Question	Response
How will interaction with commercial fishing activities be managed?	Safety is ConocoPhillips' top priority. We support safe and responsible navigation by all marine vessels, including oil and gas support vessels and commercial fishing vessels.
	For the Barossa Development Drilling campaign, as per standard industry practice, a petroleum safety zone (PSZ) will be in place around the MODU while it is drilling each well. Outside these exclusion zones, within and outside the operational area, safe navigation is a joint responsibility of all marine vessels to safely share the marine environment and manage activities accordingly.
	ConocoPhillips does not anticipate a significant level of interaction due to low fishing activity in the area and the fact that the drilling area is located in deep water (220-280 metres) and away from shoals/banks. A number of proposed controls for support vessels and the drill rig will be included in the Environment Plan to be submitted to NOPSEMA for assessment.
	The controls that will be in place cover vessel movement, noise, waste, speed and communications. For example: 1. The MODU will be equipped with a RACON (radar transponder) or Automatic Identification System (AIS) to minimise risk of vessel collisions.
	2. Support vessels will be equipped and crewed in accordance with the <i>Navigation Act 2012</i> (as applicable for vessel size, type and class) including, but not limited to, Marine Orders 21 (Safety of Navigation and Emergency Procedures), 27 (Radio Equipment), 30 (Prevention of Collisions) and 71 (Masters and Deck Officers).
	3. Consultation with relevant and interested stakeholders will be undertaken in accordance with ConocoPhillips' stakeholder consultation plan, both prior to and during drilling operations.
	4. Fishing licence holders of potentially affected commercial fisheries will be notified regarding commencement of drilling activities prior to the start of the campaign and the start of drilling at each well location.
	5. Australian Hydrographic Service (AHS) Notice to Mariners and AMSA Maritime Safety Information (MSI) will be notified prior to commencement of drilling activities.
	6. A support vessel will always be present in the field during MODU drilling activities to minimise the potential adverse interactions with other vessels.
	7. Ongoing communications will take place with potentially affected fishers.

The Vessel Master will maintain primary responsibility for communicating with other marine vessels. ConocoPhillips will ensure a contact point is available throughout the drilling campaign for the commercial fishing sector to discuss any related issues or concerns.

As part of our key commitment to safe and responsible operations ConocoPhillips ensures all personnel working on our activities, as well as other users of the area, are aware of the relevant requirements outlined in accepted EPs. ConocoPhillips supports safe and responsible navigation by all marine vessels, including oil and gas support vessels and commercial fishing vessels. Safe navigation is a joint responsibility of all marine vessels to safely share the marine environment and manage activities accordingly.

All ConocoPhillips' personnel, including third party contractors, involved with the development drilling and completions activity, undergo the appropriate training and marine induction prior to commencing work on the project. This will include being made aware of their responsibility to implement the requirements of the EP, including those related to on-water safety.

The training will inform the work crews of their obligations and specific environmental management procedures, including personal responsibilities and lines of communication. Requirements for training are documented, and completed training is recorded for all personnel. Risk based audits are conducted by both ConocoPhillips (as part of normal internal policy) and by NOPSEMA to ensure compliance with EP requirements.

ConocoPhillips will engage with relevant commercial fishers as part of ongoing consultation on the proposed development drilling campaign. ConocoPhillips does not anticipate a significant level of interaction due to low fishing activity in the area and the fact that the drilling area is located in deep water (220-280 metres) and away from shoals/banks.

Do you enforce a 'No fishing from support/commercial vessels' policy?

Recreational fishing is not permitted from support vessels while they are under contract with ConocoPhillips.

All personnel, including third party contractors, involved with the activity will undergo the appropriate training and marine induction prior to commencing work on the project. This will include being made aware of their responsibility to implement the requirements of the EP as well as specific ConocoPhillips' policy and requirements. The training and marine induction will inform the work crews of their obligations and specific environmental management procedures, including responsibilities and lines of communication. This includes the directive that recreational fishing is not permitted from any marine vessel or facility. Personnel training is recorded.

HSE management system audits of third-party contractors are completed according to the ConocoPhillips audit procedure. The frequency of contractor audits is reviewed and updated annually.

What operational and exclusion	
zones will be in place?	

During drilling, a 500m PSZ will be in place around the MODU while it is drilling at each well location. As per standard industry practice, it is ConocoPhillips' intention to apply for a permanent 500m PSZ around each of the wellheads to ensure they are protected for the duration of Barossa operations. ConocoPhillips will liaise with relevant stakeholders at an appropriate time closer to when an application for permanent zones is made.

ConocoPhillips does not anticipate a significant ongoing impact from the exclusion zones as the drilling area constitutes a very small area of the overall fishery, is located in deep water (220-280 metres) and away from shoals/banks and has low fishing activity in the area.

For the Barossa Development Drilling campaign, as per standard industry practice, an operational area has been nominated in addition to the 500m PSZ. It is recognised that other marine users are not excluded from this broader operational area. Outside of the 500m PSZ, within and outside the operational area, safe navigation is a joint responsibility of all marine users to safely share the marine environment and manage activities accordingly.

All personnel, including third party contractors, involved with the activity will undergo the appropriate training and marine induction prior to commencing work on the project. This will include being made aware of their responsibility to implement the requirements of the EP. The training will inform the work crews of their obligations and specific environmental management procedures, including responsibilities and lines of communication. The induction will explain the requirements associated with the petroleum safety zone and the 2.5km operational area. Personnel training is recorded.

How is the drilling schedule planned to reflect the least / absolute minimal impact to other on-the-water activities?

Once development drilling and completions activities commence, they will occur continuously throughout the year over approximately two years. ConocoPhillips will be mindful of peak fishing periods but the exact timing of drilling activities at each well location is subject to a range of factors including rig availability, sea state and weather conditions and operational efficiencies.

As indicated above we will continue to consult during development of the schedule in 2020 and provide as much notice as possible of drilling locations and time frames. ConocoPhillips will be able to provide commercial fishing stakeholders with a clearer schedule for each well closer to the activity.

ConocoPhillips will continue to consult with NT DPIR (Fisheries) and commercial fishers on an ongoing basis and encourages licence holders and their representative associations to provide information they feel is important to assist in the preparation of our drilling campaign.

ConocoPhillips does not anticipate a significant level of interaction with commercial fishing as the drilling area constitutes a very small area of the overall fishery, is located in deep water (220-280 metres) and away from shoals/banks and has low fishing activity in the area.

What processes does ConocoPhillips have in place, e.g. baseline or pre-drilling stock assessments, to quantitively assess any damage to fish and shellfish stocks in the event of a spill event? ConocoPhillips has in place robust spill prevention, mitigation and response capability. The number of proposed controls to be included in the EP include the following:

- 1. Support vessels will be equipped and crewed in accordance with the *Navigation Act 2012* (as applicable for vessel size, type and class) including, but not limited to, Marine Orders 21 (Safety of navigation and emergency procedures), 27 (Radio Equipment), 30 (Prevention of Collisions) and 71 Masters and Deck Officers).
- 2. An Oil Pollution Emergency Plan (OPEP) will be prepared and implemented throughout the Barossa Drilling Campaign.
- 3. All vessels will have a dedicated Ship Oil Pollution Emergency Plan (SOPEP).
- 4. Bunkering will be undertaken under a Permit-to-Work system
- 5. Vessel speed restrictions will be in place in the 500 metre PSZ.
- 6. Support vessel entry and movements within the 500 metre PSZ will be undertaken in accordance with the MODU Marine Operations Manual

ConocoPhillips' has an Operational and Scientific Monitoring Program (OSMP) that will be adopted in the event of a hydrocarbon spill incident. The OSMP is the principal tool for assessing the extent, severity, and persistence of environmental impacts from a marine hydrocarbon spill and informing oil spill response and remediation activities. The OSMP includes the Scientific Monitoring Plan SM07 "Determination of the impact of hydrocarbon/chemical spill on commercial, traditional and recreational fisheries and aquaculture".

As outlined in the Barossa Offshore Project Proposal (OPP), ConocoPhillips has undertaken an extensive and robust environmental baseline studies program, including collaborative studies with the Australian Institute of Marine Science (AIMS), to characterise the existing marine environment within and surrounding the Barossa offshore development area. For example, a field-based seabed biodiversity survey¹ was conducted of three shoals to the west of the Barossa offshore development area (Evans Shoal, Tassie Shoal and Blackwood Shoal) and two mid-continental shelf regions relevant to the potential gas export pipeline route. The survey involved

¹ See Appendix F and Addendum (Heyward et al. 2017) of the Barossa OPP – https://www.nopsema.gov.au/assets/OPPs/A598152-2.pdf

characterisation of the seabed habitats, associated biota and fish communities through the use of multibeam, towed video and stereo baited remote underwater video stations (SBRUVs).

ConocoPhillips is also able to draw upon extensive fish spawning research and assessment conducting over the Barossa development area for our 2016 3D seismic work². This included desktop studies and consultation with the commercial fishing industry and the NT DPIR (Fisheries). ConocoPhillips has engaged with and continues to engage with the NT DPIR (Fisheries) on stock assessments.

ConocoPhillips will continue to consult with commercial fishers on an ongoing basis and encourages licence holders and their representative associations to provide information they feel is important to assist in the preparation of our drilling campaign.

What is being done to address the threat of oil spills?

An activity-specific Oil Pollution Emergency Plan (OPEP) that demonstrates arrangements for responding to and monitoring oil pollution in the event of a major unplanned release must be prepared by ConocoPhillips, submitted and accepted by the Australian Government regulatory body, NOPSEMA, prior to commencing the activity.

Safety is ConocoPhillips' top priority. We support safe and responsible navigation by all marine vessels, including oil and gas support vessels and commercial fishing vessels. For the Barossa Development Drilling campaign, as per standard industry practice, a petroleum safety zone (PSZ) will be in place around the MODU while it is drilling each well. Outside these exclusion zones, within and outside the operational area, safe navigation is a joint responsibility of all marine vessels to safely share the marine environment and manage activities accordingly.

ConocoPhillips has in place robust spill prevention, mitigation and response capability. One of the main measures that has been implemented to reduce oil spill impacts for the Barossa Project is to only allow vessels which use marine diesel oil as opposed to Heavy Fuel Oil. Other proposed controls to be part of the EP include the following:

- Support vessels will be equipped and crewed in accordance with the Navigation Act 2012 (as applicable for vessel size, type and class) including, but not limited to, Marine Orders 21 (Safety of navigation and emergency procedures), 27 (Radio Equipment), 30 (Prevention of Collisions) and 71 Masters and Deck Officers).
- An Oil Pollution Emergency Plan (OPEP) will be prepared and implemented throughout the Barossa Drilling Campaign.
- All vessels will have a dedicated Ship Oil Pollution Emergency Plan (SOPEP).

² See accepted Caldita-Barossa 3D Marine Seismic Survey EP – https://info.nopsema.gov.au/environment_plans/364/show_public

- Bunkering will be undertaken under a Permit-to-Work system
- Vessel speed restrictions will be in place in the 500 metre PSZ
- Support vessel entry and movements within the 500 metre PSZ will be undertaken in accordance with the MODU Marine Operations Manual

In the unlikely event of a major unplanned release, an Oil Spill Management Plan (OSMP) will be implemented which includes a number of operational monitoring plans and scientific monitoring plans to guide the spill response and assess potential environmental impacts. The OSMP is initiated and implemented as appropriate to the nature and scale of the spill and the existing environment, as informed by a net environmental benefit assessment. The OSMP includes the Scientific Monitoring Plan SM07 "Determination of the impact of hydrocarbon/chemical spill on commercial, traditional and recreational fisheries and aquaculture".

As outlined in the Barossa Offshore Project Proposal (OPP), ConocoPhillips has undertaken an extensive and robust environmental baseline studies program, including collaborative studies with the Australian Institute of Marine Science (AIMS), to characterise the existing marine environment within and surrounding the Barossa offshore development area.

For example, a field-based seabed biodiversity survey was conducted of three shoals to the west of the Barossa offshore development area (Evans Shoal, Tassie Shoal and Blackwood Shoal) and two mid-continental shelf regions relevant to the potential gas export pipeline route. The survey involved characterisation of the seabed habitats, associated biota and fish communities through the use of multibeam, towed video and stereo baited remote underwater video stations (SBRUVs).

ConocoPhillips is also able to draw upon extensive fish spawning research and assessment conducting over the Barossa development area for our 2016 3D seismic work. This included desktop studies and consultation with the commercial fishing industry and the NT DPIR (Fisheries). ConocoPhillips has engaged with and continues to engage with the NT DPIR (Fisheries) on stock assessments.

Spill response is highly dependent on the nature and scale of the activity being conducted, the location of the activity and the mix of source hydrocarbons. As noted above, an Oil Pollution Emergency Plan (OPEP) will be implemented throughout the Barossa Drilling Campaign. The OPEP will include a detailed plan outlining how ConocoPhillips would respond to a worst-case spill event. The OPEP will also identify how ConocoPhillips' response aligns with state/territory plans and the National Plan for Maritime Environmental Emergencies as part of collective tiered responses.

As part of the development of the OPEP, ConocoPhillips conducted workshops with specialist consultants and our oil spill response providers AMOSC and OSRL. These workshops identified the best spill response techniques to use in different spill scenarios and helped determine the type and quantity of resources required to implement these techniques. Response options that are available include the following:

- source control (relief well drilling, well capping)
- monitoring and evaluation
- containment and recovery
- oiled wildlife response
- monitoring of environmental effects
- remediation

The EP and associated OPEP will be developed based on these identified spill response options and will demonstrate that the risks of spills is ALARP and acceptable. ConocoPhillips will be pleased to share further details of the plans as they are prepared and the final version that is accepted by NOPSEMA.

What lessons has ConocoPhillips learned from other global spill events, especially in relation to emergency response time and (early) control of the oil loss in Australia's isolated oceans?

The Australian oil and gas industry works collaboratively through its global networks to share best practice as part of our commitment to continuous improvement. Oil spill preparedness and response capacity are improving through regional cooperation and collaboration with the Australian Marine Oil Spill Centre (AMOSC) and OSRL for example.

The industry association APPEA (of which ConocoPhillips is an active member) is working with the international oil and gas industry to ensure Australia has access to the world's best well incident prevention and response capability. In 2011, the International Oil and Gas Producers Association's Global Industry Response Group established a Subsea Well Response Project, which led to the development of a complete subsea incident response equipment package and the Subsea First Response Toolkit (SFRT) for use anywhere in the world.

An Australian SFRT was developed in partnership with the global SFRT and is compatible with it. Funded by an industry consortium (including ConocoPhillips), it provides specialised equipment in Australia for immediate use at the start of a subsea well control event. It contains equipment to clean around the wellhead, enable intervention and prepare for relief well drilling and installation of a capping device.

The oil and gas industry in Australia has access to a number of cooperative arrangements in the event of a spill, including:

• the APPEA MoU on mutual aid assistance arrangements in drilling relief wells

- mutual spill response equipment and stockpiles maintained through the AMSA National Plan for Maritime Environmental Emergencies located in Darwin, Fremantle, Geelong, Brisbane
- State and Territory contingency plans
- the Australian Marine Oil Spill Centre (AMOSC), including the SFRT at Fremantle and Geelong
- OSRL including the subsea well intervention systems located in Singapore

ConocoPhillips believes the capability exists within the industry for our proposed response to a worst-case scenario for Barossa to reduce relevant risks to ALARP and acceptable.

What could be the possible impacts to turtles and fish and implications this could have on hunting (turtles) and fishing?

ConocoPhillips does not anticipate any interaction with traditional fishing or hunting activities or any impact on these activities caused by the proposed offshore drilling campaign due to the remote locations. The drill sites are located approximately 300 kilometres north-west of Darwin (~130kms from the Tiwi Islands). The drilling would occur in deep water (220-280 metres) and away from shoals/banks.

The closest regionally important environmental features are Evans Shoal (35 km west), Tassie Shoal (32 km west) and Lynedoch Bank (27 km east). The area does not contain any biologically important areas or regionally significant feeding, breeding or aggregation areas for marine fauna, specifically any emergent land or shallow features that may be of importance to turtles and, therefore, they are unlikely to be present in the area in significant numbers. While they may pass through, they will not remain there. There is no land or other features that support nesting or feeding turtles, breeding populations of seabirds, or migratory shorebirds.

Although the tropical waters off the NT coast contain a diverse range of fish, their abundance is considered low in the deep, relatively featureless waters that characterise the Barossa offshore development area and surrounds. There are no significant seabed features or benthic communities in the area. The seabed footprint for the entire project, including the Gas Export Pipeline, is relatively small at a regional scale with any potential disturbance expected to be very localised.

The placement of infrastructure on the seabed will result in a single brief disturbance resulting in a transient turbid plume. The remote project location means no facilities will be placed near any areas of regional environmental importance such as shoals, banks, coral reefs, or biologically important areas or habitats critical to the survival for marine fauna.

Assessment of all potential risks associated with these activities and investigation of additional control measures, is ongoing as part of the development of the Environment Plan (EP). Risks assessed to date of particular relevance to your questions are as follows:

- Impacts from physical presence of offshore infrastructure (well heads), the drilling rig and support vessels potentially causing interference with other activities or impacts from noise
- Impacts from the unplanned introduction of Invasive Marine Species (i.e. marine pests)
- Impacts from an unplanned release of fuel from the drilling rig or support vessels due to a vessel collision or refuelling incident; (discussed in separate response below)
- Impacts from unplanned loss of well control event (discussed in separate response below).

A number of proposed controls for support vessels and the drill rig will be included in the EP to be submitted to NOPSEMA for assessment. The controls that will be in place cover vessel movement, noise, waste, speed and communications. For example:

- The MODU will be equipped with a RACON (radar transponder) or Automatic Identification System (AIS) to minimise risk of vessel collisions.
- Support vessels will be equipped and crewed in accordance with the Navigation Act 2012 (as applicable for vessel size, type and class) including, but not limited to, Marine Orders 21 (Safety of Navigation and Emergency Procedures), 27 (Radio Equipment), 30 (Prevention of Collisions) and 71 (Masters and Deck Officers).
- Consultation with relevant and interested stakeholders will be undertaken in accordance with ConocoPhillips' stakeholder consultation plan, both prior to and during drilling operations.
- Fishing licence holders of potentially affected commercial fisheries will be notified regarding commencement of drilling activities prior to the start of the campaign and the start of drilling at each well location.
- Australian Hydrographic Service (AHS) Notice to Mariners and AMSA Maritime Safety Information (MSI) will be notified prior to commencement of drilling activities.
- A support vessel will always be present in the field during MODU drilling activities to minimise the potential adverse interactions with other vessels.
- Ongoing communications will take place with potentially affected fishers.

The residual risk of impact from planned discharge of drill cuttings and Water-Based Mud fluids in the area is considered low given the relatively short duration of development drilling, the fact that discharge of sediment is contained within the area where no significant benthic communities have been identified, and no contact is predicted with the closest shoals/ banks. Impacts beyond temporary minor effects to water quality (e.g. turbidity increase) and localised burial, smothering and displacement of commonly represented benthic habitats and communities are not anticipated.

Natural sources (i.e. wind and waves) of underwater noise dominates the soundscape of the area, with some contributions from biological sources (e.g. fish and whales). There is a low level of anthropogenic activity in the area, with vessel movements a minor contributor.

Vessels, facilities (including MODUs/drill ships) and equipment sourced from outside Australia have the potential to introduce or transport invasive marine species (IMS) to the project area. The project will be managed in accordance with a Quarantine Management Plan and all relevant Australian and international regulations, requirements and guidelines.

A Quarantine Management Plan will be developed and implemented, which will include as a minimum:

- compliance with all relevant Australian legislation and current regulatory guidance
- outline of when an IMS risk assessment is required and the associated inspection, cleaning and certification requirements
- implementation of management measures commensurate with the level of risk (based on the outcomes of the IMS

risk assessment), such as inspections and movement restrictions

• anti-fouling prevention measures including details on maintenance and inspection of anti-fouling coatings.

All wastes generated offshore will be managed in accordance with relevant legal requirements. A Project Waste Management Plan will be developed and implemented and will include details of:

- the types of waste that will be generated by the project and will require containment, transport to, and disposal at, a licensed facility onshore
- management protocols for the handling, segregation and responsible disposal of wastes. For example, non-hazardous and hazardous solid and liquid wastes will be transported safely to shore and disposed onshore at licensed treatment and disposal facilities
- measurable performance criteria
- · competency and training
- audits, reporting and review, including compliance checks via waste manifests.