Oceans
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Key issue
Resource use and ocean protection must proceed in tandem. Parliament may need to consider appropriate ways of achieving a sustainable future for marine ecosystems and industries.

Australia’s Exclusive Economic Zone (EEZ) covers 8.2 million km² and is home to an estimated 50,000 marine species. The economic and conservation value of these waters is considerable: the marine environment contributed $50 billion to Australia’s economy in 2016, and this is expected to double by 2025.

Economic activity in the EEZ is regulated to minimise adverse impacts on important marine environments through the declaration of marine reserves and the regulation of industries such as fisheries and offshore petroleum operations.

Marine parks and resource use
In November 2012, Australian marine parks were declared in the North-west, North, Temperate East and South-west Marine Regions, and in the Coral Sea. These marine parks joined those already declared in the South East Marine Region, and the Great Barrier Reef Marine Park, the Macquarie Island Marine Park and the Heard Island and McDonald Islands Marine Reserve.

The marine parks were revoked and reproclaimed in December 2013.

This suspended the management plans for these marine parks, and the subsequent Commonwealth Marine Reserves Review of the parks recommended new management arrangements. New management plans were approved in January 2018, assigning new zones to the marine parks that outline the activities permitted or prohibited in each particular zone, such as fishing, mining or commercial shipping, or what is protected, such as habitat.

The Great Australian Bight

The Great Australian Bight is an area of particular conservation significance, being home to a diverse range of species. More than 85 per cent of known species in the region are found nowhere else in the world. Several marine parks have been proclaimed in the area as part of the South-west Marine Parks Network (see Figure). The area supports tourism and a fishing industry.

There is also renewed interest in petroleum exploration in the Bight, with several exploration permits granted in the region since 2011. This followed surveys by Geoscience Australia that identified potential oil-prone source rocks in the Bight Basin.

However, conservation groups have raised concerns about the effects of seismic surveys on marine species in the Bight, the risk of oil spills from drilling activities, and greenhouse gas emissions as a result of increased oil or gas production. These concerns led to a Senate Committee inquiry that reported in May 2017. In its response to this report, the Government confirmed it is committed to encouraging offshore petroleum exploration, including in the Bight.
In the face of opposition from community and environmental groups, some companies, such as BP and Chevron, have withdrawn plans for exploration in the Bight. However, several active petroleum exploration titles still remain in the Great Australian Bight region.

Offshore petroleum regulation

Petroleum titles are issued under the Offshore Petroleum and Greenhouse Gas Storage Act 2006, which regulates offshore petroleum activities in Commonwealth waters (generally the area from three to 200 nautical miles from the coastline). The Act also establishes two key agencies:

- the National Offshore Petroleum Titles Administrator to administer offshore titles and
- the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), which regulates health and safety, environmental management, and well integrity for offshore petroleum and greenhouse gas storage activities.

Before 2014, the Commonwealth Environment Minister had a role in approving petroleum activities under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). However, in February 2014, the Environment Minister endorsed NOPSEMA's processes. NOPSEMA is now the sole Commonwealth regulator for environmental management of offshore petroleum activities. These activities cannot start until NOPSEMA has assessed and accepted an environment plan.

Parliamentary responses

In April 2019, the Government tabled amendments to regulations to increase transparency and improve consultation processes relating to offshore environment plans. The Coalition has also previously expressed support for petroleum exploration in the Bight, ‘subject to continued strong oversight by NOPSEMA’.

However, following protests during the election campaign about Equinor’s proposed exploratory drilling program in the Bight Marine Park, the Coalition promised an independent audit of NOPSEMA’s current assessments of exploration in the Bight.

Before the election, the Australian Labor Party promised to commission an independent scientific study into the potential impact of an oil spill in the Bight. The Centre Alliance described both the Labor and Coalition promises as meaningless, and vowed to oppose drilling in the Bight. Central Alliance MP Rebekha Sharkie has also promised to reintroduce her Bill to grant National Heritage status to the Bight.

The Australian Greens have proposed, among other measures, World Heritage protection for the Bight region. In the last Parliament, the Greens introduced the Great Australian Bight Environment Protection Bill 2016 to prohibit mining and petroleum activities in the area. During the election campaign, they released a draft Bill to ban all new offshore oil and gas exploration and production in Commonwealth waters.

The Great Barrier Reef

The World Heritage-listed Great Barrier Reef (GBR) contains 10 per cent of the world’s coral reef ecosystems and extends 2,300 km along the Queensland coast. The Reef has been valued at $56.0 billion, supports 64,000 jobs, and contributes $6.4 billion annually to the economy.

The GBR is managed by the Australian and Queensland Governments. The Great Barrier Reef Marine Park Authority is responsible for the GBR Marine Park while the Queensland Government manages the adjacent state marine parks and islands.
The health of the GBR has come under significant pressure in recent years with the Reef ‘already experiencing the consequences of climate change’.

As at mid-2018, coral cover in the Region’s north was less than half of what it was in 2013. This is unprecedented and due to mortality caused by two severe cyclones, severe coral bleaching in 2016 and 2017, and ongoing crown-of-thorns starfish outbreaks.

The World Heritage Committee has raised the state of conservation of the GBR World Heritage Area over the past decade, in light of proposed developments for the area, water quality issues (sediment and agricultural nutrient run-off) and climate change. The Australian and Queensland Governments responded by developing the Reef 2050 Long-Term Sustainability Plan and the Reef 2050 Water Quality Improvement Plan. The two governments are investing $200 million annually towards the reef’s health.

A total of $700 million has been committed to the Reef Trust to focus on improving coastal habitat and water quality throughout the GBR and adjacent catchments, of which $444 million was provided to the Great
Barrier Reef Foundation in 2018. A 2019 report by the Senate Environment Committee recommended that all unspent funds given to the GBR Foundation should be returned and spent on projects to protect the GBR. An ANAO report on the grant concluded:

All decisions in the process through which a $443.3 million grant was awarded and paid in 2017–18 to the foundation were informed by departmental advice … There were shortcomings in aspects of the department’s advice, partly as a result of non-compliance with elements of the grants administration framework.

Marine plastics

It is estimated that about eight million tonnes of plastics enter the marine environment globally each year, with 80–90 per cent coming from land-based sources. There are an estimated 5.25 trillion pieces of plastic weighing 269,000 tonnes floating in the oceans. This may represent only 18 per cent of marine plastic—the bulk of plastics are floating under the surface in the water column or have settled on the ocean floor.

Various environmental and health issues are associated with marine plastic, including entanglement in or ingestion of debris that can result in the death of wildlife. In 2015, 557 marine species were identified as being harmed through entanglement and ingestion. Plastic can accumulate so that species higher up the food chain, including humans, consume a greater concentration of microplastics by eating prey species. Degraded plastics also potentially cause cancer or interfere with the body’s hormones and toxic marine contaminants can adhere to the plastic’s surface.

National and international policy

Many countries have tackled issues such as microbeads and single use plastic bags. The 2018 UN report, *Single Use Plastics—a Road to Sustainability*, assesses government action against plastic pollution and suggests a ten-step roadmap for policy makers.

In May 2019, the Basel Convention was amended so that plastic waste could be managed under the Convention. This means that contaminated, mixed, or unrecyclable plastic waste will require ‘prior consent’ from receiving countries before it can be traded. The Convention is implemented in Australia through the *Hazardous Waste (Regulation of Exports and Imports) Act 1989*.

Recent initiatives to address marine plastics in Australia include the voluntary phase out of microbeads and state-based plastic bag bans and container deposit schemes. Australia also has an aspirational target of 100 per cent of Australian packaging being recyclable, compostable or reusable by 2025. Some of these measures were recommended in a 2016 Senate Committee report into marine plastic pollution, although the Government has not yet officially responded to that report.

‘Marine debris’ is listed under the *EPBC Act* as a key threatening process. The associated Threat Abatement Plan for marine debris was revised in 2018 and outlines actions to reduce the impact of marine debris. Marine plastic pollution is also a threat to the GBR, and is addressed in the *Reef 2050 Plan*.

Further reading
