Regulatory framework C

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Santos
GLNG Project

Gas Field Development Project
Environmental Impact Statement

Appendix C: Regulatory framework

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C.1 Commonwealth legislation

C.1.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides the framework used by the Commonwealth Government to protect and manage nationally and internationally important flora, fauna, ecological communities, and heritage places, which are defined in the EPBC Act as matters of national environmental significance (MNES). The EPBC Act establishes a process for environmental assessment and approval of proposed actions that may have a significant impact on MNES, known as 'controlled actions'.

Under the EPBC Act, those who propose an action that may impact upon a MNES must refer the proposal to the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPaC, now Department of the Environment (DOTE)). This referral is used by the Commonwealth Minister for Environment to assist in deciding whether the proposal requires assessment and approval under the EPBC Act.

Santos GLNG referred the Gas Field Development Project (GFD Project) to SEWPaC on 5 November 2012 to determine if the GFD Project required assessment as a controlled action under Section 8 of the EPBC Act. A copy of the referral is included in Appendix U1 of this environmental impact statement (EIS).

On 3 December 2012, SEWPaC deemed the GFD Project to be a controlled action for which an EIS would be required. The nominated controlling provisions that were prescribed under the EPBC Act included:

- Wetlands of international importance (Ramsar wetlands) (sections 16 and 17B)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A).

Following this declaration, the EPBC Act was amended in June 2013 to include water resources as a matter of MNES in relation to coal seam gas and large coal mining development. Consequently, Santos GLNG was notified on 17 October 2013 of the DOTE decision that water resources would also be a controlling provision for the GFD Project, under Sections 24D and 24E of the EPBC Act.

Santos GLNG also received confirmation from SEWPaC that the GFD Project would be assessed under the bilateral agreement between the Commonwealth and Queensland governments. As such, the preparation of this EIS in accordance with Part 4 of Queensland's SDPWO Act is accredited as one of the accepted assessment pathways satisfying Section 8 of the EPBC Act.

The bilateral arrangement includes a decision process requiring review and support of the GFD Project's EIS by both levels of government before the GFD Project can proceed. To assist with the EIS review process, the Independent Expert Scientific Committee (IESC) on Coal Seam Gas and Large Coal Mining Development was established as a statutory committee in 2012 by the Australian Government under the *Environment Protection and Biodiversity Conservation Amendment (Independent Expert Scientific Committee on Coal Seam Gas and Large Mining Development) Act 2012* (Cth).

The IESC provides scientific advice to decision makers on the impact that coal seam gas and large coal mining development may have on Australia's water resources, as requested by federal and state government regulators. The Queensland Government regulators can seek the Committee's advice in accordance with the terms of the National Partnership Agreement on Coal Seam Gas and Large Coal Mining Development.

To meet the requirements of the EIS terms of reference two reports titled 'Report on Matters of national environmental significance (water resources) (Santos, 2014)' and 'Report on Matters of national environmental significance (ecology) (Aurecon, 2014)' have been prepared and included in the EIS for DOTE and IESC review.

C.1.2 Native Title Act 1993

The purpose of the Commonwealth *Native Title Act 1993* (NT Act) is to protect the rights and interests of Indigenous people. The NT Act provides the Commonwealth Government with a process to:

- Recognise and protect the rights and interests of Indigenous people through Native Title claims and determinations
- Manage the impact that proposed actions may have on Native Title through the 'future acts' system and associated agreements
- Extinguish Native Title over specified areas (including particular freehold estates, leasehold land, or public works activities or infrastructure).

The National Native Title Tribunal (NNTT) is the federal agency responsible for a wide range of functions under the NT Act. Its role includes registering agreements such as, Indigenous land use agreements or future acts agreements and maintaining relevant registers.

The project area is subject to a number of active and potential Native Title claims and contains lands where registered Aboriginal parties can claim Native Title.

C.1.3 National Greenhouse and Energy Reporting Act 2007

The Commonwealth *National Greenhouse and Energy Reporting Act 2007*, the Regulations under that Act, and the *National Greenhouse and Energy Reporting (Measurement) Determination 2008* establish the legislative framework for a National Greenhouse and Energy Reporting (NGER) scheme. Corporations are required to register and report if they emit greenhouse gas, produce energy, or consume energy at or above the annual thresholds specified within the Act (see clause 13 of the Act). The emission sources to be reported include:

- The combustion of fuels for energy
- Fugitive emissions from the extraction of coal, crude oil and natural gas
- Industrial processes (such as producing cement and steel)
- Waste management.

C.2 Queensland legislation

C.2.1 Environmental legislation

C.2.1.1 Aboriginal Cultural Heritage Act 2003

The *Aboriginal Cultural Heritage Act 2003* provides for the recognition, protection and conservation of Aboriginal cultural heritage. Key provisions of the Act include duty of care obligations, an Aboriginal cultural heritage database and a register of artefacts.

The GFD Project area contains known sites of cultural heritage significance and project activities such as vegetation clearing and earthworks have the potential to harm Aboriginal cultural heritage.

Under the Act, Santos GLNG is required to take all reasonable and practicable measures to ensure that GFD Project activities do not impact upon Aboriginal cultural heritage. Compliance with this duty of care can be achieved by acting under an approved cultural heritage management plan (CHMP) or an Indigenous land use agreement (where Aboriginal cultural heritage is subject to the agreement). Part 7 of the Act outlines the provisions for CHMPs. In particular, a CHMP must be developed when a project necessitates an EIS, or requires an environmental authority (EA) under another Act.

C.2.1.2 Environmental Protection Act 1994

The *Environmental Protection Act 1994* (EP Act) provides the overarching environmental legislative framework for the protection and management of environmental values within Queensland. The EP Act aims to protect the natural environment and associated ecological systems and processes while allowing for continued sustainable development. To achieve this, the EP Act regulates activities that will or may have the potential to cause environmental harm. The EP Act prescribes a number of mechanisms to achieve these objectives.

Recent amendments to the EP Act have streamlined the approval pathways of some environmental approvals and activities. These changes were introduced through the *Environmental Protection (Greentape Reduction) and Other Legislation Amendment Act 2012* (Greentape Reduction Act), commenced on 31 March 2013. They include:

- All environmentally relevant activities (ERAs) are now authorised under an environmental authority (EA)
- Some ERAs may now either be a prescribed ERA (previously known as Chapter 4 activities) or a resource activity (previously known as Mining and Chapter 5A activities)
- A number of procedural changes including, amongst other things:
  - Streamlining mining and environmental approvals through linking EAs and resource tenure. Eliminating the need to transfer applications to be made under the EP Act
  - Amalgamated corporate authorities for corporate holders of multiple EAs.

The changes introduced through the Greentape Reduction Act will have little effect on Santos GLNG's existing petroleum projects, which already have EAs. The transitional provisions for the changes resulting from the Greentape Reduction Act will only apply if Santos GLNG seeks to alter existing EAs or change an element of the existing EA or include ancillary activities no longer administered beneath Chapter 5 of the EP Act. These environmental authorities will then be known as 'transitional authorities'.

The transitional provisions in the Greentape Reduction Act administer a range of existing approvals relevant to ERAs and environmental authorities amongst other things. The transitional provisions are detailed in Chapter 3, Part 18 of the EP Act.

In accordance with the changes introduced through the Greentape Reduction Act, the GFD Project will require Santos GLNG to seek additional EAs or where appropriate, an amalgamated corporate authority, which will authorise the activities discussed in this EIS that are not already authorised by existing EAs.

Environmental authority

An EA is the regulatory document that states the environmental conditions that must be complied with to enable a proponent to carry out any resource activity in Queensland. Activities authorised under the *Petroleum and Gas (Production and Safety) Act 2004* (P&G Act) are considered resource activities (petroleum activities) under Chapter 5 of the EP Act.

Part 2, Chapter 5 of the EP Act outlines the process for applying for an EA for a resource activity.

Resource activities generally include activities and other forms of development that are listed in Schedule 2 of the *Environmental Protection Regulation 2008* (EP Regulation). These are known as 'ancillary activities' as they comprise part of the resource activity as a single integrated operation on-tenure. In this instance, ERAs are considered to be ancillary activities. For off-tenure ancillary activities, a separate EA application is required for the prescribed ERA.

There are three types of EA applications that apply to resource activities:

- Standard application — the activity can meet the eligibility criteria and comply with the standard conditions
- Variation application — the activity can meet the eligibility criteria, but with one or more variations on the standard conditions
- Site-specific application — the activity does not have eligibility criteria or cannot meet the eligibility criteria.

The EA for the GFD Project will be sought through either a variation or site-specific application under the EP Act. As such, the application must include an assessment of the likely impact of each relevant activity on the environmental values, including:

- A description of the environmental values likely to be affected by each relevant activity
- Details of any emissions or releases likely to be generated by each relevant activity
- A description of the risk and likely magnitude of impacts on the environmental values
- Details of the management practices proposed to be implemented to prevent or minimise adverse impacts
- Details of how the land the subject of the application will be rehabilitated after each relevant activity ceases, including:
  - A description of the proposed measures for minimising and managing waste generated by each relevant activity
  - Details of any site management plan(s).

In addition, a site-specific application for a coal seam gas activity must also state the following:

- The amount of coal seam water reasonably expected to be generated
- The flow rate at which the applicant reasonably expects the water will be generated
- The quality of the water, including changes in the water quality, the applicant reasonably expects while each relevant coal seam gas activity is carried out
- The proposed management of the water, (e.g. use, treatment, storage or disposal)
- The criteria against which the applicant will monitor and assess the effectiveness of the management of the water, including, for example, criteria for each of the following:
  - The quantity and quality of the water used, treated, stored or disposed of

  - Protection of the environmental values affected by each relevant coal seam gas activity
  - The disposal of waste including, for example, salt generated from the management of the water.
- The action proposed to be taken if any of the management criteria are not complied with to ensure the criteria will be able to be complied with in the future.

Environmentally Relevant Activities

Under the EP Act, activities that have the potential to release contaminants into the environment and may cause environmental harm are defined as ERAs. Changes to the EP Act and EP Regulation under the Greentape Reduction Act resulted in the deletion of 20 ERA thresholds.

The ERAs expected to be applicable to the GFD Project will likely include:

- ERA 9 (3b) – Hydrocarbon Gas Refining – consists of refining 200,000,000m^3 or more of natural gas
- ERA 10 – Gas Producing – consists of manufacturing, processing or reforming 200 t or more of hydrocarbon gas in a year
- ERA 14 (1) – Electricity Generation – generating electricity by using gas at a rated capacity of 10MW electrical or more
- ERA 15 – Fuel Burning – consists of using fuel burning equipment that is capable of burning at least 500kg of fuel in an hour
- ERA 60 (1d) – Waste Disposal – operating a facility for disposing of, in a year, more than 200000 t of any combination of regulated waste, general waste and limited regulated waste and <5 t of untreated clinical waste (if in a scheduled area)
- ERA 63 (1b) – Sewage Treatment - Operating sewage treatment works, other than no release works, with a total daily peak design capacity of more than 100 EP to 1500 EP.
- ERA 8 – Chemical Storage - storing more than 500m^3 of chemicals of class C1 or C2 combustible liquids under AS 1940 or dangerous goods class 3
- ERA 38 – Surface Coating – coating, painting or powder coating, using, in a year, more than 100 t of surface coating materials.
- ERA 47 – Timber milling and woodchipping – milling more than 100000 t of timber in a year.
- ERA 56 – Regulated Waste Storage – receiving and storing regulated waste. Aggregation and brine dams
- ERA 57 – Regulated Waste Transport – transporting regulated waste, other than tyres, in 36 or more vehicles. The transport of CS water and brine between project areas
- ERA 58 – Regulated Waste Treatment – operating a facility for receiving and treating regulated waste to render the waste non-hazardous or less hazardous
- ERA 60 – Waste Disposal – operating a facility for disposing of, in a year, more than 200000 t of any combination of regulated waste, general waste and limited regulated waste and <5 t of untreated clinical waste (if in a scheduled area)
- ERA 61 – Waste Incineration and Thermal Treatment – incinerating or thermally treating other regulated waste
- ERA 63 (1)(a)(i) – Sewage Treatment – Operating sewage treatment works (21-100 EP), other than no release works
- ERA 63 (1)(b)(i) – Sewage Treatment – Operating sewage treatment works (100-1500 EP), other than no release works
- ERA 64 – treating 10 ML or more raw water in a day. This ERA is for 'no release to waters' RO plants (the majority of our RO plants).

Notifiable activities

Schedule 3 of the EP Act details notifiable activities regulated under the Act. These are activities that are likely to lead to land contamination. Under the EP Act, a landowner must notify the Department of Environment and Heritage Protection (EHP) if land is being or has been used for a notifiable activity. This land is then recorded on the Environmental Management Register (EMR) administered by EHP.

Notifiable activities relevant to the GFD Project may include:

- 6 — Chemical manufacture or formulation-manufacturing, blending, mixing or formulating chemicals
- 7 — Chemical storage
- 28 — Petroleum or petrochemical industries
- 29 — Petroleum product or oil storage-storing petroleum products or oil
- 37 — Waste storage, treatment or disposal-storing, treating, reprocessing or disposing of regulated waste.

Contaminated land

In addition to the EMR, EHP also administers the Contaminated Land Register (CLR), a register of known contaminated land that is causing, or may cause serious environmental harm.

Under Schedule 3 of the *Sustainable Planning Regulation 2009*, development that involves a material change of use or a reconfiguration of a lot on a site registered on the EMR or CLR, is considered 'assessable development' for which certain site investigations and development approvals are required.

Environmental Protection Regulation 2008

The EP Regulation supports and supplements the environmental assessment process outlined under the EP Act. It also specifies ERAs that require approval, associated thresholds, specific approval details and reporting requirements. The EP Regulation also provides the mechanism for levels of protection for environmentally sensitive areas, which are defined in Schedule 12.

Environmental Protection (Waste Management) Regulation 2000

The *Environmental Protection (Waste Management) Regulation 2000* outlines specific requirements for waste management, including requirements for regulated waste management, waste disposal facilities, and interstate and local government waste management systems. The State's preferred waste management hierarchy is outlined in the *Waste Reduction and Recycling Act 2011*.

The extraction of coal seam water is authorised and administered under the EP Act as part of an EA granted for a Chapter 5 resource activity project. It is also authorised under Part 4 of Chapter 2 of the P&G Act as part of activities approved under a petroleum tenure. Water extracted as a result of coal seam gas production activities was previously considered a regulated waste (coal seam water). However, the EP Regulation was amended in 2013 so that better quality coal seam water is exempt from the definition of regulated waste. This change applies where coal seam water has a pH between 6 -10.5 and an electrical conductivity less than 15,000 micro Siemens per centimetre (µS/cm).

Trackable waste requirements under *Environmental Protection (Waste Management) Regulation 2000* only apply to regulated wastes. Accordingly, additional tracking, transport and disposal requirements for regulated wastes will only continue to apply to saline coal seam water and brine concentrates that are outside the above definition.

In the same regulation amendment, the definition of regulated waste under the *Waste Reduction and Recycling Regulation 2011* was also amended to refer directly to the definition in the EP Regulation. This provides consistency across all regulatory requirements around the management of regulated waste.

Coal seam water must be managed in accordance with the conditions specified by EAs and petroleum tenures as listed under the EP Act or the P&G Act. For example, the P&G Act states that coal seam water can be used for domestic or stock purposes on land within or adjacent to a petroleum tenure, provided that the latter is owned by the petroleum tenure holder. Any uses outside of these approved purposes require approval and licensing under the *Water Act 2000*.

Coal Seam Gas Water Management Policy 2012

The *Coal Seam Gas Water Management Policy 2012* seeks to ensure that the salt produced as a result of coal seam gas activities does not cause environmental harm or contamination, and to encourage the beneficial use of treated process water. The policy outlines the hierarchy of preferred treatment options for coal seam water.

The policy was amended in 2012, with any existing authorised coal seam water management practices, except the use of evaporation dams, permitted to continue for the life of any environmental authority, unless it is demonstrated that the water management solutions have resulted, or may result, in environmental harm or that coal seam water measurable criteria have not been met.

This hierarchy has been incorporated into the approach identified for coal seam water management for the GFD Project developed as part of this environmental assessment process.

Environmental Protection Policies

Under the EP Act, the following environmental protection policies (EPPs) have been developed to achieve the objectives of the Act and to provide guidance on air, noise and water management:

- *Environmental Protection (Air) Policy 2008*
- *Environmental Protection (Noise) Policy 2008*
- *Environmental Protection (Water) Policy 2009*.

The EPPs outline indicators and objectives for protecting or enhancing environmental values, offences for failing to adhere to requirements, and prescribe associated penalties for the discharge of waste, pollutants or contaminants into particular environs (air, surface water, groundwater, etc.).

No specific approvals will need to be obtained under these policies. However, where relevant impacts may result from the GFD Project, impact assessment will need to be undertaken in accordance with the environmental values specified in each EPP.

Queensland Biodiversity Offsets Policy

The *Queensland Biodiversity Offsets Policy* aims to increase the long-term protection and viability of Queensland's biodiversity where residual impacts from a development cannot be avoided. It provides a framework to ensure that there is no net loss of biodiversity in the State.

This policy applies to Chapter 5 petroleum and gas activities under the EP Act. Under this policy, all practical and reasonable efforts have to be taken to avoid and minimise impacts on State significant biodiversity values. Where impacts cannot be avoided, an environmental offset will likely be required to mitigate residual impact.

The *Queensland Biodiversity Offsets Policy* will be replaced by *the Queensland Environmental Offsets Framework*. At the time writing this EIS, the framework had not been established. As a result, the *Queensland Biodiversity Offsets Policy* is used as the presiding policy in this EIS.

C.2.1.3 Environmental Offsets Act 2014

The main purpose of the *Environmental Offsets Act 2014* is to counterbalance the significant residual impacts of particular activities on prescribed environmental matters through the use of environmental offsets.

The Act includes consequential amendments to existing legislation to align the environmental offset provisions in each Act. This includes VM Act, NC Act, EP Act, Fisheries Act, and SP Act.

The Act establishes a single environmental offsets policy. This ensures that previous State government environmental offset policies in effect prior to the introduction of the Act will no longer apply to applications lodged after the commencement of the Act. At the time of writing, the substantive provisions of the Act were not in operation.

The *Environmental Offsets Regulation 2014* provides details of the prescribed activities regulated under existing legislation and prescribed environmental matters to which the Act applies.

C.2.1.4 Fisheries Act 1994

The *Fisheries Act 1994* administers the use, conservation and enhancement of fisheries resources and fish habitats in a manner that promotes ecological sustainability. A number of declared watercourses and fish habitat areas are located within the GFD Project area. Activities associated with the GFD Project, such as the construction of access roads or pipelines, may require works across these waterways.

Waterway barrier works are defined as operational works under Section 10 of the *Sustainable Planning Act 2009.* Waterway barrier works are assessable development beneath Schedule 3, Table 4 of the *Sustainable Planning Regulation*. Waterway barrier work permits will be required for any works (on or off-lease) that involve the establishment of a barrier across a waterway (including partial barrier) that may affect fish passage.

C.2.1.5 Forestry Act 1959

The *Forestry Act 1959* regulates the use of forest products on all State land including State forests, leasehold land and unallocated State land. It establishes a framework that provides for forest (timber) reservations, the management and protection of State forests, and the sale and disposal of forest products and quarry material. The project overlies freehold and State land that may contain millable timber. Vegetation clearance for forested areas on state land may be required to accommodate project infrastructure. The use of quarry material may also be proposed from these areas for the construction of the project.

A permit is required to interfere with any forest products in any State forest, timber reserve or forest entitlement area. While vegetation clearance on State forests and forest reserves are regulated under the *Forestry Act 1959*, vegetation clearing of regional ecosystems will still be subject to the requirements of the *Vegetation Management Act 1999*.

Under the *Forestry Act 1959*, quarry material may be used for construction activities provided the quarry material is not removed from an area of State land and is used for the construction of infrastructure consistent with the purpose of the petroleum tenure.

Changes to the NC Act to be delivered through the *Nature Conservation and Other Legislation Amendment Act 2013* include the removal of a number of protected classes used in this report, including forest reserve, conservation park and resource reserve. The Queensland Government is reclassifying areas that were protected under the abolished classes; however, this process was not completed at the time of preparing this report (March 2014). As a result, the to-be-abolished classes have been used for the purpose of this assessment.

C.2.1.6 Land Act 1994

The *Land Act 1994* (Land Act) prescribes the framework for the allocation of land tenure types such as leasehold, freehold or other tenures and their subsequent management.

Under Chapter 4, Part 4 of the Land Act a permit to occupy is required for the occupation of a reserve, road or area of unallocated State land. A permit to occupy will also be required for any underground infrastructure that is proposed beneath land governed by State held tenure.

C.2.1.7 Land Protection (Pest and Stock Route Management) Act 2002

The *Land Protection (Pest and Stock Route Management) Act 2002* provides the framework for planning and managing pests and stock routes. The Act identifies and classifies species declared as pests and outlines practices to prevent their spread throughout Queensland. It also outlines strategies for the construction and maintenance of stock facilities on declared stock routes, and outlines the responsibilities of governments and landholders for the management of pest and stock route activities.

Pest management

The Act identifies state-declared exotic weeds and animal pests classified as Class 1, 2 and 3 pests, and the associated management requirements of landholders to control these species. Where declared pest plant or animal species are encountered, Santos GLNG has an obligation to control the declared weeds and pest animals consistent with relevant guidelines, local government pest management plans (where applicable) and the *Queensland Weeds Strategy 2002 – 2006*.

The GFD Project area contains weeds of national significance (WONS) and the relevant national management strategies must be followed. The management of WONS is a priority for the GFD Project as numerous activities have the potential to spread and distribute WONS (and other weeds) from one property to another. Santos GLNG has operational procedures to ensure the spread and distribution of weeds is prevented and managed.

Stock route management

Under Section 105 of the *Land Protection (Pest and Stock Route Management) Act 2002,* the relevant local government has the responsibility to prepare stock route network management plans. A number of declared stock routes are located in the GFD Project area. These routes generally align with roads (sometimes unformed) and the Act will only be triggered if these alignments are impacted by the project.

Schedule 4 of the *Land Protection (Pest and Stock Route Management) Regulation 2003* lists the local governments required to prepare stock route network management plans. This list includes all local government authorities within the project area.

At time of writing, none of the local government authorities had released a stock route management plan. Santos GLNG will comply with the principles of stock route network management, as identified under Chapter 3, Section 97 of the Act, which are:

- Public awareness
- Commitment
- Consultation and partnership
- Management
- Payment of use
- Planning
- Monitoring and evaluation.

C.2.1.8 Local Government Act 2009

The *Local Government Act 2009* outlines the powers and responsibilities of local governments within their respective jurisdictions. The Act provides local governments with the power to enact and enforce laws within the relevant local government area. These laws usually relate to the protection of amenity or other values important to communities including local roads, noise, light, waste management, vegetation, animals, parks and fencing.

The GFD Project will need to be carried out in accordance with relevant local laws.

C.2.1.9 Native Title Act 1993

The *Native Title Act 1993* (Qld) outlines the Queensland Government's strategy for achieving the objectives of the *Native Title Act 1993* (Cth). The Native Title Act aims to ensure that Queensland's strategies are in accordance with the national standards for recognising, protecting and managing the rights and interests of Aboriginal people over land or water resources. The Act ensures that activities, such as the granting of petroleum authorities, or the rights to construct and operate under such authorities, are undertaken in accordance with the Commonwealth procedural rights given to Native Title parties. Where Native Title has not been extinguished on a proposed development site, the Native Title Act requires the proponent to seek to negotiate a relevant agreement (typically an Indigenous land use agreement (ILUA)) with all relevant Native Title parties.

C.2.1.10 Nature Conservation Act 1992

The *Nature Conservation Act 1992* is the principal piece of legislation governing nature conservation in Queensland. It provides a comprehensive framework comprising:

- The system of protected areas
- The classification and protection of significant plant and animal species from activities that may have a detrimental impact.

A number of declared protected areas intersect or adjoin the GFD Project area. These protected areas include various national parks and conservation areas. Part 4 of the Nature Conservation Act outlines the types of protected areas and the management principles that apply to each type of area. From these provisions, individual management plans will need to be developed for each area declared to be a protected area.

Under section 27(1) of the Nature Conservation Act, activities authorised under the *Petroleum and Gas (Production and Safety) Act 2004* (P&G Act) cannot be granted in relation to most categories of protected areas. However Section 27(1) of the Act does not apply to:

> *(a) An authorised activity for a survey licence under the P&G Act, section 394 other than in relation to a petroleum facility under that Act, or*
>
> *(b) An authorised activity for a pipeline under the P&G Act.*

In addition, an authority may be granted within a national park (scientific), national park or national park (recovery) where authority is granted by EHP, and the activities proposed in the protected area are consistent with the management principles and plan for the area.

In accordance with the Nature Conservation Act and subordinate legislative instruments, the following permits may be required for the GFD Project:

- Taking or interfering with cultural and natural resources of a protected area (Section 62 *Nature Conservation Act)*
- Protected animals movement permits (Section 88 Nature Conservation Act)
- Protected plants clearing permits (Section 89 Nature Conservation Act)
- Wildlife movement permit (Section 97 Nature Conservation Act) (for wildlife not protected under the Nature Conservation Act 1992 but found in certain areas covered by conservation plans)
- Species management plan (Section 332 Nature Conservation (Wildlife Management) Regulation 2006)
- Rehabilitation permit (spotter catcher endorsement) (Section 207 Nature Conservation (Wildlife Management) Regulation)
- Damage mitigation permit (removal and relocation) (Section 181 Nature Conservation (Wildlife Management) Regulation).

Subordinate to the Nature Conservation Act are a number of regulations and conservation plans. Four of these instruments of relevance to the GFD Project are discussed below.

Nature Conservation (Protected Areas Management) Regulation 2006

The *Nature Conservation (Protected Areas Management) Regulation 2006* outlines the provisions for carrying out an approved activity within a protected area. For example, within a protected area, a permit is required to conduct a commercial activity, or to erect a structure or to undertake works. These approvals may be required should such activities be proposed within a protected areas as part of the GFD Project.

Nature Conservation (Wildlife) Regulation 2006

The *Nature Conservation (Wildlife) Regulation 2006* lists all flora and fauna species that are considered to be 'extinct in the wild', 'endangered', 'vulnerable', 'near threatened', and 'least concern' wildlife. The Regulation also states the declared management intent and principles that apply to each class. Also listed are 'international wildlife' and 'prohibited wildlife'.

Nature Conservation (Wildlife Management) Regulation 2006

The *Nature Conservation (Wildlife Management) Regulation 2006* applies to the taking or destruction of protected plants and animals. It specifies the provisions associated with taking, keeping, using or moving protected animals and plants under authorities granted by EHP or outside such authorities (e.g. under permits or licences under the *Nature Conservation Act*). An authority or relevant permit will be required to undertake the activities specified above within areas of protected tenure.

C.2.1.11 Queensland Heritage Act 1992

The *Queensland Heritage Act 1992* serves to protect Queensland's cultural heritage for the benefit of the community and future generations. The Queensland Heritage Act protects heritage areas that are considered to be of State significance and are placed on the Queensland Heritage Register, administered by the Queensland Heritage Council. Local heritage is also addressed with the Act, with local governments being required to establish their own heritage registers.

A key role of the Act is to regulate development that may affect the heritage significance of registered places. Approval by the Queensland Heritage Council is required if proposed development has the potential to destroy or reduce the cultural heritage significance of a State heritage place. This occurs through the Integrated Development Assessment System process under the SP Act.

Unless a registered place, area or relic is of cultural heritage significance to both European and Aboriginal and Torres Strait Islander peoples, the Queensland Heritage Act does not apply to areas of Indigenous cultural heritage. Indigenous cultural heritage in Queensland is protected under the Aboriginal Cultural Heritage Act and the *Torres Strait Islander Cultural Heritage Act 2003*.

In accordance with Section 89 of the Queensland Heritage Act, where 'an archaeological artefact that is an important source of information about an aspect of Queensland's history' is uncovered, EHP needs to be contacted for direction.

C.2.1.12 Soil Conservation Act 1986

The *Soil Conservation Act 1986* provides a framework for the conservation of soil in Queensland. To achieve this, it outlines and facilitates the implementation of soil conservation measures to mitigate or avoid soil erosion. Soil conservation plans proposed under the Soil Conservation Act may show a preferred or recommended layout of soil conservation works used to control erosion, principally on cultivation land.

Parts 3 and 4 of the Act provide a framework for the approval of soil conservation plans including:

- Property plans — consists of a map and specifications for the soil conservation structures and practices needed to control erosion. The plan may apply to part or all of the property. These do not have an expiry date.
- Project plans — are intended for the planning of a group of properties in a catchment (e.g. 10–20 properties). These are also used where soil conservation works (community works) are proposed to be the responsibility of a statutory authority. These last for 10 years but can be renewed.

C.2.1.13 State Development and Public Works Organisation Act 1971

The *State Development and Public Works Organisation Act 1971* (SDPWO Act) provides for State planning and development through a coordinated system of public works, environmental coordination, and related purposes. The SDPWO Act provides the Queensland Coordinator-General with the power and responsibility to assess and authorise the most significant and complex projects.

The project was declared a 'significant project' in November 2012 and has been assessed in accordance with the relevant provisions of the SDPWO Act as it then stood. (The SDPWO Act was amended after the declaration of the project as a significant project. These amendments included replacing the term significant project with the term 'coordinated project', changes to reporting processes and timeframes).

The Coordinator-General determined that an EIS was required to assess the project's environmental, social and economic impacts and prepared the term of reference for the EIS. This EIS has been prepared to address those terms of reference.

On 14 February 2012, the State of Queensland committed to the National Partnership Agreement on Coal Seam Gas and Large Coal Mining Development (NPA). The objective of the NPA is to strengthen the regulation of coal seam gas and large coal mining development by ensuring future decisions are informed by science and independent expert advice. Paragraph 14(c) of the NPA provides for the Australian Government to establish and maintain an Independent Expert Scientific Committee (IESC).

The IESC was established as a statutory committee in 2012 under the Environment Protection and Biodiversity Conservation Amendment (Independent Expert Scientific Committee on Coal Seam Gas and Large Mining Development) Act 2012 (Cth). The IESC provides scientific advice to decision makers on the impact that coal seam gas and large coal mining development may have on Australia's water resources, as requested by federal and state government regulators.

Under the SDPWO Act, the Queensland Coordinator-General will submit two reports to the IESC for review as part of the terms of reference requirements of the GFD Project EIS, namely 'Report on Matters of national environmental significance (water resources) (Santos, 2014)' and 'Report on Matters of national environmental significance (ecology) (Aurecon, 2014)'.

The SDPWO Act also contains provisions that direct development within geographically defined state development areas. The project includes land that is covered by the Surat Basin Infrastructure Corridor State Development Area, in which development is regulated by the provisions of the relevant development scheme.

The preparation of an EIS in accordance with Part 4 of the Queensland SDPWO Act also satisfies the requirements of Section 8 of the Commonwealth EPBC Act.

C.2.1.14 Regional Planning Interests Act 2014

The *Regional Planning Interests Act 2014 (Qld)* (RPI Act) and *Regional Planning Interests Regulation 2014* (RPI Regulation) commenced on 13 June 2014.

The RPI Act identifies and protects areas of Queensland that are of regional interest. In doing this, the RPI Act seeks to manage the impact and support coexistence of resource activities and other regulated activities in areas of regional interest. The Act aims to ensure that land use planning protects:

- Living areas (termed Priority Living Areas)
- High quality agricultural areas (termed Priority Agricultural Areas)
- Strategic cropping land (termed Strategic Cropping Areas)
- Important environmental areas (termed Strategic Environmental Areas).

The RPI Act repealed the *Strategic Cropping Land Act 2011* (SCL Act) but integrates the SCL Act policy framework for 'on-tenure' resource activities. The RPI Act has various implications for resource projects proposed within an area of regional interest and is dependent on the status of tenure and environmental approvals at various prescribed dates, the location and the type of proposed development. If a resource activity is proposed within an area of regional interest and an exemption under the RPI Act does not apply to the project, a Regional Interests Development Approval will be required.

Regional Interests Development Approval

A RIDA is a stand-alone decision that is required to be obtained prior to commencing the activity. The RPI Act provides for a regional interests development approval to be applied for and/or secured before or after the issuing of a resource authority, environmental authority or development approval. The assessment process for a RIDA may require referral by the chief executive of DSDIP to other entities and may also require public notification.

C.2.1.15 Vegetation Management Act 1999

The *Vegetation Management Act 1999* (VM Act) regulates and manages the process and impacts of native vegetation clearance. The VM Act provides a State-wide system for the management of native vegetation on freehold and leasehold land based on the concept of regional ecosystem areas. The conservation status of each regional ecosystem is assigned as one of three categories: 'endangered', 'of concern' or 'least concern', based upon an estimate of the regional ecosystem's pre-clearing distribution, and how much of it remains.

Under Schedule 3 of the *Sustainable Planning Regulation 2009*, the VM Act makes clearing of native vegetation on freehold and leasehold land an assessable development, which requires a development permit. However, petroleum activities conducted under the P&G Act are exempt from the requirements of the VM Act. Any project activities that are outside a petroleum tenure would continue to be assessable against the VM Act and subordinate codes and offset policies.

Project activities will also need to comply with applicable vegetation management conditions outlined in EAs granted under the EP Act.

Although the VM Act does not apply to petroleum activities on a petroleum tenure, the basis for biodiversity conservation provided by the VM Act can be used to assess the conservation significance of the vegetation communities.

C.2.1.16 Waste Reduction and Recycling Act 2011

The *Waste Reduction and Recycling Act 2011* aims to promote waste avoidance and reduction and to encourage resource recovery and efficiency.

The Act provides a strategic framework for managing wastes by establishing the following waste and resource management hierarchy:

- AVOID unnecessary resource consumption
- REDUCE waste generation and disposal
- RE-USE waste resources without further manufacturing
- RECYCLE waste resources to make the same or different products
- RECOVER waste resources, including the recovery of energy
- TREAT waste before disposal, including reducing the hazardous nature of waste
- DISPOSE of waste only if there is no viable alternative.

The Act is supported by the *Waste Reduction and Recycling Regulation 2011,* which provides mechanisms to achieve the objectives of the Act.

C.2.1.17 Water Act 2000

The *Water Act 2000* (Qld) (Water Act) provides a framework to deliver sustainable water planning, allocation management and supply processes to provide for the improved security of water resources in Queensland. The risk of adverse impacts associated with the extraction of coal seam water from gas seams on groundwater supplies is managed under this Act. The Water Act *2000* is supported by the *Water Regulation 2002* and various water resource plans for defined geographic regions.

The use of coal seam water for purposes not authorised beneath an EA will require a separate licence and permits under the Water Act 2000.

Water resource plans

The *Water Resource (Condamine and Balonne) Plan 2004* and the *Water Resource (Fitzroy Basin) Plan 2011* each cover sections of the project area. These plans provide the catchment specific framework for sustainably managing and using water resources. The GFD Project area also overlies areas of the Great Artesian Basin (GAB). Water resources within the GAB are subject to the provisions of the *Water Resource (Great Artesian Basin) Plan 2006* and the *Great Artesian Basin Resource Operations Plan 2007.* The purpose of the *Water Resource (Great Artesian Basin) Plan 2006* is aligned to the *Water Resource Plans for Condamine and Balonne and the Fitzroy Basin* (with sections of the project falling under the jurisdiction of the Surat, Surat North, Surat East and Mimosa management areas).

The resource operations plans implement the objectives and outcomes of the water resource plan and complement the water planning and management process to ensure enhanced water certainty and security. The abovementioned plans outline specific strategies and regulatory provisions to sustainably allocate and managing water to meet the future needs of these areas.

Groundwater

Water will be extracted as a by-product from underground coal seams as part of project production activities. Part 6, Chapter 2 of the *Water Act 2000* outlines water licensing and permitting requirements for users interfering with sub-artesian water. For sub-artesian areas defined in the *Water Regulation 2002*, typically:

- A water licence is required to take or interfere with sub-artesian water, other than for the purposes specified within Schedule 11 of the *Water Regulation 2002*
- A development permit under the *Sustainable Planning Act 2009* is required to construct or install works that take sub-artesian water, other than works constructed or installed solely for the purposes mentioned within Schedule 11 of the *Water Regulation 2002*.

However, Section 206 of the *Water Act 2000* and Section 188 of the *Petroleum and Gas (Production and Safety) Act 2004* allow petroleum tenure holders to take or interfere with underground water if the taking or interference happens during the course of, or results from, the carrying out of an authorised activity.

The petroleum tenure holder may also allow the property owner to use process water for domestic or stock purposes, provided the water is used on the land within the petroleum tenure or on adjoining lands that have the same owner.

A water licence is therefore only required where water is proposed to be taken, interfered with or used outside of these authorised activities. A licence may also be required if coal seam water is to be supplied to third parties outside of the purposes legislated in the *Petroleum and Gas (Production and Safety) Act 2004*. It is not expected that these activities will be undertaken as part of the GFD Project.

Surface water

Under the *Water Act 2000*, a watercourse means a river, creek or stream in which water flows permanently or intermittently either in a natural channel (whether artificially improved or not) or in an artificial channel that has changed the course of the watercourse. It also includes the bed and banks and any other element of the river, creek or stream.

Under Section 266 of the *Water Act 2000*, a riverine protection permit is required from Department of Natural Resources and Mines to:

- Excavate in a watercourse, lake or spring
- Place fill in a watercourse, lake or spring.

However, there are a number of exemptions for activities that are necessary or associated with activities undertaken under an environmental authority. These exemptions are outlined in the *Riverine protection permit exemption requirements WSS/2013/726* (DNRM, 2014). This guideline states that works that involve excavating or placing fill in a watercourse or lake and otherwise conducted in accordance with the guideline, are permitted.

C.2.2 Mining, petroleum and gas legislation

C.2.2.1 Greenhouse Gas Storage Act 2009

The *Greenhouse Gas Storage Act 2009* seeks to reduce the impact of greenhouse gas emissions on the environment by facilitating the geological storage of greenhouse gas. This purpose is achieved through the granting of authorities to explore for or use underground geological formations to store greenhouse gases, while ensuring such activities are responsible, any conflicts with other land uses are minimised, and appropriate consultation and compensation measures are followed.

Chapter 4 of the Act outlines the coordination of greenhouse gas approvals with other approvals such as those granted under the P&G Act, as well as the requirements and restrictions applicable to areas of overlapping tenure. At present, ATP 868 and ATP 631 (within the Roma gas field) of the GFD Project overlap with a greenhouse gas exploration permit (EPQ7).

Where an area is subject to overlapping tenure, a coordination arrangement is required. These arrangements confirm the consent of tenure holders to proposed activities. Activities must accord with approved management plans and not adversely affect the carrying out of activities authorised under another approval.

C.2.2.2 Mineral Resources Act 1989

The *Mineral Resources Act 1989* seeks to facilitate the prospecting, exploration and mining of minerals within Queensland. Central to its purpose is conducting activities in an environmentally responsible manner and with minimal land use conflicts.

GFD Project tenures cover areas subject to mining authorities granted under the *Mineral Resources Act* and the issue of such tenures overlapping with tenures issues under the P&G Act need resolution. Arrangement is required to be negotiated between the overlapping tenure holders to enable developments to proceed.

C.2.2.3 Petroleum and Gas (Production and Safety) Act 2004

The P&G Act seeks to regulate activities associated with the exploration, development and production of petroleum and gas resources in Queensland. The P&G Act establishes a framework to facilitate petroleum and gas activities, through the granting of authority to prospect (ATP) permits and

petroleum leases (PLs). Exploration and appraisal activities are conducted under an ATP, while further appraisal and production activities are conducted under a PL. Approval for most GFD Project activities will be obtained under the P&G Act through applications for PLs.

Petroleum tenure applications

Santos GLNG is seeking approval for the progressive development of production wells and associated project infrastructure across the project area.

Applications for PLs are coordinated by Queensland Mines and Energy within Department of Natural Resources and Mines. PLs are only granted following the issuing of an EA and agreement with relevant Traditional Owners by ILUAs or Native Title compensation agreements. The approval of an EA is granted under the EP Act by EHP. The P&G Act outlines the approval process for the transition of an ATP to a PL.

Overlapping tenures

Chapter 3 of P&G Act outlines the provisions and requirements for obtaining PLs over land in the area of an existing mining tenement. In addition to the submission of an initial development plan, an application for a PL in these areas must include a coal seam gas statement.

The coal seam gas statement requires the proponent to assess the likely effect of the proposed activity on the future development of other mineral resources. This includes issues surrounding the timing of resource extraction and development, and the technical and commercial feasibility of coordinated resource production.

The coal seam gas statement must also include a proposed management plan detailing how the proposed activities will develop, and how the potential impacts resulting from the proposed activities will be managed.

In deciding whether to grant the PL, the Minister will consider compliance of the application with the P&G Act, the economic and technical viability of carrying out coordinated or concurrent activities on the tenures involved, as well as the interests of relevant third parties and the general public.

Exemptions

In accordance with the *Sustainable Planning Act 2009* (SP Act), an activity authorised under the P&G Act and subject to a PL is exempt from assessment against a local planning scheme, temporary local planning instrument, preliminary approval or master plan authorised under the SP Act.

The P&G Act also provides for specific exemptions for incidental or ancillary activities covered under a PL and EA that would otherwise require approvals or permitting under other legislation including the *Vegetation Management Act 1999, Water Act 2000* and *Work Health and Safety Act 2011*. Any activities undertaken outside of the area of a PL or not authorised under the EA will require approvals under the applicable legislation.

C.2.2.4 Petroleum Act 1923

The *Petroleum Act 1923* regulates activities for the exploration, production and conveying of petroleum and natural gas in Queensland.

A PL granted in accordance with the provisions of the Act gives its holder the right to explore for, test for production, and produce petroleum within the area of the PL. The maximum area that may be granted for a PL under the Act is 260 km². The holder of an ATP administered under the Act may

apply for a PL, however the area applied for cannot be within the area of an exploration permit, mineral development licence, or mining lease for either coal or oil shale.

The Act authorises a number of the existing Santos GLNG petroleum tenures located within the GFD Project area.

There is a requirement, over time, that the tenures granted under the Petroleum Act will be converted to tenures under and administered by the P&G Act.

C.2.3 Construction and infrastructure legislation

C.2.3.1 Building Act 1975

The *Building Act 1975* (Building Act) regulates building approvals and works in addition to providing relevant classifications and certification requirements for structures built in Queensland. Approval for building works is required under the Building Act and the SP Act for all assessable development where structures or work is of a fixed nature. A certificate of compliance is required for the construction of each building or structure. This would require assessment against the Building Code of Australia by a private certifier, local council or the Queensland Fire and Rescue Service. A certificate of classification is required for each building or structure.

Any buildings on a PL that are considered as 'incidental activities' under the P&G Act are exempt from the requirements of the Building Act.

The relevant local government with jurisdiction over the land on which the development is proposed is the assessing authority for any approvals under Integrated Development Assessment System and the SP Act. Specific approvals associated with the Building Act are determined following detailed design and consultation with relevant assessing authorities.

C.2.3.2 Electricity Act 1994

The *Electricity Act 1994* sets out the requirements which must be followed to ensure the safe, efficient and reliable supply of electricity in Queensland. It also requires that the supply of electricity is undertaken in an environmentally sound manner.

Santos GLNG will submit applications to the relevant electricity entities in order to connect to the state's electricity grid. Where works affecting existing infrastructure owned by an electricity entity are required, the entity will be notified pursuant to Section 99 of the Act.

C.2.3.3 Explosives Act 1999

The *Explosives Act 1999* seeks to ensure that explosives materials and associated activities are authorised and carried out in accordance with the Act; that is that these materials and activities are appropriately handled or conducted to ensure the safety of the wider community. To achieve this, the Act outlines the various approvals and associated provisions that are necessary to use, handle, store, manufacture, transport or possess explosives.

It is not expected that explosives will be required to be used for the construction of any GFD Project components. However in the unlikely event that explosives are required, Santos GLNG or its contractors will obtain a licence to use explosives in accordance with Section 29 of the *Explosives Regulation 2003*. A licence to use explosives permits the use, possession, storage and transportation of explosives in the manner stated in the licence.

C.2.3.4 Sustainable Planning Act 2009

The SP Act seeks to achieve ecologically sustainable development by managing the process and effects of planning and development in a coordinated and integrated manner. The SP Act provides the overarching framework for Queensland's planning and development assessment system. Chapter 6 of the SP Act administers the Integrated Development Assessment System which prescribes the assessment and approvals process for assessable development in Queensland.

In accordance with Schedule 4 of the *Sustainable Planning Regulation 2009*, petroleum activities and those activities covered by authorities issued under the EP Act and the P&G Act, are classified as development which:

> *'cannot be declared to be assessable development under a planning scheme, temporary local planning instrument, preliminary approval to which section 242 of the SP Act applies or master plan'.*

Therefore, any GFD Project activities within a PL will be exempt from the assessment provisions of the SP Act.

However, there may be instances where GFD Project infrastructure and development activities are proposed off-lease (outside of PL areas). In such instances, the provisions of the SP Act may apply and compliance with the legislative provisions, plans, and policies will be required. Where the provisions of the SP Act apply, it is likely that the local government authority with jurisdiction over the subject land will be the assessing authority for required development applications, with State government departments acting as referral agencies where triggered.

C.2.3.5 Transport Infrastructure Act 1994

The *Transport Infrastructure Act 1994* forms part of the Queensland Government's framework for the integrated planning and management of transport (road, rail and air) infrastructure. Approvals under the Act are required for activities that will interfere with a State-controlled road or railway.

Roads

A number of State-controlled roads are located within the project area. Approval is required from the Department of Transport and Main Roads (TMR) for any project activities that will impact upon a State-controlled road, including works to construct, maintain, operate or conduct ancillary works (e.g. access roads, intersection upgrades, pipelines proposed beneath roads or verges).

There is an existing infrastructure agreement between the TMR and Santos GLNG relating to road infrastructure works connecting to State-controlled roads. The agreement specifies the obligations of the two parties in relation to road infrastructure works carried out or required to be carried out on the State-controlled road network by Santos GLNG or its contractors. The agreement demonstrates that Santos GLNG has a framework for mitigating the impacts of their activities.

Rail

The Western Rail Line and a number of spur lines servicing coal mines pass through the project area. Approval will be required from Queensland Rail for any activities that interfere with its rail infrastructure.

C.2.3.6 Transport Operations (Road Use Management) Act 1995

The *Transport Operations (Road Use Management) Act 1995* provides for the effective and efficient management of vehicle and road use within Queensland.

Part 3 of the *Transport Operations (Road Use Management – Mass, Dimensions and Loading) Regulation 2005* prohibits the use of vehicles that exceed the dimensions outlined in Part 3. However, oversize vehicles may be permitted to travel on roads, under certain conditions, under Part 6 of the Regulation.

In cases where an oversized vehicle is not generally permitted to be used on a road by the provisions of the Regulation, a proponent is required to submit an application to TMR under section 51(2) of the Regulation to receive a permit to allow movement of an excess dimension vehicle or indivisible load.

Relevant permits types include:

- Period permits — issued for a specified period, not exceeding 12 months
- Single trip permit — issued for each individual movement (permit (single trip)).

C.2.4 Health and safety legislation

C.2.4.1 Coal Mining Safety and Health Act 1999

The *Coal Mining Safety and Health Act 1999* regulates coal mining activities throughout Queensland to protect the safety and health of persons at coal mines and affected by coal mining operations. To achieve this, the Act imposes health and safety obligations and requirements on operators, which must be adhered to by parties who take part in operations.

This Act may be relevant if development associated with the project is within or adjacent to a coal mining lease. No project approvals are likely to be triggered in relation to this Act. However, its provisions will be considered during project design and the development of management plans.

C.2.4.2 Work Health and Safety Act 2011

The *Work Health and Safety Act 2011* (WHS Act) aims to provide a balanced framework, consistent with the national system, to secure the health and safety of workers and workplaces throughout Queensland. The Act focuses on protecting workers and other persons from harm by eliminating or minimising risks arising from work or particular types of substances or plant.

Part of the Act replaces the recently repealed *Dangerous Goods and Safety Management Act 2001* and deals with matters previously addressed under that Act, such as major hazard facilities or dangerous goods locations. Depending on the scale and type of materials present, the project may trigger the WHS Act.

Thresholds for determining whether a development is a major hazard facility or a dangerous goods location are outlined in the *Work Health and Safety Regulation 2011* (WHS Reg.). The WHS Reg. also specifies obligations of parties who operate these facilities or locations, which include notifying the Hazardous Industries and Chemicals Branch of Workplace Health and Safety Queensland. If a development is classified as a major hazard facility under the WHS Act and Reg. or by the Hazardous Industries and Chemicals Branch, it must be licenced by the Branch and where applicable, receive development approval for a material change of use (in addition to any ancillary approvals) from the relevant local government in accordance with the SP Act.

Under the WHS Act and Reg., approvals are not required for petroleum pipelines authorised under the P&G Act, unless the pipeline has been classified as a major hazard facility or dangerous goods location under the WHS Act. In this instance, the pipeline will only require notification, licensing and approval under the WHS Act if it exceeds the thresholds outlined in the WHS Reg.

C.3 Statutory planning instruments

State Planning Regulatory Provisions (SPRPs) and State Planning Policy (SPP) are the two key statutory planning instruments supporting the intent and purpose of the SP Act. These instruments are administered by the Department of State Development, Infrastructure and Planning.

C.3.1 State planning regulatory provisions

SPRPs provide regulatory support for regional or master planning, administer charges for infrastructure supply and protect planning scheme areas from adverse impacts. There are currently seven SPRPs in Queensland, which may apply to all or part of the State. None of these SPRPs are relevant to lands within the project area. As such, these provisions will not impact upon the project.

C.3.2 State planning policy

The State Planning Policy (SPP) is a key component of Queensland's land use planning system and provides a comprehensive set of principles which underpin Queensland's planning system to guide local governments and the state government in land use planning and development assessment. The SPP was introduced in December 2013 to replace a number of policies and provides a clear, consolidated and comprehensive view of the state's interests in land use planning and development in one place. The SPP provides clarity for local governments by identifying the state interests they must consider when preparing or amending local planning schemes and, in some cases, assessing development applications. The policy assists local governments to reflect and balance state interests up front, ensuring the approval of the right development in the right location without undue delays. The SPP also sets out the matters that must be considered by the state before designating land for community infrastructure and in preparing and amending the new generation of regional plans.

- The SPP includes 16 state interests arranged under five broad themes:Liveable communities and housing
- Economic growth
- Environment and heritage
- Safety and resilience to hazards
- Transport and infrastructure.

C.4 Regional planning instruments

The project area extends over sections of the Surat Basin and Central Queensland regional planning areas. Key statutory and non-statutory regional plans and strategies developed for this area are the:

- Central Queensland; Darling Downs and Maranoa-Balonne regional plans
- *Surat Basin Future Directions Statement*
- *Surat Basin Regional Planning Framework*
- *Natural Resources Management Plans*.

Natural resource management plans, providing guidance for resource use and management within local communities, are another element of the regional planning framework relevant to the GFD Project.

C.4.1 Central Queensland and Darling Downs Regional plans

In October 2013 the Queensland Government approved the *Central Queensland Regional Plan* (which includes much of the Fairview and Arcadia gas fields) and the *Darling Downs Regional Plan* (which includes the Roma and Scotia gas fields). These are statutory planning documents that provide

strategic direction and policies to deliver regional outcomes, which align with the State's interests in planning and development.

The objectives of the plans include resolving land use conflicts arising from agricultural and resource extraction activities, fostering diverse and strong economic growth, planning and prioritising infrastructure, and managing impacts on the environment.

The plans aim to:

- Protect Priority Agricultural Land Uses (PALU) while supporting co-existence opportunities for resource extraction:
  - Priority Agricultural Areas (PAA) are identified in the plans and include areas containing highly productive agricultural land uses. In these areas, PALUs are the land use priority and are given priority over any other proposed land use
  - PAA co-existence criteria are to be developed to enable compatible resource extraction activities to co-exist with PALUs within PAAs. The criteria will be aimed at ensuring that a resource extraction activity cannot materially impact the ongoing viability of a PALU within a PAA. This will maximise opportunities for economic growth to ensure that the regions remain resilient, diversified and prosperous.
- Provide certainty for the future of towns:
  - Increasing certainty for towns in the regions through the identification of important towns as Priority Living Areas (PLAs)
  - PLA classification will enable towns to expand through the establishment of a town buffer which is protected from incompatible land uses
  - Legislation is proposed that will give councils the ability to approve resource extraction activities within a PLA where they deem it to be appropriate and in the community's interest.

The GFD Project is compatible with the provisions of the *Darling Downs Regional Plan*, as shown in Table C.4-1.

Table C.4-1 Compatibility with the Darling Downs Regional Plan

Regional outcome	Regional policy	Compatibility of GFD Project
Protecting PAA while supporting co-existence opportunities for the resources sector		
Agriculture and resources industries within the Darling Downs region continue to grow with certainty and investor confidence.	Protect PALUs within PAAs.	There is no PAA within that part of the GFD Project area that is covered by the *Darling Downs Regional Plan.*
	Maximise opportunities for co-existence of resource and agricultural land uses within PAAs.	There is no PAA within that part of the GFD Project area that is covered by the *Darling Downs Regional Plan.*

Regional outcome	Regional policy	Compatibility of GFD Project
Providing certainty for the future of towns		
The growth potential of towns within the Darling Downs region is enabled through the establishment of PLAs. Compatible resource activities within these areas which are in the communities' interest can be supported by local governments.	Safeguard the areas required for the growth of towns through establishment of PLAs.	In the *Darling Downs Regional Plan* there are four PLAs within the GFD Project area (Roma, Wallumbilla, Wandoan and Yuleba). The plan provides for council to determine the appropriateness of any potential resource activity within PLAs. Any application for a resource extraction activity within a PLA needs to include consideration of community expectations as determined by the relevant local council and articulated in the local planning scheme. Should GFD Project development activities be planned within a PLA, Santos GLNG will consult with the council and consider any relevant requirements of the planning scheme.
	Provide for resource activities to locate within a PLA where it meets the communities' expectations as determined by the relevant local government.	Should GFD Project development activities be planned within a PLA, Santos GLNG will consult with the council and consider any relevant requirements of the planning scheme.

The GFD Project is compatible the provisions of the *Central Queensland Regional Plan* as shown in Table C.4-2.

Table C.4-2 Compatibility with the Central Queensland Regional Plan

Regional outcome	Regional policy	Compatibility of GFD Project
Protecting PAAs while supporting co-existence opportunities for the resources sector		
Agriculture and resources industries within the Central Queensland region continue to grow with certainty and investor confidence.	Protect PALUs within PAAs.	There are 279 ha of PALU within a PAA in the Arcadia gas field. Should GFD Project development activities be proposed in this area, they will be designed to comply with the co-existence criteria, which are to be developed to enable compatible resource activities to co-exist with PALUs within PAAs. Santos GLNG will manage impacts on these agricultural land uses through the implementation of relevant management plans including the Land Access and Landholder Engagement Strategy and the Constraints protocol.
	Maximise opportunities for co-existence of resource and agricultural land uses within PAAs.	Should GFD Project development activities be proposed in a PALU within a PAA, they will be designed to comply with the co-existence criteria. Santos GLNG will manage impacts on these agricultural land uses through the implementation of relevant management plans including the Land Access and Landholder Engagement Strategy and the Constraints protocol.
Providing certainty for the future of towns		
The growth potential of towns within the Central Queensland region is enabled through the establishment of PLAs. Compatible resource activities within these areas which are in the communities' interest can be supported by local governments.	Safeguard the areas required for the growth of towns through establishment of PLAs.	In the Central Queensland Regional Plan there is one PLA within the GFD Project area (Taroom). The plan provides for council to determine the appropriateness of any potential resource activity within PLAs. Any application for a resource extraction activity within a PLA needs to include consideration of community expectations as determined by the local council and articulated in the local planning scheme. Should GFD Project development activities be planned within the Taroom PLA, Santos GLNG will consult with the council and consider any relevant requirements of the planning scheme.
	Provide for resource activities to locate within a PLA where it meets the communities' expectations as determined by the relevant local government.	Should GFD Project development activities be planned within the PLA, Santos GLNG will consult with the council and consider any relevant requirements of the planning scheme.

C.4.2 Maranoa-Balonne Regional Plan

The *Maranoa-Balonne Regional Plan* is a statutory planning instrument last updated in 2009 that provides for a range of strategies and associated land use policies that address the region's environmental, social and economic priorities. These priorities are broadly grouped under the categories of natural environments, natural resources, strong communities, urban development, economic development and infrastructure. The region covered by the Plan comprises the local government areas of Maranoa Regional Council and the Balonne Shire Council. The Roma and Scotia gas fields are located within the Maranoa-Balonne Region.

A key purpose of the Plan is to inform other planning instruments such as applicable local government planning schemes. As such, the objectives of this Plan will indirectly shape and be reflected in the project through the compliance of activities assessable under the SP Act with relevant provisions of applicable planning schemes. Details of the compatibility of the Project to the outcomes and objectives of the Regional Plan are summarised in Table 4-2.

Table C.4-3 Maranoa-Balonne Regional Plan

Desired regional outcome	Plan objectives	Compatibility of GFD Project
Natural environment		
The region's natural assets are valued and managed to sustain a healthy, functioning natural environment, resilient to the impacts of climate change.	Maintain and improve the extent, diversity and condition of the region's biodiversity, ecological integrity and ecological processes.	The GFD Project's environmental assessment process has been prepared to minimise impacts to the region's environmental and social values by locating the GFD Project development within an existing infrastructure hub and outside of environmentally or socially sensitive areas.
Natural resource management		
The productive capacity and social and cultural values of the region's landscapes and supporting ecosystems are maintained through the stewardship of informed resource managers.	Ensure that the use of surface water and groundwater resources is sustainable.	There will be a temporary surplus of water generated by the GFD Project. Since the inception of the GLNG Project Santos GLNG has been undertaking various trials and studies to ensure there is a range of options for use of this temporary surplus.
	Ensure the long-term prosperity and sustainability of primary production.	GQAL has been identified and will be avoided where practical.
Strong communities		
Engaged residents, actively participating in a healthy community that is enriched by its diversity, empowered by its influence on service provision and attractive to new residents.	To protect and maintain the unique cultural heritage values, Indigenous and non-Indigenous, of the Maranoa–Balonne region.	Cultural heritage values, Indigenous and non-Indigenous values within the GFD Project area have been identified. Santos GLNG will act in accordance with the Cultural Heritage Management Plans established between the relevant Aboriginal parties regarding the use and management of land. Measures to enhance, and avoid impact to, these values will be developed and implemented where practical.
Urban development		
Affordable, safe and climate-friendly residential accommodation with urban facilities and infrastructure suited to the diverse needs of a changing population.	Reinforce Maranoa–Balonne's activity centres network by providing timely and efficient infrastructure and services.	Where possible the GFD Project will be self-sufficient and not reliant upon existing service infrastructure within the region. Where required, the improvements to regional infrastructure will be undertaken to support the project. As a consequence, the presence of the Project is likely to improve regional infrastructure.
	Ensure housing and accommodation options in the region are diverse and affordable.	Employee accommodation will be provided where necessary to minimise impacts to housing markets within the region.

Desired regional outcome	Plan objectives	Compatibility of GFD Project
Economic development		
A robust, dynamic regional economy building on historic strengths, operating within the limits of natural systems and responding to new opportunities, so that balanced economic, social and environmental dividends accrue from sound business investments.	To strengthen rural industries in a sustainable manner by increasing adaptability and productivity, value-adding and expanding market access.	Beneficial re-use of water may provide opportunities for additional agricultural activities and supporting industries.
	To broaden Maranoa–Balonne's economic base, employment and business investment, by taking advantage of the opportunities afforded by development of the oil, mineral and gas extraction industry.	The GFD Project will provide significant employment opportunities, as well as regional economic development opportunities for businesses to provide services to the GFD Project through local contract arrangements.
Infrastructure		
A coordinated, safe and efficient network of all facets of infrastructure, which is well maintained and underpins the social, economic and environmental health of the region.	To provide and maintain all facets of infrastructure in a transparent, coordinated and planned manner.	The GFD Project is likely to have a positive effect on municipal infrastructure through GFD Project upgrades and additional funding, where required, to infrastructure and services.

C.4.3 Surat Basin Future Directions Statement

The *Surat Basin Future Directions Statement* is a higher level strategic document that provides a framework to shape the Surat Basin through to 2030. The *Future Directions Statement* applies to the local government areas of Toowoomba Regional Council, Western Downs Regional Council and Maranoa Regional Council.

The Roma, Scotia and Fairview gas fields are all located within the area to which the *Surat Basin Future Directions Statement* applies.

The *Surat Basin Future Direction Statement* identifies major issues and pressures facing the region, and more specifically, its infrastructure, services and character, and proposes overarching integrated strategies to address such challenges. It also aims to ensure that wider social, economic and infrastructural inter-linkages are supported, and that proposed initiatives are coordinated with those that are already existing or proposed within the Surat Basin and the rest of the State – particularly in terms of related areas of significance, such as Gladstone and south-east Queensland. The six specific elements of the *Surat Basin Future Direction Statement* are to plan for growth, developing infrastructure, liveable communities, capturing economic opportunities, a skilled workforce and sustaining regional environments. The Statement does not directly impact upon the project, but rather shapes lower level planning documents and strategies, such as regional plans and local planning schemes. For example, the Maranoa-Balonne Regional Plan, which was an initiative of the *Surat Basin Future Direction Statement*.

C.4.4 Surat Basin Regional Planning Framework

The Surat Basin Regional Planning Framework is a non-statutory initiative of the Surat Basin Future Directions Statement, which aims to sustainably manage regional growth within the Surat Basin which includes much of the GFD Project area.

The framework sets directions and establishes principles to inform planning related policies and decision making (such as the preparation or review of statutory regional plans and local planning schemes). It focuses on protecting and enhancing the region's environmental and community based values and character, and building industry and community resilience to the challenges that are being faced within the GFD Project area.

The framework will not directly affect the GFD Project; rather, it provides a framework for the preparation or review of planning agendas from national to local levels. It is also used by the Queensland Government in the assessment of major projects within the area.

Through this EIS, the GFD Project demonstrates a general accordance with applicable aspects of the hierarchy of elements used to achieve the framework's vision of creating a sustainable and resilient region through effective protection of environmental and natural resources, a strong economy, and the development of a resource sector that supports these values.

C.4.5 Natural Resource Management Plans

Queensland has fourteen natural resource management regions. The primary role of these groups is to develop natural resource management plans and organise associated on-ground work, while representing and engaging key stakeholders (particularly in terms of local communities).

The natural resource management plans identify the major natural resources of a region, the key challenges impacting upon these resources and measures for addressing the identified issues. The plans are developed collaboratively with government and non-government bodies, the private sector, local communities and Indigenous people. These plans form the basis for investment from "Caring for our Country".

The GFD Project is located within the jurisdiction of two natural resource management groups – the Queensland Murray Darling Committee and the Fitzroy Basin Association.

Queensland Murray Darling Committee

The Queensland Murray Darling Committee is a community based body that provides natural resource management and planning support to communities in the Queensland section of the Murray Darling Basin. The Queensland Murray Darling Committee, in partnership with the South West Natural Resource Management Group, has developed a natural resource management plan that covers both regions. This plan outlines the condition, targets and management actions for resources such as land and soil, water and watercourses (including wetlands), weeds and pest management, vegetation and biodiversity.

This plan is applicable to Roma gas field. This EIS and relevant aspects of its management plans have been developed in consideration of the goals, strategies and actions outlined within this plan.

Fitzroy Basin Association

The Fitzroy Basin Association is the body that provides support to the five community based natural resource management groups within the Fitzroy Basin. The northern section of the GFD Project is located within the Fitzroy Basin, and more specifically, the Dawson catchment area. The Dawson Catchment Coordinating Association is the community based natural resource management body that works with stakeholders in this area to formulate the sub-region's natural resource management plan, the Dawson River Catchment Strategy.

As mentioned above, this EIS and relevant management plans have been developed with regard to relevant natural resource management plans. Importantly, as an industry stakeholder, Santos GLNG also has the opportunity to participate in the development or amendment of such plans.

C.5 Local planning instruments

C.5.1 Local government area

The GFD Project is located across four local government areas:

- Central Highlands Regional Council
- Banana Shire Council
- Maranoa Regional Council
- Western Downs Regional Council.

These regional councils were formed in March 2008 as part of amalgamations associated with the Queensland Local Government reform process. Table C.5-1 outlines the former shires that now comprise these regional councils along with the associated GFD Project tenures.

Table C.5-1 Current and former local government areas

Regional Council	Former council shires
Central Highlands	Bauhinia Shire Duaringa Shire Emerald Shire Peak Downs Shire
Banana	Banana Shire Taroom Shire (Division 1) – northern portion
Maranoa	Roma Town Bungil Shire Bendemere Shire Waroo Shire Booringa Shire
Western Downs	Chinchilla Shire Murilla Shire Tara Shire Wambo Shire Dalby Town Taroom Shire (Division 2) – southern (Wandoan area)

C.5.2 Local government planning scheme

Chapter 3 of the SP Act provides local governments with the power to prepare local planning instruments, primarily in the form of planning schemes. These schemes outline the land use definitions, zones and levels of assessment that operate within a council's jurisdiction to guide growth and development and locally achieve the purposes of the SP Act and other higher level planning instruments (SPRPs, SPP, regional planning instruments, etc.).

Under the transitional agreements for amalgamated councils, the planning scheme operating in each former shire remains applicable in the development assessment process until a consolidated regional planning scheme is prepared by the newly formed regional council. As such, the planning schemes relevant to the GFD Project include:

- Bauhinia Shire Planning Scheme
- Taroom Shire Planning Scheme
- Roma Town Planning Scheme
- Bungil Shire Planning Scheme
- Bendemere Shire Planning Scheme.

As detailed in Section 3.1, in accordance with the SP Act, an activity authorised under the P&G Act and subject to a PL is exempt from assessment against a local planning scheme, temporary local planning instrument, preliminary approval or master plan authorised beneath the SP Act.

C.5.3 Local laws

A local law is a 'law adopted by a council that reflects community needs and ensures the good rule and government of the area' (Department of Local Government, 2012). Local laws are created via the process contained in the *Local Government Act 1993*.

Each of the local government councils relevant to the GFD Project administers their own local laws and subordinate local laws. A review of the local laws relevant to the project is outlined in Table C.5-2.

In the case where any of the above listed activities are undertaken, the project will be conducted in accordance with the relevant local laws and will apply for approval of the activity where required.

Table C.5-2 Relevant local laws

Regional Council	Relevant Local Laws	Approval/requirements
Central Highlands Regional Council	Subordinate Local Law No.1 (Administration) 2012	Schedule 7, section 3 – an approval is required in order to make an alteration or improvement to a local government area or road.
	Subordinate Local Law No.3 (Community and Environmental Management) 2012	Schedule 4, section 10 – prescribed requirements for community safety hazards: Fencing for security must be installed, operated and maintained in accordance with AS/NZS 016:2002. Wells (including disused wells) to be securely fenced and covered.
Banana Shire Council	*Subordinate Local Law No.1 (Administration) 2010*	Schedule 7, section 3 — an approval is required in order to make an alteration or improvement to a local government area or road.
	Subordinate Local Law No.3 (Community and Environmental Management) 2011	Schedule 4, section 10 — prescribed requirements for community safety hazards: Fencing for security must be installed, operated and maintained in accordance with AS/NZS 016:2002. Wells (including disused wells) to be securely fenced and covered.
	Subordinate Local Law No.3 (Gates And Grids) 2011	Part 1 — a permit is required to place a gate or grid across a public road.
Maranoa Regional Council and Western Downs Regional Council	*Subordinate Local Law No1.1 (Alteration or Improvement to Local Government Controlled Areas and Roads) 2011*	Schedule 1, section 5 — an approval is required to alter or improve a local government controlled area or road.
	Subordinate Local Law No1.15 (Carrying out Works on a Road or Interfering with a Road or its Operation) 2011	Schedule 1, section 5 — an approval is required for carrying out works on a road or interfering with a road or its operation.
	Subordinate Local Law No1.16 (Gates and Grids) 2011	Schedule 1, section 5 — an approval is required to install a gate or grid across a road.
	Subordinate Local Law No.3 (Community and Environmental Management) 2011	Schedule 4, section 10 — prescribed requirements for community safety hazards: Fencing for security must be installed, operated and maintained in accordance with AS/NZS 016:2002. Wells (including disused wells) to be securely fenced and covered.