

**Table 2:** Summary of impacts/risks and key proposed controls for installation activities

Aspect	Potential interaction	Proposed Control
<b>First Nations cultural values (tangible and intangible)</b>	<ul style="list-style-type: none"> <li>• Potential disturbance to underwater cultural heritage (UCH) during installation activities.</li> <li>• Potential changes to cultural values, including songlines, dreaming stories and culturally important marine fauna.</li> </ul>	<ul style="list-style-type: none"> <li>• A UCH 'finds protocol' will be implemented where there are activities interacting with the seabed with the risk of disturbing unlocated First Nations UCH, to ensure discoveries are identified and responded to with adequate conservation and management actions.</li> <li>• Control measures related to marine fauna and other cultural values and features are outlined in sections below.</li> <li>• Chevron Australia is committed to ongoing engagement and consultation with Traditional Owners and their representative bodies. This will continue to inform our understanding of cultural values and features and facilitate the co-design of appropriate controls to avoid impacts.</li> </ul>
<b>Planned impacts</b>		
<b>Physical presence of subsea infrastructure, field control station and vessels within the Operational Area (OA)</b>	<ul style="list-style-type: none"> <li>• Presence of subsea infrastructure, field control station and vessels within the OA has the potential to interact and disrupt commercial shipping, fishing vessels and marine fauna</li> <li>• Potential interaction with fishing vessels may result in entanglement of trawl fishing gear on subsea infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>• Relevant parties will be advised of the commencement of key phases of the activity.</li> <li>• Marine safety information to be issued via AUSCOAST and/or Notice to Mariners (where required) prior to commencing the installation activity.</li> <li>• Vessels will meet Chevron's crew competency, navigation equipment, and radar requirements as per the Chevron Corporation Marine Standard.</li> <li>• In accordance with EPBC Regulations 2000 – Part 8 Division 8.1 – Interacting with cetaceans, vessels will implement caution and no approach zones, where practicable.</li> <li>• Where required, a simultaneous operation plan will be developed and implemented to manage the activity.</li> </ul>
<b>Light emissions</b>	<ul style="list-style-type: none"> <li>• Navigation and operational lighting from vessels within the OA may result in a localised and temporary change in ambient light.</li> <li>• Change in ambient light may result in the temporary attraction of light-sensitive species.</li> </ul>	<ul style="list-style-type: none"> <li>• Vessels will meet lighting requirements of the Chevron Corporation Marine Standard.</li> <li>• An activity-risk assessment will be undertaken when vessels work at night within critical habitats and during turtle nesting season.</li> </ul>
<b>Underwater sound from marine surveys, vessels and helicopter operations within the OA</b>	<ul style="list-style-type: none"> <li>• Surveys, vessels and/or helicopter operations within the operational area may result in localised and temporary increase to ambient underwater sound levels.</li> <li>• A change in ambient sound may result in temporary and localised behavioural disturbance to marine fauna.</li> </ul>	<ul style="list-style-type: none"> <li>• In accordance with EPBC Regulations 2000 – Part 8 Division 8.1 – Interacting with cetaceans, vessels will implement caution and no approach zones, and interaction management action.</li> <li>• A dedicated Marine Fauna Observer will be on-board the main installation vessel during the predicted peak periods for pygmy blue whale migration when working in the pygmy blue whale migration biologically important area.</li> <li>• Vessel bridge-watch crew will be trained in marine fauna observations.</li> <li>• Pre-start visual observations will be undertaken prior to the commencement of installation activities.</li> </ul>
<b>Seabed Disturbance</b>	<ul style="list-style-type: none"> <li>• Seabed disturbance from installation activities may result in the alteration of marine habitat and a localised and temporary change in water quality.</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-lay surveys will be conducted to identify and avoid emergent seabed features before installing subsea infrastructure.</li> <li>• Vessels will meet the crew competency, navigation equipment, and radar requirements as per the Chevron Corporation Marine Standard.</li> </ul>
<b>Air Emissions</b>	<ul style="list-style-type: none"> <li>• Combustion of fuel from vessels and helicopters within the operational area may result in a localised and temporary reduction in air quality.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced sulfur content fuel will be used.</li> <li>• Vessels will comply with the requirements of Marine Order 97 (MARPOL 73/78 Annex VI) in relation to air pollution.</li> </ul>

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<b>Planned Discharges – Vessel Operations</b>	<ul style="list-style-type: none"> <li>Planned discharges from vessel operations may result in localised and temporary change in water quality.</li> </ul>	<ul style="list-style-type: none"> <li>Vessels will comply with the requirements of Marine Order 96 (MARPOL 73/78 Annex IV) in relation to sewage discharge.</li> <li>Vessels will comply with the requirements of Marine Order 95 (MARPOL 73/78 Annex V) in relation to food waste discharge.</li> <li>Vessels will comply with the requirements of Marine Order 91 (MARPOL 73/78 Annex I) in relation to oily bilge water discharges.</li> </ul>
<b>Planned Discharges – Subsea Operations</b>	<ul style="list-style-type: none"> <li>Leak testing, flying lead installation and pre-commissioning activities may have the potential to result in planned discharges from subsea operations causing localised and temporary change in water quality.</li> <li>Change in ambient water quality may result in indirect impacts to marine fauna.</li> </ul>	<ul style="list-style-type: none"> <li>Hazardous materials will be selected and managed in accordance with <i>Chevron Australia's Hazardous Materials Management Procedure</i>.</li> </ul>

## Unplanned risks

<b>Invasive marine pests</b>	<ul style="list-style-type: none"> <li>Planned discharged of ballast water or the presence of biofouling on vessels may have the potential to result in the introduction of an invasive marine pest.</li> </ul>	<ul style="list-style-type: none"> <li>Vessels will meet the requirements of the Chevron Australia's Quarantine Management Procedure for Marine Vessel.</li> <li>Ballast water exchanges will be managed in accordance with the Australian Ballast Water Management Requirements.</li> <li>Vessels greater than 400 GT with an antifoul coating are to maintain an up-to-date international antifouling coating certification in accordance with the Protection of the Sea (Harmful Anti-fouling Systems) Act 2006 and/or relevant codes and standards.</li> <li>Where required, vessel pre-arrival information will be reported through the Maritime Arrivals Reporting System as per the Commonwealth Biosecurity Act 2015.</li> </ul>
<b>Accidental release – waste</b>	<ul style="list-style-type: none"> <li>Vessel operations and subsea structure, jumpers, and tie-in spool installation activities may result in an unplanned release of waste to the environment causing marine pollution and potentially resulting in entanglement or injury to marine fauna.</li> </ul>	<ul style="list-style-type: none"> <li>Vessels will comply with the requirements of Marine Order 95 (MARPOL 73/78 Annex V) in relation to managing waste (garbage) offshore.</li> </ul>
<b>Accidental release – fuel bunkering</b>	<ul style="list-style-type: none"> <li>Unplanned release of hazardous material from transferring materials from vessel activities may result in indirect impacts to the marine environment and fauna arising from chemical toxicity.</li> </ul>	<ul style="list-style-type: none"> <li>Vessels will meet the requirements of Chevron Corporation Marine Standard, including the pre-mobilisation inspections of equipment, couplings and secondary containment availability and refuelling/bunkering process</li> <li>Vessels will comply with the requirements of Marine Order 91 (MARPOL 73/78 Annex I) in relation to having an approved Ship Oil Pollution Emergency Plan in place.</li> </ul>
<b>Accidental release – vessel collision</b>	<ul style="list-style-type: none"> <li>The potential environmental impacts associated with hydrocarbon exposure from a vessel collision event may result in marine pollution, smothering of subtidal and intertidal habitats, indirect impacts to fisheries, and reduction in amenity.</li> </ul>	<ul style="list-style-type: none"> <li>Vessels will meet the crew competency, navigation equipment, and radar requirements of the Chevron Corporation Marine Standard.</li> <li>Notification to relevant agencies of activities and vessel movements to allow them to send warnings and/or notices to mariners prior to commencing activity.</li> <li>Vessels will comply with the requirements of Marine Order 91 (MARPOL 73/78 Annex I) in relation to having an approved Ship Oil Pollution Emergency Plan in place.</li> <li>Emergency response will be implemented in accordance with the response arrangements and strategies detailed in <i>Chevron Australia's Oil Pollution Emergency Plan</i>.</li> <li>Where required, operational and scientific monitoring will be undertaken in accordance with <i>Chevron Australia's Operational and Scientific Monitoring Plan</i>.</li> </ul>

Aspect	Potential interaction	Proposed Control
<b>Accidental release – hydrocarbons from subsea infrastructure</b>	<ul style="list-style-type: none"> <li>The potential environmental impacts associated with hydrocarbon exposures from a subsea release event may result in marine pollution, smothering of subtidal and intertidal habitats, indirect impacts to fisheries, and reduction in amenity.</li> </ul>	<ul style="list-style-type: none"> <li>Monitoring, inspection and maintenance of hydrocarbon system and infrastructure will be undertaken.</li> <li>Source control / isolation procedures will be implemented.</li> <li>Safe lifting of offsets from existing subsea infrastructure.</li> <li>Emergency response will be implemented in accordance with the response arrangements and strategies detailed in Chevron Australia's Oil Pollution Emergency Plan.</li> <li>Where required, operational and scientific monitoring will be undertaken in accordance with <i>Chevron Australia's Operational and Scientific Monitoring Plan</i>.</li> </ul>

## Emergency response

<b>Ground disturbance – shoreline spill response</b>	<ul style="list-style-type: none"> <li>In the event of a worst-case spill event, if shoreline is impacted, implementing shoreline clean-up techniques involves people and equipment, which may disturb shoreline habitat with subsequent impacts to fauna.</li> </ul>	<ul style="list-style-type: none"> <li>Where required, operational and scientific monitoring will be undertaken in accordance with <i>Chevron Australia's Operational and Scientific Monitoring Plan</i>.</li> </ul>
<b>Physical presence – oiled wildlife response</b>	<ul style="list-style-type: none"> <li>In the event of a worst-case spill event, if fauna is affected, the handling and treating of marine fauna will result in personnel interacting with marine fauna.</li> </ul>	<ul style="list-style-type: none"> <li>Where required, operational and scientific monitoring will be undertaken in accordance with <i>Chevron Australia's Operational and Scientific Monitoring Plan</i></li> </ul>

## Onshore

<b>Terrestrial Disturbance</b>	<ul style="list-style-type: none"> <li>Chevron Australia has prepared a separate Information Sheet outlining controls to be implemented to manage impacts and risks associated with terrestrial disturbance on Barrow Island. If you would like a copy, please request via the contact details listed.</li> </ul>	
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