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Esso Australia Resources Pty Ltd

**Gippsland Basin Geophysical and Geotechnical Investigations
Environment Plan Revision 2**

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Abbreviations

Abbreviation	Description
AFMA	Australian Fisheries Management Authority
AHS	Australian Hydrographic Society
ALARP	As Low As Reasonably Practicable
AMOSC	Australian Marine Oil Spill Centre
AMSA	Australian Maritime Safety Authority
ANZECC	Australian and New Zealand Environment and Conservation Council
APASA	Asia Pacific Applied Science Association
APPEA	Australian Petroleum Production and Exploration Association
AQIS	Australian Quarantine Inspection Service
AS/NZS	Australian Standards/New Zealand Standards
ATBA	Area To Be Avoided
BHP	BHP Billiton Petroleum (Bass Strait) Pty Ltd



BOM	Bureau of Meteorology
BSCZSF	Bass Strait Central Zone Scallop Fishery
BSEP	Bass Strait Environment Plan
CHARM	Chemical Hazard and Risk Management Model
CO	Carbon Monoxide
CO2	Carbon Dioxide
CVIT	Commonwealth Victoria Inshore Trawl
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
DELWP	Department of Environment, Land, Water and Planning
DoEE	Department of the Environment and Energy
DoIIS	Department of Industry, Innovation and Science
DP	Dynamic Positioning
EAPL	Esso Australia Pty Ltd
EARPL	Esso Australia Resources Pty Ltd
EEZ	Exclusive Economic Zone
EMRS	Esso Maintenance and Reliability System
EP	Environment Plan
EPA	Environment Protection Authority
EPBC	Environment Protection and Biodiversity Conservation
ERA	Environmental Risk Assessment
ERM	Emergency Response Manual
ESD	Emergency Shutdown
ESG	Emergency Support Group
EWMM	Esso Work Management Manual
FIMS	Facility Integrity Management System
GBJVOA	Gippsland Basin Joint Venture Operational Agreement
GHG	Greenhouse Gases
HAZID	Hazard Identification workshops
IMT	Incident Management Team
JRCC	Joint Rescue Coordination Centre
JV	Joint Venture
KPI	Key Performance Indicators
KUJV	Kipper Unity Joint Venture
KUJVOA	Kipper Unit Joint Venture Operational Agreement
LEFCOL	Lakes Entrance Fishing Co-operative Limited



LEL	Lower Exposure Limit
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships
MLWL	Mean Low Water Level
MSDS	Material Safety Data Sheet
MSF	Module Support Frame
MSL	Mean Sea Level
NEPM	National Environment Pollution Measures
NM	Nautical Mile
NOPSEMA	National Offshore Petroleum Safety and Environmental Management Authority
OCNS	Offshore Chemical Notification Scheme
ODSP	Open Drain Skimmer Piles
OIMS	Operations Integrity Management System
OIW	Oil-In-Water
OPEP	Oil Pollution Emergency Plan
OPGGGS Act	Offshore Petroleum and Greenhouse Gas Storage Act 2006
ORCA	Oilspill Resources Company of Australia
OSR	Oil Spill Response
OSTM	Oil Spill Trajectory Modelling
PIC	Person In Charge
PSZ	Petroleum Safety Zone
RAMSAR	Convention on Wetlands of International Importance
RAPIDS	Remotely Activated Pressure Inventory Depressuring System
RC	Required Competencies
RO	Reverse Osmosis
ROV	Remotely Operated Vehicle
RRT	Regional Response Team
SESSF	Southern and Eastern Scalefish and Shark Fishery
SETF	South Eastern Trawl Fishery
SIMAP	Spill Impact Mapping and Analysis Program
SSHE	Safety, Security, Health, Environment
TD	Total Depth
WCDS	Worst Credible Discharge Scenario
WMM	Waste Management Manual
WMP	Waste Management Plan
WOMP	Well Operations Management Plan



ZPI

Zone of Potential Impact



1. Introduction

1.1 Overview

Esso proposes to undertake geophysical and geotechnical surveys across multiple licence areas located within Commonwealth waters of the Gippsland Basin in Bass Strait.

The survey activities are required to inform a number of prospective future developments in the Gippsland basin (as shown in Figure 1-1). These include:

- Development of the West Barracouta gas field (VIC/L1) which is part of the existing Barracouta gas field and located approximately 6 km southwest of the existing Barracouta platform (in VIC/L2)
- Potential plug and abandonment activities at a number of existing wells located in VIC/L1, VIC/L2, VIC/L3, VIC/L5, VIC/L9, VIC/L15, VIC/L17, VIC/L18 and VIC/RL1
- Potential drilling activities inside VIC/L2, VIC/L9, VIC/L10
- Future developments around the existing Kipper facilities (VIC/L25).

This Environment Plan (EP) has been prepared in accordance with the requirements of the Commonwealth Offshore Petroleum and Greenhouse Gas Storage Act 2006 and the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Environment Regulations), per the amended Act and Regulations as at 28 February 2014. The EP's development has been guided by N04750-GN1344 Revision 3 Environment Plan Content Requirements (NOPSEMA 2016).

To date, only the geophysical survey and part of the geotechnical survey as it relates to the West Barracouta gas field has been completed.

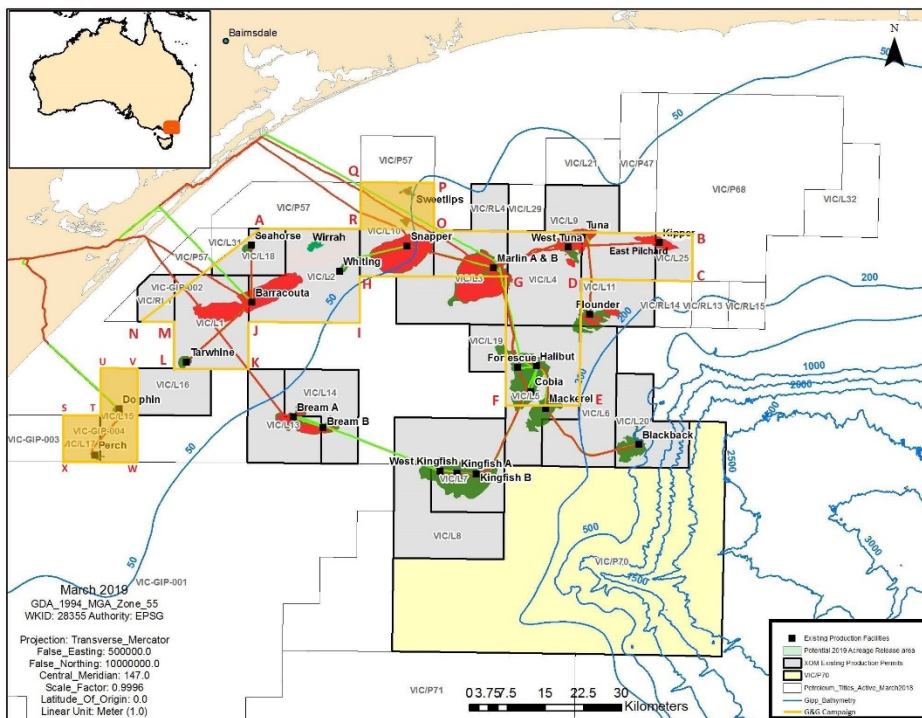


Figure 1-1 Proposed Geophysical and Geotechnical Survey, Gippsland Basin



1.2 Purpose and scope of Environment Plan

In accordance with the objectives of the Environment Regulations, the purpose of this EP is to demonstrate that:

- The potential environmental impacts and risks (planned (routine and non-routine) and unplanned) that may result from the Petroleum Activities Program are identified
- Appropriate management controls are implemented. Management controls identified are implemented to reduce impacts and risks to an acceptable level
- The Petroleum Activities Program is carried out in a manner consistent with the principles of ecologically sustainable development (as defined in Section 3A of the Commonwealth Environment Protection and Biodiversity Conservation Act, 1999 (EPBC Act)).

This EP describes the process and resulting outputs of the risk assessment, whereby impacts and risks are reduced to 'as low as reasonably practicable' (ALARP).

This EP defines activity-specific environmental performance outcomes, standards and measurement criteria. These form the basis for monitoring, auditing and management of the petroleum activities program to be undertaken by Esso and its contractors during survey activities. The implementation strategy (derived from the decision support framework tools) specified within this EP provides Esso with the required level of assurance that impacts and risks associated with the activity are reduced to ALARP and are acceptable.

The scope of the EP encompasses all activities relating to the survey vessel while undertaking geophysical and geotechnical activities within the operational area as outlined in this EP, for petroleum related activities within the project area, within Commonwealth Waters.

1.3 Scope of Revision

In accordance with OPGGSE Regulations 2009, there are a number of triggers for a revision to an EP. The changes to the geophysical and geotechnical survey to what was contemplated in Revision 1 of the EP are:

- Inclusion of additional survey locations within VIC/L2, VIC/L9, VIC/L10, VIC/L15 and VIC/L17. Licence areas VIC/L15, VIC/L17 and part of VIC/L10 (highlighted in Figure 1-1) were not contemplated in previous revisions of this document.
- Change in survey timing for delays to Kipper campaign and to enable additional surveys, including surveys for potential relief well locations.

The scope of the revision as it relates to the triggers in the OPGGSE Regulations 2009 are described below.

Subregulation 17(1) – New activity

The changes to the parameters of the survey do not constitute a change to the type of activity and do not result in a change in regulatory levy category. The activity of a geophysical and geotechnical survey remains the same.

Subregulation 17(5) – Significant modification or new stage of the activity

The change to the geophysical and geotechnical survey (additional locations and change in timeframe) triggers the requirement for an EP revision.

Subregulation 17(6) and Regulation 8 - New or increased impact or risk

The changes to the geophysical and geotechnical survey do not introduce a new or increased environmental risk, as this has been taken into account in the EP.

In addition, the conservation actions for each EPBC listed species and the subsequent controls (see Table 4-2) do not change as a result of the change in timing.

1.4 Details of titleholder

The area for the geophysical and geotechnical survey (operational area) is located in Commonwealth waters, specifically within the area covered by Production Licences VIC/L1, VIC/L2, VIC/L3, VIC/L5, VIC/L9, VIC/L10, VIC/L15, VIC/L17, VIC/L18 and Retention Lease VIC/RL1 (Figure 1-1).

Production Licences VIC/L1, VIC/L2, VIC/L3, VIC/L5, VIC/L9, VIC/L10, VIC/L15, VIC/L17, VIC/L18, and Retention Lease VIC/RL1 are held by Esso Australia Resources Pty Ltd (EARPL) and BHP Billiton Petroleum (Bass Strait) Pty Ltd (BHP) in the 50:50 Gippsland Basin Joint Venture (GBJV).

Production licence VIC/L25 is held by Esso Australia Resources Pty Ltd (EARPL), BHP and MEPAU A Pty Ltd as co-venturers in the Kipper Unit Joint Venture (KUJV).

EARPL is a subsidiary of ExxonMobil Australia Pty Ltd ('ExxonMobil') which forms a part of the ExxonMobil Corporation group of companies, and is the operator of both the GBJV and KUJV under the relevant joint venture operating agreements.

Esso Australia Pty Ltd (EAPL) a wholly owned subsidiary of EARPL, provides services to EARPL. For the purposes of the Environment Regulations, EAPL has the overall responsibility for the day-to-day management and operation of the production facilities contained within the VIC/L1, VIC/L2, VIC/L3, VIC/L5, VIC/L9, VIC/L10, VIC/L15, VIC/L17, VIC/L18, VIC/L25 and VIC/RL1 areas and, accordingly, is the designated "operator" under those Regulations.

The nominated registered office for the proponent is as follows:

Esso Australia Pty Ltd (EAPL ACN 000 018 566)
Level 9, 664 Collins Street
Docklands VIC 3008

1.4.1 Details of liaison person

The environmental contact for this activity is:

Carolyn Thomas
Risk, Environment and Regulatory Supervisor
Esso Australia Pty Ltd for and on behalf of Esso Australia Resources Pty Ltd
Telephone: (03) 9261 0000
Email: consultation@exxonmobil.com

NOPSEMA (Submissions) will be notified via phone or email of a change in titleholder, a change in the environmental contact or a change in the contact details for either the titleholder or the environmental contact (Regulation 15 (3) of the Environment Regulations).

1.5 Corporate environment policy

It is ExxonMobil policy to conduct its business in a manner that is compatible with the balanced environmental and economic needs of the communities in which it operates. The Corporation is committed to continuous efforts to improve environmental performance throughout its operations.

Accordingly, ExxonMobil's policy is to:

- Comply with all applicable environmental laws and regulations and apply responsible standards where laws and regulations do not exist



- Encourage concern and respect for the environment, emphasize every employee's responsibility in environmental performance, and ensure appropriate operational practices and training
- Work with government and industry groups to foster timely development of effective environmental laws and regulations based on sound science and considering risks, costs and benefits, including effects on energy and product supply
- Manage its business with the goal of preventing incidents and of controlling emissions and wastes to below harmful levels and design, operate, and maintain facilities to this end
- Respond quickly and effectively to incidents resulting from its operations, co-operational with industry organisations and authorized government agencies
- Conduct and support research to improve understanding of the impact of its business on the environment, to improve methods of environmental protection, and to enhance its capability to make operations and products compatible with the environment
- Communicate with the public on environmental matters and share its experience with others to facilitate improvements in industry performance
- Undertake appropriate reviews and evaluations of its operations to measure progress and to ensure compliance with this environmental policy.

Esso conducts all operations under the ExxonMobil Environment Policy. It carefully measures performance and strives to continually enhance it by improving systems and investing in technology.

1.6 Consultation

Esso has undertaken consultation with all relevant stakeholders potentially affected by the geophysical and geotechnical campaign. The principles of stakeholder engagement are to:

- Provide meaningful information in a format and language that is readily understandable and tailored to the needs of the target stakeholder group(s)
- Provide information in advance of consultation activities and decision-making
- Disseminate information in ways and locations that make it easy for stakeholders to access it
- Respect local timeframes and decision making processes
- Establish two-way dialogue that gives both sides the opportunity to exchange views and information, to listen, and to have their issues heard and addressed
- Adopt processes free of intimidation or coercion
- Develop clear mechanisms for responding to people's concerns, suggestions, and grievances
- Incorporate feedback into program design, and report back to stakeholders
- Demonstrate that stakeholders have been consulted in accordance with the requirements of the OPGGS (Environment) Regulations 2009.

1.6.1 Stakeholder identification

Esso identified all stakeholders potentially affected by the Baldfish Exploration Drilling Campaign. Since the geophysical and geotechnical activities are a prerequisite for the drilling campaign, the same stakeholders apply to the activities described in this EP. Esso classified its stakeholders into three categories:

- Primary stakeholders are those expected to provide direct advice or collaborate on plans in a spill response to define and reach agreement on respective roles and responsibilities in the response arrangements described in the OPEP



- Secondary stakeholders are those with functions, interests or activities in the ZPI that could be potentially affected by the activities to be carried out under the environment plan
- Tertiary stakeholders are other persons and organisations who may have an interest in the activities, but are unlikely to be affected or unknown stakeholders with whom Esso extended an opportunity to self-identify as having an interest in activities, by way of a public consultation forum in Lakes Entrance, which was promoted through various newspaper advertisements.

The following stakeholders were identified, as summarised in Table 1-1.

Table 1-1 Identified Stakeholders

Department of Industry, Innovation and Science (DolIS)
Department of Environment and Energy (DoEE)
Australian Maritime Safety Authority (AMSA) Search and Rescue / Systems Safety Standards
Australian Fisheries Management Authority (AFMA)
Department of Economic Development, Jobs, Transport and Resources (DEDJTR Transport)
Department of Economic Development, Jobs, Transport and Resources (DEDJTR Earth Resources)
Department of Environment, Land, Water and Planning (DELWP)
Environment Protection Authority, Victoria (EPA Vic)
VicPlan Operations Group (VPOG)
Gippsland Ports
Parks Victoria
Country Fire Authority
State Emergency Service
Water Police
Phillip Island Nature Park
Australian Marine Oil Spill Centre (AMOSC)
Oil Response Company of Australia (ORCA)
Asia Pacific Applied Science Associates (RPS APASA)
Wildlife Victoria
Commonwealth Fisheries Association (CFA)
Seafood Industry Victoria (SIV)
Sustainable Shark Fishing Association
Victorian Scallop Industry Association
Victorian Bays and Inlets Fisheries Association
Victorian Fishery Association Resource Management
Victorian Rock Lobster Association



Eastern Victorian Sea Urchin Divers Association & Eastern Zone Abalone Industry Association
East Gippsland Estuarine Fishermen's Association
Lakes Entrance Fishermens' Co-operative Society Limited (LEFCOL)
Lakes Entrance Scallop Fishing Industry Association
Corner Inlet Fisheries Habitat Association
Victorian Recreational Fishing (VRFish)
MSS Security
East Gippsland Catchment Management Authority
Origin Energy
BHP Billiton Petroleum
ROC Oil Limited
Oil Basins Limited
Carnarvon Hibiscus Pty Ltd
Bass Oil Company Limited
Strategic Energy Limited
Seven Group Holdings
Wellington Shire Council
South Gippsland Shire Council
East Gippsland Shire Council
Port Philip Sea Pilots
Mornington Peninsula Shire
Port of Hastings Development Authority / Channels Authority
Victorian Ports Cooperation
Gippsland Coastal Board
Committee for Wellington
South Gippsland Marine Coastal Park
Port of Portland
Lakes Oil
Mitsui
Lakes Entrance Volunteer Coastguard
Australian Hydrographic Office (AHO)

The Stakeholder Consultation Log, including the complete report of consultation records, is provided in Appendix C.



1.6.2 Mechanisms for Consultation

A number of mechanisms to communicate with stakeholders have been used to ensure stakeholders can make an informed assessment of the possible consequences of the activity on their functions, interests or activities.

The following mechanisms to communicate with stakeholders:

- Written communications:
 - Letters/emails
 - Informative fact sheets.
- One-on-one discussions via telephone and in-person
- Public consultation sessions in Lakes Entrance:
 - Promoted through personal invitations, fact sheet and newspaper advertisements (see below)
- Esso community news webpage which included:
 - Fact sheet on planned activities in Gippsland Basin
 - Information about Esso plans to extend field life of Gippsland Basin
 - Contact details to lodge an enquiry.

1.6.2.1 Written communications

Early in October 2017, an email update was sent to Esso's existing offshore stakeholder database, informing them about upcoming activities in the Gippsland Basin and reason Esso was seeking to consult with the stakeholders. A three-page fact sheet (*Esso Offshore Projects*) was attached, providing details of the planned geophysical and geotechnical campaign. Additionally, it included an invitation to attend the public consultation session in November 2017, or arrange an alternative meeting time at their convenience.

Personal invitations for the Lakes Entrance consultation forum went out to relevant stakeholders in October 2017. In addition to the letter drop and fact sheet, the Lakes Entrance consultation forum was promoted through a series of announcements in a local newspaper (*Gippsland Times: "Back in the hunt for Gippsland gas"*, 26 September 2017), with ongoing communications in fishing trade magazines (SETFIA, LEFCOL).

At that point of the consultation process some stakeholders indicated they had received adequate information, had no comments, and would like to be 'considered consulted'. A greater number indicated a general interest in being 'kept in the loop' without any specific comments or queries about the planned activity. For all those stakeholders who had not explicitly conveyed they had received sufficient information, Esso sent a summary of the information presented at the consultation forum, along with Esso's strategies for managing and reducing activity risks to as low as reasonably practicable.

The *Esso Offshore Project* fact sheet was updated and distributed to stakeholders in August 2018 to include additional scope at Kipper gas field (VIC/L25). It was also made available at a December 2018 Lakes Entrance public consultation session, which had relevant stakeholders invited and was advertised in the Lakes Post.

In May 2019 an update was distributed to stakeholders via e-mail to include the scope of this revision to the EP. No objections, claims, issues or merits have been raised to date.



1.6.2.2 One-on-one discussions via telephone and in-person

Depending on the stakeholders' preference, telephone and in-person discussions were held to clarify and discuss the survey. This also included meetings held in Southbank and Lakes Entrance. In addition a meeting was held with LEFCOL and SIV (May 21st) and this discussed the new scope contained within this revision and the extension for KPA, no objections, claims or issues were raised in this meeting with respect to planned EAPL projects or operations.

1.6.2.3 Public consultation sessions in Lakes Entrance

The public consultation session was held in Lakes Entrance on 17 November 2017 and was intended to consult about the project, and provide an opportunity for both known stakeholders and unknown stakeholders to learn more about Esso's offshore operations. Invitations were announced widely, followed up by individual follow-up invitations by telephone in the week before the public consultation session.

The session was well attended, with 32 stakeholders confirmed, from a wide range of backgrounds, of which 27 attended on the day. Key stakeholders with particular relevance to the geophysical and geotechnical survey locations included Johnathon Davey from Seafood Industry Victoria and Brad Duncan from LEFCOL. Esso was represented by the Offshore Operations Manager (Geoff Humphreys), the Offshore Risk, Environmental & Regulatory Supervisor (Carolyn Thomas), Public and Government Affairs (Joanna Le Lotto) and the Project SSHE Coordinator (Rob Tyler). A brief overview of planned activities, including the Baldfish Exploration Drilling program, was presented by the Esso Offshore Operations Manager. This was followed by a Q&A session and one-on-one conversations.

A series of informative posters were also presented at the session, which visitors were invited to read and discuss with Esso personnel. In addition, the flyer with information on the upcoming activities in Bass Strait was available for visitors to take away

No major concerns were raised with regards to the geophysical and geotechnical campaign.

A second public consultation session was held in Lakes Entrance on 5 December 2018. The event was publicised widely, including an advertisement in the local paper. The session was well attended by a range of stakeholders including LEFCOL, Water Police, Gippsland Ports, East Gippsland Shire Council and DEDJTR. At the session, the geophysical and geotechnical survey was discussed, specifically the survey work completed in 2018 as well as the location and timing of survey work to be completed in 2019. No objections, claims, issues or merits were raised during the session.

1.6.2.4 Project-specific webpage

In August 2017, Esso updated its offshore webpage (www.exxonmobil.com.au/) with information about the forthcoming activities in Bass Strait, which included:

- Downloadable PDF of the fact sheet ("*Esso Offshore Projects*") on planned activities in Gippsland Basin, which included an announcement about the upcoming consultation session (Oct. 2017)
- Information about Esso plans to extend field life of Gippsland basin through exploration in Block VIC/P70:
 - "*Back in the hunt for Gippsland gas*" (Aug. 2017)
 - "*Key gas fields nearing the end but news not all bad*" (Oct. 2017)
 - "*East coast gas supply Q&As*"
- The webpage also features a clear "*contact us*" link for interested parties to email Esso.



An "Offshore projects" page was created in November 2017, to provide ongoing updates on Esso offshore activities (<http://www.exxonmobil.com.au/en-au/energy/natural-gas/natural-gas-operations/offshore-projects>).

1.6.3 Timing

Esso began communications with key stakeholders identified in August 2017. Further dialogue specific to the geophysical and geotechnical activities commenced in early October 2017. Esso reached out to remaining stakeholders during October and November 2017 via telephone and email/postal letters.

The consultation period (from August 2017 to May 2019) provided sufficient time for stakeholders to:

- Learn about the activities covered in the geophysical and geotechnical survey
- Ask and have questions resolved
- Have the opportunity to provide comment with ample time for consideration in the geophysical and geotechnical Environment Plan and
- Identify other potential stakeholders or allow unknown stakeholders to self-identify.

Esso has continued to engage with stakeholders throughout the survey activities. A summary of this consultation including an updated Stakeholder Consultation Log has been documented in Esso's Interim Post Survey reports submitted to NOPSEMA on 4 June 2018 and 30 July 2018 and is also provided in Appendix C.

1.6.4 Outcomes

Much of the interaction with stakeholders during the consultative process was administrative in nature. Common reasons for providing feedback throughout the process were to:

- Re-direct Esso's communication to another position in the organization
- Advise Esso the stakeholder would like to be kept updated about Esso's offshore operations
- Notification they had received the information and considered themselves consulted.

Twenty-three stakeholders either asked clarifying questions about, or provided comment to, the proposed activities. These questions and Esso's assessments and responses are noted in Appendix C. Minor follow up conversations/clarifications were required for seven stakeholders.

A summary of feedback is provided in Table 1-2 and the consultation log is provided in Appendix C. Appendix C includes the consultation completed in the course of developing this revision from December 2018 – May 2019. No issues or concerns were raised by stakeholders in relation to the geophysical and geotechnical activities. All actions are considered closed out and no further control measures are required. All stakeholders (unless they specified otherwise) will be included in ongoing consultation as described in Section 8.12.

No issues or concerns have been raised by stakeholders in relation to the change in scope to the geophysical and geotechnical survey as outlined in this EP.

Table 1-2 Summary of stakeholder feedback

Organisation	Correspondence Date	Summary
Australian Marine Oil Spill Centre	10-Oct-17	AMOSC and Esso have touched base about upcoming Esso activities which may interface with AMOSC & look forward to the consultation on the drilling activity EP/OPEP in due course and welcome the opportunity to input into that suite of documents.
Australian Maritime Safety Authority	13-Oct-17	Email received to update contact.
	6-Nov-17	F/U email sent by Esso contact asking if further consultation with the shipping community on this matter is required or advisable. Awaiting response.
	15-Nov-17	AMSA contact responded to Esso contact that consultation with the entire shipping community would be too complex. AMSA contact suggested contacting the Harbour Masters of Ports: Portland, Geelong, Melbourne and Transport Safety Victoria.
APASA (Oil Spill Modelling)	15-Apr-17	AMOSC advised Esso it has an arrangement in place with APASA so industry members can access 24/7 modelling services.
Australian Fisheries Management Authority	13-Oct-17	Email received to update contact.
	6-Nov-17	Email sent by Esso contact requesting a status update on fishing data. Awaiting response.
	9-Nov-17	Esso contact spoke with AFMA contact and requested we resend the invitation. Invite resent.
BHP Billiton Petroleum	17-Nov-17	Attended the Lakes Entrance Community session.
Commonwealth Department of Environment	16-Oct-17	Email received to update contact.
East Gippsland Shire Council	6-Nov-17	Esso contact advised by EGSC that 'Fact Sheet' was received.
	5-Dec-18	Attended Lakes Entrance Community Session.



Organisation	Correspondence Date	Summary
Gippsland Ports	17-Nov-17	Attended the Lakes Entrance Community Session.
	5-Dec-18	Attended Lakes Entrance Community Session.
Lakes Entrance Fishermans' Co-op	1-Nov-17	Esso contact spoke with LEFC contact re the various Esso projects that are planned for the next 12 months – Baldfish Exploration drilling, Cobia pipeline repair and the West Barracouta development. LEFC contact had received the flyer and the invite.
	17-Nov-17	Attended the Lakes Entrance community session.
	17-Nov-17	Attended the Lakes Entrance community session.
	5-Dec-18	Attended the Lakes Entrance community session.
	21-May-19	Meeting at SIV with LEFCOL and EAPL representatives to discuss consultation and current projects planned for Bass Strait. Additional scope items as contained in the EP revision discussed – no concerns or issues raised.
Seven Group Holdings (formerly Nexus)	20-Oct-17	Contact advised that they have no concerns regarding the proposed activities but would like to be kept updated as the projects develop. SGHE have no immediate campaigns or projects planned for Bass Strait but this may change in 2018.
Formerly Origin Energy	25-Oct-17	Contact name updated. Update resent.
Port of Hastings	20-Oct-17	Email rec'd requesting additional recipient - SH update email resent
Seafood Industry Victoria	10-Oct-17	SIV responded inquiring whether perhaps there was availability to sit down and discuss the information presented in the email, along with consultation options and where to from here.
	21-May-19	Meeting at SIV with LEFCOL and EAPL representatives to discuss consultation and current projects planned for Bass Strait. Additional scope items as contained in the EP revision discussed – no concerns or issues raised.
Cooper Energy (Formerly Santos)	9-Oct-17	Stakeholder update email sent. Santos contact requested to be taken off stakeholder list (no operations in Victoria).
	17-Nov-17	Attended the Lakes Entrance community session.



Organisation	Correspondence Date	Summary
Cooper Energy (Formerly Santos)	19-Oct-17	Sent stakeholder email. Response received & contact names updated.
	17-Nov-17	Attended the Lakes Entrance community session.
South East Trawl Fishing Industry Association	3-Nov-17	Phone call b/w Esso contact and SETFIA contact to discuss the various projects that Esso have planned in the next 12 months. Fact Sheet also emailed to SETFIA contact.
	06-Dec-18	SETFIA contact called Esso contact. Geotechnical surveys discussed, no issues raised.
Department of Economic Development, Jobs, Transport and Resources	9-Nov-17	Esso contact spoke with DEDJTR contact, will continue ongoing consultation with Esso contact.
	5-Dec-18	DEDJTR contact attended the Lakes Entrance community session.
Victorian Recreational Fishing (VRFish)	15-Nov-17	VRF contact wants to be included in any SHC, esp sword fisherman.
Roads and Maritime Services	18-Oct-17	Email received with updated org name from Transport for NSW to Roads and Maritime Services
Water Police	18-Oct-17	Esso contact suggested using waterpolice, update email sent
	22-Oct-17	Contact updated.
	5-Dec-18	Attended Lakes Entrance community session.
Department of Defence	6-Nov-17	Being dealt with through AMSA - no further consultation required.
Gippsland Times	26-Sep-17	Undertaking a series of ads in the Gippsland Times focusing on our economic contribution, investment and community outreach in Gippsland & mentions our exploration program.



2. Environmental legislation

2.1 Legislative framework

The principal offshore legislation for production activities beyond three nautical miles to the outer extent of the Australian Exclusive Economic Zone (EEZ) at 200 nautical miles is the Commonwealth Offshore Petroleum and Greenhouse Gas Storage Act 2006 (OPGGs Act). The OPGGS Act is administered by the National Offshore Petroleum Titles Administrator (NOPTA) and the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA).

This EP has been prepared for submission to NOPSEMA, in accordance with the provisions of the Environment Regulations. The EP has been structured to reflect the process and requirements of the Environment Regulations as outlined in Table 2-1.

Table 2-1 Key obligations of the titleholder under an approved EP

Criteria for acceptance	Content Requirements/Relevant Regulations	Elements	Section of EP
Regulation 10A(a) <i>is appropriate for the nature and scale of the activity</i>	Regulation 13 <i>Environmental Assessment</i> Regulation 14 <i>Implementation strategy for the environment plan</i> Regulation 16 <i>Other information in the environment plan</i>	The principle of 'nature and scale' is applicable throughout the EP	Section 3 Section 4 Section 5 Section 6 Section 7
Regulation 10A(b) <i>demonstrates that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable</i>	Regulation 13(1) – 13(7) 13(1) <i>Description of the activity</i> 13(2)(3) <i>Description of the environment</i> 13(4) <i>Requirements</i> 13(5)(6) <i>Evaluation of environmental impacts and risks</i> 13(7) <i>Environmental performance outcomes and standards</i>	Set the context (activity and existing environment) Define 'acceptable' (the requirements, the corporate policy, relevant persons) Detail the impacts and risks Evaluate to nature and scale Detail the control measures – ALARP and acceptable	Section 1.3 Section 1.5 Section 1.5 Section 4 Section 6 Section 7
Regulation 10A(c) <i>demonstrates that the environmental impacts and risks of the activity will be of an acceptable level</i>	Regulation 16(a) – 16(c) <i>A statement of the titleholder's corporate environmental policy</i> <i>A report on all consultations between the titleholder and any relevant person</i>		
Regulation 10A(d) <i>provides for appropriate environmental performance outcomes, environmental performance standards and measurement criteria</i>	Regulation 13(7) <i>Environmental performance outcomes and standards</i>	Environmental performance outcomes Environmental performance standards Measurement criteria	Section 7
Regulation 10A(e) <i>includes an appropriate implementation strategy and monitoring, recording and reporting arrangements</i>	Regulation 14 <i>Implementation strategy for the environment plan</i>	Implementation strategy, including: EMS Performance monitoring	Section 8



Criteria for acceptance	Content Requirements/Relevant Regulations	Elements	Section of EP
		Oil Pollution Emergency Plan (OPEP) and scientific monitoring Ongoing consultation	
Regulation 10A(f) <i>does not involve the activity or part of the activity, other than arrangements for environmental monitoring or for responding to an emergency, being undertaken in any part of a declared World Heritage property within the meaning of the EPBC Act</i>	Regulation 13 (1) – 13(3) <i>13(1) Description of the activity</i> <i>13(2) Description of the environment</i> <i>13(3) Without limiting [Regulation 13(2)(b)], particular relevant values and sensitivities may include any of the following:</i> <i>(a) the world heritage values of a declared World Heritage property within the meaning of the EPBC Act;</i> <i>(b) the national heritage values of a National Heritage place within the meaning of that Act;</i> <i>(c) the ecological character of a declared Ramsar wetland within the meaning of that Act;</i> <i>(d) the presence of a listed threatened species or listed threatened ecological community within the meaning of that Act;</i> <i>(e) the presence of a listed migratory species within the meaning of that Act;</i> <i>(f) any values and sensitivities that exist in, or in relation to, part or all of:</i> <i>(i) a Commonwealth marine area within the meaning of that Act; or</i> <i>(ii) Commonwealth land within the meaning of that Act.</i>	No activity, or part of the activity, undertaken in any part of a declared World Heritage property, National Heritage Place, Ramsar wetland and Commonwealth land.	Section 3 Section 4
Regulation 10A(g) <i>(i) the titleholder has carried out the consultations required by Division 2.2A</i> <i>(ii) the measures (if any) that the titleholder has adopted, or proposes to adopt, because of the consultations are appropriate</i>	Regulation 11A <i>Consultation with relevant authorities, persons and organisations, etc</i> Regulation 16(b) <i>A report on all consultations between the titleholder and any relevant person</i>	Consultation in preparation of the EP	Section 1.6
Regulation 10A(h) <i>complies with the Act and the regulations</i>	Regulation 13(4)a <i>Describe the requirements, including legislative requirements, that apply to activity and are relevant to the</i>	All contents of the EP must comply with the Act and the regulations	Section 1.4.1 Section 1.5 Section 2 Section 6



Criteria for acceptance	Content Requirements/Relevant Regulations	Elements	Section of EP
	<i>environmental management of the activity</i> Regulation 15 <i>Details of the Titleholder and liaison person</i> Regulation 16(a) <i>A statement of the titleholder's corporate environmental policy</i> Regulation 16(c) <i>details of all reportable incidents in relation to the proposed activity.</i>		

2.2 Relevant legislation

Relevant Commonwealth and Victorian legislation as it applies to the operational area and zone of potential impact (ZPI) is provided in Table 2-3 and Table 2-4 respectively.

The Australian Petroleum Production and Exploration Association (APPEA) Code of Environmental Practice 2008 provides guidance on a set of recommended minimum standards for petroleum industry activities offshore. These standards are aimed at minimising adverse impact on the environment, and ensuring public health and safety by using the best practical technologies available. The APPEA Code of Environmental Practice was a key reference in preparing for the environmental risk assessment and development of performance objectives in this EP. A summary of applicable industry guidelines is provided in Table 2-2.

Table 2-2 Applicable industry guidelines

Guidelines and Agreements / Conventions	Summary
APPEA Code of Environmental Practice	October 2008 - Management system and a comprehensive list of environmental guidelines for the petroleum industry. Provides guidelines for activities that are not formally regulated and have evolved from the collective knowledge and experience of the oil and gas industry.
Environmental Plan Content Requirements (N04750-GN1344)	Revision 3, April 2016 – NOPSEMA - This guidance note aims to provide guidelines for use by titleholders in preparing environment plans for submission to NOPSEMA.
When to submit a proposed revision of an EP (N04750-GL1705)	Revision 1 January 2017 – NOPSEMA - This document provides guidance on NOPSEMA's interpretation of the requirements to revise an environment plan (EP) under regulation 17, 18 and 19 of the OPGGSE Regulations 2009
Australian Ballast Water Management Requirements (Version 7) – Department of Agriculture and Water Resources (DAWR)	September 2017 - This document provides requirements for management measures to reduce the risk of introducing harmful aquatic organisms into Australia's marine environment through ship's ballast water in order to comply with the Biosecurity Act 2015.
National Biofouling Management Guidance for the Petroleum Production and Exploration Industry	April 2009 – This document provides recommendations for the management of biofouling hazards by vessels and equipment used in the petroleum industry.
Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC 2000)	October 2000 - provide water quality guidelines proposed to protect and manage the environmental values supported by the water resources.



Table 2-3 Key Commonwealth legislation

Legislation	Coverage and Applicability to Activity	International Convention Enacted	Administering Authority
Offshore Petroleum & Greenhouse Gas Storage Act 2006 & associated regulations (associated regulations include: OPGGS (Environment) Regulations 2009, Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Regulations 2011 [RMAR], Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009)	The <i>OPGGS Act</i> addresses all licensing, health, safety, environmental and royalty issues for offshore petroleum exploration and recovery operations extending beyond the 3 nautical mile limit. The <i>OPGGS (Environment) Regulations</i> ensures that petroleum activities are carried out in a manner; consistent with the principles of ecologically sustainable development set out in section 3A of the EPBC Act; and by which the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable and will be of an acceptable level.		National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)
Environment Protection & Biodiversity Conservation Act 1999	This Act focuses on environmental matters of National Significance, streamlines the Commonwealth environmental assessment and approval process and provides an integrated system for biodiversity conservation and management of protected areas. Matters of national environmental significance are world heritage properties; Ramsar wetlands; listed threatened species and communities; migratory species under international agreements; nuclear actions and the commonwealth marine environment. On 28 February 2014, NOPSEMA became the sole designated assessor of petroleum and greenhouse gas activities in Commonwealth waters in accordance with the Ministers for the Environment's endorsement of NOPSEMA's environmental authorisation process under Part 10, Section 146 of the EPBC Act.	<ul style="list-style-type: none"> • 1992 Convention on Biological Diversity & Agenda 21 • Convention on International Trade in Endangered Species of Wildlife and Flora 1973 (CITES) • Japan/Australia Migratory Birds Agreement 1974 (JAMBA) • China/Australia Migratory Birds Agreement 1974 (CAMBA) • Republic of Korea Migratory Birds Agreement 2006 (ROKAMBA) • USSR-Australia Migratory Bird Agreement • Convention on Wetlands of International Importance especially waterfowl habitat 1971 (Ramsar) • International Convention on Whaling 1946 	Department of Environment and Energy (DoEE) For petroleum activities in Commonwealth waters, National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)



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Legislation	Coverage and Applicability to Activity	International Convention Enacted	Administering Authority
		<ul style="list-style-type: none"> • Convention on the Migratory Species of Wild Animals (Bonn Convention) 1979 • Convention concerning the Protection of the World Cultural and Natural Heritage 1972 	
Environment Protection (Sea Dumping) Act 1981	Act prevents the deliberate disposal of wastes (loading, dumping, and incineration) at sea from vessels, aircraft, and operational areas.	Convention on the Prevention of Marine Pollution by dumping of waste & other materials 1972 (London Convention) MARPOL.	Department of Environment and Energy (DoEE)
Australian Maritime Safety Authority Act 1990	Facilitates international cooperation and mutual assistance in preparing and responding to a major oil spill incident and encourages countries to develop and maintain an adequate capability to deal with oil pollution emergencies. Requirements are given effect through AMSA.	International Convention on Oil Pollution (Preparedness, Response and Cooperation) 1990 (OPRC).	Australian Maritime Safety Authority (AMSA)
Historic Shipwrecks Act 1976	Protects the heritage values of shipwrecks and relics.	<ul style="list-style-type: none"> • Convention on Conservation of Nature in the South Pacific (APIA Convention) 1976. • Aust-Netherlands Agreement concerning old Dutch Shipwrecks 1972. • Convention on Protection of Underwater Cultural Heritage 2001. 	Department of Environment and Energy (DoEE)
National Environment Protection Council Act 1994	Council develops (in conjunction with other state authorities) through the Intergovernmental Agreement on the Environment (IGAE) on consistent environmental standards to be adopted between states. These requirements take the form of National Environment Pollution Measures (NEPMs) such as National Pollutant Inventory .		Natural Resources Management Ministerial Council/Environment Protection & Heritage Council
National Greenhouse and Energy Reporting Act 2007	Provides for the reporting and dissemination of information related to greenhouse gas emissions, greenhouse gas projects, energy production and energy consumption.	United Nations Framework Convention on Climate Change, 1992, and the Kyoto Protocol.	Clean Energy Regulator



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Legislation	Coverage and Applicability to Activity	International Convention Enacted	Administering Authority
Protection of the Sea (Prevention of Pollution from Ships) Act 1983	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.	International Convention for the Prevention of Pollution from Ships [MARPOL 73/78] provisions and unified interpretations of the articles, protocols and Annexes of MARPOL 73/78, including the incorporation of all of the amendments that have been adopted by the MEPC and have entered into force, up to and including the 2000 amendments (as adopted by resolution MEPC 89(45)).	Australian Maritime Safety Authority (AMSA)
Biosecurity Act 2015	The Act is about managing diseases and pests that may cause harm to human, animal or plant health or the environment. It empowers authorities to monitor, authorise, respond to and control biosecurity risks for the movement of goods, vessels and people to prevent the introduction, establishment or spread of diseases or pests affecting human beings, animals, or plants.	International Convention for the Control and Management of Ships Ballast Water & Sediments 2017.	Department of Agriculture and Water Resources
Navigation Act 2012	Regulates ship-related activities and invokes certain requirements of the MARPOL convention relating to equipment and construction of ships .	International Convention for the Prevention of Pollution from Ships [MARPOL 73/78] (certain sections).	Department of Infrastructure and Regional Development (DoIRD) (formerly Department of Infrastructure & Transport)/ AMSA
Coastal Waters (State Powers) Act 1980	This Act transferred constitutional power over coastal waters , and title to seabed minerals within territorial limits, from the Commonwealth to the States.		Geoscience Australia (Maritime Boundaries Advice Unit)
Protection of the Sea (Harmful Anti-fouling Systems) Act 2006	Regulates the use of harmful anti-fouling systems employed on vessels and their effects on the marine environment.	International Convention on the Control of Harmful Anti-fouling Systems on Ships 2001.	AMSA
Native Title Act 1993	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.		Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA)



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Legislation	Coverage and Applicability to Activity	International Convention Enacted	Administering Authority
Clean Energy Act 2011	The Act sets up a mechanism to deal with climate change by encouraging the use of clean energy and puts a price on greenhouse gas emissions.	United Nations Framework Convention on Climate Change, 1992, and the Kyoto Protocol.	Clean Energy Regulator
Civil Aviation Act 1988 and associated regulations (including Civil Aviation Safety Regulations 1998)	The Act sets up a Civil Aviation Safety Authority with functions to regulate the safety of civil aviation, including the carrying of dangerous goods, airworthiness standards for aviation, maintenance; general operational and flight rules; and aerial application operations.	Chicago Convention 1944.	Civil Aviation Safety Authority (CASA)
Radiocommunications Act 1992	The Act provides for the management of the radiofrequency spectrum in order to make adequate provision of the spectrum for use by agencies involved in the defence or national security of Australia, law enforcement or the provision of emergency services; and for use by the public or community services.		Australian Communications and Media Authority (ACMA)

Table 2-4 Key Victorian legislation

Legislation	Coverage
Environment Protection Act 1970	This Act is the key Victorian Legislation regulating emissions to the environment within Victoria (relevant for waste transfer and disposal, National Pollutant Inventory reporting). Administered by the Victorian Environment Protection Authority.
Pollution of Waters by Oil and Noxious Substances Act 1986	This Act is the Victorian state legislation giving effect to the requirements of MARPOL 73/78 within state waters. Administered by the Victorian Environment Protection Authority.
Emergency Management Act 1986	This Act ensures that the components of emergency management (prevention, response and recovery) are organised to facilitate planning, preparedness, operational coordination and community participation. Administered by Department of Justice's Police and Emergency Management Division.
Port Management Act 1995	Under this Act all managers of local and commercial ports must prepare a Safety Management Plan and Environmental Management Plan (together known as SEMP's).
Marine Safety Act 2010	This Act provides for safe marine operations in Victoria.



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Legislation	Coverage
Heritage Act 1995	This Act is the Victorian state legislation which protects the heritage values of shipwrecks and relics within state waters. Administered by the Heritage Council of Victoria.
National Parks Act 1975	This Act provides for the protection, use and management of Victoria's national and other parks. Administered by the Department of Environment and Primary Industries.
Radiation Act 2005	This Act provides for licencing for use and management of radioactive sources, and conducting radiation practice (including radiation testing).
Catchment and Land Protection Act 1994	This Act sets up a framework for the integrated management and protection of catchments. Administered by the Catchment Management Authorities.
Coastal Management Act 1995	This Act provides for co-ordinated strategic planning and management for Victorian coast, the preparation and implementation of management plans for coastal Crown land and a coordinated approach to approvals for use and development of coastal Crown land.
Land Titles Validation Act 1994	This Act validates past acts, provides for compensation rights for the holders of native title which has been affected by past acts, and confirms certain existing rights. The Act also confirms ownership by the Crown of natural resources, the right to regulate water flows and existing fishing rights under State law; and public access to waterways, beds and banks of waterways, coastal waters, beaches and public areas.
Dangerous Goods Act 1985	This Act, the associated Dangerous Goods (Storage and Handling) Regulations 2012 and the Code of Practice for the Storage and Handling of Dangerous Goods 2013 (WorkSafe) promotes the safety of persons and property in relation to the manufacture, storage, transfer, transport, sale, purchase and use of dangerous goods and the import of explosives and other dangerous goods.
OPGGS Act 2010 and OPGGS Regulations 2011	This Act and Regulations apply to petroleum operations effectively within three nautical miles of the Victorian coast and address licensing, health, safety, environmental and royalty issues for offshore petroleum exploration and development operations. Waters greater than 3 nautical miles offshore from the coast are Commonwealth waters and are covered by Commonwealth legislation (<i>OPGGS Act 2006</i>). The Commonwealth and Victorian legislation are, by agreement, very similar with regard to petroleum.



3. Description of the activity

3.1 Overview

Esso proposes to undertake geophysical and geotechnical surveys (hereafter referred to as “the survey program”) within existing production licence areas. The survey program is required to inform a number of prospective future developments in the Gippsland basin. These include:

- Development of the West Barracouta (BTW) gas field (VIC/L1) which is part of the existing Barracouta gas field and located approximately 6 km southwest of the existing Barracouta platform (in VIC/L2)
- Potential plug and abandonment activities at a number of existing wells located in VIC/L1, VIC/L2, VIC/L3, VIC/L5, VIC/L9, VIC/L15, VIC/L17, VIC/L18 and VIC/RL1
- Potential drilling activities inside VIC/L2, VIC/L9 and VIC/L10
- Future developments around the Kipper facilities. The Kipper subsea facility is located in VIC/L25, 18km from the West Tuna (WTN) platform, and is connected via the WTN 350 pipeline.

3.2 Location of operational area

The survey program will take place in the Gippsland Basin of the eastern Bass Strait as shown in Figure 3-1.

The operational area defines the spatial boundary of the survey program as described, risk assessed and managed by the EP. Vessels supporting the survey program operating outside the operational area (e.g. transiting to and from port) are subject to applicable maritime regulations and other requirements and are not managed by this EP.

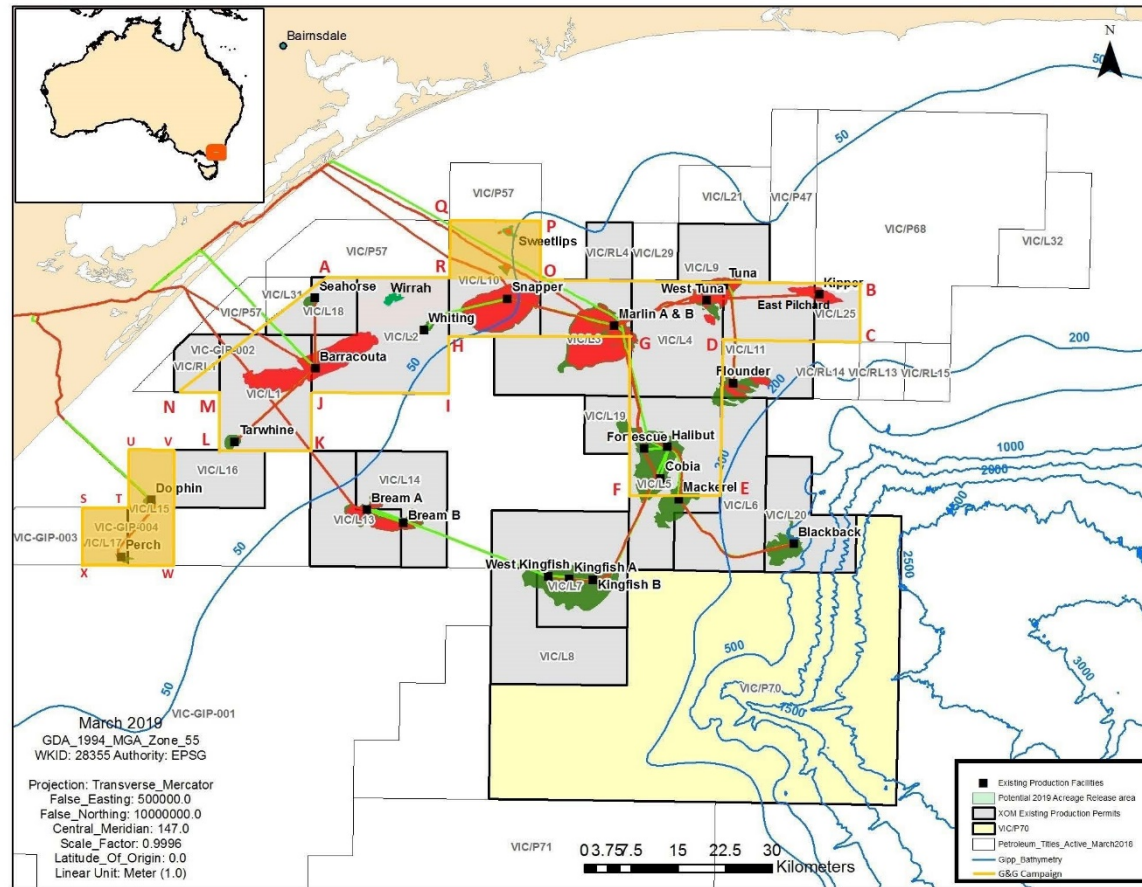


Figure 3-1 Location of operational area



For the purpose of this EP, the following operational area summarised in Table 3-1 will apply:

- An elongated rectangular area 800 m wide and 10 km long, oriented NE-SW, centred over the BTW Drill Centre location described below and limited to the north east alignment by the Barracouta (BTA) platform and in the south west by the existing Bream (BMA) Pipeline Tie In location
- A 1 km x 1 km survey area centred over the well locations Tarwhine 1, Whiptail 1A, Whiting A2, Whiting A3-A7, Marlin 1, Halibut 1, Seahorse 1, Mulloway 1, Sweetlips, Sweetlips Alt, Wirrah, Dolphin, Perch and East Pilchard 1.
- An elongated rectangular area 3 km wide and 8 km long, oriented NW-SE, centred over the potential VIC/L9 Drill Centre location.

Table 3-1 Approximate location details for operational area (GDA94)

Location	Licence area	Latitude	Longitude	Water depth (m)
Activity coordinates:				
BTW Drill Centre	VIC/L1	38° 19' 06" S	147° 36' 53" E	46
BTW BMA Pipeline Tie In	VIC/L1	38° 20' 13" S	147° 35' 09" E	46
BTA Platform	VIC/L2	38° 17' 54" S	147° 40' 29" E	46
Tarwhine 1	VIC/L1	38° 24' 12" S	147° 31' 46" E	42
Whiptail 1A	VIC/L1	38° 19' 25" S	147° .31' 14" E	38
Whiting A2 (subsea)	VIC/L2	38° 14' 24" S	147° 52' 25" E	46
WTA Platform Whiting A3, A5, A6 and A7	VIC/L2	38° 14' 24" S	147° 52' 26" E	54
Marlin 1	VIC/L3	38° 13' 58" S	148° 13' 38" E	60
Halibut 1	VIC/L5	38° 23' 52" S	148° 19' 02" E	73
Seahorse 1	VIC/L18	38° 11' 42" S	147° 40' 27" E	42
Mulloway 1	VIC/RL1	38° 19' 19" S	147° 29' 06" E	36
VIC/L9 Drill Centre	VIC/L9	38° 10' 52" S	148° 35' 37" E	89
Kipper subsea facility	VIC/L25/L9	38° 18' 11" S	148° 59' 36 E"	95
Sweetlips	VIC/L10	38° 05' 42" S	148° 02' 05" E	52
Sweetlips Alt	VIC/L10	38° 05' 27" S	148° 03' 13" E	52
Wirrah	VIC/L2	38° 11' 10" S	147° 49' 02" E	49
Dolphin	VIC/L15	38° 29' 20" S	147° 22' 34" E	38
Perch	VIC/L17	38° 34' 14" S	147° 19' 17" E	42
East Pilchard 1	VIC/L9	38° 11' 54" S	148° 33' 42" S	91
Operational area coordinates (see Figure 3-1):				
A	VIC/L18	38° 09' 55"	147° 40' 05"	-
B	VIC/L25	38° 09' 54"	148° 40' 055"	-
C	VIC/L25	38° 14' 54"	148° 40' 055"	-
D	VIC/L9	38° 14' 54"	148° 25' 05"	-
E	VIC/L5	38° 27' 25"	148° 25' 05"	-
F	VIC/L5	38° 27' 25"	148° 15' 05"	-
G	VIC/L3	38° 14' 55"	148° 15' 05"	-



H	VIC/L2	38° 14' 55"	147° 55' 05"	-
I	VIC/L2	38° 19' 55"	147° 55' 05"	-
J	VIC/L1	38° 19' 55"	147° 40' 05"	-
K	VIC/L1	38° 24' 56"	147° 40' 05"	-
L	VIC/L1	38° 24' 55"	147° 30' 05"	-
M	VIC/L1	38° 19' 55"	147° 30' 05"	-
N	VIC/RL1	38° 19' 55"	147° 27' 35"	-
O	VIC/L10	38° 09' 52"	147° 05' 01"	-
P	VIC/L10	38° 05' 06"	148° 04' 55"	-
Q	VIC/L10	38° 05' 03"	147° 55' 24"	-
R	VIC/L10	38° 09' 50"	147° 55' 09"	-
S	VIC/L17	38° 29' 59"	147° 15' 09"	-
T	VIC/L15	38° 29' 52"	147° 20' 07"	-
U	VIC/L15	38° 24' 55"	147° 20' 06"	-
V	VIC/L15	38° 24' 56"	147° 24' 58"	-
W	VIC/L15	38° 34' 50"	147° 25' 00"	-
X	VIC/L17	38° 34' 52"	147° 15' 09"	-

3.3 Survey timing

The survey program commenced in the first quarter of 2018 and will continue intermittently during 2019 through 2020 and potentially beyond to 2023. Survey activities are likely to occur over a 2 to 15 day period at each of the locations referred to in Table 3-1.

The activities are anticipated to progress to the remaining locations as summarised in Table 3-2 and Table 3-3.

Table 3-2 Indicative timing for the geophysical surveys

Location	Approximate duration	Indicative timing
BTW	5 days	Survey completed Q1 2018.
VIC/L9	5 days	Q2 2019 – December 2020
Other Areas	<10 days	Q2 2019 – December 2020
Kipper	5 days	Q2 2019 – December 2020

Table 3-3 Indicative timing for the geotechnical surveys

Location	Approximate duration	Indicative timing
BTW	15 days	Survey part completed Q2 2018. Remaining survey to be completed by December 2020.
VIC/L9	15 days	Q2 2019 – December 2020
Other Areas	<10 days	Q2 2019 – December 2020
Kipper	15 days	Q2 2019 – December 2020



3.4 Survey program overview

The proposed survey program will be completed in two stages. Stage 1 involving the geophysical survey will commence at BTW and then progress to the additional licence areas. Stage 2 involving the geotechnical survey will also commence at BTW, approximately two months after the commencement of the geophysical survey and then also progress to the additional licence areas.

3.4.1 Geophysical Survey Program

A geophysical survey is the systematic collection of geophysical data (i.e. measurements of seabed characteristics, imaging and profiling) for assessment of water depths, seabed topography, seabed conditions and identification of obstructions on the seabed. Geophysical lines are proposed to be surveyed using the following conventional techniques:

- Single beam echo sounder (SBES)
- Multi beam echo sounder (MBES)
- Side scan sonar (SSS)
- Sub bottom profiler (SBP) including Ultra high resolution (UHR)
- Magnetometer.

For BTW, the geophysical survey was undertaken at the BTW drill centre and along the proposed pipeline and umbilical routes from the BTW drill centre to tie-in locations at BTA platform and the existing Barracouta and Bream gas pipelines. The area surveyed will be 800m wide and 10km long, oriented NE-SW, centred over the BTW drill centre location.

Inside VIC/L9, the geophysical survey will be undertaken over an elongated rectangular area 3km wide and 8km long, oriented NW-SE that is centred over a potential new well location.

For all remaining locations mentioned in Table 3-1, the geophysical area will be undertaken over an area that is no larger than a 1km x 1km square that is centred over the existing wells.

A summary of the proposed geophysical survey scope is provided in Table 3-4.

Table 3-4 Survey parameters for the geophysical survey

	West Barracouta	VIC/L9	Kipper	Other Areas
Licence Areas	1	1	1	8
Survey Area (km ²)	10	VIC/L9 (18)	1 area x 1 km ²	16 areas x 1 km ²
Water Depth (m)	46	89	95	36-73
MBES/SBES	Yes	Yes	Yes	Yes
SSS	Yes	Yes	Yes	Yes
SBP/UHR	Yes	Yes	Yes	Yes
Magnetometer	Yes	Yes	Yes	Yes
Water Samples	Yes	No	No	No
Sediment Samples	Yes	No	No	No

3.4.1.1 Single beam echo sounder

SBES, like other sonar systems, transmit sound energy and analyse the return signal (echo) from the seabed or other objects. The sound waves are transmitted from a transducer mounted on the vessel



hull to produce single line coverage of the seabed. This survey will use a single beam echo sounder with a frequency range greater than 200 kHz. The single beam bathymetry received sounds exposure level is not likely to exceed 160 dB. This will be used primarily for confirming depths at site locations.

3.4.1.2 Multi beam echo sounder

MBES is similar to SBES except that coverage on the seabed is wider than a single beam and typically in the order of 3-12 times the water depth. Bathymetric data will be acquired using MBES which usually involves mounting a transducer to the base of a pole that is attached to the side of the vessel.

3.4.1.3 Side scan sonar

SSS is a hydro-acoustic technique used for sea floor imaging. A SSS survey is undertaken by towing a sonar "tow fish" over the survey area. The tow-fish is equipped with a liner array of transducers that emit and later receive an acoustic energy pulse in a specific frequency range. The acoustic energy received by the side scan sonar tow vehicle (backscatter) is continuously recorded creating a 'picture' of the ocean bottom which can be used to give an indication of the texture of the seabed.

The survey will use a SSS system in the 100 to 500 kHz frequency range. The SSS survey received sounds exposure level is not likely to exceed 160 dB. The SSS towfish will be towed at a speed of about 4 knots, approximately 10-15 m above the seabed at a distance of about 150-200 m behind the vessel. Seafloor characteristics and debris or obstructions on the seabed are identified using SSS.

3.4.1.4 Sub bottom profiler including Ultra high resolution

SBPs are devices for converting electrical energy into acoustic energy. They produce an acoustic profile which extends from the seabed down to the limit of penetration. Geophysical surveying uses a variety of profilers which operate at differing energy levels and are characterised by different dominant frequencies. Higher energy sources are needed to transmit the acoustic signals to greater depth but they have correspondingly lower dominant frequencies which reduce the resolution of the resultant record. SBP are used to survey the shallow geology of an area, and as such are considerably lower in acoustic energy output compared to other geological survey techniques such as exploration seismic surveys using airgun arrays. Acoustic emissions from SBPs are typically in the frequency range of 0.05 to 12 kHz, with peak sound pressure level (SPL) of up to 222 dB re 1 μ Pa @ 1 m.

No air guns will be used during the geophysical survey.

Pinger or CHIRP

Traditional SBPs utilise single frequency fixed length "pinger" type pulses, which reflect from subsea layers to map the morphology while the CHIRP system emits a sweep of frequency signals (transmitted electromagnetic signal over a period of time). The CHIRP/Pinger system also acts as a receiver for the reflected signal.

Boomer or Sparker

Boomer or Sparker systems consist of two spatially separated units; a hull mounted transmitter (Boomer plate or Sparker array) and a receiver (hydrophone equipment). The Boomer Plate is an electro-mechanical transducer comprising an insulated electrical coil adjacent to a metal plate. A shipboard power supply generates an electrical pulse which is discharged to the electrical coil causing a magnetic field to repel a metal plate. This energetic motion generates a broad band, high amplitude impulsive acoustic signal in the water column that is directed vertically downward. The Sparker creates a relatively higher powered sound source (compared to a Boomer) that produces an omnidirectional acoustic pulse using an electrical arc. The hydrophone system consists of individual hydrophone elements located within neutrally buoyant synthetic hydrocarbon filled tubing. They typically contain 8 to 12 hydrophone elements evenly spaced in a tube that is 2.5 to 4.5 m in length and 25 mm in diameter. The cable will hold approximately 5 L of hydrophone fluid.

The SBP together with a surface towed boomer/sparker can be used for acquisition of shallow geological data, usually to a depth of 50-200 m below the seabed.



3.4.1.5 Magnetometer

A magnetometer survey will be conducted simultaneously with the other geophysical techniques. A magnetometer is used to measure total magnetic field strength to identify ferrous objects lying on, or buried immediately below, the sea floor. The sensor will be towed as close to the seafloor as possible and sufficiently far away from the vessel to isolate the sensor from the magnetic field of the survey vessel.

3.4.1.6 Geophysical Equipment Deployment

The survey vessel together with autonomous underwater vehicles (AUV), remotely operated vehicles (ROVs), towfish and/or catamaran will be used to deploy equipment and collect geophysical data.

Proposed deployment methods are summarised in Table 3-5.

Table 3-5 Proposed geophysical equipment deployment method

Geophysical Equipment	Towfish	Surface Tow	DeepTow	Hull Mounted
SBES				✓
MBES				✓
SSS	✓		✓	
CHIRP	✓			✓
Pinger	✓			
Boomer		✓	✓	
Sparker		✓		
Magnetometer			✓	

3.4.2 Environmental Baseline Survey (BTW Only)

The objective of the environmental survey is to collect baseline data from the BTW operational area (and pipeline alignment) through sampling of benthos and collection of water and sediment samples.

3.4.2.1 Water Sampling

Vertical profiling of the water column will be undertaken using a CTD profiler and supplemented with sampling of discrete water samples using a Niskin sampler from 3 sample depths (near surface, mid water and above the seabed).

3.4.2.2 Sediment Sampling

Surface sediment samples will be collected using a Van Veen corer (or equivalent) for sediment quality assessment as well as assessment of benthic infauna.

3.4.2.3 Video Survey

Seabed conditions will also be documented using a video camera system. This may involve use of a towed video system or ROV.

3.4.3 Geotechnical Survey Program

The objective of the geotechnical survey is to assess and characterize seabed conditions in the nominated locations, specifically:



- To acquire shallow geotechnical samples to support subsea facilities and pipeline design, route selection and seabed stability studies and to calibrate/interpret geophysical records
- To acquire geologic cores to aid in understanding the local geology and geo-hazards and help establish ages of key seabed features.

The geotechnical survey will involve the following activities (Table 3-6):

- Borehole drilling at potential drill rig spud can locations
- PLEM (Pipeline End Manifold) seabed sampling and PCPT (Piezocone Penetration Test)
- Pipeline seabed sampling and PCPT along the pipeline route.

All drilling proposed is for geotechnical purposes only – there will be no drilling through petroleum-bearing reservoirs.

For the BTW survey, up to 3 rotary boreholes will be drilled to coincide with the potential jack up rig spud can locations. The maximum depth of the boreholes is one borehole to 80 m depth (below the seabed) and two boreholes to 30 m depth (below the seabed). Downhole sampling would be undertaken at predetermined intervals.

The PLEM seabed sampling and PCPT program will involve collection of piston cores (PC), or vibracores (VC) if PC recovery is not possible. Target depth for the cores is 6 m.

Geotechnical testing along the pipeline and umbilical routes will involve the collection of a series of PCPTs and VCs along the proposed alignment at predetermined intervals. Two separate sections of pipeline will be surveyed with estimated lengths of 7 km and 4 km, in addition to an 8 km section of umbilical. The maximum spacing between tests will be 500 m, with additional tests where there is an observed change in soil characteristics. Target depth for the cores is 3 m.

For the VIC/L9 survey, up to 3 rotary boreholes will be drilled to coincide with a potential jack up rig spud can location. The maximum depth of coring required corresponds to the depths mentioned for the BTW geotechnical program.

For all other areas, allowance of one borehole to 80 m depth (below the seabed) and two boreholes to 30 m depth (below the seabed) has been made for each of the survey locations.

Table 3-6 Survey parameters for the Geotechnical Field Program

	West Barracouta	VIC/L9	Kipper	Other Areas
Number of Survey Locations	3	2	2	16
Water Depth (m)	46	89	95	36-73
Number of 80m depth boreholes (max)	1	6	2	16
Number of 30m depth boreholes (max)	2	10	2 (40m)	32
Number of 6m depth vibracores or piston cores (max)	3	3	0	0
Number of 3m depth vibracores or piston cores (max)	4	4	0	0



Notes: PCPT testing will be undertaken on all cores collected

3.4.3.1 Borehole sampling

Rotary borehole sampling involves drilling through cemented soils or weak rock using an open-centred drill bit. Sampling can be performed using a dedicated rotary coring drill string or a drop in core barrel that latches inside the drill string. As the borehole is advanced, the core enters the open face drill bit and is retained in an inner core barrel. On reaching the final penetration depth all equipment is withdrawn from the seabed. A small hole will remain in the seabed, which will eventually collapse and /or infill. The hole left in the seabed will be proportional to the geometry of the drill string.

Borehole drilling also requires the use of a surface mud system that delivers drilling fluid downhole and is then recirculated until the target depth is achieved.

3.4.3.2 In-situ Penetration Testing

Penetration testing, such as PCPT or T-Bar, involves pushing a penetrometer (probe) into the seabed at a constant rate while continuously measuring resistance, friction and water pressure. CPT is the most frequently performed penetration test but in suitable seabed sediments, the cone penetrometer can be replaced with a ball or T-bar penetrometer to continuously measure resistance, friction and water pressure during both the push-in and pull-out phases of the test.

On reaching the required final penetration depth, all equipment is withdrawn from the seabed. A small hole will remain in the seabed, which will eventually collapse and infill with the movement of surface sediments in ocean current. The hole will be proportional to the geometry of the penetrometer used:

- CPT: Approximately 25-40 mm diameter
- Ball penetrometer: Approximately 56.4-133 mm diameter
- T-bar penetrometer: Approximately 40 mm nominal diameter and 250 mm length.

3.4.3.3 Drill Cuttings

Drill cuttings are inert pieces of rock, gravel and sand removed from the subsurface borehole during the rotary drilling process. They are comprised of calcarenite, shale and sandstone. Cuttings are likely to range in size from very fine to very coarse particles, with a mean size 10 mm in diameter.

The coring process generates minimal cuttings in the form of benign calcareous sediment which are removed from the borehole by drilling fluid and discharged at the seafloor. The borehole diameter will be 100 mm or less. Boreholes drilled will generate a very small volume of cuttings. Approximate volumes of cuttings generated as part of the rotary borehole sampling and coring are provided in Table 3-7.

Table 3-7 Approximate drill cutting discharge volumes

Activity	Depth below mud line	Diameter of hole (mm)	Maximum number of holes	Total drill cuttings volume
Rotary Boring	80m	<100	24	7 m ³
Rotary Boring	30m	<100	44	5 m ³

3.4.3.4 Drilling Fluids

Drilling fluid is required to lubricate the face of the drill bit, keep the boreholes clean, (free from cuttings) and prevent the borehole from collapsing during the coring process. Seawater is the primary constituent of geotechnical drilling fluids. One or more chemically inert water-based muds (WBM) may be added to seawater to increase the specific gravity of the mud. Common WBM that may be used during the

survey program are outlined in Table 3-8. The geotechnical drilling fluids that will be used will only be known after the contract is awarded.

Table 3-8 Common drilling fluid additives for geotechnical seabed coring

Fluid	Function	Offshore Chemical Notification Scheme (OCNS) Rating
Guar gum	Viscosifier	OCNS Group E
Bentonite	Viscosifier	OCNS Group E
Barite	Lost circulation material	OCNS Group E

3.4.3.5 Fluid Assessment Process

Esso will review the geotechnical drilling fluids for environmental acceptability as part of the chemical approval process (See Section 7.14.1). This staged process involves a review all chemical against international standards for example the Chemical Hazard Assessment and Risk Management (CHARM) or Offshore Chemical Notification Scheme (OCNS), OSPAR as used in the North Sea.

If the chemical has not been assessed internationally, environmental testing information (e.g., aquatic toxicity, biodegradation or bioaccumulation results) is used for the assessment. Chemicals that do not pass one of these two acceptance tests are not considered 'low impact' or suitable for overboard discharge and will not be discharged to the marine environment. Not all water soluble chemicals are required to be subject to the Chemical Approval process, as a minimum only water soluble chemicals intended for discharge.

3.4.3.6 Vibracoring/ Piston Coring

Piston coring involves penetrating the seabed with a steel sample tube to recover soil samples. The leading edge of the sample tube is tapered to minimise disturbance to the core and seabed. If recovery of the piston cores are insufficient due to a hard bottom, a vibracore may be used. The vibracore involves attaching a mechanical vibration source to the core tubing allowing easier extraction of the core.

In addition, a box core may be used to take grab samples of surface sediments from the seafloor if the CPT readings are not consistent.

On reaching the required penetration depth all equipment is withdrawn from the seabed. A small hole will remain in the seabed which will eventually collapse and infill. Typically the hole left in the seabed will be proportional to the geometry of the sample tube (i.e., approximately 3 m or 6 m depth by 85 mm in diameter).

3.5 Proposed survey vessels

Two separate vessels are likely to be contracted to complete the survey program.

The geophysical and minor elements of the geotechnical survey will be completed by a vessel similar to the MV Offshore Guardian which has previously operated in Victoria. The 34m long vessel is a shallow draught, alloy aluminium catamaran with a 20 tonne extendable A-frame and crane. The vessel has a maximum speed of 15 knots and can carry up to 28 passengers. It has a maximum fuel capacity of 60m³.



Figure 3-2 MV Offshore Guardian

The geotechnical survey will be undertaken using a multipurpose vessel such as the MV Fugro Voyager or equivalent (Figure 3-3). The vessel is 82m in length, has a maximum speed of 12 knots and can carry up to 60 personnel. It has a maximum fuel capacity of 800 m³ (with a maximum single tank volume of 144 m³).



Figure 3-3 MV Fugro Voyager

The design of the Fugro Voyager allows integrated investigation methods to be deployed during one survey programme. A twin tower type drilling derrick will be installed over a centrally located moonpool and drilling is performed with a heave motion compensated ram type drilling system. The drilling machinery and equipment, rig pumps, drilling fluid bulk storage and mixing and ancillary equipment is installed below the deck providing a clear uncluttered main deck/ drill floor area that when combined with automated pipe and tool handling equipment promotes safe drill floor operations.

3.5.1 Survey Vessel Positioning

USBL (Ultra-short Base Line) acoustic positioning system will be utilised on board the geotechnical vessel (and may be an option on the geophysical vessel). This tool is used to locate the position of equipment lowered to the seabed. The USBL system uses a vessel mounted transceiver to detect the range and bearing to a target using acoustic signals. This range and bearing technique is based on two principles:

- An accurate range can be determined by knowing precisely the time taken for an acoustic signal to travel between the target and the transceiver and the speed at which the signal travelled (sound speed)
- The bearing can be determined by knowing the discreet difference in phase between the reception of the signal at the multiple transducers present in the transceiver. This allows the



USBL system to determine a time-phase difference for each transducer and therefore calculate the angle of the arriving signal.

An acoustic pulse is transmitted by the transceiver and detected by the subsea transponder, which replies with its own acoustic pulse. This return pulse is detected by the shipboard transceiver. The time from the transmission of the initial acoustic pulse until the reply is detected is measured by the USBL system and is converted into a range. To calculate a subsea position, the USBL calculates both a range and an angle from the transceiver to the subsea beacon. Angles are measured by the transceiver, which contains an array of transducers. The transceiver head normally contains three or more transducers separated by a baseline of 10 cm or less. A method called “phase-differencing” within this transducer array is used to calculate the angle to the subsea transponder. The transducer will then send sound signals, typically at 20 to 30 kHz to a USBL transponder mounted on the object (such as a seabed frame or coring device), whose position is being determined.

3.5.2 Survey Vessel Refuelling

No at sea refuelling will occur during either survey, vessels will return to port for refuelling, supplies and crew changes.

4. Description of the environment

4.1 Overview

In accordance with Regulation 13(2) and 13(3) of the Environment Regulations, a description of the existing environment that may be affected by the activity (planned and unplanned activities, as described in Section 3) including details of the particular relevant values and sensitivities of the environment are provided in this section, and have been used for the purposes of the risk assessment.

The key existing environment characteristics are described in terms of the operational area and the zone of potential impact (ZPI) as shown in (Figure 4-1). This is the zone potentially impacted by a worse case spill scenario from a vessel at PCA, BTW and VIC/L9.

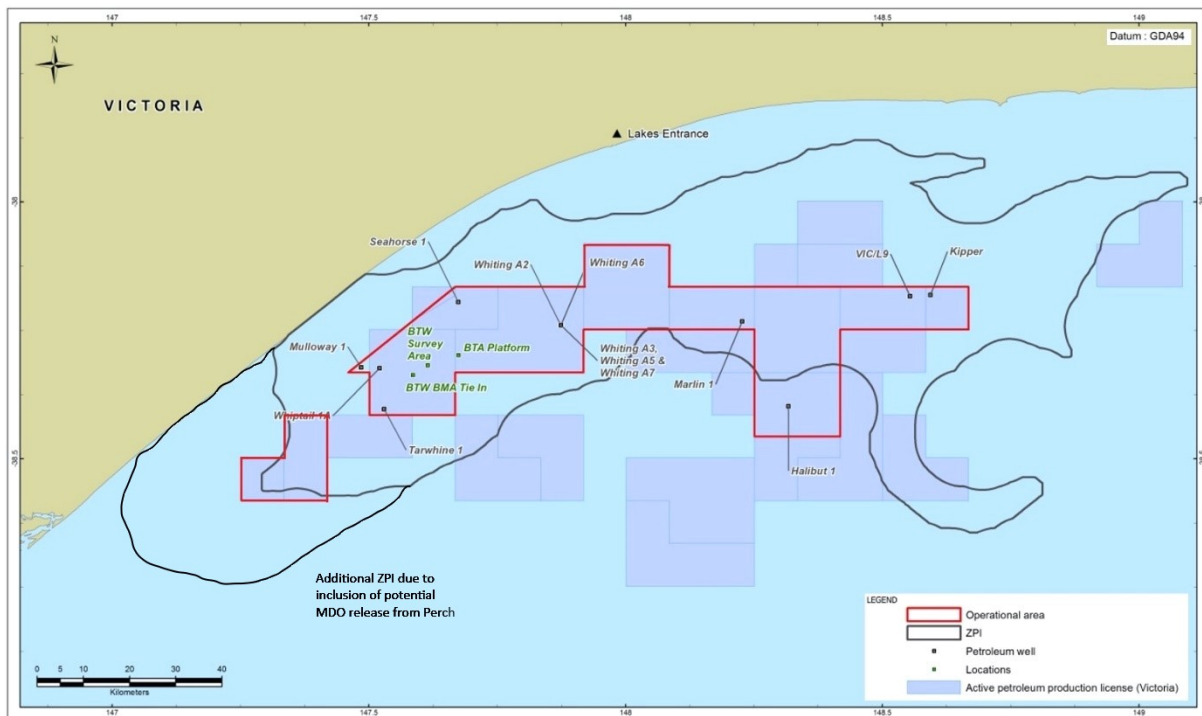


Figure 4-1 Operational Area and ZPI for the Geophysical and Geotechnical Activities

4.2 Regional context

The operational area is located in the South-east Shelf Transition bioregion of the South-east marine region. The continental shelf is relatively broad and shallow in the southern area of the Gippsland Basin. The area is strongly influenced by a number of different currents that run along, through and nearby the shelf, bringing both warm and cool currents. Nutrients from cooler upwelling bring rich biota that thrives in the warmer shallower shelf region. Fauna is characterised by assemblages of fish, echinoderm, gastropods and bivalves.

4.3 Physical environment

Bass Strait is the region of the continental shelf that separates mainland Australia from Tasmania. The strait, including the operational area and ZPI, is located in a relatively shallow area of the continental shelf (Figure 4-2).

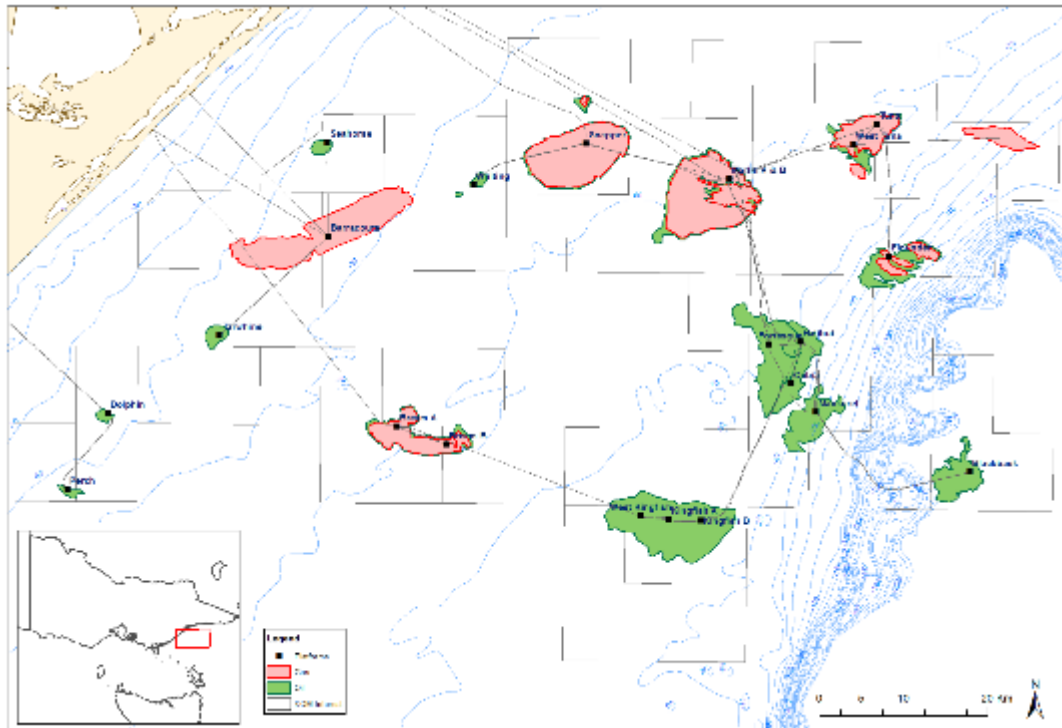


Figure 4-2 Bathymetry within Eastern Bass Strait

4.3.1 Climate and meteorology

The wind direction and speed around the ZPI depends on the position and movement of synoptic systems. Wind speeds are in the range of 10 to 30 km per hour, with maximum gusts reaching 100 km per hour. The wind direction is predominately westerly during winter, westerly and easterly during spring and autumn (when wind speeds are highest) and easterly during summer. Strong south-easterly winds can be generated by low pressure systems known as ‘east coast lows’. Although these occur relatively infrequently (once or twice per year), the longer fetch of these winds increases their potential for generating extreme wave conditions (BOM 2017).

Average summer air temperatures in coastal Victoria range from early morning lows of 12 to 15°C, to afternoon highs of 23 to 26°C (BOM 2017). Average winter temperatures range from minimums of 4°C to maximums of 15°C in the afternoons. Offshore (on Deal Island in central Bass Strait), milder conditions occur with an average summer range of 13 to 21°C and an average winter range of 9 to 14°C (BOM 2017).

Average annual rainfall along the Gippsland coast ranges from approximately 500 mm to greater than 1,000 mm. Offshore (on Deal Island in central Bass Strait) annual rainfall is comparable (average 714 mm) and shows a similar pattern to the coastal region (Lakes Entrance) with slightly higher winter rainfall (BOM 2017).

There are three main and one minor types of storms which can generate severe wave conditions in the operational area in Bass Strait. These are (Esso 1989, Cardno 2017):

South-east Storms: are generally associated with what has become known as an “east-coast low”. East-coast lows are generally associated with very strong east to south-east winds (speeds in excess of 80 knots have been measured off the New South Wales coastline) and high rainfall. South-east storms resulting from east-coast lows occur relatively infrequently (on average 1 to 2 per year), and not all travel far enough south to cause concern in Bass Strait. The waves they generate are however, unrestricted by fetch or water depth. As such they have the greatest potential for generating extreme wave conditions in eastern Bass Strait.



South-west storms: occur relatively frequently (typically several severe storms per year). Due to fetch and depth limitation, it is unlikely that extreme design-wave conditions will occur during a south-west storm.

South Storms: are generally associated with low-pressure systems in the western part of the Tasman Sea. During the peak of the storm the Tasman Sea lows generate very strong south south-east through to south south-west winds in Bass Strait. During storm development however, the wind can have a significant south-east or south-west component, depending on the origin of the low. Southerly storms occur at about the same frequency as south-east storms. Southerly storms are considered to have a greater potential than the south-west storms for generating extreme wave conditions.

Small-scale Bass Strait Lows: can generate south east, south or south west waves, depending on their origin and location. These storms can be quite severe (e.g., the January 1986 storm), but due to fetch limitations are unlikely to be the cause of extreme design-wave conditions.

4.3.2 Oceanography

4.3.2.1 Currents and tides

Currents around the operational area location are tide and wind driven. Tidal movements predominantly have a northeast–southwest orientation. Tidal flows come from the east and west during a rising (flood) tide, and flow out to the east and west during a falling (ebb) tide. Tidal streams are dominated by the lunar tidal constituent, which has a period of 12.4 hours. The main tidal components around the operational area vary in phase by about three to four hours from east to west. Most of this phase change occurs between Lakes Entrance and Wilsons Promontory. Timing of the high tide, for example, can vary by up to three hours across this region. Tides in the area from Lakes Entrance to Gabo Island are, however, relatively weak in comparison to other areas of Bass Strait (GEMS 2005).

Wind driven currents in the operational area can be caused by the direct influence of weather systems passing over Bass Strait (wind and pressure driven currents) and the indirect effects of weather systems passing over the Great Australian Bight (GEMS 2005).

4.3.2.2 Water temperatures and density stratification

Temperatures in the subsurface waters of the operational area range from about 13°C in August/September to 16°C in February/March. Surface temperatures can exceed 20°C at times in late summer due to the warmer waters of the East Australia Current entering the strait. Water temperatures in the operational area are expected to follow this pattern (Jones 1980).

Waters are generally well mixed, but surface warming sometimes causes weak stratification in calm summer conditions. During these times, mixing and interaction between varying water masses leads to variations in horizontal water temperature and a thermocline (temperature profile) develops. The thermocline acts as a low friction layer separating the wind driven motions of the upper well mixed layer from the bottom well mixed layer. As a result, upwelling of cold water on the northern shores of Bass Strait can occur (Jones 1980).

4.3.2.3 Wave height

The area around the operational area is a high energy environment exposed to frequent storms and significant wave heights. High wave conditions are generally associated with strong west to southwest winds caused by the eastward passage of low pressure systems across Bass Strait. Storms may occur several times a month resulting in wave heights of 3 to 4 m or more. In severe cases, southwest storms can result in significant wave heights of greater than 6 m (Jones 1980).

Wave data have been analysed for the ten year period from 1977 to 1987 (Lawson & Treloar 1987). Higher wave conditions are generally associated with strong west to south west winds caused by the eastward passage of low pressure systems across Bass Strait. These may occur several times per month and can result in significant wave heights of three to four metres or more. In severe cases, south west storms can result in significant wave heights of up to six to seven metres.



Extreme design wave conditions are associated with east coast low pressure systems. These can result in very strong east to south east winds in eastern Bass Strait. The 1989 Metocean Design Criteria Report (Esso 1990) gives a design significant wave height of 9.0 m and a corresponding maximum wave height of 17.5 m.

4.3.2.4 Bathymetry

The bathymetry in the ZPI is concave shaped, with a shallower rim on the eastern and western entrances to the strait and a deeper centre. The seabed bathymetry across the ZPI region is highly variable. A steep nearshore profile (0 to 20 m water depth) extends to a less steep inner (20 to 60 m water depth) and moderate profile (60 to 120 m water depth), concluding with a flat outer shelf plain (greater than 120 m water depth) in the western part of the ZPI, and a steep slope into the Bass Canyon in the east (Black et al. 1991). The operational area lies between approximately 36-100 m water depth.

4.4 Biological environment

The operational area and ZPI supports a range of diverse benthic invertebrate fauna as well as a variety of vertebrate species such as fish, birds, seals and whales, including listed, endangered and vulnerable species.

4.4.1 Protected species

The EPBC Act Protected Matters Search Tool has been used to identify threatened or migratory species that may occur within and adjacent to the operational area and the wider ZPI; this informs the impact assessment of planned events, as well as unplanned events in Section 6.

Two EPBC Act Protected Matters Search Tool reports were generated; one based on the operational area and one based on the ZPI for the worst case spill scenario – a marine diesel oil (MDO) spill from a vessel (Appendix A). New EPBC Act Protected Matters Search Tool reports have been generated to include additional operational areas and the wider ZPI for the worst case spill scenario. These additional reports have been included in Appendix A and the results of these reports have been included in Table 4-1.

A total of 57 EPBC Act listed species were identified as potentially occurring within the wider ZPI, of which a subset of 53 were identified as potentially occurring within the operational area (Table 4-1). It should be noted that the EPBC Act Protected Matters Search Tool is a general database that conservatively identifies areas in which protected species have the potential to occur.

Table 4-1 Threatened and migratory marine species under the EPBC Act potentially occurring within the operational area or ZPI

Species	Common Name	Status	Presence in operational area	Presence in ZPI
Marine mammals				
<i>Balaenoptera bonaerensis</i>	Antarctic Minke Whale, Dark-shoulder Minke Whale	Migratory	Not present	Species or species habitat likely to occur within area
<i>Balaenoptera borealis</i>	Sei Whale	Vulnerable / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Balaenoptera edeni</i>	Bryde's Whale	Migratory	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Balaenoptera musculus</i>	Blue Whale	Endangered / Migratory	Species or species habitat likely to occur within area	Species or species habitat likely to occur within area
<i>Balaenoptera physalus</i>	Fin Whale	Vulnerable / Migratory	Foraging, feeding or related	Foraging, feeding or related



Species	Common Name	Status	Presence in operational area	Presence in ZPI
			behaviour likely to occur within area	behaviour likely to occur within area
<i>Caperea marginata</i>	Pygmy Right Whale	Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Eubalaena australis</i> (<i>Balaenoptera glacialis australis</i>)	Southern Right Whale	Endangered / Migratory	Species or species habitat known to occur within area	Species or species habitat known to occur within area
<i>Megaptera novaeangliae</i>	Humpback Whale	Vulnerable / Migratory	Species or species habitat known to occur within area	Species or species habitat known to occur within area
<i>Orcinus orca</i>	Killer Whale, Orca	Migratory	Species or species habitat likely to occur within area	Species or species habitat likely to occur within area
<i>Physeter macrocephalus</i>	Sperm Whale	Migratory	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Lagenorhynchus obscurus</i>	Dusky Dolphin	Migratory	Species or species habitat may occur within area	Species or species habitat likely to occur within area
Marine reptiles				
<i>Caretta caretta</i>	Loggerhead Turtle	Endangered / Migratory	Species or species habitat likely to occur within area	Species or species habitat likely to occur within area
<i>Chelonia mydas</i>	Green Turtle	Vulnerable / Migratory	Species or species habitat known to occur within area	Species or species habitat known to occur within area
<i>Dermochelys coriacea</i>	Leatherback Turtle, Leathery Turtle, Luth	Endangered / Migratory	Species or species habitat likely to occur within area	Species or species habitat likely to occur within area
<i>Eretmochelys imbricata</i>	Hawksbill Turtle	Vulnerable / Migratory	Not present	Species or species habitat likely to occur within area
Fish, sharks and rays				
<i>Prototroctes maraena</i>	Australian Grayling	Vulnerable	Species or species habitat may occur within area	Species or species habitat likely to occur within area
<i>Carcharias taurus</i> (east coast population)	Grey Nurse Shark (east coast population)	Critically Endangered	Not present	Species or species habitat may occur within area
<i>Carcharodon carcharias</i>	White Shark, Great White Shark	Vulnerable / Migratory	Breeding known to occur within area	Breeding known to occur within area
<i>Isurus oxyrinchus</i>	Shortfin Mako, Mako Shark	Migratory	Species or species habitat likely to occur within area	Species or species habitat likely to occur within area
<i>Lamna nasus</i>	Porbeagle, Mackerel Shark	Migratory	Species or species habitat likely to occur within area	Species or species habitat likely to occur within area
<i>Rhincodon typus</i>	Whale Shark	Vulnerable / Migratory	Species or species habitat may occur within area	Species or species habitat may occur within area
Seabirds				
<i>Actitis hypoleucos</i>	Common Sandpiper	Migratory Wetland Species	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Apus pacificus</i>	Fork-tailed Swift	Migratory	Species or species habitat likely to occur within area	Species or species habitat likely to occur within area



Species	Common Name	Status	Presence in operational area	Presence in ZPI
<i>Ardenna carneipes</i> (<i>Puffinus carneipes</i>)	Flesh-footed Shearwater, Fleshy-footed Shearwater	Migratory	Species or species habitat likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Botaurus poiciloptilus</i>	Australasian Bittern	Endangered	Not present	Species or species habitat known to occur within area
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Migratory Wetland Species	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Calidris canutus</i>	Red Knot, Knot	Endangered / Migratory Wetland Species	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Calidris ferruginea</i>	Curlew Sandpiper	Critically Endangered / Migratory Wetland Species	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Calidris melanotos</i>	Pectoral Sandpiper	Migratory Wetland Species	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Diomedea antipodensis</i>	Antipodean Albatross	Vulnerable / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Diomedea antipodensis gibsoni</i>	Gibson's Albatross	Vulnerable / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Diomedea epomophora</i>	Southern Royal Albatross	Vulnerable / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Diomedea exulans</i>	Wandering Albatross	Vulnerable / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Diomedea sanfordi</i>	Northern Royal Albatross	Endangered / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Fregetta grallaria grallaria</i>	White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian)	Vulnerable	Species or species habitat likely to occur within area	Species or species habitat likely to occur within area
<i>Halobaena caerulea</i>	Blue Petrel	Vulnerable	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Macronectes giganteus</i>	Southern Giant-Petrel, Southern Giant Petrel	Endangered / Migratory	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Macronectes halli</i>	Northern Giant Petrel	Vulnerable / Migratory	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew	Critically Endangered / Migratory Wetland Species	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Pachyptila turtur subantarctica</i>	Fairy Prion (southern)	Vulnerable / Migratory	Species or species habitat may occur within area	Species or species habitat known to occur within area



Species	Common Name	Status	Presence in operational area	Presence in ZPI
<i>Pandion haliaetus</i>	Osprey	Migratory Wetland Species	Species or species habitat may occur within area	Species or species habitat likely to occur within area
<i>Phoebastria fusca</i>	Sooty Albatross	Vulnerable / Migratory	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Pterodroma leucoptera leucoptera</i>	Gould's Petrel, Australian Gould's Petrel	Endangered	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Sternula nereis nereis</i>	Australian Fairy Tern	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Thalassarche bulleri</i>	Buller's Albatross, Pacific Albatross	Vulnerable / Migratory	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Thalassarche bulleri platei</i>	Northern Buller's Albatross, Pacific Albatross	Vulnerable / Migratory	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Thalassarche cauta</i>	Tasmanian Shy Albatross	Vulnerable / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Thalassarche cauta cauta</i>	Shy Albatross, Tasmanian Shy Albatross	Vulnerable / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Thalassarche cauta steadi (Thalassarche steadi)</i>	White-capped Albatross	Vulnerable / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Thalassarche chrysostoma</i>	Grey-headed Albatross	Endangered / Migratory	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Thalassarche eremita</i>	Chatham Albatross	Endangered / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Thalassarche impavida</i>	Campbell Albatross, Campbell Black-browed Albatross	Vulnerable / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area
<i>Thalassarche melanophris</i>	Black-browed Albatross	Vulnerable / Migratory	Species or species habitat may occur within area	Species or species habitat may occur within area
<i>Thalassarche salvini</i>	Salvin's Albatross	Vulnerable / Migratory	Foraging, feeding or related behaviour likely to occur within area	Foraging, feeding or related behaviour likely to occur within area

4.4.1.1 Listed threatened species recovery plans

The requirements of the species recovery plans and conservation advices (Table 4-2) have been considered to identify any requirements that may be applicable to the risk assessment (Section 6). Recovery plans are enacted under the EPBC Act and remain in force until the species is removed from the threatened list. Conservation advice provides guidance on immediate recovery and threat abatement activities that can be undertaken to facilitate the conservation of a listed species or ecological community.

Table 4-2 outlines the recovery plans and conservation advices relevant to those species identified as potentially occurring within or utilising habitat in the operational area and ZPI by the EPBC Protected



Matters search (Table 4-1) and summarises the key threats to those species, as described in relevant recovery plans and conservation advices.

Table 4-2 Conservation advice for EPBC listed species considered during environmental risk assessment

Species / Sensitivity	Recovery Plan / Conservation Advice (Date Issued)	Key Threats Identified in the Recovery Plan / Conservation Advice	Relevant Conservation Actions	Relevant Section of EP
Marine mammals				
Sei Whale	Approved Conservation Advice for <i>Balaenoptera borealis</i> (sei whale) (TSSC 2015)	Noise interference, vessel disturbance	<ul style="list-style-type: none"> Evaluate risk of sound impacts to cetaceans and, if required, ensure appropriate mitigation measures are implemented Evaluate risk of vessel strikes and, if required, ensure appropriate mitigation measures are implemented Ensure all vessel strike incidents are reported in the National Vessel Strike Database 	6.1.1, 6.1.2,
				6.3.2
Blue Whale	Conservation Management Plan for the Blue Whale - A Recovery Plan under the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth of Australia 2015)	Noise interference, vessel disturbance	<ul style="list-style-type: none"> Evaluate risk of sound impacts to cetaceans and, if required, ensure appropriate mitigation measures are implemented Evaluate risk of vessel strikes and, if required, ensure appropriate mitigation measures are implemented Ensure all vessel strike incidents are reported in the National Vessel Strike Database 	6.1.1, 6.1.2
				6.3.2
Fin Whale	Approved Conservation Advice for <i>Balaenoptera physalus</i> (fin whale) (TSSC 2015c)	Noise interference, vessel disturbance	<ul style="list-style-type: none"> Once the biologically important areas for fin whales are defined (both spatial and temporal aspects) an assessment of anthropogenic noise impact should be conducted for this species Develop a national vessel strike strategy that investigates the risk of vessel strikes on fin whales and also identifies potential mitigation measures Evaluate risk of sound impacts to cetaceans and, if required, ensure appropriate mitigation measures are implemented Evaluate risk of vessel strikes and, if required, ensure appropriate mitigation measures are implemented Ensure all vessel strike incidents are reported in the National Vessel Strike Database 	6.1.1, 6.1.2,
				6.3.2
				6.1.1, 6.1.2,
				6.3.2
Southern Right Whale	Conservation Management Plan for the Southern Right Whale. A Recovery Plan under the	Noise interference, vessel disturbance	<ul style="list-style-type: none"> Evaluate risk of sound impacts to cetaceans and, if required, ensure appropriate mitigation measures are implemented Evaluate risk of vessel strikes and, if required, ensure appropriate 	6.1.1, 6.1.2
				6.3.2



Species / Sensitivity	Recovery Plan / Conservation Advice (Date Issued)	Key Threats Identified in the Recovery Plan / Conservation Advice	Relevant Conservation Actions	Relevant Section of EP
	Environment Protection and Biodiversity Conservation Act 1999 (DoSEWPC 2012)		<p>mitigation measures are implemented</p> <ul style="list-style-type: none"> Ensure all vessel strike incidents are reported in the National Vessel Strike Database 	
Humpback Whale	Approved Conservation Advice for <i>Megaptera novaeangliae</i> (humpback whale) (TSSC 2015e)	Noise interference, vessel disturbance	<ul style="list-style-type: none"> Site-specific modelling should be conducted to investigate acoustic impacts (including cumulative impacts) on humpback whale calving, resting, feeding areas or migratory pathways (for example from pile driving or explosives) Ensure the risk of vessel strike on humpback whales is considered when assessing actions that increase vessel traffic in areas where humpback whales occur and, if required appropriate mitigation measures are implemented to reduce the risk of vessel strike Evaluate risk of sound impacts to cetaceans and, if required, ensure appropriate mitigation measures are implemented Ensure all vessel strike incidents are reported in the National Vessel Strike Database 	n/a –noise modelling would not reduce potential impact of noise to cetaceans given the low levels expected
				6.3.2
				6.1.1, 6.1.2
				6.3.2
Marine reptiles				
Loggerhead Turtle	Recovery plan for marine turtles in Australia (DoEE 2017)	Vessel disturbance, oil pollution	<ul style="list-style-type: none"> Vessel interactions identified as a threat. No explicit relevant management actions relating to vessels prescribed in the plan Ensure that spill risk response programs and strategies include management turtles and turtle habitats 	6.3.2
Green Turtle				6.4
Hawksbill Turtle				
Leatherback Turtle, Leathery Turtle, Luth	Recovery plan for marine turtles in Australia (DoEE 2017) Commonwealth Conservation Advice on <i>Dermochelys coriacea</i> (TSSC 2008)	Vessel disturbance	<ul style="list-style-type: none"> No explicit relevant management actions. Vessel interactions identified as a threat 	6.3.2
Fish, sharks and rays				



Species / Sensitivity	Recovery Plan / Conservation Advice (Date Issued)	Key Threats Identified in the Recovery Plan / Conservation Advice	Relevant Conservation Actions	Relevant Section of EP
Grey Nurse Shark (east coast population)	Recovery Plan for the Grey Nurse Shark (<i>Carcharias taurus</i>) (DoE 2014)	Habitat modification and pollution	<ul style="list-style-type: none"> No explicit relevant management actions 	n/a
White Shark, Great White Shark	Recovery Plan for the White Shark (<i>Carcharodon carcharias</i>) (DoSEWPC 2013)	None	<ul style="list-style-type: none"> No explicit relevant management actions 	n/a
Whale Shark	Approved Conservation Advice for <i>Rhincodon typus</i> (whale shark) (TSSC 2015g)	Vessel disturbance, habitat degradation / modification	<ul style="list-style-type: none"> Assess impacts to whale sharks from offshore installations and associated environmental changes (chronic noise, light spill, water temperature changes, altered nutrient levels) and the mitigation measures required Evaluate risk of vessel interactions and ensure appropriate mitigation measures are implemented if required (collision avoidance systems) Minimise offshore development and transit of large vessels near habitats which correlate with whale shark aggregations and migration routes 	n/a – no installation
				6.3.2
				3
Seabirds				
Australasian Bittern	Approved Conservation Advice for <i>Botaurus poiciloptilus</i> (Australasian Bittern) (DoSEWPC 2011a)	Habitat modification and pollution	<ul style="list-style-type: none"> Manage any changes to hydrology that may result in changes to sedimentation or pollution. 	6.1.5, 6.1.6
Red Knot, Knot	Approved Conservation Advice for <i>Calidris canutus</i> (Red knot) (TSSC 2016a)	Habitat degradation - oil pollution	<ul style="list-style-type: none"> No explicit relevant management actions. Oil pollution is recognised as a threat 	6.3.5
Curlew Sandpiper	Approved Conservation Advice for <i>Calidris ferruginea</i> (Curlew Sandpiper) (TSSC 2015d)	Habitat degradation - oil pollution	<ul style="list-style-type: none"> No explicit relevant management actions. Oil pollution is recognised as a threat 	6.3.5
White-bellied Storm-Petrel (Tasman Sea)	Lord Howe Island Biodiversity Management Plan (DoECC (NSW) 2007)	Habitat degradation / modification	<ul style="list-style-type: none"> No explicit relevant management actions. Degradation / modification to threatened habitat recognised as a threat 	6.3.5
Blue Petrel	Conservation Advice <i>Halobaena caerulea</i> blue petrel (TSSC 2015a)	None	<ul style="list-style-type: none"> No explicit relevant management actions 	n/a
Southern Giant	National recovery plan for threatened		<ul style="list-style-type: none"> Evaluate risk of oil spill impact to nest locations and implement 	6.3.5



Species / Sensitivity	Recovery Plan / Conservation Advice (Date Issued)	Key Threats Identified in the Recovery Plan / Conservation Advice	Relevant Conservation Actions	Relevant Section of EP
Petrel, Northern Giant Petrel	albatrosses and giant petrels 2011-2016 (DoSEWPC 2011)	Vessel disturbance, oil pollution	appropriate mitigation measures if required <ul style="list-style-type: none"> All vessels to be in compliance with relevant pollution regulations 	6.1.5, 6.1.6
Eastern Curlew, Far Eastern Curlew	Approved Conservation Advice for <i>Numenius madagascariensis</i> (Eastern Curlew) (TSSC 2015f)	Habitat degradation / modification - oil pollution	<ul style="list-style-type: none"> No explicit relevant management actions. Oil pollution is recognised as a threat 	6.3.5
Gould's Petrel	Gould's Petrel (<i>Pterodroma leucoptera leucoptera</i>) Recovery Plan (DoEC (NSW) 2006)	Oil pollution	<ul style="list-style-type: none"> No explicit relevant management actions. Oil pollution is recognised as a threat 	6.3.5
Australian Fairy Tern	Commonwealth Conservation Advice on <i>Sternula nereis nereis</i> (Fairy Tern) (TSSC 2011)	Habitat degradation / modification - oil pollution	<ul style="list-style-type: none"> Ensure appropriate oil-spill contingency plans exist to manage subspecies' breeding sites which are vulnerable to oil spills 	6.3.5
Fairy Prion (southern)	Conservation Advice <i>Pachyptila turtur subantarctica</i> fairy prion (southern) (TSSC 2015b)	None	<ul style="list-style-type: none"> No explicit relevant management actions 	n/a
Antipodean Albatross, Gibson's Albatross, Southern Royal Albatross, Wandering Albatross, Northern Royal Albatross, Sooty Albatross, Buller's Albatross, Shy Albatross, White-capped Albatross, Grey-headed Albatross, Chatham Albatross, Campbell Albatross, Black-browed Albatross, Salvin's Albatross	National recovery plan for threatened albatrosses and giant petrels 2011-2016 (DoSEWPC 2011b)	Vessel disturbance, oil pollution	<ul style="list-style-type: none"> No explicit relevant management actions. Oil pollution is recognised as a threat 	6.3.5



Species / Sensitivity	Recovery Plan / Conservation Advice (Date Issued)	Key Threats Identified in the Recovery Plan / Conservation Advice	Relevant Conservation Actions	Relevant Section of EP
Red Knot, Bar-tailed Godwit	Wildlife conservation plan for migratory shorebirds (Commonwealth of Australia 2015c)	Habitat degradation / modification - oil pollution	<ul style="list-style-type: none"> No explicit relevant management actions. Oil pollution is recognised as a threat 	6.3.5

4.4.1.2 Marine mammals

A total of eleven marine mammal species (10 whales and 1 dolphin) were identified as listed threatened or migratory species under the EPBC Act and may inhabit or transit through the ZPI (DoEE 2017). Of these, five species are listed as threatened species, namely the blue whale (Endangered), southern right whale (Endangered), the humpback whale (Vulnerable), the fin whale (Vulnerable) and the sei whale (Vulnerable). All of these species are also listed as migratory. Details on these threatened and migratory species are included below.

Blue whale (Endangered/Migratory)

There are two recognised sub-species of blue whale in the Southern Hemisphere, which are both recorded in Australian waters. These are the Antarctic (or 'true') blue whale (*Balaenoptera musculus*) and the pygmy blue whale. Antarctic blue whale numbers have been severely depleted by historic whaling and numbers are slowly recovering. There is a lack of information surrounding the numbers of pygmy blue whales pre exploitation and the current total worldwide population is unknown (Commonwealth of Australia 2015). Blue whales generally migrate between warmer, lower latitude breeding grounds, where mating and calving takes place during winter months, and colder, higher latitude feeding grounds in the summer months (Commonwealth of Australia 2015). A species recovery plan has been prepared for the blue whale which provides details of their distribution in Australia and potential threats, which include climate variability, noise interference and vessel disturbance (Commonwealth of Australia 2015).

Areas of significance to the blue whale are feeding areas near the southern continental shelf, including the Bass Strait south of Victoria (DEH 2005b). Additionally, the biologically important areas (BIA's) for blue whales shows that the operational area and ZPI lie within their distribution and foraging range (**Figure 4-3**). Therefore blue whales are likely to occur in the operational area or ZPI during southern migration.

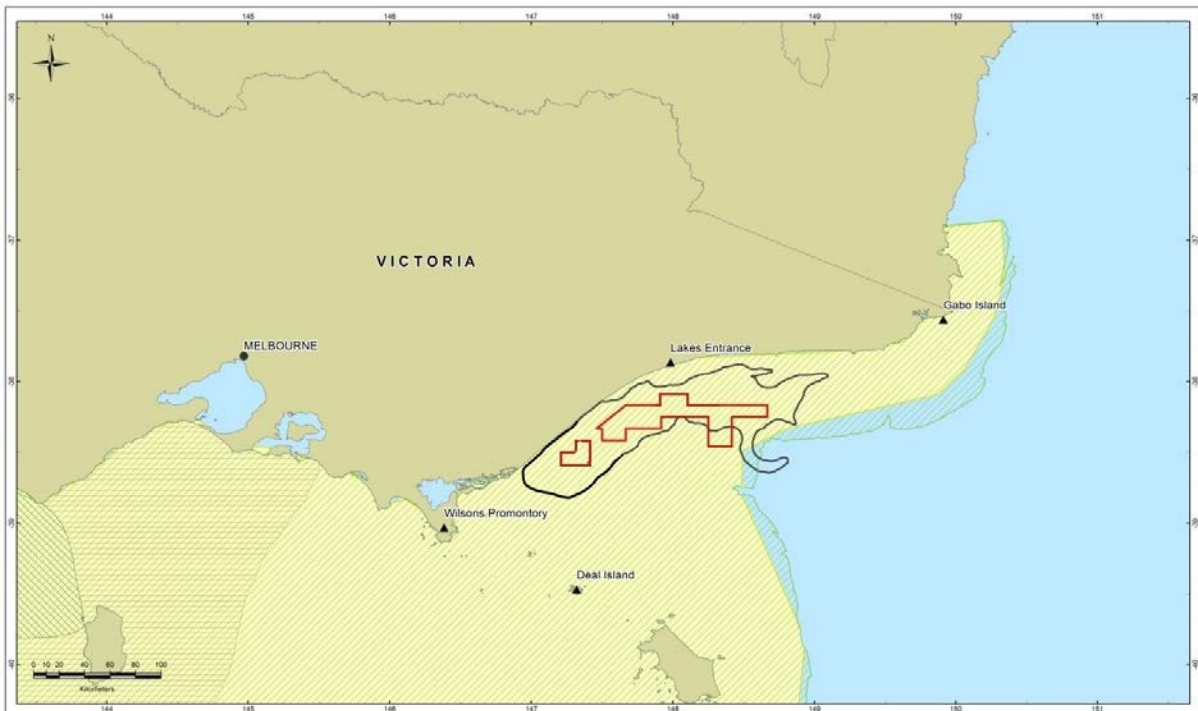


Figure 4-3 Biologically Important Area for the Pygmy Blue Whale

Southern right whale (Endangered/Migratory)

Southern right whales (*Eubalaena australis*) have undergone a significant reduction in numbers due to historic whaling (DSEWPAC 2012). A review of the initial recovery plan, developed for the period between 2005 – 2010, found that despite evidence of some population increase in south-west Australian waters, abundance and habitat occupancy numbers are still below historical figures (DSEWPAC 2012). Current population estimates are approximately 3,500 for the Australian population.

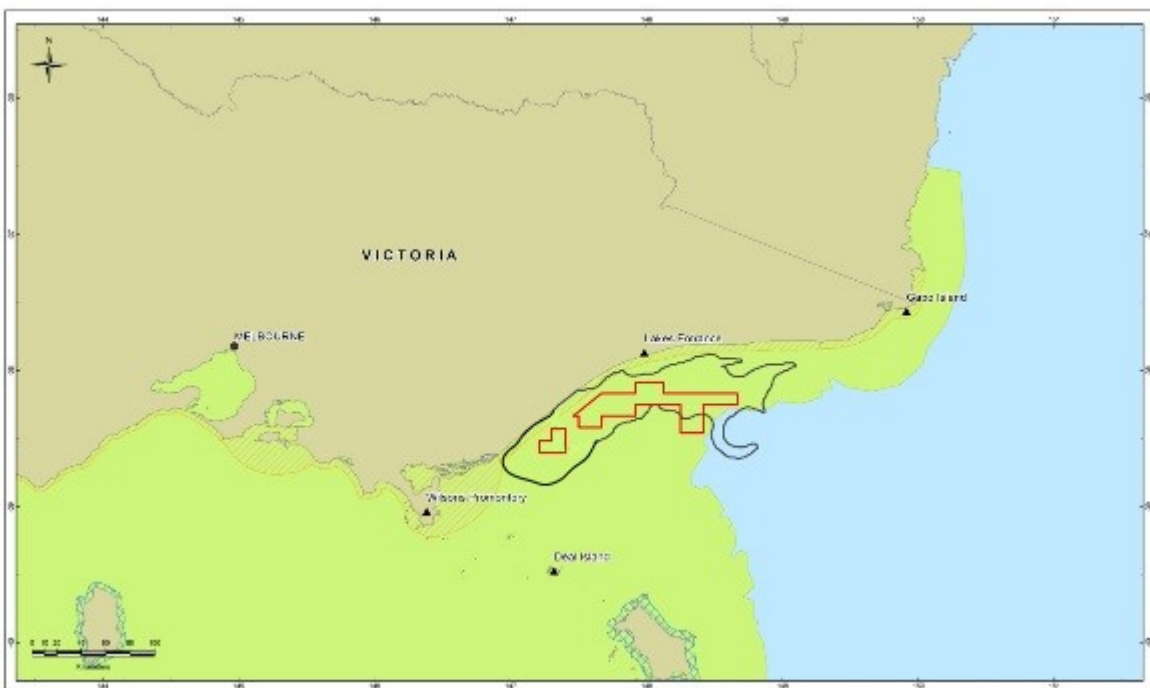


Figure 4-4 Biologically Important Area for the Southern Right Whale



Southern right whales are seasonally present on the Australian coast between about May and November. Southern right whales have been recorded in the coastal waters of all Australian states with the exception of the Northern Territory (Bannister et al. 1996) but usually occur in the mid to lower latitudes anywhere between Sydney and Perth (Bannister 1979—2005). Evidence suggests that <10% of reproductively mature female calving on the coast in any one year use locations east of eastern South Australia, with major calving areas located in Western Australia and South Australia (Bannister et al. 1996; Burnell & McKenna 1996; Kemper et al. 1997).

The operational area and ZPI overlap or are in close proximity to the southern right whale BIAs for known core range and migration and resting on migration (Figure 4-4). While southern right whales prefer the south west coast of Australia, their occurrence in the ZPI is possible during southern migration.

Humpback whale (Vulnerable/Migratory)

Humpback whales (*Megaptera novaeangliae*) have been observed in all oceans worldwide, and are considered the most common baleen whale species in Australia during the Austral winter. They were listed as vulnerable due to their small population size following unsustainable historic whaling practices (TSSC 2015e).

Humpback whales have migration patterns similar to those of blue whales, with seasonal migration through the waters of northeast Australia, from Antarctic summer feeding grounds to winter calving grounds around the Great Barrier Reef complex (Garrigue et al. 2000). Southern migration from the calving grounds peaks from late-August to early September but can extend to as late as November in some years (Jenner et al. 2001).

It is likely that the humpback whale will transit through the operational area or ZPI during its annual migration between summer feeding grounds in Antarctica and winter breeding grounds around the Great Barrier Reef, likely in small numbers. However, the nearest BIA for humpback whales (foraging) is about 150 km northeast of the ZPI.

Fin whale (Vulnerable/Migratory)

Fin whales (*Balaenoptera physalus*) inhabit offshore waters from tropical to polar regions worldwide. They have been recorded in small numbers in the waters off Western Australia, South Australia, Victoria and Tasmania. As there is a lack of recorded sightings in Australia, abundance and distribution in Australia has been interpolated primarily from whaling records and stranding events. It is likely that fin whales migrate between Australian waters and Antarctic and subantarctic feeding areas and tropical breeding areas in Indonesia (DoEE 2017a). There is currently no BIA for fin whales. Based on low numbers of sightings, it is unlikely that significant populations of fin whale would be present around the operational area or ZPI at any time.

Sei whale (Vulnerable/Migratory)

The Sei whale (*Balaenoptera borealis*) has a patchy and wide-ranging distribution, favouring deep, offshore habitat more than other large whale species. Sei whales have been sighted in the proximity of the Bonney Upwelling, western Victoria, but are not often found near the coastline and are infrequently recorded in Australian waters (Gill 2002). There is currently no BIA for the Sei whale. As they rarely occur in shallower waters, it is considered unlikely that significant numbers of the species will be present in the operational area or ZPI.

Antarctic minke whale (Migratory)

The Antarctic minke whale (*Balaenoptera bonaerensis*) primarily occupies offshore and pelagic habitats within cold temperate to Antarctic waters between 21° S and 65° S (Bannister et al. 1996; Thiele & Gill 1999). This species migrates between the summer Antarctic feeding grounds and winter sub-tropical to tropical breeding grounds. On the winter breeding grounds, Antarctic minke whales appear to occupy pelagic waters exceeding 600 m depth (Zerbini et al. 1997). Antarctic minke whales have also been reported up to 350 km south of the ice edge during winter, suggesting that some portions of the



population may over-winter in higher latitudes (Perrin & Brownell 2002; Thiele & Gill 1999). There is no BIA for Antarctic minke whales.

As the operational area and ZPI do not correspond with any known significant breeding or feeding grounds for this species, it is unlikely that Antarctic minke whales will be encountered.

Bryde's whale (Migratory)

Bryde's whales may be found in all temperate and tropical waters in the Pacific Ocean, Indian Ocean and Atlantic Ocean (Kato 2002). Population estimates are not available for this species, globally or in Australia, and no migration patterns have been documented in Australian waters (DoEE 2017c).

Bryde's whales have been recorded in both oceanic and inshore waters off all Australian states, except the Northern Territory (DoEE 2017c). Two forms are recognised: inshore and offshore Bryde's whales. Inshore whales live in coastal water less than 200 m, moving in response to prey availability (DoEE 2017c). The offshore form is found in deeper waters (500 to 1000 m) and may migrate seasonally, travelling to warmer tropical waters during the winter, although migration are not well known, and it is believed that they may also remain in warmer waters year round (Kato 2002).

BIAs for Bryde's whales have not been identified. However, one sighting, one stranding and multiple specimens of Bryde's whales occurring in Victoria have been reported (DEW 2007, Bannister et al. 1996). Therefore low numbers of this species may transit through the operational area or ZPI on occasion.

Pygmy right whale (Migratory)

Distribution of pygmy right whales in Australia waters occurs between 32° S and 47° S, however they are not spread uniformly around the coast (Kemper 2002). Few or no records of the pygmy right whale are available for eastern Victoria, with concentrations of stranded whales recorded around Tasmania and in particular the entrance of the gulfs in South Australia, where the species is suspected to be the most abundant (Kemper 2002). There are currently no BIAs for the pygmy right whale. Due to the lack of sightings in Victoria, occurrence of the pygmy right whale within the operational area or ZPI is considered unlikely.

Killer whale (Migratory)

Killer whales (*Orcinus orca*) have a widespread distribution from polar to equatorial waters around the globe, with preferred habitats of oceanic, pelagic and neritic (relatively shallow waters over the continental shelf) regions (DoEE 2017d). There is no reliable estimate of the global population of killer whales; although regions with well-studied populations of killer whales have abundance estimates available (Ford 2002). The species is listed as Data Deficient by the IUCN.

In Australia, killer whales have been recorded from all state waters and along the Australian continental shelf (Bannister et al. 1996). They appear to be more abundant in cold, deep waters (Bannister et al. 1996). The only area with regular sightings of killer whales is Macquarie Island, a Tasmanian State Reserve and World Heritage Site (Bannister et al. 1996). In South Australia, reports of killer whales included groups of about 10-50 individuals, and frequent sightings of killer whales have also been collected from the Antarctic and Victoria (Bannister et al. 1996). There is no evidence of killer whale migratory behaviour around Australia, and their frequent sightings may be influenced by seasonal changes in prey availability (Bannister et al. 1996).

There is no BIA for killer whales. Given their distribution range and sightings in the waters of Victoria, this species is likely to occur in the operational area and ZPI.

Sperm whale (Migratory)

Sperm whales (*Physeter macrocephalus*) are found worldwide and are the largest of all the toothed whale species. Their global distribution is comparable to the killer whale, with regular observations from both polar and equatorial waters (Whitehead 2002). The IUCN Red List status for sperm whales is Vulnerable.



Sperm whales are sighted frequently in deeper waters and form large aggregations (100–1,000 animals) in foraging grounds of high oceanic productivity (Whitehead 2002). Female sperm whales have restricted home ranges in water deeper than 1,000 m and less than 40 degree latitudes (Whitehead 2002). Male sperm whales will remain with their mothers for several years until early adulthood (4–21 years), at which time they will join larger male-only herds that will migrate to polar waters to feed, and return back to tropical and temperate waters to breed (Whitehead 2002). No global population estimates for sperm whales are available.

In Australia, sperm whales are most commonly found in deep waters (greater than 600 m) off the continental shelf of all Australian states (Bannister et al. 1996). There are no population estimates for sperm whales in Australia, with information regarding their presence and distribution gathered from incidental sightings and stranding records (DoEE 2017e). Bannister et al. (1996) considered it likely that they are more than tens of thousands of sperm whales in Australian waters.

There are no BIAs for sperm whales located near the ZPI. Due to their preference of deep waters, it is unlikely that sperm whales will occur in the operational area or ZPI.

Dusky dolphin (Migratory)

Dusky dolphins are distributed throughout the Southern hemisphere within temperate and sub-Antarctic zones from about 55° to 26°S (Gill et al. 2000; Ross 2006). The species is thought to be a primarily inshore species but may also be pelagic at times, and occurs in the southwest and southeast marine regions of Australia. Abundance and distribution data of dusky dolphin populations in Australian waters is limited, however low stranding and sighting rates suggest that they are uncommon (Gill et al. 2000; Ross 2006). Currently there is no BIA for the dusky dolphin. As the species is uncommon in Australian waters with limited observational records, it is unlikely that it will occur within the operational area or ZPI.

4.4.1.3 Marine reptiles

A total of four marine reptiles (turtles) were identified as listed threatened and migratory species under the EPBC Act and may inhabit or transit through the ZPI (DoEE 2017). These species are the loggerhead turtle (Endangered/Migratory), green turtle (Vulnerable/Migratory), leatherback turtle (Endangered/Migratory) and hawksbill turtle (Vulnerable/Migratory). Details on these threatened and migratory species are included below.

Loggerhead turtle (Endangered/Migratory)

Loggerhead turtles (*Caretta caretta*) are known to have a broad distribution, occurring in proximity to coral and rocky reefs, seagrass beds and muddy bays throughout eastern, northern and western Australia. Loggerhead turtles nest on sandy beach and the juvenile turtles spend their first several years adrift on the ocean currents. Once they become large enough, loggerhead turtles enter the benthic habitat to forage. Loggerhead turtles are carnivorous, feeding primarily on crustaceans and molluscs (Spotila 2004) and are likely to be found foraging in areas that support high densities of these organisms.

Significant loggerhead turtle populations in eastern Australia exist from Mon Repos north to Wreck Rock, around the Capricorn Bunker Islands and Swain Reefs, all in Queensland waters. The nearest BIAs for the loggerhead turtle are about 1,000 km south of the ZPI. Given the distance of the operational area and ZPI from known loggerhead turtle rookeries and prospective foraging areas, it is unlikely that significant numbers of loggerhead turtles will be present.

Green turtle (Vulnerable/Migratory)

Green turtles (*Chelonia mydas*) are found in tropical and subtropical waters throughout the world. The species nests, forages and migrates across tropical northern Australia, however individuals can stray into temperate waters (Cogger et al. 1993). There are seven distinct genetic populations of green turtles in Australia, the largest of which nests in Western Australia, with significant rookeries also located in Queensland and the Northern Territory. In eastern Australia, juvenile and adult green turtles feed in



intertidal and sub-tidal habitats, including coral and rocky reefs, seagrass meadows, algal turfs on sand or mud flats (Limpus 2009). Green Turtles can migrate more than 2,600 km between feeding and nesting grounds.

Given there are no BIAs or key nesting areas for green turtles near the operational area and ZPI, and due to the species' preference to inhabit tropical waters in northern Australia, the area is unlikely to represent important habitat for green turtles during any life history phase.

Leatherback turtle (Endangered/Migratory)

The leatherback turtle (*Dermochelys coriacea*) has the widest distribution of any marine turtle species, and can be found in tropical, subtropical and temperate waters throughout the world (Marquez 1990). Leatherback turtles are relatively rare in northern Australian waters and is more commonly observed in southern coastal waters around Australia, including Victoria.

No major breeding sites of leatherback turtles have been recorded in Australia (Limpus 2009); however, scattered nesting occurs in the Northern Territory, along the coast of Arnhem Land. For example, low numbers of nesting females have been recorded at Cobourg Peninsula in north-west Arnhem Land (Chatto & Baker 2008), with breeding occurring mostly during December and January.

Nesting occurs on tropical beaches and subtropical beaches (Marquez 1990) but no major centres of nesting activity have been recorded in Australia, although scattered isolated nesting (1-3 nests per annum) occurs in southern Queensland and Northern Territory (Limpus & McLachlin 1994). However, leatherback turtles are the most pelagic of all marine turtles, and make long migrations between foraging areas and nesting beaches (DoEE 2017f).

As leatherback turtles commonly occur offshore southeast Australia including near Victoria and Tasmania, leatherback turtles may occasionally transit through the operational area and ZPI. However, given the distance from known leatherback turtle rookeries and prospective foraging areas, it is unlikely that significant numbers will occur at the location. There is no BIA for leatherback turtles anywhere in Victoria.

Hawksbill turtle (Vulnerable/Migratory)

Hawksbill turtles (*Eretmochelys imbricata*) are found in tropical, subtropical and temperate waters in all oceans of the world. The total population of hawksbill turtles in Australia is unknown. However, it is known that Australia holds the largest breeding populations of hawksbill turtles in the world, and the largest rookeries (DoEE 2017g).

Hawksbill turtles spend the first five to ten years of their life drifting on ocean currents (DoEE 2017i). During this pelagic phase, they are often found in association with rafts of *Sargassum* (DoEE 2017i). Once hawksbill turtles reach 30 to 40 cm in length, they settle to forage in tropical tidal and subtidal rocky and coral reef habitat. They have also been found, those less regularly, in coastal seagrass habitat and within the deep waters of trawl fisheries. Nesting is mainly confined to tropical beaches (DoEE 2017g). Key nesting and foraging areas for hawksbill turtles are located in northern Queensland, Western Australia and the Northern Territory (DEH 2005a) but not Victoria. Hawksbill turtles feed primarily on sponges, but also forage on cephalopods, gastropods, cnidarians, seagrass and seaweed (Carr & Stancyk 1975; Witzell 1983; Limpus 1992; Spotila 2004) and are likely to be found foraging in habitats that support these organisms.

No BIAs for hawksbill turtles are located in the offshore waters of Victoria, and there are no known key nesting and foraging areas near the operational area and ZPI. Therefore hawksbill turtles are unlikely to occur.

4.4.1.4 Fish, sharks and rays

A total of six fish, sharks or rays (1 fish and 5 sharks) were identified as listed threatened or migratory species under the EPBC Act and may inhabit or transit through the ZPI (DoEE 2017). Of these, four species are listed as threatened species, namely the Australian grayling (Vulnerable), grey nurse shark



(Critically Endangered), white shark (Vulnerable/Migratory) and whale shark (Vulnerable/Migratory). Details on these threatened and migratory species are included below.

Australian grayling (Vulnerable)

The Australian grayling occurs in rivers and streams near the Otway Ranges of Victoria and in Tasmania, and is found in fresh and brackish waters of coastal lagoons. The Australian Grayling is diadromous, spending part of its lifecycle in freshwater and at least part of the larval and/or juvenile stages in coastal seas (Miles et al. 2013). Research indicates that grayling populations undergo significant annual fluctuations depending on environmental conditions.

A large population is known within Tambo River in Victoria, however limited studies have been conducted on abundance, with a decline in numbers and distribution of the species reported in NSW (DPI 2006; Jackson & Koehn 1988; Jenkins et al. 2009). There are no BIAs for the Australian grayling. Given the Tambo River drains into the Gippsland Lakes, there is low likelihood that Australian grayling will occur in the operational area or the ZPI.

Grey nurse shark (east coast population) (Critically Endangered)

The grey nurse shark (*Carcharias taurus*) has a wide-ranging in-shore distribution, focused around main continental landmasses in sub-tropical to cool, temperate waters. The species is often recorded near in-shore rocky reefs, rocky caves, islands and sandy-bottomed gutters. They have also been observed in the surf zone and close to coral reefs. It is thought that this species is not restricted to any particular habitat. They tend to hover above the seabed at depths between 15 and 40 m. Grey nurse sharks have also been recorded at depths of approximately 200 m on the continental shelf (Bennett & Bansemer 2004).

The east coast grey nurse shark population has been regularly reported from southern Queensland and around southeast Australia, however the species is now considered to be extinct in Victorian waters. Additionally, there are no BIAs for the grey nurse shark near the ZPI, and the EPBC Act Protected Matters Search Tool report did not indicate the presence of grey nurse sharks in the operational area. Therefore the species is very unlikely to occur within waters near the operational area or ZPI.

White shark (Vulnerable/Migratory)

The great white shark (*Carcharodon carcharias*) has a wide distribution, and is located throughout temperate and sub-tropical waters, from central Queensland, around the south coast and up to the north-west coast of Western Australia (DoEE 2017h). Great white sharks can be found from close to shore around rocky reefs, surf beaches and shallow coastal bays to outer continental shelf and slope areas (DoEE 2017h). Although they typically occur between the coast and the 100 m depth contour, they have been observed diving to 1,000 m (Bruce et al. 2006). Great White Sharks have been recorded travelling very large distances and do not seem to reside in one area (DoEE 2017h). However, the great white shark is often found close inshore and penetrates shallow bays in continental coastal waters.

Seasonal aggregation of juvenile white sharks occurs in key areas along the Australian coast including Ninety Mile Beach in Victoria, which is adjacent to the operational area. Additionally, the operational area and ZPI lie within the white shark BIA for known distribution and breeding (Figure 4-5). Therefore white sharks are likely to occur within the area.

Shortfin mako (Migratory)

The shortfin mako shark (*Isurus oxyrinchus*) is an active, offshore littoral and epipelagic species, found in tropical and warm-temperate seas from the surface down to at least 500 m, seldom occurring where water temperature is below 16°C (Cailliet et al. 2009). This species has been occasionally found close inshore where the continental shelf is narrow, and may occur from 20-50° between Australia and Chile, and to almost 60° south east of New Zealand (Reardon et al. 2006). There is no BIA for the shortfin mako but due to the broad distribution of this species, they may occur within the operational area or ZPI.

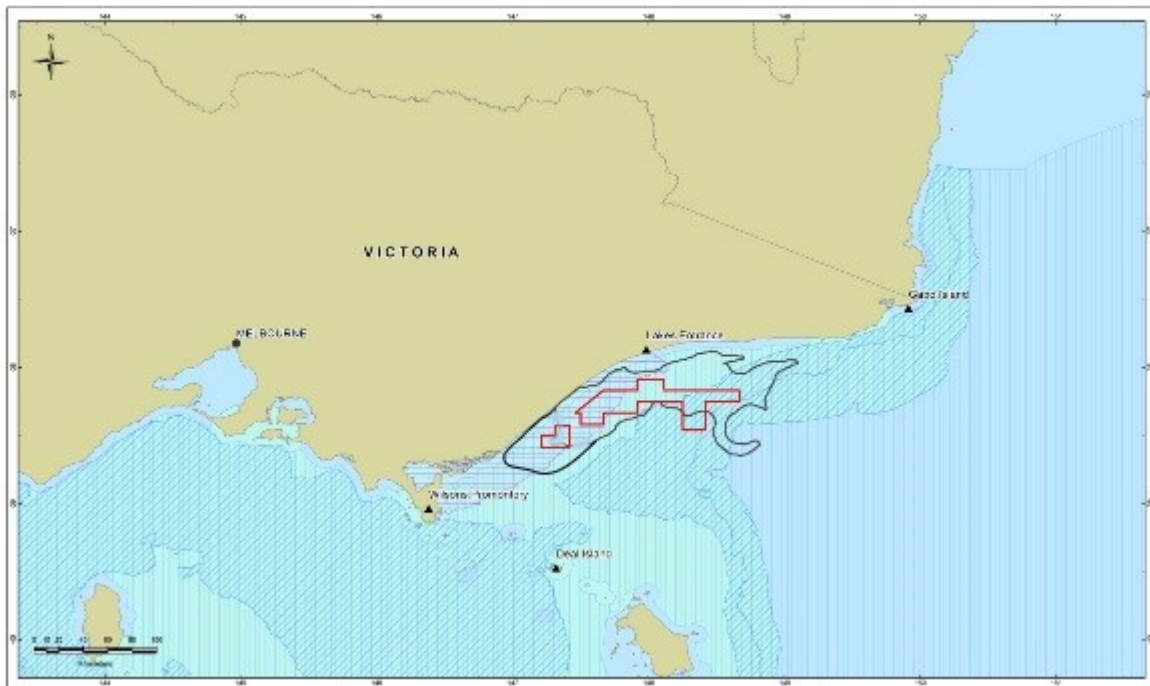


Figure 4-5 Biologically Important Area for the Great White Shark

Porbeagle (Migratory)

The porbeagle is widely distributed, inhabiting temperate and subantarctic waters of the southern hemisphere (Francis et al. 2002). The species occurs in waters from southern Queensland to southwest Australia, typically in oceanic waters but occasionally coastal waters (Francis et al. 2002; Last & Stevens 2009). The species is known to undertake seasonal migrations, however there is limited information on the timing and details of these migratory movements (Saunders et al. 2011). There is currently no BIAs for porbeagles, however due to their wide distribution they may occur within the operational area or ZPI.

Whale shark (Vulnerable/Migratory)

The whale shark (*Rhincodon typus*) has a broad distribution in tropical and warm temperate seas, usually between latitudes 30°N and 35°S (Wilson et al. 2001; Wilson et al. 2006). Whale sharks are highly migratory and the species' movements are closely associated with productivity pulses, ocean circulation and water temperatures, although this is little understood (DoEE 2017). Whale shark presence coincides with the coral mass spawning period, when there is an abundance of food (krill, planktonic larvae and schools of small fish) in the waters adjacent to the reef. The species most commonly observed in northern waters, but occasionally in Victoria and South Australia.

No BIAs for the whale shark are present in waters near Victoria. As the species prefers warmer seas near northern Australia, its occurrence in the operational area and ZPI is unlikely.

4.4.1.5 Seabirds

A total of thirty-eight seabirds or shorebirds were identified as listed threatened or migratory species under the EPBC Act and may inhabit or transit through the ZPI (DoEE 2017). Of these, eight are non-threatened migratory species, with the remaining species and subspecies ranging from vulnerable to critically endangered as described below.

Fork-tailed swift (Migratory)

The fork-tailed swift is native to over 30 countries and occurs in all Australian states and territories outside of breeding periods (Birdlife International 2009). The species leaves breeding grounds in Siberia in August-September for warmer climatic conditions, with some populations arriving in Australia around October. Fork-tailed swifts are common in Victoria from December–April when late-summer



subtropical cyclone centers move further south than usual, but are otherwise sparsely scattered across Victoria (Higgins 1999). The fork-tailed swift departs southern Australia around mid-April, heading northwards to its breeding grounds by May (Higgins 1999). Although almost exclusively aerial, including roosting, the species mostly occurs over inland plains, cliffs, beaches and dry/open habitats, foraging aerially for insects (Higgins 1999).

There is currently no BIA for the fork-tailed swift. As the species is typically sparsely scattered in Victoria during the southern migration period, it is unlikely to occur near the operational area and ZPI.

Flesh-footed shearwater (Migratory)

Most breeding populations of the flesh-footed shearwater within Australian jurisdictions are poorly known (DoEE 2017i), although breeding occurs from late August to mid-May on islands off the south and south-west coast of Western Australia, South Australia and New Zealand. The species then migrates northward at the completion of the breeding season to waters off Korea, Japan and Russia and returns by the end of September (DoEE 2017i). Colonies are known to occur over the southern Indian ocean including waters off southwest Victoria.

The nearest BIA for the flesh-footed shearwater (foraging) is located about 150 km northeast of the ZPI. Due to its distribution, the flesh-footed shearwater is likely to occur in proximity to the operational area and ZPI.

Australasian bittern (Endangered)

The Australasian bittern is distributed in eastern Australia in both coastal and inland areas from east South Australia to Mackay in Queensland, as well as Tasmania (DoSEWPC 2011a). The species inhabits wetlands with tall, dense vegetation, foraging in shallow waters. It favours seasonal and permanent freshwater habitats and frequents coastal freshwater lakes (DoSEWPC 2011a). There is currently no BIA for the Australasian Bittern, and the EPBC Act Protected Matters Search Tool report did not identify the species within the operational area. As the operational area and ZPI are located in marine waters, the species is unlikely to be present in the area.

Red knot (Endangered/Migratory)

The red knot is widespread along the coast of Victoria, with the nearest international importance located at Corner Inlet over 300 km east of the ZPI (Bamford et al. 2008). Migration occurs to high northern latitudes during the northern hemisphere summer to breeding grounds where food is readily abundant, then southward to escape severe winter conditions under which energy demands are high and prey is scarce. Both Australia and New Zealand host significant populations of red knots during the non-breeding period (Bamford et al. 2008).

Similar to other migratory shorebirds, the red knot frequents intertidal sands, mudflats and coastal wetlands. While these habitats are not present within the ZPI, as the ZPI is immediately adjacent to the coast of Victoria, the species may occur in the area during the non-breeding period. There is currently no BIA for this species.

Eastern curlew (Critically Endangered/Migratory)

The eastern curlew (*Numenius madagascariensis*) is Australia's largest shorebird. It is a long-haul flyer and easily distinguished by its long, downwards curving bill. The eastern curlew breeds in the Northern Hemisphere and arrives in Australia in August to forage for crabs and molluscs in intertidal mudflats (DoEE 2017j). The species is coastal and is primarily found in the north, east and southeast regions of Australia including Tasmania. Significant populations in Victoria are located at Corner Inlet and Western Port Bay, with smaller populations in Port Phillip Bay and scattered along the coast (TSSC 2015f). There is currently no BIA for the eastern curlew.

Due to its significant distribution in Victoria, the eastern curlew is likely to occur over waters of the operational area and ZPI, particularly near the coastal areas of the ZPI most suitable for foraging.



Fairy prion (southern) (Vulnerable)

The fairy prion breeds exclusively at Macquarie Island and the Bishop and Clerk Islands, southeast of Tasmania. The species frequents subtropical waters during the non-breeding period in winter and may occur in the coastal waters of south Australia, from north of Perth in Western Australia to Mackay in Queensland, as well as Tasmania (TSSC 2015b). There is currently no BIA for the fairy prion, although the fairy prion may occur near the operational area and ZPI during the non-breeding period.

Osprey (Migratory)

Eastern ospreys occur in coastal and littoral habitats, and terrestrial wetlands of tropical and temperate islands. The eastern osprey has a breeding range that extends around the northern coast of Australia, with a second isolated breeding population on the coast of south Australia (Barrett et al. 2003). Its total range is widespread across almost all coastal areas of Australia, however records become scarcer towards the south, and into Victoria and Tasmania, where the species is a vagrant (Barrett et al. 2003). There is currently no BIAs for the eastern osprey. Due to the scarcity of records in Victoria, the eastern osprey is unlikely to occur in the operational area or ZPI.

Little tern (Migratory)

The breeding population of the little tern in eastern Australia is distributed on the eastern and southeastern coast of the mainland and northern and eastern Tasmania, with breeding occurring in the austral spring-summer. There are 16 colonies in Victoria (Garnett & Crowley 2000). The eastern subpopulation is migratory, leaving colonies late summer-autumn, mostly vacating southern Australia. Foraging occurs in shallow waters of channels and estuaries, in surf on beaches, or from the surface (Taylor & Roe 2005). As the species is common near the coast of Victoria, it is likely to be seasonally present near the ZPI, particularly in coastal areas. However, the EPBC Act Protected Matters Search Tool report did not identify the species within the operational area nor is there a BIA for this species.

Australian fairy tern (Vulnerable)

The Australian fairy tern (*Sternula nereis nereis*) feeds almost entirely on fish, foraging in in-shore waters around sheltered islands where it nests on sandy beaches. The species is distributed along the coast of South Australia including Victoria and Tasmania (Garnett & Crowley 2000). However, it is estimated that only a few pairs remain in Victoria (IUCN 2010). The nearest BIA for the Australian fairy tern is near the coast west of Adelaide. Due to the species' limited abundance in Victoria, and the large distance from the nearest BIA, the Australian fairy tern is unlikely to occur in the operational area or ZPI.

Common sandpiper (Migratory)

The common sandpiper has a wide breeding distribution, ranging from eastern Russia to western Europe, and is found throughout Australia, south and south-east Asia and Africa (except near the equator) during non-breeding periods (Bamford et al. 2008). Breeding occurs during May-June, with southward migration between mid-July and August until a return to breeding grounds around April (del Hoyo et al. 1996). During non-breeding periods, the species inhabits inland wetland and coastal areas, such as estuaries, streams, pools, tidal creeks and freshwater seeps on coastal shores, but typically avoids large coastal mudflats (del Hoyo et al. 1996; Snow and Perrins 1998; Yalden 1992). There are currently no BIAs for the common sandpiper, however it may occur during non-breeding periods at wetland and coastal areas near the ZPI.

Sharp-tailed sandpiper (Migratory)

The sharp-tailed sandpiper migrates southward from its breeding grounds across Asia to Australia, Indonesia, New Guinea and China where it resides during the northern hemisphere winter, with over 90% of the non-breeding population occurring in Australia (Bamford et al. 2008). The non-breeding distribution within Australia is widespread with the species occurring in ephemeral wetlands inland, foraging within mudflats and grasslands (Bamford et al. 2008). Important international sites for the sharp-tailed sandpiper include Lake Buloke, Eastern Port Phillip Bay, Lake Tutchewop/Kerang, Lake Murdeduke, Western Port Bay and Ocean Grove to Barwon Heads (Bamford et al. 2008) all of which



are over 100 km west of the ZPI. Due to its preference for inland areas, the sharp-tailed sandpiper is unlikely to occur in the operational area and ZPI nor is there a BIA defined.

Pectoral sandpiper (Migratory)

The pectoral sandpiper breeds during the northern hemisphere summer in northern Russia and North America before migrating southwards. The species is transient through the Caribbean and Central America, moving to non-breeding habitats within South America and the tropical Pacific (Higgins & Davies 1996). The species has been recorded in Victoria at Port Philip Bay and the valley of the Murray River. The pectoral sandpiper typically found near coastal habitats but is occasionally found further inland. It inhabits bays, lagoons, estuaries, creeks, swamps, lakes, saltmarshes, floodplains and wetlands with low, emergent or fringing vegetation (Higgins & Davies 1996). Foraging occurs in soft mud and shallow waters. As the species inhabits coastal areas, it may occur near the ZPI, but is not expected to occur outside of migratory movements. There is currently no BIA for the pectoral sandpiper.

Curlew sandpiper (Critically Endangered/Migratory)

The curlew sandpiper (*Calidris ferruginea*) is a slim, small sandpiper with a long neck and long legs. Within Australia, curlew sandpipers are widespread across coastal habitats and also quite broadly distributed inland, occurring during the non-breeding period, and also during the breeding season where many one year old birds remain in Australia instead of migrating north. In Victoria, the species is widespread and common in inlets, coastal bays and near-coastal wetlands (Higgins & Davies 1996). There is currently no BIA for the curlew sandpiper, however the species is likely to occur within coastal areas near the ZPI.

Albatrosses

Albatross species identified as threatened or migratory species that may occur within and adjacent to the ZPI by the EPBC Act Protected Matters Search Tool include:

- Antipodean albatross* (Vulnerable)
- Gibson's albatross (Vulnerable)
- Southern royal albatross (Vulnerable/Migratory)
- Wandering albatross* (Vulnerable/Migratory)
- Northern royal Albatross (Endangered)
- Buller's albatross* (Vulnerable/Migratory)
- Northern Buller's Albatross (Vulnerable/Migratory)
- White-capped albatross* (Vulnerable/Migratory)
- Grey-headed albatross (Endangered/Migratory)
- Chatham albatross (Endangered)
- Campbell albatross* (Vulnerable)
- Black-browed albatross* (Vulnerable/Migratory)
- Salvin's albatross (Vulnerable)
- Tasmanian shy albatross (Vulnerable/Migratory)
- Shy albatross* (Vulnerable/Migratory)
- Sooty albatross (Vulnerable/Migratory).

BIAs exist for the species marked with an asterisk.

Only 6 locations under Australian jurisdiction are breeding localities for albatrosses (DoSEWPC 2011):

- Macquarie Island (including Bishop and Clerk Islets)

- Albatross Island
- Pedra Branca
- the Mewstone
- Heard and McDonald Islands
- The Australian Antarctic Territory.

These remote locations are regarded as critical habitat for the survival of albatrosses in Australian waters, particularly for shy albatrosses which breed only within Australia (DoSEWPC 2011b). Albatrosses exhibit a range of foraging behaviours and diets, but all have the ability to cover vast oceanic distances, hence all Australian waters are considered foraging habitat. The most critical foraging habitat for albatrosses is in waters south of 25 degrees which comprise the majority of foraging activity (DoSEWPC 2011b).

BIAs for the following albatrosses overlap with the operational area and ZPI (**Figure 4-6**):

- Antipodean albatross (foraging)
- Wandering albatross (foraging)
- Buller's albatross (foraging)
- Campbell albatross (foraging)
- Black-browed albatross (foraging)
- Shy Albatross (foraging likely).

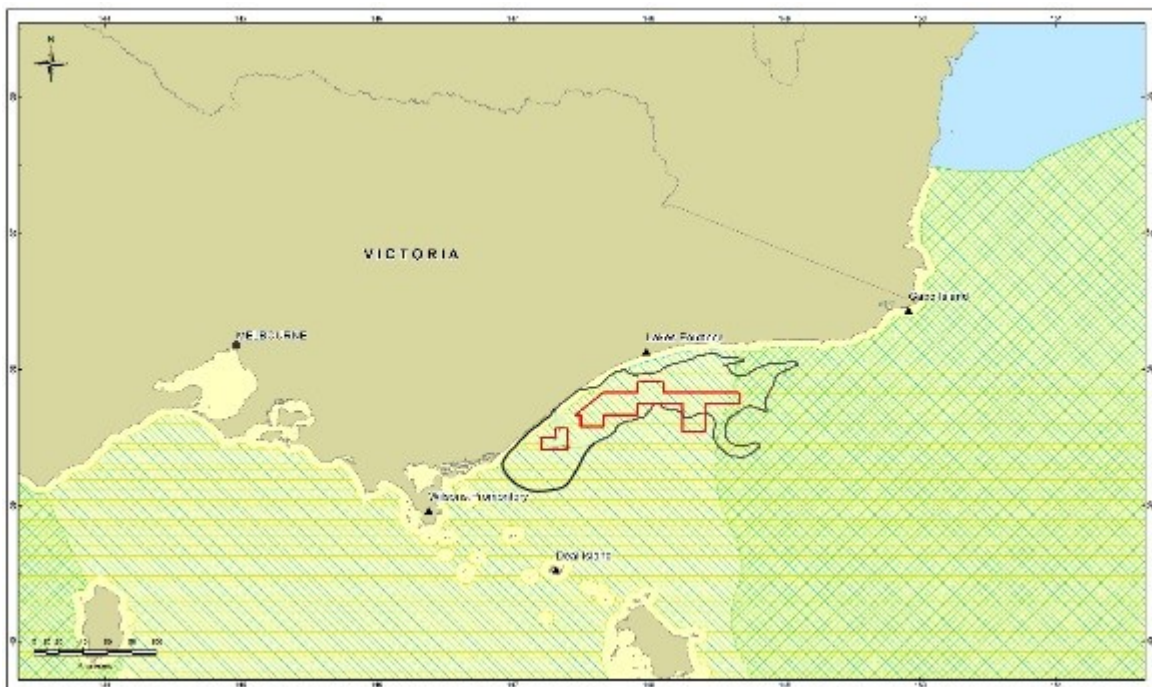


Figure 4-6 Biologically Important Area for six Albatross species

There are six species of albatross, where the BIA for foraging overlaps the operational area and ZPI.



Bar-tailed godwit (Migratory/Vulnerable) and northern Siberian bar-tailed godwit (Migratory/Critically Endangered)

The bar-tailed godwit has been reported in the coastal areas of all Australian states, including the southeast coast of Victoria (Marchant & Higgins 1993). Like other migratory species, the bar-tailed godwit breeds in the northern hemisphere during summer and migrates southwards during winter.

In Victoria, there is one site of international importance for the bar-tailed godwit at Corner Inlet, southwest of the ZPI (Bamford et al. 2008). Typical habitat for the species includes intertidal sandflats, mudflats and other coastal areas (Marchant & Higgins 1993). There is currently no BIA for these species. The species may occur within the ZPI during non-breeding periods, particularly near the coast, however the EPBC Act Protected Matters Search Tool query did not identify the species within the operational area.

Southern giant petrel (Endangered/Migratory) and northern giant petrel (Vulnerable/Migratory)

The southern giant petrel is widespread throughout the Southern Ocean, breeding on six subantarctic and Antarctic islands within Australian territory (all localities shared with Albatrosses). The northern giant petrel, a sibling species, shares a similar distribution. The worldwide population of southern giant petrels is estimated at 62,000 individuals and is in continued rapid decline (DoEE 2017k). There are an estimated 7090 breeding pairs within Australian territory. In summer, giant petrels occur predominantly in subantarctic to Antarctic waters, dispersing north during winter towards the Tropic of Capricorn. Giant petrels are opportunistic feeders, scavenging in coastal and island environments and surface seizing in open water environments (DoEE 2017k).

The only BIA for these species is on the east coast of Australia along the New South Wales coastline, which is listed as foraging habitat (DoEE 2017k). The species may be present in the operational area or ZPI seasonally during migration.

White-bellied storm-petrel (Tasman Sea) (Vulnerable)

The white-bellied storm petrel occurs across tropical and sub-tropical waters in the Tasman Sea, Coral Sea and possibly the central Pacific Ocean (Marchant & Higgins 1990), breeding at the Lord Howe Island group. The species forages by skimming low over the ocean, plucking prey from beneath the surface of the water (Hutton 1991). There are no BIAs for the white-bellied storm petrel within the ZPI, however it may occur for foraging purposes in the area.

Blue petrel (Vulnerable)

The blue petrel breeds near Macquarie Island, and is distributed in ocean waters throughout south Australia including near the coast of Victoria (DoEC 2006). The species forages in Antarctic and subantarctic waters (Marchant & Higgins 1990). There are currently no BIAs for the blue petrel. The species may occur in the operational area and ZPI when foraging.

Gould's petrel (Endangered)

Gould's petrel has breeding grounds on Cabbage Tree Island and nearby Boondelbah Island in NSW, and is rarely recorded away from these locations. There is limited information on the species' distribution at sea, but it is suggested that most individuals would occur in the Tasman Sea, and the species has also been recorded in the southern Indian Ocean (Marchant & Higgins 1990; Woehler et al. 1990). Most records at sea are in water off south-eastern Australia, especially near Tasmania, between December and April (Reid et al. 2002). Occurrence of Gould's petrels within the operational area and ZPI is possible, however there is no BIA for Gould's petrel in Victorian waters.

Common diving-petrel and white-faced storm-petrel

The common diving petrel and white-faced storm-petrel were not identified by the EPBC Act Protected Matters Search Tool report, as the species are not listed as migratory or threatened. However, both species are listed as Vulnerable under the Advisory List of Threatened Vertebrate Fauna in Victoria: 2013 list. The ZPI impinges on the foraging BIA for both species; additionally the operational area

impinges on the common diving-petrel's foraging BIA (Figure 4-7). Both species are likely to occur in these respective areas.

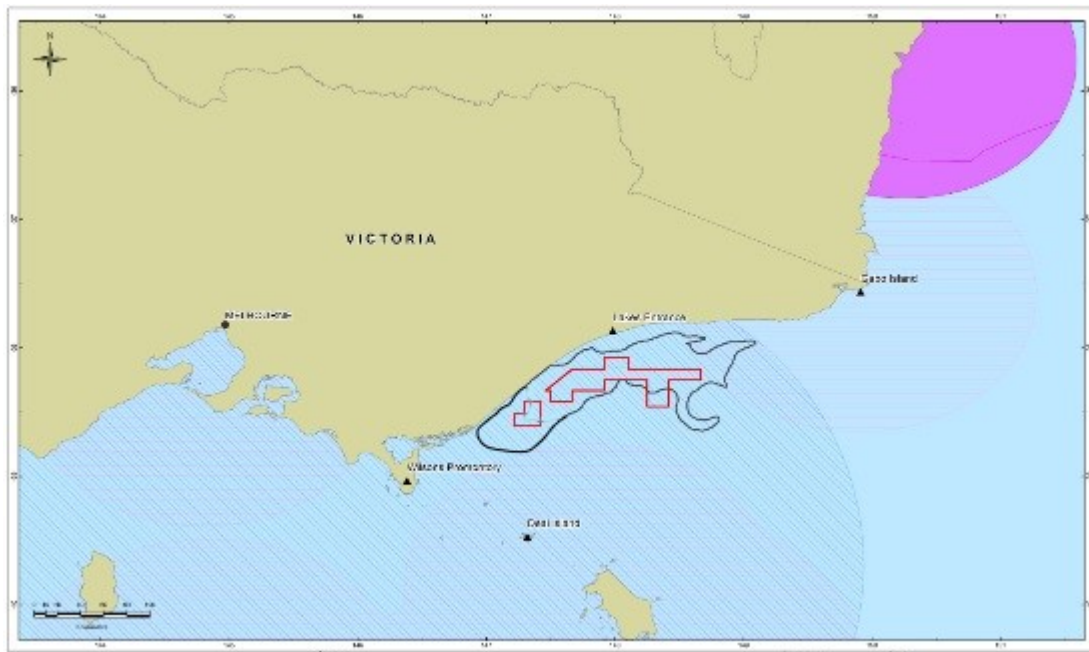


Figure 4-7 Biologically Important Area for several species of Petrel

4.4.2 Intertidal marine habitat

The ZPI is directly adjacent to a short section (less than 20km section of coastline) of Ninety Mile Beach between Glomar Beach and Paradise Beach. This shoreline is a high energy, open sandy beach as shown in Figure 4-8 and forms part of the Gippsland Lakes Coastal Park.



Figure 4-8 High energy sandy beaches, Ninety Mile Beach (PV 2017)

The Ninety Mile Beach marine environment supports four distinct marine ecological communities (Plummer et al. 2003): intertidal sandy beach, subtidal sandy sediment, subtidal reef and open waters.

High-energy sandy beaches extend uninterrupted along the entire intertidal edge of the Ninety Mile Beach. Intertidal sand communities along the Ninety Mile Beach are species-poor (LCC 1993), which is typical of coarse-grained, steep-faced, high-energy beaches. At McGaurans Beach, adjacent to the Park, only nine species were found during a survey of the beach fauna. The most dominant species of the sandy beach are crustaceans in the swash area, while bivalves (such as pipis) and worms are known to occur in the sand in the lower intertidal area (LCC 1993).



Wrack, primarily drift algae, is a microhabitat and food resource for mobile beach organisms such as beetles, sand hoppers and kelp flies, as well as small crustaceans (LCC 1993). The intertidal zone is an important roosting and feeding area for several threatened shorebirds (PV 2017) as discussed in Section 4.4.1.5.

4.4.3 Subtidal marine habitat

The subtidal marine habitats that occur within the operating area and ZPI include:

- Water Column (Open Water)
- Soft sediment
- Subtidal reef.

4.4.3.1 Water Column

The water column is occupied by planktonic (drifting) and pelagic (actively swimming) species.

Plankton species, including both phytoplankton and zooplankton, are a key component in oceanic food chains. Phytoplankton are photosynthetic organisms that spend either part or all of their lifecycle drifting with the ocean currents. Phytoplankton biomass ranges from about 0.1 to 1.6 mg/L across Bass Strait from shallow to deeper waters and about 0.5 mg/L at the operational area (Gibbs et al. 1991).

Zooplankton is comprised of small protozoa, crustaceans (such as krill) and the eggs and larvae from larger animals. Zooplankton biomass is higher in shallow waters of Bass Strait (16.1 mg/m³ dry weight off Mallacoota and 15.5 mg/m³ off Seaspray) and ranges between about 2.1-9.5 mg/m³ in Eastern Bass Strait (Gibbs et al. 1991). Copepods were the dominant species present (Watson & Chaloupka 1982).

Significant pelagic species such as marine mammals, reptiles and fish are considered in Section 4.4.1.2, Section 4.4.1.3 and Section 4.4.1.4 respectively.

4.4.3.2 Soft Sediment

Soft sediment habitat is the dominant habitat within the operational area and ZPI. The benthic fauna present on the soft sediment can be broadly divided into two groupings:

- The epibenthos which includes sessile species such as sponges and bryozoans, hydroids, ascidians, poriferans and mobile fauna including hermit crabs, sea stars and octopus
- The infauna which includes a diverse range of species such as amphipods, shrimps, bivalves, tubeworms, small crustaceans, nematodes, nemertean, seapens, polychaetes and molluscs (Parry et al. 1990).

The subtidal sand community along Ninety Mile Beach has been found to be the most species-rich of its type in the world. A survey of a section of Ninety Mile Beach found approximately 800 marine invertebrate species per 10 m², compared to 300 to 400 per 10 m² in comparable habitats (Coleman et al. 1997). This high species richness was a major factor in the creation of a Marine National Park on the Ninety Mile Beach (Parks Victoria 2006). The subtidal sand invertebrate fauna are dominated by small animals, mostly crustaceans, molluscs, echinoderms and polychaetes (Plummer et al. 2003).

Parry et al. (1990) found high diversity and patchiness of benthos sampled off Lakes Entrance, where a total of 353 species of infauna was recorded. Crustaceans (53%), polychaetes (32%) and molluscs (9%) dominated sample results. A significant site for the listed opisthobranch mollusc (seaslug) *Platydorid galbana* is located off Delray Beach, 2 km south-west of Golden Beach on the shoreline (O'Hara & Barmby 2000). An ROV seabed survey was conducted following drilling at the Snapper operational area in 2009 (Coffey 2010) and a seabed monitoring program conducted near West Tuna in 1999 (URS 2000) confirmed that polychaetes and crustaceans were the most abundant infaunal taxa present in the seabed sediments.



The introduced New Zealand screw shell (*Maoricolpus roseus*) is present in eastern Bass Strait and is known to form extensive and dense beds on the sandy seafloor spreading to the 80 metres (m) isobath off eastern Victoria and NSW (Patil et al. 2004).

4.4.3.3 Subtidal reefs

This habitat occurs either as extensions of intertidal rocky shores or as isolated offshore reefs. As there are no intertidal rocky shores within the ZPI, the subtidal rocky habitats present along this section of coastline are mainly patchy, low profile, calcarenite reefs (from a few centimetres to a metre high). The lowest lying reefs can be covered and uncovered periodically by sand, driven by very strong, tidal currents (2 to 2.5 knots). Reefs are generally flat topped with occasional small ledges and crevices. The reefs extend from 1 to 4 km (and possibly further) offshore at depths of 5 to 20 metres (ECC 2000).

Isolated offshore reefs are likely to be present within the operational area and broader ZPI.

4.5 Values and sensitivities

The following section outlines the values and sensitivities of the established and proposed Marine Protected Areas (MPAs) and other sensitive areas that overlap the wider ZPI that may be impacted by planned and unplanned survey activities.

4.5.1 World Heritage Areas

There is no World Heritage Area (WHA) within the operational area or ZPI as shown in Figure 4-9.

The Lord Howe Island Group which is inscribed on both the World Heritage List and National Heritage List is located, approximately 1,500 km from the operational area.

There are no other World Heritage properties or National Heritage places in the ZPI.

4.5.2 Ramsar sites

No Ramsar sites occur within the operational area or the ZPI. The closest Ramsar sites to the ZPI are the Gippsland Lakes and Corner Inlet Ramsar site.

Gippsland Lakes Ramsar site

The Gippsland Lakes Ramsar site is located in Victoria, south of the Eastern Highlands and to the east of the Latrobe Valley. The site covers an area of 60,015 ha and is made up of three main water bodies being, Lakes Wellington, Victoria and King. The site is a series of large, shallow, coastal lagoons, isolated from the open coast by a dune barrier system that protects the Ramsar site from sea-based impacts. The Ramsar site has only one access point to Bass Strait through Lakes Entrance which is located more than 20 km to the north of the ZPI.

The Gippsland Lakes Ramsar site is categorised by the International Union for the Conservation of Nature (IUCN) as category II, which protects large natural or near natural areas with large-scale ecological processes, indigenous species and ecosystems. The site meets Ramsar criteria 1, 2, 4, 5, 6 and 8 as described below:

- Criterion 1: Contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.
- Criterion 2: Supports vulnerable, endangered or critically endangered species or threatened ecological communities.
- Criterion 4: Supports plant and/or animal species at a critical stage in their life cycles or provides refuge during adverse conditions.
- Criterion 5: Regularly supports 20,000 or more waterbirds.
- Criterion 6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.
- Criterion 8: Is an important source of food for fish, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere.



Ecological components, processes or services/benefits are important determinants of the unique character of wetland sites and are used to determine the Ramsar criteria for which the sites are listed. The critical components, processes and services/benefits for the Gippsland Lakes Ramsar Site are summarised in Table 4-3. The following have been identified:

- eight critical components and two supporting components
- two critical processes and six supporting processes
- two critical services/benefits and two supporting services/benefits.



Table 4-3 Summary of critical components, processes and services/benefits for the Gippsland Lakes Ramsar site

Critical components	Critical processes	Critical services/benefits
<p>Wetland habitats: grouped as follows</p> <ul style="list-style-type: none"> • (C1) marine subtidal aquatic beds (seagrass/aquatic plants). • (C2) coastal brackish or saline lagoons (open water phytoplankton-dominated habitats). • fringing wetlands that can occur within the site as– • (C3) predominantly freshwater wetlands • (C4) brackish wetlands • (C5) saltmarsh/ hypersaline wetlands. <p>Wetland flora and fauna:</p> <ul style="list-style-type: none"> • (C6) abundance and diversity of waterbirds. • (C7) presence of threatened frog species (green and golden bell frog; growling grass frog). • (C8) presence of threatened wetland flora species. 	<p>Hydrological regime: (P1) patterns of inundation and freshwater flows into the wetland system, groundwater influences and marine inflows that affect habitat structure and condition.</p> <p>Waterbird breeding functions: (P2) critical breeding habitats for a variety of waterbird species.</p>	<p>Threatened species: (S1) the site supports an assemblage of vulnerable or endangered wetland flora and fauna that contribute to biodiversity.</p> <p>Fisheries resource values: (S2) the site supports key fisheries habitats and stocks of commercial and recreational significance.</p>
Supporting Components	Supporting Processes	Supporting services/benefits
<p>Other wetland habitats: supported by the site (sand/pebble shores, estuarine waters, etc.).</p> <p>Other wetland fauna: supported by the site (for example, fish, aquatic invertebrates).</p>	<p>Climate: patterns of temperature, rainfall and evaporation.</p> <p>Geomorphology: key geomorphologic/topographic features of the site.</p> <p>Coastal and shoreline processes: hydrodynamic controls on coasts and shorelines through tides, currents, wind, erosion and accretion.</p> <p>Water quality: water quality influences aquatic ecosystem values, noting the key water quality variables for Gippsland Lakes are</p>	<p>Tourism and recreation: the site provides and supports a range of tourism and recreational activities that are significant to the regional economy.</p> <p>Scientific research: the site supports and contains features important for scientific research.</p>



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salinity, dissolved oxygen, nutrients and sediments.

Nutrient cycling, sediment processes and algal blooms: primary productivity and the natural functioning of nutrient cycling/flux processes in waterbodies.

Biological processes: important biological processes such as primary productivity.



Corner Inlet Ramsar site

The Corner Inlet site is located on the south-east coast of Victoria. It is bounded to the west and north by the South Gippsland coastline, in the south-east by a series of barrier islands and sandy spits lying end to end and separated by narrow entrances, and to the south by the hills of Wilsons Promontory. The Corner Inlet site covers an area of 67 186 ha, composed of a complex network of coastal wetland types and meets Ramsar criteria 1, 2, 4, 5, 6 and 8 (as described above).

Ecological components, processes or services/benefits are important determinants of the unique character of wetland sites and are used to determine the Ramsar criteria for which the sites are listed. The ecological character description (ECD) of the Corner Inlet Ramsar Site is summarised in Table 4-4.

The following have been identified:

- two critical components and two supporting components
- one critical process and five supporting processes
- two critical services/benefits and two supporting services/benefits



Table 4-4 Summary of critical components, processes and services/benefits for the Corner Inlet Ramsar site (DSEWPAC 2011)

Critical Components	Critical Processes	Critical Services/Benefits
<p>C1. Several key wetland mega-habitat types are present:</p> <ul style="list-style-type: none"> • Seagrass (B) • intertidal sand or mud flats (G) • mangroves (I) • saltmarshes (H) • permanent shallow marine water (A) <p>C2. Abundance and diversity of waterbirds</p> <p><i>(I) – denotes type of marine/coastal wetland</i></p>	<p>P1. Waterbird breeding is a key life history function in the context of maintaining the ecological character of the site, with important sites present on the sand barrier islands</p>	<p>S1. The site supports nationally threatened fauna species including:</p> <ul style="list-style-type: none"> • orange-bellied parrot • growling grass frog • fairy tern • Australian grayling <p>S2. The site supports outstanding fish habitat values that contribute to the health and sustainability of the bioregion</p>
Supporting Components	Supporting Processes	Supporting Services/Benefits
<p>Important geomorphological features that control habitat extent and types include:</p> <ul style="list-style-type: none"> • sand barrier island and associated tidal delta system • the extensive tidal channel network • mudflats and sandflats. <p>Invertebrate megafauna in seagrass beds and subtidal channels are important elements of biodiversity and control a range of ecosystem functions.</p> <p>The diverse fish communities underpin the biodiversity values of the site</p>	<p>Climate, particularly patterns in temperature and rainfall, control a range of physical processes and ecosystem functions</p> <p>Important hydraulic and hydrological processes that support the ecological character of the site includes:</p> <ul style="list-style-type: none"> • Fluvial hydrology. Patterns of inundation and freshwater flows to wetland systems • Physical coastal processes. • Hydrodynamic controls and marine inflows that affect habitats through tides, currents, wind, erosion and accretion. • Groundwater. For those wetlands influenced by groundwater interaction, 	<p>The site supports recreation and tourism values (scenic values, boating, recreational fishing, camping, etc.) that have important flow-on economic effects for the region.</p> <p>The site provides a range of values important for scientific research, including a valuable reference site for future monitoring.</p>



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the level of the groundwater table and groundwater quality.

Water quality underpins aquatic ecosystem values within wetland habitats. The key water quality parameters for the site are salinity, turbidity, dissolved oxygen and nutrients.

Important **biological processes** include nutrient cycling and food webs.



4.5.3 Commonwealth Marine Parks

No Commonwealth Marine Parks (CMP)¹ occur within the operational area or ZPI. The closest CMP is the Beagle CMP (southwest) and the East Gippsland CMP (100 km to the east).

4.5.4 State Managed Protected Areas

No State-managed protected areas occur within the operational area. The Gippsland Lakes Coastal Park comprises the Gippsland Lakes Ramsar site (Section 4.5.2) in addition to extensive coastal dune systems, woodlands and heathlands, as well as water bodies such as Lake Reeve and Bunga Arm (Parks Victoria 2017k). The ZPI is directly adjacent to a short section (less than 20km section of coastline) of the Gippsland Lakes Coastal Park between Glomar Beach and Paradise Beach.

The Ninety Mile Beach Marine National Park which is located south of Seaspray and is well outside the ZPI, contains an example of the high diversity habitat described in Section 4.4.3.2.

4.5.5 Key Ecological Features

One Key Ecological Feature (KEF), Upwelling East of Eden, occurs within the operational area and ZPI and another nearby KEF, the Big Horseshoe Canyon, is located approximately 50 km east of the ZPI (Figure 4-9).

4.5.5.1 Upwelling East of Eden

The Upwelling East of Eden is designated a KEF for the high productivity and aggregations of marine life. Dynamic eddies of the East Australian Current cause episodic productivity events when they interact with the continental shelf and headlands. Phytoplankton blooms, resulting from mixing and nutrient enrichment, are the basis of productive food chains including zooplankton, copepods, krill and small pelagic fish.

The upwelling supports high primary productivity that supports higher trophic levels, including top order predators, marine mammals and seabirds. The area supports foraging blue and humpback whales, known to arrive when significant krill aggregations form. The area is also important for seals, other cetaceans, sharks and seabirds.

¹ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18

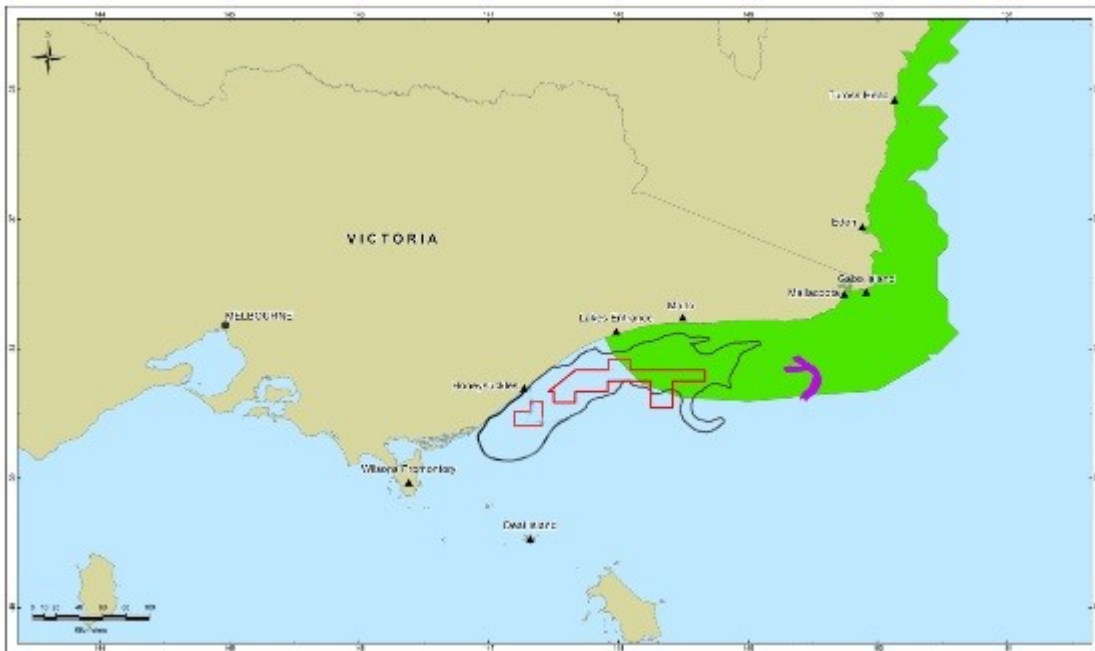


Figure 4-9 Location of key ecological features in eastern Bass Strait

4.6 Socio-economic and cultural environment

4.6.1 Cultural Heritage

4.6.1.1 European and/or indigenous sites of significance

The Gunai-Kurnai people hold native title over much of Gippsland. The native title determination area (Tribunal file no. VCD2010/001) covers approximately 45,000 hectares and extends from west Gippsland near Warragul, east to the Snowy River, and north to the Great Dividing Range (Figure 4-10). It also includes 200 metres of offshore sea territory between Lakes Entrance and Marlo immediately north of the ZPI. The area includes 10 parks and reserves that are jointly managed by the Victorian government and the Gunai-Kurnai people (NNTT, 2010).

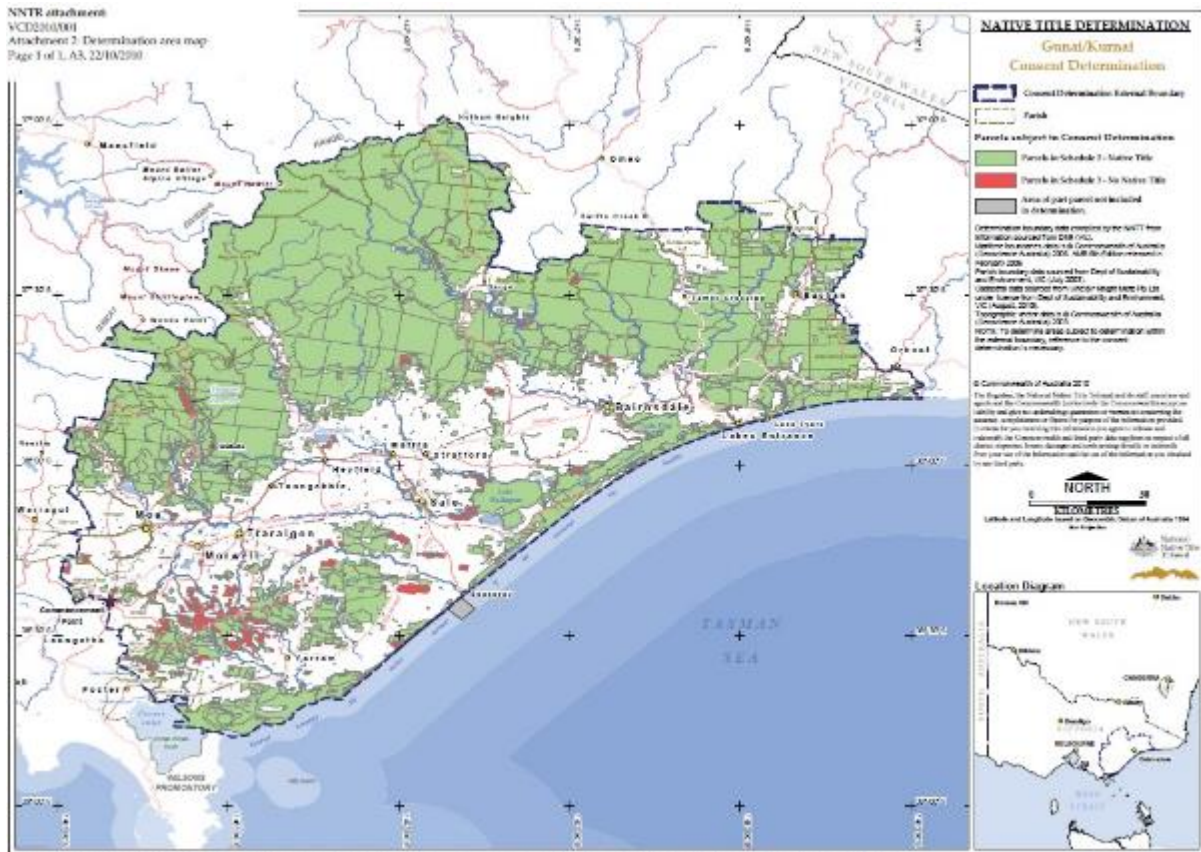
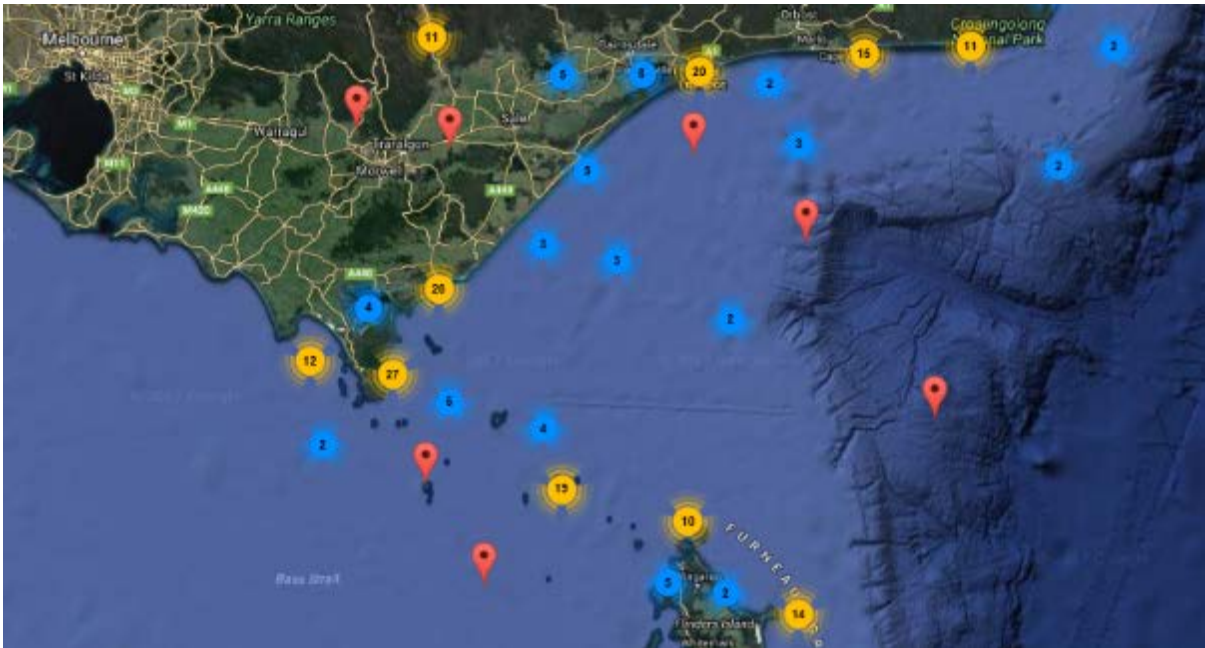


Figure 4-10 Gunaikurnai Native Title determination area (VCD2010/01)

4.6.2 Shipwrecks

A search of the National Shipwrecks Database identified 255 wrecks between Latitude 37° 00' to 40° 00', and Longitude 146° 00' to 150° 00'. Fifteen shipwrecks occur within the operational area (DoEE, 2017).



Markers indicate the number of shipwrecks in that location. Red markers indicate one shipwreck in that location (DoEE, 2017xc)

Figure 4-11 Shipwreck sites around the Gippsland Basin

4.6.3 Commercial fishing

4.6.3.1 Commonwealth and state fisheries

The majority of the commercial fishing (volume basis) occurs in Commonwealth waters along the continental shelf and the upper continental slope.

Further details on Commonwealth and State fisheries intersecting the operational area and ZPI are provided in Table 4-4.



Table 4-5 Commonwealth and state fisheries potentially operating in the ZPI

Fishery	Description	Does known fishing intersect operational area	Does known fishing intersect with ZPI
Commonwealth Fisheries			
Bass Strait Central Zone Scallop Fishery	<p>This fishery extends along the coast of Victoria and Tasmania from the 20 nm to the 200 nm limit. Scallop spawning occurs from winter to spring (June to November). The timing is dependent on environmental conditions such as wind and water temperature (Sause <i>et al.</i>, 1987). Fishing can occur down to 120 m water depth. Fishers use towed dredges. The dredge used in the fishery is constructed of a heavy steel frame covered with steel mesh but open on the front side which is towed and is used to lift scallops out of the sand and mud.</p> <p>11 vessels were active in the area in 2017 (AFMA, 2017).</p>	No	Yes
Small Pelagic Fishery;	<p>The fishery extends from southern Queensland to Western Australia to the edge of the Australian Fishing Zone (AFZ) (200 nm). The target species are Australian sardine (<i>Sardinops sagax</i>), Blue mackerel (<i>Scomber australasicus</i>), Jack mackerel (<i>Trachurus declivis</i>, <i>T. murphyi</i>) and Redbait (<i>Emmelichthys nitidus</i>). Fishers mainly use midwater trawl and purse seine gear to catch target species</p> <p>There were 32 Statutory Fishing Rights in the 2016- 17 fishing season, with 2 purse seine and 1 mid-watertrawl vessels active.</p>	No	No - Fishing effort is concentrated in the near-shore Great Australian Bight (GAB) (west of Port Lincoln and Kangaroo Island) and Western Victoria. Eastern sub-area effort is concentrated in far southern NSW and Tasmania (2015-16 data).
Southern and Eastern Scalefish and Shark Fishery (SESSF) Commonwealth South East Trawl Sector; Commonwealth Gillnet and Shark Hook Sector	<p>The Southern and Eastern Scalefish and Shark Fishery stretches south from Fraser Island in southern Queensland, around Tasmania, to Cape Leeuwin in southern Western Australia. It is a multi-sector, multi- species fishery and the target species are: Blue grenadier (<i>Macruronus novaezelandiae</i>), Tiger flathead (<i>Neoplatycephalus richardsoni</i>), Silver warehou (<i>Seriolella punctata</i>), Gummy shark (<i>Mustelus antarcticus</i>) and Pink ling (<i>Genypterus blacodes</i>).</p>	Yes	Yes



Fishery	Description	Does known fishing intersect operational area	Does known fishing intersect with ZPI
	<p>Many different fishing techniques are used in this fishery including; Danish seine, bottom trawling, midwater-trawling, pair trawling, purse seine, bottom longline, automatic longline, dropline, demersal gillnet and trap.</p> <p>Fishers need to be allocated statutory fishing rights to fish in this fishery. In the fishery there are currently:</p> <ul style="list-style-type: none"> • 57 trawl statutory fishing rights; • 37 scalefish hook statutory fishing rights; • 61 shark gillnet statutory fishing rights; and • 13 shark hook statutory fishing rights. <p>The fishery is comprised of the following major sections that intersect the ZPI:</p> <ul style="list-style-type: none"> • Commonwealth South East Trawl Sector; • Commonwealth Gillnet and Shark Hook Sector • Scalefish Hook Sector <p>The Commonwealth South East Trawl Sector covers the area of the AFZ extending southward from Barrenjoey Point (north of Sydney) around the New South Wales, Victorian and Tasmanian coastlines to Cape Jervis in South Australia.</p> <p>The Commonwealth Gillnet and Shark Hook Sector includes waters from the New South Wales/Victorian border westward to the South Australian/Western Australian border, including the waters around Tasmania, from the low water mark to the extent of the Australian Fishing Zone.</p> <p>Within the Shark Gillnet and Hook sector, there were 61 gillnet fishing permits and 13 hook fishing permits issued in 2016-17 season. Vessels actively fishing during the season included 36 gillnet vessels and 26 hook vessels.</p> <p>The Scalefish Hook Sector includes all waters off South Australia, Victoria and Tasmania from 3 nm to the extent of the Australian Fishing Zone. It also includes waters off southern Queensland (south of Sandy Cape) and New South Wales from approximately the 4000 m depth contour (60-80 nm from the coast) to the extent of the AFZ. Waters inside this line off the New South Wales and Queensland coasts, and inside 3 nm around South Australia, Victoria and Tasmania, are managed by the state governments.</p>		



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Fishery	Description	Does known fishing intersect operational area	Does known fishing intersect with ZPI
Southern Bluefin Tuna Fishery	<p>Fishery extends throughout all waters in the AFZ. The primary fishing method is purse seine in waters off South Australia with a number of fish captured by longline vessels off the East Coast. Southern Bluefin Tuna spawn in the north-east Indian Ocean. Spawning occurs from Spring to Autumn after which juveniles are thought to migrate south. Young tuna surface in the GAB between November and April.</p> <p>There are currently 89 statutory fishing right owners in this fishery (AFMA 2017).</p>	No	No - Fishery effort concentrated in the GAB off Kangaroo Island and in southern NSW coast off the continental shelf.
Southern Jig Squid Fishery	<p>The fishery extends from the South Australian/Western Australian border east to southern Queensland to the edge of the AFZ. The target species is Gould's squid (<i>Nototodarus gouldi</i>). Squid jigging is the fishing method used, mainly in water depths of 60 to 120 m at night.</p> <p>Fishing is seasonal with the season starting in February and ending in June. The season starts off the Port Phillip Bay heads and slowly moves westwards to Portland as the season progresses, following the natural migration of the squid (SIV, 2016). Most of the jig catch is taken between January and June each year, with the highest catches concentrated in March and April.</p>	No	No - fishing effort concentrated from Port Phillip Bay to Portland .
Victorian State Fisheries			
Rock Lobster Fishery	<p>The Eastern Zone extends west from the New South Wales border to Apollo Bay. The Western Zone extends from Apollo Bay west to the border with South Australia. The Rock Lobster Fishery is Victoria's second most valuable fishery after abalone and the target species is southern rock lobster (<i>Jasus edwardsii</i>)</p> <p>There are 47 licences in the eastern zone, permitted to use baited rock lobster pots. In 2014/15, 59 tonnes were harvested in the eastern zone.</p> <p>Rock lobsters are caught in beehive-shaped pots measuring 1.5 m wide by 1.5 m long and 1.2 m high. Pots have one entrance and gaps that allow undersize animals to escape. Pots are connected to buoys that are visible on the water surface.</p> <p>Fishing is prohibited from 15 September to 15 November for male rock lobsters and from 1 June to 15 November for female rock lobsters.</p>	Yes	Yes
Abalone fishery	<p>The fishery is located between Lakes Entrance and the Victorian-NSW border. Abalone are caught along the majority of the Victorian coastline and the fishery is primarily based on targeting blacklip abalone (<i>Haliotis rubra</i>). Greenlip abalone are also targeted (<i>Haliotis laevegata</i>).</p>	No	Yes - fishing may intersect the ZPI. Abalone diving



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Fishery	Description	Does known fishing intersect operational area	Does known fishing intersect with ZPI
	<p>There are 71 fishery access licences in the Victorian Abalone Fishery, which is subdivided into three management zones. The licences are distributed across the three management zones, with 14 in the Western Zone, 34 in the central zone and 23 in the Eastern Zone. This means a maximum of 71 divers can operate on any particular day (VFA 2017).</p> <p>Commercial fishing methods use diving equipment such as a surface air supply to the diver (hookah system) from small high speed fishing boats. Diving is normally to depths less than 20 m.</p> <p>Blacklip abalones spawn between February and April and again between October and December.</p>		<p>generally occurs close to the shoreline generally to depths of 30 m on rocky reefs.</p>
Giant crab fishery	<p>The fishery has two management zones, the Western Zone and Eastern Zone; the Eastern Zone extends from Apollo Bay to the boundary of NSW and Victoria. In the Eastern Zone, the giant crab fishery is managed as a developing fishery using general permits and is not under quota management. Although holders of Rock Lobster Fishery (Eastern Zone) Access Licenses are eligible for a permit, only a few have been issued. Giant crabs can only be taken by hand or with recreational hoop nets.</p>	Yes	Yes - but few fishing permits have been used.
Scallop fishery	<p>The fishery extends 20 nm south of the Victorian coastline. The target species is scallop (<i>Pecten fumatus</i>). A total of 91 commercial licenses are issued each year and approximately 10-15 vessels operate within the fishery. Commercial vessels tow a single dredge that is dragged along the seabed. Dredges are deployed from the rear of the vessel, and are up to 4.5 m wide. Fishing usually occurs from May to end of November.</p> <p>The fishery is not opened unless the abundance of scallops in specific locations meets the agreed criteria for the average number of scallop meats per kg. A total allowable commercial catch (TACC) is set annually for the period 1 April to 31 March (following year). In the seasons 2010/11, 2011/12 and 2012/13 there was a zero TACC for the Victorian Scallop Fishery. A small conservative quota was in place for the 2013/4 season of 136.5 tonnes and for 2014/5 of 135 tonnes.</p>	Yes	Yes - may intersect ZPI depending on quota.
Wrasse fishery	<p>The commercial fishery extends along the entire length of the Victorian coastline and out to 20 nautical miles offshore, except for marine reserves. Bluethroat Wrasse (<i>Notolabrus tetricus</i>) and Purple Wrasse (also called Saddled Wrasse; <i>N. fucicola</i>), comprise approximately 90 per cent of the commercial Victorian wrasse harvest. Small catches of Rosy Wrasse (<i>Pseudolabrus</i></p>	Yes	Yes



Fishery	Description	Does known fishing intersect operational area	Does known fishing intersect with ZPI
	<p><i>psittaculus</i>), Senator Wrasse (<i>Pictilabrus laticlavus</i>) and Southern Maori Wrasse (<i>Ophthalmolepis lineolatus</i>) are also caught.</p> <p>Most wrasse is harvested by hook and line although commercial rock lobster fishers who also hold a commercial wrasse licence can keep those fish that they catch in their rock lobster pots.</p> <p>The commercial wrasse fishery is managed primarily by:</p> <ul style="list-style-type: none"> • Limited entry: There are currently 22 Wrasse (Ocean) Fishery Access Licences (OWFAL) issued under the Fisheries Act 1995; • Legal minimum size: Bluethroat Wrasse must be at least 28 centimetres total length; all other species must be at least 27 centimetres; and • Gear restrictions: fishers can use no more than six fishing lines and these must not have more than 3 hooks or one jig attached; longlines are not permitted (VFA, 2017) 		
Sea urchin fishery	<p>The sea urchin fishery comprises four individual management zones. The central and eastern zones intersect the ZPI. The central zone covers Victorian Waters from Hopkins River to Lakes Entrance at 148°E. The eastern zone extends from Lakes Entrance to the NSW border. The target species are the white sea urchin (<i>Heliocidaris erythrogramma</i>) and the black, long-spined sea urchin (<i>Centrostephanus rodgersii</i>)</p> <p>The sea urchin is usually collected by hand by divers. Currently, sea urchin will only be harvested in eastern Victoria, primarily out of Mallacoota, and in Port Phillip Bay. An initial TACC of 3% of biomass (114 tonnes) will apply to black urchin in the eastern zone. An initial TACC of 2% biomass will be set for white urchins in the Port Phillip Bay Zone and in the eastern zone (equivalent to 60 tonnes and 57 tonnes respectively) (VFA 2017).</p>	Yes	Yes



4.6.4 Recreational Fishing

Recreational fishing is a key attraction to the Gippsland region with access to a wide range of species and locations. The Gippsland Lakes in particular are Australia's largest inland waterway and is a very popular location for a range of recreational activities including fishing. Recreational fishing is also popular along the Ninety Mile Beach comprising both beach based fishing and boat based fishing. As Bass Strait is relatively shallow, the water currents through the Bass Strait can create unpredictable seas reducing the number of recreational boats from venturing into the Bass Strait from the shore. There is also limited access to the open ocean for larger boats, except via Lakes Entrance which is distant from the operational area and more than 20 km from the ZPI.

Species caught by recreational anglers along the Ninety Mile Beach include Australian salmon, flathead, gummy sharks, whiting, silver trevally, mullet, tailor, mulloway, snapper and sharks.

Limited recreational fishing is expected to occur inside the operational area but some potential interaction is possible within the ZPI.

4.6.5 Tourism and recreation

Tourism and recreational activities offered by the coastal areas of central and eastern Gippsland include (Tourism Victoria 2013):

- Recreational fishing among the Nooramunga islands, on the Gippsland Lakes, along Ninety Mile Beach, at Cape Conran Coastal Park and Croajingolong National Park and off the coast of Mallacoota, comprising both boat based fishing and beach based surf fishing. Boat based fishing includes charter operations and private craft launched from boat ramps in the region. Boatyards and slipways are located at Bullock Island (Lakes Entrance), Port Welshpool and Mallacoota
- Swimming and surfing along the Gippsland coast. Surf Life Saving Clubs are located at Lakes Entrance, Seaspray and Woodside Beach on the Ninety Mile Beach and at Mallacoota. Popular locations with experienced surfers include along the coast of Wilson's Promontory National Park, Red Bluff at Lake Tyers Beach, Salmon Rocks at West Cape Beach in the Cape Conran Coastal Park and Bastion Point Beach in Mallacoota
- Scuba diving and snorkelling in Gippsland's Marine and Coastal Parks, in particular Cape Conran Coastal Park around West Cape Beach and Salmon Rocks
- Walking and hiking in Gippsland's National and Coastal Parks.

4.6.6 Commercial Shipping

Bass Strait is one of Australia's busiest shipping areas with more than 3,000 vessels passing through Bass Strait each year (Bass Strait is a transit route for shipping traffic connecting the eastern and western ports of Australia (NOO 2002) (Figure 4-12).

The Bass Strait area to be avoided (ATBA) (Figure 4-13) is an area off the coast of Victoria described in Schedule 2 of the OPGGS Act. All of the operational area occurs within the ATBA. The ATBA excludes, without permission, entry of all ships over 200 t gross and restricts commercial vessel traffic to shipping channels to the east and south of the area.

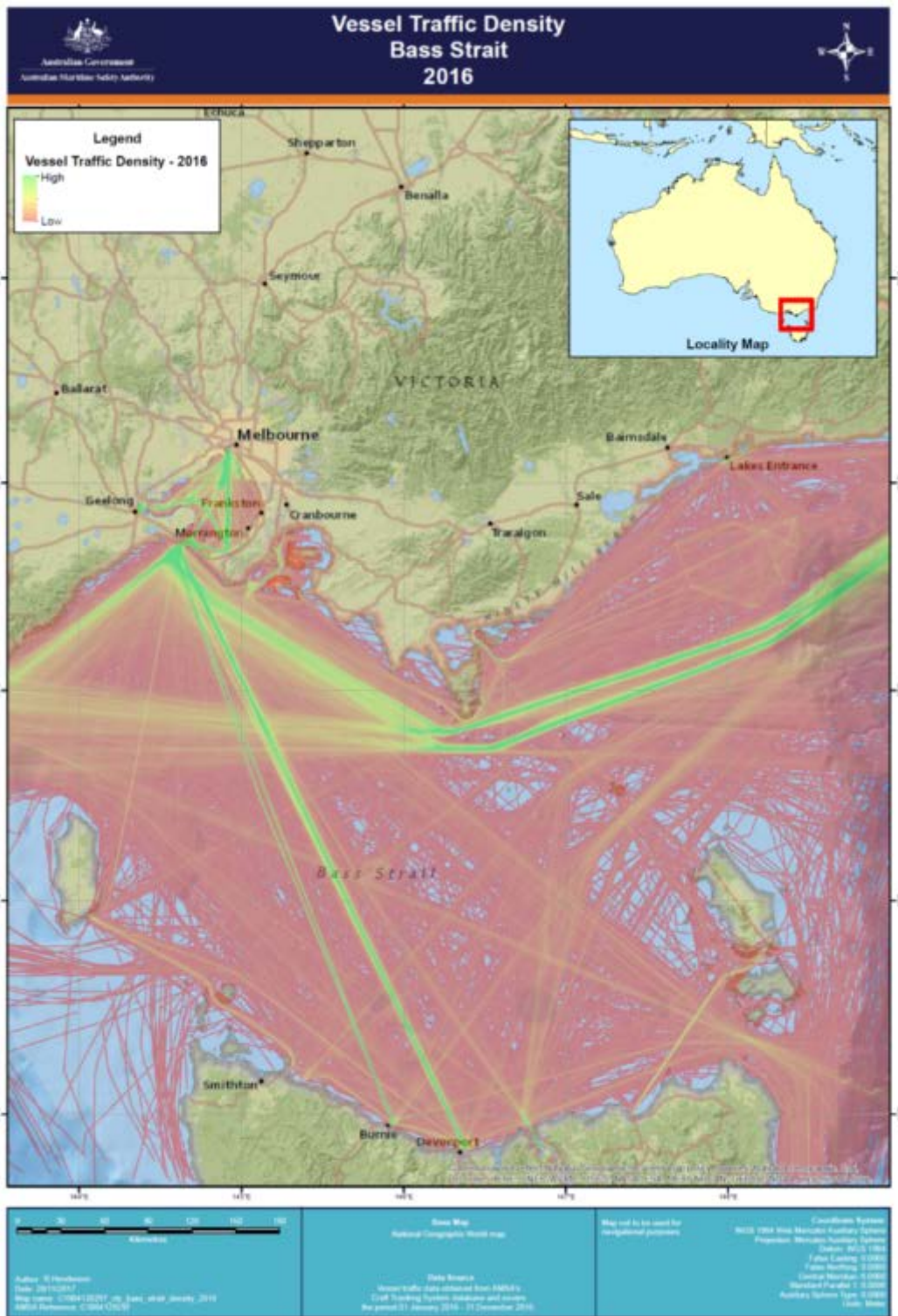


Figure 4-12 Vessel density map for the ZPI from 2016, derived from AMSA satellite tracking system data

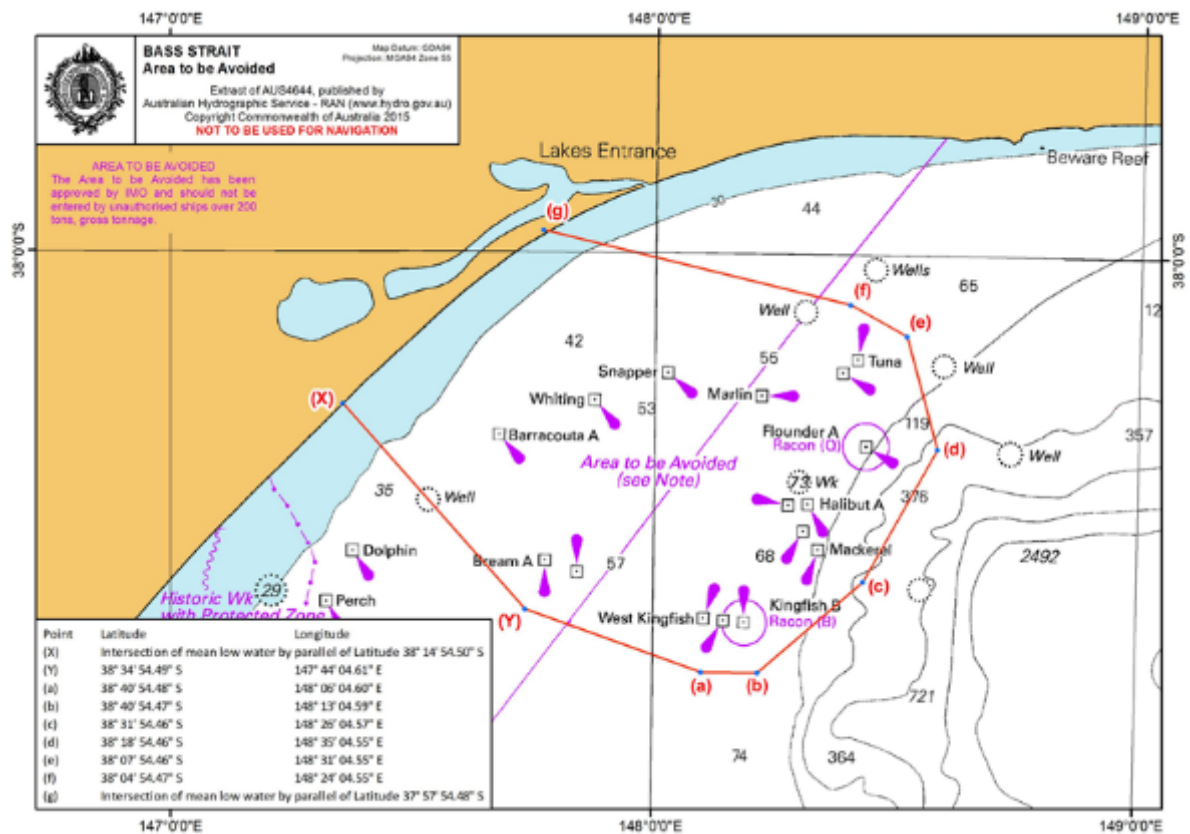


Figure 4-13 Designated area to be avoided (source Australian Border Force, 2017)

4.6.7 Oil and gas industry

The Gippsland Basin has been producing hydrocarbons since 1969 (a total of 4 billion barrels of liquids and 7 tcf of gas to date). Although a mature basin by comparison with other Australian basins, by world standards it is relatively unexplored. The Basin includes offshore production facilities (operational areas, monotowers and subsea completions), a pipeline network over 600 km; and various fields under exploration or development. The BassLink power cable between Victoria and Tasmania also traverses the operational area.

Other titleholders of production licences in the ZPI are presented in Table 4-4.

Table 4-6 Production Licences, Exploration permits and retention leases, Gippsland Basin

Title	Title Holder/s	Field
Production Licences, Gippsland Basin		
VIC/L1	EARPL, BHP	Barracouta/Tarwhine/Whiptail
VIC/L10	EARPL, BHP	Snapper/Sweetlips
VIC/L11	EARPL, BHP	Flounder
VIC/L13-14	EARPL, BHP	Bream
VIC/L15	EARPL, BHP	Dolphin
VIC/L16	EARPL, BHP	Torsk
VIC/L17	EARPL, BHP	Perch



Title	Title Holder/s	Field
VIC/L18	EARPL, BHP	Seahorse
VIC/L19	EARPL, BHP	West Fortescue
VIC/L2	EARPL, BHP	Barracouta/Whiting/Wirrah
VIC/L20	EARPL, BHP	Blackback
VIC/L21	Cooper Energy	Patricia Baleen
VIC/L25	EARPL, BHP, MEPAU	Kipper
VIC/L29	SGH Energy	Longtom
VIC/L3	EARPL, BHP	Marlin/Turrum/North Turrum
VIC/L32	Cooper Energy	Sole (was VIC/RL3)
VIC/L4	EARPL, BHP	Marlin/Turrum/Tuna/Baldfish/Flounder
VIC/L5	EARPL, BHP	Halibut/Fortescue/Cobia/Mackerel
VIC/L6	EARPL, BHP	Mackerel/Flounder
VIC/L7-8	EARPL, BHP	Kingfish
VIC/L9	EARPL, BHP	Tuna/East Pilchard 1
VIC/L31	Hibiscus Pty Ltd	West Seahorse (see VIC/P57)
Exploration Permits, Gippsland Basin		
VIC/P47	Oil Basins, Shelf Oil	Judith/Moby
VIC/P57	Hibiscus, 3D Oil	West Seahorse/Sea Lion (See VIC/L31)
VIC/P68	Bass Strait Oil Company	Leatherjacket
VIC/P70	Esso Deepwater Gippsland Pty Ltd	Dory/Blackback
VIC/P71	Llanberis Energy	-
VIC/P72	Cooper Energy	-
Retention Leases, Gippsland Basin		
VIC/RL1	EARPL, BHP (Pending Renewal)	Golden Beach
VIC/RL13 VIC/RL14 VIC/RL15	Cooper Energy	Basker, Manta, Gummy (BMG) Field
VIC/RL3	Cooper Energy	Sole
VIC/RL4	EARPL, BHP (Pending Renewal)	Remora

4.6.8 Defence

There are no defence activities within the operational area or ZPI.



5. Environmental risk assessment and management

The approach and methodology used within this Environment Plan are consistent with AS/NZS ISO 31000 Risk management – Principles and Guidelines and AS/NZS ISO 14001 Environmental Management Systems – Requirements with Guidance for Use.

The Environmental Aspects Guide (ExxonMobil 2012) describes the process used for comprehensive and rigorous identification and risk based assessment of environmental aspects. This involves five steps:

1. Identify and characterise environmental aspects
2. Characterise the environmental, social and regulatory setting
3. Identify project or operational alternatives
4. Develop risk scenarios
5. Assess significance.

5.1 Risk assessment methodology

Evaluation of the risk of an environmental aspect is based on a determination of consequence severity, combined with an estimate of probability or likelihood that the consequences could occur, given the implementation of both prevention and mitigation controls.

5.1.1 Identification of potential environmental impacts

An environmental risk assessment (ERA) of the survey program was conducted to determine the environmental risks associated with the survey, so controls could be identified to reduce the risks to the environment to As Low As Reasonably Practicable (ALARP). Section 6 presents the outcomes of the ERA for the geophysical and geotechnical survey. The consequence and probability/likelihood rankings are interpreted from the risk matrices provided in Sections 5.1.2 and 5.1.3.

Control prevention and mitigation measures have been developed from experience gained during previous geophysical and geotechnical surveys and from the experience of Esso in Bass Strait and other offshore surveys in Australia and around the world.

5.1.2 Determination of consequence severity

Environmental consequences are judged by the degree of adverse effects on receptors, e.g. flora, fauna, habitat etc. These effects may be due to routine emissions, spills/releases or other events or conditions that may affect the environment or its components.

Environmental impacts, or consequences can be evaluated in terms of the degree of the effects and the sensitivity of the environment (refer to Table 5-1 and Table 5-2).

The determination of consequence severity involves evaluating each dimension as lower, moderate, or higher based on qualitative descriptions. Once each dimension is evaluated, results for effects and sensitivity are compared against interpretive criteria to define overall consequence severity (Table 5-3).

Table 5-1 Evaluation of environmental effect dimensions

Effect Dimension	Value	Description
Duration	Short-term (Lower)	Hours to days; effects highly transitory.
	Medium-term (Moderate)	Weeks to months. Trigger/cause is temporary; effects decline over time. For chemicals, consider persistence, breakdown product, and bioaccumulation potential in determining effects duration.



Effect Dimension	Value	Description
	Long-term (Higher)	Years; effects are ongoing. For chemicals, consider persistence or bioaccumulation potential in determining effects duration.
Size/Scale	Localised (Lower)	Within or near an operational site, facility, etc.; affecting an area similar to or smaller than a typical operational site (for small and/or mobile sources); effects are physically contained/controlled; not a significant portion of any sensitive area.
	Moderate	Affecting an area significantly larger than a typical operational site, facility, etc.; a significant portion of a habitat, watershed or single ecological area; a significant portion of the range or occurrence of a population of a species.
	Widespread (Higher)	Encompassing entire ecosystems, watersheds, or bioregions (landscape-scale); affecting most of the global range or occurrence of a species; having a noticeable impact on corporate-level environmental performance reporting.
Intensity	Minor (Lower)	Minor changes to wildlife, habitat, water occurrence/drainage, or vegetation; low density. For chemical effects: low concentration or hazard* potential.
	Moderate	Moderate or partial changes to habitat, water occurrence/flow, ground cover, ground stability, vegetation or wildlife. For chemicals, moderate concentrations, bioaccumulation or hazard* potential; sub-lethal, non-reproductive direct or indirect effects on organisms.
	Significant (Higher)	Notable changes to, fragmentation of, or elimination of habitat, water drainage/features, ground cover, ground stability, vegetation, and/or wildlife; for chemicals, high concentrations, bioaccumulation, or hazard*potential. Significant direct or indirect survival and/or reproductive effects on organisms.

* Chemical hazard generically includes radioactivity, reactivity, toxicity, carcinogenicity, mutagenicity, pathogenicity, reproductive effects potential, etc.

Table 5-2 Evaluation of sensitivity dimensions

Sensitivity Dimension	Value	Description (applies to species, ecosystem, and/or ecosystem features/ functions/ services, all at same scale as Consequence)
Irreplaceability	Lower	Common, plentiful
	Moderate	Less common or plentiful, but not rare or unique
	Higher	Unique or rare
Vulnerability	Lower	Healthy, resilient, unthreatened, undamaged, or no remaining natural elements (such as some industrial settings)
	Moderate	Moderately resilient, existing stress or damage not significantly impairing function. Sustainable demand on resources/services
	Higher	Not resilient or capable of recovery, highly stressed, threatened and/or endangered, functions/ services failing (such as collapsing fishery)
Influence	Lower	Providing few or no services (supporting, regulating, provisioning, cultural)
	Moderate	Considered moderately important, providing a range of ecological, cultural, social, or commercial services for humans and biodiversity
	Higher	Highly productive and/or bio diverse, critical for human well-being (such as subsistence), functions/services provide critical support for key human/biological communities (such as clean water), considered highly important by public

Table 5-3 Determination of environmental consequence severity

Consequence Level	Environmental Impact	Interpretative Examples of Environmental Consequence Dimension Considerations
I	Potential Widespread, Long Term, Significant Adverse Effects	Sensitivity averages higher; Effect averages higher
II	Potential Localised, Medium Term, Significant Adverse Effects	Sensitivity averages moderate or higher; Effect averages moderate or higher
III	Potential Short Term, Minor Adverse Effects	Sensitivity averages lower to moderate; Effect averages in the moderate range Sensitivity is lower, but Effect is above moderate Any Sensitivity with Effect averaging lower or mostly lower
IV	Inconsequential or No Adverse Effects	Sensitivity is lower; Effect averages in lower to moderate range

5.1.3 Determination of probability

Once the most severe consequences are identified, the probability of those consequences being realized is assessed. This is done by assessing the probability for each failure, event, or condition necessary to produce the consequences as documented in the risk scenario.

The probability of lower severity consequences is also evaluated to determine whether any have sufficiently higher probability to result in a higher risk.

The risk matrix reflects five categories of probability as shown in Table 5-4.

Table 5-4 Probability categories

Probability Range	Qualitative Interpretation Guidance
A	Very Likely – Similar event has occurred once or more at Site in the last 10 years – Has happened several times at Site or many times in Company
B	Somewhat Likely – Has happened once before at Site or several times in Company
C	Unlikely – Has not happened before at Site or has happened a few times in Company
D	Very Unlikely – Have been isolated occurrences in Company or has happened several times in industry
E	Very Highly Unlikely – Has happened once or not at all in Company – Has happened a few times or not at all in industry

5.1.4 Demonstration of ALARP

The combination of consequence severity and probability of occurrence determines the level of risk.

ExxonMobil classifies risk into four risk levels or categories. The significance of each Risk Category is as follows:



Category 1: A higher risk where specific controls should be established in the short term and should, when possible, be reduced to a Category 2 risk or below. Continued operation requires annual review and approval by the Production Manager or equivalent.

Category 2: A medium risk that should be reduced unless it is not "reasonably practicable" to do so.

Category 3: A medium risk that should be reduced if "lower cost" options exist to do so.

Note: "Lower cost" denotes follow-up work that can be completed without a) allocating extensive engineering, technical, and operations manpower or b) the need for unit shutdowns or activities which may introduce other risks or use resources that may be more appropriately used to address higher risk category items.

Category 4: A lower risk that is expected to be effectively managed in base OIMS practices and therefore typically requires "No Further Action." Risk mitigation measures that are in place to manage the risk to Category 4 should be continued.

Environmental risks described in this Environment Plan have been assessed as Category 3 and Category 4 risks.

Determining whether risks have been reduced to ALARP requires an understanding of the nature and cause of the risk to be avoided and the sacrifice (in terms of impact on personal safety and/or the environment, time, effort and cost) involved in avoiding that risk. Where the nature of a risk is well-understood, in the context of the receiving environment, and the activity is a well-established practice, the application of control measures specific to systems and specified in international standards or design codes may be sufficient and obvious to demonstrate that the risk is ALARP. For complex situations it may be difficult to reach a decision on the basis of 'good practice' or standards alone. Therefore for each risk, a discussion on ALARP demonstration has been provided which considers elimination of the activity, availability of practical alternatives where they exist, and the decision to rule out adoption of additional control measures (where they exist) because they involve grossly disproportionate sacrifices to the resultant reduction in risk.

A risk is considered to be reduced to ALARP when the following criteria are met:

- There are no additional reasonably practicable measures available to further reduce the risk, and²
- There are no reasonably practicable alternatives to the activity, and
- The 'cost' of implementing further measures is grossly disproportionate to the reduction in risk.

These factors are used to demonstrate ALARP in Section 6.

5.1.5 Demonstration of acceptable level

The environmental impact and risk is considered to be **reduced to acceptable levels if:**

- The level of residual environmental risk was **assessed as being as low as reasonably practicable** (ALARP; per Section 5.1.4), **and**
- The level of residual environmental risk associated with the activity was either **Category 2, 3 or 4**, and
- The activity is commonplace in current offshore practice (i.e. benchmarked), and is compliant with current industry/ExxonMobil Australia policy and standards, and Australian legislation, and
- Valid claims or objections to the risk from relevant persons or stakeholders, if any, are considered.

² Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



These factors are used to demonstrate acceptability in Section 6.

5.2 Environmental risks

Fifteen risks (RA1 to RA 15) were identified and assessed, including:

5.2.1 Vessel presence and operations

- Underwater noise from geophysical sources (RA 1)
- Underwater noise from vessel (RA 2)
- Lighting from vessel (RA 3)
- Fuel combustion equipment on vessel (RA 4)
- Disposal of sewage, food wastes and grey water from vessel (RA 5)
- Vessel oily water (bilge) discharge (RA 6)
- Vessel deck drainage (RA 7)
- Physical presence – Interference with other marine users (RA 8).

5.2.2 Drilling, coring and seabed samples

- Disturbance to seabed, benthic organisms and water column as a result of survey activities (RA 9).

5.2.3 Unplanned events

- Introduction of marine pest species (RA 10)
- Vessel movements - collision with fauna (RA 11)
- Dropped objects (RA 12)
- Loss of hazardous and non-hazardous waste (RA 13)
- Loss of containment of hydrocarbons or diesel (RA 14)
- Oil spill response (RA15).



6. Environmental Risk and Impact Assessment, Controls, Demonstration of ALARP and Acceptability

This section describes the environmental risks, control measures and demonstration of ALARP for each of the potential hazards identified for the activities to be undertaken during the survey program.

This section outlines:

- A description of the hazards
- The potential impact on the environment
- A description of the controls in place to eliminate the risk where possible or reduce the risk of these events occurring to ALARP
- A demonstration of ALARP; this outlines any other measures that were considered or actions taken to reduce the risks to ALARP
- A demonstration of acceptability.

Fifteen risks (RA 1 to RA 15) have been identified and assessed.

6.1 Vessel presence and operations

6.1.1 Underwater noise from geophysical sources (RA 1)

6.1.1.1 Hazard

Underwater noise generated by geophysical survey techniques such as SSS and MBES has the potential to cause disruption to marine fauna.

The geophysical surveys will use a range of sources which have frequency outputs ranging between 50 Hz (low end of Sparker-SBP pulse) to 410 kHz (SSS).

The geophysical sources proposed for the activity, include³:

- Sub bottom profiler (SBP)
- Side scan sonar (SSS)
- Single/Multi beam echo sounder (SBES/MBES)

Source levels of equipment proposed for use are outlined in Table 6-1 below.

Table 6-1 Source levels of equipment proposed for use

Acoustic Noise Source	Frequency Range (kHz)	Estimated Peak Sound Pressure Level (SPL) (dB re 1µPa @ 1 m pk)	Estimated Sound Exposure Level (SEL) (dB re 1 µPa ² s @ 1 m)
SSS	120-410	226	Unknown
SBES/MBES	200-300	220	Unknown
SBP (CHIRP)	1-12	205	190
SBP (Pinger)	2-12	214	196
SBP (Boomer)	0.3-5	212	172
SBP/UHR (Sparker)	0.05-4	222	183.3
USBL	20-30		

³ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18

Acoustic Noise Source	Frequency Range (kHz)	Estimated Peak Sound Pressure Level (SPL) (dB re 1µPa @ 1 m pk)	Estimated Sound Exposure Level (SEL) (dB re 1 µPa ² s @ 1 m)
Vessel small to medium (<100 m length)	100-1,000	160-180	
Vessel greater than 100 m length	10-1,000	180-190	
Vessel using dynamic positioning (DP)	Broadband	137	

6.1.1.2 Impact assessment

Generally elevated underwater noise can affect marine organisms in three main ways (Richardson et al. 1995; Simmonds et al. 2004):

- By causing direct physical effects on hearing or other organs (injury)
- By masking or interfering with other biologically important sounds (including vocal communication, echolocation, signals and sounds produced by predators or prey)
- Through disturbance leading to behavioural changes or displacement of animals from important areas.

The response of marine fauna to marine noise will range from no effect to various behavioural changes and in some cases physical impacts (McCauley 1994). Physical effects can occur but only likely at a very short range and high sound intensities. Physical impacts are unlikely to occur in the majority of fish and marine mammal species as most free-swimming species will display avoidance behaviour well before they get within the range at which physical effects may occur.

Five whale species (Blue, Southern right, Humpback, Bryde's, Killer), a marine turtle species (Leatherback) and three shark species (White, Shortfin mako and Porbeagle) have been identified to inhabit or transit the operational area.

Whales

Thresholds above which behavioural disturbance occurs vary between species and potentially between individuals of the same species. Southall et al. (2007) conducted a review of recommended thresholds for marine mammal noise exposure. This study included thresholds for non-recoverable permanent hearing loss (Permanent Threshold Shift - PTS) and non-injury temporary thresholds shift (TTS) in marine mammals:

- **PTS (Injury criteria):**
 - Sound pressure level (SPL) = 230 dB re 1 µPa (peak)
 - Sound exposure level (SEL) = 139 dB re:1 µPa².s (m-weighted).
- **TTS**
 - SPL = 224 dB re 1 µPa (peak)
 - SEL = 139 dB re:1 µPa².s (m-weighted).

All proposed geophysical sources are below the 230 dB re 1 µPa (peak) PTS threshold (Table 6-1). A literature review of behavioural responses of cetaceans to pulsed sounds, found that sound levels ranging from 120 to 180 dB re 1µ (SPL) were required before the onset of behavioural disturbance (Southall et al. 2007). This is range is lower than the estimated SPL of all proposed geophysical sources (Table 6-1). Behavioural responses can vary from deflection (avoidance), attraction, changes in call rates and changes in surfacing-respirations-dive cycles.



Baleen whales⁴:

The frequency range of the SBP overlaps the hearing range of the low frequency cetaceans, who have an estimated auditory bandwidth of 7 Hz to 22 kHz (Southall et al. 2007). Low frequency cetaceans are comprised of all the mysticete whales (baleen whales) including humpback and blue whales.

Baleen whales use low-frequency signals for communication (12Hz-8 kHz, but predominantly less than 1 kHz; McCauley, 1994).

This, combined with studies of their hearing apparatus, suggests that their hearing is also best adapted for low frequency sound (McCauley, 1994; Richardson *et al.*, 1995). The higher frequency source levels from the SSS and MBES are outside the auditory range for baleen whales. Therefore, PTS, TTS and behavioural impacts, and the interference with intraspecific communication (i.e. masking), are not expected.

The auditory band width of baleen whales also overlaps the low frequency broadband noise produced by thrusters during vessel positioning and movement (Table 6-1). Impacts are likely to be limited to behavioural disturbance, as the noise levels likely to be produced by operations are well below proposed injury criteria for low frequency cetaceans (estimated at 230 dB re 1 μ Pa) (Southall *et al.*, 2007).

Blue whales are likely to occur in the operational area with foraging behaviour potentially occurring, as demonstrated by the presence of BIAs for this species (see Section 4.4.1.2). In addition, southern right whales may also be present within the operational area. A migration BIA overlaps the ZPI, however elevated noise levels as a result of the activity are unlikely to enter the BIA due to the rapid horizontal dissipation of noise.

To date, no studies modelling or measuring the noise discharged from geophysical surveys have been conducted. However, much work has been done of the noise attenuation from seismic surveys.

The intensity of sound emitted during a seismic survey drops rapidly with increasing distance and depending on local conditions, and can be reduced to background intensity within a few tens of kilometres (APPEA, 2009). Since the source levels of geophysical surveys is much lower than that of a seismic survey (typical SPL of an seismic survey airgun array is ~230 dB re 1 μ Pa-m at 1m), it is expected that the intensity of sound levels from the geophysical survey will also decrease rapidly, reaching ambient levels quicker than that of a seismic survey (due to a lower source level). Furthermore, the geophysical sources have a directionally focused beam platform which predominantly points downwards at the seafloor. Therefore, it is expected that the loss due to absorption and spread will increase with increasing horizontal distance⁵.

As described above, blue and southern right whales may exhibit a behavioural response to elevated noise levels, such as temporarily moving away from the source. This could lead to exclusion from feeding areas should foraging blue whales occur in the operational area. The areas identified as potential blue whale foraging grounds are large in comparison the operational area. Furthermore, the surveys will only occur at discrete point locations within the operational area. As such, the area where noise levels may exceed behavioural response thresholds represents a very small proportion of the available blue whale foraging habitat. Furthermore, given the short duration of the surveys at any given location (2-10 days, Section 3.3), disruption to foraging individuals is unlikely and any short term behavioural impacts are unlikely to be significant at the population level.

⁴ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18

⁵ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



Underwater noise levels are expected to dissipate rapidly with distance from the source, give their frequency range and low intensity. The operational area contains no feeding, breeding or resting areas for humpback or blue whales, the operational area is also outside the main migration route for the humpback whale, therefore any behavioural response or avoidance behaviour is limited to individuals transiting the area. Given the short duration of the survey program and the low numbers of whales transiting the area, potential impacts to whales are likely to be short term and minor.

Toothed whales⁶:

Although the frequency range of toothed whale sounds (excluding echo location clicks) are higher than that of baleen whales (mostly <20 kHz with most of the energy typically around 10 kHz), some calls may be as low as 100 to 900 Hz (Richardson *et al.*, 1995), they are still outside the range of the SSS and MBES. Therefore, the higher frequency source levels from the SSS and MBES are unlikely to interfere with intraspecific communication (i.e. masking).

The maximum SPL for SSS and MBES is 226 dB re 1 μ Pa @ 1 m pk which is lower than PTS threshold (230 dB re 1 μ Pa @ 1 m pk, see EP for references). Therefore, permanent damage to the auditory system of toothed whales is not considered credible.

The higher end of the SPL range overlaps with the upper TTS threshold (224 dB re 1 μ Pa (peak)) referenced above. Should these frequencies be audible, it is unlikely that individuals will be in close enough range to the source to experience maximum sound levels leading to TTS, given the control measures in place.

Recent studies (Wood *et al.* 2012), recommend a threshold of 160 dB re 1 μ Pa for assessing behavioural impacts of cetaceans. Since the operating SPL of the geophysical sources are greater than this, low level behavioural impacts may occur due to the operation of SSS and MBES sources should they be audible. However, given the short duration of the proposed activity, these are not expected to lead to long term changes in individual behaviour or population distribution.

Marine turtles

Marine turtles have an auditory bandwidth of 100–800 Hz, with the greatest sensitivity between 200–400 Hz (adults) and 600–700 Hz (juveniles) (Ketten & Bartol 2005) which overlaps the frequency range of the proposed Boomer and Sparker SBP. Behavioural response thresholds for caged green and loggerhead turtle and injury thresholds are specific to pile driving (Table 6-2). Estimated SELs for proposed geophysical sources are below the 210 dB re 1 μ Pa.s² injury threshold. The SPL injury threshold may be exceeded by all geophysical sources within 10 m of the source. Due to their external rigid anatomy, it is possible that turtles are highly protected from impulsive sound (Popper *et al.* 2014; McCauley *et al.* 2003).

There are no marine turtle BIAs, nesting beaches or foraging areas within the operational area or ZPI, most turtles are likely to remain near to their nesting beaches and as they leave nesting beaches they typically spread out and consequently density decreases rapidly with increasing distance from a nesting beach. Bass Strait is considered to have one of the three largest concentrations of feeding leatherback turtles in Australia (Parks Victoria 2017n), however, even though they have not been seen anecdotally in the operational area in the last five years, they may occur in the operational area. The presence of turtles is likely to be limited to a few individuals transiting the area. Given the short duration of the survey program and the low numbers of turtles transiting the area, potential impacts are likely to be short term and minor.

⁶ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



The impact assessment of underwater noise from geophysical sources on marine turtles uses the SEL threshold of 210 dB re 1 $\mu\text{Pa}\cdot\text{s}^2$ for injury. Although this is not directly comparable to the SPLs of the SSS and MBES, since SEL values are lower than SPLs (e.g. SBP Sparker SPL is 222 dB re 1 μPa @ 1 m pk while the SEL is 183 dB re 1 $\mu\text{Pa}\cdot\text{s}^2$ @ 1 m), SEL of the SSS or MBES is not expected to exceed the injury threshold of 210 dB re 1 $\mu\text{Pa}\cdot\text{s}^2$ for marine turtles. Furthermore, the auditory frequency range of turtles is outside the frequency range of the SSS and MBES and therefore potential impacts to turtles are limited. Any potential impacts are likely to be short term and minor⁷.

Table 6-2 Noise exposure thresholds for marine turtles

Source	Species	Received sound level			Effect
		SPL (dB re 1 μPa RMS)	SPL (dB re 1 μPa pK)	cSEL (dB re 1 $\mu\text{Pa}\cdot\text{s}^2$)	
McCauley et al. (2003)	One green and one loggerhead turtle	166			Noticeable increase in swimming behaviour, presumed avoidance response
		175			Behaviour becomes increasingly erratic, presumed alarm response
Popper et al. (2014)	Sea turtles		>207	210	Injury

Fish including sharks

The hearing system of fish is sensitive to sound pressures between 50 Hz and 500 Hz (Ladich & Fay 2013), which is outside the predominant frequency ranges of all proposed geophysical equipment with the exception of the Boomer and Sparker SBP (Table 6-1). Certain species of fish have a structure linking the gas filled swim bladder to the ear and these species usually have increased hearing sensitivity to anthropogenic noise sources. Species such as mackerel or tuna that do not have a swim bladder or have a much reduced swim bladder tend to have a relatively low auditory sensitivity. Noise exposure thresholds for fish based on these differences in fish physiology are presented in Table 6-3. All proposed geophysical sources are outside the cSEL thresholds for mortality. The SBP (chirp and pinger) source levels may reach the TTS cSEL for each fish type. Guidelines for TTS are based on data from Popper et al. 2005 for exposure of several riverine species to a seismic air gun, in all cases fish shower TTS received to normal hearing levels within 18-24 hours. It is expected that fish may exhibit avoidance behaviour in close proximity to the source, thus further limiting TTS effects. Given the short duration of the survey and the temporary nature of potential impacts potential impacts are likely to be short term and minor.

Myrberg (2001) stated that sharks differ from bony fish in that they have no accessory organs of hearing (such as a swim bladder) and therefore are unlikely to respond to acoustical pressure. The study also suggested that the lateral line system does not respond to normal acoustic stimuli and is unable to detect sound-induced water displacements beyond a few body lengths, even with large sound intensities (Myrberg 2001). Klimley and Myrberg (1979) established that an individual shark will suddenly turn and withdraw from a sound source of high intensity (>20 dB re 1 μPa above broadband ambient SPL) when approaching within 10 m of a sound source.

It is expected that the potential effects to sharks resulting from exposure to underwater noise will be the same as other pelagic fish species, resulting in minor and temporary behavioural change (such as

⁷ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18

avoidance). A white shark BIA for distribution and breeding overlaps the operational area and ZPI and therefore are likely to occur in the area. However, the amount of overlap between the operational area and the entire BIAs is relatively small indicating that only a small amount of white shark habitat (including breeding), will experience elevated noise levels as a result of the activity. Furthermore, given the short duration of the surveys at any given location (2-10 days, Section 3.3), any short term behavioural impacts occurring as a result of the activity are unlikely to be significant at the population level.

Table 6-3 Noise exposure thresholds for fish (Popper et al. 2014)

Type of Fish	Mortality and Potential Mortal Injury	Recoverable Injury	TTS
No swim bladder (particle motion detection)	>219 dB re 1 μ Pa ² s (cSEL) or >213 dB re 1 μ Pa (SPL _{peak})	>216 dB re 1 μ Pa ² s (cSEL) or >213 dB re 1 μ Pa (SPL _{peak})	>> 186 dB re 1 μ Pa ² s (cSEL)
Swim bladder is not involved in hearing (particle motion detection)	>210 dB re 1 μ Pa ² s (cSEL) or >207 dB re 1 μ Pa (SPL _{peak})	>207 dB re 1 μ Pa ² s (cSEL) or >203 dB re 1 μ Pa (SPL _{peak})	>> 186 dB re 1 μ Pa ² s cSEL)
Swim bladder involved in hearing (primarily pressure detection)	207 dB re 1 μ Pa ² s (cSEL) or >207 dB re 1 μ Pa (SPL _{peak})	207 dB re 1 μ Pa ² s (cSEL) or >203 dB re 1 μ Pa (SPL _{peak})	186 dB re 1 μ Pa ² s (cSEL)

The frequency range of fish and sharks (50– 500 Hz) is outside the range of the SSS and MBES and therefore potential impacts are limited. As described above for turtles, although SELs for SSS and MBES are unknown given the relationship with SPL, it is unlikely that SEL will be greater than the SEL for mortality. TTS thresholds may be breached by SSS and MBES but the potential impacts have been previously discussed in the EP. Any short term behavioural impacts occurring as a result of the activity are unlikely to be significant at the population level⁸.

6.1.1.3 Controls

- A 500 m shutdown zone will be maintained around the SBP, SSS and MBES, consistent with EPBC Act Policy Statement 2.1⁹
- Shutdown zones to be maintained using crew observers.

The shutdown in the Policy Statement assumes that noise levels from a seismic survey will have reduced to levels below which PTS in cetaceans can occur within 500 m. Since the noise levels discharged through geophysical activities are lower compared to a seismic survey, this is considered a highly conservative measure in reducing potential impacts from noise on marine fauna.

Crew initiating the 500 m shutdown will be trained and have proven competence in identifying turtles, cetaceans and other megafauna. The training and competency assessment will be provided by a third party MMO specialist and will include (but not limited to):

- Cues and search methods (observation position, visual cues, scanning, influence of weather and sea state, distance estimation techniques)
- Species identification

In addition, as part of the environmental induction undertaken by all crew, the personnel responsible for fauna observations will be aware of the management controls, environmental performance outcomes,

⁸ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18

⁹ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18

environmental performance standards and measurement criteria are required to be followed and how to implement them, in addition to reporting requirements outlined in the EP.

6.1.1.4 Risk ranking

Probability	Consequence	Risk Ranking
D	III	4

6.1.1.5 Demonstration of ALARP

The residual risk for this hazard was assessed as Category 3, medium risk, therefore to demonstrate that the impacts and risk associated with this hazard have been reduced to ALARP in accordance with Section 5.1.4 additional controls and alternatives were considered, as summarised in Table 6-4¹⁰.

The use of dedicated Marine Fauna Observer (MFO) on board the survey vessel was considered however given the low numbers of cetaceans, marine turtles and sharks in the operational area and the small shutdown zones proposed, the cost of utilising MFOs was considered disproportionate to the reduction in risk.

The use of geophysical sources cannot be eliminated as they are required to undertake the survey. Given the short duration of the surveys, the low level of behavioural responses expected and the small area of habitat potentially impacted (in relation to the available habitat identified in individual species BIAs), Esso considers the risk to be ALARP.

6.1.1.6 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 3 medium risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were raised from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

The environmental performance outcomes and environmental performance standards for the controls above are outlined in Section 7.

¹⁰ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



Table 6-4 Summary of ALARP Assessment – Underwater Noise from Geophysical Sources (RA1)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 1	Underwater noise from geophysical sources	The use of geophysical sources cannot be eliminated as they are required to undertake the survey	Dedicated MFOs on board vessel	<p>Additional costs of approximately \$1,500 per day for the duration of the G&G campaign were considered.</p> <p>Low numbers of cetaceans, marine turtles and sharks in the operational area short duration of the surveys, the low level of behavioural responses expected, the small area of habitat potentially impacted (in relation to the available habitat identified in individual species BIAs) and the use of trained and competent crew to undertake the shutdown zones proposed, meant the cost of utilising dedicated MFOs was considered grossly disproportionate to the reduction in risk.</p>	Given the short duration of the surveys, the low level of behavioural responses expected and the small area of habitat potentially impacted (in relation to the available habitat identified in individual species BIAs), Esso considers the risk to be ALARP.



6.1.2 Underwater noise from vessels (RA 2)

6.1.2.1 Hazard

The main source of underwater noise from a vessel is through the use of dynamic positioning (DP) thrusters to maintain position. Highest noise levels are likely to occur during the use of bow thrusters to maintain position. McCauley (1998) measured underwater noise in root square mean sound pressure level (RMS SPL) from a support vessel holding its position using bow-thrusters as 182 dB re 1 μ Pa at 1 m (RMS SPL) and 137 dB re 1 μ Pa at 405 m (RMS SPL). Levels of 120 dB re 1 μ Pa (RMS SPL) extended for a distance of approximately 3-5 km from the source. Under normal conditions (i.e., when vessels are idling or moving between sites), source levels would be between 160-180 dB re 1 μ Pa at 1 m (Hatch & Southhall 2009).

The USBL positioning systems have sound intensities at a higher frequency but lower intensity than geophysical energy sources. The sound source intensity from a USBL system is typically 190-205 dB re 1 μ Pa with a frequency range of 20-30 kHz.

6.1.2.2 Impact assessment

Elevated underwater noise can affect marine fauna, including cetaceans, turtles and sharks in three main ways (Richardson et al. 1995; Simmonds et al. 2004):

- By causing direct physical effects on hearing or other organs (injury)
- By masking or interfering with other biologically important sounds (including vocal communication, echolocation, signals and sounds produced by predators or prey)
- Through disturbance leading to behavioural changes or displacement from important areas.

Whales

In the operational area, the marine fauna most at risk from acoustic disturbance are cetaceans, particularly baleen whales, as the auditory bandwidth of these large whales (ranging from 7 Hz to 22 kHz (Southhall et al. 2007) overlaps with the low frequency broadband noise produced by thrusters during vessel positioning and movement. Underwater noise levels from a range of vessels including DP vessels have been measured at 164-182 dB re 1 μ Pa at 1 m (RMS SPL) (McCauley 1998). The sound source intensity from a USBL system is typically 190-205 dB re 1 μ Pa. These sound levels are within the 120 to 180 dB re 1 μ (SPL) range required before the onset of behavioural disturbance (Southhall et al. 2007) but well below the well below proposed injury criteria for low frequency cetaceans (estimated at 230 dB re 1 μ Pa) (Southhall et al. 2007).

Underwater noise levels are expected to dissipate rapidly with distance from the source, given their frequency range and low intensity. The operational area contains no feeding, breeding or resting areas for humpback or blue whales, the operational area is also outside the main migration route for the humpback whale, therefore any behavioural response or avoidance behaviour is limited to individuals transiting the area. Given the short duration of the survey program and the low numbers of whales transiting the area, potential impacts to whales are likely to be short term and minor.

Marine Turtles

Although individuals of all five species of turtle may pass through the area during their long migrations, they are not likely to be resident or occur in the area in significant numbers as there are no turtle BIAs or nesting areas within the ZPI. Marine turtles have an auditory bandwidth of 100–800 Hz, with the greatest sensitivity between 200–400 Hz (adults) and 600–700 Hz (juveniles) (Ketten & Bartol 2005). This frequency does not overlap with the broadband low frequency noise generated by thruster and USBL use, therefore, turtles are not likely to be significantly affected by underwater noise associated with survey vessels.



Fish

Impacts on fish are likely to be minimal and limited to behavioural disturbance, as fish may avoid acoustical emissions which attain levels that have the potential to cause pathological effects (Hatch & Southall 2009). However, the underwater noise levels generated by thrusters is unlikely to result in auditory injury of a range of species (Nedwell & Edwards 2004), including fish and porpoises.

Given the short duration, intermittent nature and relatively low intensity of noise associated with survey vessels, impacts from underwater noise (if any) are likely to consist of short term behavioural disturbance.

6.1.2.3 Controls

- Project vessels will comply with EPBC Regulations 2000 - Part 8 Division 8.1 (Interacting with cetaceans)
- Vessels are required to have valid documentation including:
 - An Oil Companies International Marine Forum (OCIMF) Offshore Vessel Inspection Database (OVID) or equivalent certification.
- OIMS System 8-1 (Evaluating, Selecting and Monitoring Third Parties) ensures vessels have an inspection maintenance and repair program.

6.1.2.4 Risk ranking

Probability	Consequence	Risk Ranking
D	IV	4

6.1.2.5 Demonstration of ALARP

The residual risk for this hazard was assessed as Category 3, medium risk, therefore to demonstrate that the impacts and risk associated with this hazard have been reduced to ALARP in accordance with Section 5.1.4, additional controls and alternatives were considered as summarised in Table 6-5¹¹.

The use of dedicated Marine Fauna Observer (MFO) on board the survey vessel was considered however given the low numbers of cetacean, turtles and sharks in the operational area and the short duration of the activity, the cost of utilising MFOs was considered disproportionate to the reduction in risk.

The use of vessels cannot be eliminated as they are required to undertake the survey. Given that the waters of the operational area and ZPI do not contain significant feeding, breeding or resting areas for cetaceans, marine turtles or sharks and the short duration of the survey, Esso considers the risk to be ALARP.

6.1.2.6 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 3 medium risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were raised from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

The environmental performance outcomes and environmental performance standards for the controls above are outlined in Section 7.

¹¹ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



Table 6-5 Summary of ALARP Assessment – Underwater Noise from vessels (RA 2)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 2	Underwater noise from vessel	The use of vessels cannot be eliminated as they are required to undertake the survey.	Dedicated MFOs on board vessel	<p>Additional costs of approximately \$1,500 per day for the duration of the G&G campaign were considered.</p> <p>Low numbers of cetaceans, marine turtles and sharks in the operational area short duration of the surveys, the low level of behavioural responses expected, the small area of habitat potentially impacted (in relation to the available habitat identified in individual species BIAs) and the use of trained and competent crew to undertake the shutdown zones proposed, meant the cost of utilising dedicated MFOs was considered grossly disproportionate to the reduction in risk.</p>	Given that the waters of the operational area and ZPI do not contain significant feeding, breeding or resting areas for cetaceans, marine turtles or sharks and the short duration of the survey, Esso considers the risk to be ALARP.

6.1.3 Lighting from vessel (RA 3)

The main risk associated with artificial lighting from vessels is the disruption of turtle hatchlings sea-finding behaviour, as hatchlings can become disorientated by artificial lighting that occurs away from the sea. As there are no turtle nesting beaches in the operational area or ZPI and lighting from vessel will be temporary and short term in nature, this risk is not considered to pose a credible environmental risk or impact, and therefore has not been discussed further in this EP.

6.1.4 Fuel combustion equipment on vessel (RA 4)

6.1.4.1 Hazard

Air emissions will be generated by the survey vessels from internal combustion engines (including all equipment and generators) during the Petroleum Activities Program. Emissions will include SO₂, NO_x, ozone depleting substances, CO₂, particulates and Volatile Organic Compounds (VOCs).

6.1.4.2 Impact assessment

Fuel combustion has the potential to result in localised, temporary reduction in air quality. Potential impacts include a localised reduction in air quality, and contribution to greenhouse gas emissions.

Due to the highly dispersive nature of the offshore environment, air emissions are not expected to affect local air quality. The greenhouse gases contribution as a result of air emissions will also be low due to the short duration of the survey program. The potential environmental impact as a result of air emissions will be short term and minor.

6.1.4.3 Controls

- OIMS System 8-1 (Evaluating, Selecting and Monitoring Third Parties) ensures vessel contractors comply with Marine Order 97.

6.1.4.4 Risk ranking

Probability	Consequence	Risk Ranking
B	IV	4

6.1.4.5 Demonstration of ALARP

The residual risk for this hazard was assessed as Category 3, medium risk, therefore to demonstrate that the impacts and risk associated with this hazard have been reduced to ALARP in accordance with Section 5.1.4, additional controls and alternatives were considered, as summarised in Table 6-6¹².

The use of alternative fuel sources (e.g., solar, wind, biofuels) was considered but their use in survey vessels has not been technically or commercially proven.

Fuel use cannot be eliminated – it is required to support vessel engines and equipment.

Given that the vessel combustion equipment will be compliant with Marine Order 97 requirements, the operational area is located in an offshore environment with winds that will assist in the dispersion and diffusion of atmospheric emissions, and there are no breeding, roosting, resting or migration BIAs in the operational area or ZPI, Esso considers the risk to be ALARP.

6.1.4.6 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 3 medium risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were received

¹² Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18

from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

The environmental performance outcomes and environmental performance standards for the controls above are outlined in Section 7.



Table 6-6 Summary of ALARP Assessment – Air Emissions (RA4)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 4	Fuel combustion equipment on vessel	Fuel use cannot be eliminated – it is required to support vessel engines and equipment.	The use of alternative fuel sources (e.g. solar, wind, biofuels)	Use in survey vessels has not been technically or commercially proven. Risks and costs associated with implementing unproven technology are grossly disproportionate to the environmental benefits gained, considering the low level of impact expected.	Given that the vessel combustion equipment will be compliant with Marine Order 97 requirements, the operational area is located in an offshore environment with winds that will assist in the dispersion and diffusion of atmospheric emissions, and there are no breeding, roosting, resting or migration BIAs in the operational area or ZPI, Esso considers the risk to be ALARP.



6.1.5 Discharge of sewage, grey water and putrescible wastes from vessels (RA 5)

6.1.5.1 Hazard

During the survey program, sewage, grey water (comprising laundry, shower and sink water) and putrescible wastes (comprising of food scraps) will be routinely discharged from survey vessels to the marine environment. Approximately 100 L of sewage greywater and approximately 1 L of food waste will be produced per person per day.

6.1.5.2 Impact assessment

Sewage and grey water

Discharge of sewage and grey water may temporarily increase nutrient availability and biological oxygen demand (BOD) over a localised area, potentially impacting aquatic organisms and stimulating growth for some plankton organisms.

In the open oceanic environment, the effect of the effluent BOD on seawater oxygen concentrations is expected to be insignificant (Black *et al.*, 1994).

Given the short duration of the survey (up to 20 days at sea for the geophysical survey and 40 days at sea for the geotechnical survey), routine discharge of sewage and grey water to the ocean will cause a negligible and localised increase in nutrient concentrations. The total nutrient loading from vessel operations during the proposed activities will be insignificant in comparison to the natural daily nutrient flux that occurs within the region. Therefore potential environmental impact associated with sewage and grey water discharge is expected to be inconsequential.

Putrescible waste

Discharge of putrescible wastes may attract pelagic marine fauna, such as fish and sharks, and increased nutrient availability may result in the biostimulation of marine organisms.

Given that the volume of putrescible waste discharges on a daily basis will be small and given the open ocean environment of the operational area rapid dilution of the effluent is expected, resulting in highly localised effects (Black *et al.*, 1994). Therefore the potential environmental impact associated with discharge of putrescible waste is expected to be inconsequential.

6.1.5.3 Controls

- Implementation of measures in MARPOL Annex V 73/78 (Prevention of pollution by garbage)/Marine Order 95 (Marine pollution prevention- garbage):
 - Putrescible waste will only be discharged to sea if comminuted to 25 mm or less and discharged en route when greater than 3 nautical miles (nm) from the 'territorial sea baseline'
 - If putrescible waste is not comminuted to 25 mm or less it will be discharged greater than 12 nm from the territorial sea baseline while en route.
- Implementation of measures in MARPOL 73/78 Annex IV/Marine Order 96 (prevention of pollution-sewage) as required by vessel class:
 - Discharge of sewage which is not comminuted or disinfected will only occur at a distance of more than 12 nm from the nearest land
 - Discharge of sewage which is comminuted or disinfected using a certified approved sewage treatment plant will only occur at a distance of more than 3 nm from the nearest land
 - Discharge of sewage will occur at a moderate rate while vessel is moving (greater than 4 knots) with no visible floating solids or discolouration of the surrounding water
 - Vessel will hold a valid International Sewage Pollution Prevention (ISPP) certificate.

6.1.5.4 Risk ranking

Likelihood	Consequence	Risk Ranking
D	IV	4

6.1.5.5 Demonstration of ALARP

To demonstrate that the impacts and risk associated with this hazard have been reduced to ALARP in accordance with Section 5.1.4, additional controls and alternatives were considered, as summarised in Table 6-7¹³. The installation of an electric marine water evaporator to evaporate the water portion of grey water and treated black water was considered, however it was not deemed practicable due to cost considerations (i.e. the costs of implementing these measures are grossly disproportionate to the reduction in risk). Operation of an additional generator would also result in an increase in air emissions and an increase in spill risk due to additional fuel storage requirements.

On this basis Esso considers the risk to be ALARP. There were no further controls identified.

6.1.5.6 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 4 low risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were received from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

The environmental performance outcomes and environmental performance standards for the controls above are given in Section 7.

¹³ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



Table 6-7 Summary of ALARP Assessment – Vessel Sewage discharge (RA5)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 5	Disposal of sewage, food wastes and grey water from vessel	The vessels need to be manned and sewage and wastes will be generated and cannot be eliminated	The installation of an electric marine water evaporator to evaporate the water portion of grey water and treated black water was considered	<p>The cost using an evaporator imposes additional cost due to space requirements for installation and increased operational costs for maintenance and staffing.</p> <p>Given the offshore location of the operational area and the minor and short term impacts expected, this cost is considered to grossly outweigh any benefit</p> <p>Operation of an additional generator would also result in an increase in air emissions and an increase in spill risk due to additional fuel storage requirements</p>	No additional environmental benefit, potential additional impacts associated with air emissions and fuel storage. On this basis Esso considers the risk to be ALARP. There were no further controls identified.



6.1.6 Vessel oily water (bilge) discharge (RA 6)

6.1.6.1 Hazard

Bilge water consists of deck drainage and machinery space water that has been directed to a bilge water tank. Bilge water shall be diverted to a holding tank either for onshore disposal at an appropriately licensed facility, or for discharge with an oil content of less than 15 parts per million (ppm).

6.1.6.2 Impact assessment

The oil in bilge water can potentially harm fish and other species that reside in the water column such as plankton.

The intermittent discharge of oily water at 15ppm to the marine environment may result in temporary, localised increases in oil content of marine waters immediately surrounding the vessel discharge point. This small waste stream as it enters the marine environment will be compliant with MARPOL 73/78 Annex 1 requirements; discharged only while the vessel is *en route*; and if discharge is required will occur in the highly dispersive waters of Bass Strait. On this basis environmental impacts from the discharge will be localised and temporary.

Given these oily water discharges will occur at intermittent periods during the survey period; the small volumes involved; the constant vessel movement; and the assimilative/dispersive nature of the receiving environment, it is considered very unlikely that this discharge will impact water quality to the extent that toxic impacts to marine fauna will occur. The residual environmental risk for this discharge is assessed as low with no impact on the receiving environment.

6.1.6.3 Controls

- All vessels will hold a current International Oil Pollution Prevention (IOPP) Certificate, which requires equipment approved by the administration that ensures oil content of less than 15(ppm, in accordance with Marine Order 91 (Marine pollution prevention-oils). If the oil in water (OIW) concentration exceeds this limit, the overboard discharge stops, an alarm is initiated and the contaminated water is automatically returned for retreatment.
- Suitable spill kits in accessible locations on board to be used immediately in the event of a chemical/hydrocarbon spill.

6.1.6.4 Risk ranking

Likelihood	Consequence	Risk Ranking
D	IV	4

6.1.6.5 Demonstration of ALARP

To demonstrate that the impacts and risk associated with this hazard have been reduced to ALARP in accordance with Section 5.1.4, additional controls and alternatives were considered such as disposal of oily water onshore and the installation of an electric marine water evaporator to evaporate the water portion of oily bilge water, as summarised in Table 6-8¹⁴. Onshore disposal would require storage in dedicated holding tanks, additional lifting operations and/or transport to an onshore port for transfer by road tanker to a licensed waste treatment plant. Onshore disposal would result in additional costs, safety risks and emissions from transfer vehicles.

The installation of an electric marine water evaporator to evaporate away the water portion of oily bilge water is not considered practicable due to cost considerations and the environmental impacts

¹⁴ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18

associated with emissions from the generator. Such a generator would also necessitate additional fuel storage (most likely to be marine diesel oil (MDO)), which increases MDO spill related risks.

Given that the residual risk was assessed as Category 4-low risk, the cost of implementing these controls was considered disproportionate to the reduction in risk achieved. On this basis Esso considers the risk to be ALARP.

6.1.6.6 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 4 low risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were received from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

The environmental performance outcomes and environmental performance standards for the controls above are outlined in Section 7.



Table 6-8 Summary of ALARP Assessment – Vessel oily water (bilge) discharge (RA6)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 6	Vessel oily water (bilge) discharge	Onshore disposal as alternative to oily water discharge	Installation of an electric marine water evaporator to evaporate the water portion of oily bilge water	Onshore disposal – additional costs associated with additional lifting operations and/or transport to an onshore port for transfer by road tanker to a licensed waste treatment plant. Given minor and short term impacts expected, this is considered grossly disproportionate. Installation of electric marine water evaporator – see RA 5 above	Given that the residual risk was assessed as Category 4-low risk, the cost of implementing these controls was considered disproportionate to the reduction in risk achieved. On this basis Esso considers the risk to be ALARP.



6.1.7 Vessel deck drainage (RA 7)

6.1.7.1 Hazard

Discharge of contaminated deck runoff has the potential to change water quality which could impact on marine species. Deck drainage consists of rain and wash down water that may contain small amounts of detergents, residual hydrocarbons and chemicals spilt or stored on the deck floor.

However, areas of the deck that have been subject to small spills (i.e. where chemicals, oils and wastes are stored) are mopped up utilising spill clean-up materials or pumped to the waste oil settling tank.

Deck drains which contain rainwater only are directed overboard.

6.1.7.2 Impact assessment

Chemicals and other contaminants that are present in the drainage water can potentially harm fish and other species that reside in the water column such as plankton.

The collection and treatment system for deck drainage prevent contaminated deck drainage from being discharged directly overboard. However, during wash-down events it is possible that minor diluted quantities of oil and grease, mud and chemicals may be discharged. Minor quantities of chemicals, oil and grease may also be released overboard during a spill on the deck.

Due to the low volume of contaminants that may be discharged and the high dilution rates expected in the open water environment and the low number sensitive receptors known to occur in the operational area, the discharge is anticipated to have little or no impact on the receiving environment.

6.1.7.3 Controls

- Vessel contractors have scupper plugs fitted for use in overboard drains.

6.1.7.4 Risk ranking

Likelihood	Consequence	Risk Ranking
D	IV	4

6.1.7.5 Demonstration of ALARP

To demonstrate that the impacts and risk associated with this hazard have been reduced to ALARP in accordance with Section 5.1.4, additional controls and alternatives were considered such as onshore, disposal of deck wash-down water, as summarised in Table 6-9¹⁵. They would require storage in holding tanks on, or below, the deck, and/or transport to an onshore port for transfer to the licensed treatment system. Onshore disposal would result in additional costs, safety risks and emissions from transfer vehicles.

Given that the residual risk was assessed as Category 4 low risk, the cost of implementing these controls was considered disproportionate to the reduction in risk achieved. On this basis Esso considers the risk to be ALARP.

6.1.7.6 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 4 low risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were received from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

¹⁵ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18

The environmental performance outcomes and environmental performance standards for the controls above are outlined in Section 7.



Table 6-9 Summary of ALARP Assessment – Vessel deck drainage (RA7)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 7	Vessel deck drainage	Onshore disposal of deck wash-down water	Onshore disposal of deck wash-down water	Additional costs associated with additional storage tanks and/or transport to an onshore port for transfer by road tanker to a licensed waste treatment system. Given minor and short term impacts expected, this is considered grossly disproportionate.	Given that the residual risk was assessed as Category 4 low risk, the cost of implementing these controls was considered disproportionate to the reduction in risk achieved. On this basis Esso considers the risk to be ALARP.



6.1.8 Physical presence – interference with other marine users (RA 8)

6.1.8.1 Hazard

The physical presence of the survey vessel and equipment undertaking the activity may interfere with fishing and shipping activities.

6.1.8.2 Impact assessment

Commercial fishing

The operational area intersects a number of Commonwealth and State managed fisheries (Section 1.1.1). The operational area intersected five Commonwealth and seven State managed fisheries, however of these only five are considered to be currently active in the vicinity of the operational area. The presence of the survey vessel has the potential to cause some disruption to fishing activities within the survey area for a period of approximately 20 days for the geophysical surveys and up to 40 days for the geotechnical surveys. Review of available fishing literature and feedback from fishing stakeholders indicates that fishing does occur in some of the proposed survey areas. As most of the survey areas are in proximity to existing structures where exclusion zone apply and the proposed survey areas are limited in area, the potential for survey activities to overlap with commercial fishing activities is limited and therefore spatial conflict with fisheries is expected to be minor.

With notification controls implemented, it is expected that fishing disruption is unlikely to occur during the survey period and on this basis the residual risk is assessed as low.

The operational area is also located inside the ATBA (Section 4.6.6). The ATBA excludes, without permission, entry of all ships over 200 t (gross) and restricts commercial vessel traffic to the shipping channels to the east and south of the operational area. These restrictions are likely to reduce the number of commercial fishing vessels entering the operational area. Given the low numbers of commercial fisheries operating in the area, the risk of interference is considered low.

Recreational fishing

Recreational fishing is generally concentrated inside the Gippsland Lakes or along the Ninety Mile Beach coastline. As the Bass Strait is relatively shallow, the water currents through the Bass Strait can create unpredictable seas reducing the number of recreational boats from venturing into the Bass Strait from the shore. Given the Gippsland Lakes are well outside the operational area and the ZPI, the risk of interference with recreational anglers is also considered low.

Shipping

The Gippsland basin area carries significant shipping activity and shipping volumes. The operational area lies within the ATBA. This excludes, without permission, entry of all ships over 200 t (gross) and restricts commercial vessel traffic to the shipping channels to the east and south of the area. Five hundred metre exclusion zones are also applied around all the operational platforms.

Defence

There are no defence activities within the operational area.

6.1.8.3 Controls

- Consultation with relevant stakeholders was undertaken during EP development and key stakeholders will be kept updated with project timeframes.
- Survey vessels comply with Marine Order 30 (Prevention of Collisions) 2009 (which requires vessels to be visible at all times) to prevent unplanned interaction with marine users.
- Survey vessel comply with Marine Order 21 (Safety of navigation and emergency procedures) 2012 to prevent unplanned interaction with marine users.

- In order to prevent activities interfering with other marine users, the Joint Rescue Coordination Centre (JRCC) based at AMSA is notified of the activity 24-48 hours before operations commence.
- In order to prevent activities interfering with other marine users, the Australian Hydrographic Society (AHS) will be notified no less than 4 working weeks prior to scheduled activity commencement date, to allow generation of navigation warnings (Maritime Safety Information Notifications (MSIN) and Notice to Mariners (NTM) [including AUSCOAST warnings where relevant]).

6.1.8.4 Risk Ranking

Likelihood	Consequence	Risk Ranking
D	IV	4

6.1.8.5 Demonstration of ALARP

To demonstrate that the impacts and risk associated with this hazard have been reduced to ALARP in accordance with Section 5.1.4, additional controls and alternatives were considered, such as undertaking survey activities during daylight hours only, as summarised in Table 6-10¹⁶. However this would result in extended survey duration and substantial additional costs. With the implementation of controls such as the Marine Order 21 and notification of stakeholders, the risk of interference with other users is considered low

Given that the residual risk was assessed as Category 4 low risk, the cost of implementing additional controls was considered disproportionate to the reduction in risk achieved. On this basis, Esso considers the risk to be ALARP.

6.1.8.6 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 4 low risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were received from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

The environmental performance outcomes and environmental performance standards for the controls above are outlined in Section 7.

¹⁶ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



Table 6-10 Summary of ALARP Assessment – interference with other marine users (RA8)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 8	Physical presence – Interference with other marine users	The use of vessels in the operational area cannot be eliminated as they are required to undertake the survey at the specific locations described	Undertaking survey activities during daylight hours only	Would potentially double the duration of the survey (to almost a year) resulting in substantial additional cost. Given the low level of interaction with other marine users (demonstrated by lack of concerns raised during consultation), daylight only operations is unlikely to significantly reduce potential impacts and therefore additional costs are considered grossly disproportionate	Implementation of controls such as the Marine Order 21 and notification of stakeholders, the risk of interference with other users is considered low. Additional controls are not considered to further reduce impacts. Given that the residual risk was assessed as Category 4 low risk, the cost of implementing additional controls was considered disproportionate to the reduction in risk achieved. On this basis, Esso considers the risk to be ALARP.



6.2 Drilling, coring and sediment sampling

6.2.1 Disturbance to seabed, benthic organisms and water quality as a result of survey activities (RA 9)

6.2.1.1 Hazard

Sediment sampling

Sediment samples will be taken from the surface layers of the seabed (Section 3.4.2) therefore impacts as a result of sediment sampling are limited to minor impacts to benthic organisms.

Geotechnical survey

Geotechnical surveying will be undertaken to confirm the seabed sediments and determine their engineering behaviour.

The geotechnical investigation will involve the following activities:

- *Rotary core sampling:* To depths between 30- 80 m below the seabed with a typical diameter of up to 100 mm (but typically less). Rotary samples are taken using a rotary coring drilling string; as the borehole is advanced the core enters the drill string. Upon achieving the desired core, the rotary drill string is recovered with the core inside. A small hole will remain in the seabed which will eventually collapse and infill.
- *In-situ testing:* Such as PCPT or T-Bar to depths of 6 m below the seabed with a diameter of up to 250 mm. On reaching the maximum depth all equipment will be withdrawn from the seabed. A small hole will remain in the seabed which will eventually collapse and infill with the movement of surface sediments and the ocean current. A box core may be used to take samples if CPT readings are inconsistent.
- *Piston core/vibracore:* To depth of between 3-6 m below the seabed. On reaching the required penetration depth, all equipment is withdrawn from the seabed. A small hole will remain in the seabed which will eventually collapse and infill (approximately 3-6 m depth by 85mm diameter).

Geotechnical coring will also lead to the discharge of small amounts of drill cuttings and drilling fluids to the marine environment. Drill cuttings will be comprised of benign calcareous sediments from the borehole. Total cutting volumes for the survey program are expected to be less than 15 m³.

Drill fluids will consist primarily of seawater and may include the low-toxicity additives listed in Table 3-8.

6.2.1.2 Impact assessment

The sea bed of the operational area mainly consists of soft sandy sediment with minimal areas of hard substrate or reef (Section 4.4.3). Benthic infauna in the operational area consists of species associated with soft sediments such as amphipods, shrimps, bivalves, tubeworms, small crustaceans, nematodes (Section 4.4.3).

The seabed in the operational area will be subject to localised physical disturbance during the survey. The area of the seabed to be disturbed at each sampling site is limited to the footprint of the cores/samples taken. Holes generated in the seabed as a result of geotechnical survey activities will eventually collapse and infill. Impacts to the seabed as a result of survey activities are expected to be short term and minor.

Drill cuttings

Drill cuttings are inert pieces of rock, gravel and sand removed from the subsea well during the drilling process. They are comprised of benign sediments of calcarenite, shale and sandstone. The geotechnical seabed coring will result in the indirect discharge of less than 15m³ of drill cuttings at the

seafloor. Cuttings are likely to range in size from very fine to very coarse particles with a mean size 10 mm in diameter. Finer particles will be temporarily suspended in the water column (close to the seafloor) before settling onto the sea floor in the immediate vicinity of the drilling location. Given the short duration of the survey and that seabed sediments and infauna are widespread throughout the Gippsland Basin environmental impacts associated with the discharge of drill cuttings are expected to be minor and short term.

Drill fluids

To stabilise the boreholes non-toxic, chemically inert water based mud (WBM) will be used.

A number of reviews have been carried out to identify common drilling mud additives, application concentrations and toxicities (e.g. Hinwood et al. 1994). Based on such reviews, WBMs can be considered to be non-toxic and chemically inert and therefore do not pose a risk to the marine environment of the survey area.

Drilling fluids will primarily consist of seawater and may have small quantities of the additives listed in Table 3-8. These additives are considered to be very low toxicity (OCNS Group E) and are expected to dilute rapidly upon discharge, as such no toxic effects to biota are expected to occur.

6.2.1.3 Controls

- Only low toxicity chemicals, as assessed against international standards, such as OCNS (Offshore Chemical Notification Scheme) Group D or E will be used.

6.2.1.4 Risk ranking

Likelihood	Consequence	Risk Ranking
D	IV	4

6.2.1.5 Demonstration of ALARP

To demonstrate that the impacts and risk associated with this hazard have been reduced to ALARP in accordance with Section 5.1.4, additional controls and alternatives were considered, as summarised in Table 6-11¹⁷.

Onshore disposal of cuttings was considered however this would require the vessel to have significant storage capacity for the cuttings resulting in additional costs. Transport of cuttings to shore for disposal would result in additional costs, safety risks and atmospheric emissions.

Given that the residual risk was assessed as Category 4 low risk, the cost of implementing these controls was considered disproportionate to the reduction in risk achieved. On this basis, Esso considers the risk to be ALARP.

6.2.1.6 Demonstration of acceptability

Given that the residual risk was assessed as Category 4 low risk, the cost of implementing these controls was considered disproportionate to the reduction in risk achieved. On this basis Esso considers the risk to be ALARP.

¹⁷ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



Table 6-11 Summary of ALARP Assessment – Drilling, Coring and Sediment Sampling (RA9)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 9	Disturbance to seabed, benthic Organisms and water column as a result of survey activities	Geotechnical drilling cannot be eliminated as they are required to undertake the survey	Onshore disposal of cuttings	Would require the vessel to have significant storage capacity for the cuttings. This would mean contracting a vessel larger than is required which would increase the overall cost of the survey. Would also incur additional costs associated with onshore transportation and disposal. Given the small volumes of cuttings potentially discharged (15m ³), and the low risk ranking for this risk, these costs are considered grossly disproportionate.	Transport of cuttings to shore for disposal would result in additional costs, safety risks and atmospheric emissions in addition to increased spill risks due to a larger vessel with larger fuel tanks. Given that the residual risk was assessed as Category 4 low risk, the cost of implementing these controls was considered disproportionate to the reduction in risk achieved.



6.3 Unplanned events

6.3.1 Introduction of marine pest species (RA 10)

6.3.1.1 Hazard

Marine pest species may potentially be transported to the operational area as a component of ballast water (and associated sediments) or as marine fouling on vessels. Marine vessels can carry ballast water containing marine species that, when discharged, has the potential to translocate the marine species into areas where they could displace native species, or interfere with ecosystem processes in other ways.

Biological fouling on vessel hulls has the potential to translocate marine species into areas where they could displace native species or interfere with ecosystem processes in other ways.

6.3.1.2 Impact assessment

Non-endemic marine species transported into areas where they have not previously been found can displace native species, or interfere with ecosystem processes in other ways (e.g. through predation).

The successful establishment of an exotic species transported via either ballast or hull-fouling depends primarily on three factors:

- Colonisation and establishment of the marine pest on a vector (vessel, equipment or structure) in a donor region (e.g. a home port, harbour or coastal project site where a marine pest is established)
- Survival of the marine pests on the vector during the voyage from the donor to the recipient region
- Colonisation (for example, by reproduction or dislodgement) of the recipient region by the marine pest, followed by successful establishment of a viable new local population.

Vessels will adhere to the Department of Agriculture and Water Resources requirements in relation to ballast water management, hull cleaning and treatment of survey vessels.

On the basis that ballast water management, hull cleaning and treatment of the vessel occurs in accordance with the Department of Agriculture and Water Resources requirements, the risk of introduction and establishment of marine pest species is considered low.

6.3.1.3 Controls

- All survey vessels to be subject to an invasive marine species (IMS) risk assessment prior to contracting
- Ballast water will be managed in accordance with Australian Ballast Water Requirements-Version 7 (Department of Agriculture and Water Resources 2017) including:
 - All vessels designed to carry ballast water are required to carry a valid ballast water management plan (BWMP) and ballast water management certificate
 - All vessels are required to submit a ballast water report
 - Ballast water exchange should be conducted in areas at least 12 nm from the nearest land and in water at least 50 m deep.
- All vessels to have an anti-fouling coating that complies with the requirements of Annex 1 of the International Convention on the Control of Harmful Anti-Fouling Systems on Ships
- Anti-fouling records will be maintained on board survey vessels in accordance with Appendix 2 of the International Maritime Organisation's Guidelines for the Control and Management of Ships' Biofouling to Minimise the Transfer of Invasive Aquatic Species, which include details of anti-fouling coating used, dates and locations of cleaning, dry docking, anti-fouling applications, date and locations of in-water inspections.

6.3.1.4 Risk ranking

Likelihood	Consequence	Risk Ranking
D	IV	4

6.3.1.5 Demonstration of ALARP

To demonstrate that the impacts and risk associated with this hazard have been reduced to ALARP in accordance with Section 5.1.4, additional controls and alternatives were considered, such as the use of ballast free vessels and dry docking and hull cleaning of the vessel prior to survey commencement, as summarised in Table 6-12¹⁸. Ballast free vessels are not commercially available or viable and dry docking and hull cleaning may result in a substantial additional costs and potential delays to survey commencement.

Given that the residual risk was assessed as Category 4 low risk, the cost of implementing these controls was considered disproportionate to the reduction in risk achieved. On this basis, Esso considers the risk to be ALARP.

6.3.1.6 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 4 low risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were received from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

The environmental performance outcomes and environmental performance standards for the controls above are outlined in Section 7.

¹⁸ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



Table 6-12 Summary of ALARP Assessment – Introduction of marine pest species (RA10)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 10	Introduction of marine pest species	Use of ballast free vessels	Dry docking and hull cleaning of vessels prior to survey commencement	Ballast free vessels are not commercially available or viable. Dry docking and hull cleaning would incur additional costs. The implemented control measures will reduce the likelihood for biofouling which is not considered further reduced by hull cleaning. As such, the cost of hull cleaning is considered grossly disproportionate to the potential environmental benefits gained and would only be considered on high risk vessels.	Given that the residual risk was assessed as Category 4 low risk, the cost of implementing these controls was considered disproportionate to the reduction in risk achieved.

6.3.2 Vessel movements – collision with fauna (RA 11)

6.3.2.1 Hazard

Vessel collision with marine fauna can lead to injury or mortality of sensitive marine species.

6.3.2.2 Impact assessment

A number of cetaceans are known to transit through Bass Strait on annual migration. Although foraging blue whales may occur, the operational area is not recognised as a significant foraging aggregation. As such, their presence is expected to be transient and occasional and therefore impacts to cetaceans are considered to be low. Cetaceans tend to practice avoidance around vessels and therefore the likelihood of a vessel striking a cetacean is low.

There have been no reported incidents of cetacean strikes in the period 2008 to 2013 across all Esso's Bass Strait operational areas.

The likelihood of vessel/whale collision being lethal is influenced by vessel speed; the greater the speed at impact, the greater the risk of mortality (Jensen and Silber, 2004; Laist et al., 2001). Vanderlaan and Taggart (2007) found that the chance of lethal injury to a large whale as a result of a vessel strike increases from about 20% at 8.6 knots to 80% at 15 knots. Survey vessels within the operational area are likely to be travelling less than 8 knots, therefore, the chance of a vessel collision with a protected species resulting in lethal effects is reduced.

Fur seals are not listed as threatened or migratory under the EPBC Act, but may occur in the operational area to forage and may potentially be affected by collision with vessels manoeuvring near operational areas. There have been two reported incidents of accidental seal strikes in the period 2008 to 2013 across all Bass Strait operational areas. Grills or guards have been fitted to the side thrusters of survey vessels to reduce the potential for injury and death of large seals and animals whilst in proximity to the operational area.

6.3.2.3 Controls

- Project vessels will comply with EPBC Regulations 2000 - Part 8 Division 8.1 (Interacting with cetaceans), including:
 - A vessel will not travel greater than 6 knots within 300 m of a whale (caution zone) and not approach closer than 100 m from a whale
 - A vessel will not approach closer than 50 m for a dolphin and/or 100 m for a whale (with the exception of animals bow riding).
- Grills or guards fitted to side thrusters of vessels.

6.3.2.4 Risk ranking

Likelihood	Consequence	Risk Ranking
B	IV	4

6.3.2.5 Demonstration of ALARP

To demonstrate that the impacts and risk associated with this hazard have been reduced to ALARP in accordance with Section 5.1.4, eliminating survey vessels and the associated risk was considered, as summarised in Table 6-13¹⁹. As the residual risk was assessed as Category 4 low risk eliminating the survey vessels is not considered to present any environmental benefits. Undertaking the survey program is an important mechanism to evaluate water depth and seabed conditions in the area to

¹⁹ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18

reduce the potential environmental and safety risks of future programs. Cetaceans are likely to occur within the operational area, but given their probably behavioural avoidance of the vessels, collision risk is considered low. Foraging fur seals may occur in the operational area, however interaction between this species and vessels is low. The use of guards and grills fitted to the side thrusters of survey vessels further reduces the potential for injury or death of seals and other larger fauna species.

On this basis, Esso considers the risk to be ALARP.

6.3.2.6 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 4 low risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were received from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

The environmental performance outcomes and environmental performance standards for the controls above are given in Section 7.



Table 6-13 Summary of ALARP Assessment –Vessel movements - Vessel movement (RA11)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 11	Vessel movements - collision with fauna	The use of vessels in the operational area cannot be eliminated as they are required to undertake the survey at the specific locations described	Dedicated MFOs on board vessel	<p>Additional costs of approximately \$1,500 per day for the duration of the G&G campaign were considered.</p> <p>Low numbers of cetaceans, marine turtles and sharks in the operational area short duration of the surveys, the low level of behavioural responses expected, the small area of habitat potentially impacted (in relation to the available habitat identified in individual species BIAs) and the use of trained and competent crew to undertake the shutdown zones proposed, meant the cost of utilising dedicated MFOs was considered grossly disproportionate to the reduction in risk.</p>	<p>As the residual risk was assessed as Category 4 low risk eliminating the survey vessels is not considered to present any environmental benefits. Undertaking the survey program is an important mechanism to evaluate water depth and seabed conditions in the area to reduce the potential environmental and safety risks of future programs. Cetaceans are likely to occur within the operational area, but given their probably behavioural avoidance of the vessels, collision risk is considered low.</p> <p>Foraging fur seals may occur in the operational area, however interaction between this species and vessels is low. The use of guards and grills fitted to the side thrusters of survey vessels further reduces the potential for injury or death of seals and other larger fauna species</p>

6.3.3 Dropped objects (RA 12)

6.3.3.1 Hazards

Survey equipment may be accidentally dropped from the vessel into the sea, lost when deployed on the seabed, or lost when towed from the vessel, causing seabed disturbance. Potential dropped objects include small numbers of personnel protective gear (e.g. glasses, gloves, hard hats), small tools (e.g. spanners) hardware fixtures (e.g. riser hose clamp) and drill equipment (e.g. drill pipe).

6.3.3.2 Impact assessment

In the unlikely event of an accidental loss of geotechnical equipment (e.g. seabed reaction frames; drill collars/drill pipe; corers; cone penetrometer; T-bar) potential environmental effects will be limited to localised physical impacts on benthic communities arising from equipment sinking to, and dragging across the seabed. Dragging of equipment along the seabed may result in localised physical disturbance. However, given the water depth range within the operational area (36-100 m), the absence of any shallow waters (<20 m water depth) and any emergent features within or immediately adjacent to the operational area, and the size/weight of the geotechnical equipment being used during the survey, the risk of significant impacts resulting from equipment loss is considered to be low.

6.3.3.3 Controls

- Certified lifting gear is appropriately maintained.
- Vessel inductions include training for crew in dropped object prevention.

6.3.3.4 Risk ranking

Probability	Consequence	Risk Ranking
C	IV	4

6.3.3.5 Demonstration of ALARP

Given that the residual risk was assessed as Category 4 low risk no reasonable additional/alternative controls were identified that would further reduce the impacts and risks without grossly disproportionate sacrifice, as summarised in Table 6-14²⁰. On this basis, Esso considers the risk to be ALARP.

6.3.3.6 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 4 low risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were received from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

The environmental performance outcomes and environmental performance standards for the controls above are given in Section 7.

²⁰ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



Table 6-14 Summary of ALARP Assessment – Dropped Objects (RA12)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 12	Dropped objects	Survey equipment is required for the activity and therefore no alternatives are available	None identified	NA	Given that the residual risk was assessed as Category 4 low risk no reasonable additional/alternative controls were identified that would further reduce the impacts and risks without grossly disproportionate sacrifice.



6.3.4 Loss of hazardous and non-hazardous waste (RA 13)

6.3.4.1 Hazard

Generated solid wastes may be broadly classified into one of two categories:

- General non-hazardous solid wastes
- Hazardous wastes.

Non-hazardous solid wastes produced on vessels include cardboard, plastic, aluminium and paper. These waste materials will be stored on board the survey vessels in suitable containers (segregated from hazardous waste materials) for transport back to shore for disposal/recycling in accordance with local regulations.

Hazardous wastes are defined as being waste materials that are harmful to health or the environment. Chemicals and other hazardous materials that may be stored on the vessels include:

- Lubricating oils, cleaning and cooling agents
- Oil filters and batteries
- Oily rags
- Paint, aerosol cans
- Acids/caustics and solvents.

All hazardous waste generated will be documented and tracked, segregated from other waste streams and stored in suitable containers. Recyclable hazardous wastes, such as oils and batteries, will be stored separately from non-recyclable materials. All hazardous waste materials will be transported to shore for disposal or recycled at an approved facility in accordance with local requirements. There is potential for hazardous and non-hazardous waste to be accidentally lost to the marine environment.

6.3.4.2 Impact assessment

Potential impacts of accidental solid waste discharge to sea include potential physical harm to marine fauna resulting from ingestion or entanglement with solid waste (garbage).

If accidentally lost overboard, hazardous waste would result in a temporary and highly localised hazardous water quality zone. This could have a toxic effect on marine fauna that are present within this zone. The exposure and toxicity would be highly temporary due to rapid dilution and dissipation expected in the open water marine environment of the operational area.

Potential impacts are likely to be limited to one or a few individual marine animals in the immediate vicinity of the accidental release site, with the most likely fauna affected those within the surface waters.

6.3.4.3 Controls

- Implementation of the following measures outlined in Marine Order 95 (Marine pollution prevention – garbage) as required by vessel class:
 - Survey vessels will have a Garbage Management Plan in place which outlined procedures for handling storing, processing and disposing of garbage
 - A garbage record book shall be maintained with details of non-hazardous and hazardous waste volumes generated and transferred for onshore recycling or disposal.
- All hazardous and non-hazardous wastes generated at sea during field management activities will be retained on survey vessels and disposed of onshore by a licensed Waste Management Contractor (excluding putrescible waste and sewage)
- All personnel will be notified of the correct waste management procedures through the induction process

- All waste material that could reasonably be lost overboard is stored securely (e.g. lidded bins)
- All wastes including hazardous wastes and chemicals will be segregated into clearly marked containers
- All hazardous wastes and chemicals will be stored in a bunded area capable of containing leakage or spillage, prior to onshore disposal
- Material Safety Data Sheets (MSDS) are present on board for each hazardous chemical

6.3.4.4 Risk ranking

Likelihood	Consequence	Risk Ranking
D	IV	4

6.3.4.5 Demonstration of ALARP

Given that the residual risk was assessed as Category 4 low risk no reasonable additional/alternative controls were identified that would further reduce the impacts and risks without grossly disproportionate sacrifice, as summarised in Table 6-15²¹. On this basis Esso considers the risk to be ALARP.

6.3.4.6 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 4 low risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were received from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

The environmental performance outcomes and environmental performance standards for the controls above are given in Section 7.

²¹ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



Table 6-15 Summary of ALARP Assessment – Loss of hazardous and non-hazardous waste (RA13)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 13	Loss of hazardous and non-hazardous waste	Consumable materials that can be classified as hazardous or non-hazardous waste are required on vessel to conduct proposed activities	Immediate removal by the vessel to shore. Use of an additional vessel to act as a transfer vessel.	Cost to transfer to shore using both methods will incur a disproportionate cost relative to the potential environmental benefits (costs associated with additional time at sea and mobilisation costs).	Given that the residual risk was assessed as Category 4 low risk no reasonable additional/alternative controls were identified that would further reduce the impacts and risks without grossly disproportionate sacrifice

6.3.5 Loss of containment of hydrocarbons or marine diesel oil (RA 14)

6.3.5.1 Hazard

The credible hazards associated with fuel and oil spills during the proposed survey program (that are considered most credible) are:

- On-deck leak or spill of small quantities (up to 50 litres) of hydraulic oil or lubricating oil
- Larger volume (up to 144 m³) loss of MDO from a ruptured fuel storage tanks, resulting from vessel collision.

Refuelling at sea is not planned due to the short duration of the survey program.

The maximum credible spill volume as a result of a vessel collision is the volume of the largest fuel tank (AMSA 2015). Two vessels will be required for the survey program one for the geophysical survey and a larger one for the geotechnical survey. The MV Fugro Voyager or equivalent will be used to undertake the geotechnical survey which is a larger vessel than that required to complete the geophysical survey (refer to Section 3.5). MDO spill modelling was undertaken on the volume of the largest fuel tank 144 m³. The basis for this spill volume is explained in Section 6.3.5.5.

6.3.5.2 Diesel properties

MDO is a light, refined petroleum product with a relatively narrow boiling range. When spilled on water, most of the oil will evaporate or naturally disperse within a few days or less. The MDO used in spill modelling has API of 37.6, density of 829 kg/m³ (at 25 °C) and a low viscosity of 4.0 cP at 25°C, classifying it as a Group II oil according to the International Tankers Owners Pollution Federation (ITOPF 2014) and USEPA/USCG classifications. MDO is characterised by a large mixture (95%) of low and semi- to low-volatiles and contains 5% persistent hydrocarbons. It is important to note that some heavy components contained in MDO have a strong tendency to physically entrain into the upper water column in the presence of moderate winds (i.e. >12 knots) and breaking waves, but can re-float to the surface if these energies abate. MDO properties are summarised in Table 6-16.

Table 6-16 Properties of marine diesel oil used in the model

Initial density (kg/m ³) at 25°C	Viscosity (cP) (25°C)	API	Component	Volatiles (%)	Semi-volatiles (%)	Low volatility (%)	Residual (%)
			BP (°C)	<180	180-265	265-380	>380
				Non-persistent			Persistent
829.1	4.0	37.60	% of total	6.0	34.6	54.4	5

6.3.5.3 Quantitative spill modelling methodology

Quantitative hydrocarbon spill modelling was undertaken by RPS APASA (RPS 2017 and 2019), on behalf of Esso, using a three-dimensional hydrocarbon spill trajectory and weathering model, SIMAP (Spill Impact Mapping and Analysis Program), which is designed to simulate the transport, spreading and weathering of specific hydrocarbon types under the influence of changing meteorological and oceanographic forces.

Quantitative spill modelling of a surface release of 144 m³ of MDO was undertaken from two release sites (BTW and VICL9) and a third release of 280m³ of MDO from Perch:

Table 6-17 Release sites use in the spill modelling study

Release site	Latitude	Longitude	Water depth (m)
BTW	38° 19' 46.1" S	147° 36' 36.3" E	~40
Near VIC/L9	38° 10' 37.4" S	148° 35' 19.2" E	~90
PCA	38° 34' 14" S	147° 19' 17" E	~42

BTW was selected as a release site as it is close to the western most extent of the operational area and is close to the coastline (within 22 km) and is where the largest survey effort is likely. Quantitative modelling from this release site provides a conservative estimate of worst case shoreline impacts in the event of a 144 m³ MDO spill. A site inside VIC/L9 was also selected as a release site as it represents the most eastern extent of the operational area and additional Perch modelling in 2019 to represent the most western extent.

The modelling study was carried out in several stages. Firstly, a five year metocean dataset (2008-2012, both inclusive) that includes the combined influence of three-dimensional ocean and tidal currents was developed, and regional wind data was sourced for the same period. Secondly, the currents, spatial winds and then detailed oil properties were used as inputs in the three-dimensional oil spill model (SIMAP) to simulate the drift, spread, weathering and fate of the hypothetical release scenario.

As a spill event may occur during any set of wind and current conditions, modelling was conducted using a stochastic (random or non-deterministic) approach, which involved running 100 single spill trajectories per scenario (i.e. 200 spill simulations total) using the same release information (spill volume, duration and composition of the oil), though different start times. This ensured that each simulation was subjected to different wind and current conditions and, in turn, movement and weathering. Once all simulations were completed, the model results were combined and analysed to produce statistics of the risk and potential exposure to the surrounding waters and contact to the shorelines.

6.3.5.4 Hydrocarbon exposure and contact thresholds

Hydrocarbon exposure and contact thresholds were used in the quantitative spill modelling to determine the environmental sensitivities that may be impacted in the event of an MDO spill. The summary of all the locations where the hydrocarbon thresholds could be exceeded by any of the modelled simulations is referred to as the ZPI. As the ZPI represents the summary of all the modelled simulations, it is larger than is likely to be affected during a single spill event. Furthermore, as the weathering of different fates of hydrocarbons (surface, entrained and dissolved) differs due to the influence of the metocean mechanism of transportation, a different ZPI is presented for each fate.

The hydrocarbon exposure and contact thresholds used surface, entrained, dissolved and accumulated hydrocarbons are described in the following sections.

Sea surface exposure thresholds

A sea surface exposure threshold of 0.5 g/m² was used in the quantitative hydrocarbon modelling. Oil of this thickness is described as a silvery to rainbow sheen in appearance, according to the Bonn Agreement Oil Appearance Code (Bonn Agreement 2009) and is also considered the practical limit of observing oil in the marine environment (AMSA 2012). This threshold is considered below levels which would cause environmental harm and it is more indicative of the areas perceived to be affected due to its visibility on the sea surface and potential to trigger temporary closures of areas (i.e. fishing grounds) as a precautionary measure. Hence, the 0.5 g/m² threshold has been selected to define the zone of potential low exposure on the sea surface. The ZPI used in this EP is based on the 0.5 g/m² sea surface exposure threshold.

Ecological impact has been estimated to occur at 10 g/m² (~10 µm) according to French et al. (1996) and French-McCay (2009) as this level of oiling has been observed to impact birds and other wildlife that are in close contact with the water surface. The 10 g/m² threshold has been selected to define the zone of potential moderate exposure on the sea surface.

Shoreline contact thresholds

A threshold of 10 g/m² was used to assess the potential for shoreline contact. It is a conservative threshold used to define regions of socio-economic impact, such as triggering temporary closures of fisheries or the need for shore clean-up on man-made concrete/stone walls or on amenity beaches, etc. The 10 g/m² threshold has been selected to define the zone of potential low contact on the shorelines.

Water column exposure thresholds

The in-water exposure is represented by for entrained and dissolved aromatic hydrocarbons. Studies indicate that the dissolved aromatic compounds (typically the mono-aromatic hydrocarbons and the two and three ring poly-aromatic hydrocarbons) are commonly the largest contributor to the toxicity of solutions generated by mixing oil into water (Di Toro et al. 2007). The threshold value for species toxicity in the water column is based on global data from French et al. (1999) and French-McCay (2002, 2003), which showed that species sensitivity (fish and invertebrates) to dissolved aromatics exposure >4 days (96-hour LC50) under different environmental conditions varied from 6 to 400 µg/L (parts per billion (ppb)) with an average of 50 ppb. This range covered 95% of aquatic organisms tested, which included species during sensitive life stages (eggs and larvae). Based on scientific literature, a minimum threshold of 6 ppb over 96-hours or equivalent was used to assess in-water low exposure zones (Engelhardt 1983; Clark 1984; Geraci & St. Aubin 1988; French-McCay 2002).

As entrained oil has undergone processes analogous to weathering and/or water-washing (i.e. many of the toxic soluble hydrocarbons have been removed through evaporation and/or dissolution), its toxicity is representative of true 'dispersed oil' phase impacts. As dispersed oil droplets in produced formation water (PFW) are small predicted no effect concentrations (PNECs) for PFW (OSPAR 2012) used to determine the water column exposure threshold for entrained hydrocarbons. The OSPAR PNEC for PFW is 70 ppb for protection of 95% of species, based on biomarker testing (i.e. whole organism responses) to total hydrocarbons (THC) by Smit et al., 2009. This PNEC represents an acceptable long term chronic exposure level from continuous point source discharges in the North Sea, which is one of the most concentrated areas in the world for oil and gas production. Utilising methodologies contained in ANZECC (2000), which is based upon USEPA Guidelines, PNECs can be back-calculated to determine LC50 values by applying a factor of 100 to the PNEC values. This approach is supported by assessment factor criteria contained within the European Chemicals Agency (2008) and the OECD Existing Chemicals Programme 2002 (OECD, 2002). Based on this criterion, a minimum threshold of 700 ppb over 96 hours was used to assess low exposure in water low exposure zones (Table 6-18).

Table 6-18 Summary of low exposure thresholds applied to quantitative hydrocarbon spill modelling

Sea Surface Exposure Thresholds	Shoreline Contact Thresholds	Dissolved Aromatic Exposure Threshold	Entrained Threshold
0.5 g/m ²	10 g/m ²	6 ppb	700 ppb

6.3.5.5 Impact assessment

Assessment of likelihood

Based on a review of the Australian Transport Safety Bureau's database it is highly unlikely that a vessel collision will occur as there have no instances of collisions, groundings, or sinking of a survey vessel in Australian waters in the last 30 years. A collision between the survey vessel and another vessel



unconnected with the activity is unlikely, given the limited commercial fisheries and shipping interactions in the survey area and surrounding waters (see Section 4).

The fuel that will be used the survey vessels is diesel. The MV Fugro Voyager has no fuel tanks adjacent to the hull. All tanks are located in the interior of the vessel and are separated from the hull by dry tanks. The largest fuel tanks on the vessel closest to the hull are 43 (port side and starboard side), which have a maximum capacity of 143.7 m³.

The estimated spill volume of 144 m³ is considered conservative as it is expected that the MDO spill volume would be less in the event of a vessel collision as:

- The MDO tanks are never filled to maximum capacity
- If the tank is ruptured below the water line, then it would only leak down to a level equivalent to the water line
- Emergency procedure would be carried out to transfer contents of the tank to other MDO tanks onboard the vessel.

It should be noted that while it is not expected that the full volume would be released to the marine environment, the full tank capacity (144 m³) was used as the demonstration volume in order to represent an overly conservative and therefore worst case scenario in the spill risk assessment.

Results of quantitative spill modelling

The quantitative spill modelling results were used to determine:

- Weathering and fate of diesel in the marine environment
- Sea surface exposure zones
- In-water exposure zones
- Shoreline contact.

Weathering

The predicted weathering and fates volume balance for a 144 m³ surface release of MDO over 6 hours under 5, 10 and 15 knot constant wind conditions are presented in Figure 6-1. Evaporation levels were highest during low wind conditions approximately 90% of the spill volume is expected to evaporate within 10 days. Additionally increasing volumes of MDO occur in the water column with increased wind speeds.

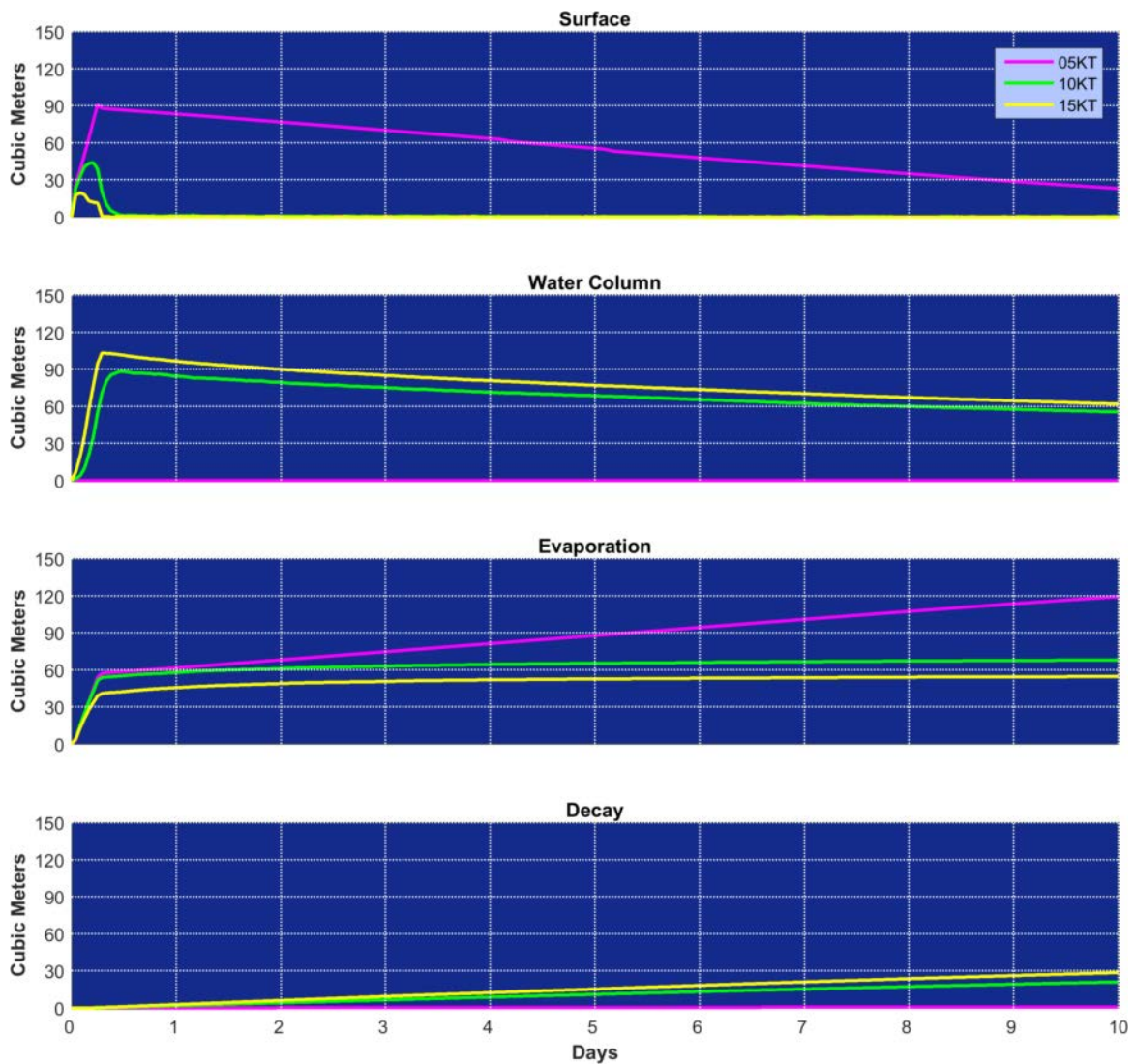


Figure 6-1 Predicted weathering and fates volume balance for a hypothetical 144 m³ surface release of MDO over 6 hours (tracked for 10 days), under 5, 10 and 15 knot constant wind conditions

The potential sea surface exposure zones from the BTW and near VIC/L9 release sites are presented in Figure 6-2 and Figure 6-3 respectively. The maximum distance travelled by low oil exposure occurred 103.7 km east-northeast from the BTW release site. The extents of the moderate and high exposure zones were much smaller, at 14.2 km and 2.4 km, respectively. The maximum distance travelled by low oil exposure occurred 51.0 km east-northeast from the near VIC/L9 release site. The extents of the moderate and high exposure zones were much smaller, at 7.3 km and 0.8 km, respectively. The potential impact of sea surface exposure on environmental sensitivities is outlined in Table 6-19.

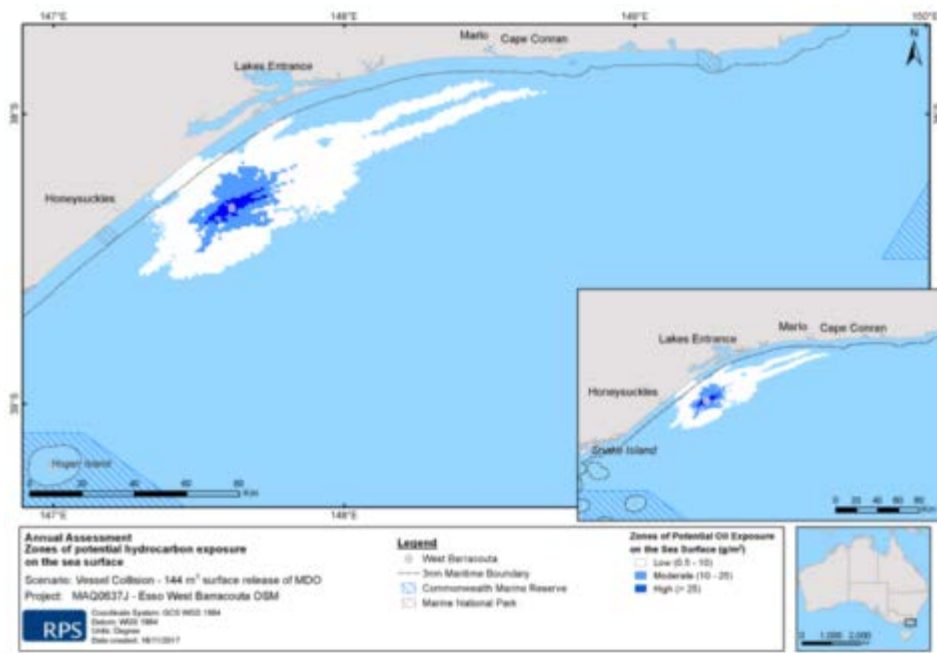


Figure 6-2 Zones of potential oil exposure on the sea surface for a hypothetical 144 m³ surface release of MDO over 6 hours from BTW release site (tracked for 10 days). Results calculated from 100 spill trajectories

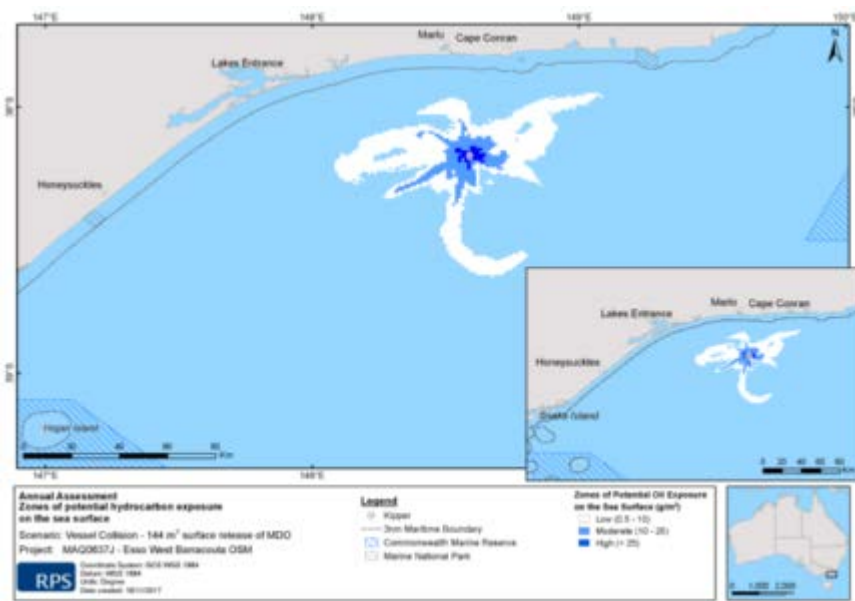


Figure 6-3 Zones of potential oil exposure on the sea surface for a hypothetical 144 m³ surface release of MDO over 6 hours from near VIC/L9 release site (tracked for 10 days). Results calculated from 100 spill trajectories

In-water exposure

The quantitative modelling results showed no entrained hydrocarbon exposure, above the low entrained threshold (96 hrs x 700 ppb), was predicted for the modelled 144 m³ surface release of MDO over 6 hours. No dissolved aromatic exposure, above the low dissolved aromatic threshold (96 hrs x 6 ppb), was predicted for the modelled 144 m³ surface release of MDO over 6 hours.



Shoreline Contact

The quantitative modelling results showed no shoreline contact, above the low shoreline contact threshold (10 g/m²), was predicted for the modelled 144 m³ surface release of MDO over 6 hours.

Assessment of consequence

Table 6-19 Potential impacts of MDO on sensitive receptors

Environmental Sensitivity	Impact
Protected Species	
Marine mammals	<p>A total of eleven marine mammals listed as Threatened or Migratory may occur within the ZPI (Section 4.4.1). The ZPI is within the pygmy blue whale foraging area and the known core range of the southern right whale.</p> <p>Whales and dolphins could potentially ingest dissolved oil when feeding in open water or become coated with diesel while surfacing to breathe. Ingestion of oil at the quantities required to induce direct toxic effects is considered unlikely in a spill scenario (Geraci, 1998). MDO has a low stickiness and would likely quickly wash-off the dorsal surfaces of cetaceans as they dive into deeper waters. Exposure of eyes and mucous membranes may result in irritation.</p> <p>There is the potential for volatile hydrocarbons to be inhaled if cetaceans were to surface within a MDO surface slick especially if this occurred close to the spill area where the hydrocarbons would be relatively fresh (i.e. have a greater concentration of volatile monocyclic aromatic hydrocarbons (MAHs) such as benzene, toluene, ethylbenzene and xylene). As the zone of sea surface contact above the 10g² ecological impact threshold is relatively small and MDO undergoes rapid dispersion and evaporation, impacts to marine mammals as a result of hydrocarbon inhalation are highly unlikely.</p>
Marine reptiles	<p>Four species of marine turtles listed as Threatened or Migratory may occur within the ZPI (Section 4.4.1).</p> <p>There are no marine turtle BIAs, nesting beaches or foraging areas within the operational area or ZPI, the presence of turtles is likely to be limited to a few individuals transiting the area.</p> <p>Harmful effects may occur through ingestion of oil, inhalation of toxic vapours (e.g. close to the spill source) or irritation to the head, neck and flippers due to oil contact with the skin. MDO is unlikely to stick to turtles in large amounts since it has a low stickiness and would likely wash off skin surfaces.</p> <p>Ingestion and inhalation of hydrocarbons is only expected to occur to animals in the immediate vicinity of the release location given the weathering characteristics of marine diesel. Given the very small predicted spill area and the mobile nature of turtles this is unlikely to affect significant numbers.</p>
Fish, sharks and rays	<p>As fish and sharks dwell in the water column, impacts are most likely from hydrocarbons dissolved in the water column, through the pathways of ingestion or the coating of gill structures. This could lead to respiratory problems or accumulation of hydrocarbons in tissues. In the worst instance this could lead to mortality, or sub-lethal stress. As the quantitative modelling results show no entrained or dissolved hydrocarbons above the low exposure thresholds, impacts to fish and sharks are likely to be minor and limited to small numbers in the immediate vicinity of the spill.</p>
Seabirds and shorebirds	<p>Numerous bird species which are listed as threatened or migratory may occur within the ZPI.</p> <p>Scholten et al. (1996) indicates that a layer of 25 µm thick would be harmful to birds that contact the slick. Estimates for the minimal thickness of oil that will result in harm to seabirds through ingestion from preening of contaminated feathers, or the loss of thermal protection of their feathers, has been estimated at 10 µm (French, 2009) to 25 µm (Koops et al., 2004).</p> <p>Oil spills can have a variety of effects including fouling of the plumage, ingestion of oil, effects on reproduction and physical disturbance. Many of the species that occur</p>



Environmental Sensitivity	Impact
	<p>offshore are surface-feeding or plunge-diving pelagic birds, so that oil slicks would potentially interfere with feeding and increase exposure risk.</p> <p>Seabirds are expected to be present within the operational area and the ZPI but their presence is transient and sporadic. Hence population level impacts are unlikely but mortality of protected seabirds may occur.</p> <p>Estimates for the minimal thickness of oil that will result in harm to seabirds through ingestion from preening of contaminated feathers, or the loss of thermal protection of their feathers, has been estimated at 10 µm (French, 2009) to 25 µm (Koops et al., 2004).</p> <p>The risk to shorebirds and coastal species would depend upon where surface oil accumulated; accumulation near nesting colonies or areas supporting feeding aggregations (i.e. sand/mud flats). Coating of feathers could occur for birds feeding or resting in surface waters or wading/roosting on oiled shorelines, although the low inherent stickiness and persistence of diesel makes this unlikely.</p> <p>Oil-coated birds can suffer hypothermia, dehydration, drowning and starvation, and become easy prey. Toxicity from ingested diesel could occur as a result of toxic hydrocarbons such as PAHs present within weathered diesel. Given the dispersive nature of MDO, the small predicted spill area and the fact that the majority of bird species are highly mobile, significant impacts as a result of an MDO spill are unlikely.</p>
Marine habitats	
Sandy beaches, marshes, rocky shorelines	The results of quantitative spill modelling indicated no shoreline contact above the low shoreline contact threshold (10 g/m ²). In Figure 6-2 it appears that MDO at the low sea surface exposure threshold (0.5 g/m ²) in contact with shorelines to the south of Lakes Entrance. This low sea surface exposure threshold is below levels which would cause environmental harm and it is more indicative of areas perceived to be affected due to the visibility of a sheen on the sea surface. This low sea surface exposure threshold does not indicate any shoreline impacts.
Values and Sensitivities	
World Heritage Area	Modelling results predict no contact during any season
Commonwealth Marine Reserves	Modelling results predict no contact during any season
State Marine Protected Area	Modelling results predict no contact during any season
Wetlands of international importance	Modelling results predict no contact during any season
Key Ecological Features	
Upwelling East of Eden	The upwelling east of Eden is defined as a key ecological feature as it is an area of high productivity and aggregations of marine life. As the predicted spill area above the ecological impact threshold (10 g/m ²) is relatively small and predominantly remains on the sea surface, significant impacts to marine species and plankton are unlikely.
Big Horseshoe Canyon	Modelling results predict no interaction with an MDO spill
Socio-Economic Receptors	
Commercial Fisheries	<p>Temporary disruption to fishing activities may occur if the surface hydrocarbon plume moves through fishing areas. In the worst instance entrained oil could lead to loss of (or loss of function of) coastal intertidal habitat (e.g. seagrass meadows, mangrove communities, intertidal mudflats) which may provide nursery habitat for fishery species (e.g. fish and crustaceans).</p> <p>Fisheries could also be impacted through the contact of oil droplets on fish/invertebrate gill structures, the ingestion of oil by target species and/or the potential for entrained oil to interfere with the development of fish eggs and larvae. Given the low potential release volume of MDO and the evaporation of diesel, there is a very low likelihood</p>

Environmental Sensitivity	Impact
	that this would have an impact on a fish population or fisheries scale. However interference to fishing operations may occur through damage to vessels and fishing gear, exclusion to areas during clean-up operations and any follow up monitoring and surveillance activities.
Commercial Shipping	The impact on shipping is the potential modification of shipping routes to avoid the area affected. These are not expected to be significant due to the expected rapid dispersion of MDO and that most of the MDO will disperse through the ATBA.
Other users	The recreational amenity of beach users e.g. recreational anglers along the Ninety Mile Beach could be affected if the MDO creates a visible sheen on the water surface close to shore.

6.3.5.6 Controls

- OIMS System 8-1 (Evaluating, Selecting and Monitoring Third Parties) ensures vessel contractors have trained and qualified Vessel Masters
- OIMS System 8-1 (Evaluating, Selecting and Monitoring Third Parties) ensures vessels will have a Shipboard Oil Pollution Emergency Plan (SOPEP) that will be implemented in the event of a MDO spill. The SOPEP is the response that will be implemented immediately by the vessel crew
- OIMS System 10-2 (Emergency Preparedness and Response) ensures effective emergency preparedness and response plans are in place, which provide for well-maintained equipment and trained personnel
- OIMS System 6-2 (Facility Integrity Management) ensures oil spill response equipment is appropriately maintained.

6.3.5.7 Risk ranking

Likelihood	Consequence	Risk Ranking
E	II	4

6.3.5.8 Demonstration of ALARP

Esso's OIMS Systems 6-2, 8-1 and 10-2 are considered a sufficient control measure to reduce the impacts and risks associated with this hazard to ALARP, in accordance with Section 5.1.4 (summarised in Table 6-20²²) as the nature of this risk is well understood, the activity is a well-established practice and the residual risk resulting from this activity is considered to be low (Category 4). The performance of OIMS Systems 6-2, 8-1 and 10-2 is appropriate for managing the day to day risk of this activity.

The contracting, or purchase, of vessels with design features such as a double skinned hull or fuel tanks located non adjacent to the hull is cost prohibitive (i.e., the costs of implementing this measure is grossly disproportionate to the reduction in risk) as these are non-standard design for survey vessels.

In the unlikely event of a spill, Esso's well-practiced oil spill response systems would be activated (per the OPEP) and the impacts minimised.

There were no further controls identified. On this basis, Esso considers the risk to be ALARP.

²² Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18

6.3.5.9 Demonstration of acceptability

For this hazard the residual risk was assessed at Category 4 low risk. As all relevant standards (Esso, Australian Standards and Industry best practice) have been met and no objections were considered from relevant persons, Esso considers the impacts and risk are acceptable in accordance with the criteria defined in Section 5.1.5.

The environmental performance outcomes and environmental performance standards for the controls above are given in Section 7, Table 7-1.



Table 6-20 Summary of ALARP Assessment – Loss of containment of hydrocarbons or diesel (RA14)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 14	Loss of containment of hydrocarbons or diesel	Hydraulic and lubricating oils are required for safe operation of machinery. Diesel is required as fuel for the vessel. No alternatives are available	Use of vessels with design features such as a double skinned hull or fuel tanks located non adjacent to the hull	Would reduce the number of vessels available for the survey duration. Due to a reduction in available vessels for contract, a higher specification or larger vessel than required would incur additional and disproportionate contracting costs as well as introducing additional risks. Given the control measures in place to prevent and respond to a spill, the potential cost of implementing this measure is grossly disproportionate to the potential environmental benefits.	In the unlikely event of a spill, Esso's well- practiced oil spill response systems would be activated (per the OPEP) and the impacts minimised.



6.4 Oil spill response (RA 15)

6.4.1 Hazard

While spill response activities are intended to reduce the potential environmental consequences of a hydrocarbon spill, response activities could potentially exacerbate or cause further environmental harm. Decisions regarding spill response activities need to consider both the potential environmental impacts associated with taking no action and the potential environmental impacts associated with a response activity or combination of spill response activities.

6.4.2 Response strategy evaluation

Spill response strategies for the worst case credible spill scenario (144 m³ MDO spill) were evaluated via Net Environmental Benefit Analysis (NEBA). NEBA is the process of considering the risk and benefits of different spill response options (including no response) and comparing them to identify a spill response decision resulting in the lowest overall environmental and socioeconomic impacts. The conceptual NEBA for the survey program is presented in Table 6-21.

In the actual event of a spill, the NEBA is revisited regularly as more information becomes available on actual conditions, spill trajectory path and locations of sensitive receptors. This review process allows response strategies to be adjusted to provide optimal results.

The process for response strategy selection and assessment is outlined in Figure 6-4.



Table 6-21 Conceptual NEBA

Response Strategy		MDO Spill		Response Strategy Carried Forward (Yes/No)
		Positive Impacts	Negative Impacts	
Monitor and Evaluate (Type I Monitoring)	Satellite Imagery	<p>Surveillance actions are used to monitor and evaluate the dispersion of the spilled hydrocarbon, and to identify and report on any potential impacts to flora and fauna that may occur while the spill disperses. Surveillance results may also be used to assist in escalating or de-escalating response strategies as required.</p> <p>Improved situational awareness will improve the effectiveness of a response decreasing risk to the environment.</p>	<p>There are a number of generic impacts that may arise from vessel and aircraft operation. Impacts such as liquid discharges, emissions, vessel movements, anchoring (disturbance to sensitive seabed features) and translocation of marine pest are described throughout this EP.</p>	Yes
	Tracking Buoys			
	Aerial Observations			
	Vessel Observations			
	Spill Modelling			
Surface Dispersants		<p>Diesel is not considered a persistent hydrocarbon, and has high natural dispersion rates in the marine environment. Chemical dispersant application is not recommended as a beneficial option for diesel as it has a low probability of increasing the dispersal rate of the spill while introducing more chemicals to the marine environment.</p>		No
Subsea Dispersants		<p>Not a feasible response to a surface diesel spill.</p>		No
Containment and Recovery		<p>Given the fast spreading nature of diesel causing the slick to break up and disperse, this response is not considered to be effective in reducing the net environmental impacts of a diesel spill. The ability to contain and recover spreading diesel on the ocean water surface is extremely limited due the very low viscosity of the fuel.</p>		No
Shoreline Cleanup		<p>No shoreline contact is predicted from a diesel spill.</p>		No
Protection and Deflection		<p>No shoreline contact is predicted from a diesel spill.</p>		No
Oiled Wildlife Response		<p>May decrease the chance of wildlife coming into contact with the diesel and or improve the chance of survival if they come in contact with the oil.</p>	<p>Undertaking this activity has the potential to result in more harm if poorly executed (i.e. drive marine animals into spill or split up the pods, schools, and flocks resulting in further stresses).</p> <p>Hazing involves the use of visual, auditory or sensory deterrents to keep healthy marine</p>	No



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Response Strategy	MDO Spill		Response Strategy Carried Forward (Yes/No)
	Positive Impacts	Negative Impacts	
		fauna away from the oil. This can lead to the separation of groups or adults/juveniles, collisions with marine fauna, inadvertent movement of animals into the oiled area, or scattering of oiled animals.	
Source Control (Securing Cargo/Trimming)	Source control activities such as cargo transfer and vessel trimming will reduce the volume of oil released to the marine environment. Consequently these response strategies will not create additional impacts on the marine environment over and above the spill itself.		Yes

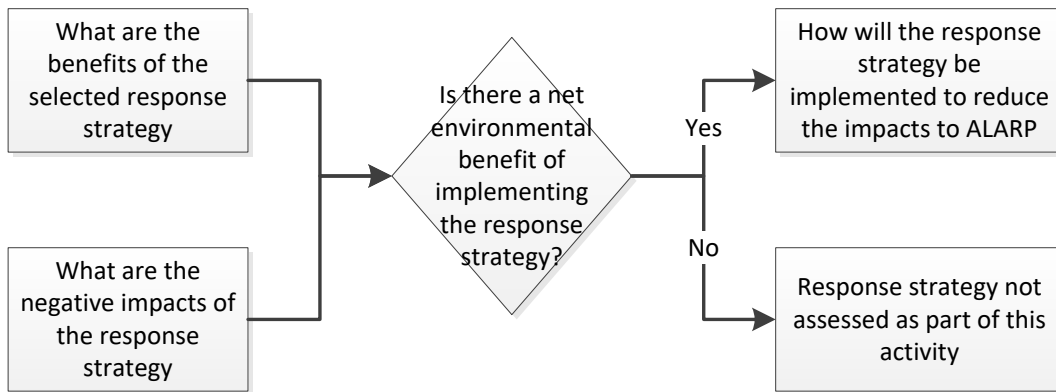


Figure 6-4 Basic response strategy selection process

6.4.3 Controls

- In the event of a hydrocarbon spill, the Vessel Master will implement available controls and resources of the SOPEP
- The Vessel Master is responsible for undertaking the initial SOPEP reporting requirements and immediate reporting to Esso
- Oil spill response equipment is appropriately maintained
- Emergency preparedness and response plans are in place to implement response strategies commensurate to the size and location of the spill
- Monitor and evaluate response activities are activated in the appropriate timeframes
- Monitor and evaluate response activities are terminated when response is complete.

6.4.4 Risk Ranking

Response strategy	Likelihood	Consequence	Risk ranking
Source control	D	IV	4
Monitor and evaluate	D	IV	4

6.4.5 Demonstration of ALARP

To demonstrate that the impacts and risk associated with response strategies have been reduced to ALARP, in accordance with Section 5.1.4 other controls and alternatives were considered, as summarised in Table 6-22²³, including:

- Increasing the number of trained personnel available for spill response activities, or having a standby workforce to respond to a spill

The listed number of personnel given in the OPEP (Appendix B), with support as required from Australian Maritime Safety Authority (AMSA) and Australian Marine Oil Spill Centre (AMOS) is appropriate for the nature and scale of the response in a worst case credible spill scenario. Establishment of a standby workforce, additional oil spill training, or establishing more trained

²³ Inserted from SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



personnel (e.g. aerial observers) or more frequent exercises to respond to a spill are costly and grossly disproportionate to the reduction in risk.

- Increasing the amount of resources and equipment available to respond to a spill

The resources listed OPEP (Appendix B), with support as required from Australian Maritime Safety Authority (AMSA) and Australian Marine Oil Spill Centre (AMOSOC) is appropriate for the nature and scale of the response in a worst case credible spill scenario.

- Setting up a permanent exclusion zone

Establishing a marine-based exclusion zone e.g. physical barriers will incur costs and present additional hazards (including safety hazards to vessels undertaking response) that are grossly disproportionate to the reduction in risk.

- Involving other stakeholders in monitoring activities

Involving other stakeholders in monitoring activities imposes other safety risks as they are not necessarily qualified and competent for the task.

There were no further alternatives identified to the response strategies as they are defined in the OPEP (Appendix B). On this basis Esso considers the risk to be ALARP.

6.4.6 Demonstration of acceptability

The hazards and risk of response strategies are evaluated above and details of Esso's capability to mount a suitable spill response is included in the OPEP (Appendix B).

The response strategies are consistent with standard industry practice and are appropriate to the nature and scale of the activity.

Esso considers the impacts and risks of response strategies are acceptable in accordance with the criteria defined in Section 6.3.4.6.



Table 6-22 Summary of ALARP Assessment – Oil spill response (RA15)

Risk number	Risk	ALARP criteria			ALARP justification summary
		<i>“There are no reasonably practicable alternatives to the activity “</i> Alternatives to activity	<i>“There are no additional reasonably practicable measures available to further reduce the risk”</i> Additional control measures considered	<i>“The ‘cost’ of implementing further measures is grossly disproportionate to the reduction in risk”</i> Demonstration of grossly disproportionate costs or reason to reject additional control measure	
RA 15	Oil spill response	Response strategies are required in order to reduce spill size, monitor the development and impacts of a spill, and minimise potential impacts	Increasing the number of trained personnel available for spill response activities, or having a standby workforce to respond to a spill	The listed number of personnel given in the OPEP, with support as required from AMSA and AMOSC is appropriate for the nature and scale of the response in a worst case credible spill scenario. Establishment of a standby workforce, additional oil spill training, or establishing more trained personnel (e.g. aerial observers) or more frequent exercises to respond to a spill are costly and grossly disproportionate to the reduction in risk.	There were no further alternatives identified to the response strategies as they are defined in the OPEP. On this basis Esso considers the risk to be ALARP
			Increasing the amount of resources and equipment available to respond to a spill	The resources listed in the OPEP, with support as required from AMSA and AMOSC is appropriate for the nature and scale of the response in a worst case credible spill scenario. Additional resources would incur additional costs that would be grossly disproportionate to the potential environmental benefits gained	
			Setting up a permanent exclusion zone	Establishing a marine-based exclusion zone e.g. physical barriers will incur costs and present additional hazards (including safety hazards to vessels undertaking response) that are grossly disproportionate to the reduction in risk.	
			Involving other stakeholders in monitoring activities	Involving other stakeholders in monitoring activities imposes other safety risks as they are not necessarily qualified and competent for the task.	



7. Performance outcomes, performance standards and measurement criteria

This section outlines:

- The environmental performance outcomes against which the performance in protecting the environment can be measured
- The performance standards that are applied to ensure control measures implemented in order to manage environmental impacts and risks to ALARP and acceptable levels
- The measurement criteria that will define how environmental performance is measured against performance outcomes and performance standards.

Table 7-1 provides the full list of performance outcomes, performance standards and measurement criteria that have been developed for Esso's Gippsland Basin Geotechnical and Geophysical Survey. The responsibility for each performance standard has been assigned and accepted by the person in the designated role.

Every control listed in Section 6 is listed again below with the corresponding Performance Outcomes, Standards and Measurement Criteria.

7.1 Performance outcomes

Environmental performance outcomes have been developed for each environmental hazard in Section 6 as defined in the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009.

Performance outcomes are a measurable level of performance required for the management of the environmental impacts and risks to ALARP and to an acceptable level.

7.2 Performance standards

Performance standards are a statement of performance required of a control measure. The performance standards have been set for every outcome and every control outlined in Section 6 in order to demonstrate how these controls will perform effectively to ensure that the risk of impacts to the environment are managed to ALARP and to an acceptable level.

7.3 Measurement criteria

Measurement criteria have been outlined to demonstrate how the outcomes and standards are measured. This forms an auditable trail and can be used to continually measure and monitor the performance of all controls, to ensure they are working effectively to reduce the risk of impacts to the environment to ALARP and to an acceptable level.



Table 7-1 Performance outcomes, standards and measurement criteria²⁴

RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
Vessel Presence and Operations							
1	Underwater noise from geophysical sources	Underwater noise from geophysical sources affecting marine fauna or cetacean behaviour	Potential impacts to marine fauna as result of noise generated from SBP will be minimised.	A 100 m shutdown zone will be maintained around the SBP for marine turtles and whales.	<p>If a whale or turtle is sighted within 100 m of the SBP prior to commencement of data acquisition the operation will be delayed until the whale or turtle has moved out of the 100 m shutdown zone or 10 minutes has passed since the last sighting.</p> <p>The SBP, SSS or MBES will be shut down if a whale or turtle is sighted within 500 m of the operating source. SBP will recommence once the whale or turtle has moved out of the 500 m observation zone or 10 minutes has passed since the last sighting.</p> <p>The SBP, SSS or MBES will not be operated at night time if there have been 3 incidences of whales or turtles sighted the previous day.</p>	Vessel records demonstrate the implementation of the 500 m shut down zone and night time restrictions.	Vessel Contract Administrator
2		Underwater noise from vessels affecting marine	Potential impacts to marine fauna as	All survey vessels to comply with EPBC Regulations 2000-Part 8	Project vessels will comply with EPBC Regulations 2000- Part 8	All incidences of non-compliance with EPBC Regulations 2000 Part	Vessel Contract Administrator

²⁴ Table updated based on SSHE 0016 18 EP Response Note - Gippsland Basin G&G Investigation Rev 0 19Jan18



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
	Underwater noise from vessels	fauna or cetacean behaviour	result of noise generated from vessels will be minimised.	Division 8.1 (interacting with cetaceans).	Division 8.1 (Interacting with cetaceans), including: <ul style="list-style-type: none"> A vessel will not travel greater than 6 knots within 300 m of a whale (caution zone) and not approach closer than 100 m to a whale A vessel will not approach closer than 50 m or a dolphin and/or 100 m for a whale (with the exception of animals bow riding)	8 Division 8.1 (interacting with cetaceans) to be recorded.	
				Vessels are required to have valid documentation including: An Oil Companies International Marine Forum (OCIMF) Offshore Vessel Inspection Database (OVID) or equivalent.	Vessels are required to have valid documentation including: <ul style="list-style-type: none"> An Oil Companies International Marine Forum (OCIMF) Offshore Vessel Inspection Database (OVID) or equivalent 	Vessel records sighted and assessed as current and valid	Vessel Contract Administrator



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
				OIMS System 8-1 (Evaluating, Selecting and Monitoring Third Parties) ensures vessels have an inspection maintenance and repair program.	Vessels have an inspection, maintenance and repair program	Vessel records indicate inspection, maintenance and repair are undertaken.	Vessel Contract Administrator
3	Lighting from vessel	Does not pose a credible risk or impact (Section 6.1.3).	N/A	N/A	N/A	N/A	N/A
4	Fuel combustion equipment on vessel	Air emissions	Fuel combustion equipment complies with the requirements of Marine Order 97 (Marine pollution prevention- air pollution) to minimise air emissions.	Vessel contractors comply with the requirements of Marine Order 97.	Vessel contractors will comply with the requirements of Marine Order 97 including: <ul style="list-style-type: none"> Vessel contractors will hold a valid International Air Pollution Prevention (IAPP) certificate The sulphur content of any fuel oil used on-board shall not exceed 3.50 % m/m Vessel engines shall meet prescribed NOx emission levels. 	Vessel inspection records sighted and assessed as compliant.	Vessel Contract Administrator



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
5	Sewage discharge from vessels	Discharge of sewage waste to the marine environment.	No discharge of untreated sewage within 12 nm. No discharge of non-comminuted putrescible waste within 12 nm.	Vessel contractors comply with the requirements of Marine Order 95.	Vessel contractors will comply with the requirements of Marine Order 95 including: <ul style="list-style-type: none">Putrescible waste will only be discharged to sea if comminuted to 25 mm or less and discharged en route when greater than 3 nautical miles from the 'territorial sea baseline'If putrescible waste is not comminuted to 25 mm or less it will be discharged greater than 12 nautical miles from the territorial sea baseline while en route.	Vessel inspection records Maintenance records of sewage treatment plant	Vessel Contract Administrator



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
				Vessel contractors will comply with the requirements of Marine Order 96 (Marine pollution prevention- sewage) 2013.	Vessel contractors will comply with the requirements of Marine Order 96 including: <ul style="list-style-type: none">• Discharge of sewage which is not comminuted or disinfected will only occur at a distance of more than 12 nm from the nearest land• Discharge of sewage which is comminuted or disinfected using a certified approved sewage treatment plant will only occur at a distance of more than 3 nm from the nearest land• Discharge of sewage will occur at a moderate rate while vessel is moving (greater than 4 knots) with no visible floating solids or discolouration of the surrounding water• Vessel will hold a valid International Sewage Pollution Prevention (ISPP) certificate	ISPP certificate verifies compliance with Marine Order 96.	Vessel Contract Administrator



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
6	Vessel oily water (bilge discharge)	Discharge of oily water to the marine environment	No discharge of untreated bilge water to the marine environment.	Vessel contractors will treat bilge to an oil-in-water concentration of 15 ppm prior to discharge in accordance with Marine Order 91 (Marine Pollution Prevention- Oils).	Vessel contractors will comply with the requirements of Marine Order 96 including: <ul style="list-style-type: none"> Vessels hold a current IOPP certificate No discharge of oily water greater than 15 ppm Alarm system prevents discharge when OIW concentration exceeds 15 ppm. 	Vessel carries current IOPP certificate. Calibration records indicate oil-in-water detection meter is calibrated in accordance with manufacturer's specifications. Records confirm volume and oil content of slops tank discharge has been historically maintained within prescribed limits. Oil record book shows all records of oil disposal.	Vessel Contract Administrator
				Vessels will have suitable spill kits in accessible locations on board to be used immediately in the event of a chemical/ hydrocarbon spill.	Suitable spill kits in accessible locations on board.	Vessel inspection during activity confirms location of spill kits.	Vessel Contract Administrator
7	Vessel deck drainage	Discharge of hydrocarbon and/or chemical contaminated deck drainage into marine environment.	No discharge of contaminated deck drainage to marine environment.	Vessels have scupper plugs fitted for use in overboard drains.	Vessel specifications are reviewed to ensure vessels have scupper plugs fitted for use in overboard drains.	Vessel inspection records confirm presence of scupper plugs.	Vessel Contract Administrator



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
8	Physical presence-of survey vessels	Interference with other marine users	Prevent disruption to other marine users including commercial fishing and shipping	<p>Consultation was undertaken with key stakeholders during the development of this EP</p> <p>Key stakeholders will be kept updated with project timeframes</p>	<p>Consultation was undertaken with key stakeholders during the development of this EP</p> <p>Key stakeholders to be updated once survey commencement date is known in accordance with Section 8.10 of the EP</p> <p>Further consultation will occur with relevant stakeholders in accordance with Section 8.10 of the EP</p>	Stakeholder consultation records.	Consultation Advisor
				<p>Vessel contractors comply with Marine Order 30 (Prevention of Collisions) 2009 (which requires vessels to be visible at all times) to prevent unplanned interaction with marine users.</p>	<p>Vessel contractors will comply with the requirements of Marine Order 30 including:</p> <ul style="list-style-type: none"> adherence to steering and sailing rules including maintaining look-outs (e.g. visual, hearing, radar etc.), proceeding at safe speeds, assessing risk of collision and taking action to avoid collision (monitoring radar) adherence to navigation light display requirements, including visibility, light position/shape appropriate to activity adherence to navigation noise signals as required. 		Vessel inspection records confirm radar, lights and noise signals working.



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
				<p>Vessel contractors comply with Marine Order 21 (Safety of navigation and emergency procedures) 2012 to prevent unplanned interaction with marine users.</p>	<p>Vessel contractors will comply with the requirements of Marine Order 21 including:</p> <p>including:</p> <ul style="list-style-type: none"> • adherence to minimum safe manning levels • maintenance of navigation equipment in efficient working order (compass/radar) • navigational systems and equipment required are those specified in Regulation 19 of Chapter V of SOLAS • Automatic Identification System (AIS) that provides other users with information about the vessel's identity, type, position, course, speed, navigational status and other safety-related data. 	<p>Vessel inspection records confirm:</p> <ul style="list-style-type: none"> • Maintenance of navigation system/equipment maintained in line with manufacturers specification • Navigation system/equipment meet Regulation 19 of Chapter V of SOLAS • AIS system on board <p>Daily vessel logs detail manning levels.</p>	Vessel Contract Administrator
				<p>In order to prevent activities interfering with other marine users, AMSA JRCC is notified of the activity</p>	<p>AMSA JRCC is notified of the activity 24-48 hours before operations commence</p>	<p>Stakeholder consultation records.</p>	<p>Consultation Advisor</p>



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
				Notification of AHS prior to commencement of activity	In order to prevent activities interfering with other marine users, AHS will be notified no less than 4 working weeks prior to scheduled activity commencement date, to allow generation of navigation warnings (Maritime Safety Information Notifications (MSIN) and Notice to Mariners (NTM) [including AUSCOAST warnings where relevant])	Stakeholder consultation records.	Consultation Advisor
Drilling, Coring and Sediment Sampling							
9	Disturbance to seabed, benthic organisms and water quality as a result of survey activities	Discharge of drill cuttings and fluids to the sea.	Only approved low toxicity drilling fluids will be used during survey activities.	The drilling fluid used is a low environmental impact fluid.	Only OCNS (Offshore Chemical Notification Scheme) Group D or E rated fluids will be used	Records show that chemicals used are OCNS Group D or E.	Esso Survey Manager/ Vessel Master
Unplanned Events							
10	Introduction of marine pest species	Introduction of marine pest species through hull fouling or ballast water discharge.	No introduction of non-endemic marine species through hull fouling or ballast water discharge.	IMS risk assessment prior to contracting	The survey vessel will be risk assessed prior to mobilisation using the National Biofouling Management Guidance for the Petroleum Production and Exploration Industry (2009)	IMS risk assessment records	Vessel Contract Administrator



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
				Vessel contractors will comply with the requirements of Australian Ballast Water Requirements-Version 7 (Department of Agriculture and Water Resources, 2017).	Ballast water will be managed in accordance with Australian Ballast Water Requirements-Version 7 (Department of Agriculture and Water Resources, 2017) including: <ul style="list-style-type: none">All vessels designed to carry ballast water are required to carry a valid ballast water management plan (BWMP) and ballast water management certificateAll vessels are required to submit a ballast water report Ballast water exchange should be conducted in areas at least 12 nm from the nearest land and in water at least 50 m deep.	Ballast water management certificate (if relevant) Ballast water report confirms ballast water is sourced from Australian waters.	Vessel Master



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
				Vessel contractors will comply with Annex 1 of the International Convention on the Control of Harmful Anti-Fouling Systems on Ships.	All vessels to have an anti-fouling coating that complies with the requirements of Annex 1 of the International Convention on the Control of Harmful Anti-Fouling Systems on Ships. Anti-fouling records will be maintained on board project vessel(s) in accordance with Appendix 2 of the International Maritime Organisation's Guidelines for the Control and Management of Ships' Biofouling to Minimise the Transfer of Invasive Aquatic Species, which include details of anti-fouling coating used, dates and locations of cleaning, dry docking, anti-fouling applications, date and locations of in-water inspections.	Anti fouling records confirm anti-fouling coating used, dates and locations of cleaning, dry docking, anti-fouling applications, date and locations of in-water inspections.	Vessel Master
11	Vessel movement	Unplanned collision with marine fauna	Maintain separation distance between vessels and cetaceans and safe vessel speeds as far as is practicable within safe operating limits in order to avoid collisions with marine fauna within the	Project vessels will comply with EPBC Regulations 2000 - Part 8 Division 8.1 (Interacting with cetaceans).	Project vessels will comply with EPBC Regulations 2000- Part 8 Division 8.1 (Interacting with cetaceans), including: <ul style="list-style-type: none"> A vessel will not travel greater than 6 knots within 300 m of a whale (caution zone) and not approach closer than 100 m from a whale A vessel will not approach closer than 50 m or a dolphin and/or 100 m for a 	All incidences of non-compliance with EPBC Regulations 2000 - Part 8 Division 8.1 (interacting with cetaceans) to be recorded.	Vessel Contract Administrator



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
			operational area.		whale (with the exception of animals bow riding)		
12	Dropped objects	Seabed disturbance	No significant incidents of dropped objects to the marine environment.	Lifting gear is appropriately maintained.	Lifting gear is maintained in accordance with manufacturer specifications	Lifting gear service and maintenance records.	Vessel Master
				Vessel inductions include training for crew in dropped object prevention.	Vessel inductions will include a prevention of dropped objects component to increase awareness of requirements.	Induction records show dropped object training is included.	Vessel Master
13	Loss of hazardous and non-hazardous waste	Unplanned release of hazardous or non-hazardous waste to the marine environment	No unplanned release of hazardous or non-hazardous waste to the environment.	Waste will be managed in accordance with the vessel Garbage Management Plan.	Vessel contractors will have a Garbage Management Plan in place which outlined procedures for handling storing, processing and disposing of garbage.	Inspection during activity to confirm that wastes are managed in accordance with waste management procedure.	Vessel Master
				A garbage record book shall be maintained with details of non-hazardous and hazardous waste volumes generated and transferred for onshore recycling or disposal.	All hazardous and non-hazardous wastes generated at sea during the activity will be retained on the survey vessel and disposed of onshore by a licensed Waste Management Contractor (excluding putrescible waste and sewage).	A garbage record book shall be maintained with details of non-hazardous and hazardous waste volumes generated and transferred for onshore recycling or disposal.	Vessel Master
				Vessel inductions include notification for personnel on correct waste management procedures.	All personnel will be notified of the correct waste management procedures through the vessel induction process.	Induction records show notification of correct waste management procedures.	Vessel Master
				Waste will be stored securely in clearly marked containers.	All waste material that could reasonably be lost overboard is stored securely (e.g. lidded bins).	Inspection during activity to confirm that litter that could reasonably be lost overboard is stored securely.	Vessel Master



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
				All hazardous wastes and chemicals will be stored in a bunded area capable of containing leakage or spillage, prior to onshore disposal	All wastes including hazardous wastes and chemicals will be segregated into clearly marked containers.	Inspection during activity to confirm waste is segregated into clearly marked containers.	Vessel Master
				Material Safety Data Sheets (MSDS) are present on board for each hazardous chemical.	Material Safety Data Sheets (MSDS) are present on board for each hazardous chemical.	Material Safety Data Sheets (MSDS) present on board for each hazardous chemical.	Vessel Master
				Esso's corrective and preventative action processes will be implemented in the event of release of solid or hazardous waste to the marine environment.	Any release of solid and hazardous wastes into the marine environment would be recorded as an environmental incident and treated accordingly by Esso's incident investigation and corrective and preventative action processes.	Incident Report.	Vessel Master
				OIMS System 8-1 (Evaluating, Selecting and Monitoring Third Parties) ensures vessel contractors have trained and qualified Vessel Masters;	Vessel Masters must all have appropriate training as outlined in the training matrices and position descriptions and are able to manoeuvre the vessels in position without incident.	Training records show vessel masters have all relevant training.	Vessel Master



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
14	Loss of containment of hydrocarbons or MDO	Unplanned loss of containment of MDO or hydraulic or lubricating oil to the marine environment	No unplanned release of MDO or hydraulic or lubricating oil to the marine environment	OIMS System 8-1 (Evaluating, Selecting and Monitoring Third Parties) ensures vessels will have a Shipboard Oil Pollution Emergency Plan (SOPEP) that will be implemented in the event of a MDO spill. The SOPEP is the response that will be implemented immediately by the vessel crew	Vessels have SOPEP in place to respond to a spill.	Vessel records indicate periodic OPEP drills (or equivalent) are undertaken.	Vessel Master
				OIMS System 10-2 (Emergency Preparedness and Response) ensures effective emergency preparedness and response plans are in place, which provide for well-maintained equipment and trained personnel. OIMS System 6-2 (Facility Integrity Management) ensures oil spill response equipment is appropriately maintained.	Procedures and plans (an OPEP) are in place to respond to a spill. The OPEP is resourced, accessible, current, and clearly communicated. Exercises, simulations, and/or drills are conducted per schedule to determine the adequacy of the OPEP.	Emergency Response Exercises show the processes of the OPEP have been practised, are adequate and have been undertaken according to schedule. If an incident occurs, the emergency response log of events demonstrates that the OPEP was followed. Emergency equipment records. Training records of emergency preparedness and response personnel.	Esso Survey Manager / Vessel Master
				Vessel Master will implement the SOPEP in the event of a spill.	Procedures and plans (vessel SOPEP) are in place to respond to a spill.	Vessel records indicate that SOPEP drills or equivalent are undertaken.	Vessel Master



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
15	Oil spill response	Implementation of source control	Source control ceases hydrocarbon release to sea	Vessel Master to undertake initial reporting as per SOPEP and immediate reporting to Esso	In the event of a spill Vessel Master executes reporting requirements outlined in SOPEP and to Esso	Incident reports demonstrate communication records between Vessel Master and Esso	Vessel Master
				Oil spill response equipment is appropriately maintained	Oil spill response equipment is maintained in accordance with the equipment strategy/ planned maintenance system.	Maintenance records show compliance with planned maintenance system (oil spill equipment)	Vessel Master
				Emergency preparedness and response plans are in place to implement response strategies commensurate to the size and location of the spill	Procedures and plans (an OPEP) are in place to respond to a spill. The OPEP is resourced, accessible, current, and clearly communicated. Exercises, simulations, and/or drills are conducted per schedule to determine the adequacy of the OPEP	Emergency Response Exercises show the processes of the OPEP have been practised, are adequate and have been undertaken according to schedule. If an incident occurs, the emergency response log of events demonstrates that the OPEP was followed.	Esso Survey Manager / Vessel Master
		Implementation of source control and monitor and evaluate	Oil spill response plans achieve their objectives	Monitor and evaluate response activities are activated in the appropriate timeframes	Monitor and evaluate response activities shall be applied within the minimum standard timeframes (as per Section 7.1 of the OPEP).	Daily logs of response activities prepared by IMT.	Esso Survey Manager / Vessel Master



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RA	Activity	Hazard/Aspect	Performance Outcomes	Controls	Performance Standards	Measurement Criteria	Responsible Person
		Implementation of monitor and evaluate spill response	Situational awareness achieved by the IMT as soon as reasonably practicable to ensure timely and suitable mobilisation, and the coordination and prioritization of oil spill response activities.	Monitor and evaluate response activities are terminated when response is complete	Monitor and evaluate response shall continue until termination criteria detailed in Section 8 of OPEP have been met.	Aerial surveillance observer log completed for each flight and sent to IMT until termination criteria met.	Esso Survey Manager / Vessel Master
			Situation awareness maintained until there is no longer a threat from spilt oil				



8. Implementation strategy

The Implementation Strategy identifies systems, practices and procedures to be used to ensure that the environmental impacts and risks of the activity are reduced to ALARP and acceptable levels, and that the environmental performance outcomes and standards in the EP are met.

This section outlines how Esso's Operations Integrity Management System (OIMS) and the practices and procedures within OIMS are properly planned, organised, led and controlled in a way that avoids, reduces or mitigates the identified environmental risks and impacts.

It details how OIMS establishes:

- A clear chain of command, and the roles and responsibilities of personnel in relation to the implementation, management and review of the EP
- Awareness and training requirements
- Monitoring, audit, management of non-conformance and review of environmental performance
- Review of the implementation strategy itself
- Maintenance of records
- Emergency response arrangements
- Appropriate consultation.

8.1 Operations Integrity Management System (OIMS)

Esso is committed to conducting business in a manner that is compatible with the environmental and economic needs of the communities in which it operates, and that protects the safety, security, and health of its employees, those involved with its operations, its customers, and the public. These commitments are documented in the Safety, Security, Health, Environmental, and Product Safety policies.

These policies are put into practice through a management system called the OIMS. Esso's OIMS Framework establishes common worldwide expectations for addressing risks inherent in the business (Figure 8-1). The term Operations Integrity (OI) is used by Esso to address all aspects of its business that can impact personnel and process safety, security, health and environmental performance.

All OIMS management systems contribute to the effective management of the identified environmental risks and impacts in this EP.

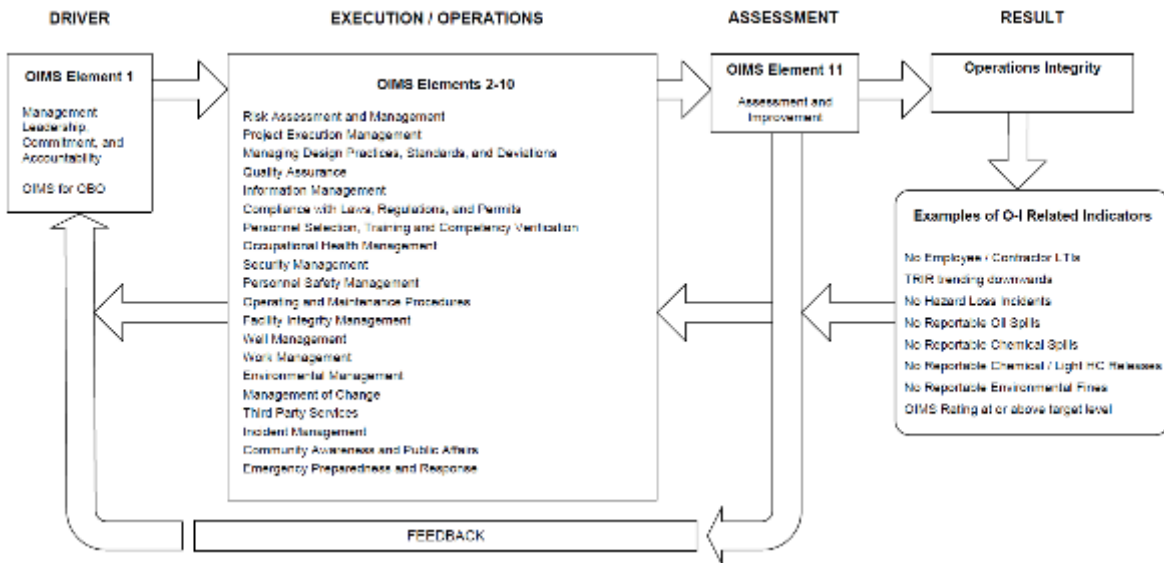


Figure 8-1 OIMS management systems

8.1.1 OIMS System 5-1: Personnel selection, training and competency verification

The purpose of OIMS System 5-1 is to ensure that personnel are trained in the knowledge and skills necessary to meet the requirements of their specific positions and roles.

The system objectives are:

- Personnel are trained to perform their assigned tasks, and the training includes OI risks and regulatory requirements
- Key positions are identified with competency requirements specified and documented
- Personnel placements meet criteria defined in the System. Personnel resources are available and qualified to meet the manning criteria as needed by the function
- Training and competencies for key positions are reviewed and assessed periodically.

The training provided by Esso is based on established requirements for OI related training (i.e. safety, health, environment and security) and an individual's identified training requirements in knowledge and skills.

Non-procedural required competencies (RCs) are identified to ensure that individuals have the required OIMS, SSHE, and local regulatory compliance training.

8.1.2 OIMS System 6-5: Environmental management

The purpose of OIMS System 6-5 is to provide a framework that meets environmental business planning expectations, establishes the requirements for environmental management which includes socioeconomic and community health aspects, and enables Esso to conduct its business in a manner that is compatible with the balanced environmental and economic needs of the communities in which it operates. This System is applicable to all activities that may result in a potentially significant environmental impact.

The System objectives are:

- Environmental aspects are identified and assessed as part of Environmental Management Plans; significant aspects are addressed and controlled consistent with policy and regulatory requirements



- Environmental management is fully integrated into Esso's business planning and stewardship process. Environmental performance, including emissions, discharges and waste, is tracked and stewarded to meet performance goals
- Facilities (including wells and pipelines) are designed, constructed, operated, and assessed taking into account consideration end of life aspects
- Facilities are assessed to determine the extent of contamination prior to long term shut down or abandonment of facilities, and appropriate remedial action is planned and implemented.

The interrelated processes for environmental management include environmental planning, implementation and operation, monitoring and corrective action, and performance analysis and management review.

8.1.3 OIMS System 8-1: Third party services

The purpose of OIMS System 8-1 is to provide a systematic approach for the selection of contractors and subsequent management of interfaces between Esso and contractors and between contractors to lead to work being performed in a safe, secure, and environmentally sound manner. This System covers requirements for evaluating and selecting contractors, communication and verification of OI requirements, interface management, and performance monitoring and stewardship.

The System objectives are:

- Contractors are qualified, evaluated, and selected based on their ability to perform work in a safe, secure, and environmentally sound manner at the best total value
- OI requirements are clearly defined and communicated to the third party contractors
- Effective interface plans are developed, and interfaces are managed between the business line and contractors
- Contractor performance is monitored, feedback provided, and deficiencies corrected.

The process for evaluating and selecting third party contractors ensures they meet minimum OI criteria, which includes (1) a documented safety, health and environment program, including security as appropriate, that includes an effective and relevant training program together with documented safety performance; (2) compliance with relevant regulations and business line standards; (3) OI qualification criteria are verified during the contracting process and records maintained; and (4) relative capability to perform work in a safe and environmentally sound manner is considered in addition to cost when selecting third-parties.

Job specific OI requirements are defined and communicated to third-parties during the contracting process and included in third party contracts.

Effective interface management is a process of timely interaction and consistent communication between Esso and the contractor as well as among contractors to influence behaviours and prevent incidents. Processes are in place to ensure personnel actively engage in interface activities with third-parties as well as in interface activities among multiple third-parties on one site or performing related activities.

Effective performance monitoring programs require alignment between the contractor and the business line on performance expectations and key performance indicators (KPIs) to be measured. Specific performance monitoring requirements are detailed in the contract agreement or in site-specific or contractor-specific SSH&E Plans.

8.1.4 OIMS System 10-2: Emergency preparedness and response

The purpose of OIMS System 10-2 is to ensure that Esso establishes effective response to emergencies and business disruptions that threaten the safety, security and health of the public, contractors and employees, the environment, asset integrity, and critical business operations. This System addresses



all sites for which Esso has responsibility and includes emergencies, disruptions to critical business operations, and security threats that could occur throughout the business line's sphere of influence (e.g. processing, drilling, transportation, office).

The System objectives are as follows:

- Emergency response plan(s) and business continuity plan(s) are documented, resourced with qualified personnel, accessible, current, and clearly communicated
- Required training, exercises, simulations, and/or drills are conducted to determine the adequacy of the emergency response and business continuity plans.

Readiness and response strategies are designed to minimise business impacts by deploying continuity strategies beginning with monitoring and surveillance by site personnel and supporting systems. In the event of an incident, an effective response will be required beginning with the initial assessment and objective of minimising impacts to personnel, the environment and critical business activities.

The overall process of effective emergency response and business continuity planning includes: (1) developing the Emergency Response Plan (ERP) and Business Continuity Plan (BCP); (2) conducting training, exercises, simulations, and/or drills of incident response and business disruption scenarios affecting critical operations; and (3) updating the ERP/BCP for significant changes.

8.2 Contractor Environmental Management Framework

The OIMS management systems contribute to the effective management of the identified environmental risks and impacts in this EP, which the vessel contractor must abide by.

Through the Third Party Services Element of OIMS (Element 8), third party systems practices and procedures are reviewed and assessed for acceptability by Esso prior to commencement of operations/activities. Third party services and systems are subject to regular audits throughout the program, at a minimum these are conducted annually as part of the critical contractor's evaluation program.

The survey vessel operator will have in place a comprehensive Health Safety and Environmental (HSE) Policy and Vessel Management System (VMS). The survey will be supported by a Vessel Emergency Response Manual and a project-specific HSE Plan, which will be compiled by the contractor.

A series of contractor work instructions, procedures and plans will be used for the proposed geophysical and geotechnical survey to ensure that appropriate management measures are applied as required to minimise the risk of environmental disturbance from operations. The work instructions, plans and procedures are documented within corporate systems/manuals developed by the contractor as well as documents written specifically for the site survey (e.g. project-specific HSE Plan). Many of the procedures apply to all vessels in a contractor's fleet, however it is possible that two different contractors will be used to deliver each of the work packages. Where the work packages are executed by two different contractors, a separate sets of plans, procedures and work instructions will be required for each vessel. These will include procedures relating to:

- Work package specific HSE Plan
- Survey vessel SOPEP (forms part of the OPEP)
- Emergency Response Manual Vessel
- Waste Management
- Emissions to air and water.

The contractor will be responsible for these procedures and ensuring they are carried out.



8.2.1 Survey documentation

The following documents apply to the geophysical and geotechnical survey and set the standards and requirements to be met for the survey by all parties (Esso and Contractors):

- The Gippsland Basin Geotechnical and Geophysical Survey Environment Plan
- The Gippsland Basin Geotechnical and Geophysical Survey Oil Pollution Emergency Plan
- A Bridging Emergency Response Plan (between the Esso and Vessel Emergency Response Manual)
- An OIMS Bridging Document (that bridges between OIMS requirements and vessel procedures).

8.3 Contractor management

All contractors and subcontractors represent that they are fully capable of performing work in compliance with contractual environmental obligations required by Esso and applicable Australian Commonwealth and state laws.

Sub-contractors must also comply with all applicable Esso and vessel specific safety, health and environmental standards, practices and procedures that comply with these provisions.

Where Esso's contractors are providing services or equipment which is deemed to be critical under the operations integrity management system (OIMS), the contractors' HSE Management Systems are reviewed as part of the contractor selection process to ensure they have appropriate systems to manage safety and environment.

Approval and management of contractors working on a separately contracted vessel will be in accordance with OIMS Element 8 (Third Party Services), which provides a systematic approach for the evaluation and selection of contractors that confirms they are capable of meeting applicable Operations Integrity performance expectations. All third party contractors must work under the contractors Environmental Management Framework and under the control of OIMS.

8.4 Roles and responsibilities

The organisation structure for implementation of the geophysical and geotechnical survey is illustrated in Figure 8-2.

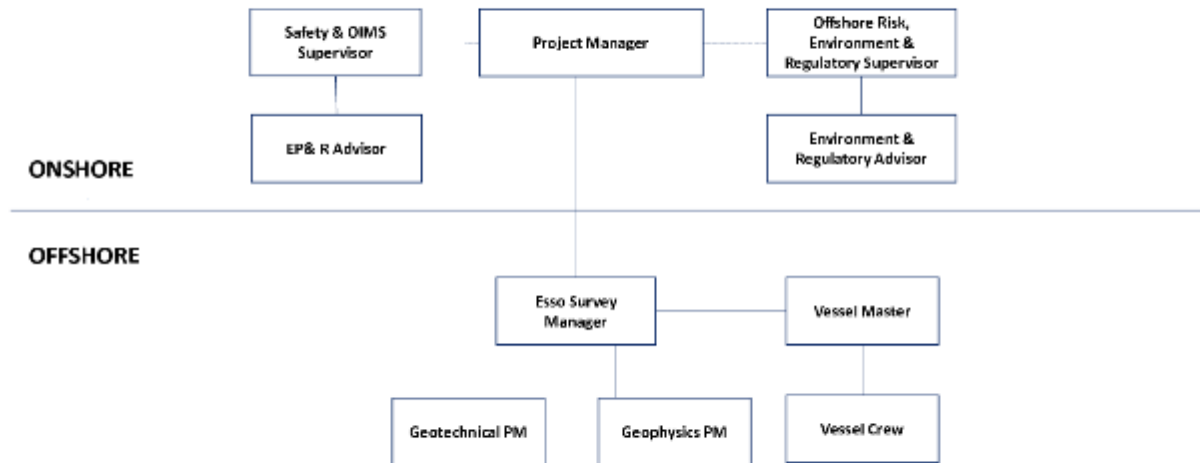


Figure 8-2 Organisation Structure

8.4.1 Organisation responsibilities

The positions relevant to the survey program activities are:

- Project Manager (Esso)
- Survey Manager (Esso)
- Environment & Regulatory Advisor (Esso).

The positions relevant to vessel support operations are:

- Survey Manager (Esso)
- Vessel Master (Vessel Contractor)
- Geotechnical PM (Vessel Contractor)
- Geophysics PM (Vessel Contractor).

The responsibilities of each of the roles above are shown in Table 8-1.

Table 8-1 Key roles and responsibilities

Role	Responsibilities
Esso Project Manager	<p>Ensures overall compliance with this EP.</p> <p>A member of the Esso Emergency Support Group</p> <p>Ensuring that an emergency response exercise/drill is performed prior to the start of the geophysical and geotechnical Survey</p>
Esso Environment & Regulatory Advisor	<p>Pre-mobilisation audit of procedures and practices to ensure compliance with EP.</p> <p>Ensuring audit non-conformances are closed out.</p> <p>Pre-mobilisation audit of waste logs of the vessel to demonstrate compliance with MARPOL.</p> <p>Ensuring all required audits and reviews are undertaken in accordance with the regulatory requirements and as required by this EP.</p> <p>Incident investigation.</p> <p>Maintain a stakeholder consultation log.</p> <p>Notification and reporting of all recordable and reportable incidents within the specified time frames.</p>
Esso Survey Manager	<p>Reports to the Esso Project Manager for the timely and professional conduct of the survey in the field, ensuring all survey procedures and specifications are fulfilled, and coordinating the movements of contractor personnel offshore. This person is usually a qualified Senior Hydrographic Surveyor, Senior Geophysicist or Senior Geotechnical Engineer with many years' experience in the offshore survey industry, including projects of a similar size and nature. The Offshore Manger will also be the field point of contact between Esso and its contractors during survey operations offshore and will be in regular contact with both the Contract Holder and Project Manager.</p> <p>The Survey Manger will be responsible for monitoring data quality, whilst the survey Vessel Master is ultimately responsible for vessel safety. In consultation with the Esso field representative, the Survey Manger and survey Vessel Master will be responsible for decisions relating to suspension of survey operations and when to recommence.</p> <p>Responsible for the conduct of the contract between Esso and sub-contractors for the surveys</p>



Role	Responsibilities
	<p>Together with the Esso Project Manager, ensuring compliance with all environmental regulations and this EP.</p> <p>Ensuring the survey vessel and equipment is maintained and in an operable condition.</p> <p>Providing and maintaining effective emergency response arrangements for all operations where there is potential environmental risk.</p> <p>Ensuring all personnel are inducted, are adequately trained, and are aware of their environmental responsibilities</p> <p>Audit of procedures to ensure compliance with this EP.</p> <p>Ensuring all required activities, monitoring plans, audits and reviews are undertaken in accordance with the regulatory requirements and as required by this EP.</p> <p>Incident investigation.</p> <p>Ensuring crew members are complying with health, safety and environmental requirements.</p> <p>Reporting all incidents and hazards to the Esso Project Manager.</p> <p>Ensure all waste and oil disposal procedures comply with MARPOL requirements</p>
Vessel Master	<p>Responsible for ensuring the safe execution of all operations of the survey vessel.</p> <p>Overall responsibility for HSE management aboard the survey vessel, and ensures that appropriate control and mitigation measures are implemented to minimise potential environmental effects resulting from vessel operations - e.g., waste management/disposal; fuel/oil spill response.</p> <p>Responsible for notifying the Survey Manger and Project Manager of any incidents/activities arising from vessel operations that are likely to have a negative impact on the performance objectives detailed in this EP.</p>
Geotechnical and Geophysical PMs	<p>Responsible for the correct operation of each system employed together with the regular checks, tests and maintenance of each component that comprises the particular system. They will be experienced, reliable and professional in their approach to the tasks required. Any project specific training required for this survey will be conducted prior to the commencement of operations.</p>

8.5 Training and competency

Personnel performing tasks that may involve environmental impacts will have the knowledge and skills necessary to perform their work in a manner consistent with company environmental policy and the requirements of System 6-5 Environmental Management.

Training and Competency are addressed by OIMS System 5-1 (Personnel Selection, Placement and Competency Verification). All offshore personnel, including third party service providers are required to undertake training based on the requirements identified in Position Descriptions and RC's (compulsory competencies that are required to protect against significant incidents (e.g. safety, environment, process safety, compliance with law/regulation or company policy)).

Field based personnel (as identified in Figure 8-2) may not commence their duties without having first achieved all relevant RCs, unless they are accompanied in the field by a mentor with relevant RCs. The Competency Assurance Manual (OIMS System 5) describes mechanisms to ensure initial and periodic refresher training is undertaken to meet job and legal requirements. RCs and one-off training are



documented in the Competency Training Roadmaps and are managed within the Esso Training Records Management System.

Each third party service provider is also required to maintain training files for their personnel. These records are verified as part of initial contract requirements and then audited at a minimum of annually for critical contractors.

8.5.1 Contractor HSE Inductions

All personnel required to work on the contracted vessel will be given a vessel specific HSE Induction prior to the commencement of the survey. The environmental component of the induction will include the following:

- Description of the environmental sensitivities and conservation values of the survey area and surrounding waters.
- Overview of marine fauna likely to be in the area.
- Importance of following procedures and using JHAs to identify environmental risks and mitigation measures.
- Procedures for reporting of any environmental incidents or hazards.
- Overview of emergency response and spill management procedures.
- Overview of the waste management requirements.
- Roles and environmental responsibilities of each position aboard the survey vessel.
- Chemical management requirements.
- Procedures for interactions with cetaceans and turtles.

Outline of all controls, environmental performance outcomes/standards/measurement criteria and roles and responsibilities detailed in the EP.

All personnel who undertake the induction will be required to sign an attendance sheet which is retained by the contractor project manager. Any environmental training requirements for the proposed survey will conform to the requirements of the contractor specific training procedure and the project HSE plan. All vessel based personnel will be required to conform to all applicable guidelines and requirements for management of HSE issues. All crew on board the vessel will be made aware of and will be required to become familiar with the requirements of both the contractor specific environmental management systems as well as the EP during the activity induction process.

In additional, project specific EP requirements will be communicated to the vessel crew by the Project Manager.

8.5.2 Oil spill response training

Esso's offshore Incident Management Team (IMT) will be supporting the geophysical and geotechnical survey in the unlikely event of an oil spill, Esso has a well-established training program for the IMT personnel required to undertake a role in oil spill response.

Esso's incident management is based on the Incident Command System (ICS). The Incident Command System (ICS) is a system designed to provide a consistent organisation to respond to emergency situations. Positions within the ICS are fixed and have specific functions, ensuring that all responders know what to do and where they report in the organisation structure. The ICS is based on the US National Incident Management System (NIMS) 2006 ICS Structure, with slight modifications for industry.

ICS is the primary emergency response framework for an oil spill response from operational area activities. Typical incident management roles and associated training courses are outlined in Table 8-2 and discussed further below.

Table 8-2 Oil spill response training

Section	Role	Course
Incident Command	Incident Commander	Incident Management Training (PMAOMIR418) Oil Spill Response Fundamentals
Planning Section	Planning Section Chief	Incident Management Training (PMAOMIR320) Oil Spill Response Fundamentals
Operations Section	Operations Section Chief	Incident Management Training (PMAOMIR320) Oil Spill Response Fundamentals
	Maritime Unit	AMOSOC Operations Course (IMO 1)
	Aviation Unit	Oil Spill Response Fundamentals Aerial Observers Course
	Shoreline Unit	AMOSOC Operations Course (IMO 1)
	OH&S Unit	ICS 200 (computer based training)
	Waste Management	Oil Spill Response Fundamentals
Logistics Section	Logistics Section Chief	Incident Management Training (PMAOMIR320) Oil Spill Response Fundamentals
	All other roles	ICS 200 (computer based training).
Finance & Admin Section	Finance & Admin Section Chief	Incident Management Training (PMAOMIR320) Oil Spill Response Fundamentals
	All other roles	ICS 200 (computer based training)

8.5.2.1 Training plan

Incident Management Training

The training program has been designed to conform to the PMA08 Chemical, Hydrocarbons and Refining training standard. Personnel with an oil spill response role will undertake Incident Management Training including ICS and oil spill response specific training, as defined by their role and in accordance with the Emergency Response Training Plan.

ICS 200 Training

ICS 200 Training will consist of a combination of computer based and instructor lead sessions along with a tiered exercise program.

Oil Spill Response Fundamentals

To supplement Incident Management Training, Esso has engaged AMOSOC to deliver an Oil Spill Response Fundamentals course consisting of both theoretical and practical activities. Outcomes of the course are to:

1. Understand different oil spill response objectives and strategies
2. Understand the different environmental, sociological and economic considerations of oil spill response
3. Learn how to develop an oil spill incident action plan (IAP)
4. Understand how to effectively monitor and evaluate oil spill strategies
5. Increase familiarity with the Bass Strait OPEP and the processes and oil spill strategies detailed therein.

AMOSC Operations Course

Operations and maintenance personnel at Esso's onshore facilities are familiarised with oil spill equipment operation, deployment and shoreline clean up techniques through dedicated training sessions and/or through participation in exercises. Training and exercises may be supported by the Australian Marine Oil Spill Centre (AMOSC), Oil Response Company of Australia (ORCA) or another training provider. Selected personnel may also be nominated to attend AMOSC's Oil Spill Response Operations Course (IMO 1).

8.5.2.2 Optional specialist training

Optional specialist training may be made available to specific personnel required to undertake a role in oil spill response. This training has been summarised in Table 8-3 and discussed further below.

Table 8-3 Optional specialist training

Typical Attendees	Course
RRT members and select IMT members	University of Spill Management
Members of the AMOSC Core Group	AMOSC Core Group Training
Select IMT members	AMOSC Oil Spill Response Management
Nominated personnel	Aerial Surveillance Course
RRT members	Regional Response Team Training Workshop
ESG members and select IMT members	Advanced ESG Training

University of Spill Management

Esso has developed an oil spill response training program which aims to present the fundamentals of oil spill response (OSR) and provide a broad overview of OSR activities with a focus on the practicality and limits when responding to an oil spill. This course is aimed at select personnel who fulfil a key role within the Incident Management Team (IMT) or Regional Response Team (RRT). The course combines theory, desktop exercises and field deployment of response equipment. The course is jointly run by Esso personnel along with specialist contractors and the local oil spill response organisation (AMOSC and/or OSRL). The course is generally run over four days.

The course content covers:

- OSR concepts
- Decision processes
- Corporate policies and preferences
- Fate, behaviour, tracking and surveillance
- Response options
- Mechanical, in-situ burning, dispersants, monitor and surveillance
- Response components
- Practical realities
- Common misconceptions
- Hands-on equipment deployment.

AMOSC Core Group Training

Selected Esso personnel have been identified as members of the AMOSC Core Group and may be called upon to respond under the National Plan arrangements. These personnel receive training

through AMOSC in accordance with the AMOSC Core Group agreement. They must also participate in annual training, exercise or response activities in order to maintain their competency.

AMOSC Oil Spill Response Management

As an alternative to the University of Spill Management course, select IMT personnel may attend the AMOSC Oil Spill Response Management course.

Aerial Surveillance Course

Members of the Aviation Unit may be required to attend the Aerial Surveillance Course, which will be provided by AMOSC and OSRL and will cover:

- Basic hydrocarbon theory and its relevance to aerial surveillance
- Basic understanding of how to work in an aviation crew environment
- How to effectively plan and coordinate an aerial surveillance flight
- How to carry out the plotting and recording of oil spill information
- How to present oil spill information back through the IMT in a clear and coherent manner.

Regional Response Team

Esso, along with other Esso business units, contribute personnel to Esso's Regional Response Team (RRT). The RRT conducts annual training workshops which are typically combined with a response exercises. Participation in RRT workshops and exercises is coordinated by the Regional Response Team Coordinator.

Emergency Support Group

Members of the Emergency Support Group (ESG) provide strategic support in event of an oil spill or other emergency event. The Advanced ESG course is used to train ESG members in the ESG process as well as provide an overview of Esso's emergency response structure. This is an internally run course which combines theory and a number of simulation exercises. The course is typically run over 2.5 days. Course objectives include:

- Increase awareness of the Esso emergency response system and the underpinning principles
- Assist in achieving a consistent approach to the ESG response process across the Corporation
- Familiarise participants with roles and responsibilities within the ESG and the interface with other responders and stakeholders
- Provide an opportunity for participants to practice roles
- Improve ESG leadership and communication skills
- Build confidence of participants in responding as a team and individually
- Enhance Esso's commitment to a consistent approach to emergency response.

8.6 Reporting

8.6.1 Commencement and completion of activity

In accordance with Regulation 29 of the OPGGS Environment Regulations, Esso will notify NOPSEMA that an activity is to commence at least 10 days before the activity commences and will notify NOPSEMA that an activity is completed within 10 days after the completion.



8.6.2 Post survey reporting

Esso will submit to NOPSEMA a post-survey report no later than three months from completion of the survey as per the OPGGS Environment Regulations (Reg. 26C(1) and 14(2)). The report will include at a minimum:

- Summary of recordable environmental incidents (i.e. breaches of performance outcomes and standards), per Section 8.6.3.2
- Summary of reportable environmental incidents, per Section 8.6.3.1
- Results of the pre-mobilisation compliance audit against the EP, per Section 8.8.1
- Summary of the monthly compliance reports showing that the environmental performance outcomes and standards in the EP were met, per Section 8.9.2
- Summary of emergency drills and exercises undertaken, per Section 8.11.4
- Consultation activities, per Section 1.6.

8.6.3 Incident notification and reporting

The OPGGS (Environment) Regulations define reportable incidents and recordable incidents and also set up reporting requirements for each type of incident. The reporting requirements under the Regulations are managed under OIMS System 4-2 Compliance with Laws Regulations and Permits.

Incidents are managed internally in accordance with OIMS System 9-1 Incident Management to ensure valuable information and lessons learned are available to improve operations and prevent the recurrence of similar incidents.

OIMS System 9-1 requires that:

- The incident is reported in the IMPACT incident database and for equipment related incidents, in the FIMS database
- A formal investigation occurs, if triggered by our evaluation of actual or potential incident severity
- The incident is correctly documented, lessons learned are communicated, and corrective actions are followed up and tracked in the IMPACT incident database.

8.6.3.1 Reportable incidents

The OPGGS (Environment) Regulations 2009 defines reportable incidents as “for an activity, an incident that has caused, or has the potential to cause, moderate to significant environmental damage”. Esso has interpreted this to be either.

- An actual or potential unplanned release of hydrocarbon liquid or non-approved chemicals exceeding 80 litres into the marine environment, or
- Actual or potential injury or death of a cetacean, a listed threatened species, a member of a listed threatened ecological community or a listed migratory species (see Table 4-1).

All environmental reportable incidents are reported to NOPSEMA by Esso or delegate in accordance with Regulation 26 of the OPGGS (Environment) regulations as follows (Table 4-1):

- The titleholder (Esso) of an activity must give notice, orally, of a reportable incident to the Regulator (NOPSEMA), including all material details of the incident that are reasonably available to the titleholder as soon as practicable, but in any case not later than 2 hours after:
 - The first occurrence of the incident, or
 - If the reportable incident was not detected by the Titleholder at the time of the first occurrence – the time the Titleholder becomes aware of the reportable incident.

- The oral report must contain:
 - All material facts and circumstances concerning the recordable incident that the titleholder knows of, or is able, by reasonable search or enquiry, to find out
 - Any action taken to avoid or mitigate any adverse environmental impacts of the recordable incidents
 - The corrective action that has been taken, or is proposed to be taken, to prevent a similar recordable incident.
- Following the initial notification, and as soon as practicable after Esso notifies a reportable incident, they must give a written record of the notification to NOPSEMA, NOPTA, and DEDJTR, that contains the information given in the oral notification.
- Then, as soon as practicable, and not later than three days after the first occurrence of the reportable incident, they must give a written report of the reportable incident to NOPSEMA (the “3 day written report”).
- If Esso triggers an internal formal investigation to determine any other corrective actions or actions proposed to be taken to prevent a similar incident occurring in the future, Esso will provide NOPSEMA with a further written report outlining these actions within 30 days after the 3 day written report of the reportable incident. Esso will specify in the 3 day written report that it intends to provide NOPSEMA a further written report (“the Esso notification”). NOPSEMA will accept the Esso notification as if it were the Regulator specifying another period in which the report must be provided under Regulation 26A(4) (b)(1), namely 30 days, unless NOPSEMA advise that the Esso notification is not accepted and NOPSEMA refuse to specify another period under Regulation 26A(4) (b)(1).
- The 3 day written report must contain:
 - All material facts and circumstances concerning the recordable incident that the titleholder knows of, or is able, by reasonable search or enquiry, to find out
 - Any action taken to avoid or mitigate any adverse environmental impacts of the recordable incidents
 - The corrective action that has been taken, or is proposed to be taken, to prevent a similar recordable incident
 - The action that has been taken, or is proposed to be taken, to prevent a similar incident occurring in the future.
- Within 7 days of giving the 3 day written report to NOPSEMA, a copy of the report must be provided to NOPTA and DEDJTR.

Table 8-4 Reporting to NOPSEMA in accordance with the OPGGS (Environment) Regulations

NOPSEMA Duty Officer: 08 6461 7090	<ul style="list-style-type: none"> • Verbally ASAP but within 2 hours of incident, or, if the reportable incident was not detected by the Titleholder at the time of the first occurrence – the time the titleholder becomes aware of the reportable incident, then • Written notification as soon as practicable (copy to NOPTA and DEDJTR) • Written report as soon as practicable but within 3 days including specifying if a further written report will be provided (then copy to NOPTA and DEDJTR within 7 days) • If formal investigation is triggered, a further written report within 30 days
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A reportable incident is one that has caused or has the potential to cause moderate to significant environmental damage (interpreted as an unplanned event that has been assessed through the risk assessment process to have a consequence ranking of I or II).

A reportable incident is an actual or potential:

- Unplanned release of hydrocarbon liquid or non-approved chemicals exceeding 80 litres into the marine environment
- Injury or death of a cetacean, a listed threatened species, a member of a listed threatened ecological community or a listed migratory species

In addition to the Environment Regulations requirements, unplanned releases of hydrocarbon liquid or non-approved chemicals exceeding 80 litres into the marine environment (while performing a petroleum activity) are to be reported to AMSA.

Other vessel incidents (while not performing a petroleum activity) must also be reported in accordance with the Navigation Act 2012 (Table 8-5).

Table 8-5 Reporting to AMSA

<p>Actual or potential unplanned releases of hydrocarbon liquid or non-approved chemicals exceeding 80 litres into the marine environment (while performing a petroleum activity) when conducting a petroleum activity</p> <p>https://www.amsa.gov.au/contact-us/index.asp#report POLREP: https://amsa-forms.nogginoca.com/public/</p>	<p>AMSA verbally at the first available opportunity and POLREP report within 3 days (consistent with the requirement to notify NOPSEMA in writing within 3 days).</p> <p>24 Hour Emergency Contact Numbers 1800 641 792 (Maritime) 1800 815 257 (Aviation) or +612 6230 6811 (Maritime) +612 6230 6899 (Aviation)</p>	<p>Offshore Survey Manager</p>
<p>AMSA will be notified by the Vessel Master if any of the following incidents occur (while not performing a petroleum activity):</p> <ul style="list-style-type: none"> • An oil pollution incident from a vessel has occurred in Commonwealth waters (Marine Notice 1/1996); • The vessel has sustained or caused an accident occasioning loss of life or serious injury; • The vessel has received damage or is defective affecting its seaworthiness; or • There is a serious danger to navigation resulting from a vessel (e.g., a sizable piece of equipment likely to float is lost overboard). 	<p>AMSA verbally at the first available opportunity and POLREP report within 2 hours.</p> <p>24 Hour Emergency Contact Numbers 1800 641 792 (Maritime) 1800 815 257 (Aviation) or +612 6230 6811 (Maritime) +612 6230 6899 (Aviation)</p>	<p>Vessel Master</p>

8.6.3.2 Recordable incidents

The Environment Regulations define recordable incidents as “for an activity, means a breach of an environmental performance outcome or environmental performance standard, in the environment plan that applies to the activity that is not a reportable incident”.

No later than 15 days after the end of each calendar month, Esso will provide a monthly report by email to NOPSEMA as per Regulation 26B. Monthly reports will utilise the NOPSEMA Incident Monthly Summary Report template available at www.nopsema.gov.au.

This report will include:

- A list of all recordable incidents that occurred during the calendar month
- All material facts and circumstances concerning the recordable incidents that Esso knows or is able, by reasonable search or enquiry, to find out
- Any action taken to avoid or mitigate any adverse environment impacts of the recordable incidents
- The corrective action that has been taken, or is proposed to be taken, to stop, control or remedy the recordable incident
- The action that has been taken, or is proposed to be taken, to prevent a similar incident occurring in the future.

If there are no recordable incidents, a 'nil' report will be submitted to NOPSEMA.

8.7 Monitoring

Measurement and recording of emissions and discharges to the sea, to air and waste to land are completed under OIMS System 6-5 Environmental Management. The process for managing environmental monitoring records is addressed through OIMS System 4-1 Information Management.

8.7.1 Routine environmental monitoring

Table 8-6 summarises the program for monitoring of emissions and discharges associated with the activities in this EP, specifically the performance outcomes, standards, and measurement criteria in Section 7. Other environmental incidents are reported as per Section 8.6.3.

Table 8-6 Environmental monitoring summary

Activity	Criteria to be Monitored	Frequency	Responsibility
Noise from vessel and acoustic sources	Cetaceans, turtle and shark sightings	Ongoing	Vessel Crew and Vessel Master
Vessel Movements	Vessel-marine fauna interactions	Ongoing	Vessel Crew and Vessel Master
Drilling and Coring Operations	Volume/quantities of constituents used for drilling	Ongoing	Offshore Survey Manager/Geotechnical Lead
	Total number of boreholes drilled and location	Ongoing	Offshore Survey Manager/Geotechnical Lead
Fuel consumption	Greenhouse gas emissions	Ongoing	Vessel Master
Sewage Disposal	Quantities of waste discharge overboard	Ongoing	Vessel Master
Bilge Discharge	Discharges from oily water system (volume)	Ongoing	Vessel Master
Disposal of Solid Waste	Quantities of waste transferred to shore	Ongoing	Vessel Master

8.7.2 Operational and scientific monitoring program

An Operational and Scientific Monitoring Program (OSMP) has been developed in accordance with CSIRO Oil Spill Monitoring Handbook and NOPSEMA (2016 and 2018) guidance documents. The Operations Superintendent is responsible for initiation of the OSMP in the event of an oil spill.

8.8 Auditing, assessments, investigations and inspections

A summary of audits, assessments, and inspections follows.

The collection of data from audits, inspections and exercises will form the basis of demonstration that the environmental performance outcomes, standards and measurement criteria are being met, that specified mitigation measures are in place to manage environmental risks, and that they remain working,

and contribute to continually reducing risks and impacts to ALARP. A summary of audits, assessments, inspections and compliance reporting required for this activity are given in Table 8-7.

Table 8-7 Summary of audits, assessments, inspections and compliance reporting

Task	Party/Responsibility	Status/Plan
Compliance audit (Section 8.8.1)	Esso Representative	Prior to survey
OIMS bridging document review (Section 8.8.2)	Esso Representative	Prior to survey
Inspection of survey vessel	Esso Survey Manager	Prior to survey
Compliance reporting (Section 8.6.3.2)	Esso Survey Manager	Monthly

8.8.1 Pre-mobilisation compliance audit

Esso will undertake a pre-mobilisation compliance audit against the performance outcomes, standards and measurement criteria identified in Table 7-1 that are applicable prior to the commencement of survey.

Findings and recommendations of the audit will be documented and provided to the Esso Survey Manager who in turn are responsible for communicating this information to the Vessel Master and crew.

8.8.2 OIMS review

OIMS Assessments are described in detail in OIMS System 11-1 OIMS Assessments.

Esso will undertake a pre-survey audit against the OIMS bridging document to ensure that the vessel based activities are compliant with OIMS requirements.

8.8.2.1 Contractor OIMS assessments

The contractor SSHE pre-qualification process is detailed in OIMS System 8-1 Evaluating, Selecting and Monitoring Third Parties. The Third Party Services Management Manual evaluates and verifies a contractor's capability and willingness to meet Esso's SSHE expectations through either document review or site assessment (or both). The SSHE group participate in the pre-qualification screening and bid evaluation process including contractor site assessments, if required.

8.9 Environmental performance review

8.9.1 Toolbox meetings

Toolbox meetings are conducted twice daily to plan for any events that are occurring during the shift. This allows for relevant permits and Job Safety Analyses to be undertaken and to make sure that personnel completing the tasks understand all the safety and environmental risks associated.

8.9.2 Monthly reviews

A review of the contractor's environmental performance, via the monthly compliance reporting (Section 8.6.3.2), will be undertaken by Esso to confirm any deficiencies in their systems.

8.9.3 Completion of Activity

Esso and its contractor will review environmental performance upon completion of the activity. The results of the review and any identified improvements or recommendations will be incorporated into processes and procedures for future surveys to help facilitate continuous improvement..



8.10 Emergency and oil spill preparedness and response

The process to prepare emergency preparedness and response plans, including procedures to prevent and mitigate potential environmental impacts associated with accidents and emergency situations, is addressed through OIMS System 10-2 Emergency Preparedness and Response.

Emergency planning and preparedness are essential to ensure that, in the event of an incident, all necessary actions are taken for the protection of the public, the environment, and company personnel, assets and reputation.

8.11 Emergency response responsibilities

8.11.1 Esso

The Esso Emergency Response Manual consists of concise information that may be required immediately in the event of an incident. Information contained in the Manual includes emergency response organisational structures, emergency response procedures relevant to specific emergency events, personnel role and responsibility checklists, emergency response call-out procedures and contact directories. Contact databases are updated at least annually.

8.11.2 Contractor

Survey specific emergency response (ER) procedures for the geophysical and geotechnical survey will be included in the vessel specific Emergency Response Manual and the project-specific HSE Plan. The HSE Plan contains instructions for vessel emergency, medical emergency, search and rescue, reportable incidents, incident notification and contact information. In the event of an emergency of any type the survey vessel Master will assume overall onsite command and act as the Emergency Response Coordinator (ERC). All persons aboard the vessel will be required to act under the ERC's directions. The survey vessel will maintain communications with the Vessel Manager and Project Manager and/or other emergency services in the event of an emergency. Emergency response support can be provided by the vessel contractor if requested by the ERC.

The survey vessel has equipment aboard for responding to emergencies, including but not limited to medical equipment, firefighting equipment and oil spill response equipment.

A planned maintenance system (PMS) will be implemented on the survey vessel, to ensure that all equipment used during operations is in full working order, and does not represent a hydrocarbon spill risk. Stocks of absorbent materials aboard the survey vessel will be checked for their adequacy and replenished as necessary prior to the commencement of activities.

8.11.3 Oil Pollution Emergency Plan

Specific actions and arrangements to be followed in the event of an emergency are documented in the OPEP.

The OPEP outlines how a worst-case credible spill scenario, the loss of containment of diesel, will be managed. The OPEP is the primary document for all oil spills and outlines the resources and response strategies to be implemented depending on the size and nature of the spill. It also outlines any notification requirements.

The OPEP will be regularly reviewed to ensure it is appropriate to the nature and scale of the activities within its scope and to ensure maintenance of the response capability and the operator's preparedness. In compliance with Reg. 14(8AA) of the OPGGS Environment Regulations the OPEP will be continuously reviewed and kept up-to-date to ensure new information or improved technology can be incorporated as specified in the SOPEP (part of the overall OPEP).



8.11.4 Drills and exercises

A drill test of the oil spill emergency response arrangements (i.e. OPEP) will be conducted during the mobilisation phase prior to commencement of the survey. As required under 14(8C)(b), response arrangements shall be tested:

- when they are introduced
- if they are significantly amended
- not later than 12 months after the most recent test
- if a new location for the activity is added to the EP after the response arrangements have been tested, and before the next test is concluded – testing the response arrangements in relation to the new location as soon as practicable after it is added to the plan.

All drill tests will be reported as per MARPOL Annex I (Regulation 15) requirements and reviewed after each drill as part of the ongoing monitoring and improvement of emergency control measures.

Identified improvements or recommendations shall be addressed. The objective of testing is to ensure that the OPEP (which includes the vessel SOPEP) is current and applicable (including contact details) for dealing with a spill specific to the nature and location associated with the activity.

Implementation and testing of the OPEP, plus adherence to the additional spill response and reporting measures detailed in Section 6, will enable Esso and its contractor to demonstrate that environmental risks from fuel and oil spills during the proposed survey have been reduced to ALARP.

8.12 Ongoing consultation

Esso will continue to consult with stakeholders, and will continue to maintain the Stakeholder Consultation Log (Appendix C – Stakeholder Consultation), for the Geophysical and Geotechnical Survey.

Esso and its field based contractor will comply with requests from stakeholders for additional information and requests for updates during the activity. As required under sub regulation 16(b), Esso shall assess the merits of any new claims or objections made by a stakeholder whereby they believe the activity may have adverse impacts upon their interest or activities. If the claim has merit, where appropriate, Esso shall modify management of the activity.

Furthermore, should stakeholder feedback identify a new impact or risk not previously assessed, or an increased impact or risk, the EP will be revised as described in Section 8.13.

Esso will re-engage with relevant stakeholders closer to the time of the Geophysical and Geotechnical Survey to provide them with the survey start date, name of vessel and call sign details. On completion of the activity, notification will be sent to the relevant stakeholders or those that request post survey notification.

8.13 Revisions of the Environment Plan

Under Regulation 8(1) of the Environment Regulations, it is an offence for a titleholder to continue if a new impact or risk, or increase in the impact or risk, is not provided for in the EP in force.

Subsequently, Esso shall undertake an internal assessment to determine whether there is a significant new environmental impact or risk, or significant increase in an existing environmental impact or risk that is not provided for in the EP. This will be conducted in line with NOPSEMA guideline N04750-GL1705.

If a significant new or increased impact or risk is identified and it is not already appropriately covered under the EP, as required under Reg. 17(6), Esso will submit a proposed revision to the EP. Esso/Vessel Contractor shall determine at the time of the assessment, whether a risk or impact is considered 'significant' based on information available at that time.



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Gippsland Basin Geophysical and
Geotechnical Investigations
Environment Plan Revision 2

ExxonMobil.

Appendix A – EPBC Protected Matters Search



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.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 14/12/18 15:55:08

[Summary](#)

[Details](#)

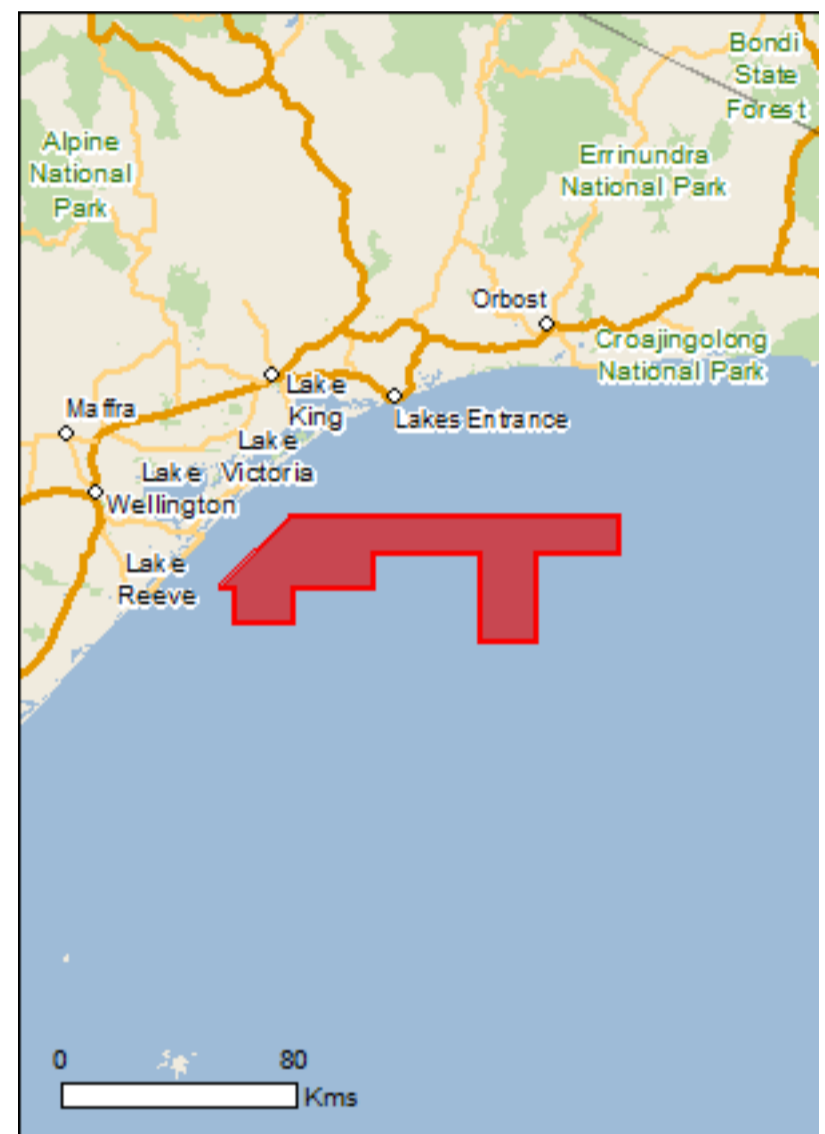
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

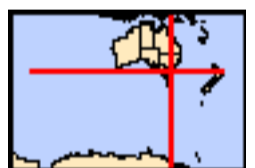
[Acknowledgements](#)



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

[Coordinates](#)

[Buffer: 1.0Km](#)



Summary

Matters of National Environmental 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:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	1
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	36
Listed Migratory Species:	41

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 environment anywhere.

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 Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	60
Whales and Other Cetaceans:	27
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

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

State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	None
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	1

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 the Commonwealth Marine Area but which has, may have or is likely to have a significant impact on the environment in the Commonwealth Marine Area. Generally the Commonwealth Marine Area stretches from three nautical miles to two hundred nautical miles from the coast.

Name

EEZ and Territorial Sea

Marine Regions

[\[Resource Information \]](#)

If you are planning to undertake action in an area in or close to the Commonwealth Marine Area, and a marine bioregional plan has been prepared for the Commonwealth Marine Area in that area, the marine bioregional plan may inform your decision as to whether to refer your proposed action under the EPBC Act.

Name

[South-east](#)

Listed Threatened Species

[\[Resource Information \]](#)

Name	Status	Type of Presence
Birds		
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Fregetta grallaria grallaria White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within

Name	Status	Type of Presence area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat may occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Fish		
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area
Mammals		
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or

Name	Status	Type of Presence
Balaenoptera musculus Blue Whale [36]	Endangered	related behaviour likely to occur within area Species or species habitat likely to occur within area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area
Sharks		
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Breeding known to occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Migratory Marine Species		
Balaena glacialis australis Southern Right Whale [75529]	Endangered*	Species or species habitat known to occur within area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour likely to occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Breeding known to occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area
Isurus oxyrinchus Shortfin Mako, Mako Shark [79073]		Species or species habitat likely to occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area
Physeter macrocephalus Sperm Whale [59]		Species or species habitat may occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

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

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Catharacta skua Great Skua [59472]		Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea gibsoni Gibson's Albatross [64466]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within

Name	Threatened	Type of Presence area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Species or species habitat likely to occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche sp. nov. Pacific Albatross [66511]	Vulnerable*	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Fish		
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area
Hippocampus minotaur Bullneck Seahorse [66705]		Species or species habitat may occur within area
Histiogamphelus briggsii Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within

Name	Threatened	Type of Presence area
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area
Hypselognathus rostratus Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area
Kaupus costatus Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area
Kimblaeus bassensis Trawl Pipefish, Bass Strait Pipefish [66247]		Species or species habitat may occur within area
Leptoichthys fistularius Brushtail Pipefish [66248]		Species or species habitat may occur within area
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area
Mitotichthys semistriatus Halfbanded Pipefish [66261]		Species or species habitat may occur within area
Mitotichthys tuckeri Tucker's Pipefish [66262]		Species or species habitat may occur within area
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within area
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area
Vanacampus poecilolaemus Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area
Mammals		
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area
Whales and other Cetaceans		[Resource Information]
Name	Status	Type of Presence
Mammals		
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Berardius arnuxii Arnoux's Beaked Whale [70]		Species or species habitat may occur within area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour likely to occur within area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur

Name	Status	Type of Presence
Globicephala macrorhynchus Short-finned Pilot Whale [62]		within area Species or species habitat may occur within area
Globicephala melas Long-finned Pilot Whale [59282]		Species or species habitat may occur within area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
Kogia breviceps Pygmy Sperm Whale [57]		Species or species habitat may occur within area
Kogia simus Dwarf Sperm Whale [58]		Species or species habitat may occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Lissodelphis peronii Southern Right Whale Dolphin [44]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Mesoplodon bowdoini Andrew's Beaked Whale [73]		Species or species habitat may occur within area
Mesoplodon densirostris Blainville's Beaked Whale, Dense-beaked Whale [74]		Species or species habitat may occur within area
Mesoplodon hectori Hector's Beaked Whale [76]		Species or species habitat may occur within area
Mesoplodon layardii Strap-toothed Beaked Whale, Strap-toothed Whale, Layard's Beaked Whale [25556]		Species or species habitat may occur within area
Mesoplodon mirus True's Beaked Whale [54]		Species or species habitat may occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area
Physeter macrocephalus Sperm Whale [59]		Species or species habitat may occur within area
Pseudorca crassidens False Killer Whale [48]		Species or species habitat likely to occur within area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area
Ziphius cavirostris Cuvier's Beaked Whale, Goose-beaked Whale [56]		Species or species habitat may occur within area

Extra Information

Key Ecological Features (Marine)

[[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
Upwelling East of Eden	South-east

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, 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 distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for 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 reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

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

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

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

Coordinates

-38.16514 147.66801,-38.16513 148.66793,-38.24846 148.66793,-38.24847 148.41794,-38.4568 148.41794,-38.4568 148.25127,-38.24846 148.25126,-38.24847 147.91794,-38.3318 147.91794,-38.3318 147.66795,-38.41557 147.66795,-38.41514 147.50128,-38.33181 147.50128,-38.33181 147.45961,-38.16514 147.66801

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.



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.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 01/05/19 11:47:27

[Summary](#)

[Details](#)

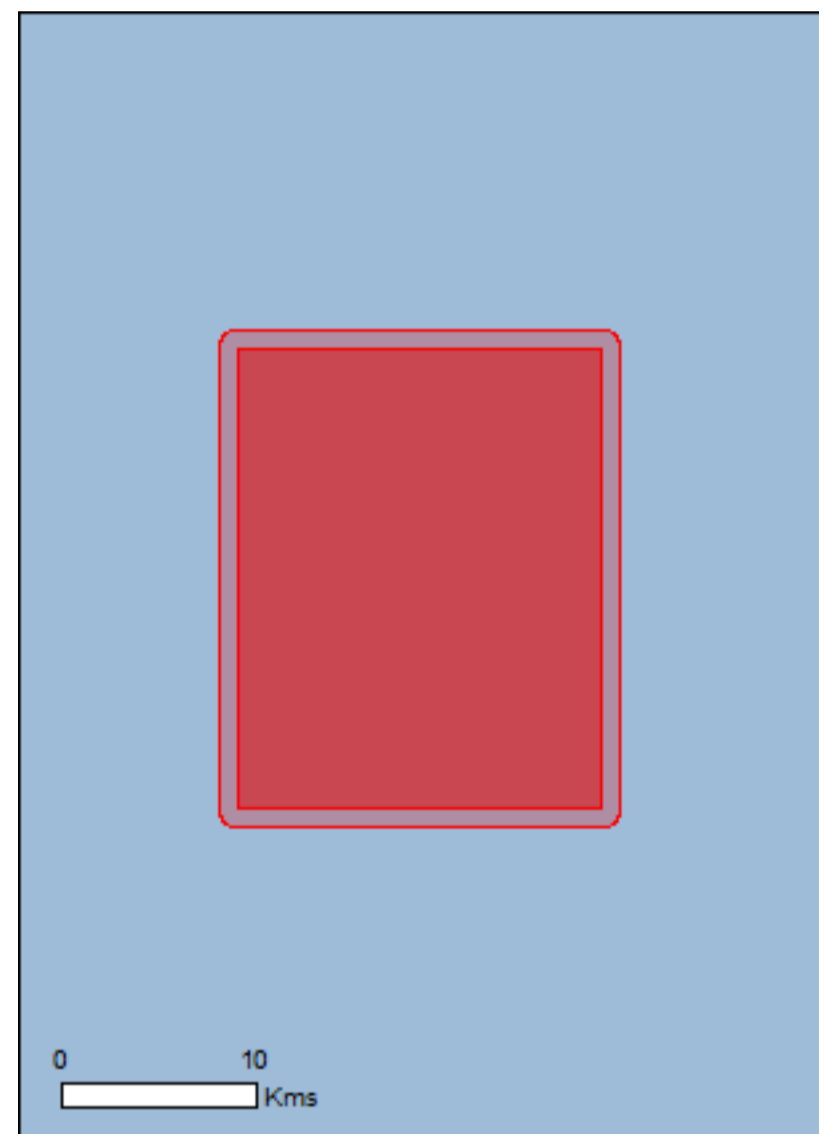
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

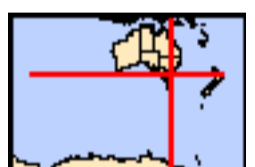
[Acknowledgements](#)



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

[Coordinates](#)

[Buffer: 1.0Km](#)



Summary

Matters of National Environmental 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:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	1
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	36
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 environment anywhere.

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 Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	59
Whales and Other Cetaceans:	13
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

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

State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	None
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	1

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 the Commonwealth Marine Area but which has, may have or is likely to have a significant impact on the environment in the Commonwealth Marine Area. Generally the Commonwealth Marine Area stretches from three nautical miles to two hundred nautical miles from the coast.

Name

EEZ and Territorial Sea

Marine Regions

[\[Resource Information \]](#)

If you are planning to undertake action in an area in or close to the Commonwealth Marine Area, and a marine bioregional plan has been prepared for the Commonwealth Marine Area in that area, the marine bioregional plan may inform your decision as to whether to refer your proposed action under the EPBC Act.

Name

[South-east](#)

Listed Threatened Species

[\[Resource Information \]](#)

Name	Status	Type of Presence
Birds		
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Fregetta grallaria grallaria White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within

Name	Status	Type of Presence area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat may occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Fish		
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area
Mammals		
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or

Name	Status	Type of Presence
Balaenoptera musculus Blue Whale [36]	Endangered	related behaviour likely to occur within area Species or species habitat likely to occur within area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area
Sharks		
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Breeding known to occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Migratory Marine Species		
Balaena glacialis australis Southern Right Whale [75529]	Endangered*	Species or species habitat known to occur within area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour likely to occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Breeding known to occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Isurus oxyrinchus Shortfin Mako, Mako Shark [79073]		Species or species habitat likely to occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area

Migratory Wetlands Species

Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

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

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Catharacta skua Great Skua [59472]		Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea gibsoni Gibson's Albatross [64466]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Species or species habitat likely to occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche sp. nov. Pacific Albatross [66511]	Vulnerable*	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Fish		
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area
Hippocampus minotaur Bullneck Seahorse [66705]		Species or species habitat may occur within area
Histiogamphelus briggsii Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area
Hypselognathus rostratus Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area
Kaupus costatus Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area
Kimblaeus bassensis Trawl Pipefish, Bass Strait Pipefish [66247]		Species or species habitat may occur within area
Leptoichthys fistularius Brushtail Pipefish [66248]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area
Mitotichthys semistriatus Halfbanded Pipefish [66261]		Species or species habitat may occur within area
Mitotichthys tuckeri Tucker's Pipefish [66262]		Species or species habitat may occur within area
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within area
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area
Vanacampus poecilolaemus Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area
Mammals		
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area
Whales and other Cetaceans		[Resource Information]
Name	Status	Type of Presence
Mammals		
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour likely to occur within area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area
Pseudorca crassidens False Killer Whale [48]		Species or species habitat likely to occur within area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area

Extra Information

Key Ecological Features (Marine)

[[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
Upwelling East of Eden	South-east

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, 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 distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for 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 reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

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

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

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

Coordinates

-38.0818 147.91794,-38.0818 148.0845,-38.2485 148.0845,-38.2485 147.91794,-38.0818 147.91794

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.



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.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 09/05/19 17:09:42

[Summary](#)

[Details](#)

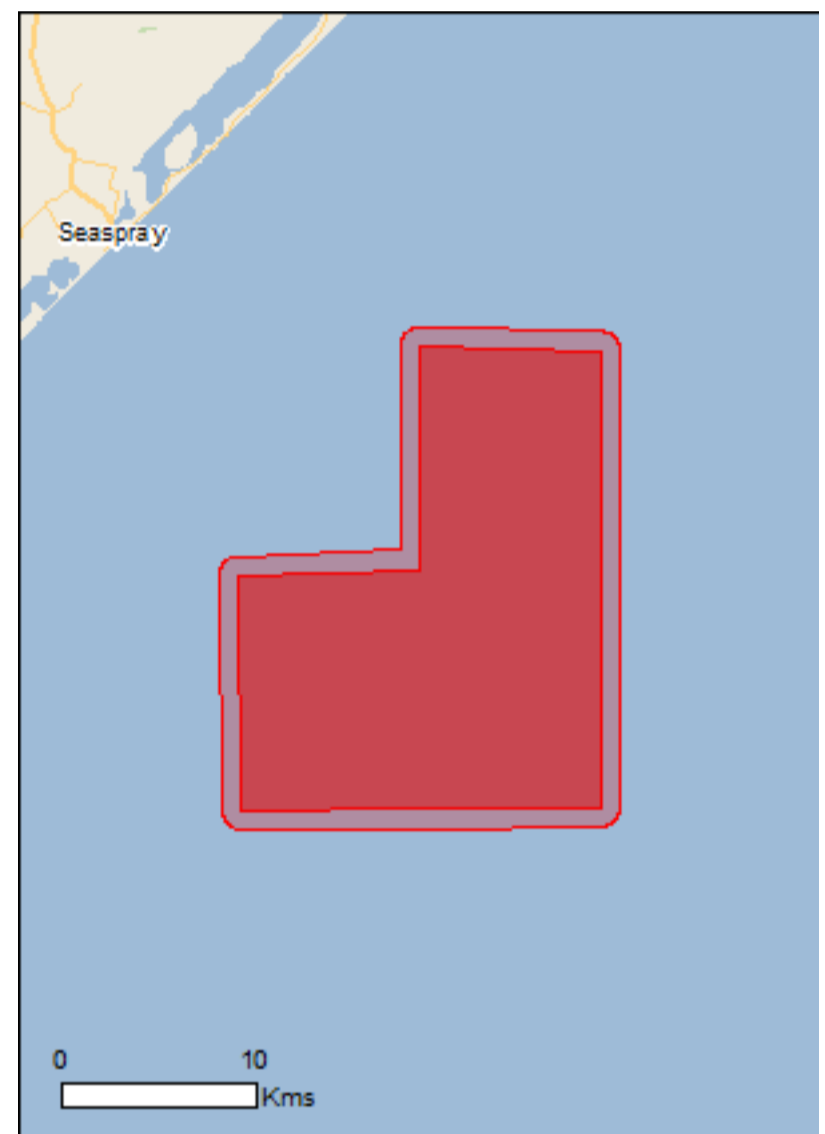
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

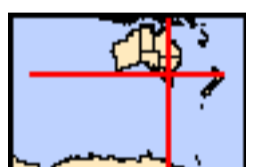
[Acknowledgements](#)



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

[Coordinates](#)

[Buffer: 1.0Km](#)



Summary

Matters of National Environmental 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:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	1
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	35
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 environment anywhere.

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 Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	59
Whales and Other Cetaceans:	13
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

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

State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	None
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	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 the Commonwealth Marine Area but which has, may have or is likely to have a significant impact on the environment in the Commonwealth Marine Area. Generally the Commonwealth Marine Area stretches from three nautical miles to two hundred nautical miles from the coast.

Name

EEZ and Territorial Sea

Marine Regions

[\[Resource Information \]](#)

If you are planning to undertake action in an area in or close to the Commonwealth Marine Area, and a marine bioregional plan has been prepared for the Commonwealth Marine Area in that area, the marine bioregional plan may inform your decision as to whether to refer your proposed action under the EPBC Act.

Name

[South-east](#)

Listed Threatened Species

[\[Resource Information \]](#)

Name	Status	Type of Presence
Birds		
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Fregetta grallaria grallaria White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within

Name	Status	Type of Presence area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat may occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Fish		
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area
Mammals		
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species

Name	Status	Type of Presence
Balaenoptera physalus Fin Whale [37]	Vulnerable	habitat likely to occur within area Foraging, feeding or related behaviour likely to occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Sharks		
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Breeding known to occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
Listed Migratory Species [Resource Information]		
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Migratory Marine Species		
Balaena glacialis australis Southern Right Whale [75529]	Endangered*	Species or species habitat known to occur within area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Breeding known to occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Isurus oxyrinchus Shortfin Mako, Mako Shark [79073]		Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Catharacta skua Great Skua [59472]		Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea gibsoni Gibson's Albatross [64466]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Species or species habitat likely to occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche sp. nov. Pacific Albatross [66511]	Vulnerable*	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Fish		
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area
Hippocampus minotaur Bullneck Seahorse [66705]		Species or species habitat may occur within area
Histiogamphelus briggsii Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area
Hypselognathus rostratus Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area
Kaupus costatus Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area
Kimblaeus bassensis Trawl Pipefish, Bass Strait Pipefish [66247]		Species or species habitat may occur within area
Leptoichthys fistularius Brushtail Pipefish [66248]		Species or species habitat may occur within area
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area
Mitotichthys semistriatus Halfbanded Pipefish [66261]		Species or species habitat may occur within area
Mitotichthys tuckeri Tucker's Pipefish [66262]		Species or species habitat may occur within area
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within area
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area
Vanacampus poecilolaemus Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area
Mammals		
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur

Name	Threatened	Type of Presence within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Whales and other Cetaceans		[Resource Information]
Name	Status	Type of Presence
Mammals		
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area
Delphinus delphis Common Dophin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area
Pseudorca crassidens False Killer Whale [48]		Species or species habitat likely to occur within area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area

Extra Information

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, 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 distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for 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 reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

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

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

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

Coordinates

-38.41361 147.33222,-38.415 147.41583,-38.58028 147.41583,-38.58139 147.25,-38.49639 147.24861,-38.49417 147.33222,-38.41361 147.33222

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.



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.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 16/05/19 07:45:54

[Summary](#)

[Details](#)

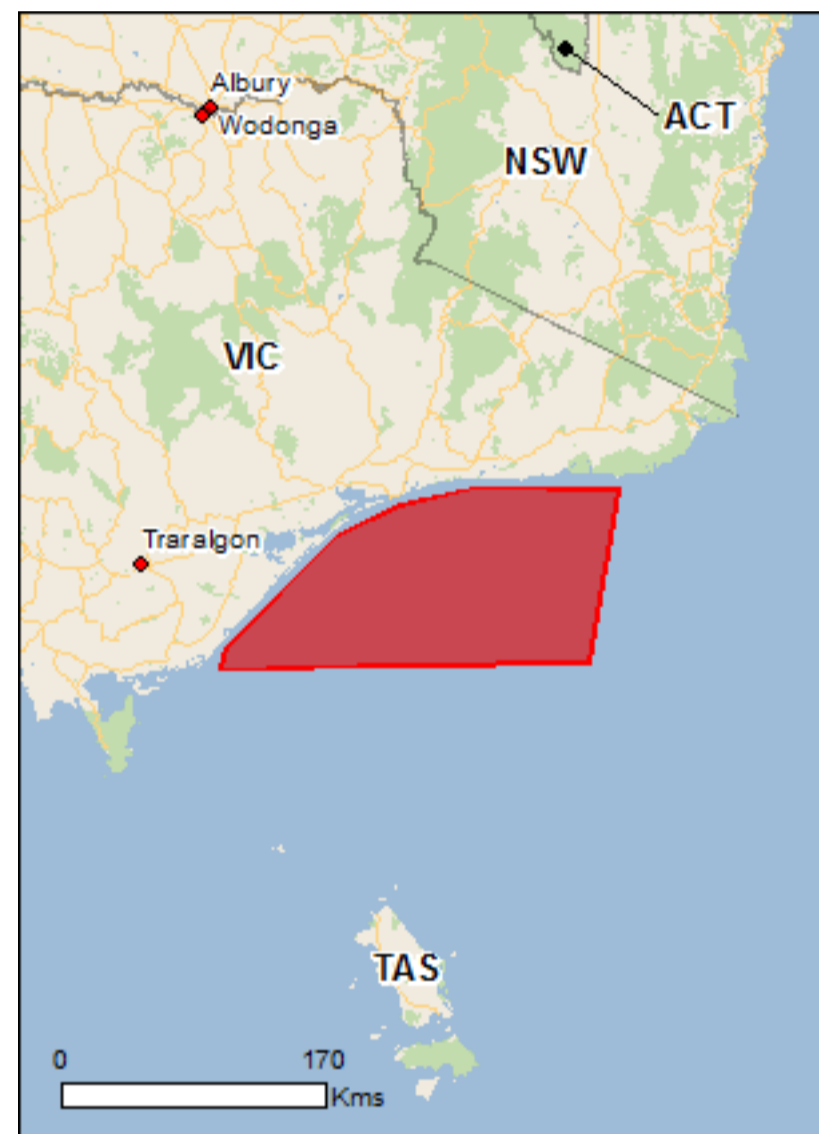
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

[Coordinates](#)

[Buffer: 1.0Km](#)



Summary

Matters of National Environmental 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:	2
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	1
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	39
Listed Migratory Species:	43

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 environment anywhere.

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 Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	62
Whales and Other Cetaceans:	30
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

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

State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	None
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	1

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar)

[\[Resource Information \]](#)

Name	Proximity
Corner inlet	Within 10km of Ramsar
Gippsland lakes	Within 10km of Ramsar

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 the Commonwealth Marine Area but which has, may have or is likely to have a significant impact on the environment in the Commonwealth Marine Area. Generally the Commonwealth Marine Area stretches from three nautical miles to two hundred nautical miles from the coast.

Name

EEZ and Territorial Sea

Marine Regions

[\[Resource Information \]](#)

If you are planning to undertake action in an area in or close to the Commonwealth Marine Area, and a marine bioregional plan has been prepared for the Commonwealth Marine Area in that area, the marine bioregional plan may inform your decision as to whether to refer your proposed action under the EPBC Act.

Name

[South-east](#)

Listed Threatened Species

[\[Resource Information \]](#)

Name	Status	Type of Presence
Birds		
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area

Name	Status	Type of Presence
Fregetta grallaria grallaria White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat may occur within area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area

Fish

Name	Status	Type of Presence
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat likely to occur within area
Mammals		
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area
Sharks		
Carcharias taurus (east coast population) Grey Nurse Shark (east coast population) [68751]	Critically Endangered	Species or species habitat may occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Breeding known to occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area

Name	Threatened	Type of Presence
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Migratory Marine Species		
Balaena glacialis australis Southern Right Whale [75529]	Endangered*	Species or species habitat known to occur within area
Balaenoptera bonaerensis Antarctic Minke Whale, Dark-shoulder Minke Whale [67812]		Species or species habitat likely to occur within area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour likely to occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Breeding known to occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area
Isurus oxyrinchus Shortfin Mako, Mako Shark [79073]		Species or species habitat likely to occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat likely to occur within area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area
Physeter macrocephalus Sperm Whale [59]		Species or species habitat may occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

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

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Breeding known to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Catharacta skua Great Skua [59472]		Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or

Name	Threatened	Type of Presence
Diomedea gibsoni Gibson's Albatross [64466]	Vulnerable*	related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Foraging, feeding or related behaviour likely to occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche sp. nov. Pacific Albatross [66511]	Vulnerable*	Species or species habitat may occur within

Name	Threatened	Type of Presence area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Fish		
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area
Hippocampus minotaur Bullneck Seahorse [66705]		Species or species habitat may occur within area
Histiogamphelus briggsii Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area
Hypsognathus rostratus Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area
Kaupus costatus Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area
Kimblaeus bassensis Trawl Pipefish, Bass Strait Pipefish [66247]		Species or species habitat may occur within area
Leptoichthys fistularius Brushtail Pipefish [66248]		Species or species habitat may occur within area
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area
Mitotichthys semistriatus Halfbanded Pipefish [66261]		Species or species habitat may occur within area
Mitotichthys tuckeri Tucker's Pipefish [66262]		Species or species habitat may occur within area
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within

Name	Threatened	Type of Presence area
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area
Vanacampus poecilolaemus Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area
Mammals		
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat likely to occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area
Whales and other Cetaceans		
[Resource Information]		
Name	Status	Type of Presence
Mammals		
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area

Name	Status	Type of Presence
Balaenoptera bonaerensis Antarctic Minke Whale, Dark-shoulder Minke Whale [67812]		Species or species habitat likely to occur within area
Balaenoptera borealis Sei Whale [34]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Balaenoptera physalus Fin Whale [37]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Berardius arnuxii Arnoux's Beaked Whale [70]		Species or species habitat may occur within area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour likely to occur within area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area
Globicephala macrorhynchus Short-finned Pilot Whale [62]		Species or species habitat may occur within area
Globicephala melas Long-finned Pilot Whale [59282]		Species or species habitat may occur within area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
Kogia breviceps Pygmy Sperm Whale [57]		Species or species habitat may occur within area
Kogia simus Dwarf Sperm Whale [58]		Species or species habitat may occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat likely to occur within area
Lissodelphis peronii Southern Right Whale Dolphin [44]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Mesoplodon bowdoini Andrew's Beaked Whale [73]		Species or species habitat may occur within area

Name	Status	Type of Presence
Mesoplodon densirostris Blainville's Beaked Whale, Dense-beaked Whale [74]		Species or species habitat may occur within area
Mesoplodon grayi Gray's Beaked Whale, Scamperdown Whale [75]		Species or species habitat may occur within area
Mesoplodon hectori Hector's Beaked Whale [76]		Species or species habitat may occur within area
Mesoplodon layardii Strap-toothed Beaked Whale, Strap-toothed Whale, Layard's Beaked Whale [25556]		Species or species habitat may occur within area
Mesoplodon mirus True's Beaked Whale [54]		Species or species habitat may occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area
Physeter macrocephalus Sperm Whale [59]		Species or species habitat may occur within area
Pseudorca crassidens False Killer Whale [48]		Species or species habitat likely to occur within area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area
Ziphius cavirostris Cuvier's Beaked Whale, Goose-beaked Whale [56]		Species or species habitat may occur within area

Extra Information

Key Ecological Features (Marine)

[[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
Upwelling East of Eden	South-east

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, 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 distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for 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 reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

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

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

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

Coordinates

-37.85026 149.27991,-37.84284 148.45477,-37.92081 148.02147,-38.05893 147.65476,-38.5673 147.00865,-38.65859 146.97684,-38.63032 149.10424,-37.85026 149.27991

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](#)
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- [-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.



Gippsland Basin Geophysical and
Geotechnical Investigations
Environment Plan Revision 2



Appendix B – OPEP



ExxonMobil™

**GIPPSLAND BASIN GEOPHYSICAL AND GEOTECHNICAL
INVESTIGATIONS OIL POLLUTION EMERGENCY PLAN –
REVISION 2**

Esso Australia Resources Pty Ltd (“Esso”)

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Endorsed / approved by Esso Australia Pty Ltd, for and on behalf of Esso Australia Resources Pty Ltd

DOCUMENT REVIEW AND UPDATE:

The Document Administrator is responsible for maintaining and controlling changes to this document in accordance with the Document Management Manual (DMM).

In the course of using this document, users may identify opportunities to improve its content. They are requested to suggest these to the Document Administrator.

This document should be reviewed for accuracy and currency on a 5 yearly basis commencing from the original formal issue date. Major revisions to this manual are to comply with the OIMS System Manual/Process Management of Change procedures.

DISTRIBUTION:

An electronic copy of this document is lodged on U-Docs and a controlled hardcopy is issued to the following recipients:

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01	Environment Manager, Contractor	Vessel Master



Quick Reference Guide

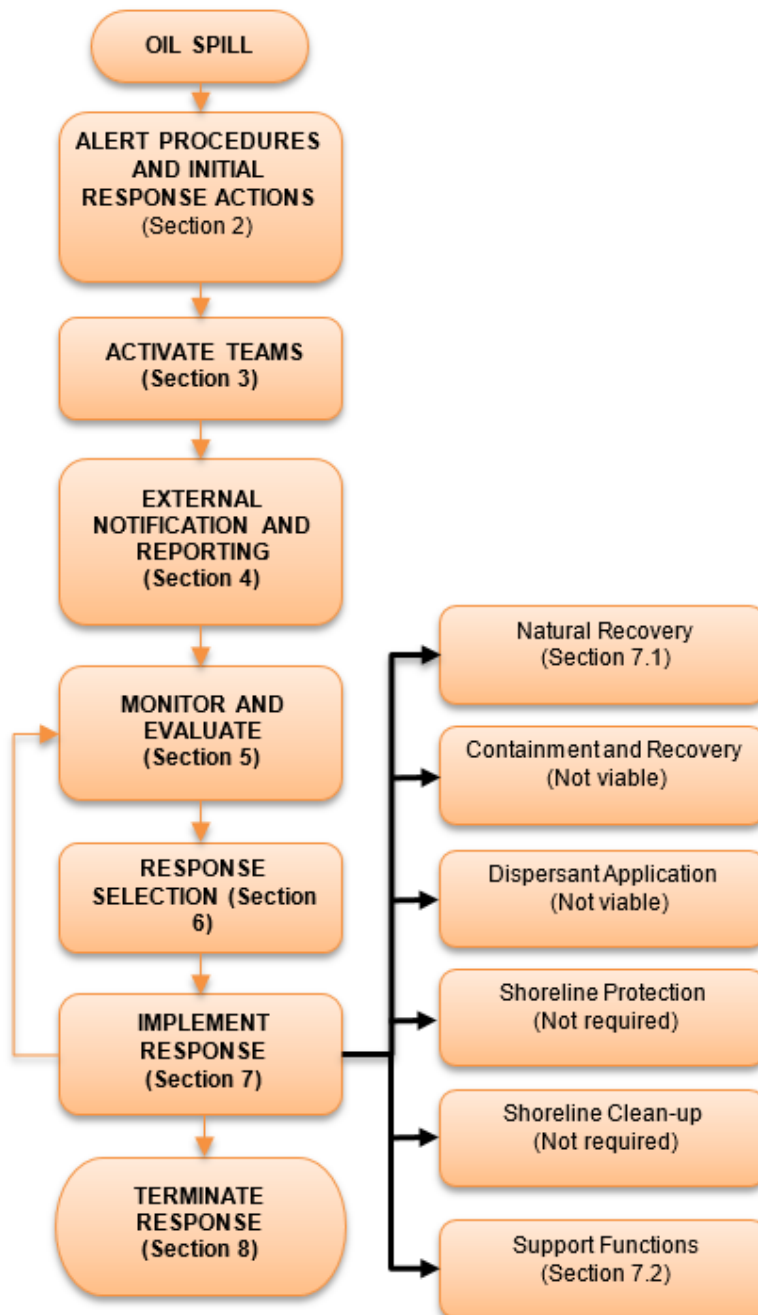


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Definitions

“Esso” may be used to refer to the ExxonMobil subsidiaries.

This document, the Gippsland Basin Geophysical and Geotechnical Investigations Oil Pollution Emergency Plan, is generally referred to as the "Gippsland Basin OPEP".

The Gippsland Basin operational area covers eleven existing licence areas.

The Zone of Potential Impact (ZPI) refers to the area that is potentially impacted as a result of a major diesel spill, as outlined in the Gippsland Basin Geophysical and Geotechnical Investigations EP.



Abbreviations

ADIOS	Automated Data Inquiry for Oil Spills
ALARP	As Low As Reasonably Practicable
AMOSC	Australian Marine Oil Spill Centre
AMOSPlan	Australian Marine Oil Spill Plan
AMSA	Australian Maritime Safety Authority
APASA	RPS Asia-Pacific Applied Science Associates
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
DPIPWE	Department of Primary Industries, Parks, Water and Environment (Tasmania)
DoEE	Department of the Environment & Energy (Cth)
DOT	Department of Transport (Vic) (replaced with DEDJTR)
DRET	Department of Resources, Energy and Tourism (Cth)
EAPL	Esso Australia Pty Ltd
EMBA	Environment that May Be Affected (also see ZPI)
EMMV	Emergency Management Manual Victoria
EP	Environment Plan
EPA	Environment Protection Authority (Vic)
ERM	Emergency Response Manual
ERT	Emergency Response Team
ESG	Emergency Support Group
EUL	Environment Unit Lead
EWMS	Esso Work Method Statement
FWADC	Fixed Wing Aerial Dispersant Capability
GOR	Gas Oil Ratio
IAP	Incident Action Plan
IC	Incident Commander
ICS	Incident Command System
IMT	Incident Management Team
IPIECA	International Petroleum Industry Environmental Conservation Association
JSA	Job Safety Analysis
LSC	Logistics Section Chief
LCM	Lead Country Manager
MDO	Marine Diesel Oil
MENSRP	Maritime Emergency (Non Search & Rescue) Plan
MES	Monitoring, Evaluation and Surveillance
MOH	Medical and Occupational Health personnel
MNES	Matter of National Environmental Significance
SDS	Safety Data Sheet
NATIONAL PLAN	National Plan for Maritime Environmental Emergencies. (previously NATPLAN: National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances)



NEBA	Net Environmental Benefit Analysis
NM	Nautical mile (also M, nmi)
NOAA	National Oceanographic and Atmospheric Administration (USA)
NOPSEMA	National Offshore Petroleum Safety and Environmental Management Authority
OSC	Operations Section Chief
OPEP	Oil Pollution Emergency Plan
OPGGSA	Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Cth)
OSA	Oiled Shoreline Assessment
OSMP	Operational and Scientific Monitoring Plan
OSR	Oil Spill Response
OSRA	Oil Spill Response Atlas
OSRL	Oil Spill Response Limited
OSTM	Oil Spill Trajectory Modelling
OWR	Oiled Wildlife Response
PCR	Production Control Room
PEAR	People, Environment, Assets, Reputation
PSC	Planning Section Chief
PSZ	Petroleum Safety Zone
POLREP	Pollution Report Form (AMSA)
POWBONS	Pollution of Waters by Oil and Noxious Substances Act 1987 (Cth)
RRT	Regional Response Team
SCAT	Shoreline Clean-up Assessment Technique
SSH&E	Safety, Security, Health, Environment
SMPC	State Marine Pollution Controller
SOPEP	Shipboard Oil Pollution Emergency Plan
TRP	Tactical Response Plan
ZPI	Zone of Potential Impact (also see EMBA)

1 Introduction

1.1 Purpose

The purpose of this Oil Pollution Emergency Plan (OPEP) is to describe the arrangements Esso Australia Pty Ltd (Esso) has in place to respond to an oil pollution incident should it occur during the Gippsland Basin geotechnical and geophysical survey campaign.

1.2 Objectives

The objectives of the plan are to:

- Define the roles and responsibilities for responding and recovering from an oil spill;
- Describe the implementation of the Esso Incident Command System
- Outline the procedures for mobilising company, industry and national support resources
- Integrate Esso’s response with relevant government and industry plans:
 - National Plan for Maritime Environmental Emergencies (‘National Plan’)¹
 - Victorian Maritime Emergencies (Non-Search & Rescue) Plan ², and
 - Australian Industry Cooperative Oil Spill Arrangements (AMOSPlan)³.
- Provide guidance for managing effective response and recovery to oil spill emergencies.

1.3 Scope

This OPEP applies to all geophysical and geotechnical activities within the operational area as defined in the EP. However, at all times it is also the responsibility of the vessel owner to respond in accordance with the vessel specific Shipboard Oil Pollution Emergency Plan (SOPEP).

1.4 Division of Responsibilities

If a ship-sourced hydrocarbon spill occurs within Commonwealth waters, AMSA is the designated Control Agency and will assume control of the incident and respond in accordance with the National Plan. Esso will assume a Support Agency role and provide all available support to AMSA in AMSA’s performance of their Control Agency responsibilities.

Table 1-1: Statutory Authorities and Combat Agencies for vessel spill

Jurisdiction	Source and location of release		Statutory Authority	Applicable Legislation	Combat Agency	
					Level 1	Level 2
Commonwealth Waters (>3nm from shore)	Vessel contracted by Esso	Within permit area	NOPSEMA/AMSA	OPGGS Act 2006 (Cth) AMSA Act 1990 (Cth)	Vessel operator with support from Esso or AMSA	AMSA
When spill threatens State Waters (<3nm from shore)			Vic DEDJTR	Emergency Management Act 1986	Vessel operator with support from	AMSA/DEDJTR

¹ https://www.amsa.gov.au/forms-and-publications/Publications/national_plan.pdf.

² <https://www.emv.vic.gov.au/responsibilities/state-emergency-plans/state-maritime-emergencies-non-search-and-rescue-plan>

³ <http://www.amosc.com.au/amosc.php>

				POWBONS Act 1986 (Vic)	Esso or AMSA	
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1.5 Health, Safety and Environment Policy

Oil spill response activities shall be implemented in accordance with Esso’s Health Safety and Environmental policies. Ensuring the safety and health of workers and the public is paramount, and a response to oil pollution should be carried out without undue safety risks. Safety risk mitigation measures, such as establishing controlled entry at polluted sites, wearing personal protective equipment and the use of safe working practices supported by suitable training, should be an integral part of response operations.

In cases where available measures to reduce the risk of injury or detrimental health implications cannot achieve tolerable levels of safety, the use of a response strategy may be not viable until conditions change. Examples include situations where fresh oil is releasing vapours, or where sea conditions prevent safe working on the deck of a vessel. Where there are security threats to response personnel, limitations on operations may also need to be imposed.

Prioritisation of decisions shall be guided by the PEAR principle:

- P - Protection of people;
- E - Protection of the environment;
- A - Protection/minimisation of damage to financial/material assets; and
- R - Protection of reputation.

1.6 Interface with Other Documentation and Plans

This OPEP interfaces with the following Internal and external plans:

Internal	External
<ul style="list-style-type: none"> • Gippsland Basin Geophysical and Geotechnical Investigations Environment Plan • Geophysical and Geotechnical Vessel SOPEP • ExxonMobil Oil Spill Response Field Guide (ExxonMobil, 2014) • Esso Emergency Response Manual (ERM) • Regional Response Team (RRT) Incident Management Handbook (The Response Group, 2015) 	<ul style="list-style-type: none"> • National Plan for Maritime Environmental Agencies (National Plan) (AMSA, 2014)¹ • Victorian Maritime Emergencies (Non-Search & Rescue) Plan² • Victorian Emergency Management Manual Victoria (EMMV) • AMOSPlan³

2 Initial Actions

2.1 Overview

Information specific to the Gippsland Basin geophysical and geotechnical survey are provided in Table 2-1. For further details, refer to the Environment Plan (EP). Marine diesel properties are described in Appendix B and in more detail in the EP.

Table 2-1 Gippsland Basin geophysical and geotechnical survey details

Oil Spill Parameter	Location			
Location / operational area	VIC/L1, VIC/L2, VIC/L3, VIC/L5, VIC/L18, VIC/RL1, VIC/L9, VIC/L25, VIC/L10, VIC/L15 and VIC/L17.			
Coordinates	Location	Latitude	Longitude	Depth
	BTW Drill Centre	-38.31837	147.61462	46
	BTW BMA Pipeline Tie In	-38.33682	147.58580	46
	BTA Platform	-38.29829	147.67467	46
	Tarwhine 1	-38.403286	147.529414	42
	Whiptail 1A	-38.3235635	147.5206096	38
	Whiting A2	-38.239984	147.873568	46
	Whiting A3	-38.2401024	147.8737497	54
	Whiting A5	-38.2401024	147.8737497	54
	Whiting A6	-38.2401026	147.8737498	54
	Whiting A7	-38.2401024	147.8737497	54
	Marlin 1	-38.2326309	148.2271026	60
	Halibut 1	-38.397902	148.317101	73
	Seahorse 1	-38.1951166	147.6741499	42
	Mulloway 1	-38.321872	147.485111	36
	VIC/L9	-38.18115	148.59351	89
	Kipper subsea facility (VIC/L25)	-38.30306	148.99333	95
	Sweetlips	-38.09500	148.03472	52
	Sweetlips Alt	-38.09083	148.05361	52
	Wirrah	-38.18611	147.81722	49
	Dolphin	-38.48889	147.37611	38
	Perch	-38.57056	147.32139	42

	East Pilchard 1	-38.19833	148.56167	91
Oil types and name	The following oil types are covered by this OPEP: Group 2 – Marine Diesel Oil (MDO)			
Worst case oil pollution scenarios	Level 1: Spill of hydraulic oil (50 litres) Level 2: Vessel collision (<144 m ³ of MDO over 6 hours) Level 3: Not credible			
Expected weathering	MDO has a low viscosity and spreads rapidly on the sea surface to thin sheens. It does not tend to form an emulsion. Evaporation is relatively slow and incomplete. It disperses readily into the water column by even gentle wave action. MDO is not very adhesive so do not adhere strongly to sediments or shoreline habitats. Loading levels on the shoreline are relatively low because of the thinness of sheens on the water surface and the low adhesion for stranded oil. The constituents of MDO are light to intermediate in molecular weight and can be readily degraded by aerobic microbial oxidation. (See also Appendix B)			
Priority sensitivities	Open Ocean			

2.2 Initial Actions

Figure 2-1 outlines the alert procedures and initial response actions, with further detail provided in Table 2-2. Immediate priorities are for the observer to stop the spill if safe to do so and alert the Person-in-Charge (PIC). The PIC then activates a response appropriate to the level of the incident (Section 2.3). It is important that on-site personnel follow predefined procedures to ensure a timely and effective response.

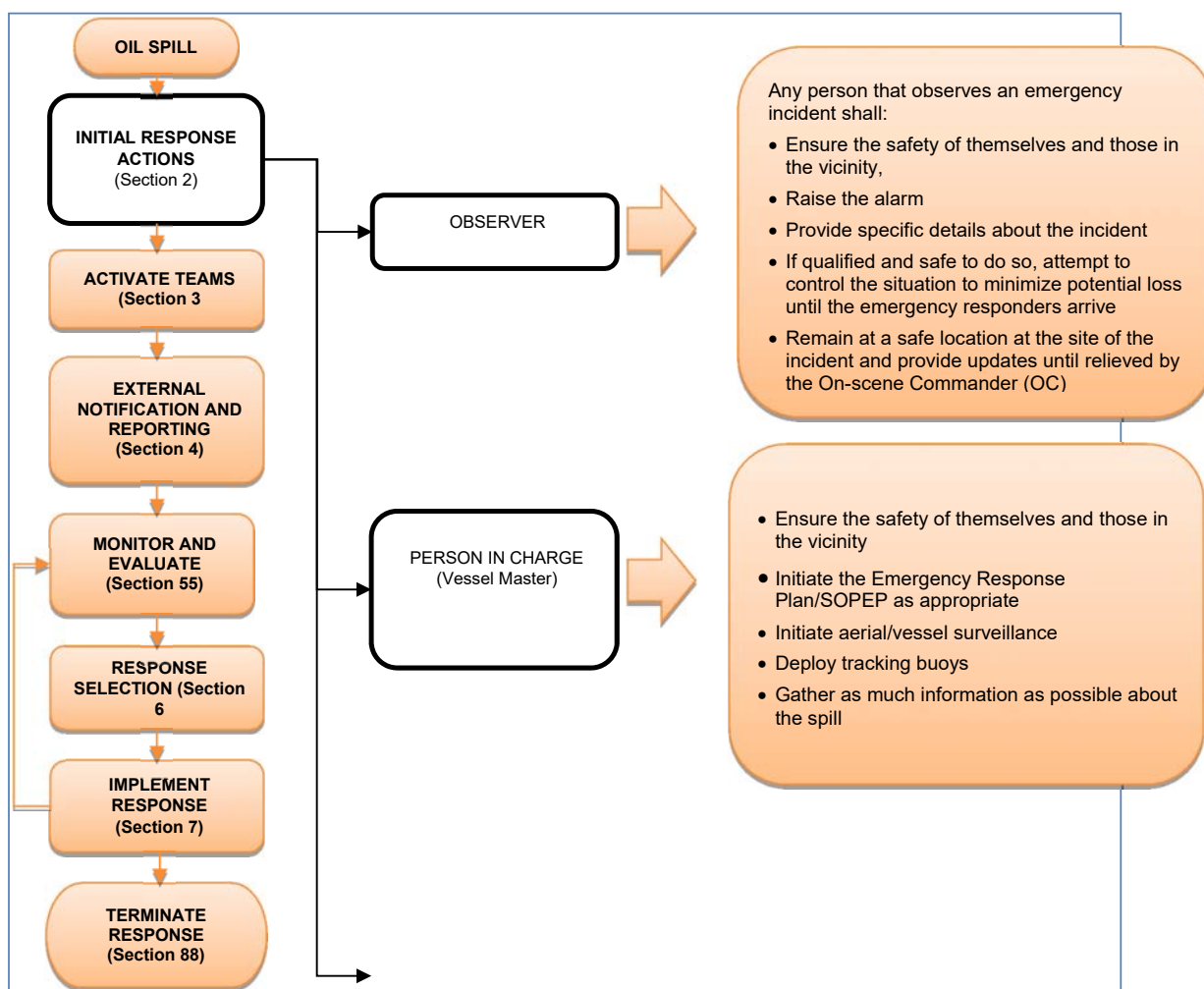


Figure 2-1: Alert procedures and initial response action guide

Initial response actions for the Esso Survey Manager are provided in. For general reference, a response strategy guide is provided in Figure 2-2.

Table 2-2: Initial actions checklist for response

Role	Initial Action
Observer – first person at scene	<input type="checkbox"/> Ensure the safety of themselves and those in the vicinity <input type="checkbox"/> Raise the alarm (radio, push button, etc.). <input type="checkbox"/> Provide specific details about the incident. <input type="checkbox"/> If qualified and safe to do so, attempt to control the situation to minimise potential loss until first responders arrive. <input type="checkbox"/> Remain in a safe location at the site of the incident and provide updates on the incident.
Vessel Master	<input type="checkbox"/> Account for all personnel <input type="checkbox"/> Activate facility SOPEP and Emergency Response Team <input type="checkbox"/> Activate firefighting system or resources (if required)



Role	Initial Action
	<ul style="list-style-type: none"> <input type="checkbox"/> Initiate source control actions (activate emergency shutdown, close blowout preventer, turn valves, shut down pumps, shut down power) <input type="checkbox"/> Determine number and severity of injuries and request onsite medical assistance <input type="checkbox"/> Secure rig operations <input type="checkbox"/> Secure the spill area onboard the vessel <input type="checkbox"/> Gather information and evaluate the incident <input type="checkbox"/> Provide information to assist with identification of oil type, including: <ul style="list-style-type: none"> <input type="checkbox"/> Signage on nearby tanks or pipelines from which the substance could have originated <input type="checkbox"/> Labelling on packaging <input type="checkbox"/> Description of sheen on water surface <input type="checkbox"/> Vessel's Oil Record Book (if relevant – contains information on volumes and content in each tank) <input type="checkbox"/> Safety Data Sheets (SDSs). <input type="checkbox"/> Conduct site safety characterisation (hazard assessment) <input type="checkbox"/> Conduct air monitoring using personal or portable monitors <input type="checkbox"/> Identify actual or potential health and safety hazards and evacuate or shelter in place, as appropriate <input type="checkbox"/> Notify Esso Survey Manager and initiate upward communications. The initial incident report should include the following information: <ul style="list-style-type: none"> <input type="checkbox"/> Was anyone injured? <input type="checkbox"/> Are there any immediate hazards (risk of fire or explosion)? <input type="checkbox"/> What is it? E.g. diesel, crude <input type="checkbox"/> Where is it? <input type="checkbox"/> How big is it? (Area/Volume) <input type="checkbox"/> Where is it going? <input type="checkbox"/> Is the source contained? <input type="checkbox"/> What is happening to it? (e.g. spreading, breaking up) <input type="checkbox"/> When was it detected? <input type="checkbox"/> Spill volume and appearance (See OSMP O1.3 (Esso, 2017b)) <input type="checkbox"/> Weather conditions and sea state? <input type="checkbox"/> Who is involved? <input type="checkbox"/> Conduct preliminary incident severity assessment <input type="checkbox"/> Initiate surveillance monitoring in accordance with OSMP module O1: <ul style="list-style-type: none"> <input type="checkbox"/> Contact heliport to initiate aerial surveillance <input type="checkbox"/> Take photographs of oil-on-water
Esso Survey Manager	<ul style="list-style-type: none"> <input type="checkbox"/> Confirm incident report <input type="checkbox"/> Document key details on the incident <input type="checkbox"/> Activate the IMT <input type="checkbox"/> Alert the medical centre of potential casualties <input type="checkbox"/> Maintain situational awareness, liaise with Vessel Master and IMT

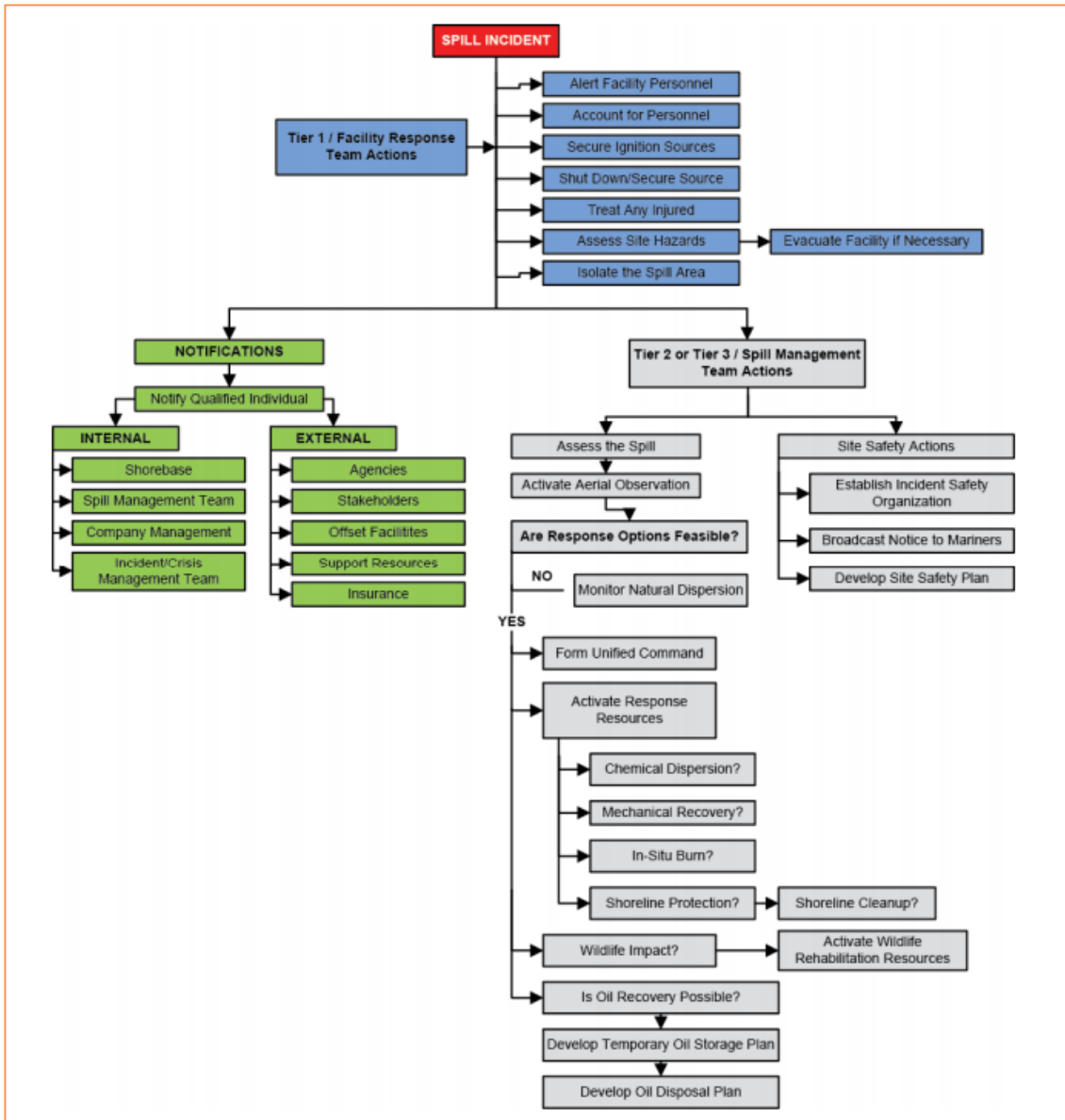


Figure 2-2: Response strategy guide (from API, 2013)

2.3 Assessment of Level

Consistent with the National Plan and AIIMS, spill response is based on the three levels described in Table 2-3. The nominated level provides an indication of the severity of the spill and can be used to develop criteria for consideration when evaluating the need to escalate response arrangements.

Table 2-3: Spill classification for potential spills from Gippsland Basin G&G survey

Level	Description	Credible scenarios identified for Gippsland Basin G&G survey
Level 1	Minor spills, including incipient spills that are quickly controlled, contained and cleaned up using local (onsite or immediately available) company/contractor owned equipment and personnel resources or spills that naturally dissipate without any intervention. Local resources include those at the facility, on nearby support vessels or at a designated shore support base or staging area. A Tier 1 spill would typically be resolved within a few hours or days	General operations e.g. hydrocarbon transfers. Oily water discharges.
Level 2	Moderate spills, controlled or uncontrolled, requiring activation of significant regional oil spill response resources and all or most of the IMT. A Tier 2 spill response may continue for several days or weeks.	Vessel collision resulting in a rupture and loss of fuel tank.
Level 3	Major spills, controlled or uncontrolled, requiring activation of large quantities and multiple types of response resources including those from out of the region, and possibly international sources. The entire Spill Management Team would be required, and would likely be supplemented by outside organizations. A Tier 3 spill response may continue for many weeks or months.	No credible scenarios identified

3 Team Activation

3.1 Division of Responsibility for a Vessel Spill

Section 1.4 summarises the division or responsibility in the event of a vessel spill from the geophysical and geotechnical survey. AMSA will assume the Combat Agency role. As the Titleholder, Esso shall support the Combat Agency through the provision of resources to implement control measures. Esso is also responsible for monitoring of impacts to the environment of oil pollution and response activities.

3.2 Definition of Roles

Table 3-1 outlines the roles for each of the main groups with responsibilities under this plan.

Table 3-1: Definitions of Roles

Organisation	Role
AMSA	The Australian Maritime Safety Authority (AMSA) is responsible for the control of incidents in offshore areas involving ships whenever the Navigation Act 1912 (the Navigation Act) applies. This is regardless of whether ships are conducting an offshore petroleum activity under the OPGSS Act or not.
DEDJTR	In the event that an incident in Commonwealth waters has impacted on state waters, DEDJTR may assume Incident Control over the impacted area in state waters.
Esso	As Titleholder, Esso shall support the Combat Agency through the provision of resources to implement control measures. Esso is also responsible for monitoring of impacts to the environment of oil pollution and response activities.

3.3 Response Team Activation

Activation of the teams shall be conducted in three distinct steps, as shown in Figure 3-1. A Level 1 spill incident may not require mobilisation of the IMT with the response being handled by the onsite Emergency Response Team (ERT) within the first 24 hours using site-based plans. For moderate to major (Level 2 or 3) spills, the IMT is activated to direct response activities. Checklists for Incident Management Team members are provided in the Incident Management Handbook (The Response Group, 2015).

3.4 Coordination with Survey Contractor

In the event of an oil spill incident Esso shall:

- Mobilise its IMT to at least an equivalent level of the contractor’s organisation;
- Appoint and send a Liaison Officer to the contractor’s IMT (equivalent); and
- Establish communication and reporting channels between the Liaison Officer and Esso’s IMT.

The Liaison Officer is the representative of Esso and as such answers to Esso’s IMT Incident Commander.

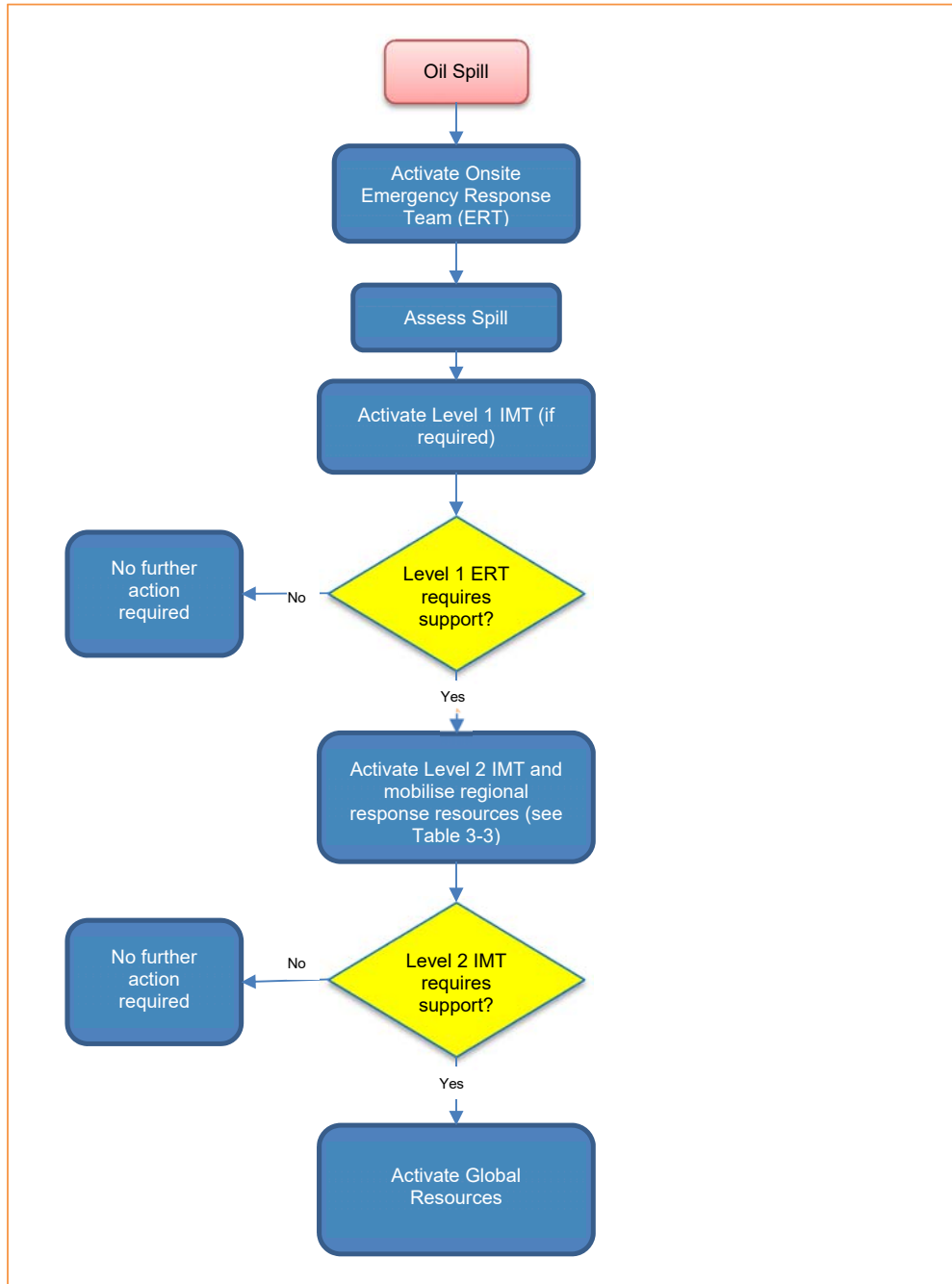


Figure 3-1: Incident Management Team activation guide

3.5 On scene Liaison

Where the site is operated by a contractor, Esso shall at all times have a dedicated Liaison Officer (e.g. Company Representative) present. The Liaison Officer shall work closely with the Vessel Master and ensure good communication between Esso's IMT and the contractor's on-scene commander.

3.6 External Support Agencies

Table 3-2 shows the links between oil spill classification, the Esso team activation and the mobilisation of external support agencies. Table 3-3 summarises the services provided by various support agencies

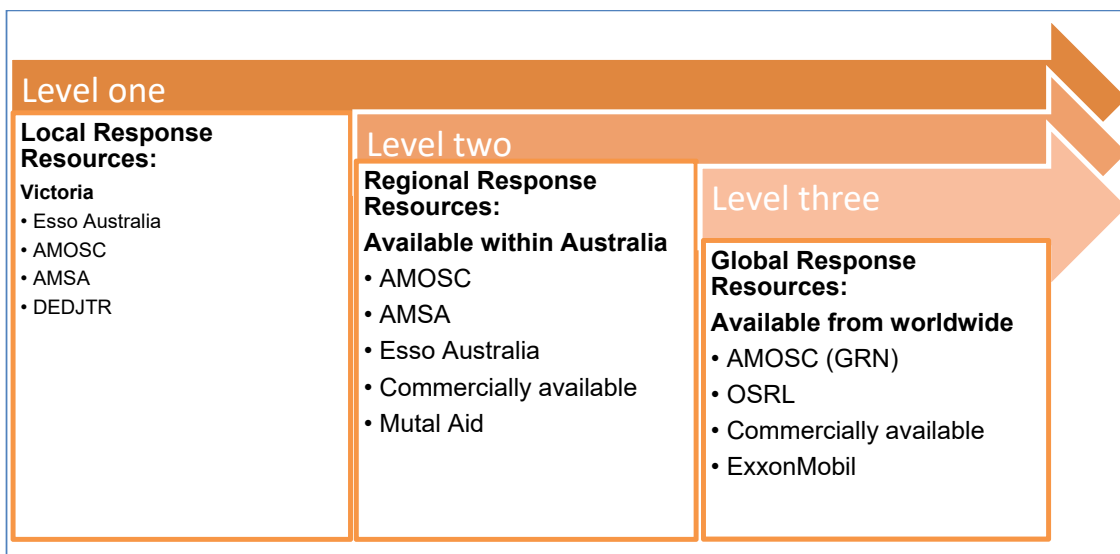


Figure 3-2: Tiered logistics response arrangements

Table 3-2: Activation of response resources

	Level 1				Level 2				Level 3			
Indicative Resources Mobilised⁽²⁾												
Vessel Contractor ERT												
Esso IMT												
AMOSC/Industry												
Vic State												
AMSA												
Esso ESG												
ExxonMobil RRT												
OSRL												

(1) See Table 2-3 for classification of level

(2) Indicative only. Highly dependent on a number of considerations.



Standby, or partially mobilised.

Mobilised or likely to be mobilised.

Table 3-3: Oil spill response agency support services and activation

Support Agency	Support Services
AMOSC	<p>AMOSC Activation Procedure:</p> <p>First call as early as possible to 24/7 Duty Officer – Contact number: 0438 379 328 (https://amosc.com.au/contact-us/)</p> <p>An AMOSC Service Agreement must be signed by an approved Company Authority prior to AMOSC providing any equipment or services. Company Authorities include:</p> <ul style="list-style-type: none"> - EP&R Advisor - SSHE Manager - Production Operations Manager - OIMS & Safety Supervisor <p>A purchase order must also be raised to cover any services (including OSTM) and equipment deployment.</p> <p>Upon request, and as soon as practicable, AMOSC will deploy a Senior Technical Officer to the IMT to provide advice and provide a direct interface with AMOSC. AMOSC will also deploy aerial observers as soon as practicable for aerial surveillance activities.</p> <p>AMOSC’s core equipment stockpile is located at North Corio Quay, Geelong, Victoria.</p> <p>An inventory is available online at https://amosc.com.au/equipment/</p> <p>Logon: [REDACTED]</p> <p>Password: [REDACTED]</p> <p>The Subsea First Response Toolkit is located in Perth and includes 500 m³ of dispersant for subsea dispersant injection.</p>
Australian Maritime Safety Authority (AMSA)	<p>AMSA Activation Procedure:</p> <p>Formal request should be made initially through the Environment Protection Duty Officer via the Emergency Response Centre on 1800 641 792 or (02) 6230 6811 (https://www.amsa.gov.au/emergency-contacts/).</p> <p>This request must be followed by written confirmation within three hours of the verbal request.</p> <p>Through a MOU arrangement with Esso, AMSA will provide a Liaison Officer to coordinate National Plan resources. AMSA can provide:</p> <ul style="list-style-type: none"> • Technical advice; • Response equipment through AMSA national equipment stockpiles; • Response contractors and services; and • Trained response personnel, including management and operational staff. <p>Resources:</p> <p>AMSA maintains nine strategic equipment stockpiles. A listing of government and industry marine oil spill response equipment is available online at: https://amsa-forms.nogginoca.com/public/equipment.html?loc=%2Fapi%2Fv1%2Fasset%2F2547401</p>



Support Agency	Support Services
<p>Victorian The Department of Economic Development Jobs, Transport & Resources (DEDJTR)</p>	<p>Esso may request state assistance from DEDJTR when:</p> <ul style="list-style-type: none"> • the spill occurred in state waters, • the spill is likely to enter state waters, and/or • the incident has exceeded the Titleholder's capacity to respond. <p>DEDJTR Activation Procedure:</p> <p>Requests can be made initially by phone to: DEDJTR Duty Watch Officer on 0409 858 715</p> <p>The verbal request shall be followed by an email, outlining the details of the request for assistance, including asset and personnel requirements, to the Marine Pollution inbox at: Semdincidentroom@ecodev.vic.gov.au .</p> <p>Within one hour of the receipt of the email DEDJTR will begin to progress the request.</p> <p>If required, Esso may request a DEDJTR EMD Emergency Liaison Officer to engage with Esso IMT.</p> <p>Resources:</p> <p>DEDJTR EMD maintains a response capability (trained personnel and equipment) throughout the state and can facilitate provision of:</p> <ul style="list-style-type: none"> • State-owned equipment and assets; • Access to national equipment and assets; • Access to state and national response personnel; and • Access to DEDJTR EMD's on-water response contractor (Oil Response Company of Australia (ORCA; http://www.oilresponse.com.au/)). <p>The EMMV (Emergency Management Manual Victoria; https://www.emv.vic.gov.au/policies/emmv) also nominates the following support agencies for marine oil spills:</p> <p>DELWP as a support agency for marine spills responsible for responding to affected wildlife in Victorian waters; and</p> <p>DELWP and Parks Victoria (shoreline manager of Coastal/National and Marine Parks) are also responsible for shoreline assessment and clean-up and carry trained resources to undertake these activities.</p>
<p>Regional Response Team (RRT)</p>	<p>RRT Activation Procedure:</p> <p>ESG Leader or designate to contact the RRT mobilisation number. This number is managed by ExxonMobil Security in Leatherhead, UK and is manned 24 hours, 7 days a week.</p> <p>██████████</p> <p>Information required:</p> <ul style="list-style-type: none"> • Name, contact phone number, email address • Company name • Type of incident • Location of incident • Type of assistance needed



Support Agency	Support Services
<p>Oil Spill Response Ltd (OSRL)</p>	<p>OSRL Activation Procedure: To mobilise OSRL in Australia https://www.oilspillresponse.com/activate-us/activation-procedure/ .</p> <p>To effectively integrate the OSRL equipment into the spill response, Esso or AMOSC will provide:</p> <ul style="list-style-type: none"> • Support in obtaining landing approval for the transport aircraft • Support with customs clearance • Transportation of the equipment from the airport to the response site • Immigrations support • Integration of OSRL advisors into the Level III response structure • Local workers to operate the equipment • Accommodation for the advisors. <p>Personnel: Personnel are on standby and available 24 hours a day, 365 days a year with equipment and logistics support to initiate, mobilise, and sustain a response comprising:</p> <ul style="list-style-type: none"> • 1 Senior Oil Spill Response Manager • 1 Oil Spill Response Manager • 15 Oil Spill Response Specialists / Oil Spill Responders • 1 Logistics Service Branch Coordinator. • Technical advisors and additional response personnel may be provided at Esso's request and OSRL's discretion. <p>Equipment and Services: Equipment will be mobilised from the most appropriate location to provide the most timely and effective response, and includes:</p> <ul style="list-style-type: none"> • wide range of pre-packaged equipment suited to a range of spill scenarios, including 700 m³ of dispersant in Singapore and aerial dispersant application systems (https://www.oilspillresponse.com/globalassets/services/member-response-services/global-dispersant-stockpile/tis-gds-2017-oct-27.pdf) • global aerial dispersant coverage is provided through a range of aerial platforms and application systems • logistics support • oil spill modelling and access to satellite imagery
<p>Cardno</p>	<p>Support service to implement the Operational and Scientific Monitoring Plan</p>

4 Notification and Alert Procedures

Figure 4-1 shows the procedure for external notification and reporting, with supplementary information provided in Table 4-1. Notifications and reporting should be undertaken by the Incident Commander in the IMT or delegate. Links to spill notification and reporting forms are provided in Table 4-1.

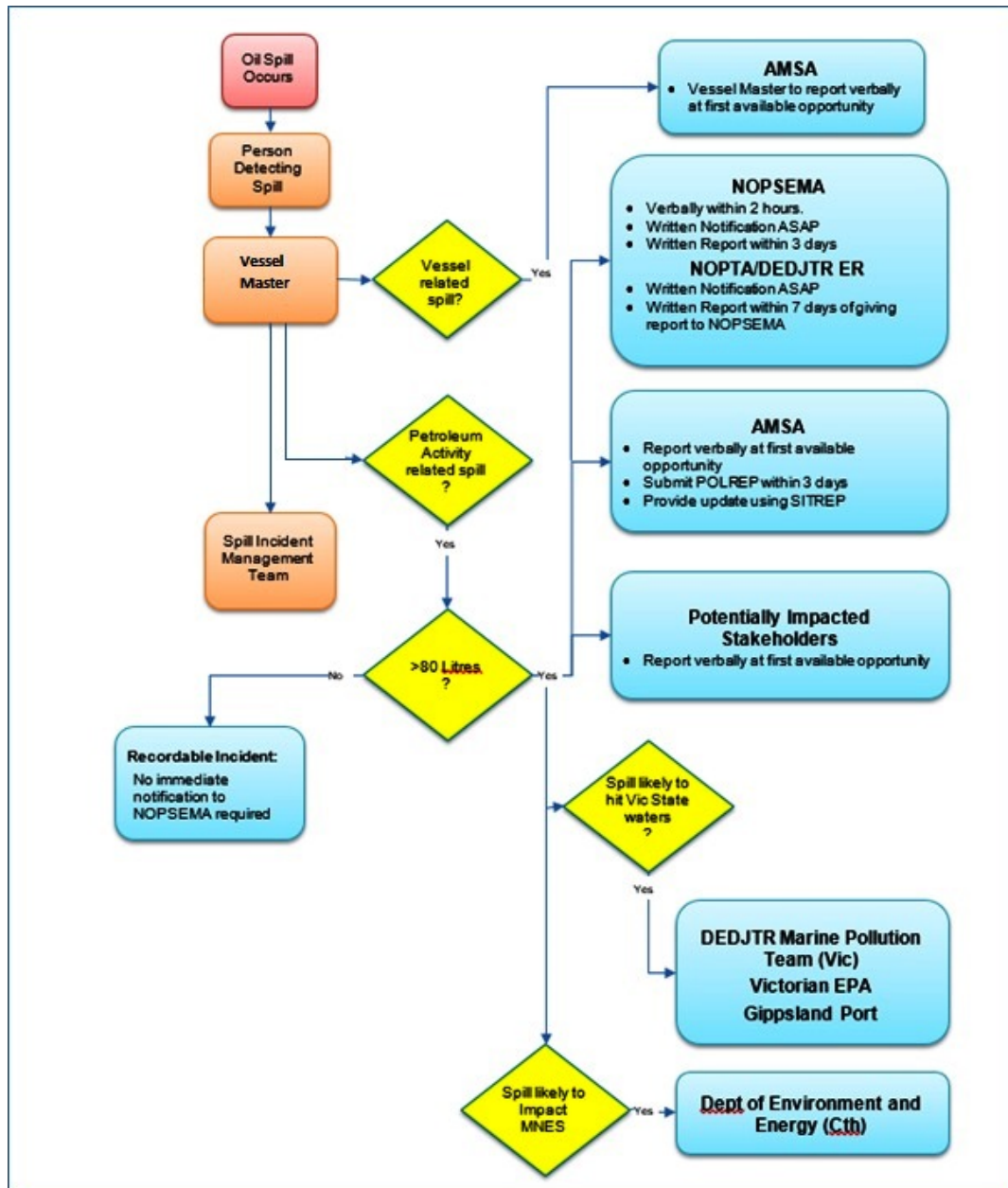


Figure 4-1: Oil spill notification process

Table 4-1: Information for external notification and reporting

Agency	Notification Criteria	Notification Details
NOPSEMA	<p>A hydrocarbon spill over 80 litres (0.5 bbl) or an incident that has caused or has the potential to cause moderate to significant environmental damage MUST:</p> <ul style="list-style-type: none"> be verbally reported to NOPSEMA as soon as practicable and within two (2) hours of the spill occurring or Esso becoming aware of the spill. be followed up by a written record of the notification to NOPSEMA as soon as practicable. be followed up with a written report (NOPSEMA N-03000-FM0831) within 3 days⁴. <p>The initial notification and the written report⁵ must contain:</p> <ul style="list-style-type: none"> all material facts and circumstances concerning the incident that the Titleholder knows or is able, by reasonable search or enquiry, to find out; and any action taken to avoid or mitigate any adverse environment impacts of the incident; and the corrective action that has been taken, or is proposed to be taken, to prevent a similar incident. 	<p>Notification made by Incident commander Duty Officer: 08 6461 7090 (https://www.nopsema.gov.au/contact/)</p> <p>submissions@nopsema.gov.au NOPSEMA FORM FM0831 (N-03000-FM0831) https://www.nopsema.gov.au/safety/reporting-accidents-and-dangerous-occurrences/</p> <p>Incident Reporting requirements: Guidance Note N-03000-GN0926: https://www.nopsema.gov.au/assets/Guidance-notes/A198752.pdf</p>
Victorian DEDJTR (Earth Resources) National Offshore Petroleum Titles administration (NOPTA)	<p>A hydrocarbon spill over 80 litres (0.5 bbl) or an incident that has caused or has the potential to cause moderate to significant environmental damage MUST:</p> <ul style="list-style-type: none"> be notified in writing to NOPTA and DEDJTR as soon as practicable (same time as the NOPSEMA written notification). be followed up with a written report to NOPTA and DEDJTR (as Joint Authority Member) as soon as reasonably practicable and within 7 days of giving the report to NOPSEMA⁶. 	<p>Notification made by Incident Commander DEDJTR: operational.reports@ecodev.vic.gov.au NOPTA: reporting@nopta.gov.au (http://www.nopta.gov.au/reporting-and-data-submissions/data-submissions.html)</p>

⁴ As per Schedule 3 to the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cth) and as outlined in NOPSEMA Notification and Reporting of Environmental Incidents form N-03000-GL0926 Clause 82.

⁵ As per Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Cth) Regulation 26.

⁶ As per Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Cth) Regulation 26A



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<p>AMSA (while performing a petroleum activity)</p>	<p>Actual or potential unplanned releases of hydrocarbon liquid or non-approved chemicals exceeding 80 litres into the marine environment (while performing a petroleum activity) Incident Reporting Requirements: https://www.amsa.gov.au/environment/reporting-ship-sourced-pollution/index.asp AMSA POLREP: https://amsa-forms.nogginoca.com/public/</p>	<p>Notification made by: Vessel Master outside 500m petroleum safety zone OIM within the 500m petroleum safety zone AMSA verbally at the first available opportunity and POLREP report within 3 days (consistent with the requirement to notify NOPSEMA in writing within 3 days). 24 Hour Emergency Contact Numbers 1800 641 792 (Maritime) 1800 815 257 (Aviation SAR) or +61 2 6230 6811 (Maritime) +61 2 6230 6899 (Aviation SAR) https://www.amsa.gov.au/contact-us/index.asp#report</p>
<p>AMSA (while <u>not</u> performing a petroleum activity)</p>	<p>AMSA will be notified by the Vessel Master if any of the following incidents occur (while not performing a petroleum activity):</p> <ul style="list-style-type: none"> • An oil pollution incident from a vessel has occurred in Commonwealth waters (Marine Notice 1/1996); • The vessel has sustained or caused an accident occasioning loss of life or serious injury; • The vessel has received damage or is defective affecting its seaworthiness; or <p>There is a danger to navigation resulting from a vessel (e.g. a sizable piece of equipment likely to float is lost overboard).</p>	<p>Notification by Vessel Master AMSA verbally at the first available opportunity and POLREP report within 2 hours. 24 Hour Emergency Contact Numbers 1800 641 792 (Maritime) 1800 815 257 (Aviation SAR) or +61 2 6230 6811 (Maritime) https://www.amsa.gov.au/contact-us/index.asp#report</p>
<p>DEDJTR (Marine Pollution Team)</p>	<p>Notify DEDJTR of the incident as soon as practicable for situational awareness, If required, request a DEDJTR Emergency Management Liaison Officer (EMLO) to engage with the Esso Incident Management Team (IMT) or Emergency Support Group (ESG). When Incident Control is transferred to DEDJTR, provide a comprehensive handover briefing and identify who will continue to represent Esso within the Incident Management Team, and Make all relevant resources available to the Incident Management Team in support of the ongoing response.(DEDJTR Advisory Note).</p>	<p>DEDJTR Duty Watch Officer: 0409 858 715 semdincidentroom@ecodev.vic.gov.au</p>
<p>Environment Protection Authority EPA (Vic)</p>	<p>Vic EPA is the Control Agency for pollution of inland waters and will be notified via DEDJTR as soon as possible for any spill likely to impact state waters (within 3 NM from shore).</p>	<p>Notification made by DEDJTR Vic Pollution Hotline: 1300 372 842 (http://www.epa.vic.gov.au/get-involved/report-pollution)</p>



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**Department of the
Environment & Energy
(DoEE)(Cth)**

DoEE is to be informed of any incident that has the potential to have a significant impact on matters of national environmental significance (NES)⁷ including protected and migratory species, Commonwealth Marine Reserves and Ramsar wetlands.

The Secretary of the Department of the Environment & Energy must be notified within 7 days (EPBC Act, Reg. 199(2)) of becoming aware of any activity that, without a permit, has resulted in death, injury, taking or moving of:

- a member of a listed threatened species (except a conservation dependent species),
- a member of a listed threatened ecological community,
- all cetacean (whale, dolphin or porpoise) species, a member of a listed migratory species,
- a member of a listed marine species in or on a Commonwealth area.

Matters of national environmental significance are world heritage properties; RAMSAR wetlands; listed threatened species and communities; migratory species under international agreements; nuclear actions and the commonwealth marine environment.

Notification made by Incident Commander

1800 803 772

<http://www.environment.gov.au/about-us/contact-us>

To Notify the Secretary Department of the Environment:

Phone: +61 2 6274 1111,

Email: EPBC.Permits@environment.gov.au

<http://www.environment.gov.au/biodiversity/threatened/listed-species-and-ecological-communities-notification>

⁷ As per the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (<http://www.environment.gov.au/epbc/permits/notifications.html>)

5 Monitoring, Evaluation and Surveillance

Oil spill monitoring, evaluation and surveillance (MES) is essential for anticipating resources at risk, directing the response and evaluating the effectiveness of response techniques. Initially surveillance will be undertaken by the most convenient and efficient methods possible with the immediately available resources. An ongoing surveillance plan will be established as part of the Incident Action Plan (IAP).

Surveillance and tracking of slicks will be conducted by one or a combination of the following means:

- **Visual observations** and photography, primarily from aircraft (Esso operated or contracted helicopters and local fixed wing aircraft contractors as identified in Appendix A - Contacts List).
- **Satellite tracking** buoys and remote sensing technologies to identify and monitor the location of the oil.
- **Spill trajectory Modelling**: Calculating and forecasting the movement of slicks using hand calculations or oil spill trajectory models (using internal resources or RPS Asia-Pacific Applied Science Associates (RPS APASA) sourced via AMOSC/AMSA (Appendix C).
- **Sampling**: Collecting water samples and using water quality monitoring to test predictions and provide information for determining the fate and behaviour and, thus, the potential environmental impact of the spilled oil.
- **Remote Sensing (RS)** – uses remote sensing technologies to identify oil slicks.

MES tactics and initiation triggers are detailed in the OSMP (Esso, 2017b). Figure 5-1 shows the MES implementation guide. Table 5-1 provides the checklists for key personnel and Table 5-2 summarises the response strategy and capability.

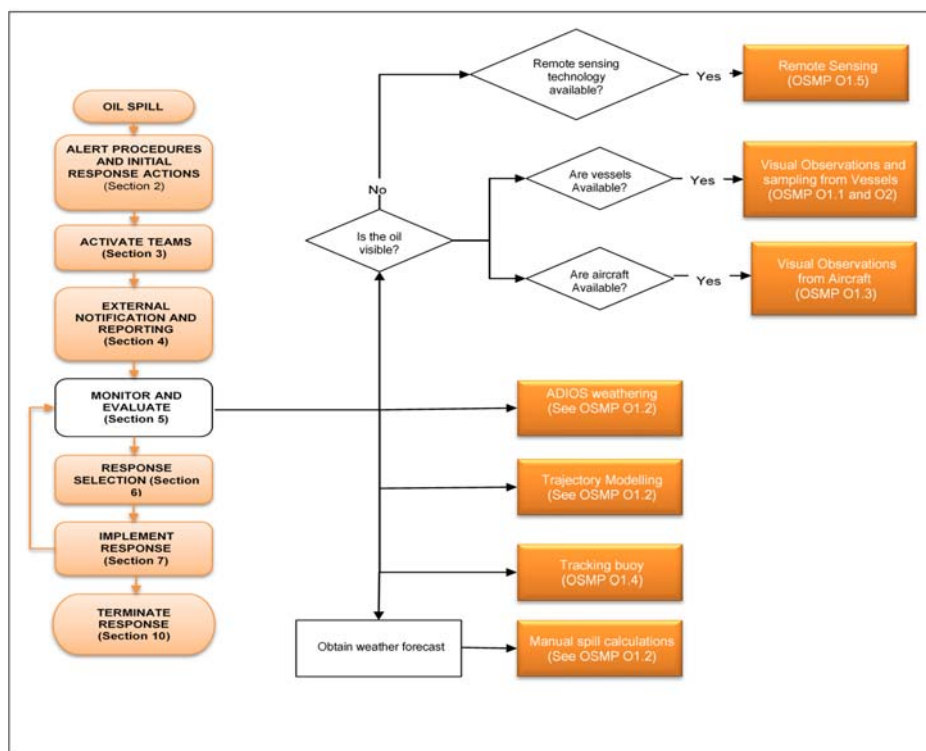


Figure 5-1: Monitoring and evaluation implementation guide

Table 5-1: Monitor and evaluate implementation checklist

Who	What	
On-scene Commander	Initiate surveillance of spill if safe to do so	<input type="checkbox"/>
	Where required, arrange for tracking buoy to be delivered to vessel for deployment when needed. Request vessel crew to deploy tracking buoy.	<input type="checkbox"/>
	Where required, mobilise vessel and/or aircraft and observers to the scene to carry out/assist with spill monitoring and surveillance activities.	<input type="checkbox"/>
Planning Section Chief (PSC)	Collate weather and tidal information from On-scene Commander and Bureau of Meteorology	<input type="checkbox"/>
	Review OSMP (Section 9) to determine which modules are triggered, and direct personnel to undertake required assessments.	<input type="checkbox"/>
	Determine the spill volume and estimate the size of the spill to water via approximate surface calculations, based on: <ul style="list-style-type: none"> • Visual estimates from On-scene Commander (refer to OSMP Attachment O1:A); • Discharge rates (based on flow rate, hole size and duration); and/or • aerial and marine surveillance data where available. Refer to the Spill Observation training module for further guidance http://ishareteam1.na.xom.com/sites/EMPC0263/EPP/Environment%20Plans/Implementation/ECO%20Presentation%20Topic%203b%20Spill%20Observation%20v030915.pptx	<input type="checkbox"/>
	If necessary, conduct hydrocarbon distribution, fate and weathering assessment to further develop response strategies. This may include: <ul style="list-style-type: none"> • Oil Spill Trajectory Modelling (OSTM) – conduct through subcontractor (RPS - Asia-Pacific Applied Science Associates RPS APASA) under existing contract (AMOSC/OSRL); or conduct through AMSA National Plan arrangements (Appendix C). • Automated Data Inquiry for Oil Spills (ADIOS) using information on oil type provided in Appendix A of this OPEP (https://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/response-tools/adios.html) • satellite/optical imagery (conduct through OSRL or AMSA) Notes: <ol style="list-style-type: none"> 1. For OSTM, the RPS-APASA pro-forma is attached in Appendix C. To initiate contact the AMOSC duty officer (0438 379 328). 2. If using AMSA, complete then email or fax the AMSA Oil Spill Trajectory Modelling (OSTM) request form, available from: http://www.amsa.gov.au/marine_environment_protection/national_plan/general_information/oil_spill_trajectory_model/Request.asp (Contact AMSA Marine Pollution Duty Officer through AMSA Search and Rescue (24/7) on 1800 641 792 for further instructions and to confirm OSTM request has been received.) 3. At the time of writing, ExxonMobil has a global agreement with MDA for emergency satellite imagery. Due to mergers and acquisitions of service providers, a new agreement is being negotiated which will provide services from MDA, Digital Globe and other affiliated companies. 	<input type="checkbox"/>
	Activate Geographic Information Systems (GIS) technicians to assist with development of mapping, including resources at risk sensitivity maps.	<input type="checkbox"/>
	Review fate weathering and trajectory modelling and validate with field reports to predict spill trajectory.	<input type="checkbox"/>
	Use available surveillance data to identify sensitive environmental and social receptors and protection prioritisation. Conduct a Net Environmental Benefit Analysis (NEBA) using the information available in order to identify appropriate strategies for protection.	<input type="checkbox"/>

	Use information collected to periodically reassess spill level, effectiveness of response and NEBA, and modify the response strategy as required.	<input type="checkbox"/>
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Table 5-2: Monitor and Evaluate response strategy and capability

Activity	Minimum Response Options Capabilities	Minimum Implementation Time	Initiation Guide	Termination Guide
Visual Observation – vessel (see Section 9 OSMP O1.3)	1 x vessel and crew from existing fleet 1 x spill observer provided by Esso	Within 24 from dedicated vessel.(note initial surveillance should be undertaken by the most convenient and efficient method using immediately available resources)	Any spill to the marine environment	The spill is below visible criteria for surface oil (0.5g/m ²).
Visual Observation – aircraft (see OSMP O1.3)	Esso helicopters to aid in aerial surveillance 1 x trained spill observer provided by Esso	Initial overflight within 6 hours of spill occurring. Trained observer within 24 hours of spill occurring. (assuming good visibility, daylight hours and suitable flying conditions)	(as above)	(as above)
ADIOS weathering modelling	Automated Data Inquiry for Oil Spills 2 (ADIOS2) installed on IMT computers IMT members familiar in program use (https://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/response-tools/adios.html)	Within 6 hours of Level 2 spill occurring.	Level 2 or 3 spill	(as above)
Trajectory modelling – Desktop (see Section 9 OSMP O1.2)	IMT members with trajectory vectoring experience Relevant set of marine charts for Bass Strait in Emergency Control Room. Internal GIS mapping specialists	Within 6 hours of spill occurring.	Any spill to the marine environment	(as above)
Trajectory modelling – Computer based (see Section 9 OSMP O1.2)	Contracts in place with AMOSC, who have contract with RPS APASA.	Within 6 hours of spill occurring.		(as above)
Tracking buoy deployment (see Section 9 OSMP O1.4)	2 × tracking buoys Tracking buoy on vessel at MODU or deployed by helicopter	Within 6 hours of spill occurring.	Level 2 or 3 spill	(as above)



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Activity	Minimum Response Options Capabilities	Minimum Implementation Time	Initiation Guide	Termination Guide
Remote observation using satellite imagery (see Section 9 OSMP O1.5)	Satellite imagery services via MDA Corp for images and service technician (MDA Corporation, Satellite imaging, +1 240 833 8282, metops@mdainformationsystems.com ; www.mdainformationsystems.com)	Within 12 hours of Level 3 spill being activated.	Level 3 spill	Surface oil is no longer detectable from airborne sensors (~0.5 g/m ²), and subsea oil return to baseline levels or within natural variation, or there is no observed difference at impact and control sites.
Water and oil sampling (see Section 9 OSMP O2)	1 x vessel and crew Initial response spill sampling kits available at various Esso locations, including support vessels. Sampling services via environmental consultancy Laboratory services via contract with third party provider Experienced analyst to interpret data Field Service technician.	2 day to mobilise field technician and collect samples Analysis commenced within 24 hours of delivery to laboratory, All results within 5 days	Following a Level 2 or 3 spill or, Level 1, at the discretion of the DIMT.	There is no actual or potential spill source from Esso's activities that has not yet been sampled
Fauna observations (see Section 9 OSMP O4)	Undertaken as part of visual observations (described above)	See vessel or aircraft observations above	Any spill to the marine environment	Oil is below criteria for environmental impact (Surface oil 10g/m ² - (metallic appearance).

6 Response Options

The selection of response options and the verification of assumptions made in the planning phase should begin as soon as the response is initiated. Like all aspects of emergency management and incident command, the response should be scaled to the size and complexity of the incident.

Figure 6-1 presents the process for selecting response options. The first step is for the IMT to evaluate the situation and verify decisions made in the planning phase. If the planning phase assumptions are valid then the strategic response can be activated as per the plan, however, if it differs then the implications should be reviewed, and appropriate changes made.

High level strategic objectives are set for the response. Options are then evaluated for their effectiveness and feasibility. NEBA is carried out to ensure that the selected responses provide a net environmental benefit. Following this and assuming certain criteria are met, the Incident Action Plan can be prepared.

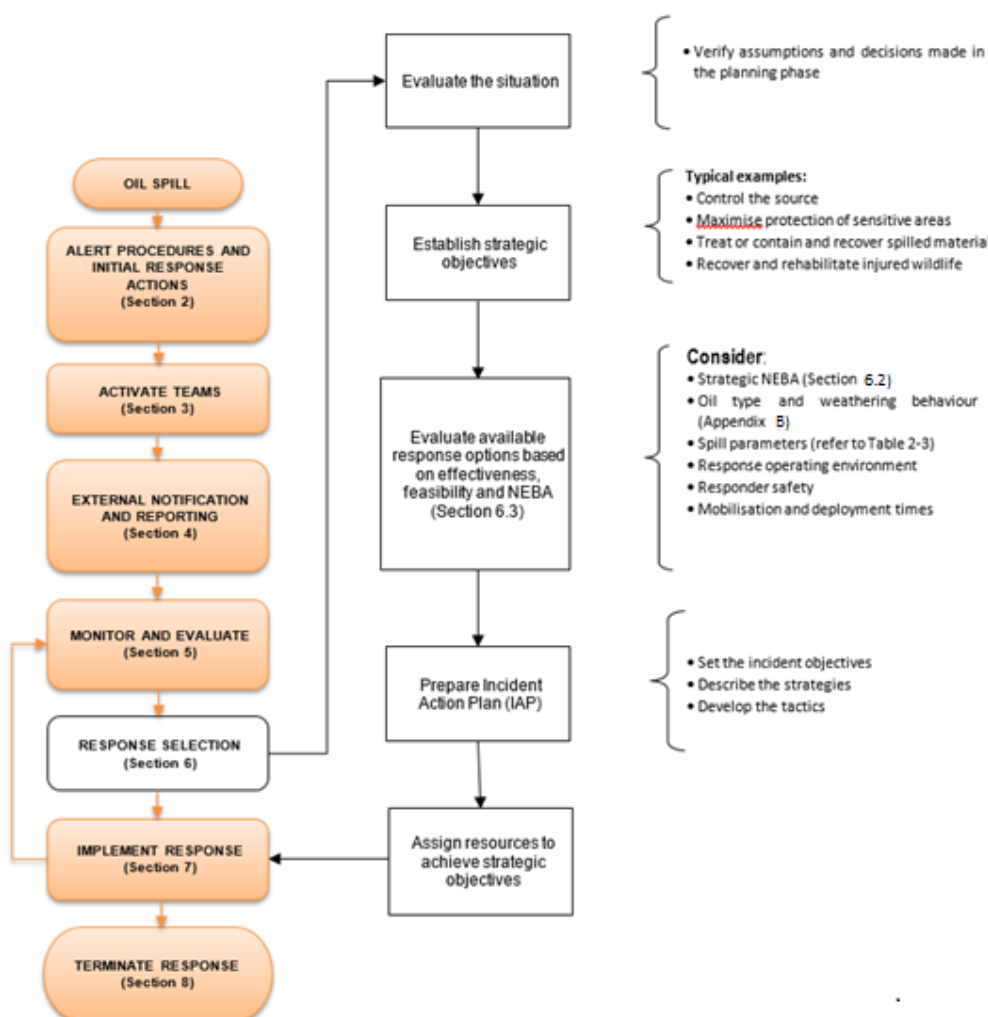


Figure 6-1: Response Option Selection Process

6.1 Incident Action Planning Process

The incident action plan (IAP) documents the emergency response objectives, prioritised operational strategies and the corresponding response tasks to achieve them. The objective of the IAP is to ensure that the IMT(s) work towards the strategic and/or tactical objectives set during the operational period. It is the responsibility of the Planning Officer to prepare the IAP under the direction of the Incident Commander for their endorsement. Each of the main emergency management functions contribute to the planning process by providing information, analysis, and direction. To ensure that the IAP is appropriate for the nature of the spill, Esso may also seek advisory support from technical experts or liaison officers from DEDJTR EMD, DELWP (wildlife), AMSA and/or AMOSC.

The main steps in completing the IAP are:

- Set the incident objectives – what are we trying to do or what are we trying to protect?
- Describe the strategies – for example, deployment of aircraft for aerial surveillance.
- Develop the tactics – detail how these strategies will be executed including responsibilities, logistics, etc.

The IMT will implement and monitor the effectiveness of the IAP ensuring regular updates to the plan are made as appropriate.

6.2 Strategic NEBA

Spill response strategies for the worst case credible spill scenario (144 m³ MDO spill) were evaluated by means of a strategic Net Environmental Benefit Analysis (NEBA). NEBA is the process of considering the risk and benefits of different spill response options (including no response) and comparing them to identify a spill response decision resulting in the lowest overall environmental and socioeconomic impacts. In the actual event of a spill, the NEBA is revisited regularly as more information becomes available on actual conditions, spill trajectory path and locations of sensitive receptors. This review process allows response strategies to be adjusted to provide optimal results.

The results are presented in Table 6-1 and will guide the initial response by the IMT and ERT upon activation and mobilisation. If the Incident Action Planning (IAP) cycle commences for a protracted response, an operational NEBA will be conducted regularly using surveillance information to inform response option decision-making.

Table 6-1: Conceptual NEBA

Response Strategy		MDO Spill		Response Strategy Carried Forward (Yes/No)
		Positive Impacts	Negative Impacts	
Monitor and Evaluate (Type I Monitoring)	Satellite Imagery	Surveillance actions are used to monitor and evaluate the dispersion of the spilled hydrocarbon, and to identify and report on any potential impacts to flora and fauna that may occur while the spill disperses. Surveillance results may also be used to assist in escalating or de-escalating response strategies as required.	There are a number of generic impacts that may arise from vessel and aircraft operation. Impacts such as liquid discharges, emissions, vessel movements, anchoring (disturbance to sensitive seabed features) and translocation of marine pest are described throughout this EP.	Yes – see Section 7
	Tracking Buoys			
	Aerial Observations			
	Vessel Observations			
	Spill Modelling			
	Fauna Observations	Improved situational awareness will improve the effectiveness of a response decreasing risk to the environment.		
Surface Dispersants		Diesel is not considered a persistent hydrocarbon, and has high natural dispersion rates in the marine environment. Chemical dispersant application is not recommended as a beneficial option for diesel as it has a low probability of increasing the dispersal rate of the spill while introducing more chemicals to the marine environment.		No
Subsea Dispersants		Not a feasible response to a surface diesel spill.		No
Containment and Recovery		Given the fast spreading nature of diesel causing the slick to break up and disperse, this response is not considered to be effective in reducing the net environmental impacts of an diesel spill. The ability to contain and recover spreading diesel on the ocean water surface is extremely limited due the very low viscosity of the fuel.		No
Shoreline Cleanup		No shoreline contact is predicted from a diesel spill.		No
Protection and Deflection		No shoreline contact is predicted from a diesel spill.		No
Oiled Wildlife		May decrease the chance of wildlife coming into contact with the diesel and or improve the chance of survival if they come in contact with the oil.	Undertaking this activity has the potential to result in more harm if poorly executed (i.e. drive marine animals into spill or split up the pods, schools, and flocks resulting in further stresses). Hazing involves the use of visual, auditory or sensory deterrents to keep healthy marine fauna away from the oil.	No

Response Strategy	MDO Spill		Response Strategy Carried Forward (Yes/No)
	Positive Impacts	Negative Impacts	
		This can lead to the separation of groups or adults/juveniles, collisions with marine fauna, inadvertent movement of animals into the oiled area, or scattering of oiled animals.	
Source Control (Securing Cargo/Trimming)	Source control activities such as cargo transfer and vessel trimming will reduce the volume of oil released to the marine environment. Consequently these response strategies will not create additional impacts on the marine environment over and above the spill itself.		Yes – see Section 6.4

6.3 Development of the operational NEBA

Figure 6-2 presents the process for undertaking the operational NEBA. An editable copy of the NEBA worksheet is available on the SSHE TeamSite:

http://ishareteam1.na.xom.com/sites/EMPC0263/EPP/Environment%20Plans/6_NEBA.xlsx

Steps are as follows:

- 1) Select the appropriate NEBA worksheets by oil type.
- 2) Refer to OSRA maps and cull the non-relevant Resource Types according to the predicted ZPI
- 3) Review the protection priority of the remaining resources (using EP).
- 4) Review and expand on each of the pros and cons within the NEBA worksheet according to the incident-specific detail.
- 5) Assess the effectiveness of the response strategies in protecting the resources at risk.
- 6) Confirm the planned response or adjust to actual conditions and summarise in the Incident Action Plan (IAP).

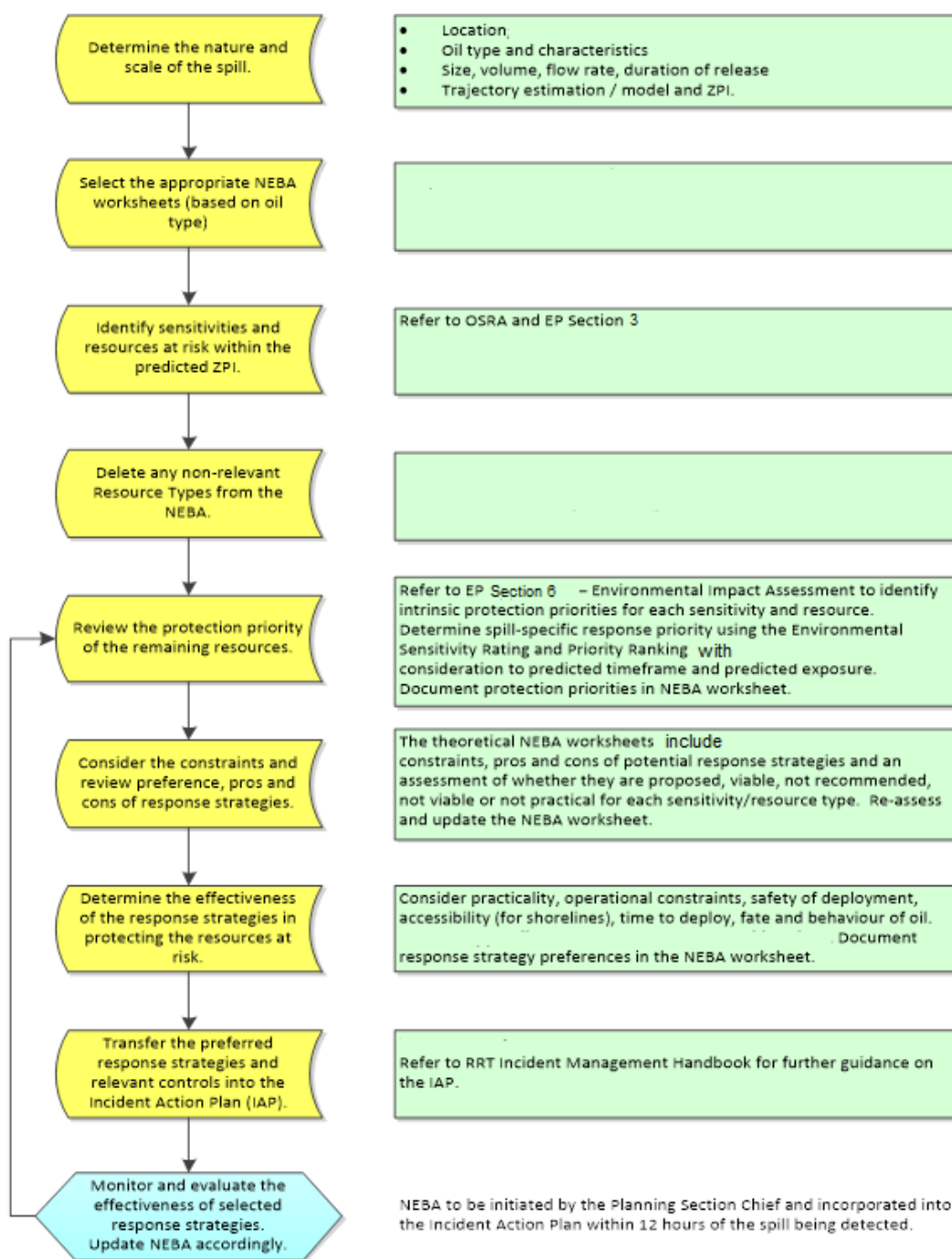


Figure 6-2: NEBA Process (from Esso, 2017a)

6.4 Source control

6.4.1 Shipboard Oil Pollution Emergency Plan (SOPEP)

As required under MARPOL 73/78 Annex I/ Marine Order 91 all ships greater than 400 gross tonnes must carry, a SOPEP as required by the International Maritime Organisation (IMO). The SOPEP recognises the divisions of responsibility as defined under National Plan to provide effective response to marine pollution incidents.

The SOPEP is the principal working document for the vessel crew in the event of a marine oil spill, and provides for the following specific management response provisions to mitigate and combat oil spills originating from vessels:

- The procedure to be followed by the Vessel Master to report an oil spill incident, the list of authorities to be contacted (i.e., AMSA Rescue Coordination Centre (RCC) and the oil spill details to be provided (i.e., forms).
- The SOPEP also includes specific emergency procedures including steps to control discharges for bunkering spills, hull damage, grounding and stranding, fire and explosions, collisions, tank failure, sinking and vapour release.

In the event of a fuel tank rupture, source control will be executed as outlined in the SOPEP.

7 Implement Response

The worst case credible spill scenario associated with the survey programme is loss of 144 m³ of marine diesel oil (MDO) from a ruptured fuel storage tank, resulting from vessel collision.

Monitor, Evaluate and Surveillance (MES) are therefore the only activities that will be undertaken (see Section 5). This section is therefore limited to the implementation of the natural recovery strategy and supporting functions of wildlife protection and rescue.

Note: The steps and responsibilities described in this section are presented to guide response teams. Depending on the nature and scale of the spill and the specific spill parameters, the IC may determine that some tasks be varied, should not be undertaken, or that responsibilities be reassigned.

7.1 Natural Recovery

Natural recovery is undertaken in combination with MES and simply means leaving the diesel to degrade naturally. Table 7-1 presents general criteria for the suitability of natural recovery option and Figure 7-1 provides the implementation guide. The ExxonMobil Oil Spill Response Field Manual should be referenced for further detail.

Table 7-1: Natural Recovery general applicability criteria

Criteria	Recommended	Not Recommended
Spill Level	Level 1 – 2	Level 2 – 3
Oil Type	Group I or II (Condensate and MDO)	Some Group II, Group III and IV
Slick thickness	Sheen or slick too thin for dispersants or containment and recovery.	Spills amenable to dispersants or contain and recover.
Location	Typically spills in remote, offshore areas or unlikely to contact identified values and sensitivities	If spill is close to identified values and sensitivities or MES indicates that impacts are likely to occur
Sea state	High sea state	Low sea state

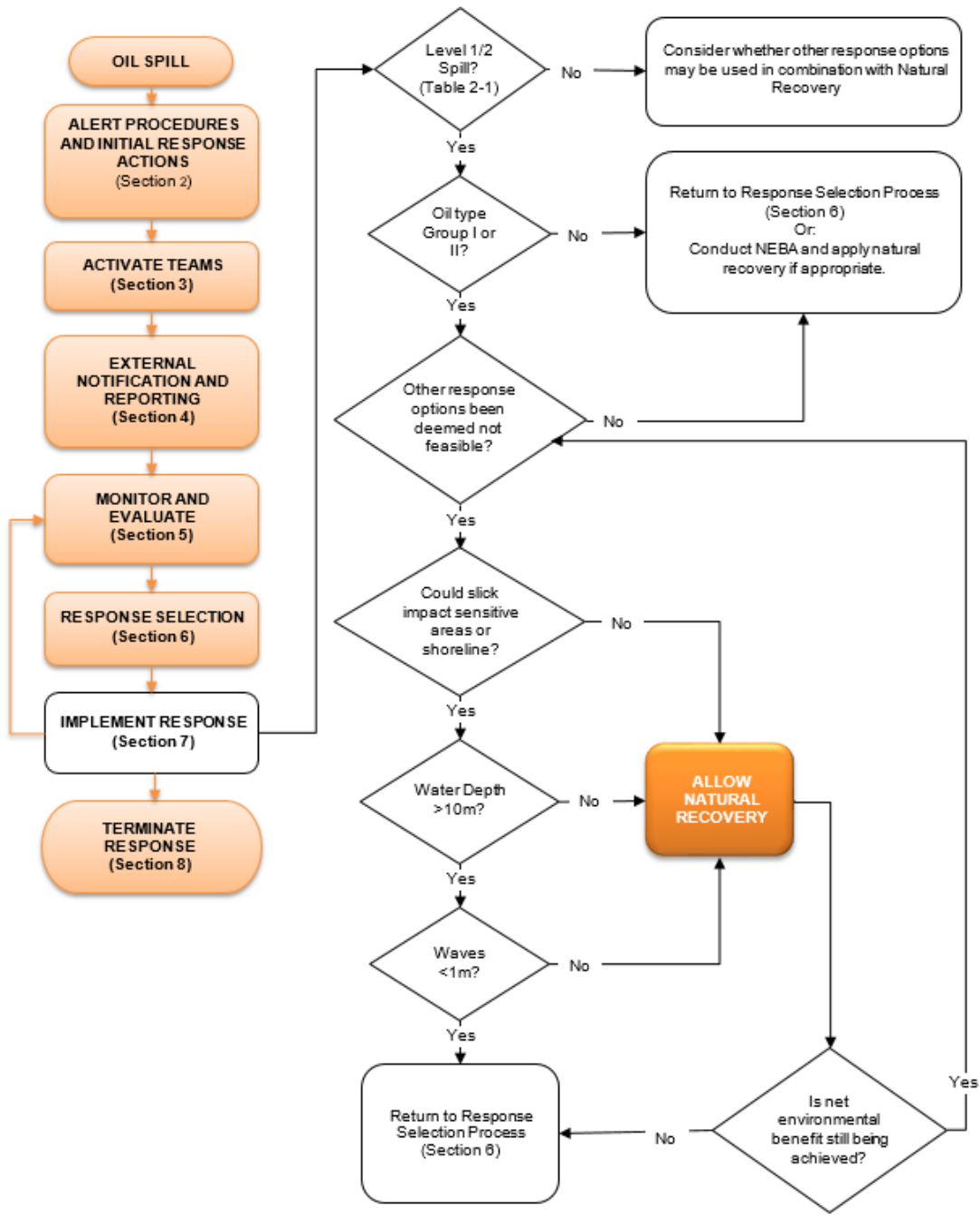


Figure 7-1: Natural recovery implementation guide

7.1.1 Wildlife Protection and Rescue

Oiled wildlife response activities include the assessment of wildlife risks in time and space, real-time monitoring of the whereabouts of wildlife in relation to the oil, protection of nesting/haul-out sites, hazing and deterrence (scaring animals away from oil), pre-emptive capture and collection of un-oiled animals and their offspring/eggs, collection and analysis of corpses, euthanasia, rehabilitation of live oiled animals, their release to the wild and, finally, monitoring of post release survival.

All wildlife in Victoria is protected under the *Wildlife Act 1975* (Vic). As such, no personnel are permitted to handle wildlife without the permission or under the direction of the Department of Environment, Land, Water and Planning (DELWP).

DELWP has responsibility for the collection, assessment, cleaning and rehabilitation of wildlife impacted by marine pollution. DELWP manages the rescue and rehabilitation of wildlife affected by a marine pollution emergency with assistance from Parks Victoria and the Phillip Island Nature Park. The Phillip Island Nature Park Wildlife Rehabilitation Centre can care for up to 1,500 little penguins in the event of an oil spill.

AMOSOC have oiled wildlife response (OWR) equipment available which could be used to supplement that owned by DELWP and Phillip Island Nature Park. In line with support for other oil spill response contingency systems, the National Plan also provides support to state wildlife response arrangements.

Access to international experts in oiled wildlife advice can be made available via activation of OSRL. OSRL have an agreement with Sea Alarm (based in Belgium; <https://www.sea-alarm.org/>) for access to expert oil wildlife advice. Sea Alarm can assist with identification of international resources, development of oiled wildlife response plans, and together with OSRL coordinate mobilization of oiled wildlife response equipment from OSRL bases.

Table 7-2: Oiled wildlife Implementation Guide

Who	What	
On Scene Commander	Notify EMT if oiled wildlife are observed or identified to be at imminent risk of exposure to oil.	
	Assist in establishing initial collection areas and holding areas as directed by EMT.	
	Assist lead agency in implementing OWR activities, as directed by EMT, which may include: <ul style="list-style-type: none"> • hazing and deterrence • fauna exclusion • pre-emptive capture • capture and rehabilitation • triage and euthanasia • carcass recovery and disposal. 	
Planning Section Chief (PSC)	Review MES data and identify if there is the potential for exposure of fauna.	
	Notify DEWLP if oiled wildlife are observed, captured, or if risk of exposure to oil is imminent.	
	Identify trained fauna handlers available to assist with hazing, deterrence, capture and collection, treatment and rehabilitation, if required.	
	Identify appropriate staging sites and holding areas.	
	Arrange for third-party support if the nature and scale of the spill requires additional resources.	
	Arrange for logistics for transportation of oiled wildlife (in consultation with lead agency) from staging area to treatment area or rehabilitation facility.	

7.1.1.1 Notifications if oiled wildlife is found

In the event of oiled wildlife being found, the Victorian DEDJTR should be immediately contacted (Refer ERM V0-070-003 for contact details). The DEDJTR will activate DELWP resources as required under the *Emergency Services Act 2005* (Vic) and the Emergency Management Manual Victoria.



7.1.1.2 Personnel safety

Capturing and caring for oiled wildlife can be a hazardous activity, and a rescue program will be successful only if people are not exposed to unreasonable risk. Wildlife can be dangerous, particularly if distressed, so no attempt should be made to capture the animal and only appropriately trained personnel should handle wildlife.

7.1.1.3 Key considerations

The most important considerations in any wildlife response are to:

- Ensure the safety of the workforce.
- Coordinate with DEDJTR and DELWP and experienced rehabilitation organizations.
- Avoid the spread of disease and pest species by appropriate quarantine arrangements and disposal of carcasses.
- Refer to ExxonMobil *OSR Field Manual* Section 13 guidelines for guidance.

8 Termination of Response and Demobilisation

The termination of a spill response includes ceasing response operations, demobilising equipment, post-incident reporting, reviewing and updating plans, rehabilitating damaged environments, and resupplying equipment.

Initiate demobilisation planning early on in a response to facilitate rapid demobilisation of resources that are no longer needed. Key considerations are safety and prioritisation of resources with lower utilisation, higher costs and greater decontamination needs.

In accordance with the National Plan (AMSA 2014), the decision to terminate response operations is made in conjunction with relevant government authorities that may include DEDJTR for State Waters, and AMSA and NOPSEMA for Commonwealth Waters. The response termination process may require days or weeks to complete, depending on the scope and scale of the response. Figure 8-1 summarises the process for terminating an oil spill response and the associated activities.

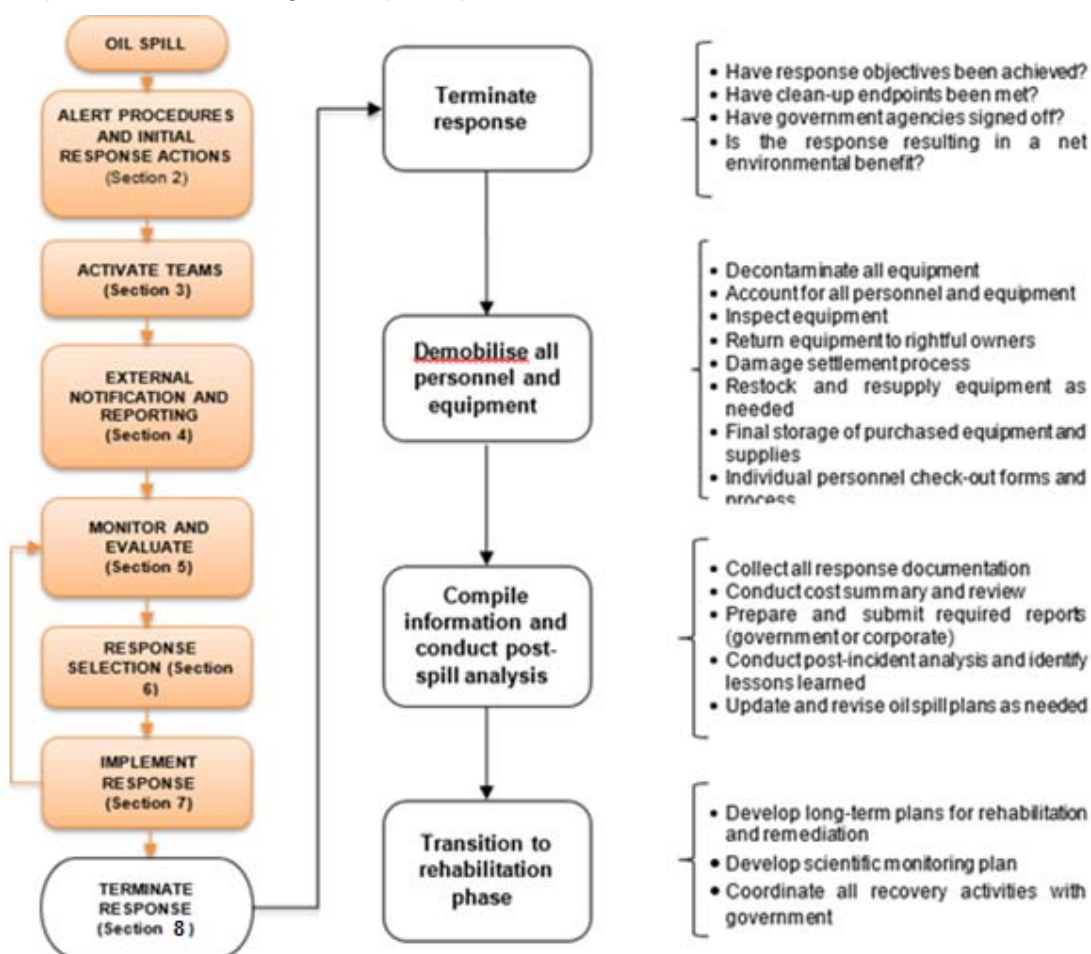


Figure 8-1: Oil spill response termination procedure

9 Operational and Scientific Monitoring

Table 9-1 summarises the operation and scientific monitoring modules detailed in the Esso Operational and Scientific Monitoring Program (Esso, 2017b).

Table 9-1: Summary of operational and scientific monitoring modules (from Esso, 2017)

ID	Title and description	Initiation Criteria	Termination criteria
O1	Oil spill Surveillance The study will monitor the distribution of hydrocarbons at sea, including the extent and possible exposure (by environmental receptors). The information generated will be used to inform response strategies, including updated modelling. The data will be collected through aerial and vessel surveillance.		
O1.1	Weather and Sea State monitoring	Following any spill to the marine environment.	The spill is or is likely to be below visible criteria for surface oil (0.5g/m ²), and low thresholds for entrained (10ppb) and dissolved (6ppb) oil concentrations.
O1.2	Trajectory modelling/forecasting (manual or OSTM)		
O1.3	Visual aerial or subsea observation		
O1.4	Remote observations using satellite buoys	Following a Level 2 or 3 spill to the marine environment.	
O1.5	Remote observations using satellite imagery	Following a Level 3 spill to the marine environment.	Surface oil is no longer detectable from airborne sensors (~0.5 g/m ²), and subsea oil return to baseline levels or within natural variation, or there is no observed difference at impact and control sites.
O2	Water and oil sampling In situ hydrocarbon and water sampling and analysis to determine the extent of surface, entrained and dissolved hydrocarbons. This will be used to inform the selection of response strategies and predict the potential impacts on the environment.		
O2.1	In-situ oil sampling and analysis	Following any spill to the marine environment, at the direction of the IMT, obtain sample using initial response spill sampling kits where practical.	Spill source has been identified and/or controlled; and, sampling is not required to inform response activities.
O2.2	Fluorometry	Following a Level 2 or 3 spill to the marine environment.	The spill is or is likely to be below visible criteria for surface oil (0.5g/m ²), and low thresholds for entrained (10ppb) and dissolved (6ppb) oil concentrations; and, If dispersant containing DOSS was applied to the spill, below ANZECC limits (<100µg/L DOSS), or suggested 99% water quality criteria for any other relevant distinct dispersant active ingredient.
O2.3	Water Samples		
O3	Shoreline Assessment The study will collect pre- and post-impact data for the shorelines, specifically the areas predicted to be impacted by the spill. The result will be a	If O1 indicates that spilled oil is likely to reach shore, or spilled oil has reached shore.	O1 indicates that no fresh spilled oil is likely to reach shore; and



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ID	Title and description	Initiation Criteria	Termination criteria
	contemporary baseline against which the success of response strategies can be evaluated.		There is no active response on shorelines; and, Shoreline oil loading is less than 100g/m2
O4	Fauna observation The study will collect data to determine the potential impacts associated with the hydrocarbon spill (and response strategies) experienced by marine megafauna. This will largely be done through aerial surveys.		
O4.1	Fauna observation at sea	Following any spill to the marine environment.	The spill is below visible criteria for surface oil (0.5g/m2), and low thresholds for entrained (10ppb) and dissolved (6ppb) oil concentrations.
O4.2	Fauna observation on shorelines	If O1 indicates that spilled oil is likely to reach shore, or spilled oil has reached shore; or O3 indicates oiled shorelines.	O1 indicates that no fresh spilled oil is likely to reach shore; and, Shoreline oil loading is less than 100g/m2
O5	Air Quality		
	Air monitoring (H2S, hydrocarbon vapours, oxygen, CO2, LEL, mercury and CO)	As determined by Safety Plan. Assessing the need for monitoring will be identified in the initial risk assessment in conjunction with forming an understanding of the nature and condition of the product that responders are expected to deal with.	As determined by Safety Plan.
S1	Ecotoxicology		
	Ecotoxicology (Chronic and sub-chronic effects of oil in water on marine organisms, including fauna and flora)	Discretionary, to be considered if any other Scientific Module is initiated.	Receipt of the final ecotoxicity laboratory report.
S2	Hydrocarbon monitoring of intertidal sediments and water		
	Baseline monitoring of water and sediments at control and impact intertidal sites Monitoring of water and sediments at control and impact intertidal sites	Any of the following: If O1 indicates that spilled oil is likely to reach or has reached shore If O1 indicates that spilled oil is present or likely to be present in the intertidal or shallow subtidal environment in water in oil concentrations higher than low thresholds for entrained (10ppb) and dissolved (6ppb) oil or in intertidal sediments higher than low thresholds of 100g/m2.	For sediments: Hydrocarbons and heavy metals concentrations in intertidal sediments return to baseline levels or within natural variation, or Hydrocarbons and heavy metals concentrations in intertidal sediments are below ANZECC (sediment) or NAGD trigger levels, or



ID	Title and description	Initiation Criteria	Termination criteria
		If O3 indicates that spilled oil has reached shorelines.	<p>There is no observed difference at impact and control sites, or</p> <p>The spill is below low thresholds for sediments of 100g/m2.</p> <p>For water:</p> <p>Intertidal water quality returns to baseline levels or within natural variation, or Termination Criteria*</p> <p>Intertidal water quality is below ANZECC (water) hydrocarbons and heavy metals levels, or</p> <p>There is no observed difference at impact and control sites, or</p> <p>The spill is below low thresholds for entrained (10ppb) and dissolved (6ppb) oil in water concentrations in intertidal water.</p>
S3 Hydrocarbon monitoring of offshore sediments:			
	<p>Baseline monitoring of sediments at control and impact offshore sites</p> <p>Monitoring of sediments at control and impact offshore sites</p>	If O2 indicates that hydrocarbons are present in the water column above entrained (10ppb) or dissolved (6ppb) or ANZECC 99% heavy metals trigger values within 1m of the seabed.	<p>Hydrocarbons and heavy metals concentrations in offshore sediments return to baseline levels or within natural variation, or there is no observed difference at impact and control sites,</p> <p>or</p> <p>Hydrocarbons and heavy metals concentrations in offshore sediments are below ANZECC (sediment) or NAGD trigger levels.</p>
S4 Fish and shellfish taint and toxicity for human consumption:			
	<p>Baseline monitoring of taint and PAH in fish and shellfish tissue at control and impact sites</p> <p>Monitoring of taint and PAH in fish and shellfish tissue at control and impact sites</p>	If S2 or O2 indicates that spilled oil is present in water in areas used for commercial shellfish fisheries or commercial fish fisheries at above levels that may cause taint in fish or other aquatic organisms (ANZECC Table 4.4.5), or,	<p>Two sequential sample sets show no fish or shellfish taint; and at least one of:</p> <p>Levels of PAH in fish and shellfish are not observed to be different at impact and control sites; or</p> <p>Levels of PAH in fish and shellfish tissue are at or below USFDA levels of concern or USEPA screening values.</p>



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ID	Title and description	Initiation Criteria	Termination criteria
		If S2 or S3 shows PAHs or metals are above ANZECC (sediment) low trigger values in areas used for commercial fish or shellfish fisheries.	
S5	Short-term impacts to oiled fauna and flora:		
	<p>Monitoring of location, species type, population number and health of fauna and oiled fauna at sea and on shorelines</p> <p>Monitoring of location, species type, extent and health of flora and oiled flora on shorelines, intertidal and subtidal sites</p>	<p>Any of the following:</p> <p>O2 or S2 indicates above moderate levels in offshore water (surface oil (10g/m²), entrained (100ppb) and dissolved (50ppb) oil);</p> <p>O2 or S2 shows hydrocarbons above entrained (10ppb) or dissolved (6ppb) or ANZECC 99% heavy metals trigger values in water</p> <p>S2 or S3 shows hydrocarbons or metals are above ANZECC (sediment) low trigger values,</p> <p>O4 indicates the presence of oiled fauna at sea or on shorelines</p>	<p>O4 shows no visually observed oiled fauna;</p> <p>and</p> <p>Spilled oil is likely at below moderate thresholds for surface oil (10g/m²), moderate thresholds for entrained (100ppb) and dissolved (50ppb) oil concentrations;</p> <p>and</p> <p>Spilled oil is below low thresholds on shorelines of 100g/m², or in sediments below acute ecotoxicity levels for flora and fauna living in or on sediment.</p>
S6	Long-term impacts to commercial and recreational fisheries:		
	<p>Analyse commercial fisheries catch data to determine species composition, catch size and effort, and catch-perunit-effort.</p> <p>Compare pre- and post-spill fisheries species abundance and species composition.</p>	<p>Any of the following:</p> <p>O2 or S2 shows hydrocarbons above entrained (10ppb) or dissolved (6ppb) or ANZECC 99% heavy metals trigger values in intertidal or sub-tidal water in areas used for commercial or shellfish fisheries,</p> <p>S2 shows hydrocarbons or metals in intertidal sediments above ANZECC (sediment) low trigger values,</p> <p>S3 shows hydrocarbons or metals in offshore sediments above ANZECC (sediment) low trigger values,</p> <p>S4 indicates that there has been taint in fish or shellfish</p>	<p>Return to baseline levels or within natural variation (based on desktop study) of both fish stocks and catch per unit effort,</p> <p>or</p> <p>There has been no change to fish stocks and catch per unit effort that is attributable to the spill as determined by the scientific team undertaking monitoring.</p>
S7	Long-term impacts to fauna:		
	<p>Monitoring of population number (i.e. breeding success) of indicator species fauna populations</p>	<p>Any of the following:</p>	<p>No observed difference in fauna population and viability at impact and control sites;</p>



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ID	Title and description	Initiation Criteria	Termination criteria
		<p>O2 or S2 shows hydrocarbons above entrained (10ppb) or dissolved (6ppb) or ANZECC 99% heavy metals trigger values in intertidal or sub-tidal water;</p> <p>S2 shows hydrocarbons or metals in intertidal sediments above ANZECC (sediment) low trigger values,</p> <p>S3 shows hydrocarbons or metals in offshore sediments above ANZECC (sediment) low trigger values,</p> <p>S5 indicates that there have been short-term impacts to fauna.</p>	<p>Or</p> <p>The scientific team undertaking monitoring determines, with appropriate justification that the fauna community structure has recovered its ecological functionality.</p>
S8	Long-term impacts to subtidal and intertidal benthic habitat		
	<p>Classify and map extent of subtidal and intertidal habitat</p> <p>Monitoring of seagrass, macroalgae, sponge biomass and cover</p> <p>Monitoring of subtidal and intertidal benthic infauna and fish species composition and abundance</p>	<p>Any of the following:</p> <p>O2 or S2 shows hydrocarbons above entrained (10ppb) or dissolved (6ppb) or ANZECC 99% heavy metals trigger values in intertidal or sub-tidal water,</p> <p>S2 shows hydrocarbons or metals in intertidal sediments above ANZECC (sediment) low trigger values,</p> <p>S3 shows hydrocarbons or metals in offshore sediments above ANZECC (sediment) low trigger values,</p> <p>S5 indicates that there have been short-term impacts to sub-tidal or intertidal flora.</p>	<p>No observed difference in species composition, biomass and percentage cover (seagrass, macroalgae and sponges) or species composition and abundance (benthic infauna and fish) at impact and control sites,</p> <p>or</p> <p>The scientific team undertaking monitoring determines, with appropriate justification that the community structure has recovered its ecological functionality,</p> <p>or</p> <p>There are no observable sub-lethal health/condition parameters (such as seagrass blackening) that are attributable to the spill as determined by the scientific team undertaking monitoring.</p>
S9	Long-term impacts to coastal flora:		
	<p>Monitoring of location, species type, extent and health of flora and oiled flora on shoreline sites</p>	<p>Any of the following:</p> <p>S2 shows hydrocarbons and heavy metals above entrained (10ppb) or dissolved (6ppb) in intertidal water,</p> <p>S2 shows hydrocarbons or metals in intertidal sediments above ANZECC (sediment) low trigger values,</p>	<p>No observed difference in species type, extent and health of flora at impact and control sites,</p> <p>or</p> <p>The scientific team undertaking monitoring determines, with appropriate justification that the community structure has recovered its ecological functionality,</p>



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ID	Title and description	Initiation Criteria	Termination criteria
		S5 indicates that there have been short-term impacts to coastal flora.	or There are no observable sub-lethal health/condition parameters (such as stunting) hat are attributable to the spill as determined by the scientific team undertaking monitoring.
S10	Long-term impacts to Ramsar Values:		
	Collation of monitoring results from S7, S8, and S9 to compare pre- and post- ecological character of the lakes system.	If S6, S7, S8 or S9 indicate that there have been impacts to flora or fauna, and the impacts occur in a RAMSAR site/s.	Return to baseline levels or within natural variation (based on desktop study); or The scientific team undertaking monitoring determines, with appropriate justification, that the community structure has recovered its ecological functionality, Or There are no observable sub-lethal health/condition parameters of the site that are attributable to the spill as determined by the scientific team undertaking monitoring.

* Initiation and termination criteria should be considered as a guide only, with actual initiation or termination of monitoring activities occurring with agreement from relevant agencies and community representatives, and they include considerations of responder or public safety and health, net environmental benefit (e.g. where the response or monitoring may cease if it is causing more environmental harm than good) or operational reasons (where clean-up has reached ALARP).



10 Health and Safety

It is ExxonMobil Corporation's policy to conduct its business in a manner that protects the safety of employees, others involved in its operations, customers, and the public. The Corporation will strive to prevent all accidents, injuries, and occupational illnesses through the active participation of every employee. The Corporation is committed to continuous efforts to identify and eliminate or manage safety risks associated with its activities.

The site safety plan and the guidelines in Section 2 Safety and Health of the EM OSR Field Manual must be followed during response operations. A Job Safety Analysis (JSA) must be conducted prior to any field deployment in accordance with Esso procedure EWMS 2.1.2.

Potential health and safety issues commonly associated with a spill and subsequent response are:

- Transport to spill sites
- Slips, trips and falls at oily sites
- Working near water or on uneven terrain
- Contact with oil and other chemicals
- Handling unfamiliar equipment
- Fatigue
- Inhalation of toxic components
- Bites from insects and other wildlife
- Equipment Handling and
- Thermal Stress (hot or cold)
- Noise from operating heavy machinery, generators and motors
- Interaction with heavy equipment.

11 References

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- The Response Group (2015). Incident Management Handbook. Process, Organization and Guidance for Incident Response Management. Regional Response Teams. January 2015.

Appendix A – Contact Details

From: Esso EMERGENCY RESPONSE MANUAL (ERM),

Callout & Contacts List: V0-020-001. ERM V2 – Offshore Manual

For emergency activation of CFA, POLICE or AMBULANCE - Call 000

ER TEAM	ER Hotline	PIN	LOCATION #
LONGFORD INCIDENT MANAGEMENT TEAM	[REDACTED]	[REDACTED]	1
OFFSHORE INCIDENT MANAGEMENT TEAM	[REDACTED]	[REDACTED]	2
LONG ISLAND POINT INCIDENT MANAGEMENT TEAM	[REDACTED]	[REDACTED]	3
BARRY BEACH MARINE TERMINAL INCIDENT MANAGEMENT	[REDACTED]	[REDACTED]	4
EMERGENCY SUPPORT GROUP (ESG) – MELBOURNE	[REDACTED]	[REDACTED]	1
EMERGENCY SUPPORT GROUP (ESG) – PERTH	[REDACTED]	[REDACTED]	2
PUBLIC & GOVT AFFAIRS (P&GA)	[REDACTED]	[REDACTED]	3
ESG – ALL GROUPS Melbourne, Perth & P&GA	[REDACTED]	[REDACTED]	4
OIL SPILL RESPONSE (OSR)	Activate site IMT using numbers listed above. OSR resources to be contacted individually.		
REGIONAL RESPONSE TEAM (RRT)	ESG Leader to contact RRT Leader to discuss activation of RRT. Phone: [REDACTED]		
TELEPHONE SUPPORT GROUP (TSG)	TSG is initiated by the Deputy PA Manager or TSG Liaison in response to request by ESG. Ref: ERM V1-060-002 for additional detail.		

To initiate a call out of an asset Incident Management Team or the Emergency Support Group using the Esso Australia ER Hotline:

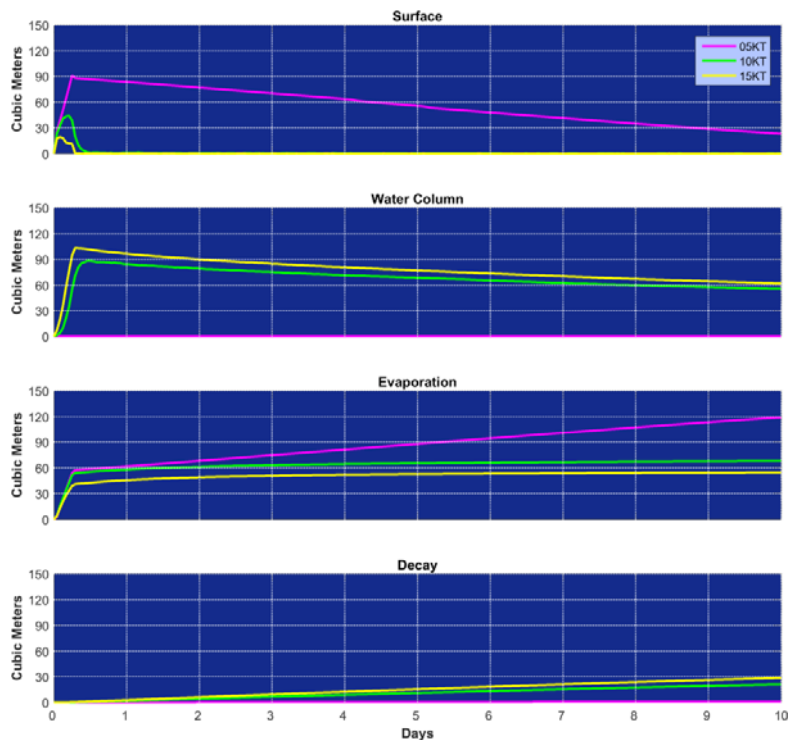
1. For asset IMT dial [REDACTED] For ESG dial [REDACTED]
2. Follow the voice prompts to select the location you are calling from or the group you wish to activate.
3. Enter the access PIN - [REDACTED]
4. Record a message including your name, location and details of the incident.

An SMS, voice message and e-mail will automatically be sent to IMT or ESG members.

Appendix B – Marine Diesel Oil (MDO)

MDO is a light, refined petroleum product with a relatively narrow boiling range. When spilled on water, most of the oil will evaporate or naturally disperse within a few days or less. It is a Group II oil according to the International Tankers Owners Pollution Federation (ITOPF, 2014) and USEPA/USCG classifications. Marine diesel oil is characterised by a large mixture (95%) of low and semi- to low-volatiles and contains 5% persistent hydrocarbons. It is important to note that some heavy components contained in marine diesel oil have a strong tendency to physically entrain into the upper water column in the presence of moderate winds (i.e. >12 knots) and breaking waves, but can re-float to the surface if these energies abate.

Property		MDO
Density (kg/m ³)		829 @ 25°C
API (°)		37.6
Dynamic Viscosity (cP)		4.0 @ 25°C
Pour Point (°C)		-14
Group		II
Persistence Classification		Light-persistent oil
Boiling Point	Volatiles <180°C	6.0%
	Semi-volatiles 180 – 265°C	34.6%
	Low volatiles 265 – 380°C	54.4%
	Residual	5.0%



Predicted weathering and fates volume balance for a hypothetical 144 m³ surface release of MDO over 6 hours (tracked for 10 days), under 5, 10 and 15 knot constant wind conditions.

Appendix C – Forms

This appendix contains NOPSEMA and AMSA notification forms:

- NOPSEMA - N-03000-FM0831 Report of an Accident, Dangerous Occurrence or Environmental Incident (<https://www.nopsema.gov.au/assets/Forms/N-03000-FM0831-Report-of-an-Accident-Dangerous-Occurrence-or-Environmental-Incident-Rev-8-Jan-2015-MS-Word-2010.docx>)
- Marine Pollution Situation Report (SITREP).
<https://www.transport.wa.gov.au/mediaFiles/marine/MAC-F-SituationReport.pdf>
- AMOSC / RPS APASA Spill Trajectory Modelling Request Form



FORM FM0831

N-03000-FM0831 Revision 8 January 2015

Report of an accident, dangerous occurrence or environmental incident

For instructions and general guidance in the use of this form, please see the last page.

Part 1 is required within 3 days of a notified incident.

Part 2 is required within 30 days of notified incident.

What was the date and time of the initial verbal incident notification to NOPSEMA?			
Date		Time	

NOTE: It is a requirement to request permission to interfere with the site of an accident or dangerous occurrence. Refer OPGGS(S)R, Reg. 2.49.

What is the date and time of this written incident report?			
Date		Time	

What type of incident is being reported?		Please tick appropriate incident type	
Accident or dangerous occurrence		<input type="checkbox"/>	Complete parts 1A, 1B & part 2
Environmental Incident		<input type="checkbox"/>	Complete parts 1A, 1C
BOTH (Accident or dangerous occurrence AND environmental incident)		<input type="checkbox"/>	Complete ALL parts (1A, 1B, 1C, 2)
<i>Please tick all applicable (one or more categories)</i>		<i>To use electronically: MS Word 2007-10 – click in check box</i>	
Categories <i>Please select one or more</i>	Accidents	Death or Serious injury Lost time injury ≥3 days	<input type="checkbox"/> <input type="checkbox"/>
	Dangerous occurrences	Hydrocarbon release >1 kg or ≥80 L (gas or liquid) Fire or explosion Collision marine vessel and facility Could have caused death, serious injury or LTI Damage to safety-critical equipment Unplanned event - implement ERP Pipeline incident Well kick >50 barrels Other _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	Environmental incidents	Hydrocarbon release Chemical release Drilling fluid/mud release Fauna Incident Other _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



**Part 1A – Information required within 3 days of an
accident, dangerous occurrence or environmental incident**

General information – all incidents

1.	Where did the incident occur?	Facility / field / title name		
		Site name and location <i>Latitude/longitude</i>		
2.	Who is the registered operator/titleholder or other person that controls the works site or activity?	Name		
		Business address		
		Business phone no.		
3.	When did the incident occur?	Time and time zone		
		Date		
4.	Did anyone witness the incident?	Yes or no <i>If yes, provide details below</i>		
	Witness details	Witness no 1	Witness no 2	Witness no 3
	Full name			
	Phone no. (Business hours)			
	Phone no. (Home) (Mobile)			
	Email (Business) (Private)			
	Postal address			
<i>NB: If more witnesses, copy and insert this section (4) here , and add extra witness numbers appropriately</i>				
5.	Details of person submitting this information	Name		
		Position		
		Email		
		Telephone no.		
6.	Brief description of incident			
7.	Work or activity being undertaken at time of incident			



Part 1A – Information required within 3 days of an accident, dangerous occurrence or environmental incident

General information – all incidents

8.	What are the internal investigation arrangements?				
9.	Was there any loss of containment of any fluid (liquid or gas)?	Yes or no <i>If Yes, provide details below</i>			
Type of fluid (liquid or gas) <i>If hydrocarbon release please complete item no.15 as well</i>		Please specify _____	Hydrocarbon	<input type="checkbox"/>	
		Please specify _____	Non-hydrocarbon	<input type="checkbox"/>	
Estimated quantity <i>Liquid (L), Gas (kg)</i>					
Estimation details		Calculation <input type="checkbox"/>		Measurement <input type="checkbox"/>	
Composition <i>Percentage and description</i>		Please specify _____			
Known toxicity to people and/or environment		Toxicity to people			
How was the leak/spill detected?		F&G detection <input type="checkbox"/>	CCTV <input type="checkbox"/>	Visual <input type="checkbox"/>	Other <input type="checkbox"/>
Did ignition occur?		No <input type="checkbox"/>	Yes <input type="checkbox"/>	Immediate <input type="checkbox"/>	Delayed <input type="checkbox"/>
	If yes, what was the likely ignition source	Hotwork <input type="checkbox"/>	Spark electrical source <input type="checkbox"/>	Spark metallic contact <input type="checkbox"/>	
			Hot surface <input type="checkbox"/>	Other <input type="checkbox"/>	
10.	Has the release been stopped and/or contained?	Yes or no			
Duration of the release <i>hh:mm:ss</i>					
Estimated rate of release <i>Litres or kg per hour</i>					
11.	Location of release	What or where is the location of the release?			
What equipment was involved in the release?					
Is this functional location listed as safety-critical equipment?					



Part 1A – Information required within 3 days of an accident, dangerous occurrence or environmental incident

General information – all incidents

12.	Weather conditions <i>Please complete as appropriate</i>	Ambient temperature °C													
		Relative humidity %													
		Wind speed m/s <i>NB: for enclosed areas use Air change per hour</i>													
		Wind direction e.g. from SW													
		Significant wave height m													
		Swell m													
		Current speed m/s													
		Current direction e.g. from SW													
13.	Hydrocarbon release details <i>If hydrocarbon fluid (liquid or gas) was released, please complete this section as well</i>	System of hydrocarbon release	<table border="0"> <tr> <td>Process</td> <td><input type="checkbox"/></td> <td>Utilities</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Drilling</td> <td><input type="checkbox"/></td> <td>Well related</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Subsea / Pipeline</td> <td><input type="checkbox"/></td> <td>Marine</td> <td><input type="checkbox"/></td> </tr> </table>	Process	<input type="checkbox"/>	Utilities	<input type="checkbox"/>	Drilling	<input type="checkbox"/>	Well related	<input type="checkbox"/>	Subsea / Pipeline	<input type="checkbox"/>	Marine	<input type="checkbox"/>
		Process	<input type="checkbox"/>	Utilities	<input type="checkbox"/>										
		Drilling	<input type="checkbox"/>	Well related	<input type="checkbox"/>										
		Subsea / Pipeline	<input type="checkbox"/>	Marine	<input type="checkbox"/>										
Estimated inventory in the isolatable system <i>Litres or kg</i>															
System pressure and size of piping or vessel <i>diameter (d in mm) length (l in m) or volume (V in L)</i>	<table border="0"> <tr> <td>Pressure MPa_g</td> <td></td> </tr> <tr> <td>Size Piping (d) and Piping (l) or Vessel (V)</td> <td></td> </tr> </table>	Pressure MPa _g		Size Piping (d) and Piping (l) or Vessel (V)											
Pressure MPa _g															
Size Piping (d) and Piping (l) or Vessel (V)															
Estimated equivalent hole diameter <i>d in mm</i>															

Part 1B - Complete for accidents or dangerous occurrences

Accidents and dangerous occurrences information

	Was NOPSEMA notified through the dedicated notification phone line? <i>Phone No. 08 6461 7090</i>	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	
15.	Action taken to make the work-site safe	Was permission given by a NOPSEMA inspector to interfere with the site? OPGGS(S)R 2.49.	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
		Action taken				
		Details of any disturbance of the work site				



Part 1B - Complete for accidents or dangerous occurrences

Accidents and dangerous occurrences information

16.	Was an emergency response initiated?	Yes <input type="checkbox"/>		No <input type="checkbox"/>	
	Type of response	Manual <input type="checkbox"/>	Automatic alarm <input type="checkbox"/>	Muster <input type="checkbox"/>	Evacuation <input type="checkbox"/>
	How effective was the emergency response?				
17.	Was anyone killed or injured? <i>Provide details below</i>	Yes <input type="checkbox"/>		No <input type="checkbox"/>	
	Injured persons (IP)	Casualty No 1			
	<i>if different from item 2.</i>				
	Employer name	Employer address			
	Employer phone no.	Employer email			
	IP full name				
	IP date of birth	Sex	M <input type="checkbox"/>	F <input type="checkbox"/>	
	IP residential address				
	IP phone no. (Work)	IP phone no. (Home) (Mobile)			
	IP occupation/job title	Contractor or core crew			
	Details of injury				
	<i>Based on TOOCS (refer last page)</i>	a. Intracranial injury <input type="checkbox"/>	d. Burn <input type="checkbox"/>		
Nature of injury	b. Fractures <input type="checkbox"/>	e. Nerve or spinal cord injury <input type="checkbox"/>			
	c. Wounds, lacerations, amputations, internal organ damage <input type="checkbox"/>	f. Joint, ligament, muscle or tendon injury <input type="checkbox"/>			
Part of body	g. Other _____ <input type="checkbox"/>				
	G1. Head or face <input type="checkbox"/>	G5. Hip or leg <input type="checkbox"/>			
	G2. Neck <input type="checkbox"/>	G6. Multiple locations <input type="checkbox"/>			
	G3. Trunk <input type="checkbox"/>	G7. Internal systems <input type="checkbox"/>			
Mechanism of injury	G4. Shoulder or arm <input type="checkbox"/>	G8. Other _____ <input type="checkbox"/>			
	G0. Falls, stepping, kneeling, sitting on object <input type="checkbox"/>	G3. Exposure to sound or pressure <input type="checkbox"/>			
	G1. Hitting object <input type="checkbox"/>	G4. Muscular stress <input type="checkbox"/>			
	G2. Being hit or trapped <input type="checkbox"/>	G5. Heat, cold or radiation <input type="checkbox"/>			
Agency of injury	G6/7 Chemical, biological substance <input type="checkbox"/>				
	G8. Other _____ <input type="checkbox"/>				
	1. Machinery or fixed plant <input type="checkbox"/>	5/6. Chemicals, materials, substances <input type="checkbox"/>			
	2. Mobile plant or transport <input type="checkbox"/>	7. Environmental agencies <input type="checkbox"/>			
3. Powered equipment <input type="checkbox"/>	8. Human or animal agencies <input type="checkbox"/>				
4. Non-power equipment <input type="checkbox"/>	9. Other _____ <input type="checkbox"/>				



Part 1B - Complete for accidents or dangerous occurrences

Accidents and dangerous occurrences information

Details of job being undertaken			
Day and hour of shift		Day e.g. 5 th day of 7 (5 / 7)	Hour e.g. 3 rd hour of 12 (3 / 12)
<i>NB: If more casualties, please copy/paste this section (19) for each additional casualty and insert here</i>			
18.	Was there any serious damage? Provide details below	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	Details	Item 1	Item 2
	Equipment damaged		
	Extent of damage		
19.	Will the equipment be shut down? <i>Yes or No</i>		
	If Yes, for how long?		
<i>NB: If more equipment seriously damaged, please copy/paste this section as required</i>			
20.	Will the facility be shut down? <i>Yes or no If yes provide details below</i>		
	Facility shutdown	Date	dd/mm/yyyy
		Time	24 hour clock
Duration		days / hours / minutes	
21.	Immediate action taken/intended, if any, to prevent recurrence of incident.	Action	Responsible party
22.	What were the immediate causes of the incident?		

Attachments

Are you attaching any documents?		Yes or no <i>If yes provide details below</i>	
No.	ID	Revision	Date
		Title/description	



Part 1C – Complete for environmental incidents

Environmental Impacts

		Open ocean <input type="checkbox"/> Shoreline <input type="checkbox"/> Population Centre <input type="checkbox"/> Stakeholders <input type="checkbox"/> Other sensitivity <input type="checkbox"/> <small>e.g. conservation area, nesting beach</small>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Macroalgae <input type="checkbox"/> Coral Reef <input type="checkbox"/> Benthic Invertebrates <input type="checkbox"/> Seagrass <input type="checkbox"/> Mangrove <input type="checkbox"/>
Details		Environment 1	Environment 2	Environment 3
	Estimated location of 'at-risk' environments			
	Estimated impact date & time			
	Action required to minimise exposure			
	Specify each matter protected under Part 3 of the EPBC Act at risk			
<small>NB: If more environments at risk of damage, please copy/paste this section (Item E2) and add extra data</small>				
26.	Was an oil pollution emergency plan activated?	Yes or no		
		If yes, what action has been implemented /planned?		
		If yes, how effective is/was the spill response?		
27.	Was an environmental monitoring program initiated?	Yes or no		
		If yes, what actions have been implemented and/or planned?		
28.	Did the incident result in the death or injury of any fauna?	Yes or no (If yes provide details of species in the table below)		
	Injured fauna	Species 1	Species 2	Species 3
	Species name (common or scientific name)			
	Number of individuals killed or injured	Killed: Injured:	Killed: Injured:	Killed: Injured:
<small>NB: If more species were injured or killed, please copy/paste this section (Item E4) and add extra data</small>				
29.	Actions taken to avoid or mitigate any adverse environmental impacts of the incident.	Action	Responsible party	Completion date <small>Actual or intended</small>
<small>NB: If more actions, please add extra rows as required</small>				



Part 1C – Complete for environmental incidents

Environmental Impacts

30.	Corrective actions taken, or proposed, to stop, control or remedy the incident.	Action	Responsible party	Completion date <i>Actual or intended</i>

NB: If more actions, please add extra rows as required

31.	Actions taken, or proposed, to prevent a similar incident occurring in the future.	Action	Responsible party	Completion date <i>Actual or intended</i>

NB: If more actions, please add extra rows as required

Attachments

Are you attaching any documents?			Yes or no <i>If yes provide details below</i>	
No.	ID	Revision	Date	Title/Description

Insert or delete rows as required



Part 2 – Information required within 30 days of accident or dangerous occurrence

NOPSEMA acknowledges that in many circumstances an operator may not have completed an investigation within 30 days of an accident or first detection of a dangerous occurrence and agrees that these items must be provided within 30 days unless otherwise agreed, in writing with NOPSEMA. In circumstances where an investigation has been completed within 30 days, and these items are available (supplemented, as required by any attachments) this part should also be completed at that time.

32.	Has the investigation been completed?	Yes or no		
	Root cause analysis <i>What were the root causes?</i>	Root cause 1		
		Root cause 2		
		Root cause 3		
	Other root causes			
	Full report <i>Describe investigation in detail, including who conducted the investigation and in accordance with what standard/procedure with reference to attachments listed in the 'attachments table' (following) as applicable</i>			
33.	Actions to prevent recurrence of same or similar incident	Action	Responsible party	Completion date <i>Actual or intended</i>

NB: Add or delete rows as appropriate

Attachments (Insert/delete rows as required)

Are you attaching any documents?		Yes or no		
		<i>If yes provide details below</i>		
No.	ID	Revision	Date	Title/description



Instructions and general guidance for use:

1. The use of this form is voluntary and is provided to assist operators and titleholders to comply with their obligations to give notice and provide reports of incidents to NOPSEMA under the applicable legislation.
2. Accidents, dangerous occurrences or environmental incidents can all be reported using this same form.
3. The applicable legislation for incident reporting is:
 - a. Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009 [OPGG(S)R]; and
 - b. Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 [OPGG(E)R], for facilities located in Commonwealth waters; or
 - c. for facilities located in designated coastal waters, the relevant State or Territory Act and associated Regulations where there is a current conferral of powers to NOPSEMA.
4. In the context of this form an incident is a reportable incident as defined under:
 - a. OPGGSA, Schedule 3, Clause 82.
 - b. OPGG(E)R, regulation 4.
5. This form should be used in conjunction with NOPSEMA Guidance Notes available on the NOPSEMA website:
 - a. N-03000-GN0099 Notification and Reporting of Accidents and Dangerous Occurrences
 - b. N-03000-GN0926 Notification and Reporting of Environmental Incidents
6. Part 1 requires completion for all incidents; then ALSO complete part 2 if the incident is an accident or dangerous occurrence.
7. NOPSEMA considers that a full report will contain copies of documentary material referenced and/or relied on in the course of completing this form, which may include (but not be limited to) as appropriate: witness statements, management system documents, drawings, diagrams and photographs, third party reports (audit, inspection, material analysis etc.), internal records and correspondence.
8. This form is intended to be completed electronically using Microsoft Word by completing the unshaded cells which will expand as required to accept the information required and the check boxes where relevant (NB: check boxes may appear shaded and have reduced functionality in MS Word versions prior to 2010).
9. The completed version of this form (and any attachments, where applicable) should be emailed to: submissions@nopsema.gov.au or submitted via secure file transfer at: <https://securefile.nopsema.gov.au/filedrop/submissions> as soon as practicable, but in any case within three days of the incident.

References

NOPSEMA website: www.nopsema.gov.au

TOOCS – Type of Occurrence Classification System.

The *Type of Occurrence Classifications System, Version 3.0* (TOOCS3.0) was developed to improve the quality and consistency of data. This system aligns with the International Classification of Diseases –Australian Modification (ICD10-AM).

[http://www.safeworkaustralia.gov.au/sites/SWA/AboutSafeWorkAustralia/WhatWeDo/Publications/Documents/207/TypeOfOccurrenceClassificationSystem\(TOOC\)3rdEditionRevision1.pdf](http://www.safeworkaustralia.gov.au/sites/SWA/AboutSafeWorkAustralia/WhatWeDo/Publications/Documents/207/TypeOfOccurrenceClassificationSystem(TOOC)3rdEditionRevision1.pdf)

OPGG(S)R. Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009. Select Legislative Instrument 2009 No. 382 as amended and made under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*. Commonwealth of Australia.

OPGG(E)R. Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009. Statutory Rules 1999 No. 228 as amended and made under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*. Commonwealth of Australia.



Privacy Notice

NOPSEMA collects your personal information for the purpose of investigating accidents, dangerous occurrences and environmental incidents under the Offshore Petroleum and Greenhouse Gas Storage Act 2006.

NOPSEMA will not use or disclose your personal information for any other purpose without your consent, unless it is required or authorised by law, or relates to NOPSEMA's enforcement activities. Your personal information may be disclosed to the following organisations, entities or individuals:

- individuals who make a request under the *Freedom of Information Act 1982*
- the Australian National Audit Office and other privately-appointed auditors
- other law enforcement bodies (for example, the police or the Coroner)
- NOPSEMA's legal advisors.

NOPSEMA may occasionally be required to disclose information to overseas recipients in order to discharge its functions or exercise its powers, or to perform its necessary business activities.

Information about how you can access, or seek correction to, your personal information is contained in NOPSEMA's APP Privacy Policy at www.nopsema.gov.au/privacy. If you have an enquiry or a complaint about your privacy, please contact NOPSEMA's Privacy Contact Officer on (08) 6188 8700 or by email at: privacy@nopsema.gov.au.



Marine Pollution Report (POLREP)

NOTE: Incidents to be reported are outlined on page 3

Send completed form to: **AMSA Marine Environment Pollution**
Fax: (02) 6230 6868 Email: rccaus@amsa.gov.au

Date of incident

C.C.

Time of incident

Location name / Description

Incident coordinates	Format of coordinates used (select one)	Latitude of spill	Longitude of spill
	Degrees & decimal degrees	° ' "	° ' "
	Degrees, minutes & decimal minutes	° ' "	° ' "
	Degrees, minutes & seconds	° ' "	° ' "

Description of incident

POLLUTION SOURCE

Vessel Land Other Unknown

Vessel Details: Type (if known): Tanker Container Bulk Cargo Fishing Defence Recreational
 Other vessel type (specify):

Vessel name <input type="text"/>	Flag state / callsign <input type="text"/>	Australian vessel? <input type="checkbox"/> Yes <input type="checkbox"/> No
----------------------------------	--	--

POLLUTANT

Oil → Bilge Diesel bunker HFO Bunker Crude Unknown
 Other

Chemical →

Name <input type="text"/>	MARPOL Cat. / UN Nos <input type="text"/>
---------------------------	---

Garbage → Packaged → Sewage → Other →

EXTENT

Size of spill (length & width in metres)

Amount of pollutant, if known (litres)



ADDITIONAL INFORMATION

Has the discharge stopped? Yes No Unknown

Response action undertaken? Yes No If yes, provide details below, please include any environmental impact

Weather conditions at site

<input type="checkbox"/> Photos taken	▶ Details	Held by
<input type="checkbox"/> Video taken	▶ Details	Held by
<input type="checkbox"/> Samples taken	▶ Description	Held by
<input type="checkbox"/> Items retrieved	▶ Description	Held by

Original report source

Name	Position	Phone
------	----------	-------

Combat agency

Statutory agency

Equipment used

AMSA State / NT

Possible further action

Legal AMSA assistance Other

SENDER DETAILS

Name	Agency	Date
Phone	Fax	Email

PRIVACY STATEMENT

The Australian Maritime Safety Authority (AMSA) is collecting the information on this form to enable it to carry out its role as managing agency of the National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances.
AMSA may give some or all of this information to other government bodies, non-government organisations who have responsibilities under the National Plan, and law enforcement agencies.



SUMMARY OF INCIDENTS TO BE REPORTED

All slicks, including deck washings, that can be seen trailing a vessel should be reported. The type of substance contained in the slick may not be able to be determined until further investigation has been undertaken by enforcement agencies.

REPORTABLE	NON-REPORTABLE
<p>Oil - All slicks trailing from a vessel. All spills in the marine environment (notwithstanding the size or amount of oil or sheen). All spills where National Plan equipment is used in a response.</p> <p><i>Note: If oil or sheen is "visible" then it is an illegal discharge MARPOL permitted oily discharges are at 15 parts of oil to one million parts of water (15ppm). Oil discharges at sea cannot be visually observed until at least 50ppm and even that may not be readily discernable depending upon the observation platform, sea state, weather conditions etc.</i></p>	<ul style="list-style-type: none"> • Coral spawning. • Algal bloom. • Oil spills specifically known to be from land sources (eg drains, road tanker accidents) and where there is no response using National Plan equipment or resources used. • Exploration/production associated discharges where there is no response and National Plan equipment or resources used. (these are reportable to the relevant authority eg: Mines Department or Department of Science Industry and Resources).
<p>Chemicals – All sightings of slicks/dicolourations trailing vessels. All odorous discharges from a vessel.</p>	
<p>Harmful Packaged Substances - All packages associated with a vessel.</p>	
<p>Sewage – All slicks seen trailing from a vessel.</p>	
<p>Garbage – All sightings of garbage being disposed from a vessel. Any type of garbage found that can be specifically tied to a specific vessel such as garbage with printing showing a vessel name (eg Quarantine bonded plastic bags with identifier tag).</p>	<ul style="list-style-type: none"> • Dumping at sea that requires a permit (EPA or EA) • Dumped dredge spoil. • Floating logs.



Purpose: describe the oil spill trajectory modelling services and activation for response.

Introduction

AMOSC has a contract with RPS APASA to provide Oil Spill Trajectory Modelling in the event of an actual, or threatened oil spill. Key components of the service include:

- surface oil spills
- subsea releases of oil e.g. sunken vessel, pipeline failure or well blow-out
- predicted effectiveness of potential response measures e.g. dispersant application
- Potential releases from vessels undergoing salvage or towing
- Backtrack modelling and determination of sources
- Assessing best sites for “places of refuge” during maritime casualties
- Ship-to-ship transfers at sea
- Emergency incidents at sea requiring cargo discharges to sea

And outputs are able to be incorporated into most GIS programs. The timeframes for this service from RPS APASA to AMOSC are:

- OILMAP model standard operation at any time night or day (offshore and open ocean incidents – oil type is known) within 2 hours
- OILMAP and SIMAP operation (for near-shore/in-port incidents where construction of site specific HYDROMAP tidal current database is required) within 4 hours.

RPS APASA is also able to provide a technical officer to work within a members intelligence/situation unit in the IMT and provide these models directly. These resource can be deployed by AMOSC after 12 hours.

Preparedness

1. Members should identify through their contingency planning process, that OSTM is a service that they are likely to require, and that this service will be purchased from AMOSC.

Response

2. If modelling is required, contact the AMOSC duty officer on 0438 379 328. The duty officer will require from the member the pro-forma (refer to separate e-PDF form) to be completed and returned as soon as possible.
3. AMOSC will request the model from RPS APASA.
4. Once the model is prepared, this will be passed onto the requesting member.
 - a. This process may be repeated for ‘simple’ runs requiring few models.
 - b. For ongoing larger spills, a requesting member may prefer RPS APASA provide a technical officer directly to their IMT. AMOSC’s contract has scope for this to occur with mobilisation after 12 hours.



OIL SPILL TRAJECTORY MODELLING UPDATE FORM	Email completed form to RPS APASA response staff response@apasa.com.au After sending this request, phone Duty Officer on telephone number provided.
Incident Name	Date & time of this update
Name of reporting person	Contact telephone number & email

Update any changes to the following information (including retrospective changes)

Spill Start Date		Spill start time (use 24 hour clock, state time zone – GMT or Local)	
Day	Month	Year	
Oil name and type – provide a copy of any assay data			
Spill location		Latitude of spill (N)	Longitude of spill (E)
Degrees, minutes & seconds		° ' "	° ' "
Easting & Northing (Zone)		S/N	E/W
Volume estimate		(select one) <input type="checkbox"/> Tonnes	<input type="checkbox"/> Cubic Metres <input type="checkbox"/> Litres <input type="checkbox"/> Barrels
Duration of release (hours)		Has spill now ceased? If so, when did it cease?	
Surface or subsurface Spill? Surface <input type="checkbox"/> Subsurface <input type="checkbox"/>		If subsurface spill, describe the source (eg. well-head blowout, pipeline leak, pipeline rupture etc.)	
		Hole Diameter (m) Oil rate (bbl/day) Gas Rate (scf/day)	
		Gas to Oil ratio (scf/bbl) Oil Discharge Temperature (°C)	
Depth of release (m)		If subsurface spill, describe appearance of any show at the surface (white plumes, slicks, sheens etc.)	
Environmental Conditions Observed at Spill Site (include time frame):			
- Wind speed (kts) and direction (from):			
- Surface current speed (m/s) and direction (to):			
- Wave height (m) and direction (from):			
- Water temperature (°C):			

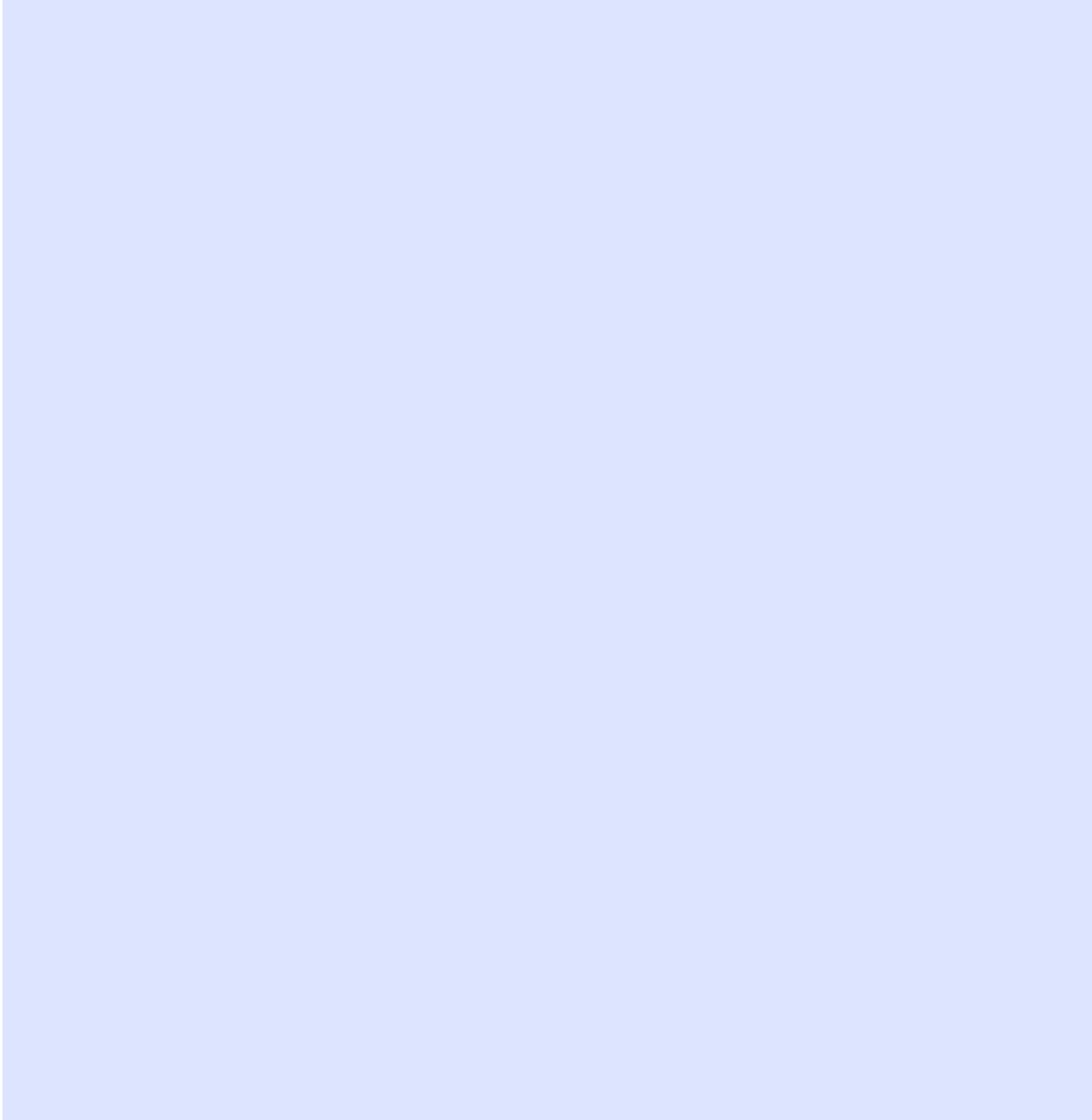
Additional Notes:



Provide a scaled distribution map for the slicks from field surveillance. Add dimensions using the scale bar below. Include position references.

You may alternatively attach a separate document containing a map of distribution of oil, or a georeferenced image or shapefile.

Mark map by relative thickness of surface oil, and use Bonn Agreement for estimating thickness based on visual appearance of oil: Sheen (0.04 μm - 0.3 μm); Rainbow (0.3 μm - 5.0 μm); Metallic (5.0 μm - 50 μm); Discontinuous True Colours (50 μm - 200 μm); and True Colours (>200 μm).



Scale to apply to the map



Appendix C – Stakeholder Consultation

This Appendix is split into 2 parts:

- C1 Survey-specific Stakeholder Consultation Summary Report and Consultation Records
- C2 General Correspondence Summary Report



Gippsland Basin Geophysical and
Geotechnical Investigations
Environment Plan Revision 2

ExxonMobil.

Appendix C1 – Survey-specific Stakeholder Consultation Summary Report and Consultation Records

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1165	15-Dec-17	Meeting at Esso House with [REDACTED] here oil spill modelling and OPEPs for Baldfish and GG campaign	<input checked="" type="checkbox"/>	ISSUE: Copy of OPEPs to be provided to AMOSC to review.	18-Dec-17
1291	18-Dec-17	[REDACTED] (EAPL) email [REDACTED] Further to our discussion last week, can you please have someone in AMOSC conduct a high level review of the OPEP for the Baldfish Drilling and Bass Strait G&G program, in particular for any items related to support from AMOSC.	<input checked="" type="checkbox"/>	Merit: Yes and OPEP subsequently provided No objections, claims or issues raised	21-Dec-17
1642	07-Jun-18	<p>Email sent from [REDACTED] to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2010	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2099	06-Aug-18	<p>Email received from [REDACTED] (AMOSC): I am currently on leave and will be irregularly checking my emails during his time.</p> <p>If your inquiry is time critical / spill response related please call AMOSC's 24/7 duty number on 0438 379 328, or email [REDACTED]</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2142	20-Nov-18	<p>Community Session invitation sent from [REDACTED] Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2187	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1285	08-Jan-18	Email received from [REDACTED] (AMSA) wanting to confirm whether Esso intends to conduct further consultation for the VIC/L1 development and Cobia pipeline project as this will determine whether AMSA provide a formal response at this time.	<input checked="" type="checkbox"/>	ISSUE: [REDACTED] wanting to confirm whether Esso intends to conduct further consultation for the VIC/L1 development and Cobia pipeline project. MERIT: [REDACTED] sent email response: Esso will be conducting further consultation on both the VIC/L1 and Cobia pipeline projects. Both these are located within the Bass Strait Area to Be Avoided, so we don't envisage any significant impact to commercial shipping. Consultation directly with fishing industry groups will be undertaken to manage any interaction with their activities.	11-Jan-18
1482	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	CLAIM: Commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	
1577	20-Feb-18	Email received from [REDACTED] (AMSA) to [REDACTED] (EAPL): Thank you for providing information on MV Offshore Guardian's activities over the next couple of weeks in VIC/L1 and VIC/L9 offshore Gippsland, Victoria. In the future, please have the vessel notify AMSA's Joint Rescue Coordination Centre (JRCC) through rccaus@amsa.gov.au (Phone: 1800 641 792 or +61 2 6230 6811) for promulgation of radio-navigation warnings 24-48 hours before operations commence. AMSA's JRCC will require the vessel details (including name, callsign and Maritime Mobile Service Identity (MMSI)), satellite communications details (including INMARSAT-C and satellite telephone), area of operation, requested clearance from other vessels and need to be advised when operations start and end. The Australian Hydrographic Office must be contacted through datacentre@hydro.gov.au no less than four working weeks before operations commence for the promulgation of related notices to mariners.	<input type="checkbox"/>	ISSUE: In the future, please have the vessel notify AMSA's Joint Rescue Coordination Centre (JRCC) through rccaus@amsa.gov.au (Phone: 1800 641 792 or +61 2 6230 6811) for promulgation of radio-navigation warnings 24-48 hours before operations commence. MERIT: Esso already complies with this requirement.	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1643	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	<p>Email from [REDACTED] (EAPL) to AMSA: Hello, This is to advise you that the above work was completed this morning at 0445 hours and that the vessel is now en route back to Eden.</p>	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1736	12-Jun-18	<p>Email received from [REDACTED] (AMSA): [REDACTED], Thank you for providing AMSA with information on the commencement date for activities in permit blocks VIC/L1 and VIC/L9 offshore Gippsland, Victoria. Please find attached a vessel traffic plot showing the Area to be Avoided and vessel traffic in relation to both permit blocks. Note that oil and gas support vessels and local craft will be encountered in both permit blocks throughout the activities.</p> <p>As per AMSA's email on 20 February 2018, please have the vessel notify AMSA's Joint Rescue Coordination Centre (JRCC) through rccaus@amsa.gov.au <mailto:rccaus@amsa.gov.au> (Phone: 1800 641 792 or +61 2 6230 6811) for promulgation of radio-navigation warnings 24-48 hours before operations commence. AMSA's JRCC will require the vessel details (including name, callsign and Maritime Mobile Service Identity (MMSI)), satellite communications details (including INMARSAT-C and satellite telephone), area of operation, requested clearance from other vessels and need to be advised when operations start and end.</p> <p>The Australian Hydrographic Office must be contacted through datacentre@hydro.gov.au <mailto:datacentre@hydro.gov.au> no less than four working weeks before operations commence for the promulgation of related notices to mariners.</p> <p>Please let me know if you have any queries.</p> <p>Kind regards</p> <p>Meredith (Mel) Clark</p>	<input type="checkbox"/>	No objections, claims or issues raised	
1855	16-Jun-18	<p>Email from AMSA to [REDACTED] (EAPL): FM JRCC Australia TO [REDACTED]</p> <p>SUBJ: BHAGWAN DRYDEN Survey Area</p> <p>Please advise the position or area for the to be issued in the Broadcast.</p> <p>We can issue a broadcast for a:</p> <p>a. point (lat-long), b. line (start lat-long and end lat-long), or c. area (lat-long of the North East Corner and lat-long of the South West Corner)</p> <p>Please advise.</p>	<input checked="" type="checkbox"/>	<p>ISSUE: Request from AMSA to advise the position or area for the to be issued in the Broadcast.</p> <p>MERIT: Email sent from [REDACTED] advising line between required points (see attachment).</p>	16-Jun-18
1856	16-Jun-18	<p>Email from [REDACTED] (EAPL) to AMSA: Hello, Please issue as a line between the following points (se attachment).</p>	<input type="checkbox"/>	<p>Email from [REDACTED] (EAPL) to AMSA: Hello, This is to advise you that the above work was completed this morning at 0445 hours and that the vessel is now en route back to Eden.</p>	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1829	19-Jun-18	<p>Email from [REDACTED] (EAPL) to AMSA: Good Morning, The purpose of this email is to inform you that Esso Australia intends to commence an Offshore Geotechnical Survey at the location indicated below in Bass Strait. The Vessel is the Bhagwan Dryden. It is currently completing mobilization activities in Eden.</p> <p>The Australian Hydrographic Office has been informed as per the email below. That Notice to Mariners has been extended until the 7th July but will remain place until the works are completed.</p> <p>The geotechnical works are expected to start late on Wednesday 20th or more likely on Thursday 21st.</p> <p>The vessel will be performing geotechnical sampling on the seabed.</p> <p>The survey is expected to be completed before the 30th June.</p> <p>I will advise you once the works have been completed</p> <p>The vessel can be reached via VSAT on the following numbers and email address. As the works are relatively close to shore the mobile number will also work.</p> <p>Please advise should you have any queries re this Notification.</p> <p>Appreciate it if you can confirm receipt of this email.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
1857	23-Jun-18	<p>Email from [REDACTED] (EAPL) to AMSA: Hello, This is to advise you that the above work was completed this morning at 0445 hours and that the vessel is now en route back to Eden.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2011	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder, Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2188	06-Dec-18	Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.	<input type="checkbox"/>	No objections, claims or issues raised	
2955	06-May-19	Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.	<input type="checkbox"/>	No objections, claims or issues raised	
3044	08-May-19	Email from [REDACTED] (EAPL) to AMSA: Please be advised that ESSO are planning to conduct some offshore work in Bass Strait within the Barracouta platform's petroleum safety zone in early June. The work involves some inspection and preparation of the Barracouta pipeline to enable a future connection. The work will be conducted by the Bhagwan (MV) Dryden (call sign VHCO) with a subsea ROV and will take approximately 10 days. The vessel will at times have limited maneuverability but we anticipate no impact on other marine users as the work is within the existing petroleum safety zone which is also within the designated ATBA that prohibits large vessels. We will also provide information to the Joint Rescue Coordination Centre in due course. If you need any additional information please let me know.	<input type="checkbox"/>	RESPONSE 09/05/19: Email from [REDACTED] (AMSA) to [REDACTED] (EAPL): Thank you for providing AMSA with information on vessel works at the Barracouta platform. Please have the Bhagwan (MV) Dryden (call sign VHCO) notify AMSA's Joint Rescue Coordination Centre (JRCC) through rccaus@amsa.gov.au (Phone: 1800 641 792 or +61 2 6230 6811) for promulgation of radio-navigation warnings 24-48 hours before operations commence. AMSA's JRCC will require the vessel details (including name, callsign and Maritime Mobile Service Identity (MMSI)), satellite communications details (including INMARSAT-C and satellite telephone), area of operation, requested clearance from other vessels and need to be advised when operations start and end. The Australian Hydrographic Office must be contacted through datacentre@hydro.gov.au no less than four working weeks before operations commence for the promulgation of related notices to mariners. Also FYI, AMSA has its AMSA's spatial data gateway and Spatial@AMSA portal to download digital data sets and maps to obtain a vessel traffic plot showing vessel Automatic Identification System (AIS) data for your area of interest. If required, a form is also available for requesting customised information and data is also available via the Spatial@AMSA portal.	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3004	14-May-19	<p>Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input checked="" type="checkbox"/>	RESPONSE 17/05/19 from [REDACTED] (AMSA): Many thanks for the update and we look forward to receiving your revision to the Geophysical and Geotechnical survey EP for areas within and just outside the Gippsland ATBA.	20-May-19
3041	20-May-19	<p>[REDACTED] (EAPL) called [REDACTED] (AMSA) to discuss her request to receive the revision to the Geophysical and Geotechnical survey EP. Mel advised [REDACTED] that she doesn't want to receive the EP, just to continue receiving our general Stakeholder updates.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED]

Position: Scientist

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1166	15-Nov-17	APASA completed oil spill modelling for Baldfish and G&G EEPs	<input type="checkbox"/>	No objections, claims or issues raised	
1483	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1644	07-Jun-18	Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,	<input type="checkbox"/>	No objections, claims or issues raised	

As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:

Commencement date: 17 June 2018
 Name of vessel: MV Dryden
 Call sign: VHCO

The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.

Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.

We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.

Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]

Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.

Contact Name: [REDACTED]

Position: Scientist

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2012	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2189	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1160	26-Oct-17	<p>[REDACTED] (EAPL) had phone call with [REDACTED] [REDACTED] regarding: [REDACTED] enquired if we had spoken with SEFTIA. I responded that we have provided written information by Email, that we will follow up with telephone conversations shortly, as well as face to face discussions and have invited them to Lakes Entrance Meeting.</p> <p>[REDACTED] re-stated previous, that data are confidential, that only info on an area with less than 5 boats can be released, and that this determines minimum area they can release info on.</p> <p>I confirmed that we have studied ABARE data, that these are very useful, but that they do not provide adequate resolution on fishing activity in Block VIC/P70</p> <p>[REDACTED] stated that she will request info on 1 degree square as minimum (60 x 60 NM).</p> <p>I confirmed that we are happy to receive what every resolution they are comfortable releasing</p> <p>AFMA will independently advise regulators also on fishing activity in Block VICP70, as a matter of routine.</p> <p>[REDACTED] will get quote to us ASAP.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
1484	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1645	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2013	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2143	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2190	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2956	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3002	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1486	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1646	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2014	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2144	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2191	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1487	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1647	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2015	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2145	20-Nov-18	<p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p> <p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2192	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1488	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1648	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2016	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2146	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2193	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1489	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1649	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2017	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2194	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1490	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1650	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2018	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2094	06-Aug-18	<p>Email received from EGSC: Thank you for taking the time to contact East Gippsland Shire Council.</p> <p>This automated interim response confirms that your enquiry has been received by us and that we will be getting back to you as quickly as possible within the guidelines contained in our response policy <http://www.eastgippsland.vic.gov.au/files/assets/public/documents/corporate_directorate/policies/customer_response_policy.pdf> . Spam and junk mail will not be responded to.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2281	05-Dec-18	<p>Offshore Community Session: summary of [REDACTED] (EAPL) talking points & stakeholder consultation as noted by [REDACTED] (EAPL):</p> <p>[REDACTED] spoke to the whole group about Esso's current and planned activities in Bass Strait in the next 12 months. Topics for discussion included the G&G survey work completed in 2018, the location and timing of survey work to be completed in 2019, and the scope of the BTW project. Other topics included:</p> <p>MILESTONES:</p> <ul style="list-style-type: none"> - Over the last 24 months, our Gippsland operations have been able to meet unprecedented east coast gas demand by increasing our production well above our historical levels. - But as the major fields in Bass Strait reach the end of their natural lives, we need to find new sources of gas. - In August, we commenced our first deep-water exploration drilling program in over 20 years, by drilling two new wells, Baldfish and Hairtail at a block known as VIC/P70, south east of our existing fields. - While the \$120m drilling campaign was completed safely and without incident by the drill rig Ocean Monarch in November, unfortunately, we didn't encounter commercial quantities of hydrocarbons. - Prior to drilling we also completed our Environment Plan, which included stakeholder consultation. We're keen to listen to your opinions on how that went and how we can keep improving our operations. - Despite not finding commercial gas at our first attempt in over 20 years, we are actively pursuing new gas development opportunities in Bass Strait so that we can meet the demand for gas. - We are going to keep trying to find new sources of gas. To do this, we have had our best engineering and science minds working on options for new gas developments to bring online much needed new gas supplies from Bass Strait fields. - We've already spent money reprocessing our historic seismic data across the Bass Strait and will consider purchasing new seismic data, should it be acquired. This will help our geoscience team better identify opportunities for new gas supplies that will keep Victorians warm in winter and cooking with gas. <p>PLANNED OFFSHORE ACTIVITIES</p> <ul style="list-style-type: none"> - Following the completion of our exploration drilling at Baldfish and Hairtail, Esso is planning to utilise the Ocean Monarch rig to undertake well abandonment work for the Blackback field and look to undertake possible further exploration drilling in VIC/P70 sometime in 2019. - We are also planning to develop a gas field in the VIC/L1 block, known as West Barracouta, approximately 6km south west of the existing Barracouta platform. - The proposed West Barracouta development will involve the drilling of two subsea wells which will be tied back to our existing Barracouta infrastructure in Bass Strait. - A subsea flowline approximately 6km in length will be connected via a subsea 	<input type="checkbox"/>	No objections, claims or issues raised	Closed Out

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
		<p>hot tap into the existing gas export pipeline and a controls umbilical approximately 6.5 km in length to the Barracouta platform will also be installed.</p> <ul style="list-style-type: none"> - As the project develops, additional consultation with stakeholders will be conducted. - We're also planning on undertaking repair and maintenance works on our Cobia pipeline, which will start soon on 20 December 2018. The pipeline is 5.5 kilometres long and runs between our Cobia and Halibut platforms. - The dive support vessel, the Seven Eagle, will be supported by the Bhagwan Dryden and the repair between Cobia and Halibut is expected to take 10-14 days. - The Seven Eagle collected the 5.5km flexible pipeline in Denmark in late October and has just left Singapore after taking on supplies and Australian crew. - Whilst the majority of the work will take place within the Cobia and Halibut petroleum safety zones a notice to mariners will be issued. - We're also updating the current environment plans for our offshore plans, which we conduct 5-yearly, and will consult with relevant stakeholders on ongoing and new risks. We've heard your feedback around multiple consultations and I'm pleased to say we've been able to work with the regulator to consolidate our 9 Environment Plans into 1 for our existing operations. - As you can see we have a busy schedule of work ahead of us and are pleased to continue investing in our operations, bringing new domestic gas supplies to market and creating jobs. <p>2019 also marks a milestone year for our Bass Strait operations, with the 50th year of production from our Gippsland Basin Joint Venture with BHP.</p> <ul style="list-style-type: none"> - It's amazing to think that back in 1969 when hydrocarbons were first produced, that we'd still be here today 50 years later, powering the local economy. <p>Stakeholders in attendance:</p> <p>[REDACTED] LEFCOL – Discussed Esso projects including Cobia PRP and timing of the activity this year. No environmental concerns or issues raised relating to EAPL projects or operations. Industry has been busy with a lot of consultation and they are concerned about the extent of the proposed CGG seismic campaign. Enquired as to whether there had been any change in fishing activities and areas in Bass Strait – only change has been the development of an octopus fishery. One boat is doing this and LEFCOL are processing the catch. Octopus fishing involves the use of traps laid on the sea floor that are then retrieved.</p> <p>Water Police – offshore recreational fishing has grown significantly in recent years with the development of the sword fish fishery. This is a long way offshore (beyond phone range) and has attracted up to 20 vessels at times. No environmental concerns or issues raised with EAPL operations or projects.</p> <p>Lakes Entrance Senior citizens Centre and Lakes Entrance Neighborhood House representatives – provided a brief overview of our operations and projects and the various regulatory requirements (environment plan, safety case, licences) – no environmental concerns or issues raised with EAPL operations or projects.</p>			

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		Attendees of the COXINS training course – quick discussion on long term opportunities for employment within the oil and gas business in Bass Strait no environmental issues raised.			
		[REDACTED] (Federal MPs office) – quick discussion about projects in the next 12+ months and the level of activity associated with maintaining gas production and supply to Victoria – no environmental concerns			
		DEDJTR - [REDACTED] (Regional Manager Gippsland) was also in attendance			
2195	06-Dec-18	Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1492	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1651	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2019	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2147	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2196	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2957	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3016	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1493	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1652	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2020	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2197	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2958	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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1494	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1653	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2021	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2148	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2283	05-Dec-18	<p>Offshore Community Session: summary of [REDACTED] (EAPL) talking points & stakeholder consultation as noted by [REDACTED] (EAPL):</p> <p>[REDACTED] spoke to the whole group about Esso's current and planned activities in Bass Strait in the next 12 months. Topics for discussion included the G&G survey work completed in 2018, the location and timing of survey work to be completed in 2019, and the scope of the BTW project. Other topics included:</p> <p>MILESTONES:</p> <ul style="list-style-type: none"> - Over the last 24 months, our Gippsland operations have been able to meet unprecedented east coast gas demand by increasing our production well above our historical levels. - But as the major fields in Bass Strait reach the end of their natural lives, we need to find new sources of gas. - In August, we commenced our first deep-water exploration drilling program in over 20 years, by drilling two new wells, Baldfish and Hairtail at a block known as VIC/P70, south east of our existing fields. - While the \$120m drilling campaign was completed safely and without incident by the drill rig Ocean Monarch in November, unfortunately, we didn't encounter commercial quantities of hydrocarbons. - Prior to drilling we also completed our Environment Plan, which included stakeholder consultation. We're keen to listen to your opinions on how that went and how we can keep improving our operations. - Despite not finding commercial gas at our first attempt in over 20 years, we are actively pursuing new gas development opportunities in Bass Strait so that we can meet the demand for gas. - We are going to keep trying to find new sources of gas. To do this, we have had our best engineering and science minds working on options for new gas developments to bring online much needed new gas supplies from Bass Strait fields. - We've already spent money reprocessing our historic seismic data across the Bass Strait and will consider purchasing new seismic data, should it be acquired. This will help our geoscience team better identify opportunities for new gas supplies that will keep Victorians warm in winter and cooking with gas. <p>PLANNED OFFSHORE ACTIVITIES</p> <ul style="list-style-type: none"> - Following the completion of our exploration drilling at Baldfish and Hairtail, Esso is planning to utilise the Ocean Monarch rig to undertake well abandonment work for the Blackback field and look to undertake possible further exploration drilling in VIC/P70 sometime in 2019. - We are also planning to develop a gas field in the VIC/L1 block, known as West Barracouta, approximately 6km south west of the existing Barracouta platform. - The proposed West Barracouta development will involve the drilling of two subsea wells which will be tied back to our existing Barracouta infrastructure in Bass Strait. - A subsea flowline approximately 6km in length will be connected via a subsea 	<input type="checkbox"/>	No objections, claims or issues raised	Closed Out

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
		<p>hot tap into the existing gas export pipeline and a controls umbilical approximately 6.5 km in length to the Barracouta platform will also be installed.</p> <ul style="list-style-type: none"> - As the project develops, additional consultation with stakeholders will be conducted. - We're also planning on undertaking repair and maintenance works on our Cobia pipeline, which will start soon on 20 December 2018. The pipeline is 5.5 kilometres long and runs between our Cobia and Halibut platforms. - The dive support vessel, the Seven Eagle, will be supported by the Bhagwan Dryden and the repair between Cobia and Halibut is expected to take 10-14 days. - The Seven Eagle collected the 5.5km flexible pipeline in Denmark in late October and has just left Singapore after taking on supplies and Australian crew. - Whilst the majority of the work will take place within the Cobia and Halibut petroleum safety zones a notice to mariners will be issued. - We're also updating the current environment plans for our offshore plans, which we conduct 5-yearly, and will consult with relevant stakeholders on ongoing and new risks. We've heard your feedback around multiple consultations and I'm pleased to say we've been able to work with the regulator to consolidate our 9 Environment Plans into 1 for our existing operations. - As you can see we have a busy schedule of work ahead of us and are pleased to continue investing in our operations, bringing new domestic gas supplies to market and creating jobs. <p>2019 also marks a milestone year for our Bass Strait operations, with the 50th year of production from our Gippsland Basin Joint Venture with BHP.</p> <ul style="list-style-type: none"> - It's amazing to think that back in 1969 when hydrocarbons were first produced, that we'd still be here today 50 years later, powering the local economy. <p>Stakeholders in attendance:</p> <p>[REDACTED] LEFCOL – Discussed Esso projects including Cobia PRP and timing of the activity this year. No environmental concerns or issues raised relating to EAPL projects or operations. Industry has been busy with a lot of consultation and they are concerned about the extent of the proposed CGG seismic campaign. Enquired as to whether there had been any change in fishing activities and areas in Bass Strait – only change has been the development of an octopus fishery. One boat is doing this and LEFCOL are processing the catch. Octopus fishing involves the use of traps laid on the sea floor that are then retrieved.</p> <p>Water Police – offshore recreational fishing has grown significantly in recent years with the development of the sword fish fishery. This is a long way offshore (beyond phone range) and has attracted up to 20 vessels at times. No environmental concerns or issues raised with EAPL operations or projects.</p> <p>Lakes Entrance Senior citizens Centre and Lakes Entrance Neighborhood House representatives – provided a brief overview of our operations and projects and the various regulatory requirements (environment plan, safety case, licences) – no environmental concerns or issues raised with EAPL operations or projects.</p>			

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		Attendees of the COXINS training course – quick discussion on long term opportunities for employment within the oil and gas business in Bass Strait no environmental issues raised.			
		[REDACTED] (Federal MPs office) – quick discussion about projects in the next 12+ months and the level of activity associated with maintaining gas production and supply to Victoria – no environmental concerns			
		DEDJTR - [REDACTED] (Regional Manager Gippsland) was also in attendance			
2198	06-Dec-18	Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.	<input type="checkbox"/>	No objections, claims or issues raised	
3018	14-May-19	Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.	<input type="checkbox"/>	No objections, claims or issues raised	

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169	01-Nov-17	[REDACTED] (EAPL) spoke with [REDACTED] re the various Esso projects that are planned for the next 12 months – Baldfish Exploration drilling, Cobia pipeline repair and the West Barracouta development. [REDACTED] had received the flyer and the invite. [REDACTED] deferred the impact / interaction with fishers to [REDACTED] (SETFIA) and would welcome a joint meeting with [REDACTED] - mentioned that the 17th November would be good after the larger stakeholder meeting planned.	<input type="checkbox"/>	No objections, claims or issues raised	
314	17-Nov-17	[REDACTED] attended the Lakes Entrance community session. The various projects were discussed with [REDACTED] and what impact there could be on the local fishermen. Cobia PRP will have virtually no impact, campaign is only a couple of weeks toward the end of the year and after the FIS survey. West Barracouta project is only at an early stage and the current campaign is only examining suitable locations for a rig and providing data for future project steps – further consultation will be undertaken as the project progresses. Baldfish drilling campaign may be the closest to the FIS locations, estimated about 20 min away but we are after the actual FIS coordinates to calculate the exact separation distances. The Baldfish drilling campaign is unlikely to have any impact on the FIS locations the level of noise and discharges is unlikely to be significant and may be hard to differentiate from the passing marine traffic. Explained [REDACTED] had been asked for details of the FIS locations and [REDACTED] said he would discuss with [REDACTED] next time when they met. [REDACTED] and [REDACTED] see each other regularly. No major concerns raised.	<input checked="" type="checkbox"/>	ISSUE: Potential issue with proximity of Baldfish to FIS survey location. Merits and issue to be further reviewed. No objections, claims or issues raised for West Barracouta or Cobia. MERIT: Yes and the issue has been reviewed further. The FIS locations are a sufficient distance from Baldfish and this was discussed with LEFCOL & SEFIA in meeting 15/2/18. The well sites are 11 nm from the FIS locations and are also separated by the shipping lane. The additional noise levels from drilling are not expected to have any significant impact on fish densities. Esso and SETFIA will continue to liaise to determine if supply vessel routing should be adjusted during the actual FIS timing.	15-Feb-18
1163	14-Dec-17	[REDACTED] (EAPL) sent email to [REDACTED] looking to confirm the location of the nearest FIS locations to next years drilling campaign, as discussed at the Lakes Entrance meeting in November.	<input type="checkbox"/>	No objections, claims or issues raised	
1462	23-Jan-18	Email sent to [REDACTED] and SETFIA from [REDACTED]: Here is our review of the distance to the nearest FIS Locations from the Baldfish drilling and Cobia pipeline repair projects. The Cobia repair (between Halibut, HLA and Cobia CBA) is very unlikely to take place earlier than Dec this year so there will be no impact. (SEE ATTACHMENT) The Baldfish drilling campaign is still scheduled for early Q3. The Baldfish well is between 12 and 16 NM from the FIS location and Hairtail is between 11 and 15 NM. Both the wells are the other side of a shipping lane, so any noise impacts are likely to be low in comparison to the impact from passing vessels. Many thanks for the information on the SMS service, we will be looking to use it to advise fishermen of our activities and to minimise any impact. In the mean time I will keep you updated on the campaign and will look to arrange a meeting with you and [REDACTED] in the next couple of months.	<input type="checkbox"/>	No objections, claims or issues raised	

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1475	09-Feb-18	<p>Email sent from [REDACTED] (EAPL) to LEFCOL & SETFIA: Hi [REDACTED], I'm in Lakes Entrance next Thursday 15th Feb, would be happy to pop in and give you an update on our planned activities on either the Thursday afternoon or Friday morning. Let me know if this is of interest.</p> <p>Response from [REDACTED] (SETFIA): Thursday works for me</p> <p>Email from [REDACTED] (EAPL) to [REDACTED] (SETFIA) and (LEFCOL): What time Thursday afternoon suits you - would 4pm at the LEFCOL offices work? If there is anything specific you want to know about please let me know or I can give you a general update and we can discuss things as they come up.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
1495	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	

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1654	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2022	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2149	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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2279	05-Dec-18	<p>Offshore Community Session: summary of [REDACTED] (EAPL) talking points & stakeholder consultation as noted by [REDACTED] (EAPL):</p> <p>[REDACTED] spoke to the whole group about Esso's current and planned activities in Bass Strait in the next 12 months. Topics for discussion included the G&G survey work completed in 2018, the location and timing of survey work to be completed in 2019, and the scope of the BTW project. Other topics included:</p> <p>MILESTONES:</p> <ul style="list-style-type: none"> - Over the last 24 months, our Gippsland operations have been able to meet unprecedented east coast gas demand by increasing our production well above our historical levels. - But as the major fields in Bass Strait reach the end of their natural lives, we need to find new sources of gas. - In August, we commenced our first deep-water exploration drilling program in over 20 years, by drilling two new wells, Baldfish and Hairtail at a block known as VIC/P70, south east of our existing fields. - While the \$120m drilling campaign was completed safely and without incident by the drill rig Ocean Monarch in November, unfortunately, we didn't encounter commercial quantities of hydrocarbons. - Prior to drilling we also completed our Environment Plan, which included stakeholder consultation. We're keen to listen to your opinions on how that went and how we can keep improving our operations. - Despite not finding commercial gas at our first attempt in over 20 years, we are actively pursuing new gas development opportunities in Bass Strait so that we can meet the demand for gas. - We are going to keep trying to find new sources of gas. To do this, we have had our best engineering and science minds working on options for new gas developments to bring online much needed new gas supplies from Bass Strait fields. - We've already spent money reprocessing our historic seismic data across the Bass Strait and will consider purchasing new seismic data, should it be acquired. This will help our geoscience team better identify opportunities for new gas supplies that will keep Victorians warm in winter and cooking with gas. <p>PLANNED OFFSHORE ACTIVITIES</p> <ul style="list-style-type: none"> - Following the completion of our exploration drilling at Baldfish and Hairtail, Esso is planning to utilise the Ocean Monarch rig to undertake well abandonment work for the Blackback field and look to undertake possible further exploration drilling in VIC/P70 sometime in 2019. - We are also planning to develop a gas field in the VIC/L1 block, known as West Barracouta, approximately 6km south west of the existing Barracouta platform. - The proposed West Barracouta development will involve the drilling of two subsea wells which will be tied back to our existing Barracouta infrastructure in Bass Strait. - A subsea flowline approximately 6km in length will be connected via a subsea 	<input type="checkbox"/>	No objections, claims or issues raised	

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		<p>hot tap into the existing gas export pipeline and a controls umbilical approximately 6.5 km in length to the Barracouta platform will also be installed.</p> <ul style="list-style-type: none"> - As the project develops, additional consultation with stakeholders will be conducted. - We're also planning on undertaking repair and maintenance works on our Cobia pipeline, which will start soon on 20 December 2018. The pipeline is 5.5 kilometres long and runs between our Cobia and Halibut platforms. - The dive support vessel, the Seven Eagle, will be supported by the Bhagwan Dryden and the repair between Cobia and Halibut is expected to take 10-14 days. - The Seven Eagle collected the 5.5km flexible pipeline in Denmark in late October and has just left Singapore after taking on supplies and Australian crew. - Whilst the majority of the work will take place within the Cobia and Halibut petroleum safety zones a notice to mariners will be issued. - We're also updating the current environment plans for our offshore plans, which we conduct 5-yearly, and will consult with relevant stakeholders on ongoing and new risks. We've heard your feedback around multiple consultations and I'm pleased to say we've been able to work with the regulator to consolidate our 9 Environment Plans into 1 for our existing operations. - As you can see we have a busy schedule of work ahead of us and are pleased to continue investing in our operations, bringing new domestic gas supplies to market and creating jobs. <p>2019 also marks a milestone year for our Bass Strait operations, with the 50th year of production from our Gippsland Basin Joint Venture with BHP.</p> <ul style="list-style-type: none"> - It's amazing to think that back in 1969 when hydrocarbons were first produced, that we'd still be here today 50 years later, powering the local economy. <p>Stakeholders in attendance:</p> <p>[REDACTED] LEFCOL – Discussed Esso projects including Cobia PRP and timing of the activity this year. No environmental concerns or issues raised relating to EAPL projects or operations. Industry has been busy with a lot of consultation and they are concerned about the extent of the proposed CGG seismic campaign. Enquired as to whether there had been any change in fishing activities and areas in Bass Strait – only change has been the development of an octopus fishery. One boat is doing this and LEFCOL are processing the catch. Octopus fishing involves the use of traps laid on the sea floor that are then retrieved.</p> <p>Water Police – offshore recreational fishing has grown significantly in recent years with the development of the sword fish fishery. This is a long way offshore (beyond phone range) and has attracted up to 20 vessels at times. No environmental concerns or issues raised with EAPL operations or projects.</p> <p>Lakes Entrance Senior citizens Centre and Lakes Entrance Neighborhood House representatives – provided a brief overview of our operations and projects and the various regulatory requirements (environment plan, safety case, licences) – no environmental concerns or issues raised with EAPL operations or projects.</p>			

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2199	06-Dec-18	<p>Attendees of the COXINS training course – quick discussion on long term opportunities for employment within the oil and gas business in Bass Strait no environmental issues raised.</p> <p>[REDACTED] (Federal MPs office) – quick discussion about projects in the next 12+ months and the level of activity associated with maintaining gas production and supply to Victoria – no environmental concerns</p> <p>DEDJTR - [REDACTED] (Regional Manager Gippsland) was also in attendance</p> <p>Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2936	18-Feb-19	<p>Meeting minutes from the Esso Fishemens Claims Tribunal:</p> <p>5 yearly EP update: Esso iscurrently conducting a 5 yearly review of our existing Environment Plans for platforms operating in Bass Strait. The revised plans will be submitted to the regulator (NOPSEMA) in September 2019.</p> <p>In developing the Environment Plans, Esso will conduct an environmental risk assessment to evaluate environmental risks associated with our ongoing operations, and will incorporate prevention and mitigation measures that reduce these risks to As Low as Reasonably Practicable (ALARP) and acceptable levels. Esso undertakes regular and continuing consultation with our stakeholders regarding impacts and risks to the environment from our operations and the control measures in place to prevent or mitigate these impacts and risks. Your feedback is sought and welcomed regarding any of our activities in Bass Strait.</p> <p>Blackback Update: Esso is undertaking a project to secure the Blackback wells using the Ocean Monarch MODU. The program started in February 2019 and will last approximately 90 days. (Well coordinates: Latitude 38° 32' south, Longitude 148° 33' east).</p> <p>BTW / Kipper Update: A geotechnical survey will be completed at a number of locations in Bass Strait including the BTW proposed well locations, Seahorse, Tarwhine and Kipper subsea facilities. The vessel to be used and timing are still being negotiated, but will be communicated to our stakeholders as soon as possible. Earliest start date will be April and latest start date will be July this year. The geotechnical campaign will take approximately 10 days.</p> <p>An ROV vessel will be contracted to complete inspection activities on the BTA450 approximately 400m from BTA (ie within the PSZ) at the proposed BTW hot tap location. The inspection activities will commence at the earliest mid-May for a duration of less than 10 days.</p> <p>Drilling EP preparation has commenced for BTW and KPA. Further details about the environmental impacts and risks from the drilling activity will be communicated separately. The earliest start date for drilling of BTW is January 2020.</p> <p>A ROV vessel will be conducting early inspection works at the KPA subsea facilities at the earliest June for a duration of 2 weeks.</p> <p>Another vessel will be contracted to continue the remaining geophysical survey in accordance with the Gippsland Basin Geophysical and Geotechnical Investigations EP.</p> <p>Esso will advise LEFCOL the start dates once confirmed.</p>	<input type="checkbox"/>	No objections, claims or issues raised	Closed Out

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
		<p>Cobia PRP Update: The Subsea 7 “Seven Eagle” Dive Support Vessel safely and successfully replaced the Cobia-to-Halibut 300mm diameter oil export pipeline with a new 150mm flexible pipeline.</p> <p>The offshore installation work started on Christmas Eve and lasted about 10 days. It took 20,000 work hours involving saturation divers and ROV activities to lay approximately 5.5 kilometres of flexible pipeline and tie it in to the Cobia and Halibut platforms.</p> <p>The work was completed with zero safety or environmental incidents.</p> <p>Teams are preparing Cobia’s facilities to return to production after about four years offline and Halibut platform is being prepared to receive oil-flow from Cobia. This preparation work includes pressure vessel inspections and repairs, piping inspections and replacements, valve checks and overhauls, instrumentation and electrical system works.</p> <p>Compressor and pump machinery will be reinstated, plugs removed from the wells with a wireline campaign and then finally commissioning and starting-up the facilities.</p> <p>Mackerel Platform: Mackerel platform has reached the end of its producing life. The wells will be secured in 2019. Navigation lights and corrosion protection for the structure will be maintained until the decommissioning plan is approved and executed.</p> <p>Sculpin-1: Esso is planning to drill the Sculpin-1 exploration well in block Vic P/70, about 90 km offshore in 2,300 m water depth. The target is a potential gas reservoir (with limited condensate)</p> <p>Drilling is scheduled to commence as early as June, 2019, utilising the Ocean Monarch MODU. The offshore activities are expected to take about 2 months.</p> <p>Seahorse / Tarwhine: Esso is reviewing options to secure the Seahorse and Tarwhine wells using a jack-up drilling rig in 2020</p> <p>Perch / Dolphin / Whiting: Esso is reviewing options to secure the Perch, Dolphin and Whiting wells using a jack-up drilling rig in 2020/21</p> <p>50 years in Bass Strait: This year we will be celebrating two key milestones for our business – the 50th anniversary of first production from our Gippsland operations and the 70th anniversary of the opening of our Altona Refinery.</p> <p>These milestones will be celebrated with community sessions later in the year.</p>			

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2959	06-May-19	Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.	<input type="checkbox"/>	No objections, claims or issues raised	
2999	06-May-19	Phone call between [REDACTED] (EAPL) and [REDACTED] (LEFCOL): Spoke with [REDACTED] at LEFCOL this morning. Discussion was around arranging a meeting to discuss consultation and how we could better achieve this as well as providing an update on current projects and EP submissions. Told him we had been in discussion with SIV and that Jonathon Davis was suggesting some time May 20-May22 and that this could be in Melbourne, Lakes or somewhere in between. [REDACTED] was keen to be involved and asked for an email with the possible dates – Note it could suit him to have another reason to come up to Melbourne. I also said we had been trying to get hold of [REDACTED] at SETFIA but hadn't had any luck. [REDACTED] indicated that [REDACTED] was very busy at the moment but said that he would print out the email and walk it around to [REDACTED] to see if the proposed dates would also work for [REDACTED].	<input type="checkbox"/>	No objections, claims or issues raised	
3000	14-May-19	Meeting request sent from [REDACTED] (EAPL) to [REDACTED] (LEFCOL).	<input type="checkbox"/>	No response received.	
3001	14-May-19	Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3043	21-May-19	<p>9:00am – 10:00am Tuesday 21st May 2019 SIV Boardroom – 133 Kensington Rd North Melbourne</p> <p>ATTENDEES LEFCOL: [REDACTED] SIV: [REDACTED] EAPL: [REDACTED], [REDACTED], [REDACTED]</p> <p>[REDACTED] opened the meeting with discussion around the increased workload from the Oil and Gas industry to SETFIA / [REDACTED] and his reluctance to offer any support until a formal payment structure is in place for his services. This is strongly supported by LEFCOL and SIV, who also rely upon [REDACTED] and his extensive knowledge and relationships within the Gippsland Fishing community. The proposed solution offered by SIV, LEFCOL and SETFIA is for EAPL to fund a contractor to liaise between them and EAPL on stakeholder consultation, egg sending out SMS regarding EAPL activities in Bass Strait to relevant stakeholders and attending quarterly meetings with EAPL and then consulting with relevant stakeholders, as well as pre and post meeting work. [REDACTED] estimated approximately \$35K a year for a consultant to fulfil this type of role. There was also a suggestion that a formal agreement could be made through APPEA for all interested Oil and Gas companies to fund such a role.</p> <p>EAPL have committed to reviewing options and will submit a proposal in the next fortnight.</p> <p>It was also noted that the fishing community would benefit from receiving EAPL activities plotted on nautical charts rather than Bass Strait maps. [REDACTED] [REDACTED] (EAPL) and [REDACTED] (EAPL) will action this request in the coming month.</p> <p>[REDACTED] (EAPL) and [REDACTED] (EAPL) then talked through a presentation on the upcoming Esso projects (see attached). These consist of West Barracouta and Kipper projects (including the Geotechnical & Geophysical campaign), potential plugging and abandonment at Blackback, Seahorse, Tarwhine, Whiting, Perch and Dolphin and drilling at Sculpin, East Pilchard, Wirrah & Sweetlips. Key items of discussion were;</p> <p>That there was only one new petroleum safety zone at West Barracouta and it was noted that this was not new and had been discussed previously. Esso’s design had progressed and the arrangements within the PSZ were now available for discussion. These are two West Barracouta wells with a snag resistant design, a pipeline end manifold and umbilical termination structure, both also designed to be snag resistant and that the electrical and hydraulic flying leads would be protected with concrete matts. These would all be located well within the 500m PSZ that must be avoided, no concerns were raised with this approach. The</p>	<input type="checkbox"/>		

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		<p>pipeline to Barracouta will be snag resistant and has been designed to be overfished, the umbilical will be trenched to minimise potential damage.</p> <p>Work at Kipper was wholly within the existing petroleum safety zone.</p> <p>Work at Seahorse, Tarwhine, Perch and Dolphin would also be within PSZs and that decommissioning options and potential removal of their PSZs was being considered. The Geotechnical & Geophysical EP has been revised to cover potential advance work at these locations to confirm the sea bed is suitable for a jack-up rig.</p> <p>Drilling at Wirrah, Sweetlips, and East Pilchard would require temporary PSZs and if commercial hydrocarbons are discovered then development plans would follow and further consultation would take place. Drilling at Sculpin is expected to start Q3/Q4 this year this is very deep water (2400m) and there is no known commercial fishing effort at this depth.</p> <p>SIV and LEFCOL raised no concerns with any of this. As already discussed the level of consultation is significant and a commercial arrangement should be examined to help ensure appropriate consultation is conducted and that certain industry figures are not overloaded with work that they are not there to conduct. The proposed CGG campaign has caused problems and whilst consultation with EAPL has always been good, the industry as a whole has been damaged by the actions of the CGG campaign. Questions were asked and answered about EAPL involvement with CGG this included that the CGG is entirely separate from EAPL, however given its scope of work EAPL would be interested in the results of the CGG to better understand Bass Strait and to better ID areas that could contain commercial hydrocarbons. Drilling is very expensive and as evident from the recent Baldfish / Hairtail campaign is not always successful.</p>			

Contact Name: [REDACTED]

Position: President

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1496	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1655	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

Contact Name: [REDACTED]

Position: President

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2023	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2150	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2200	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2960	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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3019	14-May-19	<p>Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1656	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2024	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2151	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2201	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2961	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3025	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1498	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1657	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2025	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2202	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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1499	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1658	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2026	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2152	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2203	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2962	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3032	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1500	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1659	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2027	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2153	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2204	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED]

Position:

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1501	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1660	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

Contact Name: [REDACTED]

Position:

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2028	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2154	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2205	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2963	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3007	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1502	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1661	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2029	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2155	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2206	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2964	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3028	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1503	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input checked="" type="checkbox"/>	[REDACTED] (Harbour Master Port of Hastings) sent email requesting to be notified when G&G survey is complete. MERIT: [REDACTED] (EAPL) sent email to [REDACTED] (Harbour Master Port of Hastings) advising the geophysical survey has been completed.	13-Mar-18
1589	13-Mar-18	Email sent from [REDACTED] (EAPL) to [REDACTED] (PoH): As advised via email sent to you on 16th February 2018, environmental and seabed surveys were being conducted for the VIC/L1 (West Barracouta) development. This email is to notify you that the survey has now been completed.	<input type="checkbox"/>	No objections, claims or issues raised	
1662	07-Jun-18	Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder, As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below: Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location. Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign. We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so. Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED] Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2030	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2207	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1504	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1663	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2031	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2156	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2208	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED]

Position: Secretary

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1505	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1664	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2032	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2157	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2209	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1507	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1665	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		
2098	06-Aug-18	Email received from Fiona Dunk (VPC): Thank you for your email. Please note that I am no longer with the organisation. For all Victorian Ports Corporation issues, please contact Roy Stanbrook (roy.stanbrook@vicports.vic.gov.au).	<input checked="" type="checkbox"/>	ISSUE: Fiona Dunk is no longer the contact for VPC. MERIT: Contact details updated from Fiona Dunk to Roy Stanbrook	06-Aug-18

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2033	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2158	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2210	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1508	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	CLAIM: commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	
1666	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2034	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2159	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2211	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2954	29-Apr-19	<p>Email from [REDACTED] (EAPL) to [REDACTED] (SIV): I rang and left a message for you this morning and just wanted to follow up with an email.</p> <p>We are looking to undertake more consultation on the West Barracouta project and are keen to discuss how best we can do this going forward e.g. what sort of information people would be like to know about, how we can better involve the fishing industry, etc.</p> <p>I'm touching base to see if there is an opportunity for [REDACTED] (our West Barracouta contact) to meet with yourself, SETFIA and LEFCOL to discuss this together.</p> <p>Please call me at your convenience and we can discuss setting up a meeting, or if you prefer, email me with some proposed dates and times.</p> <p>West Barracouta will be a small (2 well) subsea development tied back to the Barracouta facilities. The plan is to drill the two wells in Q1 2020 and this will take about 3 months with a Jack-up drill rig. Installation of the pipeline will occur in Q3 and last about a month. Environment Plans covering this work are currently being developed. To prepare for these campaigns there may be some additional surveys and seabed checks conducted this year – details will be provided for SMS alerts. From our understanding there isn't a great deal of fishing at West Barracouta. There will however likely be a new petroleum safety zone at the subsea well site to protect the equipment and would appreciate ideas of how best to get this information out to all fishers in the area. The pipeline itself is being designed to be over trawlable and there shouldn't be any snag points except at the two ends. One end will be in the new PSZ the other is within the existing Barracouta PSZ.</p> <p>To keep you informed of other Esso activities. The work at Blackback is continuing with the Ocean Monarch. Once complete she is likely to be used by Cooper for a couple of months and will then return to Esso to drill another exploration well. This well will be south of the shipping lanes and in about 2400mm of water, I think this will make it one of the deepest water wells drilled in Australia. An EP for this is currently with NOPSEMA. I don't think there are any other Esso projects occurring this year but if this changes will let you know.</p>	<input type="checkbox"/>		
2997	03-May-19	<p>Email sent from [REDACTED] (EAPL) to [REDACTED] (SIV): Following on from our phone conversation earlier in the week, please find attached our 2020 Jack up rig campaign for inclusion in the upcoming edition of PROFISH. Please contact me if you have any queries.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2965	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
3034	14-May-19	<p>Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3042	21-May-19	<p>9:00am – 10:00am Tuesday 21st May 2019 SIV Boardroom – 133 Kensington Rd North Melbourne</p> <p>ATTENDEES LEFCOL: [REDACTED] SIV: [REDACTED] EAPL: [REDACTED], [REDACTED], [REDACTED] and [REDACTED]</p> <p>[REDACTED] opened the meeting with discussion around the increased workload from the Oil and Gas industry to SETFIA / [REDACTED] and his reluctance to offer any support until a formal payment structure is in place for his services. This is strongly supported by LEFCOL and SIV, who also rely upon [REDACTED] and his extensive knowledge and relationships within the Gippsland Fishing community. The proposed solution offered by SIV, LEFCOL and SETFIA is for EAPL to fund a contractor to liaise between them and EAPL on stakeholder consultation, egg sending out SMS regarding EAPL activities in Bass Strait to relevant stakeholders and attending quarterly meetings with EAPL and then consulting with relevant stakeholders, as well as pre and post meeting work. [REDACTED] estimated approximately \$35K a year for a consultant to fulfil this type of role. There was also a suggestion that a formal agreement could be made through APPEA for all interested Oil and Gas companies to fund such a role.</p> <p>EAPL have committed to reviewing options and will submit a proposal in the next fortnight.</p> <p>It was also noted that the fishing community would benefit from receiving EAPL activities plotted on nautical charts rather than Bass Strait maps. [REDACTED] (EAPL) and [REDACTED] (EAPL) will action this request in the coming month.</p> <p>[REDACTED] (EAPL) and [REDACTED] (EAPL) then talked through a presentation on the upcoming Esso projects (see attached). These consist of West Barracouta and Kipper projects (including the Geotechnical & Geophysical campaign), potential plugging and abandonment at Blackback, Seahorse, Tarwhine, Whiting, Perch and Dolphin and drilling at Sculpin, East Pilchard, Wirrah & Sweetlips. Key items of discussion were;</p> <p>That there was only one new petroleum safety zone at West Barracouta and it was noted that this was not new and had been discussed previously. Esso’s design had progressed and the arrangements within the PSZ were now available for discussion. These are two West Barracouta wells with a snag resistant design, a pipeline end manifold and umbilical termination structure, both also designed to be snag resistant and that the electrical and hydraulic flying leads would be protected with concrete matts. These would all be located well within the 500m PSZ that must be avoided, no concerns were raised with this approach. The</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
		<p>pipeline to Barracouta will be snag resistant and has been designed to be overfished, the umbilical will be trenched to minimise potential damage.</p>			
		<p>Work at Kipper was wholly within the existing petroleum safety zone.</p>			
		<p>Work at Seahorse, Tarwhine, Perch and Dolphin would also be within PSZs and that decommissioning options and potential removal of their PSZs was being considered. The Geotechnical & Geophysical EP has been revised to cover potential advance work at these locations to confirm the sea bed is suitable for a jack-up rig.</p>			
		<p>Drilling at Wirrah, Sweetlips, and East Pilchard would require temporary PSZs and if commercial hydrocarbons are discovered then development plans would follow and further consultation would take place. Drilling at Sculpin is expected to start Q3/Q4 this year this is very deep water (2400m) and there is no known commercial fishing effort at this depth.</p>			
		<p>SIV and LEFCOL raised no concerns with any of this. As already discussed the level of consultation is significant and a commercial arrangement should be examined to help ensure appropriate consultation is conducted and that certain industry figures are not overloaded with work that they are not there to conduct. The proposed CGG campaign has caused problems and whilst consultation with EAPL has always been good, the industry as a whole has been damaged by the actions of the CGG campaign. Questions were asked and answered about EAPL involvement with CGG this included that the CGG is entirely separate from EAPL, however given its scope of work EAPL would be interested in the results of the CGG to better understand Bass Strait and to better ID areas that could contain commercial hydrocarbons. Drilling is very expensive and as evident from the recent Baldfish / Hairtail campaign is not always successful.</p>			

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1509	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1667	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2035	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2097	06-Aug-18	<p>Email received from Jodie Earnshaw (Cooper Energy): Hello, Effective 13/07/2018 please direct any correspondence to the following addresses: For Stakeholder: [REDACTED]@cooperenergy.com.au</p>	<input checked="" type="checkbox"/>	<p>ISSUE: New correspondence email address MERIT: Contact email updated</p>	06-Aug-18
2160	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2212	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input checked="" type="checkbox"/>	<p>Response from [REDACTED] (CE): [REDACTED] used to get these but she has now left. Could you please add my email to the list?</p> <p>MERIT: Contact details updated from [REDACTED] to [REDACTED]</p>	06-Dec-18
2966	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3008	14-May-19	<p>Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED]

Position: Executive Officer

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
215	01-Nov-17	[REDACTED] (EAPL) phoned [REDACTED] at 11 am, [REDACTED] busy, [REDACTED] text message asking if he could call later and was after an opportunity to discuss the projects Esso are planning and would like to discuss how best to manage any potential interactions.	<input type="checkbox"/>	No objections, claims or issues raised	
216	03-Nov-17	Phone call between [REDACTED] (EAPL) and [REDACTED] to discuss the various projects that Esso have planned in the next 12 months. Fact Sheet also emailed to [REDACTED]. Main issues raised: - amount of consultation - proximity to FIS sites. [REDACTED] (EAPL) asked for coordinates of FIS sites to confirm separation distance but from the data we have looks about 20nM @ Baldfish which shouldn't have any impact.	<input checked="" type="checkbox"/>	ISSUE #1: Level of consultation MERIT #1: Esso have to consult but will try to coordinate projects to limit the number of requests. [REDACTED] to provide coordinate of the FIS sites. ISSUE #2: Proximity to FIS sites MERIT #2: Proximity to FIS location to be determined however from the data we have looks about 20nM @ Baldfish which shouldn't have any impact.	15-Feb-18
1164	14-Dec-17	[REDACTED] (EAPL) sent email looking to confirm location of nearest FIS locations to next years drilling campaign.	<input checked="" type="checkbox"/>	Follow up with [REDACTED] in 2018 to confirm FIS location	15-Feb-18
1457	12-Jan-18	Email received from [REDACTED]: Please find FIS locations attached. SETFIA operates and maintains several SMS lists for commercial fisherman across three regions. You are interested in the eastern region. Here are a couple of examples (one from today) of the sort of SMS we send. The aim is to minimise the affects of oil/gas works on the fishing industry. SETFIA charges per SMS, the cost allows us to maintain software that sends group SMSs and to maintain the list, the maintenance is a lot of work. There are about 90 contacts on the eastern list. The list covers all sectors, State and C'wealth not just trawl. I suggest we need to meet and would like to do this in Lakes Entrance. This campaign will take some planning to minimise effects on the fishing industry.	<input checked="" type="checkbox"/>	ISSUE 1: Proximity to FIS locations. MERIT 1: Not relevant to G&G campaign due to survey timing prior to FIS and distance from FIS locations. Not relevant for CBA due to timing. Needs to be reviewed further for Baldfish. ISSUE 2: Consultation with fishers via SMS. MERIT 2: Yes - EAPL agree consultation important.	15-Feb-18
1461	23-Jan-18	Email sent to [REDACTED] and LEFCOL from [REDACTED]: Here is our review of the distance to the nearest FIS Locations from the Baldfish drilling and Cobia pipeline repair projects. The Cobia repair (between Halibut, HLA and Cobia CBA) is very unlikely to take place earlier than Dec this year so there will be no impact. (SEE ATTACHMENT) The Baldfish drilling campaign is still scheduled for early Q3. The Baldfish well is between 12 and 16 NM from the FIS location and Hairtail is between 11 and 15 NM. Both the wells are the other side of a shipping lane, so any noise impacts are likely to be low in comparison to the impact from passing vessels. Many thanks for the information on the SMS service, we will be looking to use it to advise fishermen of our activities and to minimise any impact. In the mean time I will keep you updated on the campaign and will look to arrange a meeting with you and [REDACTED] in the next couple of months.	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1476	09-Feb-18	<p>Email sent from [REDACTED] (EAPL) to LEFCOL & SETFIA: Hi [REDACTED], I'm in Lakes Entrance next Thursday 15th Feb, would be happy to pop in and give you an update on our planned activities on either the Thursday afternoon or Friday morning. Let me know if this is of interest.</p> <p>Response from [REDACTED] (SETFIA): Thursday works for me</p> <p>Email from [REDACTED] (EAPL) to [REDACTED] (SETFIA) and (LEFCOL): What time Thursday afternoon suits you - would 4pm at the LEFCOL offices work? If there is anything specific you want to know about please let me know or I can give you a general update and we can discuss things as they come up.</p> <p>Response from [REDACTED] (SETFIA):4pm Thursday good. Pls send a calander invite.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1573	15-Feb-18	<p>[REDACTED] (EAPL) met with [REDACTED] (LEFCOL) and [REDACTED] (SETFIA) at LEFCOLs offices in Lakes Entrance on Thursday 15th Feb. Discussed West Barracouta G&G, Baldfish Drilling, Cobia pipeline repair and Kipper/Pilchard campaigns including the type of activity involved and the timing.</p> <p>[REDACTED] and [REDACTED] happy to hear that wells at WBT would probably be in the same PSZ. Asked about fishing activity in the area and [REDACTED] indicated that if we wanted he could investigate the type, nature and scale of fishing in the area subject to a commercial contract. [REDACTED] also indicated that PSZ may not be as rigorously complied with as he and oil and gas operators have assumed to date. Discussed if there was an opportunity for industry to develop a video explaining what PSZs are for and for this to be provided to fishermen – agreed to discuss this internally within Esso but noted that it should probably be something that APPEA should look into. Action raise issue of an Industry video with APPEA and internally within Esso. [REDACTED] raised the value of sending an SMS to all fishermen of campaigns and vessel activity in Bass Strait. Copper have been providing regular updates on the Sole project and their other assets, it seems to have been well received and as fishermen do not rigorously read navigation warnings and alerts from AMSA it provides an alternate means of raising awareness of the projects and what is happening where. [REDACTED] was happy to send an SMS for the G&G campaign on approval from Esso, subsequent SMSs will be entail a small cost. Action to be discussed within Esso, with [REDACTED] to be given go ahead to send G&G SMS text and an ongoing SMS protocol developed, i.e. SMSs to be sent regularly, month before, day before and on completion of activity.</p> <p>Talked about Baldfish and proximity to the FIS locations. [REDACTED] agreed that the distance from Baldfish Hairtail probably wouldn't have a significant impact on the FIS location. He indicated that he was a bit annoyed that while Oil and Gas operators had been provided with the FIS locations and dates that they hadn't planned their activities better to avoid any overlap. We talked about schedules and use of rigs of opportunity to minimise mobilisation and demobilisation costs and how these can be significant impediments to scheduling these campaigns around third party requests. [REDACTED] and [REDACTED] acknowledged how this would be an issue. The FIS work may not occur this year as there has been little statistically significant results obtained to date with this work, the work is arranged by AFMA? And is a significant cost that is sourced from the fishing industry that may be better spent / saved.</p> <p>Potential Blackback decommissioning following the Baldfish drilling campaign was also discussed. The temporary fairways recently announced by AMSA to protect the rig will also provide protection at Blackback. A temporary PSZ will be gazetted at Blackback for this work. Some discussion on whether the fishermen fish in the shipping lanes, thought was that they probably do as its near the drop off.</p> <p>After all the projects add</p>	<input type="checkbox"/>	Refer to LEFCOL consultation records regarding ISSUES / MERITS	Closed Out

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		<p>The level of consultation was raised again and [REDACTED] indicated that he was getting numerous emails and phone calls and that it was taking up a significant amount of his time and that he couldn't and wouldn't always respond. We discussed it was a regulatory requirement and a NOPSEMA expectation that consultation was documented and could be demonstrated hence why [REDACTED] was being chased for responses. Acknowledged that in some cases it may be frustrating but without being able to provide a response from stakeholders the oil and gas industry had potential difficulty in gaining EP acceptance. A single point of contact within the oil and gas industry would be good but the mechanisms and arrangements for this to be conducted are not currently available.</p> <p>Discussed Cobia pipeline repair, still scheduled for December this year with a DSV from Europe. Another candidate for SMS messages.</p> <p>Discussed Kipper infield drilling and adjacent (Pilchard) development that is being examined. Kipper infield drilling to be contained within existing PSZ, adjacent development may require an additional PSZ will discuss these projects further as they progress. Another candidate for SMS messages and review of fishing intensity.</p> <p>Given the quantity of work and activities going on [REDACTED] suggested a monthly phone call to advise progress, changes and the dates of key activities taking place. An invite was sent out for this to occur the last Friday of every month starting the 30th March.</p> <p>There are a number of issues raised so we'll need to add these and document our response</p> <p>ISSUE: Development of Video to raise awareness of PSZ and subsea assets – good idea has merits will need to be raised internally within Esso and possibly APPEA</p>			
1510	16-Feb-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1574	21-Feb-18	<p>[REDACTED] (EAPL) and [REDACTED] (SETFIA) had discussions via SMS text and phone calls 21ST Feb</p> <p>[REDACTED] developed a draft SMS message for sending to his list of fishermen, sent it for review/ confirmation for him to send it out. Message reviewed with WBT project and SHES and minor changes made and approval to send given. Text message contained the following</p> <p>Dear Eastern Operator, Esso have a lot planned over the coming year. Presently, the vessel Offshore Guardian (VZXN) (see image) is collecting sediment and water samples and completing acoustic work (not seismic) around the Barracouta area. The work will finish around mid-March (weather permitting) following this she will be conducting general inspection work at their other facilities till mid year. Esso ask that you operate good comms and be aware that the Offshore Guardian may have limited maneuverability. Thanks SETFIA (on behalf of Esso)</p> <p>A short while later [REDACTED] phoned with advice that he had received a call from an octopus fishermen who had pots set to the east and west of Barracouta and wanted to know how he could contact the vessel to provide the actual coordinates to see if anything needed to be done. Phone numbers of the vessel master and Esso rep on board provided. Contact was then made by fishermen to vessel and issue resolved. [REDACTED] commented that this was a good example of effective consultation.</p>	<input checked="" type="checkbox"/>	<p>ISSUE: A short while later [REDACTED] phoned with advice that he had received a call from an octopus fishermen who had pots set to the east and west of Barracouta and wanted to know how he could contact the vessel to provide the actual coordinates to see if anything needed to be done.</p> <p>MERIT: Yes - Phone numbers of the vessel master and Esso rep on board provided. Contact was then made by fishermen to vessel and issue resolved. [REDACTED] commented that this was a good example of effective consultation.</p>	21-Feb-18
1601	27-Apr-18	<p>Spoke with [REDACTED] today 27th April.</p> <p>Discussed WBT geotechnical work and that the Dryden may be doing some work at WBT in mid May. Told him we were about to send an email regarding the work but wanted to get the date better confirmed. Indicated that the work would be completed in a week or two and that the Dryden would be stationary with reduced mobility for some time. Discussed and agreed that an SMS message nearer the time would be good.</p> <p>Also discussed rig mobilization to Baldfish and I indicated that nothing was likely before mid June and depending on Cooper activities it may be delayed till August. [REDACTED] said that Cooper were very busy and he was talking to them every few days.</p> <p>Agreed to keep in touch and notify [REDACTED] when the BTW dates are better defined and when Baldfish dates are clearer.</p> <p>Subsequently got the following SMS from SETFIA on Cooper (see attachment)</p>	<input checked="" type="checkbox"/>	<p>ISSUE: provide [REDACTED] with WBT geotechnical details and dates such that he can send an SMS message to notify fishermen in Bass Strait</p> <p>MERIT: Esso agree and details will be provided for SMS alert once campaign timing is known.</p>	16-May-18

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1668	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1739	08-Jun-18	<p>Email sent from [REDACTED] (EAPL) to [REDACTED] (SETFIA): Hi [REDACTED],</p> <p>We should probably send out an SMS in the next week.</p> <p>An email notification was sent out earlier in the week – thinking an SMS something along the lines of.</p> <p>Esso are conducting some work at West Barracouta, this includes collection of shallow geotechnical data and collection of seabed samples. This will be carried out by the MV Dryden over about 7 days, starting 17th June. She will be stationary at times and have limited maneuverability . Approximate location of the work is between 38 19.1, 147 36.9 and 38 17.8, 147 40.6.</p> <p>Happy to discuss further.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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2001	20-Jul-18	<p>Phone call between [REDACTED] (SETFIA) and [REDACTED] (EAPL) to discuss EAPL activities.</p> <p>First activity will be Baldfish which will take place following Cooper campaign at Basker Manta. Early date is probably in August and EAPL will know this better once Cooper have finished at Sole. The duration of the Cooper Basker Manta activities are also unknown but EAPL will try and ask for an SMS message to fishermen about 2 weeks before moving to Baldfish. Baldfish EP was accepted a couple of weeks ago by NOPSEMA. Baldfish campaign will last about 60 days.</p> <p>Second activity will be Blackback P&A campaign this will follow Baldfish and EAPL will look to issue an SMS for this too. Blackback is relatively close to Baldfish and on the edge of the continental shelf. A PSZ will be gazetted and as per Baldfish the anchor chains will need to be avoided by fishermen. Blackback may last 2-3 months.</p> <p>Cobia pipeline repair is still scheduled for December and will be the subject of another SMS message in November, a temporary PSZ will be gazette to protect the divers, ROV and vessel when repairing the pipeline as she will have limited maneuverability.</p> <p>Other projects at West Barracouta and Kipper are being planned with some minor work potentially in 2019 and drilling in 2020.</p> <p>SETFIA had no major concerns with these projects and had completed the paperwork to be added to the EAPL system to enable payment for SMS messages to be processed. There are a number of seismic campaigns taking place in and around the south east area and these have potentially a more significant impact on where fishing can take place. SETFIA have been commissioned to undertake fishing assessments within the seismic areas and have issued some of the seismic operators with detailed reports listing the key fishermen and their contact details who work the areas. A lack of this information has led to Eps being rejected.</p> <p>[REDACTED] has also been sent recent emails on Prelude and Crux and wanted to know what these were for. We discussed that these were from Shell and were for projects on the NW shelf and would have no impact on SETFIA activities.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2036	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2161	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2213	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2635	06-Dec-18	Email from [REDACTED] (SETFIA) to [REDACTED] (EAPL): Anything happening in the field that I should tell the fleet about?	<input type="checkbox"/>	<p>Response from [REDACTED] (EAPL) to [REDACTED] (SETFIA): Not in the next week.</p> <p>Caught up with [REDACTED] yesterday in Lakes Entrance at the Esso meeting. In summary</p> <p>Cobia to Halibut pipeline repair scheduled to start around 20th Dec for 10 days – will confirm timing next week so we can issue SMS before and then after.</p> <p>Blackback plug and abandon campaign will be Feb next year and this may be followed up by another drilling campaign in the same block as Baldfish Hairtail – deepwater and beyond the shipping lane. Will keep you informed and we will look to issue SMSs.</p> <p>Some geotechnical surveys to support West Barracouta are planned for mid next year</p> <p>Drilling at West Barracouta and Kipper end next year / beginning 2020.</p> <p>Let me know if you need any extra detail.</p>	
2942	02-Apr-19	[REDACTED] (EAPL) tried calling [REDACTED] (SETFIA) several times this morning but no answer so far – have sent him a text message to give me a call. He can be very busy both interstate and internationally so may just be travelling / unavailable this morning will continue to try and track him down.	<input type="checkbox"/>	No objections, claims or issues raised	

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2945	05-Apr-19	<p>Email from [REDACTED] (EAPL) to [REDACTED] (SETFIA): I'm providing some support to the Esso West Barracouta project and we are looking to undertake some more consultation on this project. Keen to discuss how best we can do this, what sort of information people would be like to know about, how we can better involve the fishing industry etc. Would like to work out if there is an opportunity to catch up with yourself, LEFCOL, SIV etc to discuss this together.</p> <p>West Barracouta will be a small (2 well) subsea development tied back to the Barracouta facilities. The plan is to drill the two wells in Q1 2020 and this will take about 3 months with a Jack-up drill rig. Installation of the pipeline will occur in Q3 and last about a month. Environment Plans covering this work are currently being developed. To prepare for these campaigns there may be some additional surveys and seabed checks conducted this year – details will be provided for SMS alerts. From our understanding there isn't a great deal of fishing at West Barracouta. There will however likely be a new petroleum safety zone at the subsea well site to protect the equipment and would appreciate ideas of how best to get this information out to all fishers in the area. The pipeline itself is being designed to be over trawlable and there shouldn't be any snag points except at the two ends. One end will be in the new PSZ the other is within the existing Barracouta PSZ.</p> <p>To keep you informed of other Esso activities. The work at Blackback is continuing with the Ocean Monarch. Once complete she is likely to be used by Cooper for a couple of months and will then return to Esso to drill another exploration well. This well will be south of the shipping lanes and in about 2400mm of water, I think this will make it one of the deepest water wells drilled in Australia. An EP for this is currently with NOPSEMA. I don't think there are any other Esso projects occurring this year but if this changes will let you know.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2998	29-Apr-19	<p>Email sent from [REDACTED] (EAPL) to [REDACTED] (SETFIA): Just following up on earlier email – Esso are keen to discuss how we can better consult with the fishing industry and would like to arrange a meeting with yourself and other key parties to work out what this should look like as well as provide an update on our current activities.</p> <p>If you're going to be up in Melbourne in the next month or so that would be good to know or alternatively we can come down to Lakes Entrance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2967	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3031	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1511	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1669	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2037	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2162	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2214	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2968	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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3033	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1512	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1670	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2038	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2163	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2215	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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1513	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1671	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2164	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2216	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2969	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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3035	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1514	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1672	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2040	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2217	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1480	16-Feb-18	Email received from [REDACTED] [REDACTED] (MSV): Thanks for the email and info on Esso Operations. I would like to be notified once the survey has been completed. For your information attached is some information on MSV's regulatory standing as far as Victorian State waters are concerned. (see attachment)	<input checked="" type="checkbox"/>	ISSUE: notify [REDACTED] [REDACTED] (MSV) of survey completion. MERIT: [REDACTED] (EAPL) sent email to [REDACTED] [REDACTED] (MSV) advising that the geophysical survey has been completed.	13-Mar-18
1515	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1590	13-Mar-18	Email sent from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (MSV): As advised via email sent to you on 16th February 2018, environmental and seabed surveys were being conducted for the VIC/L1 (West Barracouta) development. This email is to notify you that the survey has now been completed.	<input type="checkbox"/>	No objections, claims or issues raised	
1673	07-Jun-18	Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder, As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below: Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location. Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign. We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so. Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED] Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2041	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2093	06-Aug-18	<p>Email received from MSV: I am currently away on leave returning Monday 13 August 2018. I'm on email however if matter is urgent please email: waterways@transportsafety.vic.gov.au.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2218	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2970	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
3020	14-May-19	<p>Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED], [REDACTED]

Position: Manager, Marine Pollution - Emergency Management Division

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1516	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1674	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2009	23-Jun-18	Email from [REDACTED] (EAPL) to AMSA: Hello, This is to advise you that the above work was completed this morning at 0445 hours and that the vessel is now en route back to Eden.	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2042	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder, Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2100	06-Aug-18	<p>Email received from [REDACTED] [REDACTED]: Hi, I will be out of the office attending an exercise, returning on Friday 3 August. Email response may be delayed during this time. In case of a maritime incident, please notify the DEDJTR State Duty Officer on 0409 858 715.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2167	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2282	05-Dec-18	<p>Offshore Community Session: summary of [REDACTED] (EAPL) talking points & stakeholder consultation as noted by [REDACTED] (EAPL):</p> <p>[REDACTED] spoke to the whole group about Esso's current and planned activities in Bass Strait in the next 12 months. Topics for discussion included the G&G survey work completed in 2018, the location and timing of survey work to be completed in 2019, and the scope of the BTW project. Other topics included:</p> <p>MILESTONES:</p> <ul style="list-style-type: none"> - Over the last 24 months, our Gippsland operations have been able to meet unprecedented east coast gas demand by increasing our production well above our historical levels. - But as the major fields in Bass Strait reach the end of their natural lives, we need to find new sources of gas. - In August, we commenced our first deep-water exploration drilling program in over 20 years, by drilling two new wells, Baldfish and Hairtail at a block known as VIC/P70, south east of our existing fields. - While the \$120m drilling campaign was completed safely and without incident by the drill rig Ocean Monarch in November, unfortunately, we didn't encounter commercial quantities of hydrocarbons. - Prior to drilling we also completed our Environment Plan, which included stakeholder consultation. We're keen to listen to your opinions on how that went and how we can keep improving our operations. - Despite not finding commercial gas at our first attempt in over 20 years, we are actively pursuing new gas development opportunities in Bass Strait so that we can meet the demand for gas. - We are going to keep trying to find new sources of gas. To do this, we have had our best engineering and science minds working on options for new gas developments to bring online much needed new gas supplies from Bass Strait fields. - We've already spent money reprocessing our historic seismic data across the Bass Strait and will consider purchasing new seismic data, should it be acquired. This will help our geoscience team better identify opportunities for new gas supplies that will keep Victorians warm in winter and cooking with gas. <p>PLANNED OFFSHORE ACTIVITIES</p> <ul style="list-style-type: none"> - Following the completion of our exploration drilling at Baldfish and Hairtail, Esso is planning to utilise the Ocean Monarch rig to undertake well abandonment work for the Blackback field and look to undertake possible further exploration drilling in VIC/P70 sometime in 2019. - We are also planning to develop a gas field in the VIC/L1 block, known as West Barracouta, approximately 6km south west of the existing Barracouta platform. - The proposed West Barracouta development will involve the drilling of two subsea wells which will be tied back to our existing Barracouta infrastructure in Bass Strait. - A subsea flowline approximately 6km in length will be connected via a subsea 	<input type="checkbox"/>	No objections, claims or issues raised	Closed Out

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
		<p>hot tap into the existing gas export pipeline and a controls umbilical approximately 6.5 km in length to the Barracouta platform will also be installed.</p> <ul style="list-style-type: none"> - As the project develops, additional consultation with stakeholders will be conducted. - We're also planning on undertaking repair and maintenance works on our Cobia pipeline, which will start soon on 20 December 2018. The pipeline is 5.5 kilometres long and runs between our Cobia and Halibut platforms. - The dive support vessel, the Seven Eagle, will be supported by the Bhagwan Dryden and the repair between Cobia and Halibut is expected to take 10-14 days. - The Seven Eagle collected the 5.5km flexible pipeline in Denmark in late October and has just left Singapore after taking on supplies and Australian crew. - Whilst the majority of the work will take place within the Cobia and Halibut petroleum safety zones a notice to mariners will be issued. - We're also updating the current environment plans for our offshore plans, which we conduct 5-yearly, and will consult with relevant stakeholders on ongoing and new risks. We've heard your feedback around multiple consultations and I'm pleased to say we've been able to work with the regulator to consolidate our 9 Environment Plans into 1 for our existing operations. - As you can see we have a busy schedule of work ahead of us and are pleased to continue investing in our operations, bringing new domestic gas supplies to market and creating jobs. <p>2019 also marks a milestone year for our Bass Strait operations, with the 50th year of production from our Gippsland Basin Joint Venture with BHP.</p> <ul style="list-style-type: none"> - It's amazing to think that back in 1969 when hydrocarbons were first produced, that we'd still be here today 50 years later, powering the local economy. <p>Stakeholders in attendance:</p> <p>[REDACTED] LEFCOL – Discussed Esso projects including Cobia PRP and timing of the activity this year. No environmental concerns or issues raised relating to EAPL projects or operations. Industry has been busy with a lot of consultation and they are concerned about the extent of the proposed CGG seismic campaign. Enquired as to whether there had been any change in fishing activities and areas in Bass Strait – only change has been the development of an octopus fishery. One boat is doing this and LEFCOL are processing the catch. Octopus fishing involves the use of traps laid on the sea floor that are then retrieved.</p> <p>Water Police – offshore recreational fishing has grown significantly in recent years with the development of the sword fish fishery. This is a long way offshore (beyond phone range) and has attracted up to 20 vessels at times. No environmental concerns or issues raised with EAPL operations or projects.</p> <p>Lakes Entrance Senior citizens Centre and Lakes Entrance Neighborhood House representatives – provided a brief overview of our operations and projects and the various regulatory requirements (environment plan, safety case, licences) – no environmental concerns or issues raised with EAPL operations or projects.</p>			

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		Attendees of the COXINS training course – quick discussion on long term opportunities for employment within the oil and gas business in Bass Strait no environmental issues raised.			
		██████████ (Federal MPs office) – quick discussion about projects in the next 12+ months and the level of activity associated with maintaining gas production and supply to Victoria – no environmental concerns			
		DEDJTR - ██████████ (Regional Manager Gippsland) was also in attendance			
2219	06-Dec-18	Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.	<input type="checkbox"/>	No objections, claims or issues raised	
2971	06-May-19	Email sent from ██████████ (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.	<input type="checkbox"/>	No objections, claims or issues raised	
3011	14-May-19	Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1517	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1675	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		
2008	23-Jun-18	Email from [REDACTED] (EAPL) to AMSA: Hello, This is to advise you that the above work was completed this morning at 0445 hours and that the vessel is now en route back to Eden.	<input type="checkbox"/>		

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2043	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2168	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2220	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2972	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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3010	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED], [REDACTED]

Position: General Manager

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1518	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1676	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input checked="" type="checkbox"/>	<p>Email received from [REDACTED] (DEDJTR): Please notify us when the survey is completed. (See ID_2007)</p> <p>Also, please confirm that you have [REDACTED], Regional Manager Gippsland and [REDACTED], Principal Petroleum Engineer on your mailing list, or can add them if not.</p>	23-Jun-18
2007	23-Jun-18	Email from [REDACTED] (EAPL) to AMSA: Hello, This is to advise you that the above work was completed this morning at 0445 hours and that the vessel is now en route back to Eden.	<input type="checkbox"/>		

Contact Name: [REDACTED], [REDACTED]

Position: General Manager

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2095	06-Aug-18	<p>Email received from [REDACTED]s (DEDJTR): I am out of the office from 31/07/2018 05:30 PM until 20/08/2018 09:00 AM. I am currently on leave, returning 20 August 2018. For any urgent matters, please contact [REDACTED] on [REDACTED], [REDACTED]@ecodev.vic.gov.au or phone 0437 662 144. I am out of the office from 31/07/2018 05:30 PM until 20/08/2018 09:00 AM.</p> <p>I am currently on leave, returning 20 August 2018. For any urgent matters, please contact [REDACTED] on [REDACTED], [REDACTED]@ecodev.vic.gov.au or phone 0437 662 144.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2044	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder, Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2166	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2221	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2973	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED]

Position:

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1519	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1677	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

Contact Name: [REDACTED]

Position:

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2045	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2169	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2222	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2976	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED]

Position:

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3012	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1520	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1678	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2046	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2170	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2223	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1521	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1679	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2047	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2172	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2224	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2975	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1522	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1680	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2048	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input checked="" type="checkbox"/>	<p>ISSUE: Email received from [REDACTED] [REDACTED] (VSIA): Thats great pitty I can’t see none of the detail on the maps. Think I need to get my eyes checked</p> <p>MERIT: Emailed [REDACTED] [REDACTED] high resolution copies of the maps used in the fact sheet (see ID_2103)</p>	08-Aug-18
2171	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2225	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2977	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3023	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1523	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1681	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2092	06-Aug-18	<p>Email received from WV: Thanks for contacting the Wildlife Victoria office.</p> <p>Important: If you're contacting us about a wildlife emergency, need wildlife advice, or are already speaking to our emergency response service about an ongoing situation, please contact the emergency response service (open 7 days) on 03 8400 7300 or by logging a case at https://wildlifelivictoria.org.au/wildlife-victoria-rescue#report</p> <p>Please understand that our service can get very busy as we prioritise a speedy response to wildlife emergencies first and foremost. This may mean that we are delayed in getting back to you. If you do not hear from us within a week, please feel free to contact us again, or contact our office directly on 03 9445 0310.</p> <p>Best regards, Wildlife Victoria</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2049	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2174	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2226	06-Dec-18	Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.	<input type="checkbox"/>	No objections, claims or issues raised	
2978	06-May-19	Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.	<input type="checkbox"/>	No objections, claims or issues raised RESPONSE: 06/05/19 Email from Wildlife Victoria: Thanks for contacting the Wildlife Victoria office.	
3026	14-May-19	Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1525	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1683	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2051	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2176	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2228	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2979	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3022	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1526	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1684	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2052	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2177	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2229	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1527	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1685	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2053	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	<p>Response from [REDACTED] (RAMS): Hi [REDACTED], Hope the weekend treated you well. There is a possibility I will be in Melbourne the morning on Monday 27 August. Accordingly if you are free it would be an opportunity to have an annual catch up on your Bass Strait operations.</p>	
2230	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2980	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
3030	14-May-19	<p>Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11’ 10”, 147° 49’ 02” (Wirrah), 38° 05’ 42”, 148° 02’ 05” (Sweetlips), 38° 11’ 54”, 148° 33’ 42” (East Pilchard), 38° 34’ 14”, 147° 19’ 17” and 38° 29’ 20”, 147° 22’ 34” (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED], [REDACTED]

Position: Marine Pollution Officer

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1528	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1686	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2054	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder, Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2231	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2981	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
3014	14-May-19	<p>Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11’ 10”, 147° 49’ 02” (Wirrah), 38° 05’ 42”, 148° 02’ 05” (Sweetlips), 38° 11’ 54”, 148° 33’ 42” (East Pilchard), 38° 34’ 14”, 147° 19’ 17” and 38° 29’ 20”, 147° 22’ 34” (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1529	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1687	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2055	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2232	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2982	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
3029	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11’ 10”, 147° 49’ 02” (Wirrah), 38° 05’ 42”, 148° 02’ 05” (Sweetlips), 38° 11’ 54”, 148° 33’ 42” (East Pilchard), 38° 34’ 14”, 147° 19’ 17” and 38° 29’ 20”, 147° 22’ 34” (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1530	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1688	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2056	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2233	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1531	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1689	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2057	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2178	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2234	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2983	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3037	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1532	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
2179	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1533	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1690	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2058	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2180	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2235	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1534	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1691	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2059	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2236	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1535	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1692	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2060	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2237	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1536	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1693	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
1997	05-Jul-18	<p>Email received from [REDACTED] [REDACTED]: I would like you to know I don't know why you are sending me this. I have no idea of what you are doing. Every second day I receive another notification of another survey disrupting our fishing activities.</p> <p>This does not constitute consultation in any way and I expect a proper process to be followed.</p>	<input checked="" type="checkbox"/>	<p>ISSUE: EAPL to contact [REDACTED] [REDACTED] to discuss EAPL stakeholder consultation process</p> <p>MERIT: Email sent from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (SSIA) to contact [REDACTED] (EAPL) to discuss stakeholder consultation process.</p>	10-Jul-18

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2061	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2238	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2734	15-Jan-19	<p>Email sent from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (SSIA) & cc'd [REDACTED] [REDACTED] (SETFIA): I’m following up on an email we received from you on Thursday, 5 July 2018 (email attached) wherein you requested a proper consultation process to be followed.</p> <p>We replied to your email on Tuesday, 10 July 2018 (email attached) proposing to discuss your request in more detail with our Offshore Risk, Environment & Regulatory Supervisor, [REDACTED] (+61 3 9261 0260).</p> <p>To date, we’ve had no response, so I’m checking in to see if you’d like us to give you a call to chat about our consultation process, and see if there are ways we might be able to improve it. If so, please email me your number and a date / time that suits you for a call.</p> <p>Alternatively, we can correspond via email, and provide you with a more detailed explanation of our consultation process.</p> <p>I’ll also forward this email onto [REDACTED] (SETFIA) so that he can pass on this information in the event you don’t receive this email.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2831	16-Jan-19	<p>Phone call between [REDACTED] (EAPL) to [REDACTED] [REDACTED] (SSIA): [REDACTED] called [REDACTED] and had a very brief conversation with him, but he didn't have time to talk so asked [REDACTED] to call back and also follow up with an email on what it was about.</p> <p>Email from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (SSIA): Further to our brief phone conversation this afternoon, I would like to touch base with you regarding Esso's activities in Bass Strait. We regularly send updates to relevant stakeholders on our current and planned activities. I wanted to give you, or other representatives from the organisations you represent, an opportunity to further discuss any aspects of our activities with us, either by phone or face-to-face meeting.</p> <p>I will call you again this afternoon at around 3:15pm.</p> <p>FOLLOW UP: [REDACTED] (EAPL) called [REDACTED] [REDACTED] (SSIA) at 3:20pm on 16/01/19 - call was not answered.</p>	<input checked="" type="checkbox"/>	<p>RESPONSE: Email received from [REDACTED] [REDACTED] (SSIA) to [REDACTED] [REDACTED] (EAPL): Thanks for your note.</p> <p>The fishing industry is over talking, as we end up getting nowhere all the time. A new Labour Greens Govt. will listen to our concerns better than Esso will that will contact us randomly looking to tick a box when it comes to consultation</p>	
2984	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
3036	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED], [REDACTED]

Position: Executive Officer

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1576	19-Feb-18	Email received from [REDACTED] [REDACTED] (EVSUDA) to [REDACTED] (EAPL): Please keep including me in developments. I am interested in receiving the survey results	<input checked="" type="checkbox"/>	MERIT: [REDACTED] (EAPL) sent email to [REDACTED] (EVSUDA) advising the geophysical survey has been completed.	13-Mar-18
1591	13-Mar-18	Email sent from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (EVSUDA): As advised via email sent to you on 16th February 2018, environmental and seabed surveys were being conducted for the VIC/L1 (West Barracouta) development. This email is to notify you that the survey has now been completed.	<input type="checkbox"/>	No objections, claims or issues raised	
1694	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2062	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2181	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2239	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2985	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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3017	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1538	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1695	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2063	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2240	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2986	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
3005	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11’ 10”, 147° 49’ 02” (Wirrah), 38° 05’ 42”, 148° 02’ 05” (Sweetlips), 38° 11’ 54”, 148° 33’ 42” (East Pilchard), 38° 34’ 14”, 147° 19’ 17” and 38° 29’ 20”, 147° 22’ 34” (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1539	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1696	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2064	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2182	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2241	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2987	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3015	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1540	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1697	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

Contact Name: [REDACTED], [REDACTED]

Position: Member

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2065	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2183	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2242	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2988	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1541	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1698	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2066	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2243	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1542	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1699	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1734	18-Jun-18	<p>Email received from [REDACTED] [REDACTED]: Good morning [REDACTED] and [REDACTED], I am just following up on the below email which has been forwarded to the Data Management Team at NOPTA.</p> <p>We have just had brought to our attention by your email the Environmental Plan which was approved by NOPSEMA earlier this year in February regarding offshore activities that ESSO Australia are currently undertaking or have already undertaken this year.</p> <p>NOPTA wants to outline the expectations required to be met as per the Regulations for offshore surveys Division 3 Part 7 of the RMA Regulations: NOPTA expects to receive an email giving notification of survey commencement 48 hours prior to reporting@nopta.gov.au <mailto:reporting@nopta.gov.au> Subdivision 3.3—Reports about geophysical and geological surveys</p> <p>7.15 Requirement for weekly survey report</p> <p>(1) A petroleum titleholder commits an offence if the titleholder:</p> <p>(a) undertakes a geophysical or geological survey in a title area; and</p> <p>(b) does not give the Titles Administrator a weekly survey report as soon as practicable after the end of each week of the survey.</p> <p>(2) In this regulation:</p> <p>weekly survey report means a report that includes:</p> <p>(a) the name of the survey; and</p> <p>(b) the title under which the survey is being conducted; and</p> <p>© the name of the titleholder; and</p> <p>(d) the name of the contractor conducting the survey; and</p> <p>€ the name of the vessel or aircraft conducting the survey; and</p> <p>(f) a map showing where the survey was conducted during the week; and</p> <p>(g) the number of kilometres or square kilometres for which data was acquired during the week; and</p> <p>(h) the number of points at which data was acquired during the week; and</p> <p>(i) the number of lines of data acquired during the week; and</p> <p>(j) the amount of downtime during the week due to equipment problems, bad weather or other circumstances; and</p> <p>(k) the percentage of the survey completed at the end of the week.</p> <p>Week of the survey means:</p> <p>(a) the week starting on the first day of data acquisition; and</p> <p>(b) each subsequent week.</p> <p>Could you please arrange to have the Weekly Survey Reports for the Geophysical survey already undertaken emailed to reporting@nopta.gov.au <mailto:reporting@nopta.gov.au> as soon as possible.</p> <p>Could you please also forward the Weekly Survey Report for the Geotechnical Report which as per your email commenced yesterday to reporting@nopta.gov.au <mailto:reporting@nopta.gov.au> at the end of the work program week.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
		<p>DATA SUBMISSIONS</p> <p>I would also like to take this opportunity to remind ESSO Australia of the survey data submissions expected from these activities.</p> <p>Other Survey Submission Requirements</p> <p>Survey Acquisition Report and Data (s7.16, Schedule 3, Part 2)</p> <p>Within 18 months from completion of acquisition</p> <ul style="list-style-type: none"> * Survey acquisition report * Field Data * Field Support Data * Navigation Data <p>Submit survey acquisition report and seismic support data to NOPTA Perth Office.</p> <p>Submit navigation, field data and seismic support data to NOPDCR, Canberra.</p> <p>Survey Processing Report and Data (s7.17, Schedule 4, Part 3)</p> <p>Within 24 months from completion of acquisition</p> <ul style="list-style-type: none"> * Survey Processing Report * Final processed data * Final processed images <p>Submit survey processing report and data to NOPTA Perth Office.</p> <p>Survey Interpretation Report and Images (s7.18, Schedule 5)</p> <p>Within 30 months of completion of acquisition</p> <ul style="list-style-type: none"> * Survey interpretation report * Digital images of interpretation maps <p>Submit survey interpretation report and images to NOPTA Perth Office.</p> <p>Please do not hesitate to contact me should you have any further queries or concerns with data submissions requirements.</p> <p>Thanks</p> <p>Kind Regards</p> <p>[REDACTED]</p>			
2067	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2244	06-Dec-18	Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.	<input type="checkbox"/>	No objections, claims or issues raised	
2989	06-May-19	Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.	<input type="checkbox"/>	No objections, claims or issues raised RESPONSE: 06/05/19 Email from NOPTA: Thank you for emailing the National Offshore Petroleum Titles Administrator (NOPTA) Titles Team. Please accept this email as acknowledgement that your email has been received by NOPTA	
3021	14-May-19	Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1543	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1700	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2068	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2184	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2245	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2990	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3006	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1544	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1701	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

Organisation: [REDACTED]

ID 88

Contact Name: [REDACTED]

Position: Community member

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2069	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2246	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1545	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1702	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2070	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2185	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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2280	05-Dec-18	<p>Offshore Community Session: summary of [REDACTED] (EAPL) talking points & stakeholder consultation as noted by [REDACTED] (EAPL):</p> <p>[REDACTED] spoke to the whole group about Esso's current and planned activities in Bass Strait in the next 12 months. Topics for discussion included the G&G survey work completed in 2018, the location and timing of survey work to be completed in 2019, and the scope of the BTW project. Other topics included:</p> <p>MILESTONES:</p> <ul style="list-style-type: none">- Over the last 24 months, our Gippsland operations have been able to meet unprecedented east coast gas demand by increasing our production well above our historical levels.- But as the major fields in Bass Strait reach the end of their natural lives, we need to find new sources of gas.- In August, we commenced our first deep-water exploration drilling program in over 20 years, by drilling two new wells, Baldfish and Hairtail at a block known as VIC/P70, south east of our existing fields.- While the \$120m drilling campaign was completed safely and without incident by the drill rig Ocean Monarch in November, unfortunately, we didn't encounter commercial quantities of hydrocarbons.- Prior to drilling we also completed our Environment Plan, which included stakeholder consultation. We're keen to listen to your opinions on how that went and how we can keep improving our operations.- Despite not finding commercial gas at our first attempt in over 20 years, we are actively pursuing new gas development opportunities in Bass Strait so that we can meet the demand for gas.- We are going to keep trying to find new sources of gas. To do this, we have had our best engineering and science minds working on options for new gas developments to bring online much needed new gas supplies from Bass Strait fields.- We've already spent money reprocessing our historic seismic data across the Bass Strait and will consider purchasing new seismic data, should it be acquired. This will help our geoscience team better identify opportunities for new gas supplies that will keep Victorians warm in winter and cooking with gas. <p>PLANNED OFFSHORE ACTIVITIES</p> <ul style="list-style-type: none">- Following the completion of our exploration drilling at Baldfish and Hairtail, Esso is planning to utilise the Ocean Monarch rig to undertake well abandonment work for the Blackback field and look to undertake possible further exploration drilling in VIC/P70 sometime in 2019.- We are also planning to develop a gas field in the VIC/L1 block, known as West Barracouta, approximately 6km south west of the existing Barracouta platform.- The proposed West Barracouta development will involve the drilling of two subsea wells which will be tied back to our existing Barracouta infrastructure in Bass Strait.- A subsea flowline approximately 6km in length will be connected via a subsea	<input type="checkbox"/>	No objections, claims or issues raised	

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		<p>hot tap into the existing gas export pipeline and a controls umbilical approximately 6.5 km in length to the Barracouta platform will also be installed.</p> <ul style="list-style-type: none">- As the project develops, additional consultation with stakeholders will be conducted.- We're also planning on undertaking repair and maintenance works on our Cobia pipeline, which will start soon on 20 December 2018. The pipeline is 5.5 kilometres long and runs between our Cobia and Halibut platforms.- The dive support vessel, the Seven Eagle, will be supported by the Bhagwan Dryden and the repair between Cobia and Halibut is expected to take 10-14 days.- The Seven Eagle collected the 5.5km flexible pipeline in Denmark in late October and has just left Singapore after taking on supplies and Australian crew.- Whilst the majority of the work will take place within the Cobia and Halibut petroleum safety zones a notice to mariners will be issued.- We're also updating the current environment plans for our offshore plans, which we conduct 5-yearly, and will consult with relevant stakeholders on ongoing and new risks. We've heard your feedback around multiple consultations and I'm pleased to say we've been able to work with the regulator to consolidate our 9 Environment Plans into 1 for our existing operations.- As you can see we have a busy schedule of work ahead of us and are pleased to continue investing in our operations, bringing new domestic gas supplies to market and creating jobs. <p>2019 also marks a milestone year for our Bass Strait operations, with the 50th year of production from our Gippsland Basin Joint Venture with BHP.</p> <ul style="list-style-type: none">- It's amazing to think that back in 1969 when hydrocarbons were first produced, that we'd still be here today 50 years later, powering the local economy. <p>Stakeholders in attendance:</p> <p>[REDACTED] LEFCOL – Discussed Esso projects including Cobia PRP and timing of the activity this year. No environmental concerns or issues raised relating to EAPL projects or operations. Industry has been busy with a lot of consultation and they are concerned about the extent of the proposed CGG seismic campaign. Enquired as to whether there had been any change in fishing activities and areas in Bass Strait – only change has been the development of an octopus fishery. One boat is doing this and LEFCOL are processing the catch. Octopus fishing involves the use of traps laid on the sea floor that are then retrieved.</p> <p>Water Police – offshore recreational fishing has grown significantly in recent years with the development of the sword fish fishery. This is a long way offshore (beyond phone range) and has attracted up to 20 vessels at times. No environmental concerns or issues raised with EAPL operations or projects.</p> <p>Lakes Entrance Senior citizens Centre and Lakes Entrance Neighborhood House representatives – provided a brief overview of our operations and projects and the various regulatory requirements (environment plan, safety case, licences) – no environmental concerns or issues raised with EAPL operations or projects.</p>			

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		Attendees of the COXINS training course – quick discussion on long term opportunities for employment within the oil and gas business in Bass Strait no environmental issues raised.			
		[REDACTED] (Federal MPs office) – quick discussion about projects in the next 12+ months and the level of activity associated with maintaining gas production and supply to Victoria – no environmental concerns			
		DEDJTR - [REDACTED] (Regional Manager Gippsland) was also in attendance			
2247	06-Dec-18	Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.	<input type="checkbox"/>	No objections, claims or issues raised	
3024	14-May-19	Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.	<input type="checkbox"/>	No objections, claims or issues raised	

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1547	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1703	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2071	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2248	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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1548	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
2996	06-May-19	Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.	<input type="checkbox"/>	No objections, claims or issues raised	

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1549	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	

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1550	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1704	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2072	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2249	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2991	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
3038	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11’ 10”, 147° 49’ 02” (Wirrah), 38° 05’ 42”, 148° 02’ 05” (Sweetlips), 38° 11’ 54”, 148° 33’ 42” (East Pilchard), 38° 34’ 14”, 147° 19’ 17” and 38° 29’ 20”, 147° 22’ 34” (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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1551	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1705	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2073	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2250	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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1552	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1706	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

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2074	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2251	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

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1619	22-Jan-18	Email from [REDACTED] (EAPL) to [REDACTED] (AHS): Hello [REDACTED], Esso Australia is currently preparing to perform a geophysical survey in the Barracouta Field, Bass Strait. We are about to award the contract to perform the works. Under our new Environmental Plan (Pending Approval) we have committed to notifying AHS prior to the works commencing. I was given your email address by our Environmental Team. Appreciate it if you could advise the form of the notification, what information is to be included and any other requirements that you may have.	<input type="checkbox"/>	No objections, claims or issues raised	
1620	23-Jan-18	Email from [REDACTED] (AHS) to [REDACTED] (EAPL): [REDACTED], Thanks for the heads up, If you could let us know with at least three weeks notice (I realise it is weather dependant etc)where, when, including completion and what is going to take place we can arrange appropriate ntm action	<input type="checkbox"/>	No objections, claims or issues raised	
1622	24-Jan-18	Email from [REDACTED] (AHS) to [REDACTED] (EAPL): [REDACTED], We currently have a notice out for the vessel, see attached. As this area is within those limits we will leave that one in force until this task is completed.	<input type="checkbox"/>	No objections, claims or issues raised	
1621	24-Jan-18	Email from [REDACTED] (EAPL) to [REDACTED] (AHS): Hello [REDACTED], Thank you for the response by email and by phone. We wish to notify you of the following activity so that a Notice to Mariners can be prepared and Issued. Details of the Project are as follows : Project : BTW Geophysical and Environmental Survey Start Date : 15 Feb End Date : 5th March Location : The route lies between BTA Platform (Barracouta), BTW Well site and the BMA pipeline Tie-in location. It is approx. 5.4 Nm long (10km) The coordinates of these are : (see attachment) Vessel :MV Offshore Guardian Vessel Activities : The vessel will perform a geophysical survey involving Bathymetry, Side Scan Sonar, Sparker and Magnetometer within 1NM either side of the route. The vessel will also perform stationary activities involving taking seabed and water samples. Please advise if there is any additional information you may require.	<input type="checkbox"/>	No objections, claims or issues raised	
1553	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1623	17-Feb-18	<p>Email from [REDACTED] (EAPL) to [REDACTED] (AHS): Good Afternoon, The purpose of this email is to inform you that Esso Australia intends to commence an Offshore Geophysical Survey at the following location in Bass Strait.</p> <p>The Australian Hydrographic Office has been informed as per the email below. The attachment shows the Notification to Mariners which is currently in place</p> <p>The survey is expected to start on Monday 19th February however the start may be delayed due to deteriorating weather conditions around then.</p> <p>The vessel will be towing a side scan sonar fish on about 150m of cable astern of the vessel.</p> <p>The survey is expected to be completed by the 5th March.</p> <p>Please advise should you have any queries re this survey.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1707	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2075	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2089	06-Aug-18	Email received from AHO:	<input type="checkbox"/>		
2252	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1554	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1708	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2076	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2096	06-Aug-18	<p>I am out of the office. For Antarctic and CCAMLR issues please contact Jack [REDACTED]. For all else, please contact Philip Kimpton, Director Sea Law section.</p> <p>Thank you</p> <p>[REDACTED]</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2253	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2994	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders:</p> <p>Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign.</p> <p>The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3013	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1555	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1709	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2077	06-Aug-18	<p>Email and fact sheet sent from ██████████ (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
		<p>If you have any questions or concerns, please do not hesitate to contact ██████████ on ██████████ or ██████████</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>			
2254	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1557	16-Feb-18	Email sent from ██████████ (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1711	07-Jun-18	<p>Email sent from ██████████ (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact ██████████ on ██████████ or ██████████</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2078	06-Aug-18	<p>Email and fact sheet sent from ██████████ (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact ██████████ on ██████████ or ██████████</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2256	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1559	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1713	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2079	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2258	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1560	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1714	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2080	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2259	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1563	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1717	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2081	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2261	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1564	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1718	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2082	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2262	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1565	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1719	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2083	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2263	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED]

Position: Research Officer

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1566	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1720	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018)</p> <p>Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: [REDACTED]

Position: Research Officer

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2084	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder, Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2264	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder, Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2992	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1567	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	
1721	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2085	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia's upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2265	06-Dec-18	<p>Email sent from EAPL: Dear Stakeholder,</p> <p>Further to the fact sheet that was distributed on 6 August 2018, seabed surveys will continue to be completed throughout 2019 at the locations identified in the map below. Esso Australia will provide advance notice to stakeholders of the proposed start date of the survey activities at each location including vessel details.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1578	22-Feb-18	<p>Email received from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (EAPL): Yesterday I received a call from the master of the fishing vessel Panama II who had placed a line of Octopus traps in the Barracouta area. He then liaised with the Offshore Guardian Master and provided coordinates etc.</p> <p>Following that I received a call from the OIM from Tuna, [REDACTED] [REDACTED] who liaises with the Fisherman’s Association on behalf of EAPL.</p> <p>We have plotted the two lines of traps and they are clear of our area of survey. The lines are plotted on our screens and we will avoid them.</p> <p>Attached is my response to [REDACTED].</p> <p>For details on the fishing activities please liaise directly with [REDACTED] (copied above)</p>	<input type="checkbox"/>	<p>ISSUE: Placement of octopus traps in Barracouta area. MERIT: We have plotted the two lines of traps and they are clear of our area of survey. The lines are plotted on our screens and we will avoid them.</p>	
1613	04-May-18	<p>[REDACTED] (EAPL) rang [REDACTED] [REDACTED] (Panama II) at 2:15pm. There was no answer, [REDACTED] left a message asking him to return her call.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
1612	07-May-18	<p>Phone call between [REDACTED] (EAPL) and [REDACTED] [REDACTED] (Panama II): [REDACTED] saw the flyer we put in the SETFIA magazine and wanted to make us aware of the octopus traps he has set up in the BTW and Tarwhine pipeline area. There are marker buoys attached to the traps. He wanted to know which vessel we’re using for the geotech surveys so that he can talk to the vessel and make sure it won’t get entangled in his traps. He is also very interested to know the exact timing of the heavy geotech and drilling at BTW so that he can remove his traps if they are in the way (so they don’t get damaged). He would like us to email the geotech survey vessel information and timing to him</p>	<input checked="" type="checkbox"/>	<p>ISSUE: [REDACTED] (EAPL) to forward Panama II the email regarding the BTW G&G campaign MERIT: [REDACTED] (EAPL) emailed past update emails and fact sheets to [REDACTED] [REDACTED] (Panama II) see ID [REDACTED] ISSUE: [REDACTED] [REDACTED] (Panama II) also suggested we look into posting on the fishing co-ops’ Facebook pages as another effective way of communicating to fishermen. [REDACTED] (EAPL) to follow up with P&GA and see what they think about the best way to go about this MERIT: Email received from [REDACTED] [REDACTED] (EAPL) with recommendations regarding Facebook posts as a means of stakeholder consultation. See ID_1618</p>	15-May-18
1615	08-May-18	<p>Email sent from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (Panama II): Good morning [REDACTED],</p> <p>Following on from your phone conversation with [REDACTED] yesterday, I’ll be sending you a series of past emails which were sent out to our stakeholders advising them of upcoming petroleum activities in Bass Strait. You have now been added to our list of stakeholders to ensure you receive future updates that may affect your fishing activities.</p> <p>We are still verifying the details of the vessel that will be used for the upcoming geotechnical survey, but you will be advised via email prior to the commencement of the survey.</p> <p>Please don’t hesitate to contact me if I can be of further assistance</p>	<input type="checkbox"/>	No objections, claims or issues raised	
1616	08-May-18	<p>Email received from [REDACTED] [REDACTED] (Panama II) to [REDACTED] [REDACTED] (EAPL): Hi [REDACTED], thanks for the update, we have received the emails.</p> <p>Kind regards, [REDACTED] [REDACTED]</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1617	09-May-18	Email sent from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (Panama II): Hi [REDACTED], [REDACTED] said you suggested we could post information on the fishing co-ops' Facebook pages as another effective way of communicating to fishermen. Can you please provide me with the relevant Facebook pages so that I can look into this option	<input type="checkbox"/>	No objections, claims or issues raised	
1635	27-May-18	Email received from [REDACTED] [REDACTED] to EAPL consultation inbox: Hi [REDACTED], we have hauled 3 lines and repositioned, the new locations are as follows Hauled line #120 and redeployed as line #128 #128 38'16.785 142'45.899 38'17.726 147'42.576 Hauled line #121 redeployed as line #129 #129 38'21.610 147'36.930 38'19.331 147'39.488 Hauled line #122 redeployed as line #130 #130 38'17.759 147'42.298 38'19.768 147'39.724 If this doesn't make sense call me on 0412699394 and I can explain	<input type="checkbox"/>	No objections, claims or issues raised	
1726	07-Jun-18	Email sent from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (Panama II): Hi [REDACTED], We've just notified all our stakeholders of the upcoming Geotechnical Survey on 17 June 2018. In regards to your lines, please liaise directly with [REDACTED] who is the Esso Survey Representative on the vessel. [REDACTED]'s mobile is: 0402 6666 54 Also, you are welcome to share the geotechnical survey information on the Lakes Entrance Fishing Fleet Facebook Page.	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1722	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1737	14-Jun-18	<p>Email sent from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (Panama II): Hello [REDACTED], I disembarked the Offshore Guardian on Tuesday and moved to Lakes Entrance yesterday in preparation for the start of the mob of the Dryden on Sunday.</p> <p>I will get back to you later today on the supply of coordinates (Degs and Decimal Minutes on EWGS-84) of the locations at Barracouta for our geotechnical works. Bhagwan are preparing a spreadsheet</p> <p>Once I get the coordinates for the current locations of your occy lines, I will pass to Bhagwan. These will be plotted on the Dryden survey screens and the vessel's radar system.</p> <p>As discussed, the upcoming works will be stationary.(Last time in March you may recall we were towing equipment)</p> <p>I happened to speak with Lee [REDACTED]son (Exxon Fishing Liaison) on Tuna while closing out a work permit there a few days and updated him on our conversation the other day.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
1738	15-Jun-18	<p>Email sent from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (Panama II): Hello [REDACTED], Thanks for octopus line coordinates received by text message. I will pass these to the Dryden Master and Surveyors for display on their systems.</p> <p>Attached are the locations of the geotechnical sampling points in Barracouta Field.</p> <p>Weather permitting, we expect to arrive Barracouta Field on Wednesday.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
1854	23-Jun-18	<p>Email sent from [REDACTED] (EAPL) to [REDACTED] [REDACTED] (Panama II): Hello [REDACTED], This is to advise you that at 0445 Hrs this we completed performing the Barracouta light geotechnical works and departed site for Eden.</p> <p>Thanks for the cooperation received during the preparation and execution periods of the works.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2086	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2186	20-Nov-18	<p>Community Session invitation sent from [REDACTED] (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2995	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
3027	14-May-19	<p>Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11’ 10”, 147° 49’ 02” (Wirrah), 38° 05’ 42”, 148° 02’ 05” (Sweetlips), 38° 11’ 54”, 148° 33’ 42” (East Pilchard), 38° 34’ 14”, 147° 19’ 17” and 38° 29’ 20”, 147° 22’ 34” (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1723	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>		

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2087	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1821	22-Jan-18	Email from [REDACTED] (EAPL) to [REDACTED] (AHS): Hello [REDACTED], Esso Australia is currently preparing to perform a geophysical survey in the Barracouta Field, Bass Strait. We are about to award the contract to perform the works. Under our new Environmental Plan (Pending Approval) we have committed to notifying AHS prior to the works commencing. I was given your email address by our Environmental Team. Appreciate it if you could advise the form of the notification, what information is to be included and any other requirements that you may have.	<input type="checkbox"/>	No objections, claims or issues raised	
1820	23-Jan-18	Email from [REDACTED] (AHS) to [REDACTED] (EAPL): [REDACTED], Thanks for the heads up, If you could let us know with at least three weeks notice (I realise it is weather dependant etc)where, when, including completion and what is going to take place we can arrange appropriate ntm action	<input type="checkbox"/>	No objections, claims or issues raised	
1818	24-Jan-18	Email from [REDACTED] (AHS) to [REDACTED] (EAPL): [REDACTED], We currently have a notice out for the vessel, see attached. As this area is within those limits we will leave that one in force until this task is completed.	<input type="checkbox"/>	No objections, claims or issues raised	
1819	24-Jan-18	Email from [REDACTED] (EAPL) to [REDACTED] (AHS): Hello [REDACTED], Thank you for the response by email and by phone. We wish to notify you of the following activity so that a Notice to Mariners can be prepared and Issued. Details of the Project are as follows : Project : BTW Geophysical and Environmental Survey Start Date : 15 Feb End Date : 5th March Location : The route lies between BTA Platform (Barracouta), BTW Well site and the BMA pipeline Tie-in location. It is approx. 5.4 Nm long (10km) The coordinates of these are : (see attachment) Vessel :MV Offshore Guardian Vessel Activities : The vessel will perform a geophysical survey involving Bathymetry, Side Scan Sonar, Sparker and Magnetometer within 1NM either side of the route. The vessel will also perform stationary activities involving taking seabed and water samples. Please advise if there is any additional information you may require.	<input type="checkbox"/>	No objections, claims or issues raised	
1814	16-Feb-18	Email sent from [REDACTED] (EAPL) to all stakeholders advising commencement of EAPL VIC/L1 (West Barracouta) Environmental and Seabed Surveys	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1813	17-Feb-18	<p>Email from [REDACTED] (EAPL) to [REDACTED] (AHS):Good Afternoon, The purpose of this email is to inform you that Esso Australia intends to commence an Offshore Geophysical Survey at the following location in Bass Strait.</p> <p>The Australian Hydrographic Office has been informed as per the email below. The attachment shows the Notification to Mariners which is currently in place</p> <p>The survey is expected to start on Monday 19th February however the start may be delayed due deteriorating weather conditions around then.</p> <p>The vessel will be towing a side scan sonar fish on about 150m of cable astern of the vessel.</p> <p>The survey is expected to be completed by the 5th March.</p> <p>Please advise should you have any queries re this survey.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1859	17-Apr-18	<p>Email from [REDACTED] (EAPL) to [REDACTED] (AHS): Hello [REDACTED] again, We wish to notify you of the following activity so that a Notice to Mariners can be prepared and Issued.</p> <p>Details of the Project are as follows :</p> <p>Project : BTW Light Geotechnical Survey</p> <p>Start Date : 12th May 2018</p> <p>End Date : 12th June 2018</p> <p>Location : The route lies between BTA Platform (Barracouta), BTW Well site and the BMA pipeline Tie-in location. It is approx. 5.4 Nm long (10km)</p> <p>The coordinates of these are :</p> <p>Vessel : MV Dryden (Call Sign VHCO)</p> <p>Vessel Activities : The vessel will perform a geotechnical survey involving seabed sampling by Vibrocore and PCPT. These are stationary activities. However when not sampling the vessel will be moving from site to site within the location.</p> <p>The works are expected to take a week however the start date may be delayed due to current poor weather conditions in Bass Strait which may delay vessel availability for our project.</p> <p>So I have included a contingency for delayed start and weather experienced during the survey.</p> <p>As we did previously, we will notify you upon completion of the activity</p> <p>Please advise if there is any additional information you may require.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
1861	31-May-18	<p>Email from [REDACTED] (AHS) to [REDACTED] (EAPL): Hi [REDACTED] No problem extension acknowledged</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1860	31-May-18	<p>Email from [REDACTED] (EAPL) to [REDACTED] (AHS): Hello [REDACTED], Following up on my recent conversation with you, I wish to again extend the Notice to Mariners to the 7th July.</p> <p>This includes a contingency for vessel availability and the potential for poor weather conditions in Bass Strait.</p> <p>As yet the works have not commenced. (Expected start now on 16th June) We will notify you when the works are completed.</p> <p>Note that the works no longer include the BMA 350 tie-in mentioned in the original email below.</p> <p>The works will be performed within 1NM of the route listed below.</p> <p>Appreciate it if you can acknowledge this extension.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1811	07-Jun-18	<p>Email sent from [REDACTED] (EAPL) to all stakeholders: Notification of Geotechnical Survey Activity (17 June 2018) Dear Stakeholder,</p> <p>As advised in the Offshore Project Fact Sheet sent to you on 21 December 2017, geotechnical seabed surveys are being conducted for the VIC/L1 (West Barracouta) development, to support potential plug and abandonment campaign and for potential drilling activities in VIC/L9. The Environment Plan covering these activities was accepted by NOPSEMA on 2nd February. This email is to notify you of the commencement date, vessel name and call sign as listed below:</p> <p>Commencement date: 17 June 2018 Name of vessel: MV Dryden Call sign: VHCO</p> <p>The proposed survey will involve collection of shallow geotechnical data and collection of seabed samples. The approximate duration of the survey is 7 days (weather dependent) in the West Barracouta location.</p> <p>Please note that the MV Dryden is currently involved in other activities for Esso, unrelated to the geophysical and geotechnical survey campaign.</p> <p>We are committed to engaging with the communities where we operate and helping our stakeholders to understand our business. Esso has been consulting with stakeholders potentially affected by these projects through a number of different channels and will continue to do so.</p> <p>Please confirm if you would like to be notified once the survey has been completed. If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	Closed Out

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1830	19-Jun-18	<p>Email from [REDACTED] (EAPL) to AHS: Good Morning,</p> <p>The purpose of this email is to inform you that Esso Australia intends to commence an Offshore Geotechnical Survey at the location indicated below in Bass Strait. The Vessel is the Bhagwan Dryden. It is currently completing mobilization activities in Eden.</p> <p>The Australian Hydrographic Office has been informed as per the email below. That Notice to Mariners has been extended until the 7th July but will remain place until the works are completed.</p> <p>The geotechnical works are expected to start late on Wednesday 20th or more likely on Thursday 21st.</p> <p>The vessel will be performing geotechnical sampling on the seabed.</p> <p>The survey is expected to be completed before the 30th June.</p> <p>I will advise you once the works have been completed</p> <p>The vessel can be reached via VSAT on the following numbers and email address. As the works are relatively close to shore the mobile number will also work.</p> <p>Please advise should you have any queries re this Notification.</p> <p>Appreciate it if you can confirm receipt of this email.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
1858	23-Jun-18	<p>Email from [REDACTED] (EAPL) to [REDACTED] (AHS): R 230344Z JUN 18 FM JRCC AUSTRALIA TO AUSTRALIAN BORDER FORCE (AMBOC) HQJOC CHARLEVILLE RADIO SA TAS MARITIME RADIO (EX COAST RADIO HOBART (DAY)) TAS MARITIME RADIO (EX COAST RADIO HOBART (NIGHT)) CHARLEVILLE RADIO VIC CHARLEVILLE RADIO NSW HYDRO RAN HQJOC MAROPS IOR POR CTG 627.0</p> <p>BT UNCLAS SIC LTJ SUBJ: AUSCOAST WARNING CANCELLATION 142/18 A. JRCC AUSTRALIA 191021 UTC JUN 2018 1. /BEGINTEXT SECURITE FM JRCC AUSTRALIA 230344Z JUN 18 CANCEL AUSCOAST WARNING 142/18 SPECIAL PURPOSE VESSEL BHAGWAN DRYDEN OPERATIONS COMPLETE NNNN /ENDTEXT 2. COAST RADIO STATIONS PSE BCAST CANCELLATION ONCE ONLY NEXT SKED BT</p> <p>Hello [REDACTED], This is to advise you that the above geotechnical work was completed this morning at 0445 hours and that the vessel is now en route back to Eden.</p> <p>The Notice to Mariners can now be withdrawn.</p> <p>We were fortunate to have good weather conditions throughout and no delays due to equipment failures etc.</p>	<input type="checkbox"/>	No objections, claims or issues raised	Closed Out

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2090	06-Aug-18	<p>Email and fact sheet sent from [REDACTED] (EAPL) to all stakeholders: Dear Stakeholder,</p> <p>Please find attached a fact sheet outlining Esso Australia’s upcoming activities in Bass Strait.</p> <p>You will have seen some of this information before, in the fact sheet we sent you in December 2017 and the flyer included in PROFISH in May 2018. This revised fact sheet includes more detail on our upcoming drilling programs, pipeline project and other platform based activities.</p> <p>If you have any questions or concerns, please do not hesitate to contact [REDACTED] on [REDACTED] or [REDACTED]</p> <p>Please reply directly to this email if you would like to be taken off our consultation mailing list and/or regular updates mailing list.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2091	06-Aug-18	<p>Email received from AHO: Please accept this email as acknowledgement that your email has been received by the AHO. The data you have supplied will now be registered, assessed, prioritised and validated in preparation for updating our Navigational Charting products. These adhere to International and Australian Charting Specifications and standards. These standards may result in some data generalisation or filtering due to the scale of existing charts, proximity to other features, and the level of risk a reported feature presents to mariners.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2993	06-May-19	<p>Email sent from [REDACTED] (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	<p>RESPONSE: 06/05/19 Please accept this email as acknowledgement that your email has been received by the AHO. The data you have supplied will now be registered, assessed, prioritised and validated in preparation for updating our Navigational Charting products. These adhere to International and Australian Charting Specifications and standards. These standards may result in some data generalisation or filtering due to the scale of existing charts, proximity to other features, and the level of risk a reported feature presents to mariners.</p> <p>No objections, claims or issues raised</p>	

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
3045	09-May-19	<p>Email from [REDACTED] (EAPL) to AHO: Please be advised that Esso Australia are planning to conduct some offshore work in Bass Strait within the Barracouta platform's petroleum safety zone in early June.</p> <p>The work involves some inspection and preparation of the Barracouta pipeline to enable a future connection. The work will be conducted by the Bhagwan (MV) Dryden (call sign VHCO) with a subsea ROV and will take approximately 10 days. The vessel will at times have limited maneuverability but we anticipate no impact on other marine users as the work is within the existing petroleum safety zone which is also within the designated ATBA that prohibits large vessels.</p> <p>I don't think there is a requirement for the promulgation of related notices to mariners given the work is within our petroleum safety zone but welcome your thoughts.</p> <p>We have provided information to AMSA and will also notify the Joint Rescue Coordination Centre in due course.</p> <p>If you need any additional information please let me know.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
3003	14-May-19	<p>Stakeholder Update Email:</p> <p>Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign.</p> <p>A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

CorrespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2165	20-Nov-18	<p>Community Session invitation sent from ██████████ (EAPL): Dear valued stakeholder,</p> <p>Please find attached your invitation to the Esso Australia Offshore community session being held on Wednesday 5 December 2018.</p> <p>Your RSVP by responding to this email or accepting the calendar invitation you will receive following this email would be appreciated by Wednesday 28 November 2018.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
2974	06-May-19	<p>Email sent from ██████████ (EAPL) to relevant stakeholders: Please find attached a campaign information sheet detailing a number of offshore activities within the Gippsland Basin off the Victorian coastline collectively called the 2020 Jack Up Rig Campaign. The campaign sheet contains details including activity description, location, timing, impacts and risks.</p>	<input type="checkbox"/>	No objections, claims or issues raised	
3009	14-May-19	<p>Stakeholder Update Email: Further to the fact sheet that was distributed on 6 August 2018 and emails late last year, Esso Australia will continue some seabed survey activity through 2019 and this will now extend into 2020. The scope of work has been extended to cover work at Wirrah, Sweetlips, East Pilchard, Perch and Dolphin as identified by the orange shaded areas on the map below. The additional work is likely to involve a number of short vessel campaigns at approximately 38° 11' 10", 147° 49' 02" (Wirrah), 38° 05' 42", 148° 02' 05" (Sweetlips), 38° 11' 54", 148° 33' 42" (East Pilchard), 38° 34' 14", 147° 19' 17" and 38° 29' 20", 147° 22' 34" (Perch and Dolphin respectively, both within the existing petroleum safety zones). Esso Australia will provide advance notice to stakeholders of the proposed start dates, and confirm locations and vessel details for each campaign. A revision to the Geophysical and Geotechnical Survey Environment Plan is being developed and will be submitted to NOPSEMA for acceptance.</p>	<input type="checkbox"/>	No objections, claims or issues raised	

Contact Name: ,

Position:

CorespID	Corresp Date	Summary	F/U	Objections/Claims/Issues/Merits	Closed Out
2458	06-Feb-18	Minutes from Esso Fishermens Claims Tribunal: Esso's operations update. ██████ tabled a series of documents and included an update on Esso's offshore projects in particular Hairtail / Baldfish program and the West Barracouta program.	<input type="checkbox"/>		

Contact Name: ,

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2951	18-Feb-19	<p>ESSO FISHERMENS CLAIMS TRIBUNAL Date and time of meeting: 18 February 2019, 1100 hrs. Present: ██████████, ██████████, ██████████ SON, ██████████ & ██████████ Notes of Meeting 1. Matters Arising from meeting of 06 August 2018. Cooper Energy No further contact has been made with Cooper Energy and it is assumed that the company has decided not to be involved with the tribunal. CGG Seismic Surveys ██████████ provided an update on the activities of CGG in Bass Strait and the frustrations being experienced by Lakes Entrance fishermen. The surveys are yet to be approved. 2. Claims No new claims were received for consideration. 3. Other business Remuneration In accordance with the minutes of 13 August 2012, it was agreed to apply a CPI increase of 1.8% to sitting fees effective from January 2019. The sitting fee will now be \$1154.00 (plus GST). Esso Summary of Activities 2019 PROJECT SUMMARY 5 yearly EP update Esso is currently conducting a 5 yearly review of our existing Environment Plans for platforms operating in Bass Strait. The revised plans will be submitted to the regulator (NOPSEMA) in September 2019.</p> <p>In developing the Environment Plans, Esso will conduct an environmental risk assessment to evaluate environmental risks associated with our ongoing operations, and will incorporate prevention and mitigation measures that reduce these risks to As Low as Reasonably Practicable (ALARP) and acceptable levels. Esso undertakes regular and continuing consultation with our stakeholders regarding impacts and risks to the environment from our operations and the control measures in place to prevent or mitigate these impacts and risks. Your feedback is sought and welcomed regarding any of our activities in Bass Strait.</p> Blackback update Esso is undertaking a project to secure the Blackback wells using the Ocean Monarch MODU. The program started in February 2019 and will last approximately 90 days. (Well coordinates: Latitude 38° 32' south, Longitude	<input type="checkbox"/>		


Contact Name: ,

Position:

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		<p>148° 33' east). BTW update / Kipper</p> <p>☑ A geotechnical survey will be completed at a number of locations in Bass Strait including the BTW proposed well locations, Seahorse, Tarwhine and Kipper subsea facilities. The vessel to be used and timing are still being negotiated, but will be communicated to our stakeholders as soon as possible. Earliest start date will be April and latest start date will be July this year. The geotechnical campaign will take approximately 10 days.</p> <p>☑ An ROV vessel will be contracted to complete inspection activities on the BTA450 approximately 400m from BTA (ie within the PSZ) at the proposed BTW hot tap location. The inspection activities will commence at the earliest mid-May for a duration of less than 10 days.</p> <p>☑ Drilling EP preparation has commenced for BTW and KPA. Further details about the environmental impacts and risks from the drilling activity will be communicated separately. The earliest start date for drilling of BTW is January 2020.</p> <p>☑ A ROV vessel will be conducting early inspection works at the KPA subsea facilities at the earliest June for a duration of 2 weeks.</p> <p>☑ Another vessel will be contracted to continue the remaining geophysical survey in accordance with the Gippsland Basin Geophysical and Geotechnical Investigations EP.</p> <p>☑ Esso will advise LEFCOL the start dates once confirmed.</p> <p>Cobia PRP update</p> <p>The Subsea 7 “Seven Eagle” Dive Support Vessel safely and successfully replaced the Cobia-to-Halibut 300mm diameter oil export pipeline with a new 150mm flexible pipeline.</p> <p>The offshore installation work started on Christmas Eve and lasted about 10 days. It took 20,000 work hours involving saturation divers and ROV activities to lay approximately 5.5 kilometres of flexible pipeline and tie it in to the Cobia and Halibut platforms.</p> <p>The work was completed with zero safety or environmental incidents.</p> <p>Teams are preparing Cobia’s facilities to return to production after about four years offline and Halibut platform is being prepared to receive oil-flow from Cobia. This preparation work includes pressure vessel inspections and repairs, piping inspections and replacements, valve checks and overhauls, instrumentation and electrical system works.</p> <p>Compressor and pump machinery will be reinstated, plugs removed from the wells with a wireline campaign and then finally commissioning and starting-up the facilities.</p> <p>Mackerel</p>			

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		<p>Platform Mackerel platform has reached the end of its producing life. The wells will be secured in 2019. Navigation lights and corrosion protection for the structure will be maintained until the decommissioning plan is approved and executed.</p> <p>Sculpin-1 Esso is planning to drill the Sculpin-1 exploration well in block Vic P/70, about 90 km offshore in 2,300 m water depth. The target is a potential gas reservoir</p> <p>(with limited condensate) Drilling is scheduled to commence as early as June, 2019, utilising the Ocean Monarch MODU. The offshore activities are expected to take about 2 months.</p> <p>Seahorse / Tarwhine Esso is reviewing options to secure the Seahorse and Tarwhine wells using a jack-up drilling rig in 2020</p> <p>Perch / Dolphin / Whiting Esso is reviewing options to secure the Perch, Dolphin and Whiting wells using a jack-up drilling rig in 2020/21</p> <p>50 years in Bass Strait This year we will be celebrating two key milestones for our business – the 50th anniversary of first production from our Gippsland operations and the 70th anniversary of the opening of our Altona Refinery.</p> <p>These milestones will be celebrated with community sessions later in the year.</p> <p>4. Next meeting The next meeting will be held on Monday 12 August 2019 at Lakes Entrance commencing at 1000 hrs. (If no claims have been received the meeting will commence at 1100 hrs) Meeting closed 1200 hrs</p> <p> CHAIRMAN</p>			