including caves, fish traps and fishing grounds, seasonal campgrounds, sleeping places, and places of creation story and spiritual practices. This cell includes registered and un-registered Aboriginal heritage sites; more broadly, all the lands and waters are of importance to the Kurna Patpa and Mullawirra Meyunna.

Please respect that cultural concepts and content included in this plan are the Aboriginal Cultural and Intellectual property (ACIP) of Karl Winda Telfer of the Mullawirra Meyunna (Kurna Meyunna) (cells 20-27). They may not be used or adapted by any other parties without consent.

Cell detail

This cell extends from Carrickalinga Head approximately 6.5km to Myponga Head. It includes several pocket beaches, many only accessible by boat. The cell is in the District Council of Yankalilla local government area.

Tenure, Land Use and Values

Spectacular coastal scenery of cliffs and pocket beaches. The coastal Crown lands and clifftops are coastal reserves dedicated for conservation purposes, which stretch the length of the cell. Inland from reserves is privately owned grazing land, with the northern end of the cell having a license for grazing across the Crown land parcel. Since 2012, the waters surrounding this cell are within the boundaries of the Encounter Marine Park.

Native title has not been established for this cell. The Federal Court did not determine native title for Kurna Yerta Aboriginal Corporation over the lands south of Myponga to the edge of the Ngarrindjeri determination (3.5km northeast of Cape Jervis). Kurna Patpangga Meyunna maintain cultural and historical connections to this region, the formal determination was limited to areas from Lower Light in the north to Myponga in the south.

Bryars (2013) describes the cell as utilised for recreational fishing, boating and diving. Limited-to-no public access to pocket beaches and rocky outcrops, other than by boat.

Landforms

High steep bedrock cliffs (>50m), dominated by rocky reef shore platforms at the base, Discontinuous cliff line, with three small pocket sand or boulder beaches at the mouths of creeks. Moderate to low wave energy (Caton et al 2007)

At the southern end of this cell lies the Carrickalinga Head Geological monument (reference 11199), with Cambrian rocks (Carrickalinga Head Formation, Kanmantoo Group, Normanville Group, Heatherdale Shale), metasediments, slumps, unconformity, disrupted bedding.

The northern end at Myponga Head has the Myponga Beach geological monument (reference 1118), which is part of the Fork Tree Limestone and Sellick Hill Formation. Nearly the entire cell is designated as a State Heritage Place of Palaeontological Significance (reference 14108) by the South Australian Heritage Council.

The cliffs flanking Myponga Beach and continuing south several kilometres provide a continuous coastal section of Early Cambrian (c. 540- 570 million years) fossiliferous limestones. The Sellick Hill Formation and the overlying Fork Tree Limestone contain the fossil *Archaeocyatha* (ancient sponges), the earliest preserved reef builder in the sea. New species have been discovered in the cliffs at Myponga Beach, allowing more accurate correlation with other Cambrian rocks in South Australia and elsewhere. This is also one of the best-known localities for *Hyolithes* (marine invertebrates resembling conical snails), another important early Cambrian fossil. Together with the faunal assemblage, the exceptional sedimentary structures in the cliffs are significant for research into the environment of the Early Palaeozoic Era in South Australia. (SA Heritage Council, 2024)



Carrickalinga Cliffs along cell F26; (Coast Protection Board, March 2024)

Terrestrial biodiversity

Whole cell

Despite being highly grazed and cleared of most vegetation, small pockets and individual species of remnant vegetation do exist amongst the cliff lines, valleys and creek lines. These are of particular value for this cell, supporting flora and fauna populations that are otherwise non-existent in the cell. Other conservation values are geological heritage, bird habitat, butterfly larvae habitat, species richness, and vegetation associations (Caton et al 2007)

The largest patch of remnant vegetation towards the southern end of the cell supports *Olearia ramulosa* shrubland by the cliffs and clifftops, and Coastal White Mallee (*Eucalyptus diversifolia* ssp. *diversifolia*) woodland within the valley. The remainder of the coastal slopes and cliff lines are predominately *Allocasuarina verticillata* low woodland.

Species of conservation significance recorded in this cell include Gilja (*Eucalyptus brachycalyx*), Yorrell (*Eucalyptus gracilis*), Thorny Lawrencia (*Lawrencia squamata*), Coast Plover-daisy (*Leiocarpa supina*), Forked Twinleaf (*Roepera confluens*), and Brown-head Samphire (*Tecticornia indica* ssp. *bidens*).

The fauna species records for this cell are particularly low, with only three species (two birds (including the Hooded Plover (*Thinornis cucullatus cucullatus*) and one butterfly Black and White Sedge-skipper (*Antipodia atralba*) recorded in the BDBSA database.

Despite the largely cleared coastal slopes, significant butterfly larvae habitat value of remnant vegetation patches in small valleys within cliffs approximately 1.5km north of Carrickalinga Head (Caton et al 2007, Stolarski 2024). Butterfly species of conservation significance recorded in this cell include Black and White Sedge-skipper (*Antipodia atralba*), Chequered Copper (*Lucia limbaria*), as well as locally uncommon Wood White (*Delias aganippe*), Common Brown (*Heteronympha merope merope*) and multiple common butterfly species that are observed across the Fleurieu Peninsula (Stolarski 2024).



Locally uncommon Wood White (*Delias aganippe*) butterfly (M Endacott)

Stolarki (2024) describes the Black and White Sedge-skipper (*Antipodia atralba*) as very localised and restricted to coastal heath areas where its larval food plant, Black Grass Saw-sedge (*Gahnia lanigera*), grows in large enough densities. Populations within and between sites fluctuate in densities in response to the availability of fresh *G. lanigera* leaf growth favoured by larvae. The butterfly is very responsive to post fire plant growth and often attains large population numbers following such events. Black and White Sedge-skipper (*Antipodia atralba*) has a patchy distribution along the southern Fleurieu Peninsula and has been recorded from the following locations: Carrickalinga and Myponga South areas, Cape Jervis, Lands End and Newland Head CP.

The Chequered Copper (*Lucia limbaria*) butterfly is very localised, rarely observed and present in coastal areas where its larval food plant, Native Sorrel (*Oxalis perennans*) is found present. Populations fluctuate in densities in response to the availability of fresh *O. perennans* leaf growth favoured by larvae. The butterfly also uses Yellow Wood-sorrel (*Oxalis corniculata* ssp. *corniculata*), an introduced weed species commonly found in suburban gardens. The species has a symbiotic relationship with *Iridomyrmex rufoniger* ants. Chequered Copper (*Lucia limbaria*) distribution along the southern Fleurieu Peninsula is known from three sites; Carrickalinga North, Waitpinga Creek and Middleton areas, both in sub coastal sites (Stolarski 2024).

Exposed rocky shores in this cell along provide foraging habitats for shorebirds, including Sooty Oystercatchers (*Haematopus fuliginosus fuliginosus*), Greater Crested Tern (*Thalasseus bergii cristatus*) and Caspian Tern (*Hydroprogne caspia*), Silver Gulls (*Chroicocephalus novaehollandiae novaehollandiae*) and Pacific Gulls (*Larus pacificus georgii*).

The coastal cliffs and slopes are 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*), Little Pied Cormorant (*Microcarbo melanoleucos*), Black-faced Cormorant (*Phalacrocorax fuscescens*), Pacific Gull (*Larus pacificus georgii*) and Kelp Gull (*Larus dominicanus dominicanus*). Peregrine Falcons (*Falco peregrinus macropus*) are also regularly observed along the cliffs in this cell, perched and flying, sometimes hunting and catching feral pigeons (*Columba livia*).

No recognised estuaries occur in this cell.

Vegetation Communities

Coastal cliffs and slopes

Coastal White Mallee (*Eucalyptus diversifolia* ssp. *diversifolia*) low open forest

- Coastal White Mallee (*Eucalyptus diversifolia* ssp. *diversifolia*) low open forest over Coast Silver Wattle (*Acacia uncifolia*) +/- Coast Beard-heath (*Leucopogon parviflorus*) +/- Twiggy Daisy-bush (*Olearia ramulosa*) tall shrubs over Guinea Flower sp. (*Hibbertia* sp.) +/- Black Rapier-sedge (*Lepidosperma carphoides*) low shrubs

Drooping Sheoak (*Allocasuarina verticillata*) low woodland

- Drooping Sheoak (*Allocasuarina verticillata*) Low Woodland over an open grassy and herbaceous understorey of Hard Mat-rush (*Lomandra multiflora* ssp. *dura*) + Scented Mat-rush (*Lomandra effusa*) + Wallaby Grass (*Rytidosperma* spp.) + Spear Grass (*Austrostipa* spp.)

Coastal Shrubland

Twiggy Daisy-bush (*Olearia ramulosa*) mid open shrubland

- Twiggy Daisy-bush (*Olearia ramulosa*) mid open shrubland over *Hare's Tail Grass (*Lagurus ovatus*) + Sea-berry Saltbush (*Rhagodia candolleana* ssp. *candolleana*) + Prickly Ground-berry (*Acrotriche patula*) low shrubs over Variable Groundsel (*Senecio pinnatifolius* spp.) +/- Short-stem Flax-lily (*Dianella brevicaulis*) +/- Thyme Riceflower (*Pimelea serpyllifolia* ssp. *serpyllifolia*)

Nearshore habitats

This cell forms part of the Encounter Marine Park. Most of the marine areas of cell F26 are within a Sanctuary Zone (SZ-4), part of the areas are within Habitat Protection Zone (HPZ-6). Peregrine Falcons (*Falco peregrinus macropus*) are sighted regularly within cell F26. The only example of a semi sheltered rocky shoreline within the Gulf of St Vincent. These reefs support an unusually high diversity of species.

Bryars (2013) describes this cell as dominated by bare sand and bare gravel/pebble habitats from midshore to offshore, with significant areas of continuous/patchy low profile reef inshore and some continuous/patchy seagrass adjacent to the inshore reef (Figure 26.1).

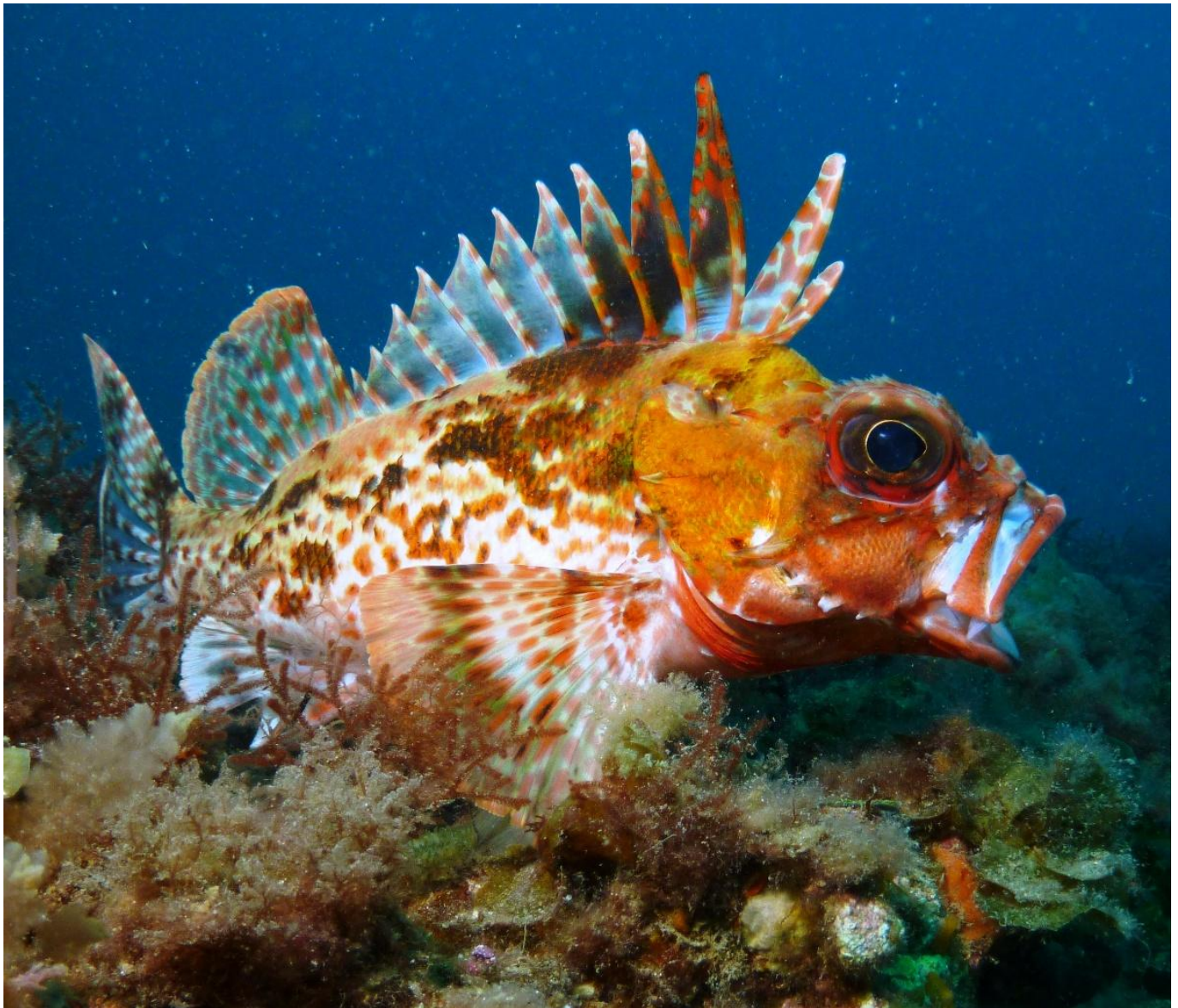
Subtidal reefs in the area are composed of limestone or metamorphic rock with a cover of macroalgae and sessile invertebrates (Turner et al. 2007, DEH 2008, Baker et al. 2009, Brook and Bryars 2014, Brook et al. 2020, Brock et al. 2023). A description of the offshore sand could not be found.

The cell is regionally significant due to its complexity of habitat types (Bryars (2013).

Subtidal and intertidal reefs

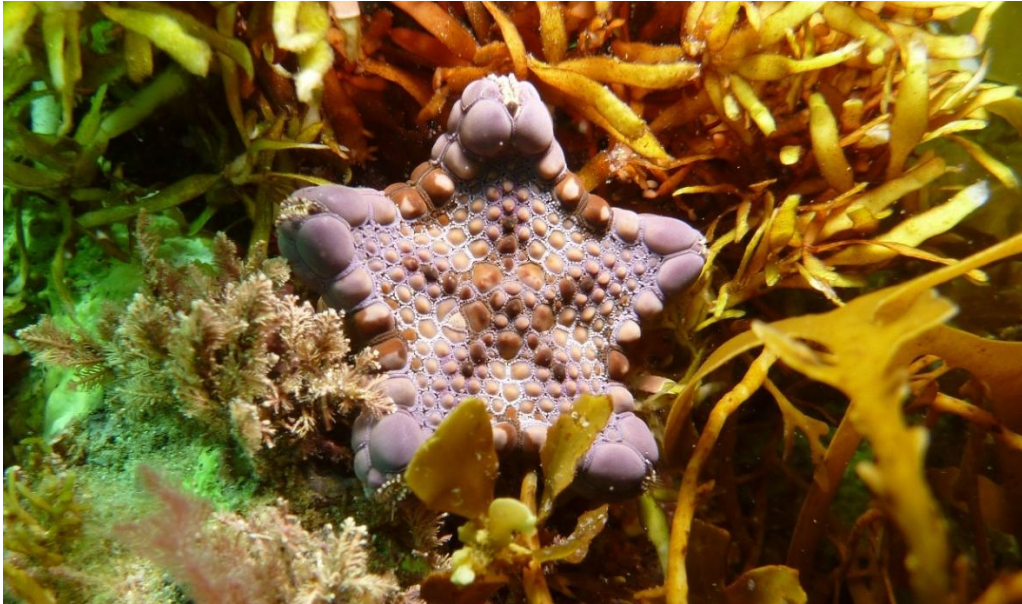
Surveys of the subtidal reef at various locations between Carrickalinga Beach and Myponga Head have found a high diversity of fishes, invertebrates and macroalgae (Edgar et al. 2006, DEH 2008, Baker et al. 2009, Brook and Bryars 2014, Brook et al. 2020, Brock et al. 2023). The subtidal reef at one of these locations ('Ripple Rock') appears to have relatively high biodiversity compared to many other reefs around the Fleurieu Peninsula (DEH 2008).

The intertidal reef at Carrickalinga has been surveyed for macroalgae, seagrasses and invertebrates (Benkendorff et al. 2008, Baring et al. 2010), and is characterised by a range of macroalgae (red, green and brown) and numerous (>25) mollusc species (Benkendorff et al. 2008). The cell lies within a region of low macroalgal species diversity. However, this is probably partly due to a low level of collection effort (see Baker and Gurgel 2010).



Common Gunard Perch (Neosebastes scorpaenoides) (S Bryars)

The reef ecosystem baseline study (Brook et al. 2020) and current study by Brock et al. (2023) assessing the trends in the condition of rocky reef ecosystems of the greater Adelaide and Fleurieu Peninsula region found that the overall status of rocky reefs was stable or improving, based on several key indicators of condition (e.g. fish and macroinvertebrate species richness, community structure, large fish biomass, macroalgae percentage cover, and reef thermal index). The Central Fleurieu subregion comprises 24 long term monitoring survey reef sites, with ten sites found within the cell. These sites include Myponga Reef, Myponga Point, Myponga South, Carrickalinga North, Ripple Rock, Carrickalinga Head and Dodds Beach. Combined reef surveys in this subregion indicate that macroinvertebrate and fish species richness, large fish biomass and the percentage cover of canopy-forming algae has remained stable or is increasing (Brock et al. 2023). Marine species in the Central Fleurieu subregion include 143 bony fish, 12 sharks and rays, 104 species of marine invertebrate, and 20 species of crustacean (Brock et al. 2023, Edgar and Barrett (2012), Edgar and Stuart-Smith (2014), Edgar et al. (2020)).



Biscuit Seastar (Tosia australis) (S Bryars)

Seagrass

The seagrass composition has not been described. Examination of aerial photos by Bryars (2013) suggests that a significant amount of *Posidonia coriacea* occurs adjacent about 1km of the inshore coastline, approximately 1km to the southwest of Myponga Head. This area of seagrass requires ground-truthing.

Species diversity

Very high level of diversity in this cell, from Reef Life Survey data, 212 species of mammals, fish and invertebrates have been identified. Bryars (2003) listed 12 fish and four macroinvertebrate species for the seagrass habitat between Sellicks Beach and Rapid Head, 14 fish and six macroinvertebrate species for the unvegetated soft bottom habitat between Sellicks Beach and Rapid Head, and 14 fish and six macroinvertebrate species for the reef habitat between Sellicks Beach and Rapid Head.



Short-tailed ceratosoma (Nudibrach) (Ceratosoma brevicaudatum) (M Stokes)

While the seagrass and bare sand habitats are likely to support a range of species (e.g. see Bryars 2003), apart from mapping studies that have characterised the seafloor (Shepherd and Sprigg 1976, Tanner 2002, DEH 2008), no biological surveys appear to have been undertaken on these habitats within Cell F26.

Nearshore Habitats: Cell F26

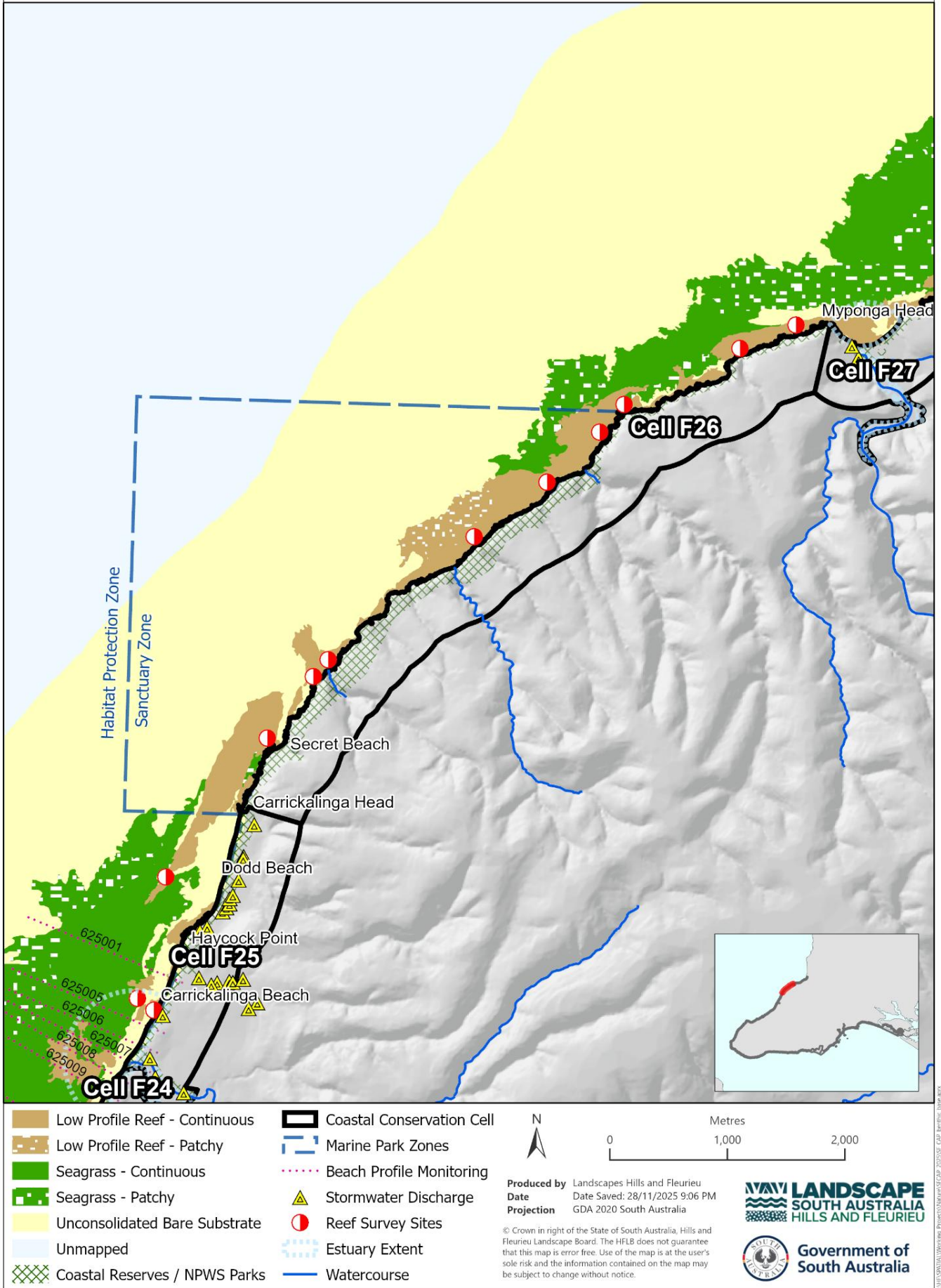


Figure 26.1 Nearshore habitats of Cell F26.

Threats

Whole cell

Despite challenges for public access, this section of coast is experiencing increased tourism and visitation. Day walkers seeking access to cliff line walks and visitation to pocket beaches and coves (often linked to boating tourism) are resulting in increased pressure on coastal and marine environments. Additional residential dwelling development is increasing infrastructure and disturbance in relatively remote areas. Other threats identified for this cell include viewscape and viewshed, vegetation block degradation, land use, land ownership, and cliff instability (Caton et al 2007).

This cell faces a high level of threat due to land use and ownership patterns, with extensive private holdings directly abutting the narrow Crown land corridor along the coastal fringe. 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.



Large areas of cleared grazing land dominate the cliff lines within the cell, many with erosion areas where stock have access to the cliff line (Coast Protection Board, March 2024)

Bechervaise (2004) notes the last house on the northern headland at Carrickalinga appears to have privatised public open space, and the walking trail north to Secret Beach headland is poorly defined and experiencing substantial use, resulting from increased awareness and promotion of the beach. The large lawned area at Carrickalinga North Bay is now managed by Council and sign posted as public land but still appears to be a private encroachment as there is no delineation with the adjacent house.



Secret Beach, Carrickalinga at southern end of the cell. (C Taylor)

The coastal reserves are partly unfenced against stock, leading to grazing pressure across coastal slopes and cliff lines and accelerated soil erosion. A substantial portion of the Crown land parcels along the cliff line in the northern end of the cell are covered by a Crown licence for grazing purposes by adjoining private landowners, which is reviewed annually. There is some pressure from Western Grey Kangaroo (*Macropus fuliginosus*) grazing. The cliff instability at this cell comprises various forms of accelerated soil erosion, including gullying and rill development on the cliff faces and cliff tops (Caton et al 2007).

Remnant vegetation is fragmented in this cell and largely restricted to areas of cliff lines where stock cannot access steep slopes, or small pockets that are fenced to restrict stock access. Grazing pressure restricts regeneration of species and increases fragmentation across the landscape.



Coastal White Mallee (*Eucalyptus diversifolia* ssp. *diversifolia*) low open forest behind a small patch of Coast Daisy-bush (*Olearia ramulosa*) mid open shrubland on the cliff line amongst grazed landscape (Coast Protection Board, March 2024)

Pest animal threats to coastal fauna and flora from rabbits (*Oryctolagus cuniculus*), foxes (*Vulpes vulpes*), and cats (*Felis catus*). There is a need to monitor and control Fallow Deer (*Cervus dama*) incursions. Coordinated collaboration between landowners and managers is required to manage pest animals (refer to Regional Pest Management Strategies). Total grazing pressure within the cell, particularly the dunes, exists through introduced and native species, as well as stock from adjacent land, impacting on vegetation through limiting regeneration and revegetation activities. Western Grey Kangaroo (*Macropus fuliginosus*) frequent the open grazing areas of the coastal slopes and cliff lines.

Weed threat is evident across the cell, with the following declared or red alert species of high priority for control; Bridal creeper (*Asparagus asparagoides*), Gazania (*Gazania linearis*), African Boxthorn (*Lycium ferocissimum*), Salvation Jane (*Echium plantagineum*), Cape Weed (*Arctotheca calendula*), Artichoke Thistle (*Cynara cardunculus* ssp. *flavescens*), Broad-leaf Cotton-bush (*Gomphocarpus cancellatus*), Tufted Honey-flower (*Melianthus comosus*), Pincushion (*Sixalix atropurpurea*), Soursobs (*Oxalis pes-caprae*), Golden Wreath Wattle (*Acacia saligna*), Sea Spurge (*Euphorbia paralias*), Olives (*Olea europaea* ssp. *Europaea*) and Apple of Sodom (*Solanum linnaeanum*).

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, weed invasion and interconnectivity between habitats prohibits movements and, therefore, creates localised isolation of populations. Several species are now restricted to pockets of isolated habitats resulting in some being vulnerable to population collapse (Stolarski 2024).

Coastal raptors are recorded to utilise habitats within the cell, including Wedge-tailed Eagles (*Aquila audax audax*) that have established foraging and breeding territories locally. Current and potential future threats include disturbance, recreational and industrial use of drones, windfarms and spread of urban development (Rowe et al 2018).

Significantly high levels of illegal fishing in the Sanctuary Zone (SZ-4) areas within the Encounter Marine Park occurs by vessel and land-based fishers at Carrickalinga Head. These no-take areas are located at core conservation areas within marine parks, protecting vital feeding, breeding, nursery, and resting areas for marine life.

Nearshore habitats

Bryars (2013) describes the coastline as sparsely populated, with only minor (although unquantified) freshwater inputs, there is unlikely to be a major threat from sediment and nutrient discharges. Nonetheless, because most of the adjacent land has been cleared of native vegetation for agriculture, the potential exists for some nutrient and sediment inputs during heavy rainfall events. The potential impact of these threats on nearshore habitats has not been investigated.

The adjacent Myponga River outflow (just to the north of Cell F26) may pose some minor threat to local subtidal habitats (see Cell F27 summary).

Bryars (2013) considered that the risk ratings for identified threats to seagrass and reef were low, while no measurable threats to sand were identified. As catchment flows appear to be relatively low, it was considered by Bryars (2013) that the consequence of catchment water on reef and seagrass could be minor, but that this was unlikely to occur, and the risk rating was low.

Opportunities

Whole cell

Opportunity to work with nature-based tourism operators and agencies to support visitor education and stewardship of local coastal environments, values and appropriate behaviors.

Community education opportunities regarding:

- Unique and valuable coastal landscape (for example, wildflowers, birds, and mammals)
- Fragile nature of coastal areas that are sensitive to foot traffic, soil compaction and erosion.
- Community education and targeted communications regarding Marine Parks (including no-fishing in Sanctuary Zones), nearshore habitats and estuary values.
- Citizen science monitoring to contribute to intertidal reef monitoring, seagrass restoration, dolphin watch, beach pole monitoring, Fleurieu seabird monitoring program and beach-nesting birds.
- Development of consistent signage and messaging for coastal values and compliance for conservation areas (public managed lands, coastal reserves) across the Fleurieu Peninsula coast.

Opportunities to support private landowners with landscape-scale conservation and connectivity to restore coastal vegetation and ecological communities. Fencing of existing remnant areas, including the cliff line, to protect isolated or fragmented vegetation and provide space for regeneration.

Definition of areas of valuable native vegetation with a view to increasing connectivity, and investigate obtaining greater long-term protection (Heritage status) of Crown Reserves (public land), and private land owners. Targeted interventions for threatened/rare plant species and communities, including weed control and reintroductions and translocations of rare plants.

Weed management is a key priority to help retain the biodiversity values within the cell across the parcels of Crown and private lands. Targeted control of declared and red alert weeds, including Bridal Creeper (*Asparagus asparagoides*), Gazania (*Gazania linearis*), African Boxthorn (*Lycium ferocissimum*), Soursobs (*Oxalis pes-caprae*), Golden Wreath Wattle (*Acacia saligna*), Sea Spurge (*Euphorbia paralias*), Olives (*Olea europaea ssp. Europaea*) and Apple of Sodom (*Solanum linnaeanum*) are a high priority, as they are actively invading intact native vegetation and displace or choke out native plant species. Ongoing monitoring for, and mapping of, new weed infestations should also be undertaken as part of an ongoing weed control program, which is critical to addressing high priority weeds and maintaining conservation values for the cell. Garden escape weeds require ongoing monitoring, control, and education for local residents on the impact of coastal garden weeds that spread to coastal reserves.

Monitor the impacts and effects of total grazing pressure that are causing impacts on 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, cliff lines and high conservation value pockets of remnant vegetation. Replace, repair and maintain existing fencing with private land, to restrict stock access to the creek lines, cliffs and areas of conservation values.

Pest animal threats to coastal fauna and flora from rabbits, foxes, and cats. There is a need to monitor deer incursions and kangaroo numbers, and control through coordinated collaboration between landowners and managers to manage pest animals (refer to Regional Pest Management Strategies).

Increase suitable habitat for coastal butterfly populations, including planting of host plants in coastal areas to increase habitat suitability for local introductions. Opportunities for habitat improvements for this cell includes Black and White Sedge-skipper (*Antipodia atralba*) and Chequered Copper (*Lucia limbaria*), through reduction of grazing pressure and high weed incursion. Investigate options to undertake an ecological burn in small patches to restore host plant vigour and distribution (Stolarski 2024). Engage with private land holders with habitats that support multiple conservation rated species, to increase awareness, protection and monitoring of species distribution and abundance.

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 Eagles (Haliaeetus leucogaster) are recorded across coastal cliff habitats (D Westmoreland)

Assessment of alignment and suitability of existing public walkway north of Carrickalinga Headland to Secret Beach. Signage and awareness of no access to beach is needed.

As part of the *Coastal Dune and Cliff-top 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 cliff-top 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.



Juvenile Shingleback (Tiliqua rugosa) is an underrepresented species in fauna databases in the region (M Stokes)

There is opportunity for collaboration between partners, such as National Parks, Marine Parks, Traditional Owners, First Nations, landscape boards, volunteer groups, community and nature-based tourism operators for monitoring of seabirds, coastal raptors, marine mammals and other wildlife.

Support community volunteer and private landowner efforts to undertake priority restoration and conservation work in this cell. Strengthen partnerships with Traditional Owners, First Nations, 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

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.

Nearshore habitats

Bryars (2013) recommends biological surveys of the seagrass, sand and gravel/pebble habitats are required to better understand habitat values and compile meaningful species lists for the cell.

Community education and targeted communications regarding Marine Parks and no fishing in Sanctuary Zones. Support for compliance resourcing, including increased numbers of fishers.

Climate change threats to coastal biodiversity (see BMT 2025)

Potential climate change threats to coastal biodiversity

Cell F26 includes high bedrock cliffs and pocket beaches, with an inshore limestone reef and dense seagrass ecosystems offshore. The clifftops and pocket beaches are supported by native vegetation, while the reef is supported by intertidal flora and fauna.

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

- Native vegetation
- Intertidal and reef ecosystems
- Pocket beach ecosystems
- Coastal cliffs
- Beach nesting birds

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

Over time, increasing aridity will slow natural recovery from damage to remnant vegetation. Seasonal run-off in small creeks will be drastically reduced by soil water budget changes. However, unpredictable intense rainstorms will locally cause fast run-off in small catchments. Changes in wave climate, likely to increase the long period swell component, would accentuate high tide changes to backshores in pocket beaches. Given the range of sea level rise projected by the IPCC (2001), many talus slopes at the base of sea cliffs will be trimmed back. Tide and water depth dependent habitats on reefs will be impacted by sea level rise, some intertidal sloping reefs will accommodate species migration, while flat low tide reef platforms will see species change (Caton et al 2007).

Marine heatwaves place further stress temperate reefs and seagrasses, reducing biodiversity. Higher atmospheric temperatures will lead to increased marine heatwaves, loss of species in the intertidal with longer than experience to grow back due to increased stressors; e.g. loss of sediment. Higher sea surface temperatures increase the potential for algal blooms.

Changes in ocean acidity (from increased CO₂ levels) can directly affect the health of temperate reefs. Increased acidification may impact the life history of calcareous organisms, such as marine molluscs and phytoplankton.

This cell is resilient to some effects of climate change, but plant and animal survival of the displacement of climate zones is a serious threat. Increasing plant and animal resilience to progressive climate change is important for this area and can be assisted by improving connectivity between remnant vegetation patches (Caton et al 2007).

Cell Action Table

Component	Issue	Proposed Action	Priority of Action	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)	Traditional Owners, First Nations, 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, ensure infrastructure is sufficient to meet the demands of increasing visitor numbers. Manage visitor numbers within sustainable limits in ecologically and culturally sensitive and significant areas - consult with Traditional Owners.	High (cons/ threat)	Council, DEW, land managers, Traditional Owners, First Nations
		Investigate opportunities for community education and engagement regarding unique and valuable coastal landscape and fragile nature of coastal areas. Structured cultural education and training for land managers, agency staff and land stewards.	High (Cons/ Soc)	Council, LHF, DEW, NPWSSA, Traditional Owners, First Nations, coastal community groups, Community groups
		Opportunity to work with nature-based tourism operators to increase education and stewardship of local coastal environments. Support opportunities for Traditional Owner-led tourism and cultural education.	Medium (Cons)	Council, land managers, Traditional Owners, First Nations, NPWSSA, coastal community groups
		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 with First Nations knowledge holders through collaborative process.	Medium (Soc/ Cons)	Council, land managers, Traditional Owners, First Nations, NPWSSA, coastal community groups
		Monitor aquatic activities (boating, paddleboard and jet skis) for increased pressures on local coastal habitats and fauna species interactions.	High (threat)	Council and land managers, NPWSSA, coastal community groups
		Weed species threat to significant flora and fauna habitats.	Ongoing control and investment in weed control (particularly WONS and Red Alert Species) to protect and maintain high conservation areas including is difficult to access areas.	High (threat)
	Targeted interventions for threatened/ rare plant species and communities.		High (cons)	DEW, NPWSSA, Traditional Owners, First Nations, LHF, coastal community groups
	Monitor changes to dunes through BushRAT or similar monitoring to measure condition assessment and change.		High (cons/ threat)	Council, DEW, LHF, land owners, Community Groups.
	Residential encroachment to coastal reserve.	Assessment of boundaries, education and compliance.	High (Threat/ Soc)	Council
		Control and monitoring of garden escape weeds from local residences and intentional plantings within the dunes. Target residences with educational materials, with regard to weeds.	High (Soc / Econ)	Council, coastal community groups

Component	Issue	Proposed Action	Priority of Action	Key Players
Whole Cell	Residential encroachment to coastal reserve.	Removal of introduced non-local species and restoration of pathways and erosion with local native coastal species.	High (threat)	Council, LHF, coastal community groups
	Protection of significant flora and fauna.	Protect existing populations through targeted weed control and restoration of habitats with local coastal species.	High (Cons/ threat)	Council, land managers, Traditional Owners, First Nations, LHF, coastal community groups
		Revegetation programs to improve the conservation prospects of threatened species.	High (cons)	DEW, land managers, Traditional Owners, First Nations, LHF, coastal community groups
		Propagate local plants for reintroduction to other sites to maintain genetic diversity and increase source populations.	High (cons)	Council, land managers, LHF, coastal community groups, Traditional Owners, First Nations, local coastal plant nurseries
	Highly valuable habitat for coastal raptors (White-bellied Sea Eagle, Wedge-tailed Eagles and Eastern Osprey)	Ongoing monitoring and management of high values nesting and foraging areas. Partner with Traditional Owners to understand cultural value and obligations associated with local raptors.	High (cons)	NPWSSA, DEW, Traditional Owners, First Nations, LHF
		Implement the recovery plan for Eastern Osprey and White-bellied Sea Eagles (2022).	High (cons)	DEW, Traditional Owners, First Nations, NPWSSA, LHF
		Investigate opportunities for establishment of nesting towers on private land for additional habitat.	Medium (cons)	DEW, LHF, land owners
	Butterfly habitats and host plant protection.	Identify locations of potential butterfly habitats and host plants with the cell.	High (cons)	DEW, LHF, Council, Traditional Owners, First Nations business/ contractors/ rangers, coastal community groups
		Extension of existing habitats and reintroduction of locally extinct butterfly species.	Medium (cons)	DEW, LHF, Council, Traditional Owners, First Nations business/ contractors/ rangers, land owners, coastal community groups
		Undertake weed management and reduce grazing pressure to enhance habitat for Black and White Sedge-skipper (<i>Antipodia atralba</i>) and Black Grass Saw-sedge (<i>Gahnia lanigera</i>), Chequered Copper (<i>Lucia limbaria</i>) and Native sorrel (<i>Oxalis perennans</i>), Yellow Wood-sorrel (<i>O. corniculata ssp. corniculata*</i>), and common species.	High (threat)	Land owners, Council, LHF
		Investigate options to undertake an ecological burn in small patches to restore host plant vigour and distribution.	Medium (cons)	Land owners, LHF, DEW, Traditional Owners, First Nations business/ contractors/ rangers.
		Engage with private land holders to increase awareness, protection and monitoring of species distribution and abundance.	Medium (Cons)	LHF, DEW, coastal community groups

Component	Issue	Proposed Action	Priority of Action	Key Players
Whole Cell	Coordinated approach to monitoring of coastal wildlife.	Collaboration between land manager and stakeholders to support research and citizen science of beach-nesting birds, seabirds, coastal raptors, marine mammals and other wildlife.	Medium (cons)	DEW, NPWSSA, BirdLife Australia, LHF, Council, SA Whale Centre, Encounter Whales, ecotourism operators, coastal community groups, Traditional Owners, First Nations business/contractors/rangers.
	Aged baseline data and significant gaps in recorded flora and fauna species across the Southern Fleurieu region.	Repeat and integrate historical vegetation surveys into a long-term monitoring program to update records and address data deficiencies.	Medium (cons/threat)	DEW, LHF, councils, coastal community groups
		Undertake fauna assessments across cells to establish baselines, update records and species distribution, particularly of underrepresented groups (reptiles and invertebrates).	Medium (cons/threat)	DEW, LHF, councils, coastal community groups
		Identify potential funding sources to repeat these long-term flora monitoring sites and fauna assessments.	High (cons/threat)	DEW, LHF, councils.
	Increasing grazing pressure from native and introduced species.	Coordinate with regional grazing pressure programs (kangaroos, deer and goats) to monitor populations and control as required to protect remnant vegetation and revegetation efforts.	High (threat)	NPWSSA, DEW, PIRSA, LHF Traditional Owners, First Nations business/contractors/rangers.
		Fencing of remnant and high value vegetation communities on private and Crown land.	High (Cons / Threat)	DEW, LHF, land owners
	Threat to coastal fauna and flora from pest animals (rabbits, foxes and cats).	Coordinated collaboration between landowners and managers is required to manage pest animals. Ensure control methods refer to cultural heritage protocols.	High (threat)	Councils, land owners, LHF, CPB Traditional Owners, First Nations business/contractors/rangers.
		Report sightings of feral animals (deer, fox, rabbit, cat and declared species) through the feral scan pest animal recording and management tool.	High (threat)	Land managers, community, coastal community groups
	Support and acknowledgement of volunteer and private land owner effort in cell.	Maintain and support volunteer effort across public and private land parcels.	High (cons)	DEW, CPB, LHF, coastal community groups
	Physical changes on the coast and natural assets from sea level rise (such as coastal squeeze on tidal habitats, erosion, vegetation loss, marine turbidity and light reduction)	Development of a council wide Coastal Hazard Adaptation Plan, including key locations, recommendations and priorities for funding. Support partnerships for ongoing investigation and monitoring in the coastal zone, working with the Coast Protection Board to identify adaptation options for the future.	High (Cons. Threat)	CPB, Council, community, university and research agencies, Climate Ready Coast Program

Component	Issue	Proposed Action	Priority of Action	Key Players
Tjilbruke / Tjirbruki Dreaming story sites within cell	Significant cultural story locations within cell and opportunities to increase community cultural education through reconciliation.	Support existing Traditional Owner cultural walks and communications to build broader community education.	High (cons/ threat)	Traditional Owners, First Nations, Council, LHF
		Support cultural monitoring and communications to protect significant known heritage sites. Support Traditional Owner aspirations to care for Country and provide cultural education for the cliff lines and surrounds.	High (cons/ threat)	Traditional Owners, First Nations, Council, LHF, coastal community groups, community
		Traditional Owner-led cultural mapping to document cultural values of the cliff lines and surrounds.	High (cons/ threat)	Traditional Owners, First Nations, Council, LHF, coastal community groups, community
Cliff tops	Threats to scenic amenity values through development proposals for cliffs and coastal slopes/townships and along clifftops.	Review of protection of cliff top land from development and spread of coastal townships.	Medium (threat)	Council.
	The potential for improved connectivity between remnant areas of native vegetation of high conservation value.	Develop a strategy to connect land parcels and land management agreements to improve connectivity between remnant vegetation blocks.	High (Cons / threat)	DEW, LHF, Council, community.
		Continue to support land managers to protect of remnant vegetation and maintain revegetation and restoration efforts across land parcels within cell Take opportunities to link to inland vegetation.	High (cons)	DEW, Council, LHF, coastal community groups
	Cliff instability and multiple areas of erosion evident within creek lines and accelerated soil erosion, including gullying and rill development on the cliff faces and cliff tops.	Undertake restoration activities to improve bank stabilisation and revegetation to reduce further erosion and weed cover.	High (threat)	Land owners, Council, LHF, coastal community groups
	Limited vegetation on cliff lines due to grazing that threatens conservation values of remnant vegetation patches.	Fencing of remnants on clifftop Crown land.	High (Cons / threat)	DEW, LHF, land owners
		Investigate opportunities for formal conservation agreement/protection including landowner Heritage Agreement.	High (Cons / Threat)	CPB, DEW, NPWSSA, land owners, LHF, Council
Protection of existing remnant vegetation and revegetation of local coastal species.		High (cons)	Council, DEW, land managers, LHF, coastal community groups	
Carrickalinga Head	Illegal fishing within Encounter Marine Park Sanctuary Zone.	Continued compliance of fishing illegal fishing activities within the Marine Park.	High (cons/threat)	NPWSSA
		Community awareness of Sanctuary Zones and need to protect marine biodiversity values.	High (cons)	NPWSSA, council, LHF, coastal community groups,
	Public access to headland above Secret Beach north of Carrickalinga Beach.	Assessment of alignment and suitability of existing public walkway north of Carrickalinga Headland to Secret Beach headland. Signage and awareness of lack of access to beach is needed.	Medium (threat/Soc/ Hazard)	Council, DEW
Nearshore habitats (Reef, Seagrass)	Sediments and nutrients from cliff top erosion and small creeks.	Support initiatives for catchment revegetation and improved land management practices.	High (threat)	District Council of Yankalilla, LHF
		Monitor catchment and stormwater impact on nearshore habitats and reefs across the cell.	High (Threat)	Council, DEW, EPA, SA Water, Landscape Boards
	Lack of knowledge of seagrass condition and species diversity in cell.	Collaboration between government agencies, researchers, and community to monitor seagrass cover, species diversity, condition and inform active management.	Medium cons/(threat)	DEW, SARDI, EPA, SA Water, LHF, NPWSSA, Universities, Council, community

Component	Issue	Proposed Action	Priority of Action	Key Players
Nearshore habitats (Reef, Seagrass)	Lack of knowledge of seagrass condition and species diversity in cell.	Investigate opportunities to support reduction of land-based impacts to avoid further loss, promote natural recovery of seagrasses and investigate potential for assisted restoration of seagrass habitats with community	High (cons/threat)	DEW, LHF, SARDI, NPWSSA, Council
Caring for Sea Country	Culturally significant Sea Country - including caves, hunting grounds, fish traps marine life - are neglected and require Traditional Owner access and self determination to care for Country.	Support Traditional Owner mapping of southern Sea Country. Support establishment of Traditional Owner-led caring for Sea Country program. Traditional Owner led restoration of Sea Country and known significant places.	High (cons/threat)	Traditional Owners, First Nations, NPWSSA, DEW, Council, LHF, coastal community groups
Climate (Cliffs)	More intense rainfall events likely to increase soil erosion.	Restoration of native plant species to assist soil stabilisation.	High (Cons/threat)	Land owners, coastal community groups, Council, LHF
	Increased aridity likely to make growing conditions less suitable to native vegetation fragments.	Restoration of native plant species to assist soil stabilisation.	High (Cons/threat)	Land owners, Council, coastal community groups, LHF
Climate (Beach and dunes)	Increased sea levels and more intense storms and higher winds can contribute to more frequent and intense wave action, which accelerates beach and dune erosion.	Restrict public access to fragile dunes.	Medium (threat)	Council, Council, coastal community groups, LHF
		Implement restoration of native plant species.	Medium (threat)	Council, coastal community groups, LHF
	Predicted increases in aridity can lead to reduced vegetation cover and increased dune drift and dune mobility.	Support cultural monitoring and communications to protect significant known heritage sites	High (threat)	Council, coastal community groups, LHF, Traditional Owners, First Nations business/ contractors/ rangers.
Climate (Macroalgal reefs and seagrasses)	More intense rainfall events likely to lead to increased pollutants, nutrients and suspended sediments washed into coastal waters especially during first flush.	Monitor stormwater quality and creek condition.	Medium (threat)	Council, DEW, LHF, land owners
	Increased storm surge can cause dislodgment of algae and seagrasses.	Monitor stormwater quality and creek condition.	Medium (threat)	Council, DEW, LHF, land owners
	Higher temperatures can lead to increased incidence and persistence of marine heatwaves and increased stress on temperate reefs and seagrasses, reducing biodiversity.	Monitor stormwater quality and creek condition.	Medium (threat)	Council, DEW, LHF, land owners
	Ocean acidification can impact the life history of marine species.	Monitor stormwater quality and creek condition.	Medium (threat)	Council, DEW, LHF, land owners
		Undertake benthic flora mapping to determine areas or opportunities for restoration.	Medium (threat)	DEW, council, LHF, land owners
Climate (whole cell)	Coastal Hazard Adaptation Planning	Investigate future funding opportunities to undertake coastal adaptation plan for DC Yankalilla to improve understanding of coastal risk, to inform coastal hazard adaptation planning and for evidence-based decisions and investments in the coast.	Medium (threat)	Council, CPB, Climate Ready Coasts Program, LGA, SACCA, DEW, consultancies, research institutions

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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 10km² 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	Coastal Crown Reserves (Minister Environment and Conservation)			
Terrestrial Habitat Description/s	See Terrestrial biodiversity vegetation communities in cell description.			
# Flora in cell	123			
# Native Flora in cell	77			
# Introduced Flora in cell	46			
# Conservation Rated Flora in cell	0			
# Threatened Ecological Communities (EPBC Act)	-			
Conservation Rated Flora	Species	Common Name	EPBC Act Status	NPW Status

All Native Flora in cell

Species	Common Name	EPBC Status	NPW Act Status	Subregional Status*
<i>Acacia rupicola</i>	Rock Wattle			RA
<i>Acacia uncifolia</i> [^]	Coast Silver Wattle			
<i>Acrotriche patula</i>	Prickly Ground-berry			NT
<i>Allocasuarina verticillata</i> [^]	Drooping Sheoak			
<i>Alyxia buxifolia</i>	Sea Box			RA
<i>Apium prostratum</i> var. <i>prostratum</i>	Native Celery			RA
<i>Asplenium subglandulosum</i>	Blanket Fern			LC
<i>Atriplex paludosa</i> ssp. <i>cordata</i>	Marsh Saltbush			LC
<i>Atriplex stipitata</i> ssp. <i>stipitata</i>	Bitter Saltbush			
<i>Atriplex vesicaria</i>	Bladder Saltbush			RA
<i>Austrostipa acrociliata</i>	Graceful Spear-grass			RA
<i>Austrostipa exilis</i>	Heath Spear-grass			RA
<i>Austrostipa</i> spp. [^]	Spear Grass			
<i>Beyeria lechenaultii</i>	Pale Turpentine Bush			NT
<i>Calostemma purpureum</i>	Pink Garland-lily			LC
<i>Calytrix tetragona</i>	Common Fringe-myrtle			LC
<i>Cassytha glabella</i> f. <i>dispar</i>	Slender Dodder-laurel			LC
<i>Crassula colligata</i> ssp. <i>lamprosperma</i>				LC
<i>Dianella brevicaulis</i>	Short-stem Flax-lily			NT
<i>Dianella revoluta</i> var. <i>revoluta</i>	Black-anther Flax-lily			LC
<i>Dichondra repens</i>	Kidney Weed			LC
<i>Disphyma crassifolium</i> ssp. <i>clavellatum</i>	Round-leaf Pigface			LC
<i>Dissocarpus biflorus</i> var. <i>biflorus</i>	Two-horn Saltbush			

Species	Common Name	EPBC Status	NPW Act Status	Subregional Status*
<i>Distichlis distichophylla</i>	Emu-grass			LC
<i>Einadia nutans ssp. nutans</i>	Climbing Saltbush			LC
<i>Enchylaena tomentosa var. tomentosa</i>	Ruby Saltbush			LC
<i>Eucalyptus brachycalyx</i>	Gilja			EN
<i>Eucalyptus diversifolia ssp. diversifolia</i>	Coastal White Mallee			RA
<i>Eucalyptus gracilis</i>	Yorrell			VU
<i>Ficinia nodosa</i>	Knobby Club-rush			LC
<i>Frankenia pauciflora var. gunnii</i>	Southern Sea-heath			
<i>Gahnia lanigera</i>	Black Grass Saw-sedge			RA
<i>Glycine rubiginosa</i>	Twining Glycine			LC
<i>Juncus pauciflorus</i>	Loose-flower Rush			NT
<i>Lachnagrostis billardierei ssp. billardierei</i>	Coast Blown-grass			RA
<i>Lawrenzia squamata</i>	Thorny Lawrenzia			VU
<i>Leiocarpa supina</i>	Coast Plover-daisy			VU
<i>Lepidosperma carphoides</i> [^]	Black Rapier-sedge			
<i>Lepidosperma congestum</i>	Clustered Sword-sedge			RA
<i>Leucophyta brownii</i>	Coast Cushion Bush			NT
<i>Leucopogon parviflorus</i> [^]	Coast Beard-heath			
<i>Lomandra effusa</i>	Scented Mat-rush			RA
<i>Lomandra multiflora ssp. dura</i> [^]	Hard Mat-rush			
<i>Lotus australis</i>	Austral Trefoil			NT
<i>Maireana brevifolia</i>	Short-leaf Bluebush			LC
<i>Maireana enchylaenoides</i>	Wingless Fissure-plant			LC
<i>Malva preissiana</i>	Australian Hollyhock			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			RA
<i>Muehlenbeckia gunnii</i>	Coastal Climbing Lignum			LC
<i>Myoporum insulare</i>	Common Boobialla			NT
<i>Nitraria billardierei</i>	Nitre-bush			RA
<i>Olearia ramulosa</i>	Twiggy Daisy-bush			LC
<i>Oxalis perennans</i>	Native Sorrel			LC
<i>Pimelea curviflora ssp. sericea</i>	Curved Riceflower			
<i>Pimelea serpyllifolia ssp. serpyllifolia</i>	Thyme Riceflower			NT
<i>Plantago hispida</i>	Hairy Plantain			NT
<i>Poa poiformis var. poiformis</i>	Coast Tussock-grass			LC
<i>Pomaderris paniculosa ssp. paniculosa</i>	Mallee Pomaderris			NT
<i>Ptilotus spathulatus</i>	Pussy-tails			RA
<i>Rhagodia candolleana ssp. candolleana</i>	Sea-berry Saltbush			LC
<i>Roepera confluens</i>	Forked Twinleaf			VU
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass			
<i>Rytidosperma spp.</i> [^]	Wallaby Grass			
<i>Sagina maritima</i>	Sea Pearlwort			LC
<i>Samolus repens</i>	Creeping Brookweed			NT
<i>Scleranthus pungens</i>	Prickly Knawel			RA
<i>Sclerolaena diacantha</i>	Grey Bindyi			RA
<i>Sclerolaena uniflora</i>	Small-spine Bindyi			RA
<i>Senecio pinnatifolius group</i>	Variable Groundsel			
<i>Senecio pinnatifolius spp.</i> [^]	Variable Groundsel			
<i>Setaria constricta</i>	Knotty-butt Paspalidium			NT
<i>Spergularia marina</i>	Salt Sand-spurrey			

Species	Common Name	EPBC Status	NPW Act Status	Subregional Status*
<i>Spinifex hirsutus</i>	Rolling Spinifex			
<i>Suaeda australis</i>	Austral Seablite			NT
<i>Tecticornia indica ssp. bidens</i>	Brown-head Samphire			VU
<i>Tetragonia implexicoma</i>	Bower Spinach			LC
<i>Threlkeldia diffusa</i>	Coast Bonefruit			NT

^ 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
<i>Acacia saligna</i>	Golden Wreath Wattle	HP		
<i>Arctotheca calendula</i>	Cape Weed	HP		
<i>Asparagus asparagoides</i> *	Bridal creeper		Yes	Yes
<i>Asparagus asparagoides f. asparagoides</i>	Bridal Creeper (form)	IC	Yes	Yes
<i>Atriplex prostrata</i>	Creeping Saltbush			
<i>Avena barbata/fatua</i>	Wild Oat			
<i>Bromus diandrus</i>	Great Brome			
<i>Bromus madritensis</i>	Compact Brome			
<i>Bupleurum semicompositum</i>	Hare's Ear			
<i>Cakile maritima ssp. maritima</i>	Two-horned Sea Rocket			
<i>Carthamus lanatus</i>	Saffron Thistle			
<i>Catapodium rigidum</i>	Rigid Fescue			
<i>Cerastium glomeratum</i>	Common Mouse-ear Chickweed			
<i>Cynara cardunculus ssp. flavescens</i>	Artichoke Thistle	IC		
<i>Echium plantagineum</i>	Salvation Jane		Yes	
<i>Ehrharta longiflora</i>	Annual Veldt Grass			
<i>Erodium botrys</i>	Long Heron's-bill			
<i>Euphorbia paralias</i>	Sea Spurge	HP		
<i>Fumaria bastardii</i>	Bastard Fumitory			
<i>Galium murale</i>	Small Bedstraw			
<i>Gazania linearis</i>	Gazania	IC	Yes	
<i>Geranium molle</i>	Soft Geranium			
<i>Gomphocarpus cancellatus</i>	Broad-leaf Cotton-bush	HP		
<i>Helminthotheca echioides</i>	Ox-tongue			
<i>Hypochaeris glabra</i>	Smooth Cat's Ear			
<i>Hypochaeris radicata</i>	Rough Cat's Ear			
<i>Lagurus ovatus</i>	Hare's Tail Grass			
<i>Lolium loliaceum</i>	Stiff Ryegrass			

Species	Common Name	Red Alert Weeds	Declared Weeds	WONS
<i>Lycium ferocissimum</i>	African Boxthorn	IC	Yes	Yes
<i>Lysimachia arvensis</i>	Pimpernel			
<i>Medicago minima</i>	Little Medic			
<i>Medicago polymorpha</i>	Burr-medic			
<i>Melianthus comosus</i>	Tufted Honey-flower	IC		
<i>Melilotus indicus</i>	King Island Melilot			
<i>Olea europaea ssp. europaea</i>	Olive	IC		
<i>Oxalis pes-caprae</i>	Soursob			
<i>Parapholis incurva</i>	Curly Ryegrass			
<i>Silene nocturna</i>	Mediterranean Catchfly			
<i>Sixalix atropurpurea</i>	Pincushion	IC		
<i>Solanum linnaeanum</i>	Apple Of Sodom	HP	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			
<i>Stellaria media</i>	Chickweed			
<i>Trifolium arvense var. arvense</i>	Hare's-foot Clover			
<i>Trifolium campestre</i>	Hop Clover			
<i>Trifolium scabrum</i>	Rough Clover			
<i>Urospermum picroides</i>	False Hawkbit			

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	41
# Native Fauna in cell	34
# Introduced Fauna in cell	7
# Conservation Rated Fauna in cell	8 (2 national, 8 state)

Conservation Rated Fauna				
Species	Common Name	Class	EPBC Act Status	NPW Act Status
<i>Falco peregrinus macropus</i> [^]	Peregrine Falcon	AVES		R
<i>Haematopus fuliginosus fuliginosus</i> [^]	Sooty Oystercatcher	AVES		R
<i>Haliaeetus leucogaster</i>	White-bellied Sea Eagle	AVES		E
<i>Larus dominicanus dominicanus</i> [^]	Kelp Gull	AVES		R
<i>Pandion haliaetus cristatus</i> [^]	Eastern Osprey	AVES		E
<i>Thinornis cucullatus cucullatus</i>	Hooded Plover	AVES	VU	V
<i>Zanda funerea whiteae</i> [^]	Yellow-tailed Black Cockatoo	AVES		V
<i>Tachyglossus aculeatus</i> [^]	Short-beaked Echidna	MAM	ssp	ssp

All Native Fauna in cell

Species Name	Common Name	Class	EPBC Act Status	NPW Act Status	Subregional Status
<i>Aquila audax audax</i> [^]	Wedge-tailed Eagle	AVES			RA
<i>Chroicocephalus novaehollandiae novaehollandiae</i> [^]	Silver Gull	AVES			LC
<i>Falco peregrinus macropus</i> [^]	Peregrine Falcon	AVES		R	RA
<i>Haematopus fuliginosus fuliginosus</i> [^]	Sooty Oystercatcher	AVES		R	VU
<i>Haliaeetus leucogaster</i>	White-bellied Sea Eagle	AVES		E	EN
<i>Hydroprogne caspia</i> [^]	Caspian Tern	AVES			LC
<i>Larus dominicanus dominicanus</i> [^]	Kelp Gull	AVES		R	RA
<i>Larus pacificus georgii</i> [^]	Pacific Gull	AVES			LC
<i>Microcarbo melanoleucos melanoleucos</i> [^]	Little Pied Cormorant	AVES			LC
<i>Pandion haliaetus cristatus</i> [^]	Eastern Osprey	AVES		E	
<i>Phalacrocorax fuscescens</i> [^]	Black-faced Cormorant	AVES			NT
<i>Phalacrocorax sulcirostris</i> [^]	Little Black Cormorant	AVES			LC
<i>Thalasseus bergii cristatus</i> [^]	Greater Crested Tern	AVES			LC
<i>Thinornis cucullatus cucullatus</i>	Hooded Plover	AVES	VU	V	EN
<i>Zanda funerea whiteae</i> [^]	Yellow-tailed Black Cockatoo	AVES		V	RA
<i>Antipodia atralba</i>	Black and White Sedge-skipper	INV			
<i>Danaus petilia</i> [^]	Lesser Wanderer	INV			
<i>Danaus plexippus plexippus</i> [^]	Monarch	INV			
<i>Delias aganippe</i> [^]	Wood White	INV			
<i>Heteronympha merope merope</i> [^]	Common Brown	INV			
<i>Junonia villida calybe</i> [^]	Meadow Argus	INV			
<i>Lampides boeticus</i> [^]	Long-tailed Pea-blue	INV			
<i>Lucia limbaria</i> [^]	Chequered Copper	INV			
<i>Nacaduba biocellata biocellata</i> [^]	Two-spotted Line-blue	INV			
<i>Ocybadistes walkeri hypochlora</i> [^]	Southern Grass-dart	INV			
<i>Pieris rapae rapae</i> [^]	Cabbage White	INV			
<i>Taractrocer papyria papyria</i> [^]	White-banded Grass-dart	INV			
<i>Theclinessthes miskini miskini</i> [^]	Wattle Blue	INV			
<i>Theclinessthes serpentatus serpentatus</i> [^]	Salt-bush Blue	INV			

Species Name	Common Name	Class	EPBC Act Status	NPW Act Status	Subregional Status
<i>Vanessa itea</i> [^]	Australian Admiral	INV			
<i>Vanessa kershawi</i> [^]	Australian Painted Lady	INV			
<i>Zizina otis labradus</i> [^]	Common Grass-blue	INV			
<i>Macropus fuliginosus</i> [^]	Western Grey Kangaroo	MAM			LC
<i>Tachyglossus aculeatus</i> [^]	Short-beaked Echidna	MAM	ssp	ssp	

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

All Introduced Fauna in cell

Species	Common Name
<i>Cervus dama</i> [^]	Fallow Deer
<i>Columba livia</i> [^]	Feral Pigeon
<i>Felis catus</i> [^]	Domestic Cat (Feral Cat)
<i>Mus musculus</i> [^]	House Mouse
<i>Oryctolagus cuniculus</i> [^]	Rabbit (European Rabbit)
<i>Sturnus vulgaris vulgaris</i> [^]	Common Starling
<i>Vulpes vulpes</i> [^]	Fox (Red Fox)



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