

Roma Phase 7-7B-SD20 Development

Application Number: **02965**

Commencement Date:

Status: **Locked**

23/06/2025

1. About the project

1.1 Project details

1.1.1 Project title *

Roma Phase 7-7B-SD20 Development

1.1.2 Project industry type *

Energy Generation and Supply (non-renewable)

1.1.3 Project industry sub-type

LNG/FLNG

1.1.4 Estimated start date *

01/10/2025

1.1.4 Estimated end date *

01/10/2075

1.2 Proposed Action details

1.2.1 Provide an overview of the proposed action, including all proposed activities. *

The Roma Phase 7-7B-SD20 Development (Project) will involve the progressive construction, operation, decommissioning and rehabilitation of up to 24 Coal Seam Gas (CSG) wells and associated infrastructure located in Authority to Prospect (ATP) 2053 (Project Area).

The Project Area is located approximately (approx.) 5 km east of the town of Wallumbilla in central-eastern Queensland (Qld) (refer to Attachment (Att.) A - Project Area map). The Project Area is located in the Maranoa Regional Council Local Government Area (LGA).

Petroleum exploration undertaken by Santos in the Project Area to date includes drilling and completion of 5 CSG appraisal wells and construction of associated infrastructure in 2022-24. These initial activities are authorised under the existing Qld Environmental Authority (EA) 0002052. The existing 5 wells form part of the proposed 24 well development.

Gas and water produced from the Project Area will be sent to existing approved gas/water storage, processing and gas compression facilities on petroleum tenures located adjacent to the Project Area. Petroleum activities on adjacent tenures are authorised under existing EPBC Act approvals for the Gladstone Liquefied Natural Gas Field Development Project (GLNG GFD) (EPBC Numbers 2008/4059: 2012/6615) and EAs EPPG00898213 / EPPG00662213.

No gas compression, water treatment or significant water storage facilities are proposed to be constructed or operated in the Project Area. The Project will include the following components (but not limited to):

- well leases (typically 1.25 ha for single wells and up to 3 ha for multi-wells)
- water / gas gathering lines, trunklines and pipelines (typically 20-35 m wide)
- roads / access tracks (typically 10-15 m wide)
- other supporting infrastructure:
 - temporary water storage tanks
 - temporary workers camps
 - power / communications lines; and
 - other incidental / ancillary infrastructure required to support the authorised activity.

Santos has developed a preliminary disturbance footprint (PDF) for the Project to locate infrastructure to avoid impacts to Matters of National Environmental Significance (MNES) and other environmental values (refer to Att. B (PDF shapefile) and Att. C (Map of Project Area with PDF)). The PDF was developed following multiple ecological surveys, field scouting and desktop planning revisions to avoid impacts to MNES and other environmental values. The process for locating infrastructure and defining environmental constraints is described in the Environmental Protocol for Constraints Planning and Field Development (Constraints Protocol) (refer to Att. D). The Constraints Protocol was informed by ecological surveys undertaken in 2022-24 (refer to the MNES - Ecological Assessment Report (EAR) (refer to Att. E)).

The PDF includes proposed and existing disturbance areas for infrastructure and covers approx. 62 ha of land in the Project Area (approx. 1229 ha area). Proposed / existing infrastructure has been predominantly located in cleared agricultural land. Disturbance to environmental values has been reduced to 0.30 ha of woody vegetation and 0.60 ha of non-remnant ephemeral wetland habitat. No disturbance to Threatened Ecological Communities (TEC) is proposed (refer to Att. E for further detail on proposed disturbance to MNES).

Construction

Project development is planned to occur from late-2025. Well development will be phased to optimise gas production to meet Santos' gas supply obligations/opportunities. Progressive decommissioning / rehabilitation of activities / infrastructure is proposed to occur over the life of the Project, thereby reducing disturbance for the duration of operations, until final decommissioning / rehabilitation at end of project life (refer to the Rehabilitation Monitoring Plan (RMP) in Att. F for further information).

Wells

Well leases are designed to accommodate drilling, well completion equipment and support services. Well construction will involve a drill rig, storage for fuel, chemicals, drilling fluids, produced water (PW) and raw water supply. Hydraulic fracture stimulation will be used to complete wells as required. PW, waste drilling muds and hydraulic fracturing fluids will be managed in accordance with the requirements of the Environmental Management Plan (EMP) (refer to Att. G). Well construction will comply with the Code of Practice for the construction and abandonment of petroleum wells and associated bores in Qld (Code of Practice) (DNRME, 2019).

Linear Infrastructure

Construction of gathering lines / trunklines / pipelines typically requires a 20-35 m wide right-of-way (RoW). Gathering lines typically include installation of low point drains (LPDs) and high point vents (HPVs). Santos aims to co-locate linear infrastructure where possible i.e. access tracks and gathering are typically co-located in a single RoW.

Construction of roads / access tracks will be required for heavy and light vehicle access. Disturbance widths for roads / access tracks is typically 10-15 m wide. Where practicable, existing disturbance or access tracks will be used, upgraded and or co-located with gathering networks. Where upgrades to existing tracks are proposed, consultation will be undertaken with landholders. If multiple linear infrastructure services are co-located in a single RoW it will typically not exceed 40 m width.

Water supply

Santos estimates it will require approx. 158 megalitres (ML) of water to develop the Project. Water will be required to support development, maintenance, dust suppression, drilling and construction activities. Santos will preferentially use PW to develop the Project. PW may be stored and sourced from onsite portable water storage tanks (concrete panel tanks or similar) (henceforth referred to as 'tanks') in accordance with EA conditions. Use of PW from existing approved dams and tanks located on adjacent tenures in accordance with EA conditions may also be required. Alternatively, in conjunction with the preferential use of PW, landholder dam water may be used to support project activities.

Supporting infrastructure

A temporary camp facility may be required to accommodate workers. This facility will be assembled onsite from prefabricated modular units with amenities e.g. water tanks, modular sewage treatment plants, generators, fencing. Other supporting infrastructure and incidental petroleum activities may include:

- communications towers
- borrow pits
- fencing
- environmental monitoring equipment and management controls
- geophysical, geotechnical, geological, topographic, cadastral, and ecological surveys
- other incidental / ancillary infrastructure required to support the authorised activity.

Operation

Wells

Wells will operate continuously on a 24-hr basis, with an expected operational life of 30-50 years. Operational well leases typically include gas/water metering, separation and filtering equipment, electrical and control systems, and pipeline connections and tanks. Wells are monitored and controlled remotely; each well has an automated shutdown system in the event of non-routine operating conditions. Routine inspections / maintenance of wellhead infrastructure will be ongoing during operations. This may require use of a well workover rig.

Gas processing

Gas produced from the Project Area is planned to be transferred to an existing compressor station located on PL 314 via new and existing gathering infrastructure. In future, gas from the Project Area may be processed or sent elsewhere, subject to relevant approvals.

Produced water management

PW management is described in the Water Management Plan (WMP) (attached as Att. H). The WMP includes modelling to estimate PW and brine output volumes from the Project, and it assesses required processing and storage capacity.

The Project peak PW forecast is estimated at 0.24 ML/day in 2028. The majority of PW is planned to be transferred to existing approved water storage and treatment facilities located adjacent to the Project Area, namely on Petroleum Leases (PLs) 314 and 315, via new and existing gathering infrastructure. PW will be transferred to existing dams located on adjacent tenures. PW from these dams will then be transferred to existing treatment facilities located on PL 314, where the PW will be processed to meet re-use criteria in accordance with Qld End of Waste Code Irrigation of Associated Water (ENEW07546918).

Adequate PW / brine storage and treatment capacity has been assessed by the WMP to be available to manage peak PW / brine production from the Project. Santo has procedures to prevent uncontrolled discharge of PW (i.e. restriction of production by “turning down” or “shutting-in” wells). In future, PW from the Project Area may be processed or sent elsewhere, subject to relevant approvals. For further information on PW management refer to the WMP (Att. H).

Maintenance

Gathering lines and pipelines will be monitored, inspected, and maintained during operations. This will include inspection of LPDs / HPVs. Roads / access tracks will be maintained to appropriate standards to allow access for servicing and inspection of infrastructure. Supporting infrastructure will be maintained to appropriate standards.

Decommissioning and rehabilitation

Disturbed areas no longer required for operational purposes will be rehabilitated to a stable, non-polluting landform in accordance with relevant EA conditions. Once operations have ceased, infrastructure will be decommissioned unless the landholder agrees with the retention and transfer of ownership of assets (in compliance with EA conditions). Refer to the RMP (Att. F) for further detail on rehabilitation requirements.

Note, Santos will comply with the Constraints Protocol (Att. D), RMP (Att. F), EMP (Att. G) as revised or updated from time-to-time to align with regulatory requirements. Revised versions of these documents will be made available upon request to DCCEEW or as otherwise required under conditions of a regulatory approval, whether under the EPBC Act or any other applicable legislation.

1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?

Yes

1.2.3 Is the proposed action the first stage of a staged development (or a larger project)?

No

1.2.4 Related referral(s)

EPBC Number	Project Title
2008/4059	Coal Seam Gas Field Development for Natural Gas Liquefaction Park, Curtis Island
2012/6615	Santos GLNG Gas Field Development Project, QLD

1.2.5 Provide information about the staged development (or relevant larger project).

This Project is not a staged development, but it will connect into other related EPBC Act approved Santos projects located in the region. The proposed action relates to the GLNG (EPBC 2008/4059) and GFD (EPBC 2012/6615) projects approved under the EPBC Act prior to the grant of the Project's tenure (in 2020) i.e. the Project could not be integrated into the GLNG or GFD projects because Santos did not own the tenure at that time. The Project is a minor infill development of the existing GLNG and GFD projects and is being referred under the EPBC Act and is not expected to be determined a Controlled Action. Santos plans to begin developing the Project Area from 2025 onwards subject to assessment time requirements under the EPBC Act.

Separately, in the next 5-years, Santos plans to develop the nearby ATP 2052 tenure, which is located approx. 25 km east of the Project Area. The ATP 2052 development will involve up to 175 CSG wells and will connect into existing GLNG and GFD project infrastructure. ATP 2052 is planned to be developed from 2028 onwards. The ATP 2052 project is being progressed separately and is planned to be referred for a decision under the EPBC Act in later 2025.

Further, in the next 10 years, Santos has several other potential development opportunities located in the region surrounding the Project Area including development of ATP 2054 (located approximately 17 km east of the Project Area) and various other petroleum tenures. The scope and timing of construction of these developments is to be determined (potentially from 2030-2035 onwards), but the developments may involve the construction of several thousand additional CSG wells in the region. These additional developments are expected to be referred as Controlled Actions, however this will be assessed once the scope is determined.

1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? *

A detailed outline of Commonwealth and State legislation, planning frameworks or policy documents relevant to the proposed action are provided in the EMP (Att. G) and summarised below:

Relevant Commonwealth Legislation

Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act identifies 'nationally significant' animals, plants, habitats and places as MNES to be protected. The Project Area intersects locations with the potential to support habitat for MNES. To assess the potential impacts of land use changes and new developments, a significant impact assessment (SIA) informed by desktop and field investigations was undertaken against the EPBC Act significant impact guidelines, which indicates the proposed action is not likely to have a significant impact on MNES. The EPBC Act also recognises Weeds of National Significance (WoNS), which threaten natural landscapes, waterways and coastal areas by displacing native species, contributing to land degradation and reducing farm and forestry productivity.

Relevant Queensland Legislation

Petroleum and Gas (Production and Safety) Act 2004

The Petroleum and Gas (Production and Safety) Act 2004 (P&G Act) facilitates and regulates activities associated with the safe exploration, development and production of petroleum and gas resources in Queensland. Petroleum tenure granted by the Department of Natural Resources, Mines and Energy (DNRME) under the P&G Act relevant to the proposed action include ATPs, PLs and petroleum pipeline licences (PPL). PLs are the resource authority required to be granted prior to the commercial production of gas from a tenure. Santos currently holds ATP 2053 over the Project Area. To enable commercial gas production activities in the Project Area, a new PL will need to be applied for and granted by DNRME under the P&G Act to replace the existing ATP.

Environmental Protection Act 1994

The Environmental Protection Act 1994 (EP Act) is the overarching environmental regulatory framework for governing the environmental management of resource activities in Queensland.

Petroleum activities undertaken in Qld are authorised under the EP Act via environmental conditions contained in an Environmental Authority (EA). Petroleum exploration, appraisal and production testing activities are currently authorised to occur in the Project Area under the requirements of EA 0002052.

Prior to the granting of a new PL under the P&G Act, the Department of Environment Tourism, Science and Innovation (DETSI) must grant a new EA that authorises commercial gas production activities subject to conditions that protect environmental values including acoustic, biodiversity, land, air, surface water (SW), groundwater (GW) and wetlands.

Environmental Offsets Act 2014

Under the Environmental Offsets Act 2014 (EO Act) an environmental offset is defined as an activity undertaken to counterbalance a significant residual impact (SRI) on prescribed environmental matters (PEMs). Santos will be required to secure offsets for any SRI to PEMs associated with the Project Area where they are not acquitted under the environmental offset requirements of the EPBC Act.

Nature Conservation Act 1992 (NC Act)

The primary purpose of the Nature Conservation Act 1992 (Qld) (NC Act) is to conserve biodiversity by protecting wildlife and its habitat. Permits are required under the requirements of the NC Act for interfering with protected wildlife and their habitat. Where wildlife listed under the Nature Conservation (Animals) Regulation 2020 (Qld) or the Nature Conservation (Plants) Regulation 2020 (Qld) are proposed to be disturbed, relevant NC Act management, assessment and approval requirements will apply.

Requirements for managing fauna including the responsibilities of fauna spotter / catchers during clearing and construction activities are documented in the Project's Significant Species Management Plan (SSMP) (refer to Att. I). Santos will comply with the SSMP (Att. I) as revised or updated from time-to-time to align with regulatory requirements. Revised versions of the SSMP will be made available upon request to DCCEEW or as otherwise required under conditions of a regulatory approval, whether under the EPBC Act or any other applicable legislation.

Water Act 2000

The proposed action is located within the Surat Cumulative Management Area (CMA) and impacts are assessed in the Underground Water Impact Report (UWIR) for the Surat CMA by the Office of Groundwater Impact Assessment (OGIA). Section 370 of the Water Act 2000 (Qld) (Water Act) requires a UWIR be prepared for approval of the proposed action. Section 376 of the Water Act provides the detailed impact assessment requirements for UWIRs. The Surat UWIR assesses the cumulative GW impacts from resource operations in the Surat and Southern Bowen basins. OGIA prepared the first Surat UWIR in 2012 and updated it in 2016, 2019 and 2021. The UWIR identifies responsible tenure holder obligations under the Water Act that include 'make good' agreements, undertaking baseline assessments and implementing the water management strategy and the spring impact management strategy. Water licences under the Water Act may be required for other activities (e.g. licence to take water from a bore) associated with the proposed development.

Aboriginal Cultural Heritage Act 2003

The Aboriginal Cultural Heritage Act 2003 provides recognition, protection and conservation of Aboriginal cultural heritage in Queensland. The Aboriginal Cultural Heritage Act establishes a duty of care for activities that may harm Aboriginal Cultural Heritage. Santos has a Cultural Heritage Management Plan (CHMP) with the relevant Indigenous stakeholders for the Project Area, which is approved under Part 7 of the Aboriginal Cultural Heritage Act, which Santos will implement to manage and protect Aboriginal cultural heritage.

Other State approvals

The proposed action may require additional environmental and land use related approvals under other Queensland legislation including, but not limited to, the Fisheries Act 1994, Regional Planning Interests Act 2014 and Waste Reduction and Recycling Act 2011. Santos will apply for environmental and land use related approvals under relevant legislation as required.

1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. *

Santos has developed a stakeholder consultation plan for the Project to guide identification and consultation with relevant stakeholders.

Identified stakeholders include DETSI, DCCEEW, Indigenous stakeholders, directly and indirectly affected private landholders, the Maranoa Regional Council (MRC), Queensland Department of Transport and Main Roads, Ergon Energy, Queensland Rail, APA Group, the regional QLD and general community, and several environmental non-governmental organisations.

Santos uses a range of engagement methods to ensure the community and stakeholders are informed about the proposed action, and they have opportunities to discuss the Project and provide feedback. Santos aims to demonstrate transparency and maintain open channels of communication.

These methods include, but are not limited to, community meetings, site tours, attending and hosting special interest group meetings, employing dedicated landholder liaisons and community advisers, managing a community email inbox, newspaper advertisements, and the sponsoring of community events and landholder BBQs.

To date, Santos has undertaken engagement and consultation with DETSI, DCCEEW, Indigenous stakeholders, directly and indirectly impacted private landholders and the MRC (refer to Consultation Records in Att. J). Santos will undertake consultation and engagement with other stakeholders in due course and as required under the EPBC Act.

Santos has an ongoing relationship with the Indigenous stakeholders of the Project Area, and they have been consulted with in regard to the Project's development. Santos has an existing Cultural Heritage Management Plan (CHMP) in place, which is applicable to the Project.

The CHMP details how cultural heritage must be managed during exploration, development, and operational activities. Although the relevant Indigenous stakeholders do not currently hold Native Title rights over the Project Area, Santos continues to work with the Indigenous stakeholders around cultural heritage management and economic participation opportunities. The Indigenous stakeholders will undertake cultural heritage field assessments prior to Project related ground disturbance activities occurring. Santos implements a "Find Stop Notify" management procedure as part of the CHMP. Further, Santos will undertake ongoing and follow-up engagement with the relevant Indigenous stakeholders post-EPBC decision/approval of the Project.

1.3.1 Identity: Referring party

Privacy Notice:

Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable.

By completing and submitting this form, you consent to the collection of all personal information contained in this form. If you are providing the personal information of other individuals in this form, please ensure you have their consent before doing so.

The Department of Climate Change, Energy, the Environment and Water (the department) collects your personal information (as defined by the Privacy Act 1988) through this platform for the purposes of enabling the department to consider your submission and contact you in relation to your submission. If you fail to provide some or all of the personal information requested on this platform (name and email address), the department will be unable to contact you to seek further information (if required) and subsequently may impact the consideration given to your submission.

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Alternatively, email us at privacy@awe.gov.au.

Confirm that you have read and understand this Privacy Notice *

1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN 60123982749
Organisation name SANTOS VENTURES PTY LTD
Organisation address 5000 SA

Referring party details

Name Alex Clarke
Job title Senior Environmental Advisor
Phone (07) 3838 3000
Email alex.clarke@santos.com
Address Level 22, Santos Place, 32 Turbot Street, Brisbane, Queensland 4000
AUSTRALIA

1.3.2 Identity: Person proposing to take the action

1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? *

Yes

Person proposing to take the action organisation details

ABN/ACN 60123982749
Organisation name SANTOS VENTURES PTY LTD
Organisation address 5000 SA

Person proposing to take the action details

Name Alex Clarke
Job title Senior Environmental Advisor
Phone (07) 3838 3000
Email alex.clarke@santos.com
Address Level 22, Santos Place, 32 Turbot Street, Brisbane, Queensland 4000
AUSTRALIA

1.3.2.14 Are you proposing the action as part of a Joint Venture? *

Yes

Joint Venture Name	Business Address	ABN/ACN	Responsible Person	Email
KGLNG E&P Pty Ltd	Level 36, Santos Place 32 Turbot Street Brisbane QLD 4000	31146143339		
PAPL (UPSTREAM) PTY LIMITED	Level 36 Santos Place 32 Turbot Street BRISBANE QLD 4000	58131318888		
SANTOS VENTURES PTY LTD	Level 22, Santos Place, 32 Turbot Street, Brisbane, Queensland 4000 AUSTRALIA	60123982749	Alex Clarke	alex.clarke@santos.com
Total Energies EP Australia II	Tower 5 Level 23 Collins Square 727 Collins Street Docklands VIC 3008	52149617167		
TOTALENERGIES EP AUSTRALIA	Tower 5 Level 23 Collins Square 727 Collins Street Docklands VIC 3008	96832035151		

1.3.2.15 Are you proposing the action as part of a Trust? *

No

1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. *

The relevant Person's history includes that of Santos Ventures Pty Ltd, Kevin Thomas Gallagher, Sherry Duhe, and Amelia Catherine Senneck as relevant office holders. There are no past or current proceedings under a Commonwealth, State or Territory law for the protection of the environment and/or conservation and sustainable use of resources against Santos Ventures Pty Ltd or against Kevin Thomas Gallagher, Sherry Duhe, or Amelia Catherine Senneck in their personal capacities.

Santos Ventures Pty Ltd is a subsidiary of Santos. For more than 65 years Santos has been working in partnership with local communities, providing Australian jobs and business opportunities to safely and sustainably develop natural gas resources. Santos currently operates a diverse portfolio of high-quality assets in South Australia, Western Australia, Northern Australia and Timor Lesté, Papua New Guinea, Queensland and New South Wales. As part of the Santos corporate group, Santos' policies also apply to the operations of Santos Ventures Pty Ltd. Santos is committed to being the safest natural gas company wherever it operates and to preventing harm to people and the environment. Santos operates in accordance with applicable jurisdictional environmental legislation and approvals, which require performance and incident reporting. Santos' environmental planning framework is underpinned by the mandatory Santos Management System (SMS). The SMS includes policies on Environment, Health and Safety Policy, Risk Management Policy and Climate Change Policy (among others), and is applied by operating standards, procedures and other tools in risk, assurance, compliance, asset life cycle, contractor management, stakeholder engagement, and incident management (among others).

We annex Santos's Environment, Health and Safety Policy with which Santos Ventures Pty Ltd is required to comply for this action as Appendix 1 in the EMP (refer to Att. G).

Santos Ventures Pty Ltd have not previously submitted a referral for assessment under the EPBC Act.

1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

The Santos Management System (SMS) framework is described in Section 2 of the EMP (refer to Att. G). The SMS is guided by Santos' EHS Policy, which has been provided as Appendix 1 in the EMP (refer to Att. G).

As detailed above, Santos' environmental planning framework is underpinned by the mandatory SMS. The SMS includes an Environment, Health and Safety Policy, Risk Management Policy and Climate Change Policy (among others), and is applied by operating standards, procedures and other tools in risk, assurance, compliance, asset life cycle, contractor management, stakeholder engagement, and incident management (among others). The proposed action will be undertaken in accordance with Santos' EHS Policy and SMS.

1.3.3 Identity: Proposed designated proponent

1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? *

Yes

Proposed designated proponent organisation details

ABN/ACN 60123982749
Organisation name SANTOS VENTURES PTY LTD
Organisation address 5000 SA

Proposed designated proponent details

Name Alex Clarke
Job title Senior Environmental Advisor
Phone (07) 3838 3000
Email alex.clarke@santos.com
Address Level 22, Santos Place, 32 Turbot Street, Brisbane, Queensland 4000
AUSTRALIA

1.3.4 Identity: Summary of allocation

✔ Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

ABN/ACN	60123982749
Organisation name	SANTOS VENTURES PTY LTD
Organisation address	5000 SA
Representative's name	Alex Clarke
Representative's job title	Senior Environmental Advisor
Phone	(07) 3838 3000
Email	alex.clarke@santos.com
Address	Level 22, Santos Place, 32 Turbot Street, Brisbane, Queensland 4000 AUSTRALIA

✔ Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

Same as Referring party information.

✔ Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

1.4 Payment details: Payment exemption and fee waiver

1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? *

No

1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? *

No

1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?

No

1.4.7 Has the department issued you with a credit note? *

No

1.4.9 Would you like to add a purchase order number to your invoice? *

No

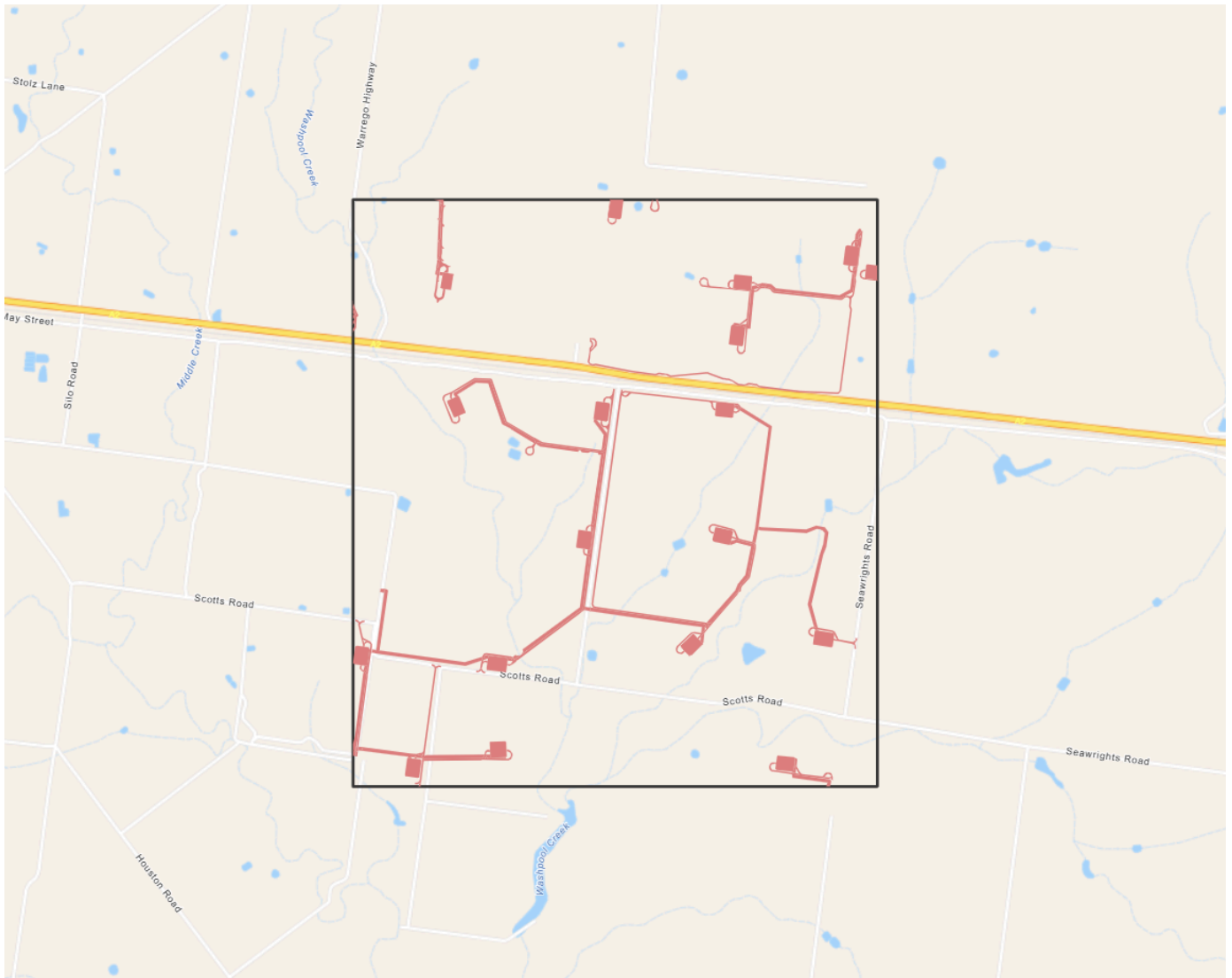
1.4 Payment details: Payment allocation

1.4.11 Who would you like to allocate as the entity responsible for payment? *

Proposed designated proponent

2. Location

2.1 Project footprint



Project Area: 1228.76 Ha Disturbance Footprint: 61.07 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

The Project Area is located approx. 5km east of Wallumbilla in central-eastern QLD. Refer to Pr

2.2.2 Where is the primary jurisdiction of the proposed action? *

Queensland

2.2.3 Is there a secondary jurisdiction for this proposed action? *

No

2.2.5 What is the tenure of the action area relevant to the project area? *

The Project Area is the extent of the ATP 2053 petroleum tenure. Petroleum activities on adjacent tenures are authorised under existing EPBC Act approvals for the GLNG GFD Project (EPBC Numbers 2008/4059 and 2012/6615) and QLD EAs EPPG00898213 and EPPG00662213.

The Project Area is surrounded by several PLs and ATPs. The relevant PLs and ATPs surrounding the Project Area include ATPs 1187, 2052, 2054, 2055 and PLs 1020, 282, 281, 315, 318 (authorised tenure holders are Santos subsidiaries and their JV partners).

Freehold and non-freehold land (Crown land - lands lease) lot on plan parcels relevant to the Project Area include:

Holding Type	Lot on Plan
• FREEHOLD	125WAL53367
• FREEHOLD	124WAL53367
• FREEHOLD	123WV468
• FREEHOLD	109RP189184
• FREEHOLD	120WAL53367
• FREEHOLD	121WAL53367
• FREEHOLD	238WAL53372
• FREEHOLD	426WAL53597
• FREEHOLD	631WV449
• FREEHOLD	421WV898
• FREEHOLD	122WAL53367
• FREEHOLD	162WV233
• FREEHOLD	126WAL53678
• FREEHOLD	131WAL53678
• FREEHOLD	128WAL53382
• FREEHOLD	127WAL53678
• FREEHOLD	129WAL53372
• FREEHOLD	130WAL53382
• FREEHOLD	159WV1423
• FREEHOLD	105WV68
• FREEHOLD	134WAL53372
• FREEHOLD	163WV322
• FREEHOLD	43WAL53326
• FREEHOLD	7WAL53372
• FREEHOLD	137WAL53372
• FREEHOLD	138WAL53372
• FREEHOLD	135WAL53381
• FREEHOLD	56WAL53326
• FREEHOLD	57WAL53328
• FREEHOLD	61WAL53328
• LANDS LEASE	51SP269504
• LANDS LEASE	51SP269504

There are also several easements and segment parcels traversing the Project Area. Relevant impacted properties will be consulted with prior to any potential impact.

Road parcels within the footprint include:

- Warrego Highway
- Scotts Road
- Seawrights Road; and

- Several unnamed local and gazetted roads.

3. Existing environment

3.1 Physical description

3.1.1 Describe the current condition of the project area's environment.

Climate

The climate of the Project Area is classified as subtropical with hot, wet summers and moderately dry, cold winters. Mean maximum temperatures range between 34.6°C in the summer months and 20.4°C in the winter months (Bureau of Meteorology station 043091, Roma Airport).

Mean minimum temperatures range between 21.1°C in the summer months and 3.7°C in the winter months. The highest rainfall occurs during December to February, with an average highest rainfall of 75.2 mm in December, the lowest rainfall occurs during June to September with a lowest average rainfall of 24.9 mm in August.

The average annual evaporation in the vicinity of the Project Area is between 2,000 millimetres (mm) and 2,400 mm. The highest evaporation occurs during the summer months (average monthly pan evaporation 300 mm), while the lowest evaporation occurs during the winter months (average monthly pan evaporation 80 mm) (BoM, 2024).

Regional Geology

The regional geology of the Project Area comprises sediments from the Early Cretaceous to Quaternary age Surat Basin. Stratigraphic units of relevance to the Project Area include:

- Quaternary alluvial systems within majority of the Project Area
- Early cretaceous age mudrock along the mid-eastern border of the Project Area; and
- Fine grained sedimentary rock north-eastern corner of the Project Area.

Land zones are categories that describe the major geologies, the associated landforms and geomorphic processes in Qld, and are a critical component of Qld's Regional Ecosystem (RE) vegetation classification scheme. The land zones identified within the Project Area using state mapping include:

- Land Zone 3: Recent Quaternary alluvial systems, including closed depressions, paleo-estuarine deposits currently under freshwater influence, inland lakes and associated wave built lunettes. Excludes colluvial deposits such as talus slopes and pediments. Includes a diverse range of soils, predominantly Vertosols and Sodosols.
- Land Zone 4: Tertiary-early Quaternary clay deposits, usually forming level to gently undulating plains not related to recent Quaternary alluvial systems. Excludes clay plains formed in-situ on bedrock. Mainly Vertosols with gilgai microrelief, but includes thin sandy or loamy surfaced Sodosols and Chromosols with the same paleo-clay subsoil deposits; and
- Land Zone 9: Fine grained sedimentary rocks, generally with little or no deformation and usually forming undulating landscapes. Siltstones, mudstones, shales, calcareous sediments, and labile sandstones are typical rock types although minor interbedded volcanics may occur. Includes a diverse range of fine textured soils of moderate to high fertility, predominantly Vertosols, Sodosols, and Chromosols (Department of Resources, 2023).

Bioregion and Vegetation

The Project Area is located entirely within Subregion 26 (Southern Downs) of the Brigalow Belt bioregion. The majority of the Project Area has been cleared of native vegetation to form non-remnant derived grassland dominated by introduced pasture grasses with occasional native trees and shrubs. Ground-truthing (ecological field surveys) identified five REs in the Project Area.

Vegetation in the southern part of the Project Area is on land zone 3 (Quaternary alluvium) associated with streams and alluvial plains. Vegetation in the northern part of the Project Area includes areas on land zone 9 (undulating country on fine-grained sedimentary rocks).

Areas of remnant and regrowth native vegetation occur as irregular, discontinuous corridors along streamlines or as small, isolated fragments. River Red Gum (*Eucalyptus camaldulensis*) dominates riparian woodland along the banks of larger streams, while Poplar Box (*E. populnea*) dominates floodplain woodlands. Brigalow (*Acacia harpophylla*) and/or Belah (*Casuarina cristata*) are prominent in areas of heavy soil and patches of Weeping Myall (*A. pendula*) occur on floodplains.

Some small low-lying areas have groundcover dominated by characteristic wetland fringe plants including sedges, Nardoo (*Marsilea* spp.), forbs and grasses. These small areas are ephemeral wetlands / floodplains, and they include non-remnant vegetation and modified drainage structures such as channels and overflow areas around dams. Refer to the EAR (Att. E) for further information on vegetation within the Project Area.

3.1.2 Describe any existing or proposed uses for the project area.

The primary land uses for the Project Area and surrounding land are livestock grazing and agriculture and CSG production. Vegetation and fauna habitats within the local area are generally disturbed and highly fragmented as a result of land use practices. The agricultural land uses of the region coexist with existing petroleum, energy and mining activities. Existing permits overlapping the Project Area include:

- EPC 1763 held by Wanbei Coal Electricity International Mining (Australia) Pty Ltd
- EPG 2034 held by Within Energy Pty Ltd
- Wallumbilla to Reedy Creek Pipeline (Petroleum Pipeline Licence (PPL) 2023) held by APA Reedy Creek Wallumbilla Pty Ltd; and
- a powerline easement crossing the northern portion of the Project Area held by Ergon Energy.

Two State-controlled roads are in the vicinity of the development, including the Warrego Highway running east to west through the northern half of the development, and Wallumbilla South Road located approx. 5 km west of the Project Area, providing efficient access for local and heavy vehicle traffic.

3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.

There are no outstanding features located within the Project Area. In the broader region, several State Forests occur within a 20 km radius of the Project Area. These include the Inglebogie, Yuleba and Wallabella State Forests.

3.1.4 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

The topography of the Project Area is gently sloping with an elevation of between 300 – 350 metres above Australian Height Datum (mAHD). The elevation of the wider Project Area increases to 450 – 600 mAHD in the north and 350 – 400 mAHD to the east and southeast. The lower lying drainage to the southwest/south ranges between 250 – 300 mAHD and is associated with the watercourses discussed Section 3.4 of this referral.

3.2 Flora and fauna

3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

Flora and fauna values located within the Project Area have been assessed by third-party ecological consultants, Boobook Ecological Consulting (Boobook), and their findings are detailed in the EAR (refer to Section 3 of Att. E.), and summarised below:

Threatened Ecological Communities

The Protected Matters Search Tool (PMST) results indicated the potential presence of five TECs in and within a 10 km search area of the Project Area (refer to Appendix C – PMST Results of Att. E).

Two TECs were identified within the Project Area by ecological field surveys. These comprised several small patches of Poplar Box Grassy Woodlands on Alluvial Plains TEC (Poplar Box TEC) (associated with RE 11.3.2 and totalling 46.71 ha), and Weeping Myall Woodlands TEC (Weeping Myall TEC) (associated with RE 11.3.2 and totalling 7.61 ha).

All areas of TEC within the Project Area have been heavily disturbed by grazing and display edge effects such as tree death and encroachment by introduced pasture grasses and weeds. All Poplar Box TEC within the Project Area was assessed as Moderate Quality (Category C) with low native cover but retaining diverse native understorey plants and more than 10 mature trees per hectare (TSSC 2019). No TEC will be disturbed by the proposed action, and there is no TEC located in the PDF.

Refer to the EAR (Att. E) for further information.

Threatened Flora

The PMST results indicated the potential presence of several EPBC Act-listed threatened flora in the Project Area and surrounding region. Wildlife Online (DETSI) and Atlas of Living Australia (ALA) searches (DESI 2024a, ALA 2024) did not identify any records of EPBC Act-listed threatened flora species within 10 km of the Project Area.

No EPBC Act-listed threatened flora were present within the Project Area during ecological field surveys, and no suitable habitat for EPBC Act-listed threatened flora is present, nor been identified within the Project Area. Further, no threatened flora was identified to have potential to, or are likely, to occur within the Project Area.

Refer to the EAR (Att. E) for further information on the ecology and likely occurrence of EPBC Act-listed threatened flora within the Project Area.

Weeds

Ecological field surveys identified the presence of the following WoNS within the Project Area:

- Common pest pear (*Opuntia stricta*)
- Sulphur pear (*O. sulphurea*)
- Velvety tree pear (*O. tomentosa*); and
- African boxthorn (*Lycium ferocissimum*).

Refer to the EAR (Att. E) for further information on the ecology and likely occurrence of WoNS within the Project Area.

Threatened Fauna

The PMST results indicated the potential presence of twenty-four EPBC Act-listed threatened fauna in the Project Area and surrounding region. Wildlife Online and Atlas of Living Australia (ALA) biological spatial database searches identified records of one EPBC Act-listed threatened fauna species (koala (*Phascolarctos cinereus*) within the buffered desktop search area.

No EPBC Act-listed threatened fauna were identified to be present within the Project Area by ecological field surveys. Ecological field surveys identified the presence of potential habitat for several EPBC Act-listed fauna species in the Project Area. The following EPBC Act-listed fauna species were assessed by the consultant to have potential or are likely to occur within the Project Area, based on the findings of the ecological surveys and expert ecological assessment:

Birds:

- Sharp-tailed sandpiper (*Calidris accuminata*), Vulnerable under the EPBC Act: Potentially present
- Glossy black cockatoo (*Calyptorhynchus lathami*), Vulnerable under the EPBC Act: Potentially present
- Latham's snipe (*Gallinago hardwickii*), Vulnerable/Migratory under the EPBC Act: Potentially present
- White-throated needletail (*Hirundapus caudacutus*), Vulnerable/Migratory under the EPBC Act: Likely to be present; and
- Australian painted snipe (*Rostratula australis*), Endangered under the EPBC Act: Potentially present.

Mammals:

- Koala (*Phascolarctos cinereus*), Endangered under the EPBC Act: Potentially present.

Reptiles:

- Yakka skink (*Egernia rugosa*), Vulnerable under the EPBC Act: Potentially present; and
- Grey snake (*Hemiaspis damelii*), Endangered under the EPBC Act: Potentially present.

Migratory Fauna:

- Common sandpiper (*Actitis hypoleucos*), Migratory under the EPBC Act: Potentially present
- Fork-tailed swift (*Apus pacificus*), Migratory under the EPBC Act: Likely to be present
- Sharp-tailed sandpiper (*Calidris acuminata*), Migratory under the EPBC Act: Potentially present; and
- Pectoral sandpiper (*Calidris melanotos*), Migratory under the EPBC Act: Potentially present.

All EPBC listed migratory fauna species assessed as potentially or likely to occur within the Project Area are birds.

Refer to the EAR (Att. E) for further information on the ecology and likely occurrence of EPBC Act-listed threatened fauna within the Project Area.

Aquatic ecology

The Project Area is located in Bungil Creek (Ck) catchment of the Maranoa-Balonne River sub-basin (within the wider the Condamine Balonne Basin). This is a landscape of low relief comprising a broad floodplain with meandering ephemeral streamlines flanked by slightly elevated and gently undulating areas.

Watercourses located in or near the Project Area are characteristically ephemeral, and being in the erosional functional process zone, typically flow only during significant larger runoff events. These watercourses range in Stream Order (SO) from 1 to 4, based on the Strahler method.

The Project Area is drained to the south by Washpool Ck which in turn drains into Wallumbilla Ck, part of the Balonne River catchment, within the Murray-Darling Basin.

Watercourses within or near the Project Area include:

- Washpool Ck: is a minor creek (consists of SO 1-3 tributaries), which originates 5 km north of the Project Area and flows through the Project Area before joining Wallumbilla Ck 2 km south of the Project Area; and
- Other watercourses in the greater region located outside the Project Area which include Middle, Wallumbilla and Yuleba Cks.
- Middle Ck (consists of SO 2-3 tributaries) is a tributary of Wallumbilla Ck, which originates 15 km northwest of the Project Area and flows south between the township of Wallumbilla and the Project Area before joining Wallumbilla Ck 2 km west of the Project Area.
- Wallumbilla Ck (consists of SO 3-4 tributaries) originates 16 km northwest of the Project Area and flows south – southeast, close to the township of Wallumbilla.
- Yuleba Ck (consists of SO 1-5 tributaries) is identified by the Qld Water Act 2000 as a major watercourse and flows for approx. 187 km from near the Great Dividing Range before joining the Balonne River 45 km south of Yuleba. Yuleba Ck flows predominately south, close to the township of Yuleba, located 13 km east of the Project Area and joins the Balonne River, 46 km southeast of the Project Area.

Other minor, unnamed watercourses occur within the Project Area, almost all of which drain into one of the watercourses listed above. The aquatic habitat of the abovementioned watercourses and other watercourses in the Condamine-Balonne catchment comprise water channels during flowing conditions, drying up to isolated perennial waterholes during the dry season. Ephemeral lacustrine wetlands provide habitat for aquatic fauna and flora during the wet season. The ephemeral streams in the Project Area support invertebrate communities, although flow intermittence has been linked to reduced taxa richness.

AquaBAMM is the Qld government endorsed method for identifying and assessing wetlands. It is also a decision support tool that utilises existing information and expert input to assess conservation value in aquatic ecosystems. Using AquaBAMM, the riverine or non-riverine wetlands within the sub-catchment units are assigned an AquaScore representing the overall conservation value of a sub-catchment unit. This varies from very low to very high.

The Wallumbilla and Yuleba Cks, and their tributaries, are identified to have a medium to high riverine AquaScore. Non-riverine wetlands of limited extent with a very low to medium AquaScore also occur at the Project Area. The upper catchment of Wallumbilla Ck (located to the northwest of the Project) has been identified as an area containing riverine 'special features'. These areas are considered to be of the highest ecological importance. However, no internationally or nationally important wetlands occur within or near the Project Area. The Project will therefore not impact upon any internationally or nationally important wetlands.

Some small low-lying areas have groundcover dominated by characteristic wetland fringe plants including sedges, Nardoo (*Marsilea spp.*), forbs and grasses. These small areas are ephemeral wetlands / floodplains, and they include non-remnant vegetation and modified drainage structures such as channels and overflow areas around dams. These areas may provide ephemeral habitat for wetland migratory birds from time to time.

For further information on the aquatic ecological values of the Project Area refer to the EAR (Att. E) and Water Resources Assessment (WRA) (Att. K).

3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

Vegetation Characteristics

The majority of the Project Area has been cleared of native vegetation to form non-remnant derived grassland (for cattle grazing purposes) dominated by introduced pasture grasses with occasional native trees and shrubs.

Areas of remnant and regrowth native vegetation occur as irregular, discontinuous corridors along streamlines, road easements and fencelines, or as small, isolated fragments.

Regrowth vegetation predominantly comprises Poplar Box (*Eucalyptus populnea*) woodland adjacent to riparian corridors, on narrow floodplains and gently undulating country.

River Red Gum (*Eucalyptus camaldulensis*) dominates riparian woodland along the banks of larger streams, while Poplar Box (*E. populnea*) dominates floodplain woodlands. Brigalow (*Acacia harpophylla*) and/or Belah (*Casuarina cristata*) are prominent in areas of heavy soil and patches of Weeping Myall (*A. pendula*) occur on floodplains.

Some low-lying areas have groundcover dominated by characteristic wetland fringe plants including sedges, Nardoo (*Marsilea spp.*), forbs and grasses. These floodplain wetlands include areas of non-remnant vegetation and modified drainage structures such as channels and overflow areas around dams.

Vegetation in the southern part of the Project Area is on land zone 3 (Quaternary alluvium) associated with streams and alluvial plains. Vegetation in the northern part of the Project Area includes areas on land zone 9 (undulating country on fine-grained sedimentary rocks).

Ground-truthing (ecological field surveys) identified five RE types within the Project Area as summarised below:

- RE 11.3.2: *Eucalyptus populnea* woodland on alluvial plains.
- RE 11.3.17: *E. populnea* woodland with *A. harpophylla* and/or *C. cristata* on alluvial plains.
- RE 11.3.25: *E. tereticornis* or *E. camaldulensis* woodland fringing drainage lines.
- RE 11.9.7: *E. populnea*, *Eremophila mitchellii* shrubby woodland on fine-grained sedimentary rocks; and
- RE 11.9.10: *E. populnea* open forest with a secondary tree layer of *A. harpophylla* and sometimes *C. cristata* on fine-grained sedimentary rocks.

The abovementioned REs have Vegetation Management (VM) classes of 'Least Concern' and 'Of Concern', and Biodiversity (BD) Status of 'Of Concern' and 'Endangered'. The BD Status is based on an assessment of the condition of remnant vegetation in addition to the criteria used to determine the class under the Qld Vegetation Management Act 1999 (VMA). The VM class is listed in the Vegetation Management Regulation under the VMA. The mapped extent of each RE in the Project Area are detailed in Table 1 and Appendix B of Att. E.

Vegetation condition was assessed using the Qld BioCondition methodology. Assessments were completed at 7 locations across the Project Area, these being representative samples of remnant and regrowth RE. All assessment sites received moderate BioCondition scores (0.47 – 0.60) which indicate significant disturbance and consequential loss of ecosystem integrity relative to intact areas of each RE. These scores also reflect landscape level fragmentation of native vegetation, which is in small patch size, low connectivity among sites, and a low proportion of remnant and regrowth vegetation in the surrounding landscape.

Soils

There is no outcropping rock within the Project Area and the surface geology consists of Quaternary alluvial sediments (Qa) with an area of unconsolidated colluvial sediments derived from early Cretaceous mudstones of the Doncaster Member (Qs>Kud) in the east associated with the adjacent plateau to the

north. Soils vary from dark brown clay-loam and sandy clay-loams across much of the Project Area, to reddish clay-loam in the east.

Refer to Att. E for further information on the vegetation and soil characteristics of the Project Area.

3.3 Heritage

3.3.1 Describe any Commonwealth Heritage Places Overseas or other places recognised as having heritage values that apply to the project area.

Historical and European Heritage

Within the Maranoa LGA, the Department of Environmental Science Heritage Database (accessed August 2024) identified one registered heritage place located 30 km west of the Project Area. Other heritage-listed places were located more than 50 km away from the Project Area. The proposed action is not expected to impact any heritage listed places.

Commonwealth Heritage

There are no registered historical heritage places located within the Project Area based on a search of the World Heritage Register, National Heritage List, Commonwealth Heritage list, Register of National Estate and State Heritage Register. The proposed action is not expected to impact any heritage listed places.

Cultural Heritage

Santos has an ongoing relationship with the Indigenous stakeholders for the Project Area and has an approved Cultural Heritage Management Plan (CHMP) (CLH000759 – Santos Ltd – Gladstone LNG Project) which covers the Project Area. Although the relevant Indigenous stakeholders do not hold Native Title rights over the Project Area, Santos continues to work with the Indigenous stakeholders around cultural heritage management and economic participation opportunities.

This existing CHMP will guide the Projects process and delivery, ensuring requirements of the relevant Indigenous stakeholders and the Aboriginal Cultural Heritage Act are satisfied. In particular, Santos engages the relevant Indigenous stakeholders to undertake cultural heritage field assessments prior to Project related ground disturbance activities occurring. Under the CHMP, Santos implements a “Find Stop Notify” management procedure for new Aboriginal cultural heritage finds outside of the initial cultural heritage assessment.

The CHMP has been developed in accordance with:

- DATSIP’s Cultural Heritage Duty of Care Guidelines, and
- DATSIP’s Guideline for the Discovery, Handling and Management of Human Remains.

Santos ensures the relevant Indigenous stakeholders are informed of all activities through the implementation of the CHMP as well as scheduled meetings initiated by Santos under its ‘Eastern Queensland - External Stakeholder Consultation Plan – Roma Phase 7-7B-SD20 (ATP 2053)’. Santos has formally consulted with the Indigenous stakeholders (prior to submission of this referral) regarding the Project’s development (refer to Consultation Records in Att. J).

3.3.2 Describe any Indigenous heritage values that apply to the project area.

No places of Aboriginal cultural heritage (or other heritage) values were identified within 10 km of the Project Area in the PMST results (refer to Appendix C – PMST Results of Att. E).

The approved CHMP provides agreed processes for the identification and management of Aboriginal cultural heritage in the Project Area. Cultural heritage surveys of the Project Area have been, and will continue to be, undertaken in accordance with the CHMP to both identify and determine management arrangements for Aboriginal cultural heritage within the Project Area.

3.4 Hydrology

3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. *

As discussed in Section 2.2.1, the Project Area is located in Bungil Ck catchment of the Maranoa-Balonne River sub-basin (within the wider the Condamine Balonne Basin). This is a landscape of low relief comprising a broad floodplain with meandering ephemeral streamlines flanked by slightly elevated areas.

Watercourses located in or in close proximity to the Project Area are characteristically ephemeral and typically flow only during significant runoff events. There are no major watercourses mapped within the Project Area and only one mapped watercourse (that being Washpool Ck). Watercourses in or near the Project Area range in Stream Order (SO) 1 to 5 based on the Strahler method. The Project Area is drained by Washpool Ck and its minor tributaries which drain into Wallumbilla Ck, part of the Balonne River catchment, within the Murray-Darling Basin. Further, there are no Qld State mapped High Ecological Value (HEV) waters located in the Project Area (refer to Section 2.2.1 for further detail on watercourses located near the Project Area).

Recharge to GW systems from watercourses may occur in the Project Area, however this only occurs when there are conditions of sufficient saturation and hydraulic head to allow water to infiltrate into surrounding aquifers (e.g. alluvium). Temporary perched GW conditions may result due to percolation of infiltrated rainwater along streamlines and collection of rainwater in low lying areas underlain by material with low permeability. In summary, available information infers that limited to no GW contribution from the regional system to watercourses as baseflow is likely at the Project Area.

The Sustainable Rivers Audit 2 (SRA 2) for rivers within the Murray-Darling basin (Murray–Darling Basin Authority, 2012) found that the Condamine Valley, which includes the region around the Project Area, had an overall poor ecosystem health rating. The physical form of the Condamine Valley River system was rated as being in moderate condition, characterised by enlarged channels and evidence of widening and channel bed degradation. The cause of this condition was not specified.

No referable, internationally or nationally important wetlands are present in or near the Project Area. Further, no significant waterbodies or groundwater dependent ecosystems (GDEs) or springs occur within or near the Project Area. Wetlands listed in the 'Directory of Important Wetlands in Australia' are not mapped in or within 25 km of the Project Area, respectively. Further, there are no Qld State mapped wetlands of High Ecological Significance (HES), or High Ecological Value (HEV), located within or immediately adjacent to the Project Area, with the nearest mapped HEV wetland located approx. 39 km south-west of the Project Area.

Several small ephemeral floodplain wetlands were ground-truthed by ecological field surveys in the Project Area (and within the PDF). These ephemeral floodplain wetlands are essentially low-lying areas with groundcover dominated by characteristic wetland fringe plants including sedges, Nardoo (*Marsilea* spp.), forbs and grasses. These ephemeral floodplain wetlands consist of non-remnant vegetation and modified drainage structures such as channels and overflow areas around dams.

Surface expression GDEs are not indicated to be present in the Project Area. Small patches of low confidence surface expression GDEs associated with the Wallumbilla Ck are mapped to the west of the Project Area.

There are no spring vents or complexes located within or near the Project Area. The closest watercourse springs are located along the Blyth and Yuleba Creeks (associated with the Mooga Sandstone) more than 20 km to the northeast and northwest of the Project Area, respectively.

The only potential GDEs mapped in the Project Area are terrestrial GDEs (i.e. deep-rooted vegetation communities) and ephemeral wetlands associated with the surficial deposits (alluvium and tertiary deposits). Small patches of low confidence 1 – 80% derived TGDEs are mapped within the Project Area, south, southeast north and northwest of the Project Area. Limited potential TGDEs are indicated surrounding the Project Area. Low to moderate confidence potential TGDEs (81 – 100%) are mapped to the east of the Project Area. Potential high confidence TGDEs mapped to the west of the Project Area correspond with riverine areas such as the Wallumbilla and Middle Creeks (1 – 80% derived TGDEs).

OGIA completed a regional scale desktop risk assessment of TGDEs that may potentially be impacted by CSG and coal mining activities as part of the Surat CMA UWIR (2021). The assessment was conservative because it was applied to vegetation that has been classified, mostly through desktop studies, by the Queensland Herbarium as a potential TGDE (therefore, it included vegetation that may not be dependent on GW). No potential TGDE areas in the vicinity of the Project Area were identified as being at risk.

There are two registered GW bores located in the Project Area. One of the bores is identified to be operational and is attributed to the Mooga Sandstone under Qld Registered bore Number (RN) 123195. Baseline assessment was undertaken by Santos of this bore in 2009. A second GW bore (RN208460) was drilled in the Project Area in June 2024. This new bore is indicated as “no longer used”. Santos are in the process of revising their Baseline Assessment Plan (BAP) to consider the new bore, with baseline assessment planned to occur in 2025 (prior to commencement of the Project).

At a regional scale, GW flow within the Surat Basin is typically north to south, from the outcrop areas located to the north. Available monitoring data for each GW formation in the Project Area infers that GW flows are consistent with regional GW flows, that being north to south, with slight variations caused by radially convergent drawdown patterns observed due to CSG development. Refer to Section 7.6 in the WRA (Att. K) for further detail on GW levels and flow in the Project Area.

4. Impacts and mitigation

4.1 Impact details

Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	Yes	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	Yes	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

No World Heritage properties were identified by the PMST results within 10 km of the Project Area (Appendix C – PMST Results of Att. E). The Project will therefore not have a significant impact on World Heritage irrespective of any pre/post-implementation of management and mitigation measures.

4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

No National Heritage properties were identified by the PMST results within 10 km of the Project Area (Appendix C – PMST Results of Att. E). The Project will not have a direct nor indirect impact on National Heritage irrespective of pre/post-implementation of management and mitigation measures.

4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Ramsar wetland
No	No	Banrock Station Wetland Complex
No	No	Narran Lake Nature Reserve
No	No	Riverland
No	No	The Coorong, and Lakes Alexandrina and Albert Wetland

4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.3.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

No Ramsar Wetlands were identified by the PMST results within 10 km of the Project Area (Appendix C – PMST Results of Att. E). The Ramsar Wetlands identified upstream of the Project Area include Narran Lake Nature Reserve (300-400 km away); The Coorong and Lakes Alexandrina and Albert Wetland (1,300 km away); Banrock Station Wetland Complex (1,100 km away); Riverland (1,100 km away).

4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Threatened species

Direct impact	Indirect impact	Species	Common name
No	No	<i>Anomalopus mackayi</i>	Five-clawed Worm-skink, Long-legged Worm-skink
No	No	<i>Aphelocephala leucopsis</i>	Southern Whiteface
No	No	<i>Cadellia pentastylis</i>	Ooline
Yes	Yes	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
Yes	Yes	<i>Calyptorhynchus lathami lathami</i>	South-eastern Glossy Black-Cockatoo
No	No	<i>Dasyurus hallucatus</i>	Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu]
No	No	<i>Delma torquata</i>	Adorned Delma, Collared Delma
No	No	<i>Dichanthium setosum</i>	bluegrass
Yes	Yes	<i>Egernia rugosa</i>	Yakka Skink
No	No	<i>Erythroriorchis radiatus</i>	Red Goshawk
No	No	<i>Falco hypoleucos</i>	Grey Falcon
No	No	<i>Furina dunmalli</i>	Dunmall's Snake
Yes	Yes	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
No	No	<i>Geophaps scripta scripta</i>	Squatter Pigeon (southern)
No	No	<i>Grantiella picta</i>	Painted Honeyeater
Yes	Yes	<i>Hemiaspis damelii</i>	Grey Snake
Yes	Yes	<i>Hirundapus caudacutus</i>	White-throated Needletail
No	No	<i>Lepidium monoplocoides</i>	Winged Pepper-cress
No	No	<i>Maccullochella peelii</i>	Murray Cod

Direct impact	Indirect impact	Species	Common name
No	No	Nyctophilus corbeni	Corben's Long-eared Bat, South-eastern Long-eared Bat
No	No	Petauroides volans	Greater Glider (southern and central)
Yes	Yes	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)
Yes	Yes	Rostratula australis	Australian Painted Snipe
No	No	Stagonopleura guttata	Diamond Firetail

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions
No	No	Poplar Box Grassy Woodland on Alluvial Plains
No	No	Weeping Myall Woodlands

4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

No TEC is located within the PDF at the Project Area and therefore no direct or indirect impacts to TECs is proposed.

No EPBC Act-listed threatened flora were identified to be present within the Project Area by ecological field surveys, and no suitable habitat for threatened flora is present, nor has any been identified within the Project Area. No EPBC Act-listed threatened flora was identified to have potential to, or are likely, to occur within the Project Area. The Project will therefore not directly or indirectly impact on EPBC Act-listed threatened flora species or associated habitat.

No EPBC Act-listed threatened fauna were present within the Project Area during ecological field surveys. Potential habitat for the following EPBC Act-listed threatened fauna species was identified in the Project Area:

- Sharp-tailed sandpiper (*Calidris acuminata*) – Vulnerable
- Glossy black-cockatoo – southeastern (*Calyptorhynchus lathami lathami*) – Vulnerable
- Latham’s snipe (*Gallinago hardwickii*) – Vulnerable
- White-throated needletail (*Hirundapus caudacutus*) – Vulnerable
- Australian painted snipe (*Rostratula Australia*) – Endangered
- Koala (*Phascolarctos cinereus*) – Endangered
- Yakka skink (*Egernia rugosa*) – Vulnerable
- Grey snake (*Hemisaspis damelii*) – Endangered.

Potential habitat for the following EPBC Act-listed threatened fauna is present in the PDF (and is therefore proposed to be potentially directly or indirectly impacted):

- White throated Needletail - 0.30 ha
- Glossy black-cockatoo – 0.30 ha
- Koala – 0.30 ha
- Yakka skink – 0.30 ha
- Grey snake – 0.30 ha
- Latham’s Snipe – 0.60 ha
- Australian Painted Snipe – 0.60 ha
- Sharp-tailed Sandpiper – 0.60 ha.

Through site-specific refinement of the PDF, disturbance to the majority of potential habitat in the Project Area has largely been avoided. Santos undertook several revisions of the PDF, which resulted in the following summarised disturbance reductions:

Habitat	TEC	Other Vegetation [^]	General Ephemeral Wetland
1. Version 1 - Original	5.24 ha	2.78 ha	NA*
2. Version 2 - Desktop Review	3.41 ha	1.90 ha	NA*
3. Version 3 - Field Scouted	0.11 ha	0.30 ha	0.93 ha
4. Version 4 - Final (PDF)	Nil	0.30 ha	0.60 ha

[^]Remnant and Regrowth Vegetation

**General ephemeral wetland habitat was not ground-truthed in the Project Area until after the scouting phase.*

Each revision of the disturbance footprint resulted in reduced disturbance to MNES and other environmental values. Proposed infrastructure/disturbance has been predominantly located in cleared agricultural land. Disturbance has been reduced to 0.30 ha of woody vegetation and 0.60 ha of general ephemeral wetland habitat for EPBC Act-listed threatened fauna. The process for locating infrastructure and defining environmental constraints is described in the Constraints Protocol (refer to Att. D). The Project will result in a total disturbance area to MNES values of 0.90 ha, comprised of the following REs / habitat:

- 11.3.2 remnant: 0.15 ha
- 11.3.2 regrowth: 0.15 ha; and
- EPBC Act-listed threatened fauna wetland habitat: 0.60 ha.

A SIA has been undertaken by Boobook for EPBC Act-listed threatened fauna species deemed potentially or likely to occur in the Project Area (sharp-tailed sandpiper, glossy black-cockatoo – southeastern, Latham's snipe, white-throated needletail, Australian painted snipe, koala, yakka skink and grey snake) in accordance with the SIG 1.1 - MNES – to determine the impact against the Significant Impact Criteria.

Boobook determined that no Significant Impact to EPBC Act listed-threatened and/or migratory fauna is expected as a result of the proposed disturbance/development of the Project. This is due to existing severe fragmentation of vegetation/habitat, generally poor habitat quality within the Project Area, the very small and localised disturbance area relative to surrounding habitat patches, and sighting of infrastructure to largely avoid disturbance to vegetation (refer to the EAR (Att. E) for further detail on the Boobook SIA).

Further, Santos will implement a range of project specific management plans (MPs) (discussed further below) to ensure impacts are avoided, minimised and mitigated through a hierarchy of management principles implemented via the Project's Constraints Protocol (Att. D), RMP (Att. F), EMP (Att. G), and the SSMP (Att. I).

The EMP and SSMP in particular, detail how Project activities will be carried out during construction, operation, decommissioning and rehabilitation phases, and how mitigation measures will be applied during these phases.

With regard to invasive species presence, four WoNs were detected in the Project Area during ecological field surveys. Detected WoNs are common to the central-Qld region and include - common pest pear (*Opuntia stricta*), sulphur pear (*O. Sulphurea*), velvety tree pear (*O. tomentosa*) and African boxthorn (*Lycium ferocissimum*). Development of the Project has the potential to inadvertently introduce and spread pest and weed species primarily through poor weed hygiene practices and the movement of vehicles between 'clean' and 'dirty' regions. To mitigate the further spread and introduction of invasive weeds and pest animals to the Project Area (and potential associated impacts to EPBC Act-listed fauna habitat) Santos will implement biosecurity management in accordance with the requirements of the EMP (refer Att. G) over the life of the Project.

4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact?

*

No

4.1.4.6 Describe why you do not consider this to be a Significant Impact. *

A SIA for EPBC Act-listed threatened fauna species deemed potentially or likely to occur in the Project Area (sharp-tailed sandpiper, glossy black-cockatoo – southeastern, Latham’s snipe, white-throated needletail, Australian painted snipe, koala, yakka skink and grey snake) has been undertaken by the consultant in accordance with the SIG 1.1 - MNES – to determine the impact against the Significant Impact Criteria.

The consultant determined that no Significant Impact to EPBC Act listed-threatened and/or migratory fauna is expected from the proposed disturbance/development of the Project.

Please refer to Att. E (Tables 9 and 10) for a detailed SIA against the Significant Impact Criteria for each of the abovementioned species. A generalised summary of the SIA against all of the abovementioned species is provided below:

Summary SIA - sharp-tailed sandpiper, glossy black-cockatoo – southeastern, Latham’s snipe, white-throated needletail, Australian painted snipe, koala, yakka skink and grey snake:

- **Lead to a long-term decrease in the size of a population**
 - Majority of affected species are rare or occasional visitors in low numbers to the region or have otherwise not been recorded in the Project Area.
 - Potential loss of 0.9 ha of potential habitat for affected species will not or is unlikely to lead to a decrease in the size of local populations.
 - Mapped habitat comprises fragmentary areas or limited suitable microhabitat features are present.
- **Reduce the Area of Occupancy of the species**
 - Available wetland habitat within the Project Area (0.60 ha) is likely to support only a few individuals during favourable conditions in spring-summer only.
 - The loss of 0.30 ha of potential woodland habitat could potentially impact residents. However, few individuals would occupy this small area.
 - The loss of 0.30 ha of potential habitat is unlikely to affect the occurrence of koala within the Project Area. No evidence of koala was detected within the Project Area. It is likely that this area would be used by occasional transient individuals.
- **Fragment an existing population into two or more populations**
 - Majority of affected species are mobile and wide-ranging, or otherwise capable of crossing gaps between habitat patches, and/or occur sporadically in the region.
 - The proposed development will not exacerbate existing fragmentation, and is unlikely to, or will not, restrict or pose a barrier to dispersal of affected species.
 - Koalas are capable of crossing gaps between habitat patches and may use isolated paddock trees. The loss of several small edges of habitat, summing to 0.30 ha, will not disrupt habitat corridors through this area and will have negligible effect on koala dispersal through the Project Area.
- **Adversely affect habitat critical to the survival of a species**
 - Wetlands within the Project Area are very small and highly ephemeral. Although these wetlands may occasionally be used by transitory individuals, they do not represent habitat critical to the survival of the species.
 - The loss of several small areas of potential wooded habitat, summing to 0.30 ha, is unlikely to have measurable impacts on species that may utilise the area. Similar features occur in the immediate vicinity and this habitat is unlikely to be limiting.
- **Disrupt the breeding cycle of a population**
 - Potentially affected migratory species do not breed in Australia (sharp-tailed Sandpiper/Latham’s Snipe/white-throated Needletail). The small and highly ephemeral nature of wetlands within the Project Area are unlikely to be attractive for breeding Australian Painted Snipe.
 - No evidence of koala was found within the Project Area, and it is likely that any koala occurrence within the Project Area is occasional and transient. The breeding cycle is unlikely

to be disrupted.

- Loss of 0.30 ha of potential breeding/nesting/shelter habitat is not significant to affected species or suitable habitat is scarce in Project Area (grey snake, yakka skink, glossy black-cockatoo). Species is an occasional visitor, rather than a breeding resident (glossy black-cockatoo).
- **Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline**
 - Wetlands within the Project Area are very small and highly ephemeral.
 - Temporary disturbance (for linear infrastructure only) will only occur to 0.60 ha of the 7.31 ha of available wetland habitat within the Project Area. Disturbance to this small area will not cause Latham's snipe, sharp-tailed sandpiper or Australian painted snipe to decline.
 - The proposed disturbance area is unlikely to reduce koala numbers or disrupt koala movement through the Project Area. It is likely the 0.30 ha of habitat proposed to be cleared involves the removal of <15 mature trees.
 - The loss of 0.30 ha of mapped shelter, foraging, breeding and dispersal habitat (constituting remnant and regrowth RE 11.3.2) is unlikely to be limiting to affected species.
 - Further, there is a total of 84.79 ha of remnant and regrowth RE 11.3.2 located in the Project Area. The potential loss of 0.30 ha of this RE represents a potential loss of 0.25% of this habitat type in the Project Area.
- **Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the critically endangered or endangered threatened species' habitat**
 - None known for all affected species.
- **Introduce disease that may cause the population to decline**
 - None known for all species, however for koala, Chlamydia is present in the koala population of southern inland Queensland, but presence of this bacterial disease is unlikely to be exacerbated by the proposed development.
- **Interfere with the recovery of the species**
 - The Project is unlikely to cause harm to any individuals (Latham's Snipe, sharp-tailed sandpiper, Australian painted snipe) and is therefore unlikely to interfere with recovery of the species.
 - Loss of 0.30 ha of potential wood habitat, across several habitat patches, could potentially impact on resident individuals, but the disturbance is unlikely to have a detectable effect on overall abundance, occurrence or recovery of affected species within the region.
- **Significance of impact assessment:**
 - No Significant Impact to MNES threatened and/or migratory fauna is expected as a result of the proposed development.
 - This is due to existing severe fragmentation of vegetation/habitat, generally poor habitat quality, the very small and localised disturbance area relative to surrounding habitat patches and sighting of infrastructure to largely avoid disturbance to vegetation.
 - Cumulative impacts resulting from the Project will be negligible. The Project Area is already located within a highly fragmented landscape.
 - Further fragmentation, habitat degradation or alteration of important habitat features is not expected due to the extremely small disturbance area of 0.9 ha to potential MNES fauna habitat.

4.1.4.7 Do you think your proposed action is a controlled action? *

No

4.1.4.9 Please elaborate why you do not think your proposed action is a controlled action.

*

No TEC is proposed to be disturbed by the action, and no EPBC Act-listed threatened flora species were detected within the Project Area.

A SIA has been undertaken by Boobook (2025) for EPBC Act-listed threatened fauna species deemed potentially or likely to occur in the Project Area in accordance with the SIG 1.1 - MNES – to determine the impact against the Significant Impact Criteria. The SIA considered impacts to the following EPBC Act-listed threatened and/or migratory fauna and/or their habitat:

- Australian painted snipe (Endangered / Migratory)
- Koala (Endangered)
- Grey snake (Endangered)
- Sharp-tailed Sandpiper (Vulnerable / Migratory)
- Glossy black-cockatoo (Vulnerable)
- Latham's snipe (Vulnerable / Migratory)
- White-throated needletail (Vulnerable / Migratory); and
- Yakka skink (Vulnerable).

The SIA determined no significant impact to the abovementioned species is expected as a result of the proposed development. This determination was primarily due to existing severe fragmentation of vegetation/habitat, generally poor habitat quality, the very small and localised total disturbance area (0.9 ha) relative to surrounding habitat patches, and the sighting of proposed disturbances via the PDF to largely avoid impacts to MNES fauna habitat and vegetation.

Further, Santos has developed a range of Project specific MPs (including the EMP, SSMP, RMP and Constraints Protocol). The MPs have been compiled to ensure development of the Project (over its complete lifecycle from planning, construction, operation and decommissioning/rehabilitation) avoids, minimises and mitigates potential direct and indirect impacts to MNES and EPBC Act-listed threatened and/or migratory fauna and their habitat.

Wetland bird species (Australian painted snipe, sharp-tailed sandpiper and Latham's snipe) assessed to potentially or likely be present in the Project Area are not expected to be impacted by the Project. Available ephemeral wetland habitat in the Project Area (7.31 ha) is only likely to support a few individuals during favourable conditions in spring-summer. The small and highly ephemeral nature of wetlands in the Project Area are unlikely to be attractive for breeding by these species. There will be no loss of individuals as a result of Project activities, and there will be no substantial decrease in available foraging habitat in the Project Area as only 0.60 ha of available habitat is proposed to be disturbed. Further, this disturbance is unlikely to restrict dispersal or interfere with recovery of these species.

The koala may experience minimal habitat loss of 0.30 ha of eucalypt woodland, inclusive of the loss of less than 15 mature trees. No evidence of koala was found in the Project Area, and it is likely the presence of koala is occasional and transient in the area. Further, the development will have a minimal effect on the recovery of koala in the area, and the breeding cycle is unlikely to be disrupted. Potential loss of 0.30 ha of habitat will not lead to a decrease in size of the local population, and the loss of several small areas of habitat will not disrupt use of habitat corridors through this area, and will therefore have negligible effect on koala dispersal through the Project Area.

The presence of the grey snake was not confirmed during ecological field survey. The Project Area is peripheral to the species' distribution, and there are no records in the vicinity. Loss of 0.30 ha of already disturbed woodland fragments is unlikely to contribute to species decline or exacerbate existing fragmentation. Potentially suitable floodplain woodland and ephemeral wetland habitat for the species (RES 11.3.2 and 11.3.25) occurs beyond the bounds of the PDF.

The glossy black-cockatoo may face minimal loss of potential habitat (0.30 ha) and nest sites associated with the development. This small disturbance area would support few potential nesting/roost trees. The species has not been recorded in the Project Area, and is likely to occur as an occasional visitor, rather than

a resident. There will be no decrease in foraging habitat. Feed trees occur nearby, but are not present in the PDF.

The white-throated needletail is an aerial feeding insectivore that forages over a wide range of intact and modified landscapes. Disturbance associated with the Project is not materially relevant to the species as no impact on foraging resources is anticipated. The species roosts overnight in tall trees along scarps and is unlikely to roost in the Project Area. It does not breed in Australia during its summer presence.

The presence of yakka skink was not confirmed in the Project Area. The species has a patchy occurrence in the region, and suitable habitat features such as logs and woody debris were scarce within the Project Area. The proposed loss of up to 0.3 ha of potential habitat could impact on resident individuals (if present), however this small area would hold few, if any, individuals and these impacts may be mitigated by pre-clearing by a fauna spotter / catcher in accordance with the requirements of the SSMP.

Cumulative impacts resulting from the Project will be negligible. The Project Area is already located within a highly fragmented landscape. Further fragmentation, habitat degradation or alteration of important habitat features is not expected due to the small disturbance area of 0.9 ha to potential MNES fauna habitat.

4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Development of CSG fields involves placing relatively localised disturbance areas for linear and non-linear infrastructure within extensive landscapes. Depending on the nature of the landscape, there is typically a reasonable level of flexibility in where infrastructure can be placed to avoid constraining features and sensitivities. Santos implements the following hierarchy of management principles when planning CSG field development:

- a) avoid – avoiding direct and indirect adverse environmental impacts where practicable
- b) minimise – minimise direct and indirect adverse environmental impacts where these cannot be avoided
- c) mitigate – implement mitigation and management measures to minimise direct, indirect and cumulative adverse impacts; and
- d) remediate and rehabilitate – actively remediate and rehabilitate impacted areas to promote and maintain long-term recovery.

Santos does not believe the proposed action constitutes a controlled action. However, following implementation of the above principles, if the regulating authority were to decide that the proposal was a controlled action, and stipulated that environmental offsets were required, Santos would provide suitable environmental offsets for the activities that were determined by the regulator to be significant impacts to MNES.

Santos has developed a PDF for the Project Area based on the abovementioned management principles and the Constraints Protocol (Att. D). The Constraints Protocol was informed by ecological surveys undertaken in 2022-2024 (refer to Att. E)). The Constraints Protocol was used to guide placement of proposed infrastructure in predominantly cleared agricultural land.

The Constraints Protocol outlines the internal steps necessary to locate infrastructure/disturbances to avoid or minimise potential impacts to MNES, including significant species and TECs. Through implementation of the Constraints Protocol, Santos have made a commitment to completely avoid disturbance to certain MNES values (TECs) for the Project, while other impacts have been minimised. Five constraint categories were developed for mapped MNES values, including:

1. no-go areas
2. avoid disturbance areas
3. minimise disturbance areas; and
4. special purpose areas (e.g. farm dams, existing public infrastructure).

The Constraints Protocol also documents the MNES proposed to be disturbed in the Project Area, and proposes 'maximum disturbance limits' for these values i.e. 0.30 ha of woody vegetation (RE 11.3.2) and 0.60 ha of ephemeral wetland habitat. Direct impacts to MNES must not exceed the maximum disturbance limits stated in the Constraints Protocol. Further, due to the nature of CSG development, there is a possibility that the PDF and planned infrastructure locations may need to be modified in future (post-EPBC Act approval) due to unforeseen constraints, engineering requirements, or changes to regulatory requirements. Any changes to the PDF would need to comply with the requirements of the Constraints Protocol and proposed maximum disturbance limits. The Constraints Protocol also ensures CSG field development takes place in accordance with the requirements of the:

- EPBC Act
- EP Act EA
- commitments identified in supporting documentation, including the:
 - EAR (Att. E)
 - RMP (Att. F)
 - EMP (Att. G)
 - WMP (Att. H)
 - SSMP (Att. I)

- WRA (Att. K); and
- Chemical Risk Assessment Framework and Report (collectively referred to as the CRAF) (Att. L).

Santos will comply with the requirements set out in the abovementioned MPs and assessment reports as revised or updated from time-to-time to align with regulatory requirements. Revised versions of the abovementioned MPs and assessment reports will be made available upon request to DCCEEW or as otherwise required under conditions of a regulatory approval, whether under the EPBC Act or any other applicable legislation.

The EMP was developed to provide a structured high-level approach to the management of environmental issues over the life of the Project and meet the requirements of the EPBC and EP Acts. The EMP details environmental management measures and controls to be implemented to avoid, minimise and mitigate environmental impacts. The EMP details environmental control plans (ECPs) for specific activities and aspects of the Project, as well as for site-specific scenarios. To ensure Project compliance, accountability and controlled impacts, the EMP and ECPs have been developed to cover the following aspects:

- Construction site management
- Soil resource management
- Water resource management
- Flora and fauna management
- Weed and pest management
- Air, vibration, light and noise management
- Liquid and solid waste management
- Cultural Heritage management
- Hazardous substances use and management
- Plant and equipment management; and
- Environmental emergency preparedness and response.

Environmental objectives and performance indicators for each environmental aspect associated with Project development are defined in the EMP and ECPs such that objectives and targets are:

- quantified and measurable
- realistic and achievable
- focused on continual improvement
- consistent with, and related to, Santos's EHS Policy and management standards; and
- periodically reviewed and revised.

The SSMP (Att. I) has been prepared to guide the management of potential impacts to significant species and their habitat located in the Project Area. Significant species are MNES EPBC Act-listed fauna species deemed potentially or likely to occur in the Project Area. The SSMP contains impact mitigation measures to be taken to avoid, mitigate and manage impacts to significant species, during construction, operation and decommissioning and rehabilitation of the Project.

For example, prior to construction activities commencing, a Fauna Spotter/Catcher will survey for the presence of fauna and significant species located in or near the proposed disturbance area. At sites where arboreal mammals are observed, construction activities will be delayed until the mammal moves outside the impact site. In the highly unlikely event that a koala is observed in the disturbance footprint, clearing will be delayed until the koala moves outside the impact site.

The SSMP also specifies how disturbance tracking will be undertaken to ensure compliance with maximum disturbance limits to EPBC Act-listed fauna species habitat as detailed in the Constraints Protocol.

Further, as per the RMP (Att. F), where potential disturbances to ephemeral wetland habitat are associated with pipeline RoWs, these disturbances will be reinstated immediately following pipeline construction (typically within 3 months or in accordance with EA conditions) with considerations made for a range of

factors including ESC, soil amelioration, fertiliser and seeding. These considerations are applied to ensure timely revegetation of the pipeline RoW. Therefore, total potential disturbance to ephemeral wetland areas will likely be less than 0.60 ha, as following pipeline RoW reinstatement, these areas will still provide functional ephemeral wetland habitat for relevant species.

4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

Environmental offsets are not expected to be required for the Project given the small disturbances proposed.

4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species	Common name
No	No	<i>Actitis hypoleucos</i>	Common Sandpiper
No	No	<i>Apus pacificus</i>	Fork-tailed Swift
Yes	Yes	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
Yes	Yes	<i>Calidris melanotos</i>	Pectoral Sandpiper
No	No	<i>Cuculus optatus</i>	Oriental Cuckoo, Horsfield's Cuckoo
Yes	Yes	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
Yes	Yes	<i>Hirundapus caudacutus</i>	White-throated Needletail
No	No	<i>Motacilla flava</i>	Yellow Wagtail

4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.5.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

PMST search results indicated EPBC Act-listed migratory/marine fauna species may occur within the buffered (10 km) desktop search area. All EPBC Act-listed migratory and marine fauna species identified to possibly occur in the Project Area are birds, including the following:

- Australian painted snipe - *Rostratula australis*
- Black-eared Cuckoo - *Chalcites osculans*
- Cattle egret - *Bubulcus ibis*
- Common sandpiper - *Actitis hypoleucos*
- Curlew sandpiper – *C. ferruginea*
- Eastern Yellow wagtail - *Motacilla tschutschensis*
- Fork-tailed swift - *Apus pacificus*
- Latham's snipe - *Gallinago hardwickii*
- Oriental cuckoo - *Cuculus optatus*
- Pectoral sandpiper – *C. melanotos*
- Rainbow Bee-eater - *Merops ornatus*
- Satin flycatcher - *Myiagra cyanoleuca*
- Sharp-tailed sandpiper - *Calidris acuminata*
- White-bellied Sea-Eagle - *Haliaeetus leucogaster*
- White-throated needletail - *Hirundapus caudacutus*.

Boobook undertook a likelihood of occurrence assessment for the abovementioned species within the Project Area based on the findings of ecological field surveys and expert ecological assessment. The following EPBC Act-listed migratory/marine fauna species were assessed by Boobook to likely or potentially occur within the Project Area:

- Australian painted snipe – *R. australis*, potentially present
- Common sandpiper – *A. hypoleucos*, potentially present
- Fork-tailed swift – *A. pacificus*, likely to be present
- Latham's snipe – *G. hardwickii*, likely to be present
- Pectoral sandpiper – *C. melanotos*, potentially present
- Sharp-tailed sandpiper - *C. acuminata*, potentially present; and
- White-throated needletail – *H. caudacutus*, likely to be present.

Potential habitat for migratory species in the Project Area comprises 7.31 ha of ephemeral wetland areas, several artificial wetlands (such as dams) and all other vegetated and non-remnant areas.

Wetland migratory species potentially occurring within the Project Area include Australian Painted Snipe, Latham's Snipe, Common Sandpiper, Sharp-tailed Sandpiper and Pectoral Sandpiper. None of these species will be significantly impacted by the proposed project as there will be minor disturbance to wetland habitat (0.60 ha out of 7.31 ha of available habitat in the Project Area). For the other migratory species, these being White-throated Needletail and Fork-tailed Swift, these are both aerial species which will not be impacted upon by the Project as this development is not materially relevant to them.

The Project Area is unlikely to harbour an ecologically significant proportion of any listed migratory species' population. The proposed action is unlikely to reduce the geographic range of any of these species and the Project Area does not otherwise contain or constitute important habitat for these species. Therefore, the proposed action is unlikely to result in significant impacts on any listed migratory species.

Refer to Att. E for further information on the ecology of the Project Area and potential impacts to EPBC Act-listed migratory fauna species.

4.1.5.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact?

*

No

4.1.5.6 Describe why you do not consider this to be a Significant Impact. *

Boobook undertook an SIA as per the EPBC SIG 1.1 for EPBC Act-listed migratory fauna species that are likely or will potentially occur in the Project Area. Boobook determined the proposed action is unlikely to result in a significant impact to any listed migratory species as summarised below and further detailed in Att. E.

An action is likely to have a significant impact on a listed migratory species if it results in: Isolation, modification or destruction of important habitat for the species. Establishment of a harmful invasive species in an area of important habitat, or disruption to breeding, feeding, migration, resting behaviour or life-expectancy of an ecologically significant proportion of the population of a listed species.

Government guidelines for assessing the significance of impacts refer to the linked concepts of 'important habitat' and an 'ecologically significant proportion' of a listed species' population. The definition of these terms vary across species ecology, range, population size and circumstances.

DoEE (2017) defines important habitat for migratory shorebirds that aggregate in flocks as an area: that has been identified as internationally important for shorebirds; or that supports at least 0.1 per cent of the East Asian-Australasian flyway population; or that supports at least 2000 migratory shorebirds; or that supports at least 15 migratory shorebird species.

For Latham's snipe, which has a more dispersed occurrence, important habitat is defined as an area that supports at least 18 individuals of this species (DoEE 2017). Guidelines for other listed migratory species suggest upper and lower thresholds of 1% and 0.1% of species populations as ecologically significant proportions at an international and national level, respectively (DoE 2015). Estimates of the lower threshold vary from 10 individuals of white-throated needletail and 100 for the fork-tailed swift. Wetland migratory species potentially occurring within the Project Area include Australian Painted Snipe, Latham's Snipe, Common Sandpiper, Sharp-tailed Sandpiper and Pectoral Sandpiper.

None of these species will be significantly impacted by the proposed project as there will be minor disturbance to wetland habitat (0.60 ha out of 7.31 ha of available habitat in the Project Area). Further, as per the RMP (Att. F), where potential disturbances to ephemeral wetland habitat are associated with pipeline RoWs, these disturbances will be reinstated immediately following pipeline construction (typically within 3 months or in accordance with EA conditions) with considerations made for a range of factors including ESC, soil amelioration, fertiliser and seeding. These considerations are applied to ensure timely revegetation of the pipeline RoW. Therefore, total potential disturbance to ephemeral wetland areas will likely be less than 0.60 ha, as following pipeline RoW reinstatement, these areas will still provide functional ephemeral wetland habitat for relevant species.

For the other migratory species, these being white-throated needletail and fork-tailed swift, these are both aerial species which will not be impacted upon by the Project as this development is not materially relevant to them.

The Project Area is unlikely to harbour an ecologically significant proportion of any listed migratory species' population. The proposed action is unlikely to reduce the geographic range of any of these species and the Project Area does not otherwise contain or constitute important habitat for these species. Therefore, the proposed action is unlikely to result in significant impacts on any listed migratory species.

4.1.5.7 Do you think your proposed action is a controlled action? *

No

4.1.5.9 Please elaborate why you do not think your proposed action is a controlled action.

*

The Project Area is unlikely to harbour an ecologically significant proportion of any listed migratory species' population. The proposed action is unlikely to reduce the geographic range of any of these species, and the Project Area does not otherwise contain or constitute important habitat for these species. Therefore, the proposed action is unlikely to result in significant impacts on any listed migratory species.

Further, Boobook undertook an SIA as per the EPBC SIG 1.1 for EPBC Act-listed migratory fauna species that are likely or will potentially occur in the Project Area. Boobook determined the proposed action is unlikely to result in a significant impact to any listed migratory species. This is due to existing severe fragmentation of vegetation/habitat, generally poor habitat quality, the very small and localised disturbance area relative to surrounding habitat patches and sighting of infrastructure to largely avoid disturbance to vegetation.

Refer to Att. E for further information on the ecology of the Project Area and potential impacts to EPBC Act-listed migratory fauna species.

4.1.5.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Please refer to avoidance and mitigation measures proposed for this action in Section 4.1.4.10 for threatened species and ecological communities.

4.1.5.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

Environmental offsets are not expected to be required for the Project given the small disturbances proposed.

4.1.6 Nuclear

4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Project is not and does not involve nuclear activities; as such, it will not be a nuclear action.

4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

No Commonwealth Marine Areas were identified by the PMST results (refer to Appendix C – PMST Results of Att. E) within a 10 km search area of the Project Area. The Project will not have a significant impact on Commonwealth Marine Areas pre/post-implementation of management and mitigation measures. The proposed action is not a controlled action.

4.1.8 Great Barrier Reef

4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Great Barrier Reef is not located in or near the Project Area (located greater than 100 km away) and was not identified in the PMST results (refer to Appendix C – PMST Results of Att. E). The Project will not have a significant impact on the Great Barrier Reef pre/post-implementation of management and mitigation measures. The proposed action is not a controlled action.

4.1.9 Water resource in relation to large coal mining development or coal seam gas

4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

Yes

4.1.9.2 Briefly describe why your action has a direct and/or indirect impact on this protected matter. *

A WRA was undertaken by KCB (third-party hydrogeologists) to assess potential impacts to water resources and water-dependent assets under the EPBC Act due to project development. The WRA was undertaken against the SIG 1.1 - MNES, Significant impact guidelines 1.3: Coal seam gas and large coal mining developments – impacts on water resources (SIG 1.3 – CSG & LCMD), and the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) guidelines for proponents preparing CSG and large coal mining development proposals.

The WRA also considers potential impacts with respect to the Qld Water Act water level trigger threshold for springs (0.2 m drawdown) and bores (5 m drawdown in consolidated aquifer; 2 m drawdown in unconsolidated aquifer) using the predicted drawdown for both the 'Project only' and 'Cumulative' predictive model scenarios.

The WRA also considers the requirements of the Joint Industry Framework (JIF) risk threshold for GDEs.

The WRA found the Project's development will not have a significant impact on MNES water resources and should not be considered a controlled action under the EPBC Act water trigger.

The WRA is attached as Att. K, and its contents and findings are summarised below:

GW Drawdown and Associated Impacts

Potential impacts from CSG water production are detailed in the WRA (Att. K). These impacts have been assessed using outputs from the UWIR 2021 GW model. The Project Area is located in the Surat CMA. The gas target for the Project is the Walloon Coal Measures (WCM) of the Surat Basin. The WCM occur at depths > 650 metres below ground level (mbGL). GW use within 25 km of the Project is predominately from the Mooga Sandstone (32% of the total GW use) and Orallo Formation (28%). Most is used for stock / domestic purposes, with 369 water supply bores identified within 25 km of the Project Area. Outputs from the UWIR 2021 GW model have been used to predict drawdown impacts to GW as a result of the Project (refer to Section 8.5 of the WRA for model scenario results).

OGIA modelled a Project only scenario (PO), which includes CSG water production from the Project only, and a Cumulative scenario (CS), which includes simulation of current and proposed developments (including reasonably foreseeable Santos developments e.g. ATPs 1187 and 2052).

For the PO, predicted long-term drawdown impacts are limited to the Springbok Sandstone, the WCM and the Durabilla Formation, located at depths > 500 mbGL in the Project Area. The CS drawdown results indicate drawdown in the Westbourne Formation, Springbok Sandstone, WCM and Durabilla Formation, located at depths > 470 mbGL in the Project Area.

The CS predicts drawdown > 0.2 m in outcropping geological units in an area more than 12 km geologically up-dip and to the north of the Project Area. This drawdown is not associated with the Project, but associated with water production from neighbouring CSG developments operating on tenures located closer to these outcropping units.

No difference between the CS with and without development of the Project is observable up to depths > 400 mbGL (Westbourne Formation), while very little difference (< 2 m) is observed in drawdown for the Springbok Sandstone that overlie the WCM.

Monitoring, management, and mitigation practices are detailed in Section 10 of the WRA. A risk assessment, which considers these potential impacts, is provided in Section 9.7 of the WRA.

Changes to Water Quality

The WRA identified potential changes to SW / GW quality as a result of project development. Potential impacts to SW / GW quality is assessed in the WRA risk assessment at Section 9.7. Management and mitigation controls, outlined in Table 9.5 and detailed in Section 10 of the WRA (refer to Att. K), will be implemented to minimize these risks to water quality. Based on the findings of the CRAF and WRA, changes to GW and SW quality are unlikely, and not predicted as a result of project development, following

implementation of management and mitigation controls as discussed in Section 10 of the WRA. Cumulative impacts are not expected due to the localised nature of the potential risks. Refer to the WRA for further information on potential changes to water quality (Att. K) Section 9.4.

Third-Party GW Users

Potential impacts to GW bores were assessed against Qld Water Act bore trigger thresholds (2 m for unconsolidated aquifer and 5 m for consolidated aquifers) using outputs from the UWIR 2021 GW model. There are 2 registered GW bores located in the Project Area. One bore is identified to be operational and is attributed to the Mooga Sandstone (Registered bore Number (RN) 123195). Baseline assessment was undertaken by Santos of this bore in 2009. A second GW bore (RN208460) was drilled in the Project Area in June 2024. This new bore is indicated as “no longer used”.

For the PO assessment, maximum predicted drawdown at 368 (existing, abandoned but usable, proposed and potential) water bores within 25 km of the Project Area, is 0.03 m. Bore triggers for consolidated aquifers are therefore not predicted to be exceeded due to project activities.

There are no water bores screened to unconsolidated aquifers within 25 km of the Project Area. For the Cumulative impact assessment, 1 bore (RN 180006) located within 25 km of the Project Area exceeds the trigger threshold, with predicted drawdown of 87 m. The bore is attributed to the Upper Juandah Coal measures and is located 14 km east of the Project Area on PL 281, operated by Santos. Water level decline in this bore was already predicted to be triggered in the 2021 UWIR, which did not include development of the Project. Project contribution to this drawdown is assessed to be < 0.001%. The contribution of the Project does not result in any additional bores being triggered in the CS.

Bore triggers are therefore not predicted to be exceeded as a result of Project activities, and predicted impact on GW supply bores is assessed as negligible.

Town water supply schemes that source water from the Gubberamunda Sandstone and the Orallo Formation in the vicinity of the Project Area will not be materially affected by drawdown as a result of the Project activities.

Hydraulic Stimulation

Hydraulic stimulation may be undertaken as part of the Project. Operational control of well drilling and hydraulic stimulation activities are in place in the form of the Code of Practice, CRAF, EMP and RMP as listed in Section 10.1 of the WRA. Santos has developed a Hydraulic Fracturing Risk Assessment (HFRA). The HFRA describes how hydraulic fracturing is conducted and monitored, and it addresses regulatory requirements of Santos' Eastern Qld EAs. These operational controls, procedures and processes will limit the potential risks to human health and the environment (refer to Section 10.2.2 of the WRA for further information).

GDEs, Springs and Wetlands

Springs

There are no spring vents or complexes recorded within 25 km of the Project Area. The closest watercourse springs are > 20 km north of the Project Area. Drawdown > 0.2 m is not predicted in any outcropping formations due to development of the PO, and PO contribution to Cumulative drawdown in outcropping formations is anticipated to be negligible. No material impacts on spring vents, complexes or watercourse springs as a result of project development were identified.

Aquatic GDEs

Aquatic GDEs are not indicated to be present in the Project Area. Drawdown exceeding the JIF threshold is not predicted for the PO in outcropping or sub-outcropping formations. Potential exceedance of the JIF threshold (> 0.2 m) for the CS, associated with neighbouring CSG developments, is indicated for outcropping formations >12 km geologically up-dip and north of the Project Area. The PO contribution to the

predicted CS drawdown is assessed to be minor to negligible (0 – 4%; < 0.08 m). The Project is therefore assessed to have a negligible effect on GDEs that may be associated with outcropping geological units. Impacts to aquatic GDEs due to the Project are not expected. No new GDE areas are triggered due to drawdown contribution from the Project.

TGDEs

Qld government desktop mapped terrestrial GDEs (TGDEs) are mapped in the Project Area i.e. deep-rooted vegetation communities / ephemeral wetlands. The WCM is over- and underlain by thick sequences of several tight aquitards which limit propagation of drawdown into the overlying and underlying aquifers. The WCM occurs at 650 mbgL at the Project Area. Rooting depths for vegetation in the Project Area are up to 22.6 m deep. OGIA completed a regional scale desktop risk assessment which did not identify any TGDE areas in the vicinity of the Project Area as being at risk due to CSG development. The Project is not predicted to exceed the JIF threshold (0.2 m) for drawdown in outcropping or sub-outcropping formations. Its contribution to drawdown is expected to be minor to negligible, and GW in surficial units supporting TGDEs are unlikely to be impacted by CSG-related drawdown.

Wetlands

No wetlands listed in the *Directory of Important Wetlands in Australia* are located in or within 25 km of the Project Area. Closest wetlands are located > 120 km away. No Qld government mapped wetlands of High Ecological Significance (HES) or High Ecological Value (HEV) are located in or within 35 km of the Project Area. Multiple small ephemeral floodplain wetlands are located in the Project Area (and within the PDF).

Further, please refer to the WRA (Att. K) for assessments of potential impacts associated with water use during Project development (Att. K, Section 3.4.4) and SW context and potential changes to the hydrological regime (Att. K, Sections 2.3.2 and 9.2). Further, refer to the CRAF (Att. L) for information on chemical use and risks associated with Project development. Character limits have not allowed further detail to be presented on these matters here.

4.1.9.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact?

*

No

4.1.9.6 Describe why you do not consider this to be a Significant Impact. *

In accordance with the SIG 1.3 – CSG & LCMD, a ‘significant impact’ is “an impact which is important, notable, or of consequence, having regard to its context or intensity”. The SIG 1.3 – CSG & LCMD general criteria (5.2) identifies that an action is likely to have a significant impact on a water resource if there is a real, or not remote, chance or possibility that it will directly or indirectly result in a change to the hydrology of a water resource and/or the water quality of a water resource, that is of sufficient scale or intensity as to reduce the current or future utility of the water resource for third-party users, including environmental and other public benefit outcomes, or to create a material risk of such reduction in utility occurring.

The Project targets the WCM for CSG production. In the vicinity of the Project Area, GW from the consolidated Surat Basin sediments is accessed for a range of GW uses. Uses of this GW, relevant to the greater Project Area, include stock, agriculture, domestic, industrial and town water supply use. Stock/domestic is the most commonly recorded use/purpose within this area.

Results of the WRA indicate:

- No bores are predicted to experience a water level decline that exceeds the Qld Water Act trigger thresholds as a result of the PO. Water level decline at one (potential) water supply bore is predicted to be triggered for the CS, as already reported in the 2021 UWIR.
- Contribution of the Project to the predicted cumulative drawdown at this potential bore, which is attributed to the Upper Juandah Coal measures (located on PL 281, operated by Santos), 14 km east of the Project Area, is assessed to be < 0.001%.
- Material impacts to aquatic GDEs due to the PO are not expected. PO drawdown > 0.2 m (Water Act 2000 spring and JIF GDE threshold) is not predicted in outcropping / sub-cropping geological units.
- Potential exceedance of the JIF threshold (> 0.2 m drawdown) for the CS, associated with neighbouring CSG developments, is indicated for outcropping formations more than 12 km geologically up-dip and to the north of the Project Area. The PO contribution to the predicted CS drawdown is assessed to be minor to negligible (0 – 4%; < 0.08 m).
- The Project is therefore assessed to have a negligible effect on GDEs that may be associated with outcropping geological units. Impacts to aquatic GDEs due to the Project are not expected. No new GDE areas are triggered due to drawdown contribution from the Project.

A summary of potential impacts against the SIG 1.3 – CSG & LCMD, Changes to Hydrological Characteristics and Changes to Water Quality has been provided below:

SIG 1.3 – CSG & LCMD - Changes to Hydrological Characteristics:

1. Flow Regime

The Project does not include planned discharge to/abstraction from SW systems or SW water diversions. No material impacts to SW environmental values are anticipated, including to aquatic ecosystems and cultural and spiritual values, due to development of the Project.

2. Recharge Rates to GW

The Project Area is located in an area where surficial alluvium and Tertiary aged sediments are underlain by the Doncaster Member of the Wallumbilla Formation. Recharge in the vicinity of the Project Area is expected to occur mainly as diffuse recharge with rainfall infiltration occurring at outcropping hydrostratigraphic units in and surrounding the Project Area. The Doncaster Member is considered a tight aquitard. Limited diffuse rainfall recharge is expected in outcropping areas. Recharge rates are not expected to be significantly modified due to project activities given the small disturbance footprint relative to the recharge area, and adherence to the requirements of the Constraints Protocol, EMP, RMP and relevant EA conditions.

3. Aquifer pressure or pressure relationship between aquifers, GW table and potentiometric surface levels and Inter-aquifer connectivity

Water production is limited to the coal seams of the WCM. In order to produce gas, the formation pressure must be reduced, which may induce leakage into the WCM from overlying or underlying formations. The presence of thick sequences of aquitards present in the Project Area, however serves to limit the propagation of drawdown from the WCM into the overlying and underlying aquifers. Modelling outputs indicate predicted PO drawdown > 0.2 m (Water Act spring and JIF GDE threshold) is not predicted in outcropping/sub-cropping geological units. Predicted drawdown impacts are limited to the Springbok Sandstone, the WCM and the Durabilla Formation, located at depths > 500 mbGL in the Project Area.

Potential exceedance of the JIF threshold (> 0.2 m drawdown) for the CS, associated with neighbouring CSG developments, is indicated for outcropping formations more than 12 km geologically up-dip and to the north of the Project Area. The PO contribution to the predicted CS drawdown is assessed to be minor to negligible (0 – 4%; < 0.08 m).

Existing Santos controls are in place in the form of the HFRA, CRAF, EMP and RMP as listed in Section 10.1 of the WRA. These controls limit potential risk of connectivity between formations during the construction, operation and rehabilitation of CSG wells. Therefore, the impact on inter-aquifer connectivity is not considered significant.

4. GW/SW Interactions

Surficial deposits are not recognised to be connected to the Surat Basin units in the Project Area. Surficial deposits in the Project Area are immediately underlain by a tight aquitard and are vertically separated from the GAB aquifers by thick sequences of several other tight aquitards and partial aquifers. GW / SW interactions will not be significantly affected. The Project does not involve watercourse abstraction or discharge, and model results show that drawdown will not affect surficial aquifers.

5. Coastal Processes

The Project Area is located in central Qld - changes to coastal processes will not occur.

SIG 1.3 – CSG & LCMD - Changes to Water Quality:

1. Changes to Water Quality and Risks

A chemical risk assessment (CRAF, refer to Att. L) has been undertaken for the Project, which assessed the full lifecycle of chemicals used during and following well drilling, hydraulic fracturing and well completion.

The CRAF found risk associated with the use of proposed chemicals to be low to insignificant for both the PO and CS following adoption of the appropriate standards, implementation of avoidance, mitigation, management and monitoring measures, and relevant EA conditions.

CSG activities may potentially result in non-chemical related impacts on SW / GW quality. These may include impacts associated with drilling and construction of CSG wells, PW storage facilities and localised incidental CSG activities such as dust suppression.

CSG and PW from the Project Area will be sent to existing storage / processing / compression facilities located on adjacent Santos petroleum tenures. Petroleum activities undertaken on adjacent tenures are authorised under existing EPBC Act approvals and EAs. Material changes to GW / SW quality are not anticipated following adoption of the appropriate standards and implementation of proposed controls and relevant EA conditions.

2. Impact on Water Availability

Water production for the Project is limited to the coal seams of the WCM. The presence of thick sequences of aquitards present in the Project area however serves to limit the propagation of drawdown from the WCM into the overlying and underlying aquifers. Modelling outputs indicate predicted PO drawdown > 0.2 m (Water Act spring & JIF GDE threshold) is not predicted in outcropping/sub-cropping geological units. Predicted drawdown impacts are limited to the Springbok Sandstone, the WCM and the Durabilla Formation, located at depths > 500 mbGL in the Project Area.

Potential exceedance of the JIF threshold (> 0.2 m drawdown) for the CS, associated with neighbouring CSG developments, is indicated for outcropping formations > 12 km geologically up-dip and north of the Project Area. The PO contribution to the predicted CS drawdown is assessed to be minor to negligible (0 – 4%; < 0.08 m).

The Project was assessed to not have a significant impact on GDEs. SW volumes are not anticipated to be impacted; surficial deposits are not recognised to be connected to the Surat Basin units in the Project Area.

Bore triggers are not predicted to be exceeded as a result of PO activities, and predicted impact on GW supply bores and Town Water supply is assessed as negligible. The contribution of the Project does not result in any additional water bores being triggered in the CS.

The Project is not anticipated to reduce the amount of water available or impact water quality following adoption of appropriate standards and implementation of proposed controls and relevant EA conditions.

3. Harmful substance accumulation in the environment

Refer to response 1 for Changes to Water Quality above.

4. Seriously affects the habitat or lifecycle of a native species dependent on a water resource

Refer to response 3 for Changes to Water Quality above.

5. Invasive species

Refer to responses 2 and 4 for Changes to Water Quality above. No changes to the water resource that may cause the establishment of an invasive species (or the spread of an existing invasive species) are expected.

6. Local water quality

Refer to responses 2 and 4 for Changes to Water Quality above. No significant worsening of local water quality is anticipated.

7. Ecosystem water quality

Limited volumes of PW may be stored in tanks in the Project Area, which will be designed and constructed to relevant Australian Standards. Proposed activities do not include planned direct discharges to watercourses.

Beneficial use of PW is limited to activities such as water supply for drilling, hydraulic fracturing purposes, and dust suppression/construction. Emergency response procedures are in place to coordinate incident response and mitigation. Therefore, no changes to ecosystem water qualities are anticipated.

4.1.9.7 Do you think your proposed action is a controlled action? *

No

4.1.9.9 Please elaborate why you do not think your proposed action is a controlled action.

*

The Project will include the construction / operation of up to 24 CSG wells and their connection to gas and water gathering lines.

The Project Area is surrounded by approx. 4,400 existing CSG wells approved under the EPBC Act, including the Santos Roma Gas Field.

CSG developments surrounding the Project Area are conditional to the JIF framework. The application of the JIF framework to surrounding development provides comfort that defined environmental outcomes for GW (as defined in the JIF) will be achieved.

The Project represents a minor infill program of the existing EPBC act approved Roma CSG field (EPBC Numbers 2008/4059 and 2012/6615), and gas and water produced by the Project will utilise existing Roma Gas Field infrastructure, thereby reducing disturbance and impacts associated with otherwise standalone development.

CSG and water produced from the Project Area will be sent to existing approved centralised gas and water storage/processing and gas compression facilities located on adjacent Santos owned and operated petroleum tenures. Petroleum activities undertaken on adjacent tenures are authorised under existing EPBC Act approvals and Queensland EAs.

The WRA report demonstrates that development of the Project will not have a significant impact on water resources. Further, justifications for the Project to be considered a “not controlled action” under the EPBC Act water trigger include:

- Predicted PO and CS drawdown impacts are limited to geological formations located at depths > 470 mbGL in the Project Area.
- Surficial deposits are not recognised to be connected to the Surat Basin units in the Project Area. There is no predicted PO drawdown in these surficial deposits. The Project was assessed to not have a significant impact on GDEs.
- Bore triggers are not predicted to be exceeded as a result of the Project.
- Nationally important wetlands, spring vents or spring complexes are not predicted to be impacted. The PO contribution to the predicted CS drawdown for watercourse springs are assessed to be negligible.
- Proposed activities do not include planned direct abstraction from, or discharges to, watercourses. Impacts on SW users, environmental values and spiritual values are not anticipated.
- The use of chemicals poses a low to insignificant risk following adoption of the appropriate standards and implementation of avoidance, mitigation, management and monitoring measures as proposed by Santos.
- The potential impacts from subsidence are considered near to negligible.
- Santos commits to adhere to relevant EA conditions, mandatory and best practice requirements and guidelines. As such, Santos has developed a comprehensive set of supporting management documents with the objective to achieve ongoing environmental compliance with regulatory requirements and to facilitate implementation of best practice environmental management strategies.

In summary, potential impacts to water MNES have been assessed and it is considered there will be no significant impacts as a result of the proposed action following implementation of avoidance, mitigation, management and monitoring measures. It is concluded the Project will not have a significant impact on water MNES and should be considered “not a controlled action” under the EPBC Act water trigger.

4.1.9.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Water resource specific avoidance mitigation and management measures for the Project have been developed in addition to the comprehensive set of management documents as listed in Section 10.1 of the WRA (Att. K).

Management measures have been developed to cover the following EPBC listed Water Resource aspects and are developed in accordance with the following legislation and guidelines:

- CSG Production Well Drilling and Construction, will be managed in accordance with the Code of Practice.
- CSG Water and Waste Management will be managed in accordance with Qld CSG Water management Policy.
- Bore and Water Resource Impact Management Measures will be in accordance with the Qld Water Act, UWIR, and Qld Baseline Assessment Guideline.
- Erosion and Sediment Management has been developed in accordance with the current version of the Best Practice Erosion and Sediment Control (IECA) (and in accordance with relevant EA conditions).

Further detail regarding all avoidance, mitigation and management measures relevant to Water Resources is detailed in Section 10 of the WRA (Att. K)

In addition, Santos has developed a range of MPs and mitigation, management and monitoring practices for the Project that will be implemented to avoid, mitigate and manage the risk of impacts to water resources and other environmental values – including:

- Eastern Queensland Hydraulic Fracturing Risk Assessment (HFRA)
- Eastern Queensland Stimulation Impact Monitoring Program (SIMP)
- Baseline Assessment Plan (BAP) for ATP 2052 and ATP 2053
- Constraints Protocol (Att. D)
- EAR (Att. E)
- RMP (Att. F)
- EMP (Att. G)
- WMP (Att. H)
- SSMP (Att. I)
- WRA (Att. K); and
- CRAF (Att. L).

4.1.9.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

Environmental offsets are not expected to be required for the Project given the small disturbances proposed.

4.1.10 Commonwealth Land

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Project Area is not located on Commonwealth Land and does not directly or indirectly impact on Commonwealth Land.

4.1.11 Commonwealth Heritage Places Overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

No Commonwealth Heritage Places Overseas properties were identified by the PMST results (Appendix C – PMST of Att. E) within 10 km of the Project Area. The Project will not have a direct/indirect impact on Commonwealth Heritage Places Overseas pre/post-implementation of management and mitigation measures. The proposed action is not a controlled action.

4.1.12 Commonwealth or Commonwealth Agency

4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? *

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

None

Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Threatened Species and Ecological Communities (S18)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? *

No

4.3.8 Describe why alternatives for your proposed action were not possible. *

Santos has operated in Queensland for over 50 years and is proud of the economic and social benefits being delivered by its Projects in the State.

One such project is the GLNG-GFD Project, which is led by Australian company Santos, in partnership with three of the world's leading energy companies – PETRONAS from Malaysia, Total from France, and KOGAS from South Korea.

Project construction began in 2011 with the first shipment of LNG in October 2015. The Project has taken more than 95 million work hours to date. More than 10,000 people have worked on the Project which saw more than \$15 billion invested Australia-wide, including \$8 billion in Queensland alone of which \$710 million was to the Maranoa, Toowoomba and Western Downs districts.

The major Roma Hub compression facility in Queensland, of which this Project will supply CSG into, can produce 145 TJ of gas per day with ongoing development and compression capacity, such as the development of this Project, to add to production rates.

To ensure the delivery of commitments to the domestic and export markets Santos is in the process of optimising activities on existing tenements, along with the active expansion of new fields. This includes the current Project, which is not a new activity, but an infill program of the existing GLNG-GFD Project.

Gas produced by the proposed activities also plays an important role as a cleaner and lower-carbon emitting alternative to coal. In Australia and Queensland, gas plays an important role in domestic energy security and diversification, supporting intermittent renewable energy sources. Santos is a major supplier of natural gas to the domestic energy market.

Santos was granted the ATP 2053 lease in 2020 to explore and potentially extract gas from the tenure under the rights and requirements of the P & G Act. Santos development and drilling schedule, and commercial interests, are driving the timeline for EPBC Act approval of the Project in 2025 – so development can start (pending approval) from late 2025.

Given the nature of onshore gas production activities and the associated required supporting infrastructure, a minimal amount of terrestrial disturbance is required and is not avoidable i.e. well leases in particular need to be located at the surface in a somewhat regular grid-like arrangement. There is no alternative to this required minimal disturbance for onshore gas development activities.

To minimise disturbance, Santos has investigated several alternative disturbance footprints (e.g. number of wells, well layout, infrastructure location). This has resulted in a PDF that largely avoids impacts to MNES and other environmental values. These design iterations are discussed and displayed in the Constraints Protocol (Att. D).

Taking no action has not been considered as this is not consistent with the purpose of the tenure under the requirements of the P&G Act, or current domestic and international clean energy demands.

Consideration has instead been given to maximising the economic and social benefits that will be achieved through developing the resource whilst maximising avoidance of adverse impacts to MNES and environmental values. Temporary disturbance (for linear infrastructure only) will only occur to 0.60 ha of the 7.31 ha of available general ephemeral wetland habitat within the Project Area. Disturbance to this small area will not cause Latham's snipe, sharp-tailed sandpiper or Australian painted snipe to decline.

The proposed disturbance area is unlikely to reduce koala numbers or disrupt koala movement through the Project Area. It is likely the 0.30 ha of habitat proposed to be cleared involves the removal of <15 mature trees. The loss of 0.30 ha of mapped shelter, foraging, breeding and dispersal habitat (constituting remnant and regrowth RE 11.3.2) is unlikely to be limiting to affected species.

Further, there is a total of 84.79 ha of remnant and regrowth RE 11.3.2 located in the Project Area. The potential loss of 0.30 ha of this RE represents a potential loss of 0.25% of this habitat type in the Project Area.

The Project Area is located in a highly modified landscape, and there is limited natural vegetation due to previous land uses. The proposed action has been designed to protect the existing environmental values and coexist with current and future land uses.

The Project will facilitate the production of gas to meet the needs of customers in Qld and other Australian states/territories. Gas produced by Santos will also generate taxes and royalties to the Qld State Government, which provides an ongoing source of revenue to support Government services provided to the public.

The proposed action is also consistent with the Maranoa Regional Council's Planning Scheme (Version 5 – current) and Strategic Framework themes and key policies (Sections 3.2.3 and 3.3). Energy reserves in the Surat Basin are a major resource for domestic and international consumers. Gas reserves in the region will play a pivotal role in Queensland achieving its clean energy electricity generation targets and will continue to increase export earnings as liquefied natural gas facilities are established and increase the supply of LNG to overseas markets. Demand for gas will continue to grow, and continue to make a major contribution to the region's economy. The Maranoa Regional Council aims to ensure the benefits of mining/energy development stay within the region and its towns, those towns providing industrial products and services, or temporary and permanent housing for mining industry workers.

Santos is committed to supporting the regional communities and towns where we operate. Further, Santos' objective in the regions we operate in is to work proactively and collaboratively with our community stakeholders and host landholders. Santos has a long history of strong and supportive community and landholder relationships in which we seek to support and enable long-term and intergenerational resilience.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment_A_RomaPhase7-7B-SD20_ProjectAreaRegionalLocationMap.pdf Project Area Regional Location Map	23/06/2025	No	High
#2.	Document	Attachment_B_RomaPhase7-7B-SD20_PDF.zip Preliminary Disturbance Footprint shapefile	23/06/2025	No	High
#3.	Document	Attachment_C_RomaPhase7-7B-SD20_PDF_Map.pdf Project Area Map with Preliminary Disturbance Footprint	23/06/2025	No	High
#4.	Document	Attachment_D_RomaPhase7-7B-SD20_Constraints Protocol.pdf Environmental protocol for constraints planning and field development	23/06/2025	No	High
#5.	Document	Attachment_E_RomaPhase7-7B-SD20_EAR.pdf Ecological assessment report	23/06/2025	No	High
#6.	Document	Attachment_F_RomaPhase7-7B-SD20_RMP.pdf Rehabilitation management plan	23/06/2025	No	High
#7.	Document	Attachment_G_RomaPhase7-7B-SD20_EMP.pdf Environmental management plan	23/06/2025	No	High
#8.	Document	Attachment_H_RomaPhase7-7B-SD20_WMP.pdf Water management plan	23/06/2025	No	High

1.2.6 Commonwealth or state legislation, planning frameworks or policy documents that are relevant to the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment_I_RomaPhase7-7B-SD20_SSMP.pdf Significant species management plan	23/06/2025	No	High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment_J_RomaPhase7-7B-SD20_ConsultationRecords.pdf Attachment_J_RomaPhase7-7B-SD20_ConsultationRecords	30/06/2025	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment_K_RomaPhase7-7B-SD20_WRA.pdf Water resource impact assessment report	23/06/2025	No	High

4.1.4.10 (Threatened Species and Ecological Communities) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment_L_RomaPhase7-7B-SD20_CRAF.pdf Chemical Risk Assessment Framework and Report	23/06/2025	No	High

5.2 Declarations

✔ Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

ABN/ACN	60123982749
Organisation name	SANTOS VENTURES PTY LTD
Organisation address	5000 SA
Representative's name	Alex Clarke
Representative's job title	Senior Environmental Advisor
Phone	(07) 3838 3000
Email	alex.clarke@santos.com
Address	Level 22, Santos Place, 32 Turbot Street, Brisbane, Queensland 4000 AUSTRALIA

Check this box to indicate you have read the referral form. *

I would like to receive notifications and track the referral progress through the EPBC portal. *

By checking this box, I, **Alex Clarke of SANTOS VENTURES PTY LTD**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *

I would like to receive notifications and track the referral progress through the EPBC portal. *

✔ Completed Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

Same as Referring party information.

Check this box to indicate you have read the referral form. *

I would like to receive notifications and track the referral progress through the EPBC portal. *

I, **Alex Clarke of SANTOS VENTURES PTY LTD**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. *

I, **Alex Clarke of SANTOS VENTURES PTY LTD**, the Person proposing the action, consent to the designation of **Alex Clarke of SANTOS VENTURES PTY LTD** as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

I would like to receive notifications and track the referral progress through the EPBC portal. *

Completed Proposed designated proponent's declaration

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

Check this box to indicate you have read the referral form. *

I would like to receive notifications and track the referral progress through the EPBC portal. *

I, **Alex Clarke of SANTOS VENTURES PTY LTD**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

I would like to receive notifications and track the referral progress through the EPBC portal. *