

Cultural heritage 20

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20 Cultural heritage

20.1 Introduction

This section describes the Indigenous and non-indigenous cultural heritage values of GFD Project area and surrounds.

The GFD Project area contains a variety of cultural heritage places, reflective of its Indigenous settlement and early European settlement. There are a range of areas and artefacts relevant to Indigenous peoples present, which are protected under established Cultural heritage management plans (CHMPs), the contents of which are confidential and contents not detailed in this section. In regards to non-indigenous cultural heritage, the GFD Project area played host to early European exploration in Queensland and thus contains places reflective of exploration, early settlement and European-Indigenous frontier interaction and conflict.

The potential impacts arising from the GFD Project activities on Indigenous and non-indigenous cultural heritage are described and mitigation measures are identified. Full details of the non-indigenous cultural heritage assessment are provided in Appendix T: Non-indigenous cultural heritage.

This section has been prepared in accordance with section 4.11 of the *Terms of reference for an environmental impact statement* dated March 2013. The index to locate where each ToR requirement is met within the EIS is included in Appendix B: Terms of reference cross-reference.

The term cultural heritage is used throughout this section to describe Indigenous and non-indigenous cultural heritage.

20.2 Regulatory context

This EIS has been prepared in accordance with the State and Commonwealth regulatory context described within Appendix C: Regulatory framework. The legislation, policies and guidelines that apply to the cultural heritage values are outlined in Table 20-1.

Table 20-1 Regulatory context of the GFD Project – cultural heritage

Legislation, policy or guidance	Relevance to the GFD Project
<p><i>Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)</i></p> <p>This Act is the central piece of environmental legislation at the Commonwealth level. It provides for the protection of environmental values (EVs), including matters of national environmental significance. The EPBC Act is the primary legislation for the Commonwealth Government to manage the environment and heritage aspects of the country. The EPBC Act, among other things, promotes heritage protection and recognises the role of Indigenous people in the conservation of Australia's biodiversity.</p>	<p>The EPBC Act provides for the maintenance of :</p> <ul style="list-style-type: none"> • The Commonwealth Heritage List, which includes Commonwealth areas that have values (whether natural, Indigenous, historic or other) of significant value to Australia. • The National Heritage List, which includes natural, historic and Indigenous places of outstanding heritage value to the nation. <p>Both the Commonwealth Heritage List and National Heritage List were reviewed in identifying cultural heritage values for the GFD Project.</p>
<p><i>The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth)</i></p> <p>This Act aims to preserve and protect areas and objects that are of particular significance to Indigenous Australians from injury or desecration.</p>	<p>Santos GLNG is committed to complying with the Act through its management framework.</p>
<p><i>The World Heritage Convention</i></p> <p>The convention defines the natural and cultural sites that can be considered for inscription on the World Heritage List. Australia ratified the convention in 1974.</p>	<p>The World Heritage List was reviewed in identifying cultural heritage values for the GFD Project.</p>

Legislation, policy or guidance	Relevance to the GFD Project
<p><i>Aboriginal Cultural Heritage Act 2003 (Qld) (ACH Act)</i></p> <p>The ACH Act protects significant Indigenous cultural heritage in Queensland. It includes items and areas that are culturally significant to Aboriginal people, including places where there is no physical manifestation of human use. Under the Act, persons or companies have a 'duty of care' to ensure that their activity does not harm Indigenous cultural heritage. The Act established a cultural heritage database and register to provide a centralised depository of information regarding Indigenous cultural heritage places in Queensland. The database and register are administered by the Department of Aboriginal and Torres Strait Islander and Multicultural Affairs.</p>	<p>The ACH Act imposes a duty of care on persons to protect or appropriately manage Aboriginal cultural heritage and provides for a number of methods to meet this duty of care. Part 7 (section 87) of the ACH Act provides that if an EIS is required for a project, no lease, licence, permit, approval or other authority required for the project can be granted unless a CHMP for the project area has been developed with the relevant Aboriginal Parties and approved under the ACH Act; or the authority is given subject to conditions to ensure that no excavation, construction or other activity takes places without an approved CHMP. Santos GLNG meets its duty of care through the execution and compliance with CHMPs with the appropriate Aboriginal parties in the GFD Project area. The cultural heritage register and database administered by the Department of Aboriginal and Torres Strait Islander and Multicultural Affairs were reviewed in identifying Indigenous cultural heritage values for the GFD Project area.</p>
<p><i>Queensland Heritage Act 1992 (Qld) (QH Act)</i></p> <p>The QH 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.</p>	<p>Heritage places and protected areas recognised under the QH Act are recorded on the Queensland Heritage Register. The QH Act also establishes the requirement for local heritage registers that are integrated with local planning provisions. The Queensland Heritage Register and relevant local heritage registers were reviewed in identifying cultural heritage values for the GFD Project area.</p>
<p><i>Australian Heritage Places Inventory</i></p> <p>The inventory contains summary information about places listed in State and Commonwealth heritage registers and lists.</p>	<p>A search of the <i>Australian Heritage Places Inventory</i> for the GFD Project area was undertaken for this EIS.</p>
<p><i>Former Environment Protection Agency heritage list</i></p> <p>A list of Indigenous and non-indigenous cultural heritage reported places was compiled in 2006 by the former Queensland Environment Protection Agency (EPA) (now EHP), including locations (unverified). Some of these places were later revisited and listed on the Queensland Heritage Register or under the ACH Act. The remainder have no statutory status or legal protection.</p>	<p>This register was searched for cultural heritage places and values for the GFD Project.</p>
<p><i>Former Register of the National Estate (via the Australian Heritage Database)</i></p> <p>The former <i>Register of the National Estate</i> is a list of natural, Indigenous and non-indigenous heritage places throughout Australia, now maintained as a non-statutory register and publicly available archive.</p>	<p>This register was searched for cultural heritage places and values for the GFD Project.</p>
<p>Interactive resource tenure map (IRTM) (Queensland Government - Department of Natural Resources and Mines).</p> <p>The IRTM displays geological data, mining tenure and exploration information, including historic mining leases (generally limited to the last 100 years), for the whole of Queensland.</p>	<p>The IRTM was searched for historic mining leases and potential mines that are located in the GFD Project area.</p>

Legislation, policy or guidance	Relevance to the GFD Project
<p><i>The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance</i> (Cth) (ICOMOS, 1999)</p> <p>The Burra Charter is the best practice guideline for non-indigenous cultural heritage assessment in Australia and provides criteria for assessing the significance of non-indigenous cultural heritage. The Charter is the recommended guiding policy document for making decisions under the QH Act.</p>	<p>The Charter was used to assess the significance of known non-indigenous cultural heritage places within the GFD Project area.</p>

This EIS seeks to obtain primary approvals for the project including the Queensland Government Coordinator-Generals Report and Commonwealth Government EPBC Act approval.

Application for or amendments to existing environmental authorities will occur subsequent to this EIS process. Other subsequent approvals required after the EIS process has been completed, corresponding triggers and legislative frameworks applicable to the GFD Project are identified in Section 2: Project approvals.

Approval of this EIS will trigger a number of subsequent approvals required for the GFD Project to proceed. Approvals will be required on tenure and off-tenure. Section 2: Project approvals summarises the key approvals necessary for the planning, construction, operations and decommissioning of the GFD Project. The triggers for each approval, the relevant administering authority and application details are provided. Consultation on the subsequent approvals will be ongoing with the administering authorities.

20.3 Assessment methodology

The non-indigenous cultural heritage assessment comprised a desktop review of literature, consultation records, surveys and an impact assessment. Impacts were assessed using the risk assessment methodology which considers the likelihood and consequence of a potential impact to assess its level of risk. The full description of the risk assessment methodology is described in section 5.6.3 of Section 5: Assessment framework and in Appendix T: Non-indigenous cultural heritage. Liaison with relevant organisations concerning places of non-indigenous cultural heritage significance is discussed in section 1.3.2 of Appendix T: Non-Indigenous cultural heritage.

The discussion of Indigenous cultural heritage values presented in section 20.4.1 is based on Santos GLNG's undertakings with those Aboriginal Parties who hold interests in the GFD Project area.

20.4 Environmental values

The GFD Project area contains a variety of cultural heritage places reflective of its Indigenous settlement and early European exploration and consequent settlement. The cultural heritage values in the GFD Project area include:

- Known heritage places of national, State and local significance, and unassessed sites
- Unknown heritage places of national, State and local significance.

20.4.1 Indigenous cultural heritage

Santos GLNG has developed an understanding of the Indigenous cultural heritage landscape of the GLNG Project area by conducting more than 1,000 inspections and/or surveys since 2009. These surveys have covered an area of more than 19,500 hectares (or 195 square kilometres) and have been undertaken in accordance with Santos GLNG's existing CHMPs and cultural heritage clearance process, as outlined in section 20.6. It is possible that other areas and places of Indigenous cultural heritage will be identified during the ongoing field development process of the GFD Project.

The nature and distribution of many forms of Indigenous cultural heritage in a landscape is associated with factors such as geology, climate and landforms which affect:

- The availability of plants, animals and water
- The location of suitable camping places and suitable surfaces upon which rock art could be performed.

Such environmental factors affect the degree to which cultural remains have survived natural and human-induced processes. In addition, European land-use practices often destroy or disturb land with potential for cultural value.

The Indigenous cultural heritage values of the GFD Project area have been identified with the relevant Aboriginal Parties through a review of applicable registers (section 20.4.1.1), existing literature (section 20.4.1.2) and field surveys (section 20.4.1.3) previously undertaken across the GFD Project area.

Native Title, Aboriginal Parties with interests across the GFD Project area, and relevant Indigenous land use agreements are listed in section 8.4.4 of Section 8: Land use and tenure.

20.4.1.1 Registered places

A review of relevant Indigenous cultural heritage registers has indicated that there are a number of registered Indigenous heritage places in the GFD Project area, which include artefact scatters, paintings and scarred trees. The results of the review are summarised in Table 20-2.

Table 20-2 Registered Indigenous cultural heritage places within the GFD Project area

Jurisdiction ¹	Register or source	Number of places
National and international	World Heritage List, National Heritage List and Commonwealth Heritage List	0
State	Cultural heritage database and register maintained by the Department of Aboriginal and Torres Strait Islander and Multicultural Affairs	1,845

¹ There is no formal local register of Indigenous cultural heritage places.

20.4.1.2 Existing literature

A number of early archaeological studies were carried out in and around the GFD Project area during the 1970s and 1980s. These studies, undertaken by Mulvaney and Joyce (1965), Beaton (1977 and 1991a) and then Morwood (1978, 1979, 1981 and 1984), were primarily focused upon Aboriginal occupation of caves and rock shelters across the Carnarvon Ranges which traverse the northern portion of the GFD Project area. The most important of these was Mulvaney and Joyce's investigation of Kenniff Cave, which provided the first firm evidence for a Pleistocene (>10,000 years) occupation of Australia (1984).

Significant literature relevant to the GFD Project area and surrounds includes:

- Investigations of Kenniff Cave on Moffat Station, which is perhaps the best known Indigenous place in the area (Mulvaney and Joyce, 1965).
- A series of investigations into rock shelters in the region, particularly in the Carnarvon Ranges, with investigations undertaken at Cathedral Cave, Rainbow Cave and Wanderer's Cave by Beaton (1977, 1991a, 1991b).
- Excavations conducted by Morwood in the late 1970s at: Ken's Cave, a small rock shelter on the upper Belyando River; Turtle Rock, a large silcrete boulder on the southern flank of the Buckland River; and two native wells located on the upper Warrego River near the head of Stockwhip Creek (Morwood, 1978, 1979, 1981).

- A scientific investigation of Buckland Bower, an open site on a ridge overlooking Buckland Creek a tributary of the Nogoa River, which included the systematic surface collection of more than 7,000 stone artefacts (Beaton, 1977; Morwood, 1984).

20.4.1.3 Field surveys

In conjunction with the existing literature discussed in section 20.4.1.2, many field surveys have been completed in the Bowen and Surat basins to support approval for resource exploration and development as well as industrial and infrastructure projects. These assessments (Archaeo, 2007; Hatte, 1996) have identified many Indigenous cultural heritage places, including artefact scatters of variable density, open camp sites with grinding plates, top stones, and edge ground axes, scarred trees, stone arrangements and hearths. Sources of raw material in the region included ochre, silcrete and sandstone.

20.4.2 Non-indigenous cultural heritage

The GFD Project area is located in some of the earliest explored and settled regions of Queensland: the Maranoa and Leichhardt pastoral regions. This is reflected in the contextual history for the area, which shows that from early exploration and pastoralism, towns began to develop in response to the need to provide facilities such as schools and cemeteries for an increasing population. Government schemes such as the soldier land settlement and the Brigalow Land Development Scheme promoted closer settlement, the diversification of agriculture and the development of a transport and communication system, resulting in substantial changes to the landscape. More recently, resource developments along with other industrial developments such as forestry and timber production have contributed to continuing change.

The non-indigenous cultural heritage values of the GFD Project area have been identified through a review of the following:

- **Statutory registers.** Statutory registers are associated with national, State and local legislation. Places included on these registers generally possess an established level of significance. The absence of a place on these registers does not mean that it is without significance, as it may not have been assessed. The review undertaken for this EIS identified no places on the national registers, 11 on the State register (Queensland Heritage Register) and 28 additional places on local registers.
- **Non-statutory registers.** These places are not afforded legislative protection. Nonetheless, places identified on these registers contribute to a better understanding of the non-indigenous cultural heritage values of the GFD Project area and may include places that have been overlooked or not yet accepted for entry on statutory registers. The review undertaken for this EIS identified 8 places on the national register (former *Register of the National Estate*) and 166 places on State registers (Queensland National Trust and the former Environmental Protection Agency list).
- **Surveys.** In recent years there have been many non-indigenous cultural heritage surveys undertaken in the Bowen and Surat basins for resources, industrial and infrastructure projects. The 11 project reports reviewed identified 68 heritage places having at least local cultural heritage significance, with 60 being previously unrecorded and 8 having been previously listed in either statutory or non-statutory registers. An additional 90 places were identified and assessed as having minimal cultural heritage value.

The search of registers and reports identified a wide range of non-indigenous cultural heritage sites throughout the GFD Project area, including:

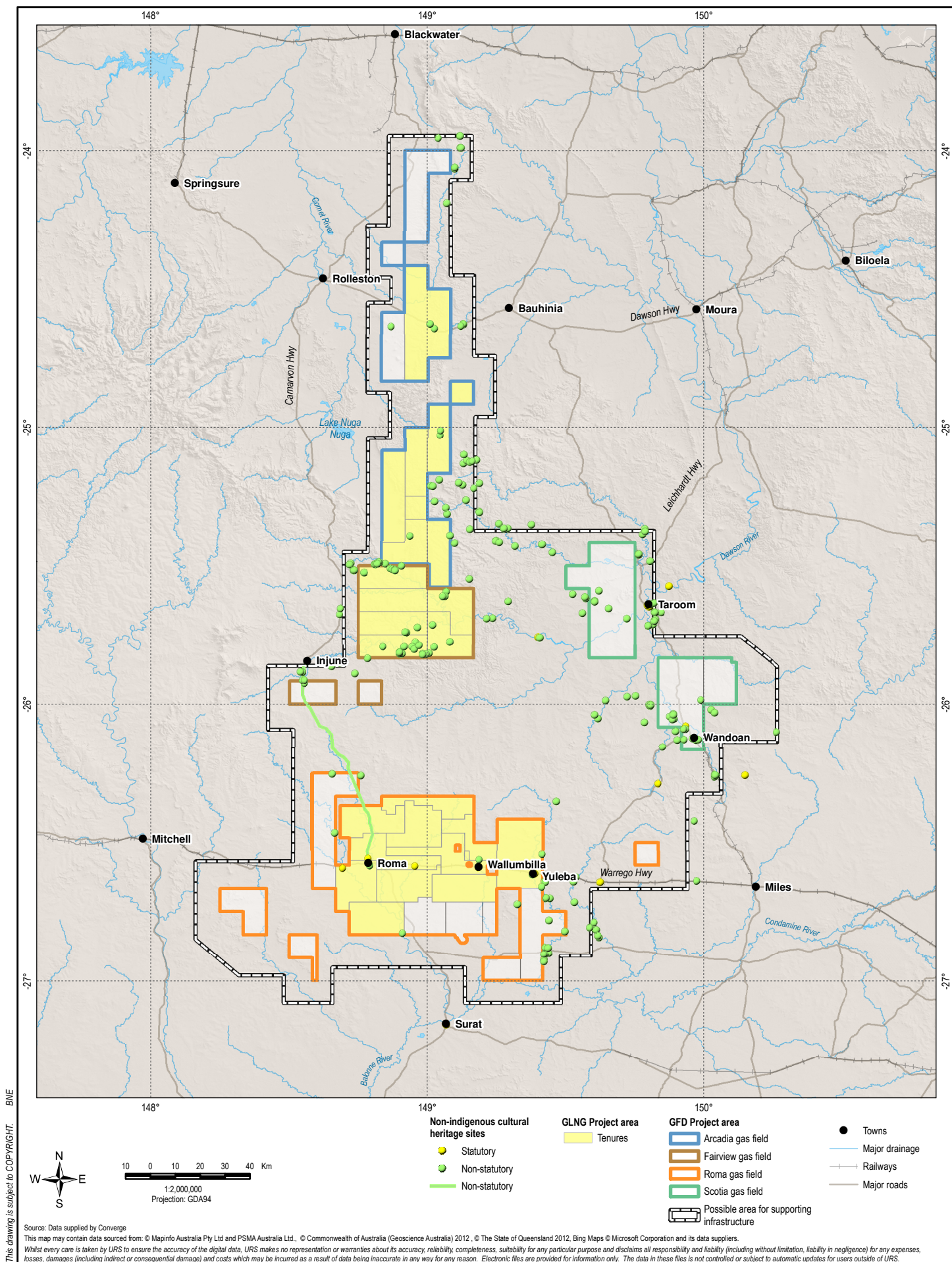
- Explorers' campsites
- Contact places including massacre places and places showing evidence of Aboriginal and non-indigenous occupation
- Pastoral places including homestead complexes (including homesteads, cattle/sheep dips, meat houses, dairies, holding yards, shearing sheds, storage sheds and refuse dumps), fencing, bores, water storage ponds, bush camps, surveyors marks and terracing
- Isolated graves and cemeteries
- Historical precincts within towns such as Roma, Surat, Wallumbilla, Old Yulebah and New Yulebah.
- Roads, railways and stock routes and associated telegraph/telephone lines including old road alignments and roads which reflect specific phases of development (e.g. soldier settler roads), railways, sidings, stations and associated settlement and housing
- Forestry industry places
- Resources projects and quarrying places, including underground and open cut mines, wells and associated infrastructure
- Memorials both to early explorers and soldiers.

The approximate locations of the non-indigenous cultural heritage places within the GFD Project area identified in registers are indicated in Figure 20-1. As the precise location of places is not always indicated in the register, an expanded spatial search criterion was used as detailed in Table 20-3.

Table 20-3 Spatial area – cultural heritage register search

Jurisdiction	Register/source	Area
National and international	World Heritage List, National Heritage List and the Commonwealth Heritage List	GFD Project area
State	Queensland Heritage Register, Nature Conservation Act 1992 (Qld)	GFD Project area + 10 km buffer
Local	Local heritage registers (Taroom Shire, Bauhinia Shire, Duaringa Shire, Bendemere Shire, Bungul Shire and Roma Town Council)	GFD Project area + 5 km buffer

A detailed understanding of the GFD Project area's non-indigenous history is provided in section 4 of Appendix T: Non-indigenous cultural heritage.



20.5 Potential impacts

Potential impacts to cultural heritage values (Indigenous and non-indigenous) that may occur as a result of the GFD Project are outlined in Table 20-4.

Table 20-4 Potential impacts – cultural heritage

Environmental value	Potential impact
Known heritage places of national, State and local significance, and unassessed sites	Disturbance or encroachment on a place of cultural heritage significance.
Unknown heritage places of national, State and local significance	
Significant heritage landscapes	

20.6 Mitigation measures

Santos GLNG has developed an effective management framework, discussed in Section 6: Management framework, to be implemented for the GFD Project. The management framework includes Santos GLNG's GFD Project Environmental protocol for constraints planning and field development (Constraints protocol) (Appendix Y-B), and the corporate environmental, health, safety and community policies which are supported by the Environment, health and safety management system.

The Constraints protocol outlines the approach that Santos GLNG will take in identifying, assessing and managing potential impacts on environmental (including cultural heritage) values during field planning across the GFD Project. Known heritage places will be incorporated into the Santos GLNG geographical information system (GIS) to assist in identifying the location of GFD Project infrastructure and activities to assist in the ongoing constraints planning and field development process. This is discussed in Section 5: Assessment framework.

After Santos GLNG has identified a potential area for development in accordance with the Constraints protocol, the overarching mechanism for protecting cultural heritage is the *Environmental hazard standard* (EHS) 11 *Cultural heritage*. EHS11 defines the processes to avoid, where practicable, or otherwise minimise impacts to cultural heritage from Santos GLNG operations and to ensure that relevant statutory cultural heritage requirements are complied with. EHS11 is supported by cultural heritage field personnel and a cultural heritage management system which ensures that construction work is undertaken according to the CHMPs and the ACH Act.

Implementation of EHS11 will identify and avoid, where practicable, or otherwise minimise impacts on cultural heritage places through awareness training and pre-clearance surveys to verify values which will inform location of infrastructure. EHS11 provides procedures for discovery, clearances, monitoring and reporting. The *Santos GLNG Cultural heritage clearance process* is a core component of EHS11 that encapsulates the steps Santos GLNG takes to identify and avoid, where practicable, or otherwise minimise impacts on culturally significant places prior to ground breaking activities. It involves the steps outlined in Figure 20-2.

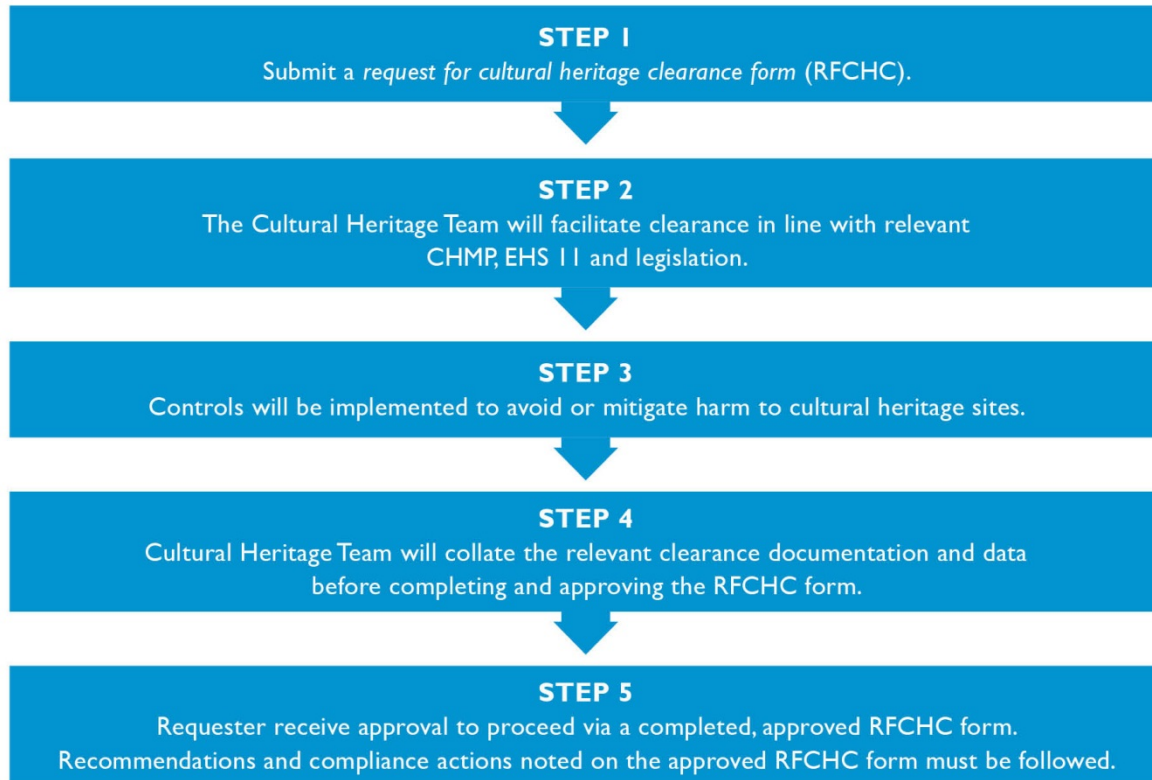
Where impact to a cultural heritage place is likely, Santos GLNG will obtain internal and statutory approvals in consultation with relevant stakeholders and conduct monitoring and reporting in accordance with relevant regulatory requirements.

EHS11 also dictates the required actions to be undertaken during a chance find of cultural heritage value.

Santos GLNG has informed the Department of Environment and Heritage Protection that it is seeking to have EHS11 treated as the heritage management plan for the GFD Project.

Consultation with Aboriginal groups will be undertaken in accordance with the *Santos GLNG Aboriginal Engagement Policy*.

Figure 20-2 Santos GLNG cultural heritage clearance process



Santos GLNG is committed to implementing the mitigation measures in Table 20-5 to manage potential cultural heritage related impacts. These measures will be incorporated into Santos GLNG's management framework for the GFD Project.

Table 20-5 Management framework relevant to cultural heritage

Management plan	Mitigation measures
GFD Project Environmental protocol for constraints planning and field development (the Constraints protocol).	<p>The Constraints protocol applies to all gas field related activities. The scope of the Constraints protocol is to:</p> <ul style="list-style-type: none"> • Enable Santos GLNG to comply with all relevant State and Federal statutory approvals and legislation • Support Santos GLNG's environmental policies and the General Environmental Duty (GED) as outlined in the EP Act • Promote the avoidance, minimisation, mitigation and management of direct and indirect adverse environmental impacts associated with land disturbances • Minimise cumulative impacts on environmental values. <p>The Constraints protocol provides a framework to guide placement of infrastructure and adopts the following management principles:</p> <ul style="list-style-type: none"> • Avoidance — avoiding direct and indirect impacts • Minimisation — minimise potential impacts • Mitigation — implement mitigation and management measures • Remediation and rehabilitation — actively remediate and rehabilitate impacted areas • Offset — offset residual adverse impacts in accordance with regulatory requirements. <p>The Constraints protocol enables the systematic identification and assessment of environmental values and the application of development constraints to effectively avoid and/or manage environmental impacts. The Constraints protocol will be implemented to identify places of cultural significance (Indigenous and non-indigenous) to guide the location of GFD Project infrastructure.</p>
Environmental hazard standard 11 Cultural heritage (EHS11).	Implementation of EHS11 will identify and avoid, where practicable, or otherwise minimise impacts on cultural heritage places through awareness training, pre-clearance surveys to verify values, informing siting decisions, and providing procedures for discovery, clearances, monitoring and reporting.
Cultural heritage management plans (CHMPs).	The GFD Project will operate within the bounds of the CHMPs developed with each relevant Aboriginal Party under the <i>Aboriginal Cultural Heritage Act 2003</i> .

Carrying out activities in accordance with a CHMP approved under Part 7 of the ACH Act means they will be deemed to have complied with the cultural heritage 'duty of care' i.e. the duty of persons undertaking an activity to take reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage.

In accordance with Part 7 of the ACH Act, where category A and B Aboriginal Parties and areas covered by registered Aboriginal cultural heritage bodies exist, Santos GLNG has entered into CHMPs with the Aboriginal Parties. The philosophy behind these CHMPs is to avoid harm to cultural heritage in the first instance and, if that cannot be achieved, management strategies to minimise impacts will be adopted in consultation with the Aboriginal Party according to processes outlined in the relevant CHMP. The existing CHMPs in the GFD Project area are listed in Table 20-6.

Table 20-6 Cultural heritage management plans in the GFD Project area

Aboriginal Party	Relevant GFD Project area	Commencement date
Mandandanji People (QC08/10)	Southern GFD Project tenure, including: ATP 665, ATP 655, ATP 336, ATP 631, ATP 708, PL 13, PL 11, PL 10, PL 9, PL 8, PL 7, PL 6, PL 3, PL 315, PL 314, PL 310, PL 309, PL 93	12 April 2010
Iman People (2) (QC97/55)	Eastern and central GFD Project tenure, including: ATP 803, ATP 526, PL 176, PL 235, PL 234, PL 233, PL 90, PL 91, PL 232, PL 100, PL 99	4 February 2009
Karingbal People	Northern and central GFD Project tenure, including: ATP 653, ATP 526, PL 236, PL 235, PL 234	9 February 2009
Gap B Endorsed Parties	Northern GFD Project tenure, including: ATP 804, ATP 526, PL 236, PL 235	24 September 2009
Bidjara People (QC06/019)	Northern and central GFD Project tenure, including: ATP 653, PL 91, PL 92, PL 99	4 February 2009
Ghangalu People (QC97/36)	Northern GFD Project tenure, including: ATP 804	29 June 2010
Kangoulou People	Northern GFD Project tenure, including: ATP 745	7 December 2010

The existing CHMPs cover not only the existing tenure and activities proposed, but also typically contain expansion clauses that apply to areas or activities not previously covered by an agreement but are within the Aboriginal Party area of the relevant parties. The expansion clauses generally allow the activities to continue if the same process required by the CHMP is followed. Should these existing mechanisms not encompass an activity undertaken by the GFD Project in the future, Santos GLNG would use its existing consultation processes to resolve issues that may arise.

20.7 Risk assessment

As discussed in section 20.3, impacts were assessed using the risk assessment methodology. As the GFD Project area covers a large geographical area, the general nature of potential impacts to environmental values associated with GFD Project activities are identified and assessed within this section.

Table 20-7 summarises the assessment undertaken for the potential impacts of the GFD Project on non-indigenous cultural heritage values. For each identified potential impact, the assessment considered:

- The potential pre-mitigated risk, where only the Constraints protocol has been applied and the potential impacts are uncontrolled
- The mitigation measures that will be used to manage the potential impacts on non-Indigenous cultural heritage values. These measures will reduce the likelihood of the potential impacts
- The residual risk of the potential impact after the implementation of mitigation measures. The residual risk takes into account the potential for impact that remains after the mitigation measures are applied.

Table 20-7 Impact assessment – cultural heritage

Potential impact	Phase	Pre-mitigated impact			Mitigation and management measures	Residual risk		
		Likelihood	Consequence	Risk		Likelihood	Consequence	Risk
Disturbance/encroachment on known cultural heritage								
State	Construction	Unlikely	Moderate	Medium	<ul style="list-style-type: none">Implement the steps in the EHS11 as well as the constraints protocol in field development to identify, assess and manage potential impacts on NICH values.Should works need to be conducted in these areas, Implementation of EHS 11 will identify and avoid, where practicable, or otherwise minimise impacts on cultural heritage places through awareness training, pre-clearance surveys to verify values, inform siting decisions, provides procedures for discovery, clearances and monitoring and reporting.	Remote	Moderate	Low
	Operations	Remote	Moderate	Low		Remote	Moderate	Low
	Decommissioning	Remote	Moderate	Low		Remote	Moderate	Low
Local	Construction	Unlikely	Minor	Low		Unlikely	Minor	Low
	Operations	Remote	Minor	Very low		Remote	Minor	Very low
	Decommissioning	Remote	Minor	Very low		Remote	Minor	Very low
Unassessed	Construction	Possible	Moderate	Medium		Unlikely	Moderate	Medium
	Operations	Remote	Moderate	Low		Remote	Moderate	Low
	Decommissioning	Remote	Moderate	Low		Remote	Moderate	Low
Disturbance/encroachment on unknown cultural heritage								
National	Construction	Remote	Major	Medium	Implementation of EHS 11 will identify and avoid, where practicable, or otherwise minimise impacts on cultural heritage places through awareness training, pre-clearance surveys to verify values, inform siting decisions, provides procedures for discovery, clearances and monitoring and reporting.	Remote	Major	Medium
	Operations	Remote	Major	Medium		Remote	Major	Medium
	Decommissioning	Remote	Major	Medium		Remote	Major	Medium
State	Construction	Possible	Moderate	Medium		Unlikely	Moderate	Medium
	Operations	Remote	Moderate	Low		Remote	Moderate	Low
	Decommissioning	Remote	Moderate	Low		Remote	Moderate	Low
Local	Construction	Possible	Minor	Low		Unlikely	Minor	Low
	Operations	Remote	Minor	Very low		Remote	Minor	Very low
	Decommissioning	Remote	Minor	Very low		Remote	Minor	Very low
Impact to significant NICH landscapes	Construction	Unlikely	Moderate	Medium		Unlikely	Moderate	Medium
	Operations	Unlikely	Moderate	Medium		Unlikely	Moderate	Medium
	Decommissioning	Unlikely	Moderate	Medium		Unlikely	Moderate	Medium

20.8 Conclusions

The cultural heritage impacts that remain after the application of mitigation and management measures are detailed in Table 20-8. The impact assessment found that the residual impacts of the GFD Project are expected to be very low to medium.

Table 20-8 Residual risks – cultural heritage

Potential impact	Heritage significance classification	Residual risk		
		Construction	Operations	Decommissioning
Disturbance/encroachment on known cultural heritage	State	Low	Low	Low
	Local	Low	Very low	Very low
	Unassessed	Medium	Low	Low
Disturbance/encroachment on unknown cultural heritage	National	Medium	Medium	Medium
	State	Medium	Low	Low
	Local	Low	Very low	Very low
Disturbance/encroachment on significant heritage landscape	N/A	Medium	Medium	Medium