



**Australian Government**

**Department of Sustainability, Environment,  
Water, Population and Communities**



# Species group report card —marine reptiles

Supporting the marine bioregional plan  
for the South-west Marine Region

prepared under the *Environment Protection and Biodiversity Conservation Act 1999*

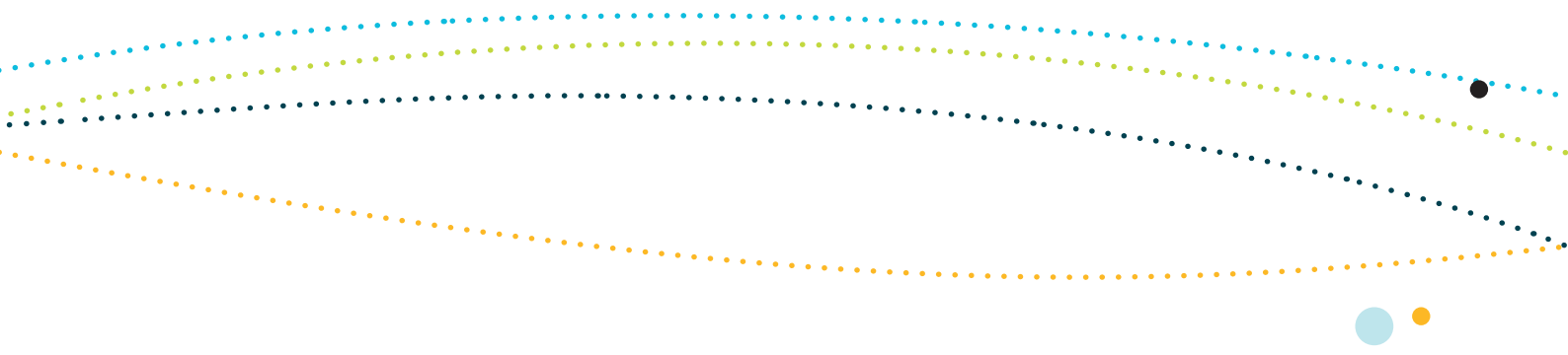
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#### Images:

Turtle at Scott Reef – Australian Institute of Marine Science, Sea snake – Australian Institute of Marine Science, Ningaloo Marine Area – Commonwealth waters – Tony Howard & DSEWPaC, Hawksbill turtle – Glen Cowans, Swallow Tail Reef – Glen Cowan, Southern calamari squid – Anthony King, Blue whale – DSEWPaC, Sea lion – Glen Cowan, Tern common – Richard Freeman



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# SPECIES GROUP REPORT CARD —MARINE REPTILES

Supporting the marine bioregional plan for the South-west Marine Region  
prepared under the *Environment Protection and Biodiversity Conservation Act 1999*

## Report cards

The primary objective of the report cards is to provide accessible information on the conservation values found in Commonwealth marine regions. This information is maintained by the Department of Sustainability, Environment, Water, Population and Communities and is available online through the department's website ([www.environment.gov.au](http://www.environment.gov.au)). A glossary of terms relevant to marine bioregional planning is located at [www.environment.gov.au/marineplans](http://www.environment.gov.au/marineplans).

Reflecting the categories of conservation values, there are three types of report cards:

- species group report cards
- marine environment report cards
- heritage places report cards.

While the focus of these report cards is the Commonwealth marine environment, in some instances pressures and ecological processes occurring in state waters are referred to where there is connectivity between pressures and ecological processes in state and Commonwealth waters.



## Species group report cards

Species group report cards are prepared for large taxonomic groups that include species identified as conservation values in a region; that is, species that are listed under Part 13 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and live in the Commonwealth marine area for all or part of their lifecycle. All listed threatened, migratory and marine species and all cetaceans occurring in Commonwealth waters are protected under the EPBC Act and are identified in the relevant marine bioregional plans as conservation values.

Species group report cards focus on species for which the region is important from a conservation perspective; for example, species of which a significant proportion of the population or an important life stage occurs in the region's waters.

For these species, the report cards:

- outline the conservation status of the species and the current state of knowledge about its ecology in the region
- define biologically important areas; that is, areas where aggregations of individuals of a species display biologically important behaviours
- assess the level of concern in relation to different pressures.



## 1. Marine reptiles of the South-west Marine Region

Three of the six species of marine turtles listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) are known to occur in the South-west Marine Region: leatherback turtle, loggerhead turtle and green turtle. Yellow-bellied seasnakes, listed under the EPBC Act, also occur in the region (Attachment 1). Seven other listed reptile species may occur infrequently in the region (Attachment 1).

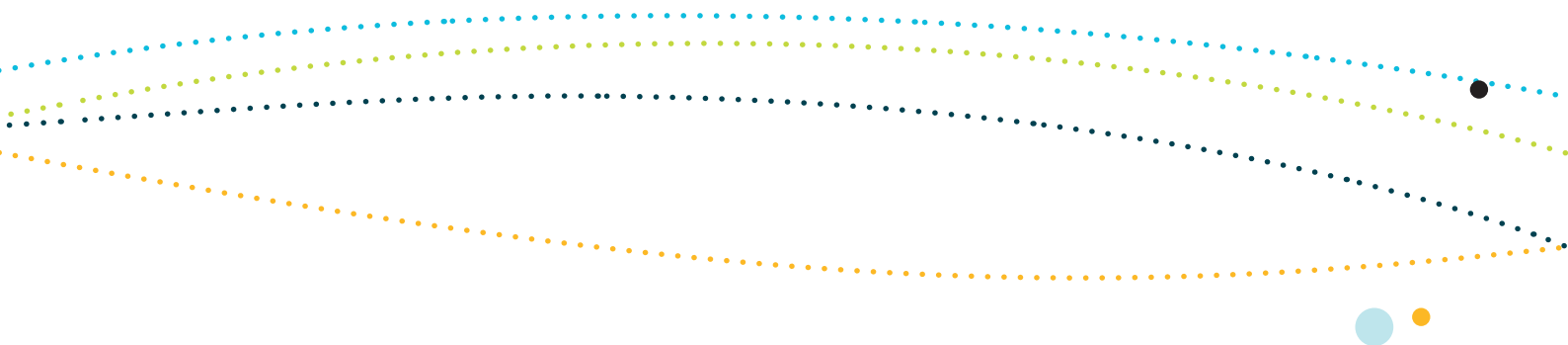
The three species of marine turtle known to occur in the region are listed as threatened species. Leatherback and loggerhead turtles are listed as endangered, while green turtles are listed as vulnerable. They are all also listed as migratory species and marine species under the EPBC Act. Yellow-bellied seasnakes are listed as a marine species.

Although marine turtles do not nest on the coast adjacent to the South-west Marine Region, these three species are known to occur in the region. The southward-flowing Leeuwin Current and the northward-flowing West Australian Current are considered to be important conduits for marine turtles in the region.<sup>1</sup> Within these water masses, hatchlings of species of marine turtles nesting in north Western Australia are dispersed from their breeding beaches in the Gascoyne, Pilbara and Kimberley regions. However, the extent to which marine turtles use the region for dispersal, migration and feeding requires further investigation. Although juvenile hawksbill (*Eretmochelys imbricata*) and flatback (*Natator depressus*) turtles have been recorded stranding in the south-west of Western Australia, these species are generally restricted to warmer, tropical waters and occur as vagrants in the region (Prince & Crane 1996).

Most sea snakes have tropical to subtropical distributions. Few sea snakes inhabit oceanic waters and most species live in shallower waters around reefs and inshore environments. Only yellow-bellied seasnakes are known to inhabit the subtropical and temperate waters of the South-west Marine Region. Other species of sea snake may be carried from warmer waters by the southward-flowing Leeuwin Current and occur as vagrants in the region.

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<sup>1</sup> The oceanography of the South-west Marine Region is dominated by the seasonal shallow southward-flowing Leeuwin Current comprising warm, tropical, low-nutrient water. Beneath it is the deeper, cooler, north-flowing Leeuwin Undercurrent, and to the west is the north-flowing West Australian Current. The Leeuwin Current is weakest in summer (November to March) and strongest in autumn and winter (April to October). The average temperature of the Leeuwin Current at Rottnest ranges from 19 °C to 23 °C, although in some years temperatures have reached 28 °C.



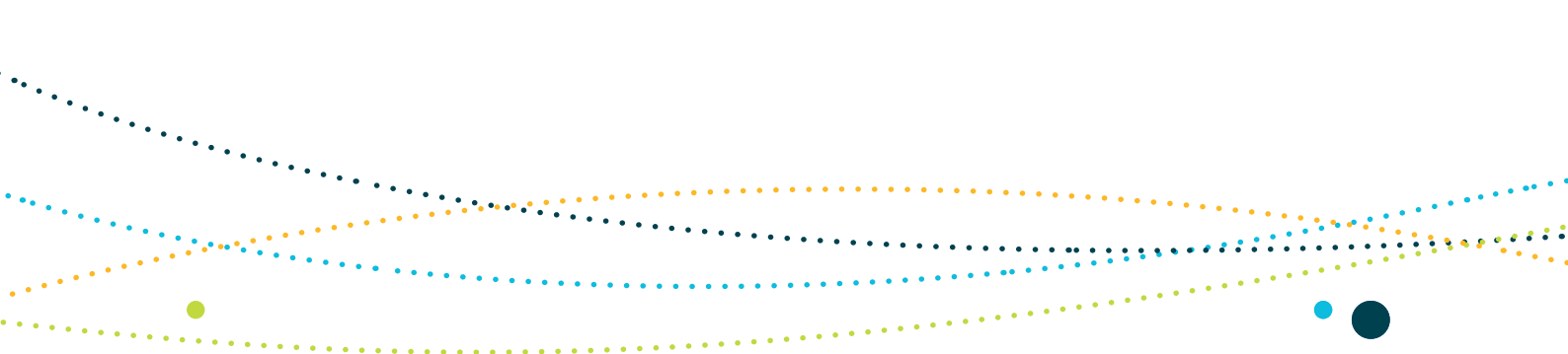
## Leatherback turtle

Leatherback turtles (*Dermochelys coriacea*) are occasionally observed at sea, mostly around the mid-west and south-west of Western Australia, where they feed on soft-bodied invertebrates such as jellyfish (WA DEC 2010). This species is primarily pelagic in both the juvenile and adult phases of its life. Leatherbacks in Australian waters range in size from small immature turtles (curved carapace length of 30.5 centimetres), up to large adults (Prince 2004). Small juveniles (<100 centimetres straight carapace length) are only found in waters warmer than 26 °C (Eckert 2002) and are probably carried into the South-west Marine Region on the Leeuwin Current (Prince 2004). Large juvenile and adult turtles (>100 centimetres straight carapace length) are found in both pelagic and coastal waters from tropical to cold temperate areas. The South-west Marine Region is important foraging habitat for this species. Foraging occurs throughout the water column, from close to the surface to depths of more than 1200 metres (Gulko & Eckert 2004). No major breeding aggregation sites have been recorded in Australia for this species (Limpus 2009). Leatherback turtles are known to feed in the Leeuwin and West Australian currents, which may provide a migratory corridor for the species to the south-western Pacific Ocean.

Leatherback turtles are most frequently encountered in the waters of southern Australia (Tasmania, Victoria, South Australia and Western Australia) and along the mid-eastern Australian Coast (south-east Queensland) (Limpus 2006). The southern extent of leatherback turtles in Western Australia is not well understood. Most observations are of foraging juvenile leatherbacks that are reported by fishermen as entanglements in lobster pot ropes (WA DF 2005). The fact that leatherbacks appear to be regular visitors to Western Australian waters but have not been reported as a nesting species suggests that major feeding grounds for this species include Western Australian locations (Prince 1990). It is thought that most leatherback turtles found in Australian waters have migrated from nesting areas in Papua New Guinea, Malaysia and West Papua to feed in temperate waters (EA 2003).

## Loggerhead turtle

Nesting of loggerhead turtles (*Caretta caretta*) is mainly concentrated on subtropical beaches, with major aggregations occurring to the north of the region, from Shark Bay to the Pilbara. Loggerhead turtles are one of the most commonly sighted turtles along the coast adjacent to the South-west Marine Region, with resident adult and large sub-adult turtles sometimes found in the Perth region between Rottnest Island and Geographe Bay (WA DEC 2010). The region is considered to be a nesting migration pathway for reproductive adults.



Small post-hatchling loggerheads originating from Western Australia's Gascoyne area are regularly washed ashore during winter and early spring storms along the south-western and southern coasts of Western Australia (Prince 1990; WA DEC 2010). Such strandings are more common in years with an early onset and strong Leeuwin Current flow (WA DEC 2010). Individuals of this species are the most common victims of accidents and strandings on beaches of the south-west coast of Western Australia (Prince 1990).

Adults and large juveniles inhabit environments with both hard and soft substrata, including rocky and coral reefs (Limpus et al. 1984), muddy bays (Conway 1994), sand flats, estuaries and seagrass meadows (Limpus et al. 1994; McCauley & Bjorndal 1999; Preen 1996). Loggerhead turtles are carnivorous, feeding primarily on benthic invertebrates in depths ranging from near shore to 55 metres, and in their juvenile stage they feed on algae, pelagic crustaceans and molluscs.

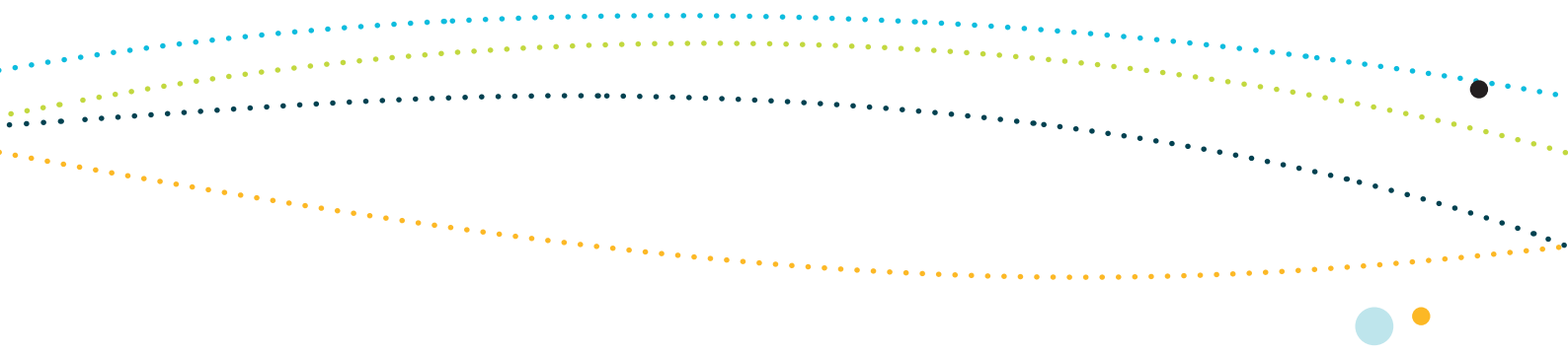
## Green turtle

One of the largest remaining green turtle (*Chelonia mydas*) populations in the world (consisting of one genetic stock) nests to the north of the region, on beaches extending from the Ningaloo Coast to the Lacepede Islands (FitzSimmons et al. 1997). Green turtles are generally found in tropical and subtropical waters and normally remain within the northern and southern limits of the 20 °C isotherms (Marquez 1990); however, individuals may stray into temperate waters and immature green turtles have been recorded foraging in water temperatures of 15 °C (Read et al. 1996).

Resident green turtles have been seen around reefs south of Shark Bay, around the mouth of the Murchison River at Kalbarri and around the reefs of the Houtman Abrolhos Islands (WA DEC 2010). Large juveniles assumed to be foraging are also seen in the reefs around Rottnest Island (WA DEC 2010). Divers regularly report adult green turtles at Rottnest Island, although these reports have not been confirmed or systematically studied.

Post-hatchling and juvenile green turtles (up to 30 centimetres curved carapace length) are pelagic, drifting on the surface of the water (Poiner & Harris 1996; Robins et al. 2002). They move to shallow benthic foraging habitat and feed primarily on seagrass and algae when they develop a curved carapace length of 30–40 centimetres (Musick & Limpus 1997; Poiner & Harris 1996; Robins et al. 2002; Whiting 2000). Habitats include coral and rocky reefs, and inshore seagrass beds and algal mats.





## Yellow-bellied seasnake

This species has a broad distribution and is found throughout the Pacific and Indian Oceans. Within the South-west Marine Region, numerous specimens have been washed ashore along the Western Australian coast as far as Esperance. Yellow-bellied seasnakes (*Pelamis platurus*) are pelagic, inhabiting the slicks and drift lines of ocean currents, where they feed on fish. The species hunts for food by remaining motionless on the surface, mimicking an inanimate floating object, thereby attracting prey species that aggregate beneath it, apparently deceived by its shape. Fish are captured either by a sideways movement of the head or by the snake swimming backwards, enabling it to seize the prey with a sudden lunge forward (DSEWPaC 2010).

## Biologically important areas

Biologically important areas are areas that are particularly important for the conservation of the protected species and where aggregations of individuals of a species display biologically important behaviour such as breeding, foraging, resting or migration. The presence of the observed behaviour is assumed to indicate that the habitat required for the behaviour is also present. Biologically important areas have been identified for some EPBC Act listed species found in the South-west Marine Region, using expert scientific knowledge about species' distribution, abundance and behaviour in the region. The selection of species was informed by the availability of scientific information, the conservation status of listed species and the importance of the region for the species. Biologically important areas have not yet been identified for marine reptiles in the South-west Marine Region.



## 2. Vulnerabilities and pressures

### Vulnerabilities

The life history patterns of marine turtles, including long life spans and late sexual maturity, make them vulnerable to a range of pressures. Marine turtles spend their life at sea, with females returning to beaches in their natal region to nest as adults (FitzSimmons et al. 1997; Miller 1997). While at sea, marine turtles are vulnerable to impacts from marine debris, as floating plastics can resemble prey items (EA 2003) and turtles may become entangled in monofilament line and nets (DEWHA 2009a). Resident foraging and migratory breeding turtles are also vulnerable to boat-based industrial activities such as dredging and construction vessel movements in the foraging or migratory habitat. Consequently, pressures acting on foraging marine turtles have the potential to affect populations of the three species of marine turtles that occur in the region.

### Analysis of pressures

On the basis of current information, pressures have been analysed for three marine reptiles discussed in this report card. There is limited information about yellow-bellied seasnakes in the region; consequently, a pressure analysis has not been done for this species. It should be noted that most of the pressures that affect marine turtles at their breeding sites or during breeding times have been assessed as *of less or no concern* in the South-west Marine Region, as the species do not breed in the region. A summary of the pressure analysis for marine turtles is provided in Table 1. Only those pressures identified as *of concern* or *of potential concern* are discussed in further detail below. An explanation of the pressure analysis process, including the definition of substantial impact used in this analysis, is provided in Part 3 and Section 1.1 of Schedule 1 of the plan.

**Table 1: Outputs of the marine reptile species pressure analysis for the South-west Marine Region**

Note: To maintain uniformity among all bioregions, this table has been added subsequently to the review by independent experts.

Pressure	Source	Species		
		Green turtle	Leatherback turtle	Loggerhead turtle
Sea level rise	Climate change			
Changes in sea temperature	Climate change			
Changes in oceanography	Climate change			
Ocean acidification	Climate change			
Chemical pollution/contaminants				
Nutrient pollution				
Changes in turbidity				
Marine debris	Aquaculture infrastructure			
	Fishing boats			
	Land-based activities			
	Oil rigs			
	Renewable energy infrastructure			
	Shipping			
	Urban development			
Noise pollution	Aquaculture infrastructure			
	Defence/surveillance activities			
	Onshore and offshore construction			
	Onshore and offshore mining operations			
	Renewable energy infrastructure			
	Seismic exploration			
	Shipping			
	Urban development			
Vessels (other)				
Light pollution				
Physical habitat modification				
Human presence at sensitive sites				
Nuisance species				
Extraction of living resources				
Bycatch	Commercial fishing			
Oil pollution				
Collision with vessels	Fishing			
	Shipping			
	Tourism			
Collision/entanglement with infrastructure				
Disease				
Invasive species				

**Legend**  of concern  of potential concern  of less or no concern



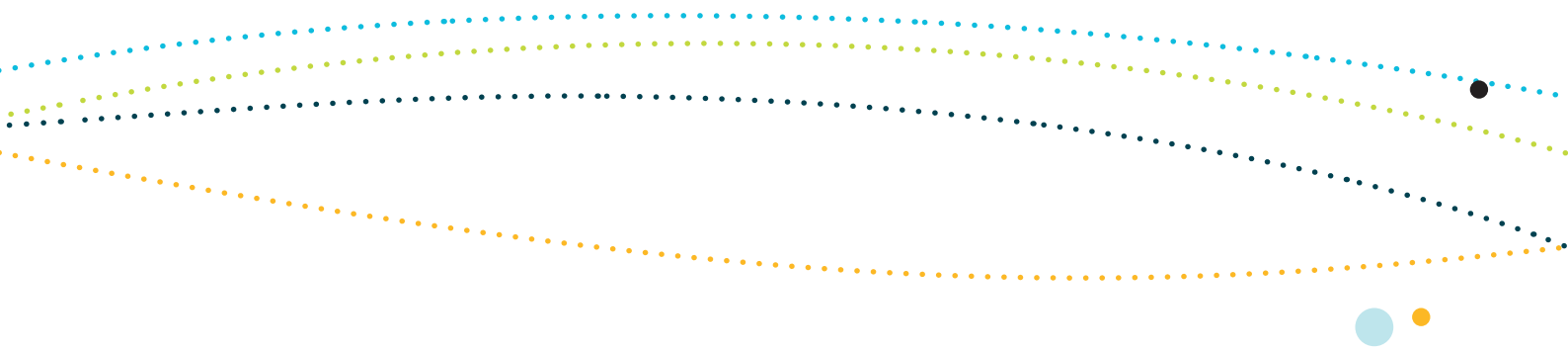
## Changes in sea temperature—climate change

Increases in sea temperatures are *of potential concern* to marine turtles through changes to their distribution and reproductive ability. Sea temperatures have warmed by 0.7 °C between 1910–1929 and 1989–2008, and current projections estimate ocean temperatures will be 1 °C warmer by 2030 (Lough 2009). The south-west of Western Australia is one of three hotspots in the Indian Ocean where rising temperature trends exceed the Indian Ocean basin average (Feng et al. 2009). This increase in sea temperature is expected to cause a southerly shift in the suitable habitat for tropical species, while distributions of temperate species are likely to contract (Poloczanska et al. 2007).

Impacts on turtles from rising sea temperatures in the region may include:

- changes to the distribution of green, leatherback and loggerhead turtles; increased water temperatures may extend the foraging range they are physiologically capable of withstanding
- an increase in leatherback breeding capacity associated with an increase in available foraging species (e.g. jellyfish)
- reduction is expected in loggerhead turtle breeding capacity associated with a decrease in ocean productivity and prey abundance (e.g. in benthic invertebrates) due to warming in foraging areas (Chaloupka et al. 2008)
- reduction in green turtle breeding capacity associated with a decrease in foraging habitat; seagrasses are highly vulnerable to a changing climate (Connolly 2009); for example, almost 13 000 hectares of seagrass was killed by heat stress in a single incident in the Spencer Gulf, South Australia, in 1993 during an El Niño event (Seddon et al. 2000, in Connolly 2009).

The thermal requirements of marine reptiles are expected to result in changes in their distributions as climate change progresses. There may be changes in turtle habitat, with a predicted southward shift in foraging and breeding habitat. For example, in 2008, a southern range extension of a tropical seagrass species (*Halophila minor*) into the subtropical waters of Moreton Bay in southern Queensland (300 kilometres south) has already been recorded (Connolly 2009). This southward range extension is expected to increase the length of coastline supporting most tropical species, while distributions of temperate species are likely to contract (Poloczanska et al. 2007). It is likely that sea turtle distribution, both in terms of coastal and oceanic foraging areas and breeding regions, will gradually expand southwards, from sparsely populated tropical Australia to more populated regions, exposing turtles to greater anthropogenic pressures (Fuentes et al. 2009).



### **Changes in oceanography–climate change**

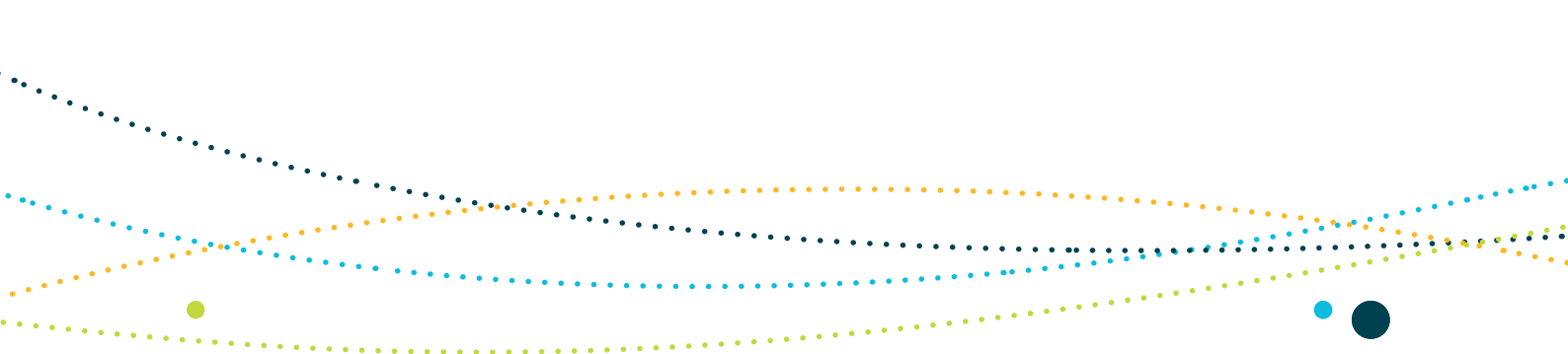
Changes in oceanographic patterns are *of potential concern* to marine turtles. The strength of the Leeuwin Current has decreased slightly since the 1970s. This weakening is expected to continue, although this prediction currently has low confidence (Feng et al. 2009). The Leeuwin Current is known to be weaker during El Niño and is therefore likely to diminish if climate change results in extended El Niño years (Hayes et al. 2008). The weakening of the Leeuwin Current may also affect migratory pathways for adult breeding marine turtles and distribution of hatchlings. In addition, the leatherback turtle is known to drift and feed in the Leeuwin Current and associated currents, and is therefore vulnerable to changes in oceanography.

### **Ocean acidification–climate change**

Ocean acidification is *of potential concern* to marine turtles. Driven by increasing levels of atmospheric carbon dioxide and subsequent chemical changes in the ocean, acidification is already underway and detectible. Since pre-industrial times, acidification has lowered ocean pH by 0.1 units (Howard et al. 2009). Furthermore, climate models predict this trend will continue, with a further 0.2–0.3 unit decline by 2100 (Howard et al. 2009). While some organisms might be able to adapt (Orr et al. 2009), anticipated changes to phytoplankton and zooplankton have the potential to detrimentally affect ecosystem processes and the structure of ecological communities.

### **Marine debris**

Marine debris is considered *of potential concern* for the endangered leatherback and loggerhead turtles. Marine debris is recognised nationally as a key threatening process that affects marine turtles through ingestion of debris confused with prey (e.g. jellyfish) by loggerhead and leatherback turtles. For example, a worldwide study assessing autopsy records of 408 leatherback turtles from 1885–2007 identified the presence of plastic in the digestive tract in 34 per cent of cases (Mrosovsky et al. 2009). Floating debris particularly affects juvenile turtles, as they spend their first years drifting in convergences (e.g. rips, fronts and drift lines formed by ocean currents) (DSEWPaC 2010). Ingestion of debris may cause blockage or impairment of the digestive system, poisoning or suffocation.



Marine debris can also affect marine turtles through entanglement in monofilament line and fishing nets, which restricts mobility and the ability to forage or avoid predators, or constricts growth and circulation, resulting in infection or asphyxiation (DEWHA 2009a). Ghost nets (lost and discarded fishing nets) are of particular concern to marine turtles, especially in open oceanic waters where juvenile turtles are attracted to floating rafts of solid material for shelter, protection and food. Juvenile turtles are likely to be entangled in ghost nets because they resemble rafts of seaweed. The occurrence, distribution, composition and quantity of marine debris across the region is not known. A study of marine debris between Cape Leeuwin and Cape Naturaliste in 2007 recorded 5395 plastic bags and 116 fishing nets (Taylor et al. 2008). Similarly, there is a lack of region-specific data on mortality rates for marine turtles linked to marine debris in the South-west Marine Region.

### **Noise pollution**

Noise pollution is *of potential concern* to all assessed marine turtles as it may influence their behaviour. Potential sources of noise pollution in the region include seismic surveys, sonar, explosives, vessels, dredging, pile driving and blasting. Other activities in the region that contribute noise to the environment include oil and gas exploration, defence force activities (e.g. the Western Australia Exercise Area off Perth), shipping and fishing (commercial and recreational vessels). Although seismic surveys, which produce noise pollution in the water, are unlikely to cause the death of turtles, they may affect critical behaviours such as foraging. McCauley et al. (2000, cited in Limpus 2008) document the circumstances in which turtles will change behaviour as a result of seismic surveys. The response of turtles to sound varies with different frequencies and intensities. Turtle hearing is most sensitive in the frequency range 100–700 Hz, which overlaps with the most common sound frequencies produced by seismic air guns (DIR 2007). Seismic testing and explosive removals of platforms have been shown to affect marine turtles, particularly if the survey runs over mating grounds or near nesting beaches during breeding season (DIR 2007). Marine turtles do not breed in coastal areas adjacent to the region, but it is highly likely that they feed in areas along the mid-west coast of Western Australia, where both shipping and petroleum exploration are expected to increase. The use of soft-start procedures is required in areas within the distribution of marine turtles under the Petroleum Submerged Lands (Management of Environment) Regulations 1999 (EA 2003).



### **Bycatch–commercial fishing**

Bycatch associated with commercial fisheries operating in the region is *of potential concern* to those marine turtles listed as endangered i.e. leatherback and loggerhead. Leatherback turtles are considered the most affected by fishing gear (Phillips et al. 2010) and catch of this species has been recorded in the scientific monitoring of longline fishing off Western Australia (the turtles caught were released alive; Ward and Curran 2004). However, all marine turtle species are vulnerable to bycatch in trawl, longline and pot fisheries (DEWHA 2007). In the South-west Marine Region, small numbers of marine turtles have been reported as bycatch in the Southern and Eastern Scalefish and Shark Fishery, Southern Bluefin Tuna Fishery, Southern and Western Tuna Billfish Fishery, South Australia Prawn Trawl Fishery and the Western Rock Lobster Fishery (DEWHA 2007). Interactions with fisheries may increase as a result of possible changes to the turtles' distributions as climate change progresses.

### **Collision with vessels**

Collision with vessels is *of potential concern* to leatherback, loggerhead and green turtles. Marine turtles suffering from disease or parasites may be debilitated, spending more time on the surface and taking shallower dives with longer post-dive resting periods. Turtles may also spend time at the surface basking in the sun. In such cases, they are more exposed to boat strikes (EA 2002). Marine turtles are at risk from commercial vessels such as fishing, construction, standby and work boats, in addition to recreational boats. This is an issue in waters adjacent to large urban populations (EA 2002) where there are many boats and other pleasure craft, and near marine construction projects, such as harbour development and dredging programs, where large numbers of work-related vessels may be present. Coastal and offshore development associated with strong economic growth throughout Western Australia is expected to continue at a rapid pace. The incidence of marine turtle mortality due to collision is not well researched in the South-west Marine Region, although it has been identified as an issue in Queensland waters (EA 2002), with deaths of loggerhead turtles due to boat strike and dredging activity (DSEWPaC 2010). In the South-west Marine Region, the Western Rock Lobster Fishery has reported incidences of collision of leatherback turtles with fishing vessels, albeit in low numbers (Stoklosa 2007). The annual number of green turtles affected by collisions with shipping and recreational boats in the region is also unknown. The number of turtles struck by vessels is likely to be underreported.



### 3. Relevant protection measures

All marine reptiles are protected as listed marine species under of the EPBC Act. Under the EPBC Act it is generally an offence to kill, injure, take, trade, keep or move listed marine, migratory or threatened species on Australian Government land or in Commonwealth waters without a permit.

Alongside the EPBC Act, a broad range of sector-specific management measures to address environmental issues and mitigate impacts apply to activities that take place in Commonwealth marine areas. These measures give effect to regulatory and administrative requirements under Commonwealth and state legislation for activities such as commercial and recreational fishing, oil and gas exploration and production, ports activities and maritime transport. In some instances, as in the case of shipping, these measures also fulfil Australia's obligations under a number of international conventions for the protection of the marine environment from pollution and environmental harm.

Protection and conservation measures administered under the EPBC Act and that are relevant to the conservation values described in this report card are listed below.

#### EPBC Act conservation plans and action plans

- *The Action Plan for Australian Reptiles* (Cogger et al. 1993)
- *Recovery Plan for Marine Turtles in Australia* (EA 2003)
- *Sustainable harvest of marine turtles and dugongs in Australia—a national partnership approach* (DEH 2005)
- *Threat Abatement Plan for the Impacts of Marine Debris on Vertebrate Marine Life* (DEWHA 2009b).





## International measures

Australia is a signatory to the following international agreements for the conservation of marine reptiles:

- Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)—[www.cites.org](http://www.cites.org)
- Convention on the Conservation of Migratory Species of Wild Animals 1979/1983 (the Bonn Convention or CMS)—[www.cms.int](http://www.cms.int).

For more information on conservation listings under the EPBC Act, and related management objectives and protection measures, visit the following sites:

- [www.environment.gov.au/coasts/species/marine-species-list.html](http://www.environment.gov.au/coasts/species/marine-species-list.html) (listed marine species)
- [www.environment.gov.au/epbc/protect/species-communities.html](http://www.environment.gov.au/epbc/protect/species-communities.html) (listed threatened species)
- [www.environment.gov.au/epbc/protect/migratory.html](http://www.environment.gov.au/epbc/protect/migratory.html) (listed migratory species)
- [www.environment.gov.au/cgi-bin/sprat/public/sprat.pl](http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl) (species profile and threats database).



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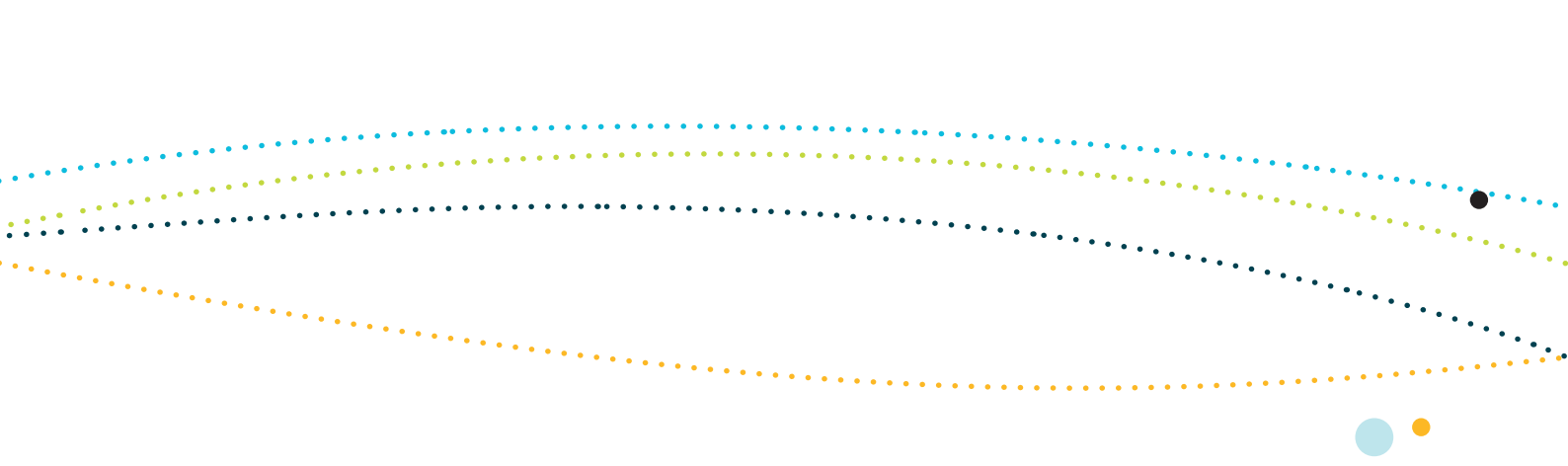
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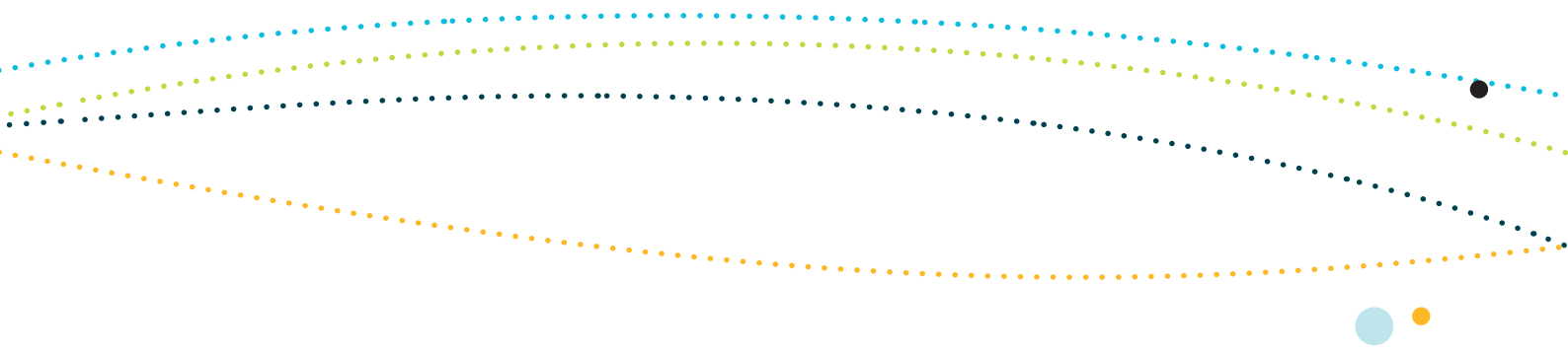
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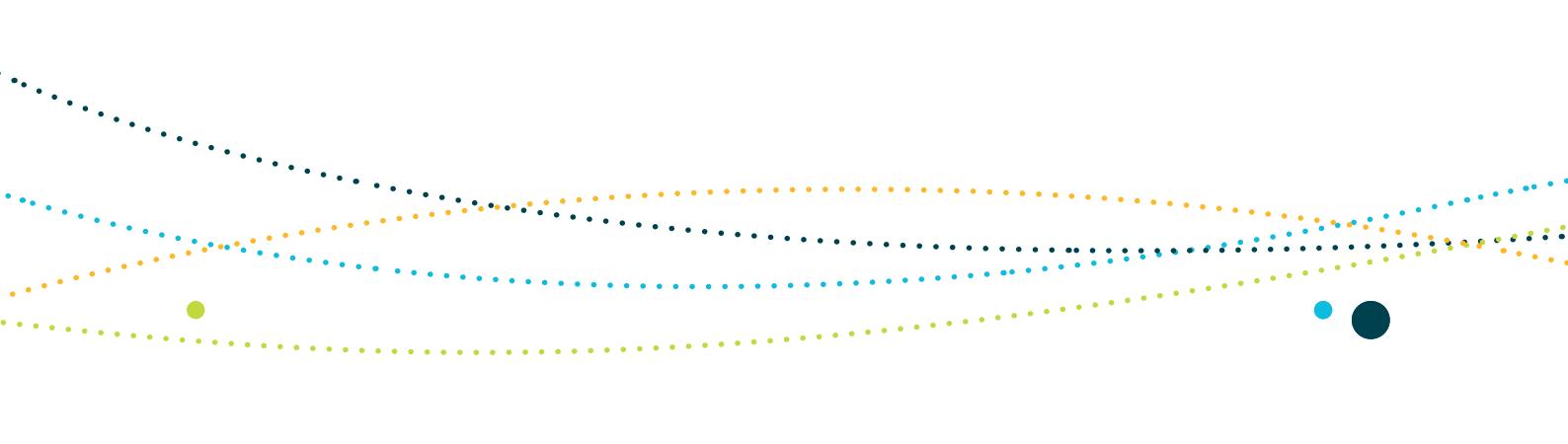
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# ATTACHMENT 1: LISTED MARINE REPTILES IN THE SOUTH-WEST MARINE REGION

**Table A1: Listed marine reptile species known to occur in the South-west Marine Region**

Species (common name/ scientific name)	Conservation status
Leatherback turtle ( <i>Dermochelys coriacea</i> )	Endangered, migratory, marine Listed under CMS (Appendix I, II) and CITES (Appendix I)
Loggerhead turtle ( <i>Caretta caretta</i> )	Endangered, migratory, marine Listed under CMS (Appendix I, II) and CITES (Appendix I)
Green turtle ( <i>Chelonia mydas</i> )	Vulnerable, migratory, marine Listed under CMS (Appendix I, II) and CITES (Appendix I)
Yellow-bellied seasnake ( <i>Pelamis platurus</i> )	Marine

CITES = Convention on International Trade in Endangered Species of Wild Fauna and Flora;

CMS = Convention on the Conservation of Migratory Species of Wild Animals

**Table A2: Listed marine reptile species known to occur in the South-west Marine Region on an infrequent basis**

Species (common name/scientific name)	Conservation status
Olive ridley turtle ( <i>Lepidochelys olivacea</i> )	Endangered, marine, migratory (Bonn)
Flatback turtle ( <i>Natator depressus</i> )	Vulnerable, marine, migratory (Bonn)
Hawksbill turtle ( <i>Eretmochelys imbricata</i> )	Vulnerable, marine, migratory (Bonn)
Elegant seasnake ( <i>Hydrophis elegans</i> )	Listed marine
Ocellated seasnake ( <i>Hydrophis ocellatus</i> )	Listed marine
Olive-headed seasnake ( <i>Disteira major</i> )	Listed marine
Shark Bay seasnake ( <i>Aipysurus pooleorum</i> )	Listed marine





