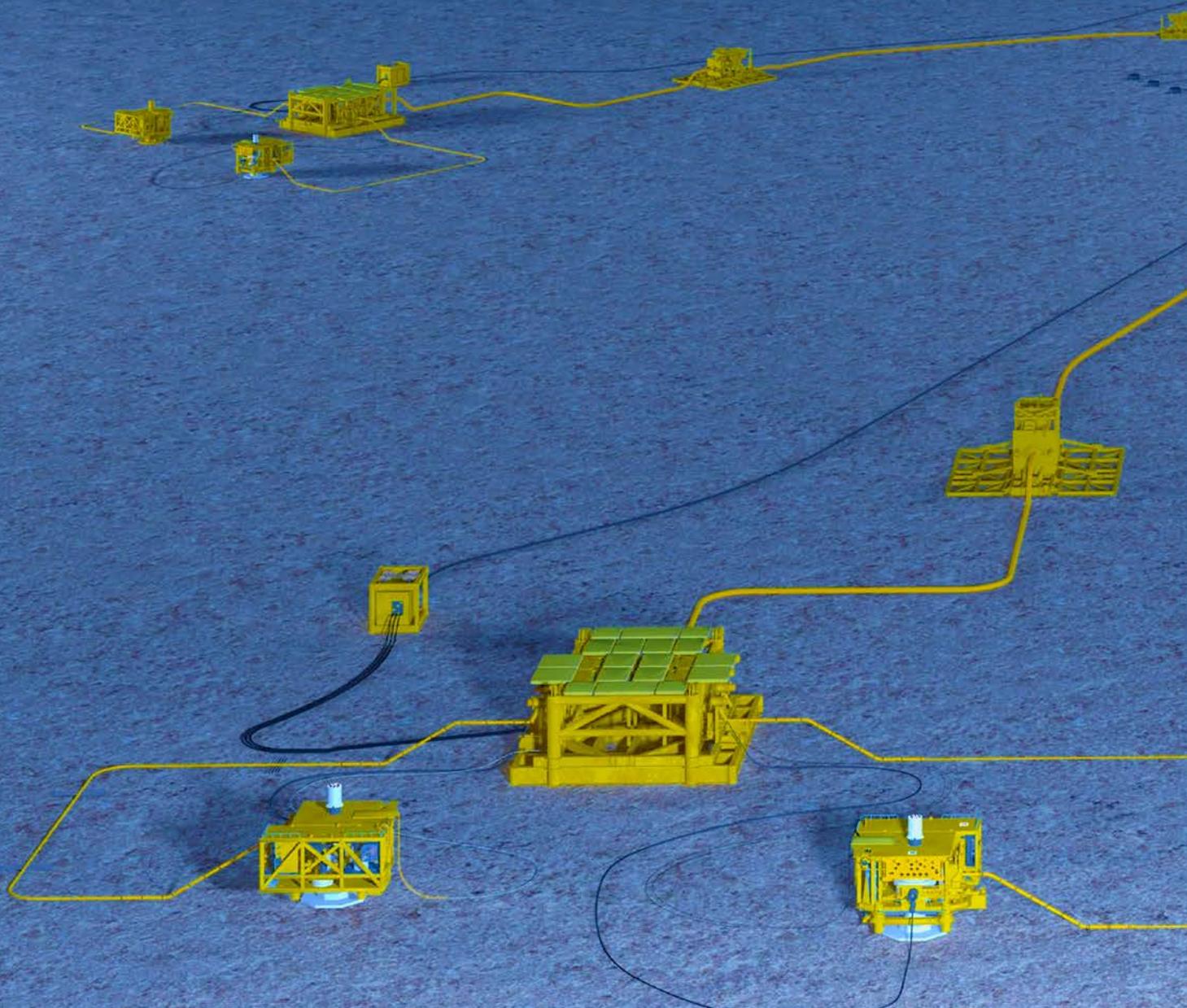


3 Environmental legislation and other environmental management requirements

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Section 3 summary

Purpose:

This section describes the legislation and other requirements that will apply to the project and their relevance to environmental management. It also describes other approvals that will be required at future stages of the project and how forward environmental approvals align with the project's development stages.

Section at a glance:

The project is located in Commonwealth waters and subject to Commonwealth laws, as well as international agreements, conventions and treaties that are in place to protect the environment, conserve biodiversity, and ensure safe and responsible practices at sea. The project will also align with applicable guidelines and codes of practice, including all relevant management and recovery plans for matters of national environmental significance listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Brief summaries of each relevant Act, agreement and treaty as they relate to the project, are described below.

The two main pieces of Commonwealth legislation that apply to the project are the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGs Act) and the EPBC Act. The OPGGS Act provides protection of the environment in Commonwealth waters through management of all relevant oil and gas activities, and requires the development of this document. The EPBC Act provides the legislative framework to protect and manage threatened species, ecological communities or listed places from actions that have a significant impact. These are identified and discussed in detail in **Section 5** and **Section 6** of this document.

Once an OPP is accepted, activity-specific Environment Plans (EPs) and Oil Pollution Emergency Plans (OPEPs) are required to be submitted to and accepted by NOPSEMA before commencing an activity. The EPs will provide further evaluation of the impacts and risks associated with specific activities, while the OPEPs detail arrangements for responding to and monitoring oil pollution.

Other approvals and plans that will be required in the future include production, pipeline and infrastructure licences, Safety Cases for vessels and management plans for well operations.

3 Environmental legislation and other environmental management requirements

Applicable legislation and environmental management frameworks are summarised below. ConocoPhillips, like all operators, is responsible for maintaining currency of applicable legal requirements as relevant to the proposal. The key relevant legislative requirements are referenced as appropriate to frame the management measures for environmental impacts and risks presented in **Section 6.4**, and summarised in **Section 7**.

3.1 Commonwealth legislation

The project is located in Australian Commonwealth waters and is, therefore, subject to Commonwealth legislation. The following sections outline the key Commonwealth legislation applicable to the project.

3.1.1 OPGGS Act 2006

The OPGGS Act provides protection of the environment in Commonwealth waters (as well as designated State and NT waters where functions have been conferred), by ensuring that all offshore petroleum and greenhouse gas storage activities are undertaken in a manner where impacts and risks on the environment, including those Matters of National Environmental Significance (MNES) protected under Part 3 of the EPBC Act, are of an acceptable level and reduced to ALARP. The OPGGS Act requires all activities to be consistent with the principles of ecologically sustainable development (ESD), as defined in the EPBC Act (Section 3A):

- *“decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;*
- *if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation ;*
- *the principle of inter-generational equity: that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;*
- *the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;*
- *improved valuation, pricing and incentive mechanisms should be promoted.”*

The OPGGS Act is supported by a range of subordinate regulations. Of primary relevance to this OPP are the OPGGS (E) Regulations, which provide further definition and guidance on the environmental management of offshore petroleum and greenhouse gas storage activities. The OPGGS Act and supporting regulations are administered by NOPSEMA.

Beyond this OPP, other approvals required under the OPGGS Act and associated regulations include the following:

- Environment Plans (EPs)
- Oil Pollution Emergency Plans (OPEPs)
- production licences
- pipeline licences
- infrastructure licences
- Safety Cases
- Well Operations Management Plan (WOMP)
- petroleum safety zones.

¹ This refers to the precautionary principle, which is defined in Section 391(2) of the EPBC Act as *“is that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage”*.

Figure 3-1 provides an indicative timeframe of how this OPP, activity-specific EPs/OPEPs and other approvals fit into ConocoPhillips' project phases. As OPP submission occurs early in the design phase, detailed engineering design is yet to be completed for the project. More specific details (e.g. timing and methodology) of project activities will be refined during the 'Define' (front end engineering design (FEED)) and 'Execute' Phases of the project (refer to **Figure 3-1**).

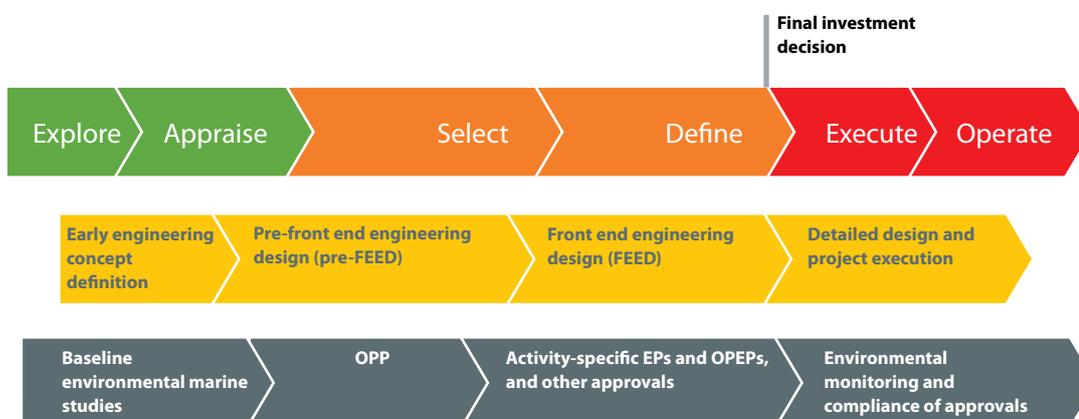


Figure 3-1: ConocoPhillips project phases and OPGGS Act approvals

Activity-specific Environment Plan

Under the OPGGS (E) Regulations, the titleholder is required to submit an EP before commencing an activity and the activity cannot take place until the regulator accepts the EP. The EP must be appropriate for the nature and scale of the activity and describe the activity, the existing environment, details of environmental impacts and risks and the control measures for the activity. In addition, the EP must include an implementation strategy to demonstrate that the impacts and risks can be managed to ALARP and an acceptable level and to describe how appropriate environmental performance outcomes, standards and measurement criteria outlined in the EP will be met. The EP will also provide a summary of all consultation undertaken with relevant persons.

ConocoPhillips will prepare and submit activity-specific EPs in accordance with the OPGGS (E) Regulations. It is envisaged that a series of EPs will be developed to cover the following project activities:

- development drilling
- subsea structure installation (including gas export pipeline installation)
- tow-out and hook up of the FPSO facility
- commissioning
- operations
- decommissioning.

Oil Pollution Emergency Plan

Under the OPGGS (E) Regulations, an OPEP is required as part of the implementation strategy for the activity-specific EP. The OPEP must include adequate arrangements for responding to and monitoring oil pollution as well as provision for updating the plan. Preliminary hydrocarbon spill modelling has been carried out for a number of maximum credible spill scenarios associated with various stages of the project (discussed in **Section 6**) and will provide support in framing the scope of future OPEPs.

Other approvals

As listed above, other approvals will be required for the project, including, but not limited to, a production licence, a pipeline licence and an infrastructure licence. These approvals are required under the OPGGS Act for the relevant activities and are granted by the Joint Authority².

The OPGGS (Resource Management and Administration) Regulations 2011 also require that a Safety Case and a WOMP are assessed and accepted by NOPSEMA for existing or proposed facilities. ConocoPhillips will prepare and submit the required Safety Cases and Well Operations Management Plans to NOPSEMA as the project is developed, to allow for timely approvals prior to each of the key stages of the project. These approvals assist in environmental protection as they ensure the integrity of the development wells, mobile offshore drilling unit (MODU)/drill ship, FPSO facility and project vessels.

² The Joint Authority for an offshore area is constituted by the responsible State (with the exception of Tasmania) or Territory Minister and the responsible Commonwealth Minister (Section 56 of the OPGGS Act).

3.1.2 EPBC Act 1999

The EPBC Act and supporting regulations provide for the protection of the environment and conservation of biodiversity in Australia (including Australian waters), particularly MNES. The EPBC Act is administered by the Department of the Environment and Energy (DoEE).

Amendments to the OPGGS Act and OPGGS (E) Regulations in February 2014, undertaken as part of the Commonwealth streamlining environmental approvals process, require MNES to be addressed in assessments of offshore petroleum development approvals. Therefore, the OPP process under the OPGGS (E) Regulations supersedes the Commonwealth referral process under the EPBC Act and replaces the requirement to prepare environmental approvals for submission to DoEE for petroleum development activities in Commonwealth waters.

This OPP covers the EPBC Act approval for those components of the project in Commonwealth waters.

The MNES relevant to the project are discussed in **Section 5.5.1**.

3.1.3 Other relevant Commonwealth legislation

Other Commonwealth legislation that is applicable to aspects of environmental management of the project is outlined in **Table 3-1**.

Table 3-1: Other relevant Commonwealth legislation

Legislation	Governing department	Summary	Relevance to project
<i>Environment Protection (Sea Dumping) Act 1981</i>	DoEE	This Act regulates permitted sea dumping and under the 1996 Protocol to the London Convention. Australia is required to minimise its waste disposal into the environment.	The project operations may result in release of wastes into the sea. ConocoPhillips recognises the importance of minimising waste disposal to the marine environment and will adhere to the requirements of this Act.
<i>Protection of the Sea (Prevention of Pollution from Ships) Act 1983 and Protection of the Sea (Prevention of Pollution from Ships) (Orders) Regulations 1994</i>	Australian Maritime Safety Authority (AMSA)	This Act relates to the protection of the sea from pollution by oil and other harmful substances discharged from ships. This Act disallows any harmful discharge of sewage, oil and noxious substances into the sea and sets the requirements for a shipboard waste management plan.	The project will adhere to the requirements of this Act as relevant to the project, including the following vessel requirements (as appropriate to vessel class): <ul style="list-style-type: none"> • Shipboard Oil Pollution Emergency Plan (SOPEP) • compliance with requirements for discharges and waste management, as outlined in the International Convention for the Prevention of Pollution from Ships (MARPOL) and Marine Orders (as appropriate to vessel class).

Legislation	Governing department	Summary	Relevance to project
<i>Navigation Act 2012</i>	Department of Infrastructure and Transport	The Act regulates international ship and seafarer safety, shipping aspects of protecting the marine environment and the actions of seafarers in Australian waters. It gives effect to the relevant international conventions relating to maritime issues to which Australia is a signatory, such as the International Convention for the Prevention of Pollution from Ships (MARPOL). The Act also has subordinate legislation contained in Regulations and Marine Orders.	The project will adhere to MARPOL and the various Marine Orders (as appropriate to vessel class) enacted under this Act.
<i>Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 and Regulations 1995</i>	DoEE	The Act regulates emissions of ozone depleting substances (ODSs) and synthetic greenhouse gases (SGGs). It controls the manufacture, import and export of ODSs and SGGs and products containing these gases.	The project will adhere to restrictions on import and use of ODSs through implementing appropriate measures that control procuring of materials for operating and maintaining refrigeration and air conditioning equipment.
<i>National Greenhouse and Energy Reporting Act 2007</i> National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015	DoEE, Clean Energy Regulator	The Act provides a single national framework for the reporting and dissemination of information related to greenhouse gas emissions, greenhouse gas projects, energy production and energy consumption, and for other purposes.	The project will adhere to the requirements for annual submission of a greenhouse and energy report in accordance with the Act. The Safeguard Mechanism will be applied to development projects constructed after 1 July 2020, where there will be a requirement to set a baseline for greenhouse gas (GHG) emissions using benchmarking. The Safeguard Mechanism aims to maintain emissions in line with a designated baseline via direct action or through the use of carbon credit instruments.

Legislation	Governing department	Summary	Relevance to project
<i>Biosecurity Act 2015</i>	Department of Agriculture and Water Resources	The Act relates to the management of diseases and pests that may cause harm to human, animal or plant health or the environment. The Act includes provisions for ballast water management plans and certificates, record-keeping obligations and powers to ensure compliance.	The project will comply with biosecurity requirements, specifically in relation to biofouling and ballast water requirements for vessels, offshore facilities and associated in-water equipment.
<i>Australian Heritage Council Act 2003</i>	DoEE	This Act identifies areas of heritage value, including those listed on the World Heritage List, National Heritage List and the Commonwealth Heritage List. The Act also establishes the Australian Heritage Council and its functions.	The project will take into any consideration heritage values (see Section 5.7 for further discussion).
<i>Historic Shipwrecks Act 1976</i> and <i>Historic Shipwrecks Regulations 1978</i>	DoEE	This Act protects shipwrecks that have lain in territorial waters for 75 years or more. It is an offence to interfere with any shipwreck covered by the Act.	Planned project operations will not interfere with any historical shipwrecks (see Section 5.7.11 for further discussion).
<i>National Environment Protection Council Act 1994</i>	DoEE	This Act establishes the National Environment Protection Council (NEPC) that sets National Environment Protection Measures (NEPMS) to ensure that Australians have equivalent protection from air, water, soil and noise pollution. This Act is mirrored in all States and Territories.	The project will comply with requirements of the NEPC and minimise pollution wherever possible.

Legislation	Governing department	Summary	Relevance to project
National Environment Protection (National Pollutant Inventory) Measure 1998 (established under the <i>National Environment Protection Council Act 1994</i>)	DoEE	This measure provides the framework for the development and establishment of the National Pollutant Inventory (NPI), which provides publicly available information on the types, and amounts of certain substances, being emitted to the air, land, and water. Implementation of the NPI NEPM is the responsibility of each participating jurisdiction. State and territory environment protection agencies have their own legislative frameworks to ensure there is compliance with the NEPM.	The project will comply with the NPI NEPM through the reporting of relevant NPI substances.
<i>National Environment Protection Measures (Implementation) Act 1998</i>	DoEE	This Act provides for the implementation of NEPMs for certain activities carried on by or on behalf of the Commonwealth and Commonwealth authorities, and for related purposes.	The project will comply with the NEPMs where applicable.
<i>Hazardous Waste (Regulation of Exports and Imports) Act 1989</i>	DoEE	This Act regulates the export and import of hazardous waste to ensure that hazardous waste is disposed of safely so that human beings and the environment, both within and outside Australia, are protected from the harmful effects of the waste.	The project will comply with the export and import requirements for hazardous waste.
<i>Telecommunications Act 1997</i>	Department of Communications and the Arts	This Act regulates telecommunications in Australia, including the activities of telecommunication carriers and carriage service providers.	Secondary approvals required for the fibre optic cable will consider the requirements of this Act.

3.1.4 Australian Industry Participation legislation

In the context of the project, the Australian Industry Participation program is relevant, to encourage full, fair and reasonable opportunity for Australian industry to compete for work in major public and private projects in Australia. While not directly relevant to environmental management, it is included in this section for completeness.

The Australian Industry Participation National Framework encourages a consistent national approach to maximise Australian industry participation in major projects. Each jurisdiction has its own policies aimed at encouraging Australian industry participation in public and private projects.

The *Australian Jobs Act 2013* details Australian industry participation requirements for major projects valued at A\$500 million or more. The Act ensures that information about opportunities to bid for work on major projects is provided by all levels of the project's supply chain.

In accordance with the Act, ConocoPhillips will prepare an Australian Industry Participation Plan detailing how all obligations will be met. The Australian Industry Participation Plan will be assessed by the Australian Industry Participation Authority.

3.2 Northern Territory legislation

The physical infrastructure and associated planned operations from the project are located within Commonwealth waters. However, there are some activities, for example vessels transiting to the offshore project area and those associated with unplanned events, that have potential to interact with values and sensitivities, such as species of conservation significance and coastlines that are within the jurisdiction of NT legislation (refer to **Section 5.5.6** for a description of sensitivities along the NT mainland coastline).

Appendix A (Table A-1) outlines the principal NT legislation that may be applicable to the project at both a broad level and as specific to any spill response operations that may be required in NT waters.

The Commonwealth is currently working with the NT Government to further streamline offshore petroleum approval processes in their coastal waters. If enacted, this process may lead to future legislative amendments to confer the powers and functions for occupational health and safety, structural integrity and environmental management on NOPSEMA for offshore petroleum operations in designated coastal waters. While this does not influence the scope of this OPP in Commonwealth waters, any future planning will take into account legislative arrangements between the NT and the Commonwealth Governments at the time.

ConocoPhillips will adhere to NT legislation and prepare and submit the required approvals in accordance with relevant requirements at the time.

3.3 International agreements and conventions

Australia is signatory to various international treaties that have atmospheric and marine environment protection aspects. A number of these treaties are specifically designed to protect MNES, including:

- Convention on the Conservation of Migratory Species of Wild Animals 1979 (Bonn Convention)
- International Convention on Wetlands of International Importance (Ramsar)
- Agreement Between the Government of Australia and the Government of Japan for the Protection of Migratory Birds in Danger of Extinction and Their Environment 1974 (commonly referred to as JAMBA)
- Agreement Between the Government of Australia and the Government of the People's Republic of China for the Protection of Migratory Birds and Their Environment 1986 (commonly referred to as CAMBA)
- Agreement Between the Government of Australia and the Government of the Republic of Korea for the Protection of Migratory Birds and Their Environment 2002 (commonly referred to as ROKAMBA).

The project is required to comply with the relevant requirements of each treaty. The key international environmental treaties and agreements that will apply to the project are detailed in **Appendix A (Table A-2)**.

3.4 Guidelines and codes of practice

Applicable guidelines and codes of practice for the project are summarised in **Appendix A (Table A-3)**.

3.5 EPBC management plans

3.5.1 Listed threatened species management/recovery plans and conservation advices

While it is considered highly unlikely that the project will have a significant impact on listed threatened species (refer to **Section 6**), the requirements of the relevant species management/recovery plans and conservation advices have been considered to identify any requirements that may be applicable. Recovery plans are enacted under the EPBC Act and remain in force until the species is removed from the threatened list. Conservation advices provide guidance on immediate recovery and threat abatement activities that can be undertaken to facilitate the conservation of a listed species or ecological community.

Table 3-2 outlines the management/recovery plans and conservation advices relevant to those species identified as potentially occurring or having habitat within the Barossa offshore development area, the gas export pipeline (collectively referred to as 'the project area') and area of influence (i.e. the existing environment that may be affected from unplanned activities; **Section 5.1**). The table also summarises the key threats to those species, as described in relevant management/recovery plans and conservation advices.

The management/recovery plans and conservation advices have been taken into consideration in assessing the impacts and risks associated with the project (**Section 6**) and will be further incorporated into implementation planning in activity-specific EPs.

Table 3-2: Summary of EPBC management/recovery plans and conservation advices relevant to the project

Species	Recovery plan/ conservation advice (date adopted)	Key threats identified in the recovery plan and conservation advice	OPP risk assessment section
Blue whale	Blue Whale Conservation Management Plan (October 2015) (DoE 2015a)	Noise interference	6.4.5
		Vessel disturbance	6.4.2
		Habitat modification including presence of oil and gas platforms/rigs, marine debris infrastructure and acute/chronic chemical discharge	6.4.2, 6.4.8, 6.4.9 and 6.4.10
		Whaling Climate variability and change	Not applicable – the key threats are outside the scope of this OPP
Humpback whale ¹	Humpback Whale Recovery Plan 2005-2010 (May 2005) (under review) (Department of Environment and Heritage (DEH) 2005a) Conservation advice (October 2015) (DoE 2015b)	Noise interference	6.4.5
		Entanglement - marine debris	6.4.9
		Vessel disturbance and strike	6.4.2
		Whaling Climate and oceanographic variability and change Overharvesting of prey	Not applicable – the key threats are outside the scope of this OPP
		Habitat degradation including coastal development and port expansion Entanglement – commercial fisheries or aquaculture equipment, and shark safety equipment	

Species	Recovery plan/ conservation advice (date adopted)	Key threats identified in the recovery plan and conservation advice	OPP risk assessment section
Sei whale	Conservation advice (October 2015) (DoE 2015c)	Climate and oceanographic variability and change	Not applicable – the key threat is outside the scope of this OPP
		Anthropogenic noise and acoustic disturbance	6.4.5
		Habitat degradation including pollution (increasing port expansion and coastal development)	Not applicable – the key threat is outside the scope of this OPP
		Pollution (persistent toxic pollutants)	6.4.8 and 6.4.10
		Vessel strike	6.4.2
		Prey depletion due to fisheries (potential threat)	Not applicable – the key threats are outside the scope of this OPP
		Resumption of commercial whaling (potential threat)	Not applicable – the key threats are outside the scope of this OPP
Fin whale	Conservation advice (October 2015) (DoE 2015d)	Climate and oceanographic variability and change	Not applicable – the key threat is outside the scope of this OPP
		Anthropogenic noise and acoustic disturbance	6.4.5
		Habitat degradation including coastal development, increasing port expansion and aquaculture	Not applicable – the key threat is outside the scope of this OPP
		Pollution (persistent toxic pollutants)	6.4.8 and 6.4.10
		Fisheries catch, entanglement and bycatch	Not applicable – the key threat is outside the scope of this OPP
		Vessel strike	6.4.2
		Resource depletion due to fisheries (potential threat)	Not applicable – the key threats are outside the scope of this OPP
Resumption of commercial whaling (potential threat)	Not applicable – the key threats are outside the scope of this OPP		

Species	Recovery plan/ conservation advice (date adopted)	Key threats identified in the recovery plan and conservation advice	OPP risk assessment section
Loggerhead turtle	Recovery Plan for Marine Turtles in Australia 2017-2027 (June 2017) (DoEE 2017a)	Marine debris	6.4.9
Green turtle		Light pollution	6.4.7
Leatherback turtle	Conservation advice (December 2008) (Department of Environment, Water, Heritage and the Arts (DEWHA) 2008a)	Vessel disturbance	6.4.2
Hawksbill turtle		Chemical and terrestrial discharge	6.4.8 and 6.4.10
Olive ridley turtle	Conservation advice (December 2008) (Department of Environment, Water, Heritage and the Arts (DEWHA) 2008a)	Habitat modification	6.4.2 and 6.4.3
Flatback turtle		Noise interference	6.4.5
		Climate change and variability	Not applicable – the key threats are outside the scope of this OPP
		International take	
	Terrestrial predation		
		Fisheries bycatch	
		Indigenous take	
		Recreational activities	
		Diseases and pathogens	
Short-nosed sea snake ²	Conservation advice (December 2010)	Degradation of reef habitat, primarily as a result of coral bleaching (principle threat)	Not applicable – the key threat is outside the scope of this OPP
Leaf-scaled sea snake ²	(DSEWPac 2010a, b)	Oil and gas exploration	Not applicable – the EPBC Protected Matters search has not recorded the species within the project area. Consideration is given to this species in the context of habitat degradation from pollution associated with unplanned hydrocarbon spills (Section 6.4.10).
		Incidental catch and death in commercial prawn trawling fisheries (relevant to the NWMR)	Not applicable – the key threat is outside the scope of this OPP
		Unsustainable and illegal fishing practices (Ashmore Reef region)	

Species	Recovery plan/ conservation advice (date adopted)	Key threats identified in the recovery plan and conservation advice	OPP risk assessment section
Curllew sandpiper Eastern curlew	Conservation advice (May 2015) (DoE 2015e, f) (notes that the threats are particularly relevant to eastern and southern Australia)	Ongoing human disturbance (in coastal areas and shoreline habitats) Habitat (intertidal mudflats) loss and degradation from pollution Changes to the water regime and invasive plants (in coastal areas and shoreline habitats)	Not applicable – the key threats are outside the scope of this OPP as they relate to disturbances in coastal areas and loss of intertidal mudflat habitat at key migration staging sites in the Yellow Sea. Consideration is given to these species in the context of habitat degradation from pollution associated with unplanned discharge of waste (Section 6.4.9) and unplanned hydrocarbon spills (Section 6.4.10).
Australian lesser noddy ²	Conservation advice (October 2015) (DoE 2015g)	Habitat loss from catastrophic weather events Habitat loss from pollution ³ Overfishing Feral animals	Not applicable – the key threat is outside the scope of this OPP 6.4.9 and 6.4.10 Not applicable – the key threats are outside the scope of this OPP
Great knot ²	Conservation advice (May 2016) (DoE 2016a)	Habitat loss and degradation (e.g. through land reclamation, industrial use and urban expansion, changes to the water regime, invasive plants, water quality deterioration and environmental pollution) Pollution/contaminants ³ Disturbance (human-related, e.g. from recreational activities including fishing, boating, four-wheel driving, walking dogs, noise and night lighting ³) Climate change Diseases Direct mortality – hunting	Not applicable – the EPBC Protected Matters search has not recorded the species within the project area. Some of the key threats are also outside the scope of this OPP. Consideration is given to this species in the context of habitat degradation from pollution associated with unplanned discharge of waste (Section 6.4.9) and unplanned hydrocarbon spills (Section 6.4.10). 6.4.9 and 6.4.10 These key threats are outside the scope of this OPP as they relate to disturbances from activities that are coastal related or are not directly relevant to the project. Not applicable – the key threats are outside the scope of this OPP

Species	Recovery plan/ conservation advice (date adopted)	Key threats identified in the recovery plan and conservation advice	OPP risk assessment section
Greater sand plover ² Lesser sand plover ²	Conservation advice (May 2016 (DoE 2016b, c)	Habitat loss and degradation (e.g. loss of marine or estuarine vegetation, land clearing, intertidal reclamation, changes to the water/hydrological regime, changes in water quality, hydrology or structural changes near roosting sites, water pollution, and residential, farming, industrial and aquaculture/fishing activities)	Not applicable – the EPBC Protected Matters search has not recorded the species within the project area. Some of the key threats are also outside the scope of this OPP. Consideration is given to this species in the context of habitat degradation from water pollution associated with unplanned discharge of waste (Section 6.4.9) and unplanned hydrocarbon spills (Section 6.4.10).
		Pollution/contamination ³	6.4.9 and 6.4.10
		Disturbance (human-related, e.g. from recreational activities including fishing, boating, four-wheel driving, walking dogs, noise and night lighting ³)	These key threats are outside the scope of this OPP as they relate to disturbances from activities that are coastal related or are not directly relevant to the project.
		Climate change Diseases	Not applicable – the key threats are outside the scope of this OPP
		Introduced species (invasion of intertidal mudflats by terrestrial weeds)	Not applicable – the key threat is outside the scope of this OPP as it relates to terrestrial pathways
		Direct mortality (e.g. from collision with large structures (e.g. wind farms) or vehicles/ aircraft, commercial hunting and predation)	Not applicable – the EPBC Protected Matters search has not recorded the species within the project area. The key threats are also outside the scope of this OPP.

Species	Recovery plan/ conservation advice (date adopted)	Key threats identified in the recovery plan and conservation advice	OPP risk assessment section
Western Alaskan bar-tailed godwit ²	Conservation advice (May 2016)	Habitat loss and degradation (e.g. loss of marine or estuarine vegetation, changes to the water/hydrological regime, reduced river flows, intertidal reclamation, environmental pollution, industrial use and urban expansion)	Not applicable – the EPBC Protected Matters search has not recorded the species within the project area. The key threats are also predominantly outside the scope of this OPP. Consideration is given to this species in the context of habitat degradation from water pollution associated with unplanned discharge of waste (Section 6.4.9) and unplanned hydrocarbon spills (Section 6.4.10).
Northern Siberian bar-tailed godwit ²	(DoE 2016d, e)		
		Pollution/contamination ³	6.4.9 and 6.4.10
		Disturbance (human-related, e.g. from recreational activities including fishing, boating, four-wheel driving, walking dogs, noise and night lighting ³)	These key threats are outside the scope of this OPP as they relate to disturbances from activities that are coastal related or are not directly relevant to the project.
		Climate change	Not applicable – the key threats are outside the scope of this OPP
		Diseases	
		Introduced species (invasion of intertidal mudflats by terrestrial weeds)	Not applicable – the key threat is outside the scope of this OPP as it relates to terrestrial pathways
		Direct mortality (e.g. from collision with large structures (e.g. wind farms) or vehicles/ aircraft, commercial hunting and predation)	Not applicable – the EPBC Protected Matters search has not recorded the species within the project area. The key threats are also outside the scope of this OPP.

Species	Recovery plan/ conservation advice (date adopted)	Key threats identified in the recovery plan and conservation advice	OPP risk assessment section
Red knot ²	Conservation advice (May 2016) (DoE 2016f)	Habitat loss and habitat degradation (e.g. through land reclamation, industrial use and urban expansion, changes to the water/hydrological regime, loss of marine or estuarine vegetation, invasive plants and environmental pollution of foraging and roosting sites)	Not applicable – the key threats are outside the scope of this OPP as they relate to disturbances to foraging/roosting sites in coastal areas. Consideration is given to this species in the context of habitat degradation from pollution associated with unplanned discharge of waste (Section 6.4.9) and unplanned hydrocarbon spills (Section 6.4.10).
		Climate change	Not applicable – the key threats are outside the scope of this OPP
		Diseases	
		Pollution/contamination	6.4.8, 6.4.9 and 6.4.10
		Disturbance (human-related, e.g. from recreational activities including fishing, boating, fourwheel driving, walking dogs, noise and night lighting)	These key threats are outside the scope of this OPP as they relate to disturbances from activities that are coastal related or are not directly relevant to the project. Consideration is given to this species in the context of disturbance from night lighting (Section 6.4.7).
Direct mortality (e.g. wind farms, bird strike with vehicles and aircraft, hunting, chemical spills and oil spills)	These key threats are outside the scope of this OPP as they relate to disturbances from activities that are not directly relevant to the project. Consideration is given to this species in the context of disturbance from chemical/oil spills (Section 6.4.10).		
Abbott's booby ²	Conservation advice (October 2015) (DoE 2015h)	Loss of rainforest habitat Introduced terrestrial species (e.g. yellow crazy ant)	Not applicable – the key threats are outside the scope of this OPP

Species	Recovery plan/ conservation advice (date adopted)	Key threats identified in the recovery plan and conservation advice	OPP risk assessment section
Whale shark	Whale shark (<i>Rhincodon typus</i>)	Pollution and marine debris	6.4.9 and 6.4.10
	Recovery Plan (2005) (May 2005) (DEH 2005b)	Vessel strike	6.4.2
Whale shark	Conservation advice (October 2015) (DoE 2015i)	Habitat disruption from mineral exploration, production and transportation	6.4.2
		Intentional/unintentional mortality from fishing outside of Australian waters (principle threat)	Not applicable – the key threats are outside the scope of this OPP
		Climate change	
		Disturbance from tourism operations	
Great white shark ¹	Recovery Plan for the White Shark (<i>Carcharodon carcharias</i>) (August 2013) (DSEWPaC 2013a)	Accidental (bycatch) or illegal (targeted) capture by commercial and recreational fisheries (including issues of post release mortality)	Not applicable – the key threats are outside the scope of this OPP
		Shark control activities (e.g. beach meshing or drum lining) (note, this threat is particularly relevant to the east coast population)	
		Illegal trade	
		Climate change	
		Ecotourism	
		Habitat modification/ degradation (e.g. development, pollution)	6.4.2, 6.4.8, 6.4.9 and 6.4.10
		(note, coastal habitat degradation and anthropogenic activities in near-coast areas are of primary relevance as they are often a preferred habitat)	

Species	Recovery plan/ conservation advice (date adopted)	Key threats identified in the recovery plan and conservation advice	OPP risk assessment section
Grey nurse shark ⁴	Recovery Plan for the Grey Nurse Shark (<i>Carcharias taurus</i>) (August 2014) (DoE 2014a)	Incidental (accidental and/or illegal) capture by commercial and recreational fishers Shark control activities (e.g. beach meshing or drum lining) Ecotourism Collection for public aquaria Disease Climate change	Not applicable – the key threats are outside the scope of this OPP
		Pollution	6.4.8, 6.4.9 and 6.4.10
		Habitat modification/ degradation (e.g. through coastal development, pollution)	6.4.2 Pollution, in a general sense, is addressed in Section 6.4.7 to Section 6.4.9 , as outlined above.
Spertooth shark Northern river shark Green sawfish Largetooth sawfish Dwarf sawfish	Sawfish and River Sharks Multispecies Recovery Plan (November 2015) (DoE 2015j) Conservation advice: spertooth shark (April 2014) (DoE 2014b), northern river shark (April 2014) (DoE 2014c), dwarf sawfish (October 2009) (DEWHA 2009) and green sawfish (2008) (DEWHA 2008b)	Fishing activities including being caught as by-catch and illegal, unreported and unregulated fishing (principle threat) Habitat degradation and modification (note, the recovery plan focuses on river and estuarine barriers that affect the migration of river sharks/sawfish) Marine debris (potential threat) Collection for display in public aquaria (potential threat)	Not applicable – the key threat is outside the scope of this OPP 6.4.2, 6.4.8, 6.4.9, 6.4.10 6.4.9 Not applicable – the key threat is outside the scope of this OPP

¹ Although the species were identified in the EPBC Protected Matters search they are highly unlikely to occur in the project area, which is outside the species range or preferred habitat (see **Section 5.6.2** for humpback whales and **Section 5.6.6** for great white sharks). However, the species may occur within the area of influence.

² These species were identified only in the area of influence EPBC Protected Matters search.

³ Potential pollution associated with planned discharges or light emissions from the project are not relevant as the EPBC Protected Matters search did not record the species as potentially occurring or having habitat within the project area (refer to **Table 5-4**).

⁴ The species was not identified in the EPBC Protected Matters search but was observed during the Barossa marine studies program at a seamount within the broader vicinity of the Barossa offshore development area (**Section 5.6.3**). Therefore, a conservative approach has been applied and it is considered the species may pass through the area.

3.5.2 Australian Marine Parks

Australian Marine Parks (AMPs, previously known as Commonwealth Marine Reserves) are recognised under the EPBC Act for the purpose of protecting and maintaining biological diversity, and to contribute to a national representative network of marine protected areas.

Current management arrangements

Once a marine park is proclaimed, Parks Australia develops a management plan for the park which details how the park is to be managed, including what activities are allowed in the different zones of the park. For those marine parks proclaimed before 2012, current management arrangements apply (even if the previous management plan has now expired). For marine parks proclaimed after 2012, transitional management arrangements are currently in place and will apply until statutory management plans come into effect. Until the management plans come into effect, activities within marine parks proclaimed after 2012 are still required to be consistent with the Australian International Union for Conservation of Nature (IUCN) reserve management principles (Environment Australia 2002), as relevant to the IUCN category assigned to the AMP. The IUCN management principles and categories have been given legal effect in relation to AMPs in the EPBC Act.

A number of marine parks have been considered in relation to the project. A portion of the gas export pipeline corridor intersects the Oceanic Shoals marine park, which is entirely zoned as Multiple Use Zone (IUCN category VI) (**Figure 3-2a**). In addition, the area of influence also overlaps the Arafura, Arnhem, Kimberley, Ashmore Reef and Cartier Island AMPs. Each of these have various management zones and the Australian IUCN reserve management principles, as defined by Environment Australia (2002), related to the zones that are relevant to the project, are provided in **Table 3-3**. Further contextual description of the area of influence is provided in **Section 5.1** of this OPP.

Table 3-3: IUCN reserve management principles for the Australian Marine Parks relevant to the project

AMP	IUCN category	Australian IUCN reserve management principles
Oceanic Shoals	Category VI (Multiple Use Zone)	<ul style="list-style-type: none"> 7.01 The reserve or zone should be managed mainly for the sustainable use of natural ecosystems based on the following principles.
Arafura	Category VI (Multiple Use Zone)	<ul style="list-style-type: none"> 7.02 The biological diversity and other natural values of the reserve
Arnhem	Category VI (Special Purpose Zone)	<ul style="list-style-type: none"> 7.03 Management practices should be applied to ensure ecologically sustainable use of the reserve or zone. 7.04 Management of the reserve or zone should contribute to regional and national development to the extent that this is consistent with these principles.
Kimberley	Category VI (Multiple Use Zone) ¹	
Ashmore Reef	Category Ia (Sanctuary Zone/ Strict Nature Reserve) and Category II (Recreational Use Zone/National Park) ²	<p><i>Category Ia</i></p> <ul style="list-style-type: none"> 1.01 The reserve or zone should be managed primarily for scientific research or environmental monitoring based on the following principles. 1.02 Habitats, ecosystems and native species should be preserved in as undisturbed a state as possible. 1.03 Genetic resources should be maintained in a dynamic and evolutionary state. 1.04 Established ecological processes should be maintained. 1.05 Structural landscape features or rock exposures should be safeguarded. 1.06 Examples of the natural environment should be secured for scientific studies, environmental monitoring and education, including baseline areas from which all avoidable access is excluded. 1.07 Disturbance should be minimised by careful planning and execution of research and other approved activities. 1.08 Public access should be limited to the extent it is consistent with these principles.

AMP	IUCN category	Australian IUCN reserve management principles
		<p><i>Category II</i></p> <ul style="list-style-type: none"> • 3.01 The reserve or zone should be protected and managed to preserve its natural condition according to the following principles. • 3.02 Natural and scenic areas of national and international significance should be protected for spiritual, scientific, educational, recreational or tourist purposes. • 3.03 Representative examples of physiographic regions, biotic communities, genetic resources, and native species should be perpetuated in as natural a state as possible to provide ecological stability and diversity. • 3.04 Visitor use should be managed for inspirational, educational, cultural and recreational purposes at a level that will maintain the reserve or zone in a natural or near natural state. • 3.05 Management should seek to ensure that exploitation or occupation inconsistent with these principles does not occur. • 3.06 Respect should be maintained for the ecological, geomorphologic, sacred and aesthetic attributes for which the reserve or zone was assigned to this category. • 3.07 The needs of indigenous people should be taken into account, including subsistence resource use, to the extent that they do not conflict with these principles. • 3.08 The aspirations of traditional owners of land within the reserve or zone, their continuing land management practices, the protection and maintenance of cultural heritage and the benefit the traditional owners derive from enterprises, established in the reserve or zone, consistent with these principles should be recognised and taken into account.
Cartier Island	Category Ia (Sanctuary Zone) ²	<ul style="list-style-type: none"> • 1.01 The reserve or zone should be managed primarily for scientific research or environmental monitoring based on the following principles. • 1.02 Habitats, ecosystems and native species should be preserved in as undisturbed a state as possible. • 1.03 Genetic resources should be maintained in a dynamic and evolutionary state. • 1.04 Established ecological processes should be maintained. • 1.05 Structural landscape features or rock exposures should be safeguarded. • 1.06 Examples of the natural environment should be secured for scientific studies, environmental monitoring and education, including baseline areas from which all avoidable access is excluded. • 1.07 Disturbance should be minimised by careful planning and execution of research and other approved activities. • 1.08 Public access should be limited to the extent it is consistent with these principles.

¹ Describes the zoning as relevant to that which is intersected by the area of influence for the project.

² The zoning aligns with the Ashmore Reef National Nature Reserve and Cartier Island Marine Reserve Management Plans 2002 (expired in 2009).

Proposed management arrangements

In September 2014, the Australian Government commissioned an independent review of the AMPs network to consider what management arrangements would best protect the marine environment and accommodate the many activities that occur within it. The independent review was undertaken by an Expert Scientific Panel and a Bioregional Advisory Panel and was completed in December 2015, with the reports made publicly available in September 2016. Following that, the Director of National Parks commenced the statutory process for developing new reserve management plans.

In July 2017, the Director of National Parks published, for public comment, draft management plans which detailed the approach to manage 44 AMPs. The plans were developed in accordance with the EPBC Act. The zoning and related rules for managing activities in the AMPs took into consideration the best available science, the advice of stakeholders, Indigenous people and the general public, the goals and principles of the National Representative System of Marine Protected Areas, and the Australian IUCN reserve management principles (Environment Australia 2002; Director of National Parks 2017a, b).

The draft management plans for the North and North west marine parks are of relevance to the project and were reviewed. The Draft North Commonwealth Marine Reserves Network Management Plan³ proposes revising the zoning of areas within the Oceanic Shoals marine park, which is currently entirely zoned as Multiple Use Zone (IUCN category VI) (**Figure 3-2a**). As shown in **Figure 3-2b**, the revised zoning includes designating portions of the Oceanic Shoals marine park as a Special Use Zone, a Marine National Park Zone and a Habitat Protection Zone. Specifically, the Habitat Protection Zone has been provided with the intention of improving protection to the benthic ecosystems of the carbonate banks and terraces of the Van Diemen Rise (Buxton and Cochrane 2015). While the Barossa offshore development area is outside the boundaries of any existing or known proposed AMPs, the gas export pipeline corridor overlaps a portion of the currently zoned Multiple Use Zone (IUCN category VI) and proposed Habitat Protection Zone (IUCN category IV) shown in **Figure 3-2**.

As stated previously, until these draft management plans come into effect, current management arrangements continue to apply and there are no changes 'on the water' for users in the AMPs.

3.6 Perth Treaty

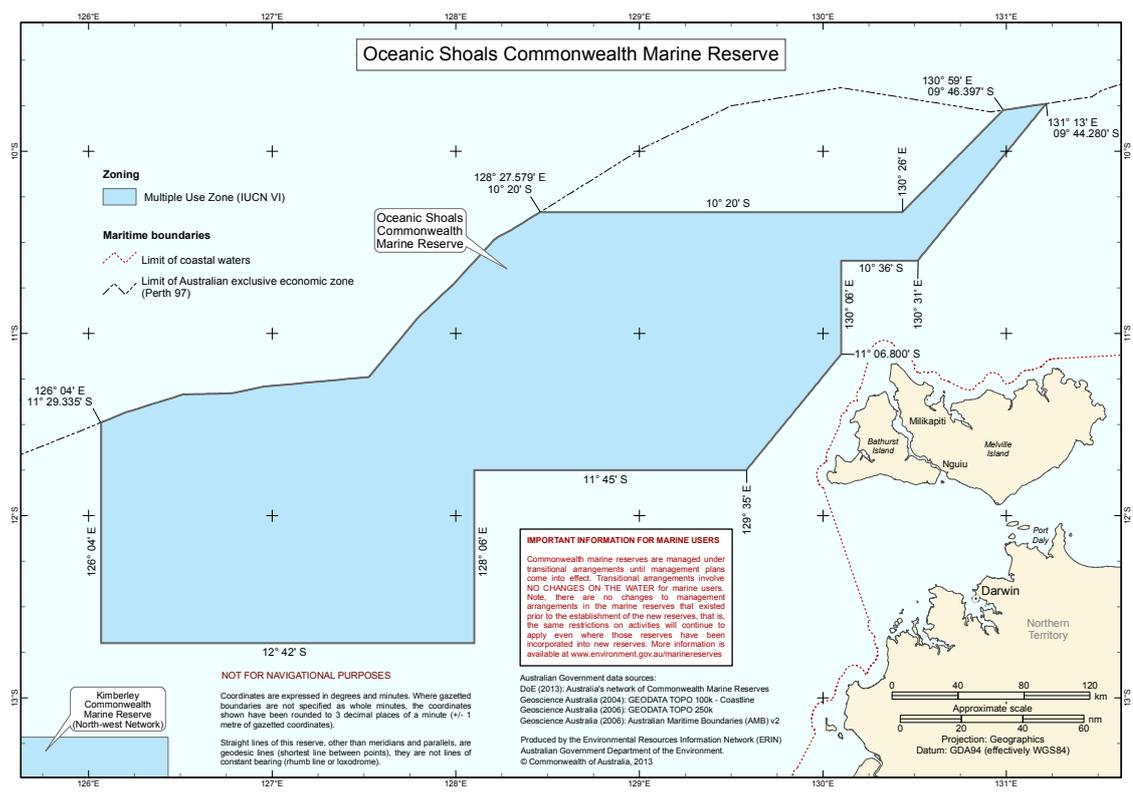
Australia and Indonesia have entered into a number of agreements and arrangements relating to the maritime area between Australia and Indonesia, including the *Treaty between the Government of Australia and the Government of the Republic of Indonesia establishing an Exclusive Economic Zone Boundary and Certain Seabed Boundaries* (the 1997 Perth Treaty). Under the Perth Treaty, there are areas of overlapping jurisdiction where Australia exercises seabed jurisdiction including for petroleum exploration, and Indonesia exercises water column jurisdiction including fishing rights (the Perth Treaty area). The Perth Treaty boundary is contiguous with the Australian Exclusive Economic Zone (EEZ) boundary in the Timor and Arafura Seas.

While the Perth Treaty has yet to be officially sanctioned by the Australian and Indonesian governments, the Australian Government acts consistently with its obligations.

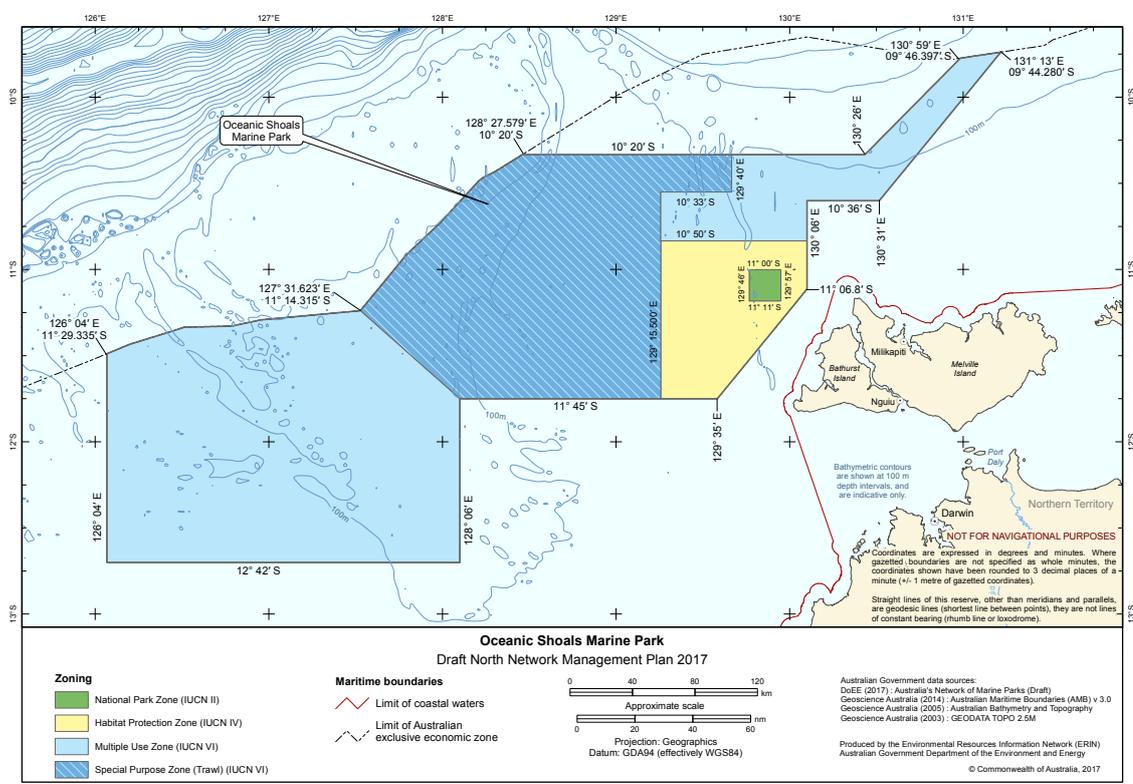
The portion of the Barossa offshore development area that is located between the Perth Treaty boundary and the 1972 continental shelf boundary is in an area of overlapping jurisdiction (**Figure 4-2**). Under the Perth Treaty, within this area of overlapping jurisdiction Indonesia may exercise EEZ sovereign rights and jurisdiction in relation to the water column (Article 7), whereas Australia may exercise continental shelf sovereign rights and jurisdiction in relation to the seabed. From a fisheries jurisdiction and management perspective this means that Indonesia has rights to pelagic fish stocks in this area of overlapping jurisdiction, whereas Australia has rights to the demersal and benthic fish stocks. The demarcation between pelagic and demersal fish is not clear, as the wording used in the *Memorandum of Understanding Between the Government of the Republic of Indonesia and the Government of Australia Concerning the Implementation of a Provisional Fisheries Surveillance and Enforcement Arrangement* (1981) is "swimming fish species" and "sedentary fish species".

Article 7 of the Perth Treaty requires that Australia give Indonesia three months' notice of proposed grant of exploration and exploitation rights in the Perth Treaty area. The notification process is conducted by the Australian Government Department of Industry, Innovation and Science (DIIS) through the Attorney-General's Department and the Department of Foreign Affairs and Trade (DFAT), which liaise directly with the Indonesian Government in Jakarta. ConocoPhillips will liaise with DIIS and DFAT as the project progresses to allow timely communication and engagement with Indonesia should any project activities be required in this area.

³ The draft management plans were released prior to the formal name change from Commonwealth Marine Reserves to Australian Marine Parks, which occurred on the 11 October 2017. The final management plans will be amended to reflect the revised naming.



a) Current zoning under transitional arrangements



b) Proposed zoning detailed in the draft management plan

Figure 3-2: Oceanic Shoals marine park current zoning and proposed zoning as detailed in the draft management plan