



ENVIRONMENT PLAN APPENDICES

Beehive Pre-Drill
Geotechnical
Assessment

WA-488-P

2 August 2022

Rev 0



Appendices

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Appendix 1 Commonwealth, State & Territory Legislation

COMMONWEALTH LEGISLATION

Commonwealth Legislation/ Regulation	Scope	Related International Conventions	Administering Authority
<p><i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i> (& Regulations 2000)</p>	<p>Protects matters of national environmental significance (MNES), provides for Commonwealth environmental assessment and approval processes and provides an integrated system for biodiversity conservation and management of protected areas.</p> <p>M NES are:</p> <ol style="list-style-type: none"> 1. World heritage properties; 2. National heritage places; 3. Wetlands of international importance (Ramsar wetlands); 4. Nationally threatened species and ecological communities; 5. Migratory species; 6. Commonwealth marine environment; 7. The Great Barrier Reef Marine Park; 8. Nuclear actions (including uranium mining); and 9. A water resource, in relation to coal seam gas development and large coal mining development. <p>Relevance to this activity: This EP includes a description and assessment of MNES and migratory species (Item 4 and Item 5 in this list) including the Commonwealth marine environment (Item 6), that may be impacted by the activity.</p>	<ul style="list-style-type: none"> • Republic of Korea Migratory Birds Agreement 2006 (ROKAMBA). • Convention on Biological Diversity and Agenda 21 1992. • Agreement between the Government and Australia and the Government of the People’s Republic of China for the Protection of Migratory Birds and their Environment 1986 (CAMBA). • Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979. • Agreement between the Government and Australia and the Government of Japan for the Protection of Migratory Birds and Birds in Danger of Extinction and their Environment 1974 (JAMBA). • Convention on International Trade in Endangered Species of Wild Fauna and Flora 1973 (CITES). • Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (RAMSAR). • International Convention for the Regulation of Whaling 1946. 	<p>DAWE (National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) in the case of this activity)</p>

Commonwealth Legislation/ Regulation	Scope	Related International Conventions	Administering Authority
<i>Offshore Petroleum Greenhouse Gas Storage Act (OPGGSA) 2006 and OPGGS (Environment) Regulations 2009</i>	<p>The Act addresses all licensing and HSE issues for offshore GHG activities extending beyond the 3 nm limit.</p> <p>The Regulations (Part 2) specify that an EP must be prepared for any petroleum activity and that activities are undertaken in an ecologically sustainable manner.</p> <p>Relevance to this activity: The submission and acceptance of this EP satisfies the key requirements of this legislation.</p>	Not applicable.	NOPSEMA
<i>Environment Protection (Sea Dumping) Act 1981 (& Regulations 1983)</i>	<p>Aims to prevent the deliberate disposal of wastes (loading, dumping, and incineration) at sea from vessels, aircraft, and platforms.</p> <p>Relevance to this activity: There will be no dumping at sea within the meaning of the legislation that would require a sea dumping permit to be obtained.</p>	<ul style="list-style-type: none"> • Protocol on the Prevention of Marine Pollution by Dumping of Waste and Other Matter 1996 [London Protocol] • Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matter 1972 [London Convention] 	DAWE
<i>Australian Maritime Safety Authority Act 1990</i>	<p>Facilitates international cooperation and mutual assistance in preparing and responding to a major oil spill incidents, and encourages countries to develop and maintain an adequate capability to deal with oil pollution emergencies.</p> <p>Requirements are effected through the Australian Maritime Safety Authority (AMSA). AMSA is the lead agency for responding to oil spills in the Commonwealth marine environment and is responsible for implementing the Australian National Plan for Maritime Environmental Emergencies (NatPlan).</p> <p>Relevance to this activity: In the event of a Level 2 or 3 hydrocarbon spill to sea from a vessel in Commonwealth waters, AMSA is the designated Combat Agency and implements the NatPlan. In the event of a spill from a well blowout, AMSA will assist the Drilling Incident Management Team (DIMT)</p>	<ul style="list-style-type: none"> • Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances 2000 • International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC). 	AMSA

Commonwealth Legislation/ Regulation	Scope	Related International Conventions	Administering Authority
<i>Underwater Cultural Heritage Act 2018</i>	<p>Protects the heritage values of shipwrecks, sunken aircraft and relics (older than 75 years) in Australian Territorial waters below the low water mark to the outer edge of the continental shelf (excluding the State's internal waterways. It is an offence to interfere with a shipwreck covered by this Act. This Act replaced the <i>Historic Shipwrecks Act 1976</i> and came into effect on 1 July 2019.</p> <p>Relevance to this activity: No historic shipwrecks have been identified within the operations area through desktop research. In the event of discovery of, and damage to, previously unrecorded wrecks, this legislation may be triggered.</p>	<ul style="list-style-type: none"> • Convention on Protection of the Underwater Cultural Heritage 2001. • Agreement between the Netherlands and Australia concerning old Dutch Shipwrecks 1972. 	DAWE
<i>Ozone Protection and Synthetic Greenhouse Gas Management Act 1989</i>	<p>Regulates the manufacture, importation and use of ozone depleting substances.</p> <p>Relevance to this activity: The MODU and support vessels will have a register of ozone-depleting substances (ODS).</p>	<ul style="list-style-type: none"> • United Nations Framework Convention on Climate Change 1992. • Montreal Protocol on Substances that Deplete the Ozone Layer 1987. 	DAWE
<i>Navigation Act 2012 (& Regulations 2013)</i>	<p>This Act regulates ship-related activities in Commonwealth waters and invokes certain requirements of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) relating to equipment and construction of ships. Several Marine Orders (MO) are enacted under this Act relating to offshore petroleum activities, including:</p> <ul style="list-style-type: none"> • MO Part 21: Safety of navigation and emergency procedures • MO Part 30: Prevention of collisions • MO Part 50: Special purpose ships • MO Part 59: Offshore industry vessel operations • MO Part 70: Seafarer certification. <p>Relevance to this activity: Support vessels will adhere to the relevant MOs while operating within Commonwealth waters.</p>	<ul style="list-style-type: none"> • International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) as amended, 1995. • United Nations Convention on the Law of the Sea 1982 (UNCLOS). • International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 (MARPOL). • International Convention for the Safety of Life at Sea 1974 (SOLAS). • Convention on the International Regulations for Preventing Collisions at Sea 1972 (COLREG). 	AMSA

Commonwealth Legislation/ Regulation	Scope	Related International Conventions	Administering Authority
<p><i>Protection of the Sea (Prevention of Pollution from Ships) Act 1983</i></p> <p>Protection of the Sea (Prevention of Pollution from Ships) (Orders) Regulations 1994</p>	<p>Regulates ship-related operational activities and invokes certain requirements of the MARPOL Convention relating to discharge of noxious liquid substances, sewage, garbage, air pollution etc.</p> <p>Requires that ships >400 gross tonnes to have pollution emergency plans. Several MO are enacted under this Act relating to offshore petroleum activities, including:</p> <ul style="list-style-type: none"> • MO Part 91: Marine Pollution Prevention – Oil • MO Part 93: Marine Pollution Prevention – Noxious Liquid Substances • MO Part 94: Marine Pollution Prevention – Harmful Substances in Packaged Forms • MO Part 95: Marine Pollution Prevention – Garbage • MO Part 96: Marine Pollution Prevention – Sewage • MO Part 97: Marine Pollution Prevention – Air Pollution • MO Part 98: Marine Pollution Prevention – Anti-fouling Systems. <p>Relevance to this activity: The MODU and support vessels > 400 gross tonnes will adhere to the relevant MOs by having a SMPEP, Oil Record Book and Garbage Management Plan in place and implemented, along with international pollution prevention certificates verifying compliance with oil, air pollution and sewage measures.</p>	<ul style="list-style-type: none"> • Various parts of MARPOL. 	<p>AMSA</p>

Commonwealth Legislation/ Regulation	Scope	Related International Conventions	Administering Authority
<i>Protection of the Sea (Civil Liability for Bunker Oil Pollution Damage) Act 2008</i>	<p>Sets up a compensation scheme for those who suffer damage caused by spills of oil that is carried as fuel in ships' bunkers.</p> <p>There is an obligation on ships > 1,000 gross tonnes to carry insurance certificates when leaving/entering Australian ports, or leaving/entering an offshore facility within Australian coastal waters.</p> <p>Relevance to this activity: Vessels will hold the required insurance certificates.</p>	<ul style="list-style-type: none"> International Convention on Civil Liability for Bunker Oil Pollution Damage 2001. 	AMSA
<i>Protection of the Sea (Harmful Antifouling Systems) Act 2006</i>	<p>Creates an offence for a person to engage in negligent conduct that results in a harmful anti-fouling compound being applied to a ship. Also provides that Australian ships must hold 'anti-fouling certificates', provided they meet certain criteria.</p> <p>Relevance to this activity: The MODU and support vessels will hold the required valid anti-fouling certificates.</p>	<ul style="list-style-type: none"> International Convention on the Control of Harmful Anti-fouling Systems on Ships 2001. 	AMSA
<i>Protection of the Sea (Shipping Levy) Act 1981</i>	<p>Provides that where, at any time during a quarter when a ship with tonnage length of no less than 24 m was in an Australia port, there was on board the ship a quantity of oil in bulk weighing more than 10 tonnes, a levy is imposed in respect of the ship for the quarter.</p> <p>Relevance to this activity: The support vessels will adhere to the shipping levy, as required.</p>	Not applicable.	AMSA
<i>Maritime Legislation Amendment (Prevention of Air Pollution from Ships) Act 2007</i>	<p>This Act implements the requirements of MARPOL 73/78 Annex VI for shipping in Commonwealth waters as per:</p> <ul style="list-style-type: none"> MO Part 97: Marine Pollution Prevention – Air Pollution. <p>Relevance to this activity: The MODU and support vessels will use low sulfur diesel fuel.</p>	<ul style="list-style-type: none"> Various parts of MARPOL. 	Department of Infrastructure, Transport, Regional Development and Communications

Commonwealth Legislation/ Regulation	Scope	Related International Conventions	Administering Authority
<p><i>National Greenhouse and Energy Reporting Act 2007</i> (NGER) (& Regulations 2008)</p>	<p>Establishes the legislative framework for the NGER Scheme, which is a national framework for reporting GHG emissions, GHG projects and energy consumption and production by corporations in Australia.</p> <p>Relevance to this activity: Under the NGER Act, a controlling corporation assesses its reporting obligations by reference to the facilities that are under its 'operational control.' As the MODU and support vessel contractors do not come under EOG's operational control, they will be required to collect and submit their own emissions data under the NGER Act (if triggered).</p>	<ul style="list-style-type: none"> • United National Framework Convention on Climate Change (UNFCCC), entered into force in 1994. Goals under the framework are updated during the annual convention. 	<p>Clean Energy Regulator</p>

Commonwealth Legislation/ Regulation	Scope	Related International Conventions	Administering Authority
<p><i>Biosecurity Act 2015</i> (& Regulations 2016)</p>	<p>This Act provides the Commonwealth with powers to take measures of quarantine, and implement related programs as are necessary, to prevent the introduction of any plant, animal, organism or matter that could contain anything that could threaten Australia’s native flora and fauna or natural environment. The Commonwealth’s powers include powers of entry, seizure, detention and disposal.</p> <p>Offshore petroleum installations outside of 12 nm are located outside of Australian territory for the purposes of the Act. While these installations are not subject to biosecurity control, aircraft and vessels (not subject to biosecurity control) that leave Australian territory and are exposed to the installations are subject to biosecurity control when returning to Australian territory.</p> <p>When a vessel or aircraft leaves Australian territory and interacts with an installation or petroleum industry vessel it becomes an ‘exposed conveyance’ and is subject to biosecurity control when it returns to Australian territory unless exceptions can be met.</p> <p>The person in charge of an exposed conveyance carries the responsibility for pre-arrival reporting under the Act and must arrive at a first point of entry.</p> <p>This Act includes mandatory controls in the use of seawater as ballast in ships and the declaration of sea vessels voyaging into and out of Commonwealth waters. The regulations stipulate that all information regarding the voyage of the vessel and the ballast water is declared correctly to the quarantine officers.</p> <p>Relevance to this activity: The MODU and support vessels sourced from foreign ports will adhere to the DAWE guidelines regarding quarantine clearance to enter Australian waters.</p>	<ul style="list-style-type: none"> • International Convention for the Control and Management of Ships Ballast Water & Sediments 2004. • World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures (SPS agreement) 1995. • World Organisation for Animal Health and the International Plant Protection Convention 1952. 	<p>DAWE</p>

Commonwealth Legislation/ Regulation	Scope	Related International Conventions	Administering Authority
<p><i>Marine Safety (Domestic Commercial Vessel) National Law Act 2012</i> (& Regulations 2013)</p>	<p>This Act provides for a national system for Domestic Commercial Vessels (DCV) between states and territories to ensure their safe operation. This system provides for MO and National Standards to be adopted for DCVs of different classes. Current MO include:</p> <ul style="list-style-type: none"> • MO 501 (Administration – National Law) 2013 • MO 502 (Vessel Identifiers – National Law) 2013 • MO 503 (Certificates of Survey – National Law) 2013 • MO 504 (Certificates of Operation and Operational Requirements – National Law) 2013 • MO 505 (Certificates of Competency – National Law) 2013 • MO 507 (Load Line Certificates – National Law) 2013. <p>This law does not over-ride state legislation with respect to marine environmental management, dangerous goods management, speed limits, navigation aids, rules for prevention of collisions, monitoring of marine communications systems, workplace health and safety or emergency management and response.</p> <p>Relevance to this activity: The MODU and support vessels will adhere to the relevant MOs while operating within Commonwealth waters.</p>	<p>Not applicable.</p>	<p>AMSA</p>
<p><i>Native Title Act 1993</i></p>	<p>Allows for recognition of native title through a claims and mediation process and also sets up regimes for obtaining interests in lands or waters where native title may exist.</p> <p>Relevance to this activity: Native Title Determination area does not cover the operational area, and therefore there is no relevance to this activity.</p>	<p>Not applicable.</p>	<p>National Native Title Tribunal (NNTT)</p>

Commonwealth Legislation/ Regulation	Scope	Related International Conventions	Administering Authority
<p><i>Fisheries Management Act 1991</i> (& Regulations 2009)</p>	<p>This Act aims to implement efficient and cost-effective fisheries management on behalf of the Commonwealth, ensure that the exploitation of fisheries resources and the carrying on of any related activities are conducted in a manner consistent with the principles of Ecologically Sustainable Development (ESD), maximise the net economic returns to the Australian community from the management of Australian fisheries, ensure accountability to the fishing industry and to the Australian community in the Australian Fisheries Management Authority's (AFMA's) management of fisheries resources, and achieve government targets in relation to the recovery of the costs of AFMA.</p> <p>Relevance to this activity: Provides the regulatory and other mechanisms to support any necessary fisheries management decisions in the event of a hydrocarbon spill in Commonwealth waters.</p>	<p>Not applicable.</p>	<p>AFMA</p>
<p><i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i></p>	<p>This Act provides for the preservation and protection from injury or desecration areas and objects that are of significance to Aboriginal people, under which the Minister may make a declaration to protect such areas and objects. Under the Act, discovery of Aboriginal remains must be reported to the Environment Minister.</p> <p>Relevance to this activity: No known sites of Aboriginal heritage significance occur within the operational area. May be relevant in the event of a hydrocarbon spill requiring shoreline access for clean-up purposes.</p>	<p>Not applicable.</p>	<p>DAWE</p>

WESTERN AUSTRALIAN LEGISLATION

WA Legislation/ Regulation	Scope	Relevance to activity	Administering Authority
<i>Conservation and Land Management Act 1984</i>	<p>This Act makes provision for the use, protection and management of certain public lands and waters and the flora and fauna. It establishes authorities responsible for such protection.</p> <p>This Act covers the management of Nationally Important Wetlands that are present along the coast of the EMBA.</p>	This Act would be triggered in the event of a hydrocarbon spill that threatens coastal marine parks, or that access to respond to a hydrocarbon spill is required through such parks.	Conservation and Parks Commission
<i>Contaminated Sites Act 2003</i> (& Regulations 2006)	<p>This Act provides for the identification, recording, management and remediation of contaminated sites.</p> <p>Under the Act, a 'site' is an area of land or water in WA, including surface water, groundwater and offshore areas out to 3 nm. A site is 'contaminated' if it has a substance in it at above background concentrations, which presents or has the potential to present a risk of harm to human health or the environment.</p>	This Act would be triggered in the event that a hydrocarbon spill contaminates shorelines and requires remediation.	Department of Water and Environmental Regulation (DWER)
<i>Environmental Protection Act 1986</i>	<p>This is the principal Act relating to environmental protection in WA. It establishes the EPA and gives the EPA overall responsibility for the prevention, control and abatement of environmental pollution and for the conservation, preservation, protection, enhancement and management of the environment.</p> <p>Part 5 of the Act states that a person who causes pollution or environmental harms or allows pollution or environmental harm to be caused commits an offence.</p>	Hydrocarbons are listed in Schedule 1 of the Act as a Listed Waste. The Act would be triggered in the event of a hydrocarbon spill that reaches the coast, particularly with regard to waste treatment, transport and disposal.	Office of the EPA
Environmental Protection (Controlled Waste) Regulations 2004	<p>These regulations detail the appropriate management and handling of controlled wastes in respect to the environment.</p> <p>Schedule 1 of the regulations lists waste oil and water, or hydrocarbons and water, mixtures or emulsions as a controlled waste.</p>	These regulations may be triggered in the event that a hydrocarbon spill enters state waters and reaches shorelines, requiring collection and onshore handling, transport and disposal.	DWER

WA Legislation/ Regulation	Scope	Relevance to activity	Administering Authority
Environmental Protection (Unauthorised Discharges) Regulations 2004	<p>These regulations make it an offence to cause pollution through unauthorised discharges, particularly with regard to dark smoke (anything darker than shade 1 on the Australian Miniature Smoke Chart, AS 3543, 1989). It may be a defence to cause dark smoke to prevent irreversible damage to a significant part of the environment.</p> <p>Schedule 1 of the regulations lists hydrocarbon as a material that must not be discharged to the environment.</p>	This Act would be triggered in the event that a hydrocarbon spill enters state waters and/or in-situ burning is a response consideration.	DWER
<i>Emergency Management Act 2005</i>	This Act provides for prompt and coordinated organisation of emergency management in the State. Hazards captured under the Act include events that result in destruction of or damage to the environment. It establishes the State Emergency Management Committee (SEMC), which is the key plan in responding to emergencies of state significance.	This Act would be triggered in the event that a hydrocarbon spill threatens state waters and shorelines. The SEMC would implement the State Emergency Management Plan on behalf of the state.	SEMC
<i>Aquatic Management Resources Act 2016 (ARMA)</i>	This Act provides for the ecologically sustainable development and management of the State's aquatic resources including management of aquatic biosecurity.	This Act would be triggered in the event that a hydrocarbon spill enters state waters and has the potential to impact commercial fishing activities (e.g., closures).	Department of Primary Industry and Regional Development (DPIRD)
<i>Harbours and Jetties Act 1928</i>	This Act relates to the liability of owners of ships for damage to harbours and jetties, and works connected therewith.	This Act may be triggered in the event that a support vessel used for the project causes loss or damage to a harbor or jetty.	Department of Transport (DoT)
<i>Pollution of Waters by Oil and Noxious Substances Act 1987 (& Regulations 1993)</i>	This Act provides for the protection of the sea and certain waters from pollution by oil and other noxious substances discharged from ships (as defined in the WA Marine Act, see below). This Act prohibits the discharge of oil or noxious substances into State waters and provides for the removal of oil or any mixture containing oil from affected waters.	This Act may be triggered in the event that a hydrocarbon spill enters state waters.	EPA & DoT
<i>Western Australian Marine Act 1982 (& (Infringements) Regulations 1985)</i>	This Act regulates navigation and shipping in WA waters.	Activity vessels traversing WA state waters (e.g., in the event of hydrocarbon spill) must abide by the requirements of the Act with regard to marine safety requirements.	DoT

WA Legislation/ Regulation	Scope	Relevance to activity	Administering Authority
<i>Biodiversity Conservation Act 2016 (& Regulations 2018)</i>	<p>This Act provides for the conservation and protection of wildlife. Licences to take (i.e., for fauna, to kill, capture, disturb, hunt and for flora to gather, pluck, dig up, destroy, etc) protected flora and fauna on Crown land (e.g., coastal parks) are required under this act.</p> <p>The regulations provide for the issuing of licences to take, keep, import and export flora and fauna, and for the caring of sick or injured fauna.</p>	<p>This Act would be triggered in the event that native wildlife rescue and treatment is required in the event of a hydrocarbon spill, or that native habitat on the coast may be damaged in the process of responding to coastal stranding of hydrocarbons.</p>	<p>Department of Biodiversity, Conservation and Attractions (DBCA)</p>
<i>Animal Welfare Act 2002 (& Animal Welfare (General) Regulations 2003)</i>	<p>This Act is established to provide for the welfare, safety and health of animals, to regulate the use of animals for scientific purposes and for related purposes. The Act is focused on prohibiting cruelty to, and other inhumane or improper treatment of, animals.</p>	<p>This Act would be triggered in the event that wildlife rescue and treatment is required in the event of a hydrocarbon spill.</p>	<p>DPIRD</p>

NORTHERN TERRITORY LEGISLATION

NT Legislation/ Regulation	Scope	Relevance to activity	Administering Authority
<i>Environment Protection Act 2019</i> (& Regulations 2020)	This Act provides the requirement for operators in the Northern Territory to hold an 'environmental approval' for proposed actions that will have a significant impact on the environment or require referral under a 'referral trigger'.	The Act would be triggered in the event of a hydrocarbon spill that reaches the shoreline, particularly with regard to pollution and waste containment, avoidance and abatement.	NT EPA
<i>Waste Management and Pollution Control Act 1998</i> (& (Administration) Regulations 1998)	Legislation protecting the environment through the encouragement of effective waste management, pollution prevention and control practices (relevant for waste disposal and transfer).	This Act and its regulations may be triggered in the event that a hydrocarbon spill enters state waters.	NT EPA
<i>Dangerous Goods Act 1998</i> (& Regulations 1985)	This Act provides for the safe storage, handling and transport of certain Dangerous Goods.	This Act and its regulations may be triggered in the event that a hydrocarbon spill enters state waters, with regard to incident reporting requirements.	NT Worksafe
<i>Marine Pollution Act 1999</i> (& Regulations 2003)	This Act provides protection of the marine and coastal environment by minimising intentional and negligent discharges of ship sourced pollutants to coastal waters. It also enacts Annexures 1, 2, 3 and 5 of MARPOL.	This Act and its regulations may be triggered in the event that a hydrocarbon spill enters state waters.	NT Department of Environment, Parks and Water Security (DEPWS)

Appendix 2 Project Information flyers

Beehive-1 Exploration Well

Information Flyer #1

17 September 2021



EOG Resources Inc (EOG) is planning to drill the Beehive-1 exploration well ('the project') in Exploration Permit WA-488-P in the Joseph Bonaparte Gulf in Western Australia (WA) (Figure 1, over page).

Why We're Consulting You

EOG has identified you, your group, organisation or company as a 'relevant person', defined under the Offshore Petroleum and Greenhouse Gas (Environment) Regulations 2009 as someone whose *functions* (power, duty, authority or responsibility), *activities* (things you do or have done) or *interests* (your rights, advantages, duties and liabilities, or concerns) may be affected by the project. Relevant persons typically include Commonwealth, State and Territory government agencies, commercial and recreational fisheries, asset owners and environment groups.

This information flyer aims to introduce you to EOG and provide information about the project and invites you to submit questions or concerns about the project. This process will assist to inform the preparation of the project's Environment Plans (EPs), which are currently in preparation for regulatory submission.

Who is EOG?

EOG is one of the largest independent crude oil and natural gas exploration and production companies in the United States of America (USA).

EOG is in the process of acquiring the WA-488-P exploration permit from Finniss Offshore Exploration Pty Ltd, which is expected to complete in September or October 2021. EOG has operated offshore since 1992, with a history of nearly 30 years in Trinidad & Tobago, the UK North Sea and the USA Gulf of Mexico.

In the past 10 years, EOG has drilled nearly 40

offshore wells, with an excellent safety and environment record.

The Project

EOG aims to explore a known hydrocarbon prospect in WA-488-P located in the Bonaparte Basin. The project is divided into two phases; geophysical and geotechnical (G&G) investigations, followed by drilling.

This information flyer is focused on the first phase of work, the G&G investigations. Additional information flyers will be issued as the project progresses.

Geophysical and Geotechnical Investigations

The G&G investigations are planned to commence any time between the start of February and end of June 2022 (contingent on the receipt of EP acceptance, vessel and equipment availability). They will be undertaken within a 440 km² envelope, which is located 163 km from the nearest WA shoreline and 73 km from the nearest Northern Territory (NT) shoreline. Water depths in the project area range from 40 m to 50 m.

The G&G investigations (Figure 2) collect seabed and shallow geological information to inform the safe location of a jack-up drilling rig. The G&G investigations are divided into two phases, as outlined here.

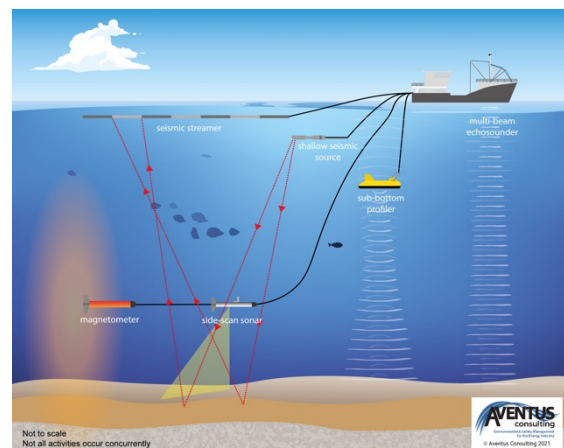


Figure 2. Geophysical investigations

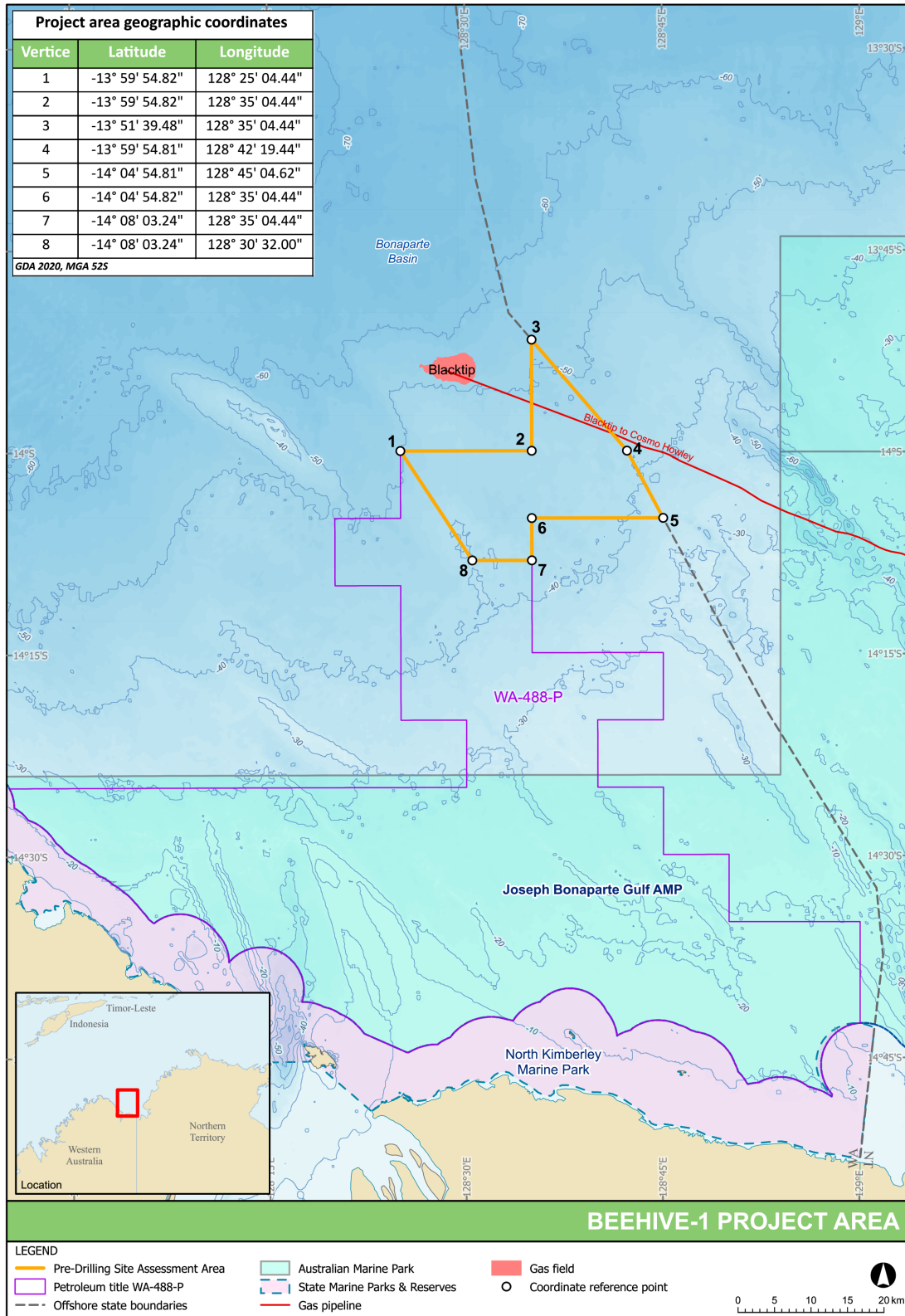


Figure 1. Beehive-1 project area

Geophysical investigations involve the following suite of tests:

- Assess water depths (bathymetry) – using a multi-beam echo sounder (MBES).
- Detect seabed hazards such as pipelines, shipwrecks, reefs and anchors – using a side scan sonar (SSS).
- Map the structure and thickness of uppermost seabed sediments (shallow geology) – using a sub-bottom profiler (SBP).
- Detect metallic objects on or below the seabed, such as cables, anchors, chains, buried pipelines – using a magnetometer.
- Map the near-surface geological hazards, such as shallow gas pockets – using a mini-airgun or sparker system.

The geophysical activities are likely to be conducted using a small, locally-based vessel (as depicted in Figure 2) and is likely to take up to two weeks to complete.

Geotechnical investigations acquire physical measurements and samples of the local shallow geology at and around the potential drill location, using the following techniques:

- Geological analysis of unconsolidated seabed sediments – using grab sampling.
- Geological analysis of formations below the seabed – using coring.
- Determine seabed strength – using piezo cone penetrometer testing (PCPT) and borehole sampling.

The geotechnical investigations are undertaken using a specialised medium-sized vessel, as depicted in Figure 3, and is likely to take up to two weeks to complete. This may be the same vessel as that used to undertake the geophysical investigations.

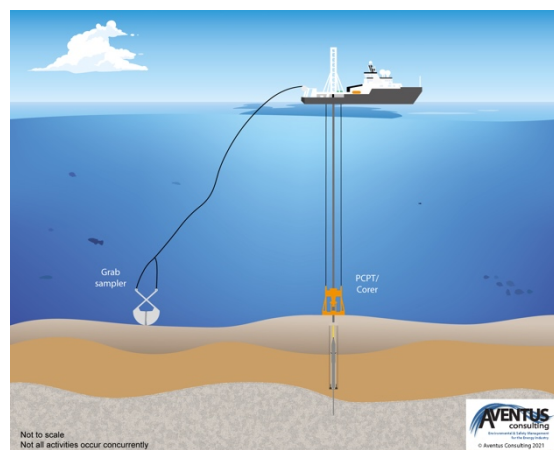


Figure 3. Geotechnical investigations

Drilling

Planning for the drilling campaign is underway. The Beehive-1 well is targeting the Sunbird Formation and anticipates the presence of a light oil or gas condensate.

A jack-up drill rig will drill the well vertically to a depth of about 5,000 m using a water-based mud system, which will take 40-50 days. In the event that hydrocarbons are discovered, well testing (that involves flaring) may take place.

It is anticipated that drilling may commence as early as Q3 2022 (contingent on the receipt of EP acceptance, vessel and equipment availability), but ideally no later than Q2 2023. Further details about the drilling campaign will be provided in future information flyers as planning progresses.

Environment Plans

Preparation of a G&G Investigations EP and a Drilling EP are underway. These will be submitted to the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) for assessment.

The full EPs will be made available on NOPSEMA's website for public exhibition prior to formal assessment by NOPSEMA.

An EP is a comprehensive document that describes the project, outlines stakeholder feedback, details the existing marine and socio-economic environment, describes and assesses impacts and risks and outlines the

control measures to avoid, minimise and mitigate environmental impacts and risks to be acceptable and ALARP (As Low As Reasonably Practicable).

The project will be subject to industry best practice standards and undertaken in accordance with all relevant environmental and safety legislation and regulations.

Features of the Project Area

Features in the project area include:

- Dominated by the Indonesian Throughflow current and strong tides.
- A seabed dominated by flat featureless plains comprising sand and gravel, with localised reefs and outcrops supporting sponge gardens. The G&G investigations will provide more detail about the type of seabed in the project area. The plains contain diverse infaunal communities (e.g., crustaceans and polychaete worms).
- Seasonal presence or likely presence of threatened migratory species including turtles, sharks, sawfish, whales, dolphins and seabirds.
- Low-intensity commercial fishing by the Commonwealth-managed Northern Prawn Fishery (the project area has a 0.06% overlap with the fishery).
- Some commercial fishing by the WA-managed Northern Demersal Scalefish Managed Fishery (mostly goldband snapper and red emperor) and Mackerel Managed Fishery.
- An absence of NT-managed commercial fisheries.
- An absence of known shipwrecks.
- Low commercial shipping traffic.
- An overlap by the Department of Defence North Australian Exercise Area.

Distances from the project area to the following features are:

- The Carbonate bank and terrace system of the Sahul Shelf Key Ecological Feature (KEF) – 13 km.
- The Blacktip unmanned wellhead platform – 13 km.
- Joseph Bonaparte Australian Marine Park (AMP) – 16 km.
- WA North Kimberley Marine Park – 50 km.

A summary of key impacts and risks of the G&G investigations is presented in the following pages.

How to Provide Feedback

EOG encourages you to ask questions or provide feedback on the project using the following contact details:

Email: australia@eogresources.com

Phone: 0409 772 170

EOG will respond to feedback in a timely fashion.

Background project information (and this information flyer) is also available on the EOG website at:

<https://www.eogresources.com/australia>

Ongoing Consultation

Consultation with relevant persons will be ongoing throughout the project planning phase, with additional information flyers to be distributed at various milestones.

Preliminary environmental impact and risk assessment for the Beehive-1 geophysical and geotechnical investigations (WA-488-P)

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
<i>Planned events</i>		
Generation of underwater sound from G&G investigations and vessels	Temporary disruption to migration, feeding or breeding patterns for sound-sensitive fauna, such as cetaceans (whales and dolphins).	<ul style="list-style-type: none"> In accordance with the EPBC Act Policy Statement 3.1, a 500-m shutdown zone will be maintained during operation of the geophysical equipment to minimise impacts on cetaceans. Vessel engines and thrusters will be maintained in accordance with planned maintenance system to ensure they are operating efficiently.
	Damage to the Blacktip gas pipeline from sound pulses.	<ul style="list-style-type: none"> Shallow gas investigations, using a mini-airgun or sparker system, will not be undertaken over the pipeline.
Seabed disturbance from geotechnical activities	Temporary and localised seabed turbidity. Smothering of seabed habitat by disturbed sediments.	<ul style="list-style-type: none"> The vessel will not anchor during geotechnical investigations (it will remain on location using dynamic positioning). Very low volumes of cuttings and drilling fluids will be discharged during borehole sampling. Seabed grab sampling and coring activities are extremely localised. Cored holes are very narrow and will collapse in on themselves and small surface 'craters' will quickly fill in with sediments and recolonise with benthic fauna. Large bulky items will be securely fastened or stored on the vessel deck to prevent loss to sea. Any dropped objects will be recovered (where safe to do so).
<i>Routine vessel discharges and emissions</i>		
Atmospheric emissions	Temporary reduction in air quality in the local air shed.	<ul style="list-style-type: none"> Vessels >400 gross tonnes will have in place a current International Air Pollution Prevention (IAPP) certificate and Ship Energy Efficiency Management Plan (SEEMP). Only marine-grade low sulphur diesel (no greater than 0.5% m/m) will be used. Waste incineration will not take place. All fuel-burning equipment will be maintained in accordance with planned maintenance systems.
Light glow	Attractant to fauna, temporary increase in predation rates on fauna attracted to lights.	<ul style="list-style-type: none"> Vessel lighting will be kept to the minimum required but in accordance with navigational standards and personnel safety requirements for night-time work.

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
Discharge of treated sewage and grey water	Temporary and localised reduction in water quality.	<ul style="list-style-type: none"> • Sewage and grey water will be treated in a MARPOL Annex IV-compliant sewage treatment plant prior to discharge (or taken back to port for disposal). • Vessels >400 gross tonnes will have in place a current International Sewage Pollution Prevention (ISPP) certificate. • In the event of a sewage treatment plant malfunction, untreated sewage will only be discharged when > 12 nm from shore or will be offloaded onshore for treatment.
Discharge of cooling water and reverse osmosis (brine)	Temporary and localised elevation in surface water temperature and salinity levels.	<ul style="list-style-type: none"> • Low impact biocides (chlorine) are used in optimised concentrations in the cooling system. • Engines and associated equipment that require cooling by water will be maintained in accordance with the planned maintenance system so that they are operating within accepted parameters. • Only low-toxicity chemicals (ONCS 'Gold'/'Silver' (CHARM) or 'D'/'E' (non-CHARM)-rated) chemicals are used in the cooling and brine water systems.
Discharge of putrescible waste	Temporary and localised increase in nutrient content of surface and near-surface water quality. Temporary increase in scavenging behaviour of pelagic fish and seabirds.	<ul style="list-style-type: none"> • Putrescible waste will be macerated to <25 mm prior to discharge (or taken back to shore for disposal). • In the event of macerator malfunction, un-macerated putrescible waste will take place will be discharged when >12 nm of land or returned to shore. • Non-putrescible galley waste will be returned to shore for disposal.
Discharge of bilge water and deck drainage	Temporary and localised reduction in water quality.	<ul style="list-style-type: none"> • Vessels >400 gross tonnes will have in place a MARPOL Annex I-compliant oily water separator set to limit oil-in-water content to <15 ppm prior to discharge. • Vessels >400 gross tonnes will have a current International Oil Pollution Prevention (IOPP) certificate. • No whole residual bilge oil is discharged overboard (residual oil from the oily water separator is pumped to tanks and disposed of onshore). • Chemical storage areas will be bunded and drain to the bilge tank. • Portable bunds and/or drip trays are used to collect spills or leaks from equipment that is not contained within a permanently bunded area (non-process areas). • Deck cleaning detergents will be biodegradable. • Spills to decks will be cleaned immediately using Shipboard Marine Pollution Emergency Plan (SMPEP) kits.
<i>Unplanned events</i>		
Accidental overboard release of hazardous	Marine pollution (litter and a temporary and localised reduction in	<ul style="list-style-type: none"> • Vessels >100 gross tonnes or certified to carry more than 15 people will have in place and implement a vessel-specific Garbage Management Plan. • Vessel crew and visitors will be inducted into the waste

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
and/or non-hazardous waste from the vessels	water quality). Injury and entanglement of individual animals (such as seabirds and turtles) and smothering or pollution of benthic habitats.	<p>management procedures.</p> <ul style="list-style-type: none"> • A waste manifest will be maintained. • Only small volumes of chemicals will be kept on board and will be stored in secured drums in banded areas away from open drains. • Banded areas will drain through a closed system, processed through the oily water separator. • Safety Data Sheets (SDS) will be available in appropriate locations. • SMPEP kits will be available on board for rapid deck clean-up response.
Introduction of invasive marine species from the vessel hulls and/or ballast water	Reduction in native marine species diversity and abundance. Displacement of native marine species. Socio-economic impacts on commercial fisheries. Reduction of conservation values of protected areas.	<ul style="list-style-type: none"> • Vessels will carry a low risk of invasive marine species introduction (as determined through a vessel contractor pre-qualification report). • Vessels >400 gross tonnes will carry a current International Anti-fouling System (IAFS) Certificate and comply with Marine Order Part 98 (Anti-fouling Systems). • The vessel/s will comply with the: <ul style="list-style-type: none"> ○ Australian Ballast Water Management Requirements (DAWR, 2020); and ○ National Biofouling Guidance for the Petroleum Production & Exploration Industry (AQIS, 2009). • Towed/submersible equipment will be cleaned (e.g., fouling is removed) prior to initial use in the project area.
Damage to Blacktip subsea gas pipeline (e.g., dropped objects, anchoring)	Loss of pipeline integrity and lost field production.	<ul style="list-style-type: none"> • Vessel anchoring will not be permitted. • EOG will consult with ENI Australia (pipeline operator) to understand the implications of operating over the pipeline. • The geophysical investigations will be undertaken prior to geotechnical investigations in order to accurately locate the pipeline and put in place geotechnical exclusion buffer around it. • EOG will ensure that the geotechnical vessel contractor has the coordinates of the Blacktip pipeline marked in its navigation system (confirmed during the geophysical survey) to ensure that no geotechnical work is conducted within a nominated buffer around the pipeline.
Vessel strike or entanglement with megafauna (e.g., whales, dolphins, turtles)	Injury or death of individual animals.	<ul style="list-style-type: none"> • The Australian Guidelines for Whale and Dolphin Watching (DEWHA, 2005) for sea-faring activities will be implemented, which includes caution and no-approach zones around whales and dolphins. • Vessel strike causing injury to or death of a cetacean is reported via the online National Ship Strike Database within 72 hours of the incident. • Entanglement of megafauna in towed equipment is reported to the NT Marine Wildwatch on 1800 453 941 (or WA's Wildcare on 08-9474 9055) as soon as possible. No attempts to disentangle megafauna will be made by project personnel unless instructed

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
		<p>by Wildwatch or Wildcare.</p> <ul style="list-style-type: none"> • Vessel crew will complete an environmental induction covering the above-listed requirements.
Displacement of or interference with third-party vessels	<p>Temporary loss of fishing grounds around the vessel safety zone.</p> <p>Trawling gear snagging on towed or submerged equipment.</p>	<ul style="list-style-type: none"> • The project area is located in an area with low levels of shipping traffic and low fishing effort. • A 'Notice to Mariners' will be issued. • Standard maritime safety precautions will be in place, including: <ul style="list-style-type: none"> ○ Radar and other anti-collision monitoring equipment to detect other vessels. ○ Display of lights and day shapes. ○ The ability to quickly move off location to avoid other vessels. ○ Warnings issued (radio, flares, lights and horns) to avoid collisions. ○ The Vessel Master will be qualified in accordance with AMSA Marine Orders Part 3 (Seagoing qualifications) (e.g., International Convention of Standards of Watchkeeping for Seafarers, STCW95, GMDSS Proficiency). • The tail buoy on the shallow seismic streamer will have flashing lights and radar reflectors so it is visible to other marine users. • The vessel master will sound the general alarm, manoeuvre the vessel to minimise the effects of the collision and implement all other measures as outlined in the vessel collision procedure. • Vessel collisions will be reported to AMSA if that collision has or is likely to affect the safety, operation or seaworthiness of the vessel or involves serious injury to personnel.
Diesel release due to a vessel-to-vessel collision	<p>Temporary and localised reduction in water quality.</p> <p>Tainting of commercial fisheries species.</p> <p>Injury and/or death of marine fauna and seabirds.</p> <p>Pathological effects on fish larvae and plankton.</p>	<ul style="list-style-type: none"> • <i>As per 'displacement of or interference with third-party vessels', plus:</i> • No refuelling will take place on location. • Vessel crew will be trained in spill response techniques in accordance with the SMPEP and vessel training matrix. • Diesel spill trajectory modelling indicates a very small area of ecological impact in the event of the loss of a whole tank of fuel. • An Oil Pollution Emergency Plan (OPEP) will be developed based on the spill modelling results. • Vessel-specific SMPEP and project-specific OPEP will be implemented in the event of a large spill. • EOG will report the spill to regulatory authorities within 2 hours of becoming aware of the spill.

Beehive-1 Exploration Well

Information Flyer #2

01 December 2021



Update on the Pre-Drill Seabed Assessment

EOG Resources, Inc. (EOG) advises that the Beehive Pre-Drill Seabed Assessment (PDSA) Environment Plan (EP) is now available on the National Offshore Petroleum Safety and Environmental Management Authority's (NOPSEMA) website for public exhibition and comment at https://info.nopsema.gov.au/home/open_for_comment

The following updates have occurred since Information Flyer #1 was issued:

- EOG Resources Australia Block WA-488 Pty Ltd, a subsidiary of EOG, is now the sole titleholder of the WA-488-P Exploration Permit;
- The activity window has been amended and is now April to August 2022 (exact timing dependent on the receipt of EP acceptance, weather, and vessel/equipment availability), rather than February to June 2022 as previously stated; and
- The PDSA activity area has been reduced by 100 km² from 440 km² to an area of 340 km².

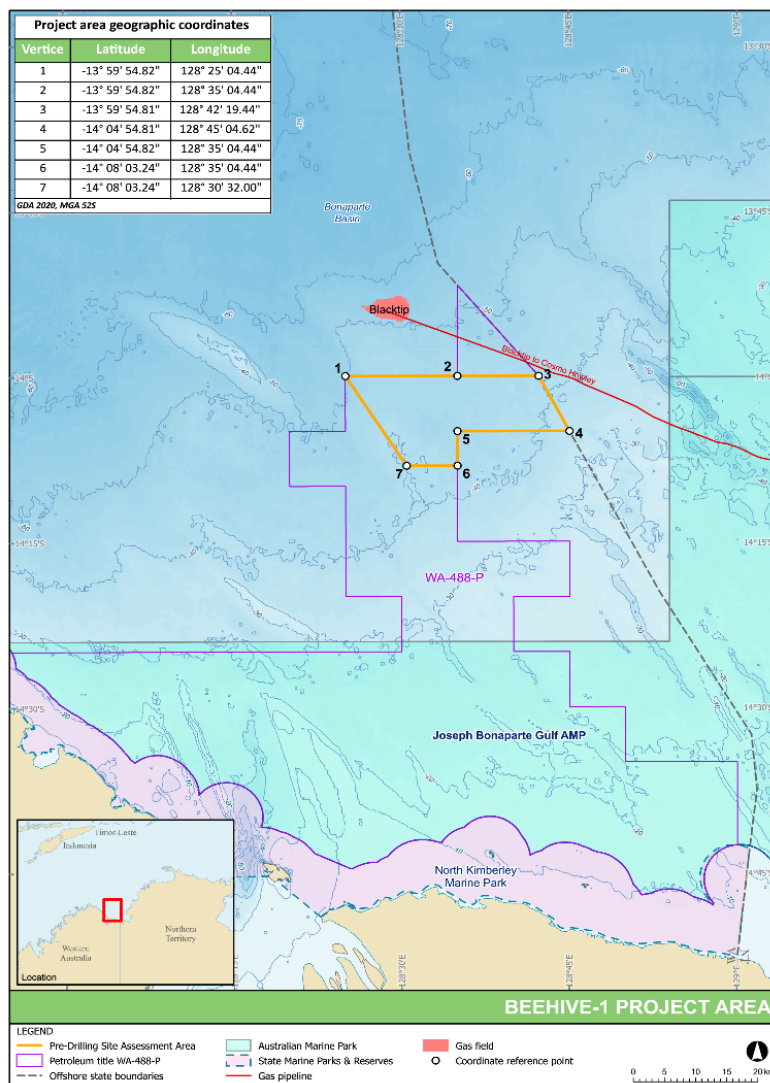


Figure 1. Updated Beehive PDSA location

How to Provide Feedback

EOG encourages you to provide feedback on the activity using the following contact details:

Email: australia@eogresources.com

Phone: 0409 772 170

EOG will respond to feedback in a timely fashion.

Background project information (and this information flyer) is also available on the EOG website at:
<https://www.eogresources.com/australia>

Ongoing Consultation

Consultation with relevant persons will be ongoing throughout the project planning and during preparation of the Beehive-1 Drilling EP.

Beehive-1 Exploration Well

Information Flyer #3

28 February 2022



EOG Resources Australia Block WA-488 Pty Ltd, a subsidiary of EOG Resources, Inc. (together 'EOG') is the Titleholder of Exploration Permit WA-488-P in the Joseph Bonaparte Gulf in Western Australia (WA).

EOG is planning to drill the Beehive-1 exploration well ('the project') (Figure 1, over page). The Beehive-1 well is targeting the Sunbird Formation and anticipates the presence of a light crude oil.

Why We're Consulting You

EOG has identified you, your group, organisation or company as a 'relevant person', defined under the Offshore Petroleum and Greenhouse Gas (Environment) Regulations 2009 as someone whose *functions* (power, duty, authority or responsibility), *activities* (things you do or have done) or *interests* (your rights, advantages, duties and liabilities, or concerns) may be affected by the project. Relevant persons typically include Commonwealth, State and Territory government agencies, commercial and recreational fisheries, asset owners and environment groups.

This information flyer aims to introduce you to EOG and provide information about the project and invites you to submit questions or concerns about the project. This process will assist to inform the preparation of the project's drilling Environment Plan (EP), which is currently in preparation for regulatory submission and acceptance.

Who is EOG?

EOG is the one of the largest independent crude oil and natural gas exploration and production companies in the United States of America (USA). EOG acquired the WA-488-P exploration permit from Finniss Offshore Exploration Pty Ltd in November 2021 with the aim of exploring known hydrocarbon prospects in the Bonaparte Basin.

EOG has operated offshore since 1992, a history of 30 years with assets in Trinidad and Tobago, UK North Sea, and the US Gulf of Mexico. In the past 10 years, EOG has drilled nearly 40 offshore wells with an excellent safety and environmental record.

The Project

The Beehive-1 exploration well is situated within Commonwealth marine waters 83 kilometres (km) off the WA coastline and 300 km southwest of Darwin in a water depth of 40 m. Drilling of the Beehive-1 exploration well is the second phase of work following the geophysical and geotechnical (G&G) investigations that are planned to occur over 4-6 weeks between April and August 2022.

This information flyer is focused on the proposed drilling activities. Additional information flyers will be issued as the project progresses.

Drilling Activities

Drilling is planned to occur between Q4 2022 and Q3 2023 (contingent on the receipt of EP acceptance, including drill rig and equipment availability).

Drilling activities are estimated to take approximately 50 to 90 days. The duration of drilling may be subject to change based on geological conditions and potential for operational challenges (e.g., sea state). Operations will be conducted 24 hours per day, seven days per week.

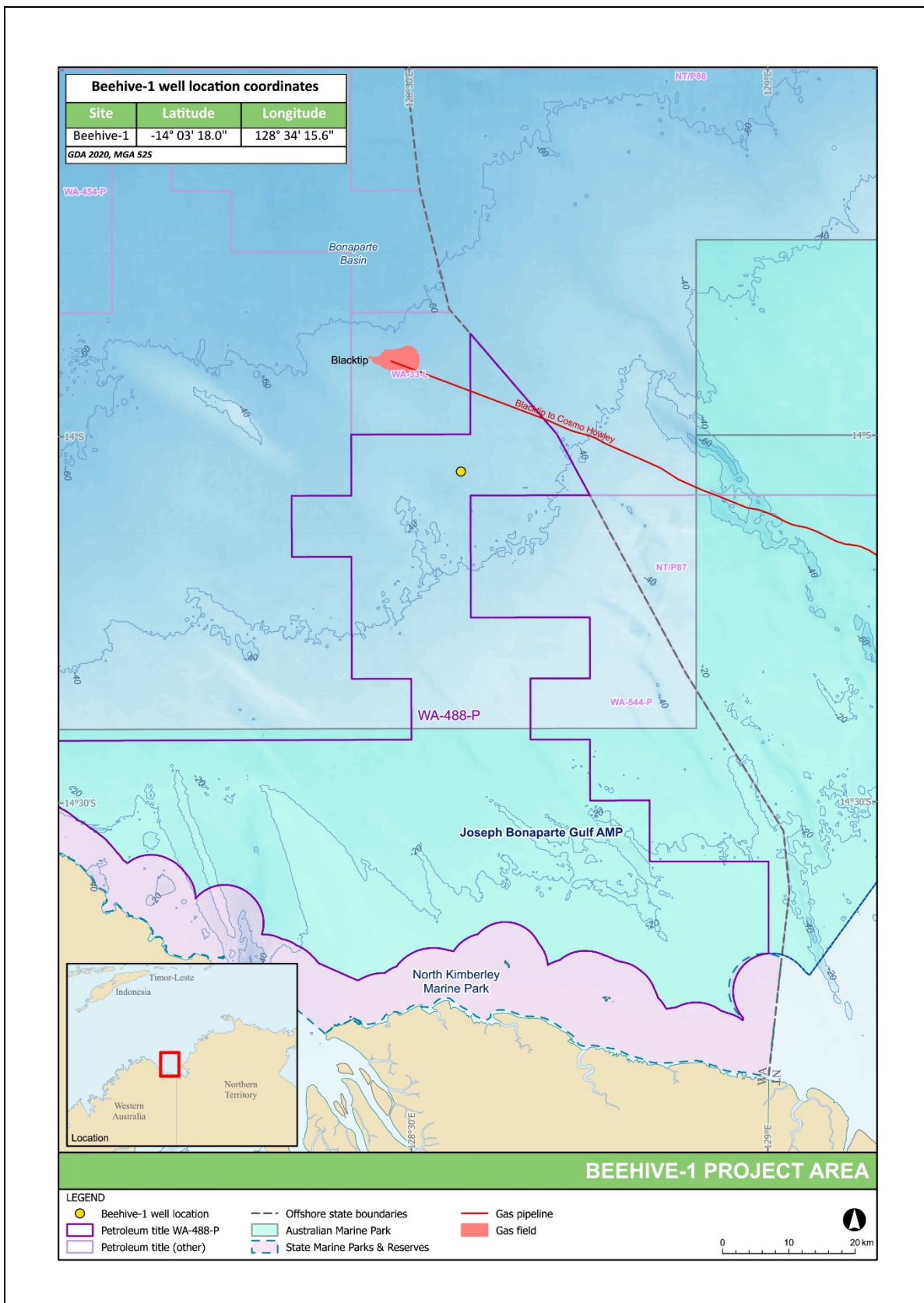


Figure 1. Beehive-1 Location map

Approach and Equipment

EOG proposes to undertake the activity using a jack-up mobile offshore drilling unit (MODU) with a 500 m exclusion zone. There will also be auxiliary activities including the use of support vessels and helicopters.

EOG is currently evaluating the availability of drill rigs for this activity. Further information on the nominated drill rig will be made available as part of EOG's ongoing consultation.

The approach to and setup of the jack-up MODU on location is summarised in Figure 2, over page.

Drilling Program

The following phases describe the planned drilling activity:

- Move the MODU to location, position MODU, pre-load and jack-up to operational elevation.
- Drill conductor hole and run conductor pipe.
- Drill surface hole section.
- Run and cement surface casing.
- Install the surface wellhead and blowout preventor (BOP).
- Perform a pressure test.
- Drill intermediate hole section(s).
- Run and cement intermediate pipe (casing) strings.
- Drill remaining sections to well total depth (TD).
- Run well evaluation program (wireline logging, sidewall cores, vertical seismic profiling [VSP] and possibly a drill stem test).
- Plug and abandon (P&A) or temporarily suspend the well.
- Demobilise the MODU and tow it away.

Environment Plan

Preparation of a Drilling EP is underway. This will be submitted to the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) for assessment.

The full EP will be made available on NOPSEMA's website for public exhibition prior to formal assessment by NOPSEMA.

The EP is a comprehensive document that describes the project, outlines stakeholder feedback, details the existing marine and socio-economic environment, describes and assesses impacts and risks (see Table 1) and outlines the control measures to avoid, minimise and mitigate environmental impacts and risks to be acceptable and ALARP (As Low as Reasonably Practicable).

The project will be subject to industry best practice standards and undertaken in accordance with all relevant environmental and safety legislation and regulations.

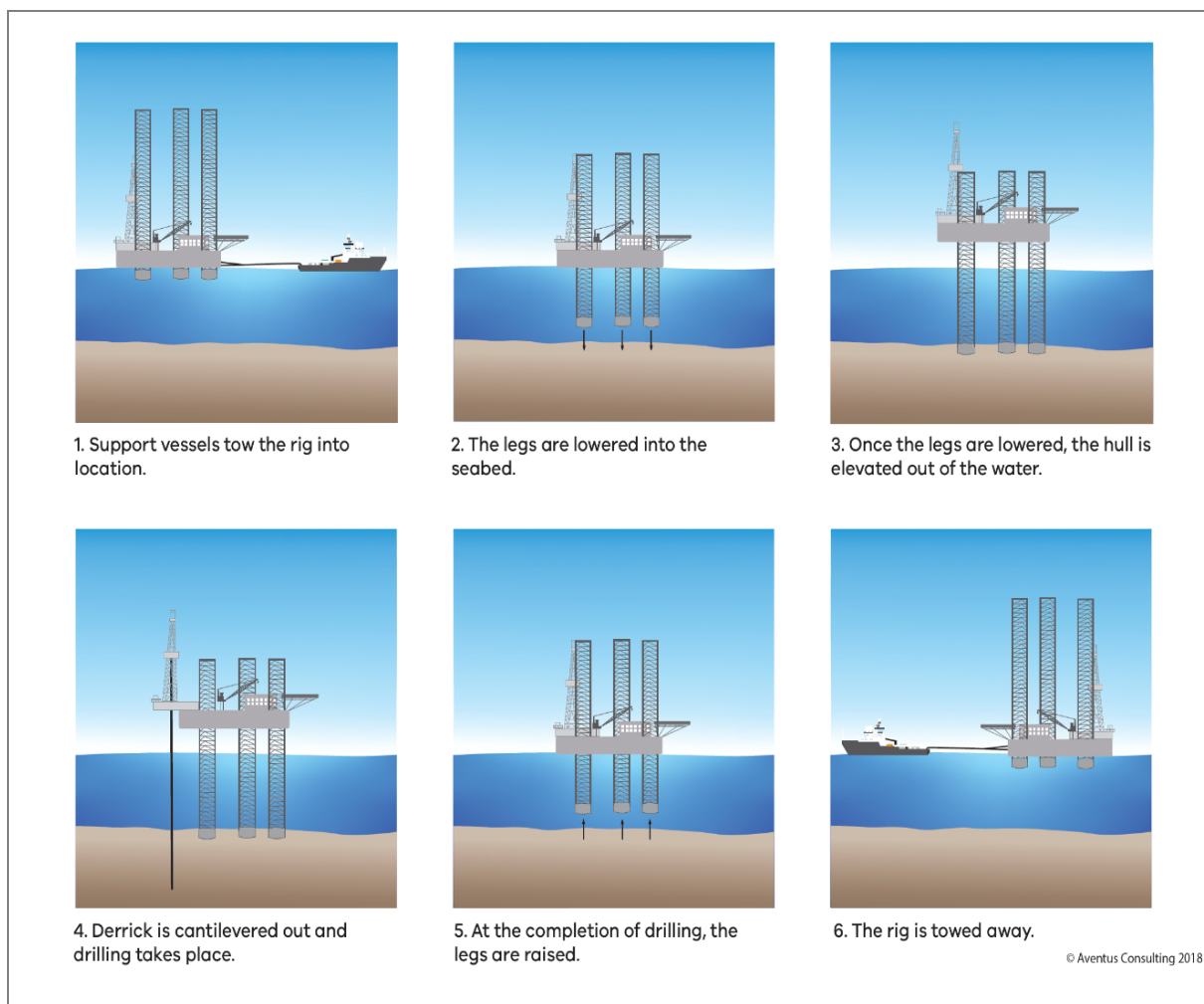


Figure 2. Overview of the jack-up MODU setup

Ongoing Consultation

Consultation with relevant persons will be ongoing throughout the project planning phase, with additional information flyers to be distributed at various milestones.

How to Provide Feedback

EOG encourages you to provide feedback on the project using the following contact details:

Email: australia@eogresources.com

Phone: 0409 772 170

EOG will respond to feedback in a timely fashion.

Additional background project information (and this information flyer) is available on the EOG website at:

<https://www.eogresources.com/australia>

Table 1. Preliminary environmental impact and risk assessment for Beehive-1 exploration well drilling

Hazard	Potential impacts & risks	Preliminary avoidance, mitigation & management strategies
<i>Planned Events</i>		
Physical presence		
Seabed disturbance	<ul style="list-style-type: none"> Physical removal or disturbance of seabed sediments. Increase in turbidity of the water column near the seabed. 	<ul style="list-style-type: none"> Seabed disturbance will be kept to the minimum area necessary for safe operations. Procedures will be in place to avoid objects being dropped overboard. If large objects are dropped overboard, they will be retrieved wherever possible.
Displacement of other marine users	<ul style="list-style-type: none"> Diversion from a planned travel route and additional time to re-join the planned route. Increased fuel use (and cost) as a result of this diversion. Temporary exclusion from fishing grounds. 	<ul style="list-style-type: none"> The exclusion zone will be reduced to the lowest area possible for safe operations. The required area of displacement for the duration of the activity will be communicated to commercial fisheries and authorities.
Routine emissions and discharges		
Light	<ul style="list-style-type: none"> Light glow may act as an attractant to light-sensitive species, in turn affecting predator-prey dynamics (due to attraction to or disorientation from light). Continuous lighting may result in localised alterations to normal marine fauna behaviours. 	<ul style="list-style-type: none"> MODU and support vessel external lighting will be kept to levels required for navigation and safety of deck operations. Blinds on portholes and windows will be lowered on support vessels at night. Lighting will be directed to working areas only (i.e., not overboard, unless in an emergency). The duration of flaring will be kept to the minimum time necessary.
Air	<ul style="list-style-type: none"> Localised and temporary decrease in air quality due to emissions from diesel combustion. Addition of greenhouse gas (GHG) to the atmosphere (influencing climate change). 	<ul style="list-style-type: none"> Only low sulphur (<0.5% m/m) marine diesel oil will be used. A planned maintenance system (PMS) will be implemented for combustion equipment. International Air Pollution Prevention (IAPP) certification will be maintained. A Ship Energy Efficiency Management Plan (SEEMP) will be in place and implemented. An Ozone Depleting Substances (ODS) procedure will be in place and implemented. Waste incineration will be managed in accordance with MARPOL and Marine Orders. The duration of flaring will be kept to the minimum time necessary. Fuel use will be monitored for abnormal consumption.

Hazard	Potential impacts & risks	Preliminary avoidance, mitigation & management strategies
Noise	<ul style="list-style-type: none"> • Behavioural effects to sound-sensitive species (e.g., whales). • Temporary or permanent threshold shift in sound-sensitive species (e.g., whales). 	<ul style="list-style-type: none"> • EPBC Policy Statement 2.1 – Part A (Standard management procedures) will be implemented during VSP activities. • Environmental awareness induction will be provided for all crew. • Vessels and helicopters will comply with EPBC Regulations 2000. • Vessel engines and thrusters will be well maintained.
Drill cuttings and muds	<ul style="list-style-type: none"> • Localised and temporary increase in total suspended solids in the water column. • Smothering of benthic habitat and fauna. • Alteration of benthic substrate. • Potential toxicity impacts to fauna. • Reduction of visual amenity from turbidity plumes. 	<ul style="list-style-type: none"> • Water-based mud (WBM) will be used for drilling (rather than synthetic- or oil-based muds). • Only low-toxicity additives will be added to the WBM system. • Mud operations will be managed to minimise discharge volumes. For example, shaker screens are used to maximise mud separation prior to overboard discharge.
Cement	<ul style="list-style-type: none"> • Localised and temporary increased turbidity of the water column. • Smothering of benthic habitat and fauna. • Alteration of benthic substrate. • Potential toxicity impacts to fauna. 	<ul style="list-style-type: none"> • Cement operations will be managed to minimise discharge volumes. For example, once good returns are noted at the seabed, the mixing and pumping of cement will cease and displacement of the string with drilling fluid will begin. • Only low-toxicity additives will be added to the cement system.
Putrescible waste	<ul style="list-style-type: none"> • Temporary and localised increase in the nutrient content of waters surrounding the discharge point. • An associated increase in scavenging behaviour of marine fauna and seabirds (at the sea surface or within the water column). 	<ul style="list-style-type: none"> • A Garbage Management Plan will be in place and implemented. • Putrescible waste will be treated as per MARPOL Annex V requirements prior to discharge. • Environmental awareness induction will be provided for all crew.
Sewage and grey water	<ul style="list-style-type: none"> • Increase in the nutrient content of surface waters around the MODU and support vessels. • An associated increase in scavenging behaviour of marine fauna and seabirds (at the sea surface or within the water column). 	<ul style="list-style-type: none"> • Treatment will be via a MARPOL-compliant sewage treatment plant prior to overboard discharge. • The sewage treatment plant will be maintained in accordance with the PMS.
Cooling and brine water	<ul style="list-style-type: none"> • Increase in sea water temperature, causing thermal stress to marine biota. 	<ul style="list-style-type: none"> • Engines and associated equipment that require cooling by water will be maintained in accordance with the PMS so they are operating within accepted parameters.

Hazard	Potential impacts & risks	Preliminary avoidance, mitigation & management strategies
	<ul style="list-style-type: none"> • Increase in sea surface salinity, potentially causing harm to fauna unable to tolerate higher salinity. • Potential toxicity impacts to marine fauna from the ingestion of residual biocide and scale inhibitors. 	<ul style="list-style-type: none"> • Only low-toxicity biocide will be used.
Bilge water and deck drainage	<ul style="list-style-type: none"> • Temporary and localised reduction of surface water quality around the discharge point. • Acute toxicity to marine fauna through ingestion of contaminated water in a small mixing zone. 	<ul style="list-style-type: none"> • All bilge water passes through a MARPOL-compliant oily water system set to limit oily-in-water to <15 ppm prior to overboard discharge. • The oily water system is maintained in accordance with the PMS. • Bunding of hydrocarbons and chemical storage areas. • Shipboard Marine Pollution Emergency Plan (SMPEP) is in place. • Use of non-toxic, biodegradable deck cleaning products. • Spill kits are availability on deck and crew are trained in spill response.
<i>Unplanned Events</i>		
Accidental discharge of waste to the ocean	<ul style="list-style-type: none"> • Marine pollution. • Acute toxicity to marine fauna through ingestion or absorption. • Injury and entanglement of individual animals (such as seabirds and seals). • Smothering or pollution of benthic habitats. 	<ul style="list-style-type: none"> • Waste is managed in accordance with the Garbage Management Plan. • Recover accidentally discharged wastes or lost equipment. • Chemical lockers are in place and used. • Follow established handling and storage procedures. • All crew are inducted in waste management procedures.
Vessel collision with megafauna	<ul style="list-style-type: none"> • Injury or death of marine megafauna (e.g., whales, dolphins, turtles). 	<ul style="list-style-type: none"> • Australian National Guidelines for Whale and Dolphin Watching (2017) are implemented by the support vessels. • All vessel crew are inducted in the guidelines. • Incident reporting procedure will be in place.
Introduction and establishment of invasive marine species (IMS)	<ul style="list-style-type: none"> • Reduction in native marine species diversity and abundance. • Depletion of commercial fish stocks (and associated socio-economic effects). • Changes to conservation values of protected areas. 	<ul style="list-style-type: none"> • A MODU and support vessels already in Australia are likely to be used (reducing the risk of introducing IMS). • An IMS risk assessment will be undertaken. • The International Anti-fouling System (IAFS) Certification will be maintained. • Implement a Biofouling Management Plan and Biofouling Record Book. • Implement a Ballast Water Management Plan. • Incident reporting procedure will be in place.

Hazard	Potential impacts & risks	Preliminary avoidance, mitigation & management strategies
Interference with other marine users	<ul style="list-style-type: none"> • Damage to third-party vessels in the case of collision. • Damage to or loss of fishing equipment and/or loss of commercial fish catches. 	<ul style="list-style-type: none"> • An Exclusion (Safety) zone will be designated around the MODU. • Navigation equipment and associated procedures will be used, including constant bridge watch. • Crew will be appropriately qualified. • Stakeholder notification process will be in place.
Marine diesel oil spill	<ul style="list-style-type: none"> • Temporary and localised reduction in water quality. • Injury or death of exposed marine fauna and seabirds. • Habitat damage where the spill reaches shorelines. • Changes to the functions, interests or activities of other users (e.g., commercial fisheries). 	<ul style="list-style-type: none"> • As per <i>'Interference with other marine users.'</i> • A bunkering procedure for any at-sea refuelling will be used. • Crews will be trained in spill prevention and response. • The following plans will be implemented in the event of a spill: <ul style="list-style-type: none"> ○ SMPEP. ○ Project-specific Oil Pollution Emergency Plan (OPEP). ○ Project-specific Operational and Scientific Monitoring Program (OSMP).
Loss of well containment	<ul style="list-style-type: none"> • Temporary but potentially widespread reduction in water quality. • Tainting of commercial fisheries species. • Injury and death of species such as seabirds. • Pathological effects on fish larvae and plankton. • Pollution of shoreline habitats such as sandy beaches, mudflats and mangroves. 	<ul style="list-style-type: none"> • Well design (including casing) will be based on geotechnical data and previously drilled wells in the area (i.e., review of offset well data). • Continuous monitoring of mud weight and other mud flow parameters will occur to ensure primary well control barrier is operating as designed. • Blow out preventer (BOP) will be tested and installed before entering the hydrocarbon zone. • Well casing will be pressure tested after drilling prior to drilling ahead. • Well control exercises will be undertaken. • An approved Well Operations Management Plan (WOMP) and Safety Case Revision will be in place. • A blowout contingency plan will be in place. • EOG will be a member of the Australian Marine Oil Spill Centre (AMOSOC), who would be called upon to assist in spill response.
Hydrocarbon spill response activities	<ul style="list-style-type: none"> • Routine and non-routine impacts and risks associated with vessel operations. • Noise disturbance to marine fauna and shoreline species by aircraft and vessels. 	<ul style="list-style-type: none"> • Maintain access to spill response capabilities (including capable personnel and equipment) and implement as required. • An appropriate distance will be maintained from marine fauna during spill response activities.

Beehive-1 Exploration Well

Information Flyer #4

11 May 2022



EOG Resources Australia Block WA-488 Pty Ltd, a subsidiary of EOG Resources, Inc. (together 'EOG') is the Titleholder of Exploration Permit WA-488-P in the Joseph Bonaparte Gulf in Western Australia (WA).

EOG is planning to drill the Beehive-1 exploration well ('the project') (see attached map). The Beehive-1 well is targeting the Sunbird Formation and anticipates the presence of a light crude oil.

Why We're Consulting You

EOG has previously consulted with you, your group, organisation or company as a 'relevant person', defined under the Offshore Petroleum and Greenhouse Gas (Environment) Regulations 2009 as someone whose *functions* (power, duty, authority or responsibility), *activities* (things you do or have done) or *interests* (your rights, advantages, duties and liabilities, or concerns) may be affected by the project. Relevant persons typically include Commonwealth, State and Territory government agencies, commercial and recreational fisheries, asset owners and environment groups.

This information flyer provides an update on project planning.

Who is EOG?

EOG is the one of the largest independent crude oil and natural gas exploration and production companies in the United States of America (USA). EOG acquired the WA-488-P exploration permit from Finniss Offshore Exploration Pty Ltd in November 2021 with the aim of exploring known hydrocarbon prospects in the Bonaparte Basin.

EOG has operated offshore since 1992, a history of 30 years with assets in Trinidad and Tobago, UK North Sea, and the US Gulf of Mexico. In the past 10 years, EOG has drilled nearly 40 offshore wells with an excellent safety and environmental record.

The Project

The Beehive-1 exploration well is situated within Commonwealth marine waters 83 kilometres (km) off the WA coastline and 300 km southwest of Darwin in a water depth of approximately 40 metres (m).

Drilling of the Beehive-1 exploration well is the second phase of work following the pre-drilling seabed assessment (PDSA) (also known as geophysical and geotechnical investigations) that are planned to occur between June and August 2022.

Geophysical Investigations

The G&G Environment Plan (EP) was accepted by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) in March 2022 (see this [link](#)).

The geophysical survey is scheduled to commence in early June 2022. EOG has contracted Fugro to undertake the survey, using the vessel *MV Outer Limit*. The survey is scheduled to take place from 1st June to 1st July 2022 in the area shown in Figure 1.

EOG has issued advice about the survey to the Australian Hydrographic Office to enable the Notice to Mariners to include the survey details. The vessel will be towing equipment approximately 100 m behind the vessel and EOG kindly requests other vessels to maintain a 500 m separation from the *MV Outer Limit* while it is undertaking survey operations.

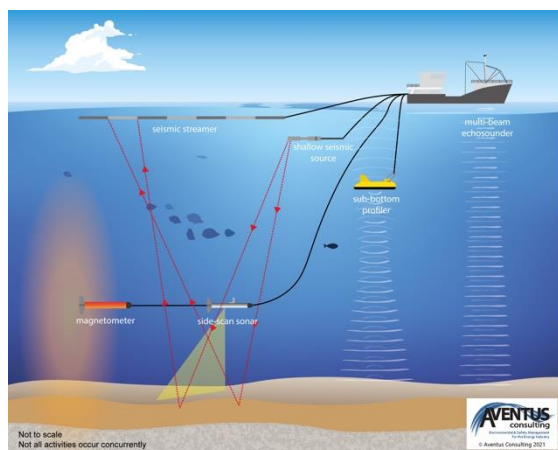


The MV Outer Limit

The *MV Outer Limit* is a 35 m long vessel and its contact details are as follows:

- Call sign – VJN3640
- Communications – using VHF Channel 16, displaying flags India over Romeo during survey operations.

A simplified representation of the geophysical survey techniques is shown in the diagram below.



Geophysical survey techniques

Geotechnical Investigations Update

The geotechnical investigation work will soon be awarded and is scheduled to commence in August 2022. Further information on this phase of work will be provided once the choice of contractor and vessel is confirmed.

Drilling Update

Drilling is planned to occur between Q1 and Q3 2023 (contingent on the receipt of EP acceptance, including drill rig and equipment availability).

Drilling activities are estimated to take approximately 50 to 90 days.

The drilling EP is now available on NOPSEMA’s website for public exhibition for 30 days, until 8th June 2022. The EP can be accessed at this [link](#). After this time, the EP will then be submitted to NOPSEMA for assessment.

The EP is a comprehensive document that describes the project, outlines feedback from relevant persons, details the existing marine and socio-economic environment, describes and assesses impacts and risks and outlines the control measures to avoid, minimise and mitigate environmental impacts and risks to be acceptable and ALARP (As Low as Reasonably Practicable).

Ongoing Consultation

Consultation with relevant persons will be ongoing throughout the project planning phase, with additional information flyers to be distributed at various milestones.

How to Provide Feedback

EOG encourages you to provide feedback on the project using the following contact details:

General Inquiries:

australia@eogresources.com

PDSA Specific Inquiries:

australia_pdsa@eogresources.com

Phone: 0409 772 170

EOG will respond to feedback in a timely fashion.

Additional background project information (and this information flyer) is available on the EOG website at:

<https://www.eogresources.com/australia>

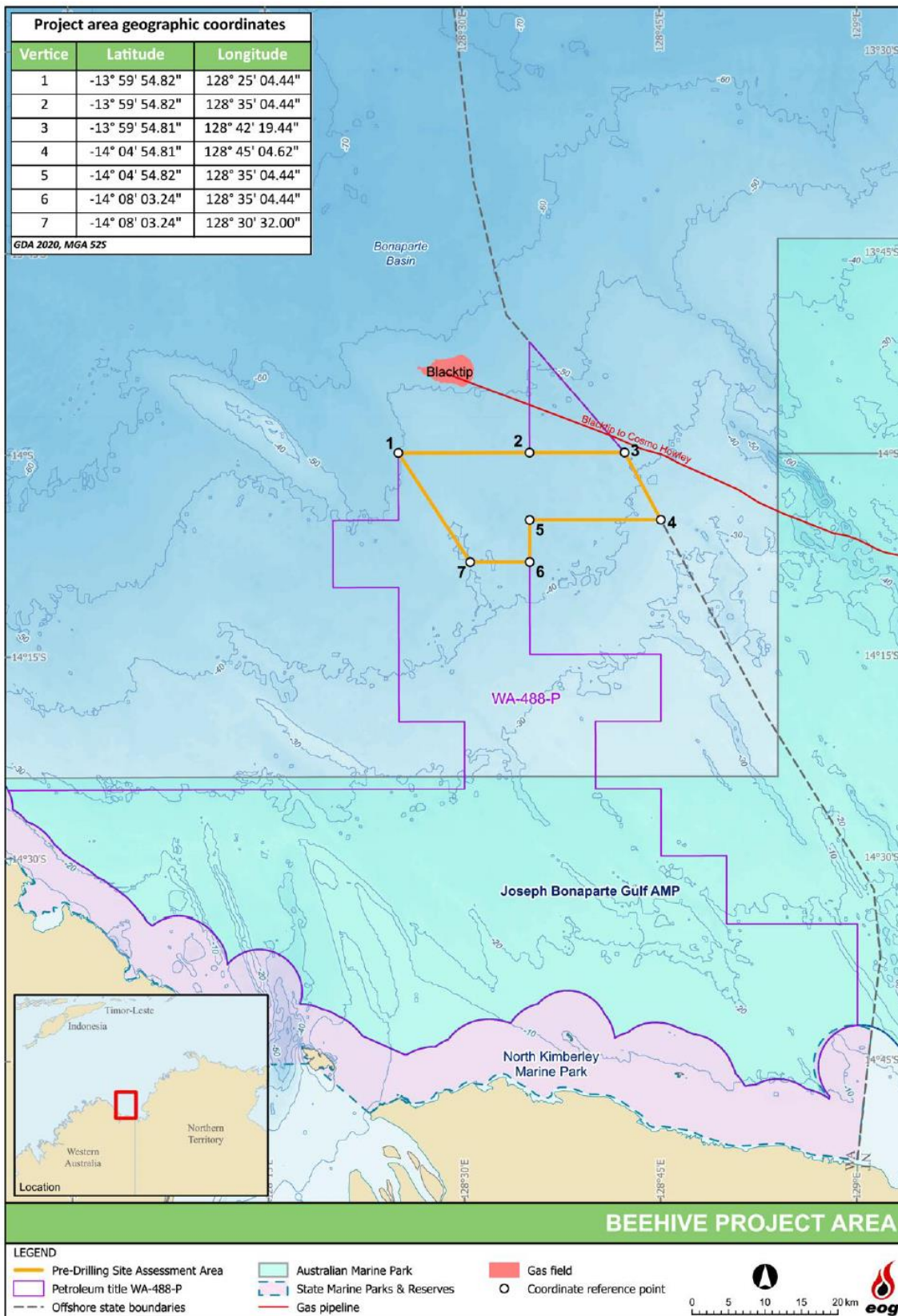


Figure 1. The Beehive-1 Project Area

Beehive-1 Exploration Well

Information Flyer #5

27 June 2022



EOG Resources Australia Block WA-488 Pty Ltd, a subsidiary of EOG Resources, Inc. (together 'EOG') as the Titleholder of Exploration Permit WA-488-P is planning to drill the Beehive-1 exploration well ('the project') in the Joseph Bonaparte Gulf in Western Australia (WA) (Figure 1, over page).

Why We're Consulting You

EOG has previously consulted with you, your group, organisation or company as a 'relevant person', defined under the Offshore Petroleum and Greenhouse Gas (Environment) Regulations 2009 as someone whose functions (power, duty, authority or responsibility), activities (things you do or have done) or interests (your rights, advantages, duties and liabilities, or concerns) may be affected by the project. Relevant persons typically include Commonwealth, State and Territory government agencies, commercial and recreational fisheries, and asset owners.

This information flyer provides an update on the project.

Who is EOG?

EOG is one of the largest independent crude oil and natural gas exploration and production companies in the United States of America (USA). EOG acquired the WA-488-P exploration permit from Finniss Offshore Exploration Pty Ltd in November 2021 with the aim of exploring known hydrocarbon prospects in the Bonaparte Basin.

EOG has operated offshore since 1992, with a history of nearly 30 years in Trinidad & Tobago, the UK North Sea and the USA Gulf of Mexico. In the past 10 years, EOG has drilled nearly 40 offshore wells, with an excellent safety and environment record.

The Project

EOG aims to explore a known hydrocarbon prospect in WA-488-P located in the Bonaparte Basin. The project includes geophysical and geotechnical investigations to characterise the seabed (collectively known as Pre-Drill Seabed Assessment or PDSA), prior to drilling an exploration well.

The *Beehive PDSA Environment Plan* (EP) for the geophysical and geotechnical investigations was accepted by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) on 2 March 2022 ([link](#)) and is approved for activities up till August 2022. The geophysical investigations are currently underway and are expected to be completed soon.

The geotechnical investigations are now expected to commence by Q2 2023, therefore EOG will prepare and submit a new EP for submission to NOPSEMA.

This information flyer is focused on the new EP for the geotechnical investigations. Additional information flyers will be issued as the project progresses.

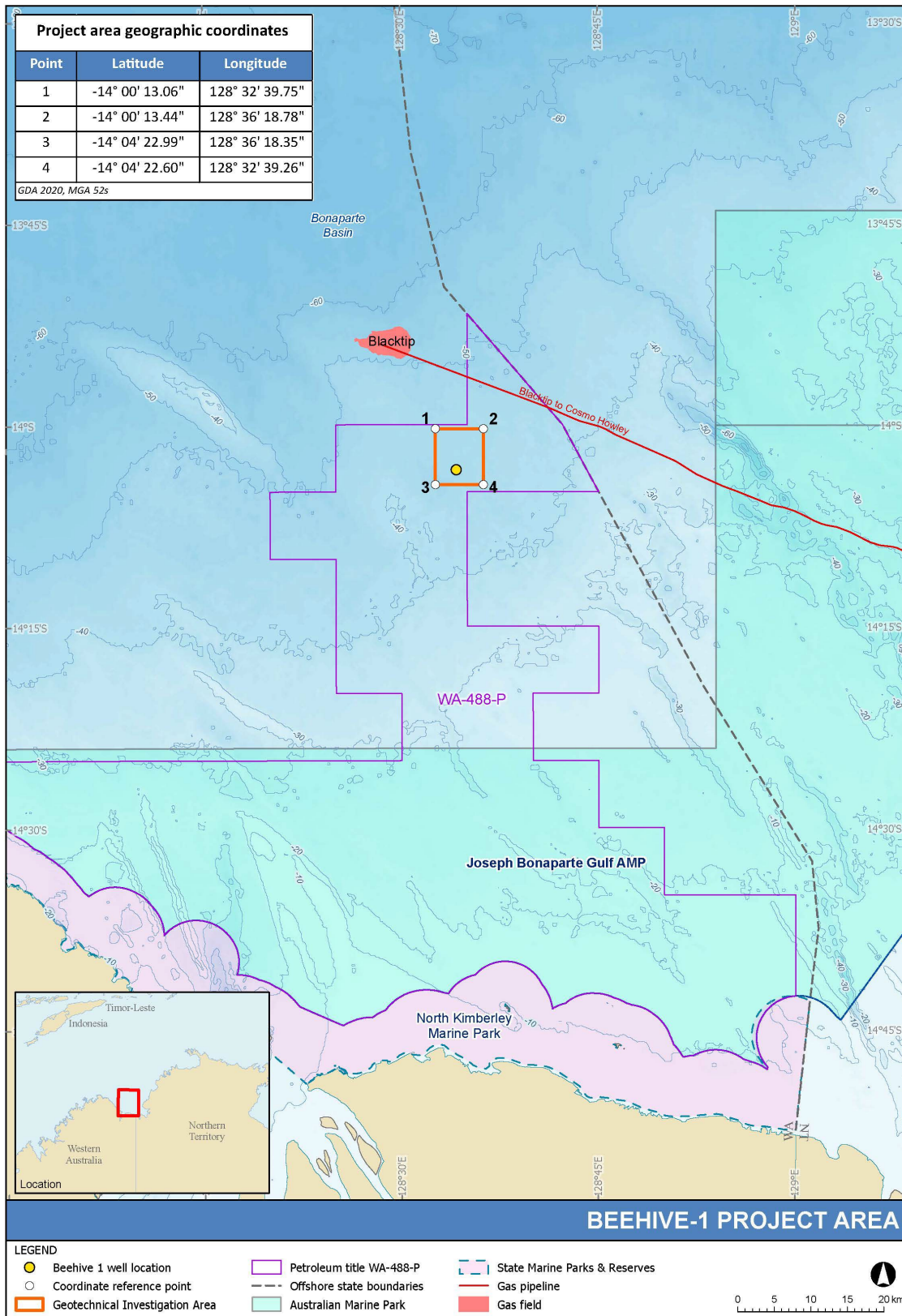


Figure 1. Beehive-1 project area

Geotechnical Investigation

The geotechnical investigations are planned to commence any time prior to Q2 2023 (contingent on the receipt of EP acceptance, vessel and equipment availability). They will be undertaken within a small area (approximately 50 km²) located 77 km from the nearest WA shoreline and 87 km from the nearest Northern Territory (NT) shoreline. Water depths in the project area range from 40 m to 50 m.

The geotechnical investigations acquire physical measurements and samples of the local shallow geology at and around the potential drill location, using the following techniques (Figure 2):

- Geological analysis of unconsolidated seabed sediments – using grab sampling.
- Geological analysis of formations below the seabed – using coring.
- Determine seabed strength – using piezo cone penetrometer testing (PCPT) and borehole sampling.

The geotechnical investigations are undertaken using a specialised medium-sized vessel and are likely to take up to two weeks to complete.

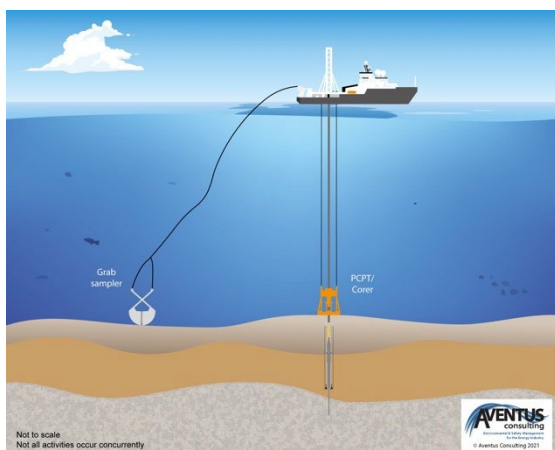


Figure 2. Geotechnical investigations

Drilling

Planning for the drilling campaign is underway. The Beehive-1 well is targeting the Sunbird Formation and anticipates the presence of a light oil or gas condensate.

A jack-up drill rig will drill the well vertically to a depth of about 5,000 m using a water-based mud system, which will take 40-50 days. In the event that hydrocarbons are discovered, well testing (that involves flaring) may take place.

It is anticipated that drilling will commence by Q3 2023 (contingent on the receipt of EP acceptance, vessel and equipment availability). Further details about the drilling campaign will be provided in future information flyers as planning progresses.

Environment Plans

As noted above, the *Beehive PDSA EP* was accepted by NOPSEMA on 2 March 2022. The EPs for the *Geotechnical Investigations* and for *Exploration Drilling* are currently being prepared. These will be submitted to the NOPSEMA for assessment. The *Exploration Drilling EP* has previously been made available on NOPSEMA's website for public exhibition prior to formal assessment by NOPSEMA.

An EP is a comprehensive document that describes the project, outlines stakeholder feedback, details the existing marine and socio-economic environment. It describes and assesses impacts and risks and outlines the control measures to avoid, minimise and mitigate environmental impacts and risks to be acceptable and ALARP (As Low As Reasonably Practicable).

The project will be subject to industry best practice standards and undertaken in accordance with all relevant environmental and safety legislation and regulations.

Features of the Project Area

Features in the project area include:

- Dominated by the Indonesian Throughflow current and strong tides.
- A seabed dominated by flat featureless plains comprising sand and gravel, with localised reefs and outcrops supporting sponge gardens. The plains contain diverse infaunal communities (e.g., crustaceans and polychaete worms).
- Seasonal presence or likely presence of threatened migratory species including turtles, sharks, sawfish, whales, dolphins and seabirds.
- Low-intensity commercial fishing by the Commonwealth managed Northern Prawn Fishery (the project area has a 0.006% overlap with the fishery).
- Some commercial fishing by the WA managed fisheries, including the Northern Demersal Scalefish Managed Fishery and the Mackerel Managed Fishery.
- An absence of NT managed commercial fisheries.
- An absence of known shipwrecks.
- Low commercial shipping traffic.
- An overlap by the Department of Defence North Australian Exercise Area.

Distances from the project area to the following features are:

- The Carbonate bank and terrace system of the Sahul Shelf Key Ecological Feature (KEF) – 13 km.
- The Blacktip unmanned wellhead platform – 13 km.
- Joseph Bonaparte Australian Marine Park (AMP) – 31 km.
- WA North Kimberley Marine Park – 64km.

The geotechnical investigations will provide more detail about the type of seabed in the project area. A summary of key impacts and

risks from the geotechnical investigations is presented in the following pages.

How to Provide Feedback

EOG encourages you to ask questions or provide feedback on the project using the following contact details:

General Inquiries:

australia@eogresources.com

PDSA Specific Inquiries:

australia_pdsa@eogresources.com

Phone: 0409 772 170

EOG will respond to feedback in a timely fashion.

Additional background project information (and this information flyer) is also available on the EOG website at:

<https://www.eogresources.com/australia>

Ongoing Consultation

Consultation with relevant persons will be ongoing throughout the project, with additional information flyers to be distributed at various milestones, and in response to any potential changes in the project

Preliminary environmental impact and risk assessment for the Beehive-1 geotechnical investigations (WA-488-P)

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
<i>Planned events</i>		
Generation of underwater sound from the geotechnical investigations and vessels	Minor, temporary and localised disruption to migration, feeding or breeding patterns for sound-sensitive fauna, such as cetaceans (whales and dolphins).	<ul style="list-style-type: none"> • Vessel engines and thrusters will be maintained in accordance with planned maintenance system to ensure they are operating efficiently. • Geotechnical activities produce negligible underwater noise. • The activity is expected to take no more than 2 weeks.
Seabed disturbance from geotechnical activities	Temporary and localised seabed turbidity. Smothering of seabed habitat by disturbed sediments.	<ul style="list-style-type: none"> • The vessel will not anchor during geotechnical investigations (it will remain on location using dynamic positioning). • Very low volumes of cuttings and drilling fluids will be discharged during borehole sampling. • Seabed grab sampling and coring activities are extremely localised. • Cored holes are very narrow and will collapse in on themselves and small surface 'craters' will quickly fill in with sediments and recolonise with benthic fauna. • Large bulky items will be securely fastened or stored on the vessel deck to prevent loss to sea. • Any dropped objects will be recovered (where safe to do so).
<i>Routine vessel discharges and emissions</i>		
Atmospheric emissions	Temporary reduction in air quality in the local air shed.	<ul style="list-style-type: none"> • Vessels >400 gross tonnes will have in place a current International Air Pollution Prevention (IAPP) certificate and Ship Energy Efficiency Management Plan (SEEMP). • Only marine-grade low sulphur diesel (no greater than 0.5% m/m) will be used. • Waste incineration will not take place. • All fuel-burning equipment will be maintained in accordance with planned maintenance systems.
Light glow	Attractant to fauna, temporary increase in predation rates on fauna attracted to lights.	<ul style="list-style-type: none"> • Vessel lighting will be kept to the minimum required but in accordance with navigational standards and personnel safety requirements for night-time work.

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
Discharge of treated sewage and grey water	Temporary and localised reduction in water quality.	<ul style="list-style-type: none"> • Sewage and grey water will be treated in a MARPOL Annex IV compliant sewage treatment plant prior to discharge (or taken back to port for disposal). • Vessels >400 gross tonnes will have in place a current International Sewage Pollution Prevention (ISPP) certificate. • In the event of a sewage treatment plant malfunction, untreated sewage will only be discharged when > 12 nm from shore or will be offloaded onshore for treatment.
Discharge of cooling water and reverse osmosis (brine)	Temporary and localised elevation in surface water temperature and salinity levels.	<ul style="list-style-type: none"> • Low impact biocides (chlorine) are used in optimised concentrations in the cooling system. • Engines and associated equipment that require cooling by water will be maintained in accordance with the planned maintenance system so that they are operating within accepted parameters. • Only low-toxicity chemicals (ONCS 'Gold'/'Silver' (CHARM) or 'D'/'E' (non-CHARM)-rated) chemicals are used in the cooling and brine water systems.
Discharge of putrescible waste	Temporary and localised increase in nutrient content of surface and near surface water quality. Temporary increase in scavenging behaviour of pelagic fish and seabirds.	<ul style="list-style-type: none"> • Putrescible waste will be macerated to <25 mm prior to discharge (or taken back to shore for disposal). • In the event of macerator malfunction, un-macerated putrescible waste will take place will be discharged when >12 nm of land or returned to shore. • Non-putrescible galley waste will be returned to shore for disposal.
Discharge of bilge water and deck drainage	Temporary and localised reduction in water quality.	<ul style="list-style-type: none"> • Vessels >400 gross tonnes will have in place a MARPOL Annex I compliant oily water separator set to limit oil-in-water content to <15 ppm prior to discharge. • Vessels >400 gross tonnes will have a current International Oil Pollution Prevention (IOPP) certificate. • No whole residual bilge oil is discharged overboard (residual oil from the oily water separator is pumped to tanks and disposed of onshore). • Chemical storage areas will be bunded and drain to the bilge tank. • Portable bunds and/or drip trays are used to collect spills or leaks from equipment that is not contained within a permanently bunded area (non-process areas). • Deck cleaning detergents will be biodegradable. • Spills to decks will be cleaned immediately using Shipboard Marine Pollution Emergency Plan (SMPEP) kits.

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
<i>Unplanned events</i>		
Accidental overboard release of hazardous and/or nonhazardous waste from the vessels	Marine pollution (litter and a temporary and localised reduction in water quality). Injury and entanglement of individual animals (such as seabirds and turtles) and smothering or pollution of benthic habitats.	<ul style="list-style-type: none"> • Vessels >100 gross tonnes or certified to carry more than 15 people will have in place and implement a vessel-specific Garbage Management Plan. • Vessel crew and visitors will be inducted into the waste management procedures. • A waste manifest will be maintained. • Only small volumes of chemicals will be kept on board and will be stored in secured drums in bunded areas away from open drains. • Bunded areas will drain through a closed system, processed through the oily water separator. • Safety Data Sheets (SDS) will be available in appropriate locations. • SMPEP kits will be available on board for rapid deck clean-up response.
Introduction of invasive marine species from the vessel hulls and/or ballast water	Reduction in native marine species diversity and abundance. Displacement of native marine species. Socio-economic impacts on commercial fisheries. Reduction of conservation values of protected areas.	<ul style="list-style-type: none"> • Vessels will carry a low risk of invasive marine species introduction (as determined through a vessel contractor prequalification report). • Vessels >400 gross tonnes will carry a current International Antifouling System (IAFS) Certificate and comply with Marine Order Part 98 (Anti-fouling Systems). • The vessel/s will comply with the: <ul style="list-style-type: none"> ○ Australian Ballast Water Management Requirements (DAWR, 2020); and ○ National Biofouling Guidance for the Petroleum Production & Exploration Industry (AQIS, 2009). • Towed/submersible equipment will be cleaned (e.g., fouling is removed) prior to initial use in the project area.
Vessel strike with megafauna (e.g., whales, dolphins, turtles)	Injury or death of individual animals.	<ul style="list-style-type: none"> • The Australian Guidelines for Whale and Dolphin Watching (DEWHA, 2005) for sea-faring activities will be implemented, which includes caution and no-approach zones around whales and dolphins. • Vessel strike causing injury to or death of a cetacean is reported via the online National Ship Strike Database within 72 hours of the incident. <p>Vessel strikes of megafauna in NT or WA waters is reported to the NT Marine Wildwatch on 1800 453 941 (or WA's Wildcare on 08-9474 9055) as soon as possible.</p> <ul style="list-style-type: none"> • Vessel crew will complete an environmental induction covering the above-listed requirements.

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
Displacement of or interference with third party vessels	Temporary loss of fishing grounds around the vessel safety zone.	<ul style="list-style-type: none"> • The project area is located in an area with low levels of shipping traffic and low fishing effort. • A 'Notice to Mariners' will be issued. • Standard maritime safety precautions will be in place, including: <ul style="list-style-type: none"> ○ Radar and other anti-collision monitoring equipment to detect other vessels. ○ Display of lights and day shapes. ○ The ability to quickly move off location to avoid other vessels. ○ Warnings issued (radio, flares, lights and horns) to avoid collisions. ○ The Vessel Master will be qualified in accordance with AMSA Marine Orders Part 3 (Seagoing qualifications) (e.g., International Convention of Standards of Watchkeeping for Seafarers, STCW95, GMDSS Proficiency). • The vessel master will sound the general alarm, manoeuvre the vessel to minimise the effects of the collision and implement all other measures as outlined in the vessel collision procedure. • Vessel collisions will be reported to AMSA if that collision has or is likely to affect the safety, operation or seaworthiness of the vessel or involves serious injury to personnel.
Diesel release due to a vessel-to vessel collision	Temporary and localised reduction in water quality. Tainting of commercial fisheries species. Injury and/or death of marine fauna and seabirds. Pathological effects on fish larvae and plankton.	<ul style="list-style-type: none"> • <i>As per 'displacement of or interference with third-party vessels', plus:</i> • No refuelling will take place on location. • Vessel crew will be trained in spill response techniques in accordance with the SMPEP and vessel training matrix. • Diesel spill trajectory modelling indicates a very small area of ecological impact in the event of the loss of a whole tank of fuel. • An Oil Pollution Emergency Plan (OPEP) will be developed based on the spill modelling results. • Vessel-specific SMPEP and project-specific OPEP will be implemented in the event of a large spill. • EOG will report the spill to regulatory authorities within 2 hours of becoming aware of the spill.

Appendix 3 Stakeholder Communications

(provided to NOPSEMA separately as sensitive information under Regulation 9(8) of the OPGGS(E))

Appendix 4 EPBC Act Protected Matters Search Tool results



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 03-Aug-2022

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	1
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	20
Listed Migratory Species:	38

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	59
Whales and Other Cetaceans:	14
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	1
Habitat Critical to the Survival of Marine Turtles:	1

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	None
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	11
Key Ecological Features (Marine):	1
Biologically Important Areas:	3
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Commonwealth Marine Area

[\[Resource Information \]](#)

Approval is required for a proposed activity that is located within the Commonwealth Marine Area which has, will have, or is likely to have a significant impact on the environment. Approval may be required for a proposed action taken outside a Commonwealth Marine Area but which has, may have or is likely to have a significant impact on the environment in the Commonwealth Marine Area.

Feature Name

Buffer Status

EEZ and Territorial Sea

In feature area

Listed Threatened Species

[\[Resource Information \]](#)

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name

Threatened Category

Presence Text

Buffer Status

BIRD

[Calidris canutus](#)

Red Knot, Knot [855]

Endangered

Species or species habitat may occur within area

In feature area

[Calidris ferruginea](#)

Curlew Sandpiper [856]

Critically Endangered

Species or species habitat may occur within area

In feature area

[Numenius madagascariensis](#)

Eastern Curlew, Far Eastern Curlew [847]

Critically Endangered

Species or species habitat may occur within area

In feature area

MAMMAL

[Balaenoptera borealis](#)

Sei Whale [34]

Vulnerable

Species or species habitat may occur within area

In feature area

[Balaenoptera musculus](#)

Blue Whale [36]

Endangered

Species or species habitat may occur within area

In feature area

[Balaenoptera physalus](#)

Fin Whale [37]

Vulnerable

Species or species habitat may occur within area

In feature area

REPTILE

Scientific Name	Threatened Category	Presence Text	Buffer Status
Aipysurus foliosquama Leaf-scaled Seasnake [1118]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area	In feature area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Congregation or aggregation known to occur within area	In feature area
SHARK			
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat may occur within area	In feature area
Glyphis garricki Northern River Shark, New Guinea River Shark [82454]	Endangered	Species or species habitat may occur within area	In feature area
Pristis clavata Dwarf Sawfish, Queensland Sawfish [68447]	Vulnerable	Species or species habitat known to occur within area	In feature area
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Species or species habitat known to occur within area	In feature area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In feature area
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In feature area

Listed Migratory Species [[Resource Information](#)]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area	In feature area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat likely to occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat likely to occur within area	In feature area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat may occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In feature area

Migratory Marine Species

Anoxypristis cuspidata Narrow Sawfish, Knifetooth Sawfish [68448]		Species or species habitat likely to occur within area	In feature area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In feature area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Species or species habitat may occur within area	In feature area
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In feature area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat may occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In feature area
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area	In feature area
Dugong dugon Dugong [28]		Species or species habitat may occur within area	In feature area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Isurus oxyrinchus Shortfin Mako, Mako Shark [79073]		Species or species habitat likely to occur within area	In feature area
Isurus paucus Longfin Mako [82947]		Species or species habitat likely to occur within area	In feature area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat likely to occur within area	In feature area
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat likely to occur within area	In feature area
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat likely to occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Congregation or aggregation known to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Pristis clavata Dwarf Sawfish, Queensland Sawfish [68447]	Vulnerable	Species or species habitat known to occur within area	In feature area
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In feature area
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In feature area
Sousa sahalensis as Sousa chinensis Australian Humpback Dolphin [87942]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus (Arafura/Timor Sea populations) Spotted Bottlenose Dolphin (Arafura/Timor Sea populations) [78900]		Species or species habitat likely to occur within area	In feature area

Migratory Wetlands Species

Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat likely to occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat likely to occur within area	In feature area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat may occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Fish			
Campichthys tricarinatus Three-keel Pipefish [66192]		Species or species habitat may occur within area	In feature area
Choeroichthys brachysoma Pacific Short-bodied Pipefish, Short-bodied Pipefish [66194]		Species or species habitat may occur within area	In feature area
Choeroichthys suillus Pig-snouted Pipefish [66198]		Species or species habitat may occur within area	In feature area
Corythoichthys amplexus Fijian Banded Pipefish, Brown-banded Pipefish [66199]		Species or species habitat may occur within area	In feature area
Corythoichthys flavofasciatus Reticulate Pipefish, Yellow-banded Pipefish, Network Pipefish [66200]		Species or species habitat may occur within area	In feature area
Corythoichthys schultzi Schultz's Pipefish [66205]		Species or species habitat may occur within area	In feature area
Doryrhamphus excisus Bluestripe Pipefish, Indian Blue-stripe Pipefish, Pacific Blue-stripe Pipefish [66211]		Species or species habitat may occur within area	In feature area
Doryrhamphus janssi Cleaner Pipefish, Janss' Pipefish [66212]		Species or species habitat may occur within area	In feature area
Halicampus brocki Brock's Pipefish [66219]		Species or species habitat may occur within area	In feature area
Halicampus grayi Mud Pipefish, Gray's Pipefish [66221]		Species or species habitat may occur within area	In feature area
Halicampus spinirostris Spiny-snout Pipefish [66225]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Haliichthys taeniophorus Ribboned Pipehorse, Ribboned Seadragon [66226]		Species or species habitat may occur within area	In feature area
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area	In feature area
Hippocampus histrix Spiny Seahorse, Thorny Seahorse [66236]		Species or species habitat may occur within area	In feature area
Hippocampus kuda Spotted Seahorse, Yellow Seahorse [66237]		Species or species habitat may occur within area	In feature area
Hippocampus planifrons Flat-face Seahorse [66238]		Species or species habitat may occur within area	In feature area
Hippocampus spinosissimus Hedgehog Seahorse [66239]		Species or species habitat may occur within area	In feature area
Micrognathus micronotopterus Tidepool Pipefish [66255]		Species or species habitat may occur within area	In feature area
Solegnathus hardwickii Pallid Pipehorse, Hardwick's Pipehorse [66272]		Species or species habitat may occur within area	In feature area
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In feature area
Solenostomus cyanopterus Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		Species or species habitat may occur within area	In feature area
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Trachyrhamphus bicoarctatus Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area	In feature area
Trachyrhamphus longirostris Straightstick Pipefish, Long-nosed Pipefish, Straight Stick Pipefish [66281]		Species or species habitat may occur within area	In feature area
Mammal			
Dugong dugon Dugong [28]		Species or species habitat may occur within area	In feature area
Reptile			
Acalyptophis peronii Horned Seasnake [1114]		Species or species habitat may occur within area	In feature area
Aipysurus duboisii Dubois' Seasnake [1116]		Species or species habitat may occur within area	In feature area
Aipysurus eydouxii Spine-tailed Seasnake [1117]		Species or species habitat may occur within area	In feature area
Aipysurus foliosquama Leaf-scaled Seasnake [1118]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Aipysurus laevis Olive Seasnake [1120]		Species or species habitat may occur within area	In feature area
Astrotia stokesii Stokes' Seasnake [1122]		Species or species habitat may occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Chitulia ornata as Hydrophis ornatus Spotted Seasnake, Ornate Reef Seasnake [87377]		Species or species habitat may occur within area	In feature area
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area	In feature area
Disteira kingii Spectacled Seasnake [1123]		Species or species habitat may occur within area	In feature area
Disteira major Olive-headed Seasnake [1124]		Species or species habitat may occur within area	In feature area
Enhydrina schistosa Beaked Seasnake [1126]		Species or species habitat may occur within area	In feature area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hydrelaps darwiniensis Black-ringed Seasnake [1100]		Species or species habitat may occur within area	In feature area
Hydrophis atriceps Black-headed Seasnake [1101]		Species or species habitat may occur within area	In feature area
Hydrophis elegans Elegant Seasnake [1104]		Species or species habitat may occur within area	In feature area
Hydrophis macdowelli as Hydrophis mcdowelli Small-headed Seasnake [75601]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lapemis curtus as Lapemis hardwickii Spine-bellied Seasnake [83554]		Species or species habitat may occur within area	In feature area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Congregation or aggregation known to occur within area	In feature area
Pelamis platurus Yellow-bellied Seasnake [1091]		Species or species habitat may occur within area	In feature area

Whales and Other Cetaceans [[Resource Information](#)]

Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera borealis Sei Whale [34]	Vulnerable	Species or species habitat may occur within area	In feature area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In feature area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Species or species habitat may occur within area	In feature area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In feature area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In feature area

Current Scientific Name	Status	Type of Presence	Buffer Status
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat likely to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Pseudorca crassidens False Killer Whale [48]		Species or species habitat likely to occur within area	In feature area
Sousa sahalensis as Sousa chinensis Australian Humpback Dolphin [87942]		Species or species habitat may occur within area	In buffer area only
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In feature area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat may occur within area	In feature area
Tursiops aduncus (Arafura/Timor Sea populations) Spotted Bottlenose Dolphin (Arafura/Timor Sea populations) [78900]		Species or species habitat likely to occur within area	In feature area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In feature area

Australian Marine Parks [[Resource Information](#)]

Park Name	Zone & IUCN Categories	Buffer Status
Joseph Bonaparte Gulf	Multiple Use Zone (IUCN VI)	In buffer area only

Habitat Critical to the Survival of Marine Turtles

Scientific Name	Behaviour	Presence	Buffer Status
Aug - Sep Natator depressus Flatback Turtle [59257]	Nesting	Known to occur	In buffer area only

Extra Information

EPBC Act Referrals				[Resource Information]	
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status	
Controlled action					
Development of Blacktip Gas Field	2003/1180	Controlled Action	Post-Approval	In feature area	
Not controlled action					
2D seismic survey, exploration permit NT/P67	2004/1587	Not Controlled Action	Completed	In buffer area only	
2D Seismic Survey in Permit Areas WA-318-P & WA-319-P, near Cape Londonderry	2004/1687	Not Controlled Action	Completed	In feature area	
Nexus Drilling Program NT-P66	2007/3745	Not Controlled Action	Completed	In feature area	
Not controlled action (particular manner)					
2D and 3D Seismic Survey	2011/6197	Not Controlled Action (Particular Manner)	Post-Approval	In feature area	
2D Marine Seismic Survey	2009/4728	Not Controlled Action (Particular Manner)	Post-Approval	In feature area	
2D Seismic survey	2009/5076	Not Controlled Action (Particular Manner)	Post-Approval	In feature area	
2D Seismic Survey in WA Permit Area TP/22 and Commonwealth Permit Area WA-280-P	2005/2100	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only	
Bonaparte 2D & 3D marine seismic survey	2011/5962	Not Controlled Action (Particular Manner)	Post-Approval	In feature area	
Petrel MC2D Marine Seismic Survey	2010/5368	Not Controlled Action (Particular Manner)	Post-Approval	In feature area	
Westralia SPAN Marine Seismic Survey, WA & NT	2012/6463	Not Controlled Action (Particular Manner)	Post-Approval	In feature area	

Key Ecological Features are the parts of the marine ecosystem that are considered to be important for the biodiversity or ecosystem functioning and integrity of the Commonwealth Marine Area.

Name	Region	Buffer Status
Carbonate bank and terrace system of the Sahul Shelf	North-west	In feature area

Biologically Important Areas

Scientific Name	Behaviour	Presence	Buffer Status
Marine Turtles			
Chelonia mydas			
Green Turtle [1765]	Foraging	Known to occur	In feature area
Lepidochelys olivacea			
Olive Ridley Turtle [1767]	Foraging	Known to occur	In feature area
Natator depressus			
Flatback Turtle [59257]	Internesting buffer	Known to occur	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.

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EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 01-Aug-2022

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	1
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	20
Listed Migratory Species:	38

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	67
Whales and Other Cetaceans:	14
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	2
Habitat Critical to the Survival of Marine Turtles:	1

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	None
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	19
Key Ecological Features (Marine):	1
Biologically Important Areas:	4
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Commonwealth Marine Area

[\[Resource Information \]](#)

Approval is required for a proposed activity that is located within the Commonwealth Marine Area which has, will have, or is likely to have a significant impact on the environment. Approval may be required for a proposed action taken outside a Commonwealth Marine Area but which has, may have or is likely to have a significant impact on the environment in the Commonwealth Marine Area.

Feature Name

Buffer Status

EEZ and Territorial Sea

In feature area

Listed Threatened Species

[\[Resource Information \]](#)

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name

Threatened Category

Presence Text

Buffer Status

BIRD

[Calidris canutus](#)

Red Knot, Knot [855]

Endangered

Species or species habitat may occur within area

In feature area

[Calidris ferruginea](#)

Curlew Sandpiper [856]

Critically Endangered

Species or species habitat may occur within area

In feature area

[Numenius madagascariensis](#)

Eastern Curlew, Far Eastern Curlew [847]

Critically Endangered

Species or species habitat may occur within area

In feature area

MAMMAL

[Balaenoptera borealis](#)

Sei Whale [34]

Vulnerable

Species or species habitat may occur within area

In feature area

[Balaenoptera musculus](#)

Blue Whale [36]

Endangered

Species or species habitat may occur within area

In feature area

[Balaenoptera physalus](#)

Fin Whale [37]

Vulnerable

Species or species habitat may occur within area

In feature area

REPTILE

Scientific Name	Threatened Category	Presence Text	Buffer Status
Aipysurus foliosquama Leaf-scaled Seasnake [1118]	Critically Endangered	Species or species habitat may occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area	In feature area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Congregation or aggregation known to occur within area	In feature area
SHARK			
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat may occur within area	In feature area
Glyphis garricki Northern River Shark, New Guinea River Shark [82454]	Endangered	Species or species habitat known to occur within area	In feature area
Pristis clavata Dwarf Sawfish, Queensland Sawfish [68447]	Vulnerable	Species or species habitat known to occur within area	In feature area
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Species or species habitat known to occur within area	In feature area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In feature area
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In feature area

Listed Migratory Species [[Resource Information](#)]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area	In feature area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat likely to occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat likely to occur within area	In feature area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat may occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In feature area

Migratory Marine Species

Anoxypristis cuspidata Narrow Sawfish, Knifetooth Sawfish [68448]		Species or species habitat likely to occur within area	In feature area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In feature area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Species or species habitat may occur within area	In feature area
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In feature area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat may occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In feature area
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area	In feature area
Dugong dugon Dugong [28]		Species or species habitat may occur within area	In feature area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Isurus oxyrinchus Shortfin Mako, Mako Shark [79073]		Species or species habitat likely to occur within area	In feature area
Isurus paucus Longfin Mako [82947]		Species or species habitat likely to occur within area	In feature area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat likely to occur within area	In feature area
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat likely to occur within area	In feature area
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat likely to occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Congregation or aggregation known to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Pristis clavata Dwarf Sawfish, Queensland Sawfish [68447]	Vulnerable	Species or species habitat known to occur within area	In feature area
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In feature area
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In feature area
Sousa sahalensis as Sousa chinensis Australian Humpback Dolphin [87942]		Species or species habitat may occur within area	In feature area
Tursiops aduncus (Arafura/Timor Sea populations) Spotted Bottlenose Dolphin (Arafura/Timor Sea populations) [78900]		Species or species habitat likely to occur within area	In feature area

Migratory Wetlands Species

Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat likely to occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat likely to occur within area	In feature area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat may occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalasseus bengalensis as Sterna bengalensis Lesser Crested Tern [66546]		Breeding known to occur within area	In feature area
Fish			
Campichthys tricarinatus Three-keel Pipefish [66192]		Species or species habitat may occur within area	In feature area
Choeroichthys brachysoma Pacific Short-bodied Pipefish, Short-bodied Pipefish [66194]		Species or species habitat may occur within area	In feature area
Choeroichthys suillus Pig-snouted Pipefish [66198]		Species or species habitat may occur within area	In feature area
Corythoichthys amplexus Fijian Banded Pipefish, Brown-banded Pipefish [66199]		Species or species habitat may occur within area	In feature area
Corythoichthys flavofasciatus Reticulate Pipefish, Yellow-banded Pipefish, Network Pipefish [66200]		Species or species habitat may occur within area	In feature area
Corythoichthys haematopterus Reef-top Pipefish [66201]		Species or species habitat may occur within area	In feature area
Corythoichthys schultzi Schultz's Pipefish [66205]		Species or species habitat may occur within area	In feature area
Doryrhamphus excisus Bluestripe Pipefish, Indian Blue-stripe Pipefish, Pacific Blue-stripe Pipefish [66211]		Species or species habitat may occur within area	In feature area
Doryrhamphus janssi Cleaner Pipefish, Janss' Pipefish [66212]		Species or species habitat may occur within area	In feature area
Festucalex cinctus Girdled Pipefish [66214]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Halicampus brocki Brock's Pipefish [66219]		Species or species habitat may occur within area	In feature area
Halicampus grayi Mud Pipefish, Gray's Pipefish [66221]		Species or species habitat may occur within area	In feature area
Halicampus spirostris Spiny-snout Pipefish [66225]		Species or species habitat may occur within area	In feature area
Haliichthys taeniophorus Ribbioned Pipehorse, Ribbioned Seadragon [66226]		Species or species habitat may occur within area	In feature area
Hippichthys cyanospilos Blue-speckled Pipefish, Blue-spotted Pipefish [66228]		Species or species habitat may occur within area	In feature area
Hippichthys parvicarinatus Short-keel Pipefish, Short-keeled Pipefish [66230]		Species or species habitat may occur within area	In feature area
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area	In feature area
Hippocampus histrix Spiny Seahorse, Thorny Seahorse [66236]		Species or species habitat may occur within area	In feature area
Hippocampus kuda Spotted Seahorse, Yellow Seahorse [66237]		Species or species habitat may occur within area	In feature area
Hippocampus planifrons Flat-face Seahorse [66238]		Species or species habitat may occur within area	In feature area
Hippocampus spinosissimus Hedgehog Seahorse [66239]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Micrognathus micronotopterus Tidepool Pipefish [66255]		Species or species habitat may occur within area	In feature area
Solegnathus hardwickii Pallid Pipehorse, Hardwick's Pipehorse [66272]		Species or species habitat may occur within area	In feature area
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In feature area
Solenostomus cyanopterus Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		Species or species habitat may occur within area	In feature area
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In feature area
Trachyrhamphus bicoarctatus Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area	In feature area
Trachyrhamphus longirostris Straightstick Pipefish, Long-nosed Pipefish, Straight Stick Pipefish [66281]		Species or species habitat may occur within area	In feature area
Mammal			
Dugong dugon Dugong [28]		Species or species habitat may occur within area	In feature area
Reptile			
Acalyptophis peronii Horned Seasnake [1114]		Species or species habitat may occur within area	In feature area
Aipysurus duboisii Dubois' Seasnake [1116]		Species or species habitat may occur within area	In feature area
Aipysurus eydouxii Spine-tailed Seasnake [1117]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Aipysurus foliosquama Leaf-scaled Seasnake [1118]	Critically Endangered	Species or species habitat may occur within area	In feature area
Aipysurus laevis Olive Seasnake [1120]		Species or species habitat may occur within area	In feature area
Astrotia stokesii Stokes' Seasnake [1122]		Species or species habitat may occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In feature area
Chitulia inornata as Hydrophis inornatus Plain Seasnake [87379]		Species or species habitat may occur within area	In feature area
Chitulia ornata as Hydrophis ornatus Spotted Seasnake, Ornate Reef Seasnake [87377]		Species or species habitat may occur within area	In feature area
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area	In feature area
Disteira kingii Spectacled Seasnake [1123]		Species or species habitat may occur within area	In feature area
Disteira major Olive-headed Seasnake [1124]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Emydocephalus annulatus Turtle-headed Seasnake [1125]		Species or species habitat may occur within area	In feature area
Enhydrina schistosa Beaked Seasnake [1126]		Species or species habitat may occur within area	In feature area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hydrelaps darwiniensis Black-ringed Seasnake [1100]		Species or species habitat may occur within area	In feature area
Hydrophis atriceps Black-headed Seasnake [1101]		Species or species habitat may occur within area	In feature area
Hydrophis elegans Elegant Seasnake [1104]		Species or species habitat may occur within area	In feature area
Hydrophis macdowelli as Hydrophis mcdowelli Small-headed Seasnake [75601]		Species or species habitat may occur within area	In feature area
Lapemis curtus as Lapemis hardwickii Spine-bellied Seasnake [83554]		Species or species habitat may occur within area	In feature area
Leioselasma pacifica as Hydrophis pacificus Large-headed Seasnake, Pacific Seasnake [87378]		Species or species habitat may occur within area	In feature area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Congregation or aggregation known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pelamis platurus Yellow-bellied Seasnake [1091]		Species or species habitat may occur within area	In feature area
Whales and Other Cetaceans			[Resource Information]
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera borealis Sei Whale [34]	Vulnerable	Species or species habitat may occur within area	In feature area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In feature area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Species or species habitat may occur within area	In feature area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In feature area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat likely to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Pseudorca crassidens False Killer Whale [48]		Species or species habitat likely to occur within area	In feature area

Current Scientific Name	Status	Type of Presence	Buffer Status
Sousa sahalensis as Sousa chinensis Australian Humpback Dolphin [87942]		Species or species habitat may occur within area	In feature area
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In feature area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat may occur within area	In feature area
Tursiops aduncus (Arafura/Timor Sea populations) Spotted Bottlenose Dolphin (Arafura/Timor Sea populations) [78900]		Species or species habitat likely to occur within area	In feature area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In feature area

Australian Marine Parks		[Resource Information]	
Park Name	Zone & IUCN Categories	Buffer Status	
Joseph Bonaparte Gulf	Multiple Use Zone (IUCN VI)	In feature area	
Joseph Bonaparte Gulf	Special Purpose Zone (IUCN VI)	In feature area	

Habitat Critical to the Survival of Marine Turtles			
Scientific Name	Behaviour	Presence	Buffer Status
Aug - Sep			
Natator depressus Flatback Turtle [59257]	Nesting	Known to occur	In feature area

Extra Information

EPBC Act Referrals					[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status	
Controlled action					
Development of Blacktip Gas Field	2003/1180	Controlled Action	Post-Approval	In feature area	
Not controlled action					
2D seismic survey, exploration permit NT/P67	2004/1587	Not Controlled Action	Completed	In feature area	

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
2D Seismic Survey in Permit Areas WA-318-P & WA-319-P, near Cape Londonderry	2004/1687	Not Controlled Action	Completed	In feature area
Nexus Drilling Program NT-P66	2007/3745	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
2D and 3D Seismic Survey	2011/6197	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
2D Marine Seismic Survey	2009/4728	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
2D marine seismic survey within permit area WA-318-P	2007/3879	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
2D Seismic survey	2009/5076	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
2D Seismic Survey in WA Permit Area TP/22 and Commonwealth Permit Area WA-280-P	2005/2100	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
3D Marine Seismic Survey	2009/4681	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Bonaparte 2D & 3D marine seismic survey	2011/5962	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Bonaparte Seismic and Bathymetric Survey	2012/6295	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Floyd 3D and Chisel 3D Seismic Surveys	2011/6220	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Kingtree & Ironstone-1 Exploration Wells	2011/5935	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action (particular manner)				
Nova 3D Seismic Survey	2013/6825	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
NT/P77 3D Marine Seismic Survey	2009/4683	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Petrel MC2D Marine Seismic Survey	2010/5368	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Westralia SPAN Marine Seismic Survey, WA & NT	2012/6463	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Referral decision

Nova 3D Seismic Survey, WA 442-NT/P81, Joseph Bonaparte Gulf	2013/6820	Referral Decision	Completed	In feature area
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Key Ecological Features

[\[Resource Information \]](#)

Key Ecological Features are the parts of the marine ecosystem that are considered to be important for the biodiversity or ecosystem functioning and integrity of the Commonwealth Marine Area.

Name	Region	Buffer Status
Carbonate bank and terrace system of the Sahul Shelf	North-west	In feature area

Biologically Important Areas

Scientific Name	Behaviour	Presence	Buffer Status
Marine Turtles			
Chelonia mydas			
Green Turtle [1765]	Foraging	Known to occur	In feature area
Lepidochelys olivacea			
Olive Ridley Turtle [1767]	Foraging	Known to occur	In feature area
Natator depressus			
Flatback Turtle [59257]	Internesting buffer	Known to occur	In feature area

Seabirds

Thalasseus bengalensis			
Lesser Crested Tern [66546]	Breeding	Known to occur	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.

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EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 01-Aug-2022

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	1
Wetlands of International Importance (Ramsar)	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	1
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	47
Listed Migratory Species:	64

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	110
Whales and Other Cetaceans:	25
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	3
Habitat Critical to the Survival of Marine Turtles:	2

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	9
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	49
Key Ecological Features (Marine):	3
Biologically Important Areas:	18
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

National Heritage Places [\[Resource Information \]](#)

Name	State	Legal Status	Buffer Status
Natural			
The West Kimberley	WA	Listed place	In feature area

Wetlands of International Importance (Ramsar Wetlands) [\[Resource Information \]](#)

Ramsar Site Name	Proximity	Buffer Status
Ord river floodplain	Within Ramsar site	In feature area

Commonwealth Marine Area [\[Resource Information \]](#)

Approval is required for a proposed activity that is located within the Commonwealth Marine Area which has, will have, or is likely to have a significant impact on the environment. Approval may be required for a proposed action taken outside a Commonwealth Marine Area but which has, may have or is likely to have a significant impact on the environment in the Commonwealth Marine Area.

Feature Name	Buffer Status
EEZ and Territorial Sea	In feature area

Listed Threatened Species [\[Resource Information \]](#)

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris tenuirostris Great Knot [862]	Critically Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat likely to occur within area	In feature area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat known to occur within area	In feature area
Erythrura gouldiae Gouldian Finch [413]	Endangered	Species or species habitat likely to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat known to occur within area	In feature area
Falcunculus frontatus whitei Crested Shrike-tit (northern), Northern Shrike-tit [26013]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Geophaps smithii smithii Partridge Pigeon (eastern) [64441]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat may occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Papasula abbotti Abbott's Booby [59297]	Endangered	Species or species habitat may occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tyto novaehollandiae kimberli Masked Owl (northern) [26048]	Vulnerable	Species or species habitat likely to occur within area	In feature area
FISH			
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Breeding known to occur within area	In feature area
MAMMAL			
Antechinus bellus Fawn Antechinus [344]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In feature area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Conilurus penicillatus Brush-tailed Rabbit-rat, Brush-tailed Tree-rat, Pakooma [132]	Vulnerable	Species or species habitat may occur within area	In feature area
Dasyurus hallucatus Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat known to occur within area	In feature area
Macroderma gigas Ghost Bat [174]	Vulnerable	Species or species habitat known to occur within area	In feature area
Mesembriomys gouldii gouldii Black-footed Tree-rat (Kimberley and mainland Northern Territory), Djintamoonga, Manbul [87618]	Endangered	Species or species habitat may occur within area	In feature area
Petrogale concinna canescens Nabarlek (Top End) [87606]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Petrogale concinna monastria Nabarlek (Kimberley) [87607]	Endangered	Species or species habitat likely to occur within area	In feature area
Phascogale pirata Northern Brush-tailed Phascogale [82954]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Saccolaimus saccolaimus nudicluniatus Bare-rumped Sheath-tailed Bat, Bare-rumped Sheath-tail Bat [66889]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Trichosurus vulpecula arnhemensis Northern Brushtail Possum [83091]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Xeromys myoides Water Mouse, False Water Rat, Yirrkoo [66]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			
Acanthopphis hawkei Plains Death Adder [83821]	Vulnerable	Species or species habitat may occur within area	In feature area
Aipysurus apraefrontalis Short-nosed Seasnake [1115]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Aipysurus foliosquama Leaf-scaled Seasnake [1118]	Critically Endangered	Species or species habitat may occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding known to occur within area	In feature area

SHARK

Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat may occur within area	In feature area
Glyphis garricki Northern River Shark, New Guinea River Shark [82454]	Endangered	Breeding known to occur within area	In feature area
Pristis clavata Dwarf Sawfish, Queensland Sawfish [68447]	Vulnerable	Breeding known to occur within area	In feature area
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Species or species habitat known to occur within area	In feature area
Rhincodon typus Whale Shark [66680]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In feature area

Listed Migratory Species

[[Resource Information](#)]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Breeding known to occur within area	In feature area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area	In feature area
Onychoprion anaethetus Bridled Tern [82845]		Breeding known to occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat likely to occur within area	In feature area
Sterna dougallii Roseate Tern [817]		Breeding likely to occur within area	In feature area
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area	In feature area
Migratory Marine Species			
Anoxypristis cuspidata Narrow Sawfish, Knifetooth Sawfish [68448]		Species or species habitat known to occur within area	In feature area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In feature area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In feature area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat may occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In feature area
Dugong dugon Dugong [28]		Species or species habitat known to occur within area	In feature area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In feature area
Isurus oxyrinchus Shortfin Mako, Mako Shark [79073]		Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Isurus paucus Longfin Mako [82947]		Species or species habitat likely to occur within area	In feature area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat likely to occur within area	In feature area
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat likely to occur within area	In feature area
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat likely to occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding known to occur within area	In feature area
Orcaella heinsohni Australian Snubfin Dolphin [81322]		Species or species habitat known to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Physeter macrocephalus Sperm Whale [59]		Species or species habitat may occur within area	In buffer area only
Pristis clavata Dwarf Sawfish, Queensland Sawfish [68447]	Vulnerable	Breeding known to occur within area	In feature area
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Species or species habitat known to occur within area	In feature area
Rhincodon typus Whale Shark [66680]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Sousa sahalensis as Sousa chinensis Australian Humpback Dolphin [87942]		Foraging, feeding or related behaviour known to occur within area	In feature area
Tursiops aduncus (Arafura/Timor Sea populations) Spotted Bottlenose Dolphin (Arafura/Timor Sea populations) [78900]		Species or species habitat known to occur within area	In feature area
Migratory Terrestrial Species			
Cecropis daurica Red-rumped Swallow [80610]		Species or species habitat may occur within area	In feature area
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area	In feature area
Hirundo rustica Barn Swallow [662]		Species or species habitat may occur within area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat likely to occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat likely to occur within area	In feature area

Migratory Wetlands Species

Scientific Name	Threatened Category	Presence Text	Buffer Status
Acrocephalus orientalis Oriental Reed-Warbler [59570]		Species or species habitat may occur within area	In feature area
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]		Species or species habitat likely to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area	In feature area
Calidris alba Sanderling [875]		Species or species habitat likely to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Calidris tenuirostris Great Knot [862]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area	In feature area
Glareola maldivarum Oriental Pratincole [840]		Species or species habitat may occur within area	In feature area
Limnodromus semipalmatus Asian Dowitcher [843]		Species or species habitat may occur within area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Limosa limosa Black-tailed Godwit [845]		Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius phaeopus Whimbrel [849]		Species or species habitat likely to occur within area	In feature area
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In feature area
Pluvialis squatarola Grey Plover [865]		Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands

[\[Resource Information \]](#)

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land Name	State	Buffer Status
Defence		
Defence - MT GOODWIN RADAR SITE [70063]	NT	In feature area

Listed Marine Species		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Acrocephalus orientalis Oriental Reed-Warbler [59570]		Species or species habitat may occur within area overfly marine area	In feature area
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In feature area
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In feature area
Anseranas semipalmata Magpie Goose [978]		Species or species habitat may occur within area overfly marine area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Arenaria interpres Ruddy Turnstone [872]		Species or species habitat likely to occur within area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area	In feature area
Calidris alba Sanderling [875]		Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris tenuirostris Great Knot [862]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In feature area
Cecropis daurica as Hirundo daurica Red-rumped Swallow [80610]		Species or species habitat may occur within area overfly marine area	In feature area
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat likely to occur within area	In feature area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Chroicocephalus novaehollandiae as Larus novaehollandiae Silver Gull [82326]		Breeding known to occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Breeding known to occur within area	In feature area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area	In feature area
Glareola maldivarum Oriental Pratincole [840]		Species or species habitat may occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hirundo rustica Barn Swallow [662]		Species or species habitat may occur within area overfly marine area	In feature area
Limnodromus semipalmatus Asian Dowitcher [843]		Species or species habitat may occur within area overfly marine area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Limosa limosa Black-tailed Godwit [845]		Species or species habitat likely to occur within area overfly marine area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat likely to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius phaeopus Whimbrel [849]		Species or species habitat likely to occur within area	In feature area
Onychoprion anaethetus as Sterna anaethetus Bridled Tern [82845]		Breeding known to occur within area	In feature area
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In feature area
Papasula abbotti Abbott's Booby [59297]	Endangered	Species or species habitat may occur within area	In buffer area only
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat likely to occur within area	In feature area
Pluvialis squatarola Grey Plover [865]		Species or species habitat likely to occur within area overfly marine area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat likely to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Sterna dougallii Roseate Tern [817]		Breeding likely to occur within area	In feature area
Sternula albifrons as Sterna albifrons Little Tern [82849]		Species or species habitat may occur within area	In feature area
Thalasseus bengalensis as Sterna bengalensis Lesser Crested Tern [66546]		Breeding known to occur within area	In feature area
Fish			
Bhanotia fasciolata Corrugated Pipefish, Barbed Pipefish [66188]		Species or species habitat may occur within area	In feature area
Campichthys tricarinatus Three-keel Pipefish [66192]		Species or species habitat may occur within area	In feature area
Choeroichthys brachysoma Pacific Short-bodied Pipefish, Short-bodied Pipefish [66194]		Species or species habitat may occur within area	In feature area
Choeroichthys suillus Pig-snouted Pipefish [66198]		Species or species habitat may occur within area	In feature area
Corythoichthys amplexus Fijian Banded Pipefish, Brown-banded Pipefish [66199]		Species or species habitat may occur within area	In feature area
Corythoichthys flavofasciatus Reticulate Pipefish, Yellow-banded Pipefish, Network Pipefish [66200]		Species or species habitat may occur within area	In feature area
Corythoichthys haematopterus Reef-top Pipefish [66201]		Species or species habitat may occur within area	In feature area
Corythoichthys intestinalis Australian Messmate Pipefish, Banded Pipefish [66202]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Corythoichthys schultzi Schultz's Pipefish [66205]		Species or species habitat may occur within area	In feature area
Cosmocampus banneri Roughridge Pipefish [66206]		Species or species habitat may occur within area	In feature area
Doryrhamphus dactyliophorus Banded Pipefish, Ringed Pipefish [66210]		Species or species habitat may occur within area	In feature area
Doryrhamphus excisus Bluestripe Pipefish, Indian Blue-stripe Pipefish, Pacific Blue-stripe Pipefish [66211]		Species or species habitat may occur within area	In feature area
Doryrhamphus janssi Cleaner Pipefish, Janss' Pipefish [66212]		Species or species habitat may occur within area	In feature area
Festucalex cinctus Girdled Pipefish [66214]		Species or species habitat may occur within area	In feature area
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area	In feature area
Halicampus brocki Brock's Pipefish [66219]		Species or species habitat may occur within area	In feature area
Halicampus dunckeri Red-hair Pipefish, Duncker's Pipefish [66220]		Species or species habitat may occur within area	In feature area
Halicampus grayi Mud Pipefish, Gray's Pipefish [66221]		Species or species habitat may occur within area	In feature area
Halicampus spinirostris Spiny-snout Pipefish [66225]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Haliichthys taeniophorus Ribboned Pipehorse, Ribboned Seadragon [66226]		Species or species habitat may occur within area	In feature area
Hippichthys cyanospilos Blue-speckled Pipefish, Blue-spotted Pipefish [66228]		Species or species habitat may occur within area	In feature area
Hippichthys parvicarinatus Short-keel Pipefish, Short-keeled Pipefish [66230]		Species or species habitat may occur within area	In feature area
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area	In feature area
Hippocampus angustus Western Spiny Seahorse, Narrow-bellied Seahorse [66234]		Species or species habitat may occur within area	In feature area
Hippocampus histrix Spiny Seahorse, Thorny Seahorse [66236]		Species or species habitat may occur within area	In feature area
Hippocampus kuda Spotted Seahorse, Yellow Seahorse [66237]		Species or species habitat may occur within area	In feature area
Hippocampus planifrons Flat-face Seahorse [66238]		Species or species habitat may occur within area	In feature area
Hippocampus spinosissimus Hedgehog Seahorse [66239]		Species or species habitat may occur within area	In feature area
Micrognathus micronotopterus Tidepool Pipefish [66255]		Species or species habitat may occur within area	In feature area
Solegnathus hardwickii Pallid Pipehorse, Hardwick's Pipehorse [66272]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In feature area
Solenostomus cyanopterus Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		Species or species habitat may occur within area	In feature area
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In feature area
Trachyrhamphus bicoarctatus Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area	In feature area
Trachyrhamphus longirostris Straightstick Pipefish, Long-nosed Pipefish, Straight Stick Pipefish [66281]		Species or species habitat may occur within area	In feature area
Mammal			
Dugong dugon Dugong [28]		Species or species habitat known to occur within area	In feature area
Reptile			
Acalyptophis peronii Horned Seasnake [1114]		Species or species habitat may occur within area	In feature area
Aipysurus apraefrontalis Short-nosed Seasnake [1115]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Aipysurus duboisii Dubois' Seasnake [1116]		Species or species habitat may occur within area	In feature area
Aipysurus eydouxii Spine-tailed Seasnake [1117]		Species or species habitat may occur within area	In feature area
Aipysurus foliosquama Leaf-scaled Seasnake [1118]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Aipysurus laevis Olive Seasnake [1120]		Species or species habitat may occur within area	In feature area
Astrotia stokesii Stokes' Seasnake [1122]		Species or species habitat may occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Chitulia inornata as Hydrophis inornatus Plain Seasnake [87379]		Species or species habitat may occur within area	In feature area
Chitulia ornata as Hydrophis ornatus Spotted Seasnake, Ornate Reef Seasnake [87377]		Species or species habitat may occur within area	In feature area
Crocodylus johnstoni Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773]		Species or species habitat may occur within area	In feature area
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In feature area
Disteira kingii Spectacled Seasnake [1123]		Species or species habitat may occur within area	In feature area
Disteira major Olive-headed Seasnake [1124]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Emydocephalus annulatus Turtle-headed Seasnake [1125]		Species or species habitat may occur within area	In feature area
Enhydrina schistosa Beaked Seasnake [1126]		Species or species habitat may occur within area	In feature area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In feature area
Hydrelaps darwiniensis Black-ringed Seasnake [1100]		Species or species habitat may occur within area	In feature area
Hydrophis atriceps Black-headed Seasnake [1101]		Species or species habitat may occur within area	In feature area
Hydrophis elegans Elegant Seasnake [1104]		Species or species habitat may occur within area	In feature area
Hydrophis macdowelli as Hydrophis mcdowelli Small-headed Seasnake [75601]		Species or species habitat may occur within area	In feature area
Lapemis curtus as Lapemis hardwickii Spine-bellied Seasnake [83554]		Species or species habitat may occur within area	In feature area
Leioselasma coggeri as Hydrophis coggeri Black-headed Sea Snake, Slender-necked Seasnake [87373]		Species or species habitat may occur within area	In feature area
Leioselasma pacifica as Hydrophis pacificus Large-headed Seasnake, Pacific Seasnake [87378]		Species or species habitat may occur within area	In feature area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding known to occur within area	In feature area
Parahydrophis mertoni Northern Mangrove Seasnake [1090]		Species or species habitat may occur within area	In feature area
Pelamis platurus Yellow-bellied Seasnake [1091]		Species or species habitat may occur within area	In feature area

Whales and Other Cetaceans [[Resource Information](#)]

Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera borealis Sei Whale [34]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In feature area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In feature area
Feresa attenuata Pygmy Killer Whale [61]		Species or species habitat may occur within area	In buffer area only
Globicephala macrorhynchus Short-finned Pilot Whale [62]		Species or species habitat may occur within area	In buffer area only
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In feature area

Current Scientific Name	Status	Type of Presence	Buffer Status
Kogia breviceps Pygmy Sperm Whale [57]		Species or species habitat may occur within area	In buffer area only
Kogia sima as Kogia simus Dwarf Sperm Whale [85043]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat likely to occur within area	In feature area
Orcaella heinsohni as Orcaella brevirostris Australian Snubfin Dolphin [81322]		Species or species habitat known to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Peponocephala electra Melon-headed Whale [47]		Species or species habitat may occur within area	In buffer area only
Physeter macrocephalus Sperm Whale [59]		Species or species habitat may occur within area	In buffer area only
Pseudorca crassidens False Killer Whale [48]		Species or species habitat likely to occur within area	In feature area
Sousa sahalensis as Sousa chinensis Australian Humpback Dolphin [87942]		Foraging, feeding or related behaviour known to occur within area	In feature area
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In feature area
Stenella coeruleoalba Striped Dolphin, Euphrosyne Dolphin [52]		Species or species habitat may occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
Stenella longirostris Long-snouted Spinner Dolphin [29]		Species or species habitat may occur within area	In buffer area only
Steno bredanensis Rough-toothed Dolphin [30]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In feature area
Tursiops aduncus (Arafura/Timor Sea populations) Spotted Bottlenose Dolphin (Arafura/Timor Sea populations) [78900]		Species or species habitat known to occur within area	In feature area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In feature area
Ziphius cavirostris Cuvier's Beaked Whale, Goose-beaked Whale [56]		Species or species habitat may occur within area	In buffer area only

Australian Marine Parks		[Resource Information]	
Park Name	Zone & IUCN Categories	Buffer Status	
Joseph Bonaparte Gulf	Multiple Use Zone (IUCN VI)	In feature area	
Kimberley	Multiple Use Zone (IUCN VI)	In feature area	
Joseph Bonaparte Gulf	Special Purpose Zone (IUCN VI)	In feature area	

Habitat Critical to the Survival of Marine Turtles			
Scientific Name	Behaviour	Presence	Buffer Status
Aug - Sep			
Natator depressus Flatback Turtle [59257]	Nesting	Known to occur	In feature area
Dec - Jan			
Chelonia mydas Green Turtle [1765]	Nesting	Known to occur	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Balanggarra	Indigenous Protected Area	WA	In feature area
Keep River	Proposed National Parks NT Act park or park addition		In feature area
Lesueur Island	Nature Reserve	WA	In feature area
Marri-Jabin (Thamurrurr - Stage 1)	Indigenous Protected Area	NT	In feature area
North Kimberley	Marine Park	WA	In feature area
Ord River	Nature Reserve	WA	In feature area
Pelican Island	Nature Reserve	WA	In feature area
Unnamed WA44677	5(1)(h) Reserve	WA	In feature area
Uunguu	Indigenous Protected Area	WA	In feature area

Nationally Important Wetlands		[Resource Information]
Wetland Name	State	Buffer Status
Ord Estuary System	WA	In feature area

EPBC Act Referrals					[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status	
Controlled action					
275 km gas pipeline from Wadeye to existing Darwin gas pipeline	2006/2930	Controlled Action	Post-Approval	In feature area	
Australia-ASEAN Power Link	2020/8818	Controlled Action	Proposed Decision	In feature area	
Blacktip Project - Wharf Construction	2007/3293	Controlled Action	Completed	In feature area	
Bonaparte Liquified Natural Gas Project	2011/6141	Controlled Action	Post-Approval	In feature area	
Development of Blacktip Gas Field	2003/1180	Controlled Action	Post-Approval	In feature area	
Ichthys Gas Field, Offshore and onshore processing facilities and subsea pipeline	2008/4208	Controlled Action	Post-Approval	In feature area	

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Trans-territory Gas Pipeline	2003/1186	Controlled Action	Completed	In feature area
Not controlled action				
2D seismic survey, exploration permit NT/P67	2004/1587	Not Controlled Action	Completed	In feature area
2D Seismic Survey in Permit Areas WA-318-P & WA-319-P, near Cape Londonderry	2004/1687	Not Controlled Action	Completed	In feature area
Drilling of Marina-1 Exploration Well	2007/3586	Not Controlled Action	Completed	In feature area
Marine Survey for the Australia-ASEAN Power Link AAPL	2020/8714	Not Controlled Action	Completed	In feature area
Nexus Drilling Program NT-P66	2007/3745	Not Controlled Action	Completed	In feature area
Project Highclere Geophysical Survey	2021/9023	Not Controlled Action	Completed	In feature area
Strumbo-1 Gas Exploration Well Permit Area WA-288-P	2002/884	Not Controlled Action	Completed	In feature area
Thresher-1 Well	2000/84	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
2D and 3D Seismic Survey	2011/6197	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
2D and 3D Seismic Survey WA-405-P	2009/5104	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
2D and 3D Seismic Survey WA-405-P	2008/4133	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
2D Marine Seismic Survey	2009/4728	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
2D marine seismic survey of Braveheart, Kurrajong, Sunshine and Crocodile	2006/2917	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
2D marine seismic survey within permit area WA-318-P	2007/3879	Not Controlled Action (Particular	Post-Approval	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action (particular manner)				
		Manner)		
2D Seismic survey	2009/5076	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
2D Seismic Survey in WA Permit Area TP/22 and Commonwealth Permit Area WA-280-P	2005/2100	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
3D Marine Seismic Survey	2009/4681	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Blacktip Gas Project Yelcherr Beach Wharf Construction	2007/3537	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Bonaparte 2D & 3D marine seismic survey	2011/5962	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Bonaparte Basin Seabed Mapping Survey	2009/4951	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Bonaparte Seismic and Bathymetric Survey	2012/6295	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Braveheart 2D Infill Marine Seismic Survey 100km offshore	2008/4442	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Braveheart 2D Marine Seismic Survey	2005/2322	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Canis 3D Marine Seismic Survey	2008/4492	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Drilling of Exploration & Appraisal Wells Braveheart-1 & Cornea-3	2009/5160	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action (particular manner)				
Fishburn2D Marine Seismic Survey	2012/6659	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Floyd 3D and Chisel 3D Seismic Surveys	2011/6220	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Gold 2D Marine Seismic Survey Permit Areas WA375P and WA376P	2009/4698	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Joseph Bonaparte Gulf Seabed mapping survey	2010/5517	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Kingtree & Ironstone-1 Exploration Wells	2011/5935	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Marine Environmental Survey 2012	2012/6310	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Nova 3D Seismic Survey	2013/6825	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
NT/P77 3D Marine Seismic Survey	2009/4683	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Offshore Fibre Optic Cable Network Construction & Operation, Port Hedland WA to Darwin NT	2014/7223	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Petrel MC2D Marine Seismic Survey	2010/5368	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Removal of Potential Unexploded Ordnance within NAXA	2012/6503	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Santos Petrel-7 Offshore Appraisal Drilling Programme (Bonaparte Basin)	2011/5934	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action (particular manner)				
		Manner)		
Vampire 2D Non Exclusive Seismic Survey, WA	2010/5543	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Westralia SPAN Marine Seismic Survey, WA & NT	2012/6463	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Referral decision				
2D Marine Seismic Survey	2008/4623	Referral Decision	Completed	In feature area
Darwin Pipeline Duplication DPD Project	2022/9166	Referral Decision	Referral Publication	In feature area
Nova 3D Seismic Survey, WA 442-NT/P81, Joseph Bonaparte Gulf	2013/6820	Referral Decision	Completed	In feature area

Key Ecological Features [[Resource Information](#)]

Key Ecological Features are the parts of the marine ecosystem that are considered to be important for the biodiversity or ecosystem functioning and integrity of the Commonwealth Marine Area.

Name	Region	Buffer Status
Ancient coastline at 125 m depth contour	North-west	In feature area
Carbonate bank and terrace system of the Sahul Shelf	North-west	In feature area
Pinnacles of the Bonaparte Basin	North-west	In feature area

Biologically Important Areas

Scientific Name	Behaviour	Presence	Buffer Status
Dolphins			
Orcaella heinsohni			
Australian Snubfin Dolphin [81322]	Breeding	Known to occur	In feature area
Orcaella heinsohni			
Australian Snubfin Dolphin [81322]	Calving	Known to occur	In feature area
Orcaella heinsohni			
Australian Snubfin Dolphin [81322]	Foraging (high density prey)	Known to occur	In feature area
Orcaella heinsohni			
Australian Snubfin Dolphin [81322]	Resting	Known to occur	In feature area

Scientific Name	Behaviour	Presence	Buffer Status
Sousa chinensis Indo-Pacific Humpback Dolphin [50]	Foraging	Likely to occur	In feature area
Sousa chinensis Indo-Pacific Humpback Dolphin [50]	Significant habitat - unknown behaviour	Likely to occur	In feature area
Marine Turtles			
Caretta caretta Loggerhead Turtle [1763]	Foraging	Known to occur	In feature area
Chelonia mydas Green Turtle [1765]	Foraging	Known to occur	In feature area
Chelonia mydas Green Turtle [1765]	Internesting buffer	Known to occur	In feature area
Lepidochelys olivacea Olive Ridley Turtle [1767]	Foraging	Known to occur	In feature area
Natator depressus Flatback Turtle [59257]	Foraging	Known to occur	In feature area
Natator depressus Flatback Turtle [59257]	Internesting	Likely to occur	In feature area
Natator depressus Flatback Turtle [59257]	Internesting buffer	Known to occur	In feature area
Natator depressus Flatback Turtle [59257]	Nesting	Known to occur	In feature area
Seabirds			
Fregata ariel Lesser Frigatebird [1012]	Breeding	Known to occur	In feature area
Sterna dougallii Roseate Tern [817]	Breeding	Known to occur	In feature area
Thalasseus bengalensis Lesser Crested Tern [66546]	Breeding	Known to occur	In feature area
Sharks			

Scientific Name	Behaviour	Presence	Buffer Status
Rhincodon typus Whale Shark [66680]	Foraging	Known to occur	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
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- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.

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