



Adani Mining Pty Ltd

# **NORTH GALILEE BASIN RAIL PROJECT**

## **Additional information to the Environmental Impact Statement**

Appendix J Revised legislation and approvals

April 2014

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## 20. Legislation and approvals

### 20.1 Purpose of this report

A range of legislation and approvals are applicable to the North Galilee Basin Rail Project (the NGBR Project) at the Commonwealth, State and local government level. The purpose of this report is to discuss the overarching legislative approval pathway, as well as identify how legislation, planning instruments and policies will apply to individual development aspects as described in Volume 2 Appendix B Revised project description. As a result, a wide range of approvals will need to be obtained for the NGBR Project and compliance with statutory requirements demonstrated throughout various stages of construction and operation.

This report is an update of NGBR Project EIS Volume 1 Chapter 20 Legislation and approvals. The section numbering of this report has been intentionally left consistent with the previous NGBR Project EIS chapter to enable direct comparison.

This report identifies assessable development triggers coordinated under, or outside of, Queensland's principal planning statute, the *Sustainable Planning Act 2009* (SP Act); and provides an assessment of State, regional and local government planning policies and schemes applicable to the NGBR Project. The report also identifies all approvals sought to be coordinated and conditionally approved by the Coordinator-General in assessing the NGBR Project, in accordance with the *State Development and Public Works Organisation Act 1971* (SDPWO Act).

Sections 20.2 to 20.5 provide a brief description of each of the relevant acts of Parliament and includes the relevant triggers for approvals required under each piece of legislation and how policies and regional and local planning schemes will apply to the NGBR Project.

A summary of the approvals required for components of the NGBR Project and when these approvals will be sought is provided in Table 20-6.

### 20.2 Overarching Commonwealth legislation and policies

This section outlines the overarching approvals required for the NGBR Project under Commonwealth (Cth) legislation. The relevant Commonwealth legislation includes approval under the *Environment Protection and Biodiversity Conservation Act 1999* and satisfaction of Native Title requirements under the *Native Title Act 1993* and *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

#### 20.2.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the principal environmental legislation administered by the Commonwealth Government. Part 3 of the EPBC Act determines that an action cannot be taken that is likely to have a significant impact on a matter of national environmental significance (MNES) without approval from the Minister who administers the EPBC Act. An action that the Minister decides is likely to have a significant impact on MNES is deemed a 'controlled action' and requires assessment under the provisions of the EPBC Act.

MNES protected by the EPBC Act include:

- World heritage properties (section 12 and 15A)
- National heritage places (sections 15B and 15C)

- Wetlands of international importance (under the Ramsar convention)
- Threatened species and ecological communities (sections 18 and 18A)
- Migratory species (sections 20 and 20A)
- Commonwealth marine areas (sections 23 and 24A)
- The Great Barrier Reef Marine Park (section 24B and 24C)
- Nuclear actions (including uranium mines)
- The environment, where actions proposed are on, or will affect commonwealth land
- The environment, where commonwealth agencies are proposing to take an action
- A water resource, in relation to coal seam gas development and large coal mining developments.

Assessments of potential impacts on MNES by controlled actions are carried out by the Commonwealth Department of the Environment (DotE). The Minister, or a designate thereof, then makes a decision regarding the controlled action and may refuse, approve or approve with conditions.

#### **Approval trigger**

An approval under the EPBC Act is required where the NGBR Project is likely to have an impact on any MNES.

#### **Relevance to NGBR Project**

A referral under the EPBC Act was lodged for the NGBR Project in May 2013. The purpose of the referral was to provide DotE with sufficient information to make a controlled action decision under the EPBC Act. In June 2013, DotE issued a referral decision determining the NGBR Project to be a controlled action due to potential impacts on a number of controlling provisions. DotE subsequently advised that the NGBR Project would require assessment via EIS under the EPBC Act, in parallel to the EIS assessment process being undertaken by the Queensland Coordinator-General under the SDPWO Act (i.e. the bilateral agreement between the State and Commonwealth does not apply to assessment of the NGBR Project EIS).

Final EIS Guidelines for the North Galilee Basin Rail Project (EPBC 2013/6885) were developed by DotE and released on 1 August 2013. The EIS Guidelines require that direct and indirect impacts on matters covered by the controlling provisions must be assessed by the EIS.

The controlling provisions determined to be of relevance to the NGBR Project are:

- World Heritage properties (section 12 and 15A)
- National Heritage places (sections 15B and 15C)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A)
- Commonwealth marine areas (sections 23 and 24A)
- Great Barrier Reef Marine Park (section 24B and 24C).

The NGBR Project requires approval from the Minister who administers the EPBC Act; the assessment will be carried under the requirements of Division 6 of the EPBC Act.

### EPBC Act Environmental Offsets Policy

The purpose of the EPBC Act Environmental Offsets Policy (the EPBC offsets policy) is to outline the Australian government's position on the use of environmental offsets to compensate for residual adverse impacts on MNES protected by the EPBC Act.

Under the EPBC Act, environmental offsets can be used to maintain or enhance the health, diversity and productivity of the environment as it relates to MNES. However, environmental offsets do not apply where the impacts of a development are considered to be minor in nature or could reasonably be mitigated.

Clearing of high conservation status regional ecosystems that are listed components of threatened ecological communities under the EPBC Act may carry offset obligations under the EPBC offsets policy; this requirement will be considered in parallel to the Queensland Government Environmental Offsets Policy (refer to Section 20.4.9).

As the NGBR Project is a controlled action under the EPBC Act, the EPBC offsets policy applies to the NGBR Project and its activities, to the extent that residual impacts on MNES are unavoidable. Clearing for the NGBR Project that will require offset obligations under the EPBC offsets policy and the quantity of offsets required is discussed in Volume 2 Appendix E Revised offsets.

#### 20.2.2 Native Title Act 1993

The *Native Title Act 1993* (NT Act) recognises the rights and interests of Indigenous people in respect of land on which they historically resided. The NT Act provides for the determination of Native Title claims, the treatment of future acts that may impact Native Title rights and the requirement for consultation and/or notification to relevant claimants where future acts are involved. Under Section 3 of the NT Act, the main objects are:

- a. *to provide for the recognition and protection of Native Title; and*
- b. *to establish ways in which future dealings affecting Native Title may proceed and to set standards for those dealings; and*
- c. *to establish a mechanism for determining claims to Native Title; and*
- d. *To provide for, or permit, the validation of past acts, and intermediate period acts, invalidated because of the existence of Native Title.*

### Approval trigger

Where a proposed development impacts on a parcel of land which is subject to a Native Title claim, the proponent is required to enter into an Indigenous land use agreement (ILUA) between the relevant Native Title holders or claimants and other interested parties about how land and waters in the area covered by the agreement will be used and managed in the future.

### Relevance to NGBR Project

A Native Title assessment was undertaken for the NGBR Project (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 15 Cultural heritage). The alignment falls within the Native Title claim areas of the following indigenous groups:

- Juru People (QC10/5 - QUD554/10)
- Juru People #2 (QC12/1 - QUD0007/12)

- Birriah People (QC98/12 - QUD6244/98)
- Jangga People (QC98/10 PRC - QUD6230/98; QC98/10 DET - QUD6230/98).

It is noted that a small section in the south of the study area traverses an unclaimed area (with respect to registered Native Title claim determination areas). Potential Indigenous cultural heritage of significance within this unclaimed area has been discussed with the neighbouring Jangga People due to the proximity of the area to that Traditional Owner group's registered Native Title claim determination area.

### 20.2.3 Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (ATSIHP Act) protects areas and objects in Australia of particular significance to living Aboriginal people in accordance with Aboriginal tradition. The ATSIHP Act does not protect areas and objects of scientific or historical interest, such as rock art, archaeological sites or areas of past Aboriginal occupation, nor wildlife or biodiversity as natural heritage or intangible forms of heritage; Aboriginal remains are, however, protected (SEWPAC 2010).

An application can be made to the department administering the ATSIHP Act, DotE to declare a 'significant Aboriginal area' or 'object' under the ATSIHP Act. For an application to be successful it would need to demonstrate a specific, material threat due to a planned or current activity.

#### **Approval trigger**

An assessment was undertaken for the NGBR Project to identify any declared 'significant Aboriginal area' or 'object' (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS and NGBR Project EIS Volume 1 Chapter 15 Cultural heritage).

A search of the Aboriginal and Torres Strait Islander Cultural Heritage Database and Register indicated that a total of 21 sites were identified in the proximity to the NGBR Project consisting of 16 artefact scatters, one stone arrangement, one quarry site with artefacts, one rock art site with associated shell midden, one shell midden and one isolated artefact.

#### **Relevance to NGBR Project**

Adani has a responsibility under the ATSIHP Act to report the discovery of anything reasonably suspected to be Aboriginal remains to the Minister who administers the ATSIHP Act. The specific requirements relating to the management and mitigation of unearthing an item or place of cultural heritage significance is detailed in cultural heritage management plans prepared for the NGBR Project. The plans have been prepared for the NGBR Project to comply with Part 7 of the State's *Aboriginal Cultural Heritage Act 2003*, refer to Section 20.5.1.

## 20.3 Overarching State legislation and policies

This section outlines the overarching approvals required for the NGBR Project under the state of Queensland (Qld) legislation. The relevant overarching State legislation for which an approval is required includes the *State Development and Public Works Organisation Act 1971* and the *Sustainable Planning Act 2009*.

### 20.3.1 State Development and Public Works Organisation Act 1971

The SDPWO Act facilitates coordinated infrastructure planning and development to support economic and social progress; and provides for the appointment of a Coordinator-General (CG) as a corporation sole, representing the Crown.



The SDPWO Act gives the CG the power to:

- Manage major infrastructure projects
- Declare a project to be a 'coordinated project' and coordinate the environmental impact assessment of the project
- Coordinate and regulate programs of works
- Enter and authorise entry onto land to undertake works
- Compulsorily acquire land
- Implement and manage state development areas.

The NGBR Project requires assessment under the SDPWO Act as a coordinated project requiring an EIS. In addition to this, the CG may designate the NGBR Project final rail corridor as a state development area or a private infrastructure facility. These are discussed in more detail below.

### **Coordinated project**

In accordance with the SDPWO Act, an initial advice statement (IAS) was lodged with the CG for the NGBR Project, in May 2013. The purpose of the IAS was to provide the CG with sufficient information to make a 'coordinated project' declaration under Section 26(1)(a) of the SDPWO Act. In June 2013, the CG declared the NGBR Project to be a coordinated project requiring an EIS. Following consultation between DotE and the CG, it was agreed that the EIS under the SDPWO Act is to be prepared in parallel to the EIS prepared under the EPBC Act and assessed separately (i.e. the bilateral agreement between the Commonwealth and State does not apply to the assessment of the NGBR Project EIS).

Under Section 35 of the SDPWO Act, once the CG has reviewed the EIS, the CG must prepare an evaluation report. The CG can coordinate subsequent approvals within this report by preparing the relevant conditions for various aspects of the NGBR Project. This will reduce the regulatory burden on the relevant assessing agencies and the proponent and streamline the public notification requirements which would otherwise be required for separate development permits. This EIS aims to provide the CG with sufficient information regarding to subsequent approvals to enable the CG to prepare conditions for the NGBR Project. A summary of the approvals sought for the components of the NGBR Project is provided in Table 20-6.

### **State development areas**

In accordance with Section 77 of the SDPWO Act the Governor in Council may designate land as a state development area (SDA) to facilitate future development. The CG then establishes a development scheme for each SDA, which allows proponents to lodge a 'material change of use' application for any proposed development within that area. The CG may, via the Governor in Council to the extent lawfully able to do so, compulsorily acquire land (or easements) and/or extinguish Native Title in land the subject of an SDA should voluntary negotiations be unsuccessful.

The CG declared the Abbot Point State Development Area (APSDA) in 2008, including later publication of the APSDA Development Scheme in 2012, to facilitate large-scale industrial development of regional, state and national significance in the vicinity of the Port of Abbot Point (Queensland Government 2012). The NGBR Project traverses the APSDA on approach to Abbot Point, and will therefore require a material change of use application for development

approval by the CG in accordance with the APSDA Development Scheme (refer Section 20.7.2).

The Galilee Basin Coal Infrastructure Framework 2013 (State of Queensland 2013a) supports the development of a south-north infrastructure corridor from the Galilee Basin to Abbot Point. In order to assist the establishment of common rail corridors from the Galilee Basin to the Port of Abbot Point, the government will consider use of the state development area powers under the *State Development and Public Works Organisation Act 1971*.

The Galilee Basin Development Strategy released in November 2013 (State of Queensland 2013b) consolidates the Queensland government's support for stimulating development of the Galilee Basin's southern and central coal resources. An important component of the strategy is the support offered to 'first movers' including the preference for rail infrastructure developed in accordance with the strategy to be declared as a SDA to streamline land acquisition and planning approvals.

Following publication of the NGBR Project EIS, the Queensland Government released a Proposed Galilee Basin State Development Area Draft Development Scheme. The proposed Galilee Basin State Development Area aligns with the State Government's support for a single north-south and multi-user common access rail corridor and is in accordance with the Galilee Basin Coal Infrastructure Framework (State of Queensland 2013a) and the Galilee Basin Development Strategy (State of Queensland 2013b). The development scheme includes indicative mapping for rail infrastructure, including a proposed North to South Rail Corridor Precinct to service the central area of the Galilee Basin. The final NGBR Project footprint is expected to be contained within the South to North Rail Corridor Precinct once the proposed state development area is declared.

Upon declaration of the Galilee Basin State Development Area and finalisation of the development scheme, Adani will seek a development approval for a material change of use in accordance with the development scheme, where required. The final development scheme is expected to remove the need for a material change of use approval for the NGBR Project under the *Bowen Shire Planning Scheme 2006* (refer Section 20.7.5), *Belyando Shire Planning Scheme 2008* (refer Section 20.7.6) and *Nebo Shire Planning Scheme 2008* (refer Section 20.7.7) under the *Sustainable Planning Act 2009*.

### **Private infrastructure facility**

Under Section 153AC of the SDPWO Act a private infrastructure facility (PIF) is a facility assessed by the CG and approved by the Governor in Council as being of significance economically or socially to Australia, Queensland or the region in which the facility is to be constructed.

Under the SDPWO Act, the sorts of infrastructure facilities that may qualify for consideration as a PIF include (but are not limited to):

- A road, railway, bridge or other transport facility
- Electricity generation, transmission or distribution facilities
- Oil or gas storage, distribution or transmission facilities.

In accordance with the SDPWO Act, when considering whether to declare a PIF, the CG must also consider the potential for the facility to contribute to community wellbeing and economic growth or employment levels as well as the contribution the PIF makes to agriculture, industrial, resource or technological development in Australia, Queensland or the relevant region. A PIF

designation represents the first step in a process under which the CG may, to the extent lawfully able to do so, compulsorily acquire land (or easements) prescribed in the *Acquisition of Land Act 1967* and/or extinguish Native Title for the facility should voluntary negotiations be unsuccessful. Under Section 125 of the SDPWOA, the Coordinator-General is authorised to take land for certain purposes, including a PIF.

A PIF has not yet been applied for or obtained for the NGBR Project. However, should an application be progressed and a PIF declared, relevant negotiations with Native Title parties and landowners will continue to be undertaken prior to commencement of any compulsory acquisition process.

#### **PIF investigators authority**

Under Section 141 of the SDPWO Act, the CG may authorise entry onto private properties to investigate the land's potential and suitability for the development of a PIF. This investigators authority may be granted, subject to conditions, before the land acquisition powers under Section 125 of the Act are exercised.

Successful engagement with 21 land holders has been undertaken and has resulted in the implementation of negotiated and signed access agreements for the purposes of investigating the NGBR Project. This amounts to approximately 80 per cent of the total land access requirements for the final rail corridor. Should it be considered that all reasonable community consultation obligations and commercial options with affected landholders who are not satisfied to grant such access has been exhausted, an application under Section 141 of the Act for an investigators authority may be submitted. A draft application for a PIF investigators authority was lodged with the CGs office in July 2013, and the CG has since commenced consultation with the affected parties.

#### 20.3.2 Sustainable Planning Act 2009

The *Sustainable Planning Act 2009* (SP Act) is the principal planning legislation administered by the Queensland Government. SP Act seeks to achieve sustainable planning outcomes through management of the process by which development takes place, the effects of development on the environment and the coordination and integration of local, regional and state planning schemes and policies. Section 231(1) of SP Act identifies the relevant categories of development which include exempt development, self-assessable development, development requiring compliance assessment, assessable development or prohibited development.

Schedule 3 of the SP Act lists development that is 'assessable development'. Chapter 6 of the SP Act establishes an Integrated Development Assessment System (IDAS) under which 'assessable development' is assessed.

Under Part 3, Division 2 (7) of the SP Act, development is defined as any of the following:

- a. *Carrying out building work*
- b. *Carrying out plumbing or drainage work*
- c. *Carrying out operational work*
- d. *Reconfiguring a lot*
- e. *Making a material change of use of premises.*

Where the above activities are to be undertaken as part of the NGBR Project and are considered assessable development, a development permit will be required under the SP Act for that activity.

The aim of the SP Act is to achieve sustainable planning outcomes through:

- Managing the process by which development takes place
- Managing the effects of development on the environment
- Continuing the coordination and integration of local, regional and state planning.

The SP Act aims to coordinate all assessable development under other acts to minimise the legislative burden on regulatory agencies. The legislation managed under the SP Act is discussed in further detail in Section 20.4.

### **Community infrastructure designation**

The approval pathway for the NGBR Project may include a designation by the Minister for Transport and Main Roads or local government as a Community Infrastructure Designation (CID) in accordance with Chapter 5 of the SP Act. In order for this process to be undertaken, the development must satisfy a public benefit test and be defined as 'Community Infrastructure' within the *Sustainable Planning Regulation 2009* (Qld) (SP Regulation). Rail transport infrastructure has been defined as Community Infrastructure in Schedule 2 of the SP Regulation.

In designating land for community infrastructure under Section 200 of the SP Act, the Minister or local government must be satisfied that the community infrastructure will:

*(a) Facilitate the implementation of legislation and policies about environmental protection or ecological sustainability; or*

*(b) Facilitate the efficient allocation of resources; or*

*(c) Satisfy statutory requirements or budgetary commitments of the State or local government for the supply of community infrastructure; or*

*(d) Satisfy the community's expectations for the efficient and timely supply of the infrastructure.*

The CID assessment process would be supported by the EIS. If the NGBR Project is granted a CID, the development will not require approval under the local planning schemes regulating land use in the area nor need to meet any scheme requirements. Under Section 206 of the SP Act, the CID must be identified in the local planning scheme; and subsequently, land uses inconsistent with the CID will be prohibited through the provisions of the planning scheme. In general, this process facilitates the efficient provision of community infrastructure at the time work needs to commence. Notwithstanding, regulatory requirements continue to apply, including building and environmental management legislation. Where Adani does not submit an application for a CID, an alternative approval pathway may involve the submission of a development application for a material change of use for a railway activity under an SDA (refer to Section 20.3.1).

### **Material change of use under local planning scheme**

Alternatively, the NGBR Project may be approved as a 'material change of use' under a local planning scheme. Under the SP Act a material change of use refers to the start of a new and materially different activity on the premises or an increase in the scale and / or intensity of an existing use.

Applications for a material change of use are assessed against the relevant local planning schemes within the NGBR Project footprint and include the Whitsunday Regional Council regulated by the Bowen Shire Planning Scheme (2006) and the Isaac Regional Council area

regulated by the Belyando Shire Planning Scheme (2008). Further detail regarding the assessment of the NGBR Project against aspects of these planning documents is provided in Sections 20.7.5 and 20.7.6.

The requirements for material change of use applications are based on the relevant activities to be undertaken for a project and the associated planning scheme zoning for the affected areas.

The NGBR Project comprises a range of activities across multiple planning instruments, and therefore it is the preferred option to have the NGBR Project designated as a CID, SDA and/or PIF, which will coordinate and simplify matters associated with acquisition of contiguous land tenure, Native Title, development approvals and planning for consistent future development. Where one or more of these designations are not granted, approval will be sought under the relevant local planning schemes and will subsequently require several different applications for each component of the NGBR Project (generally on lot-by-lot basis). This approach will significantly increase the regulatory burden on the relevant assessment managers.

## 20.4 Legislation coordinated under the SP Act

The SP Act makes provisions for the governance of assessable development through the Integrated Development Assessment System. Schedule 3 of the SP Regulation includes provisions for IDAS to govern assessable development under a number of Queensland Acts, including:

- *Acquisition of Land Act 1967*
- *Building Act 1975*
- *Coastal Protection and Management Act 1995*
- *Environmental Protection Act 1994*
- *Fisheries Act 1994*
- *Land Act 1994*
- *Plumbing and Drainage Act 2002*
- *Queensland Heritage Act 1992*
- *Transport Infrastructure Act 1994*
- *Vegetation Management Act 1999*
- *Water Act 2000.*

All applications are required to be lodged through the State Assessment and Referral Agency (SARA) which will coordinate the referral of the application to other relevant agencies as required. SARA will comprise the single point of contact for proponents and will incorporate feedback from the relevant agencies in approval conditions.

### **Approval trigger**

Where the NGBR Project comprises code or impact assessable development defined under Part 3, Division 2 (7) of the SP Act, a development permit will be required.

### **Relevance to NGBR Project**

The activities associated with the NGBR Project are subject to development assessment under the SP Act; assessable development is likely to include a material change of use under the relevant local planning schemes (code or impact assessable), building works, reconfiguration of

a lot and operational works including excavating or filling that materially affects a premise or its use (bulk earthworks, road works) and clearing vegetation. Operational work that is the clearing of native vegetation is to be assessed against the purposes of the *Vegetation Management Act 1999* (refer Section 20.4.9).

#### 20.4.1 Acquisition of Land Act 1967

The *Acquisition of Land Act 1967* (AL Act) is concerned with the procedures by which land may be taken and the assessment of compensation subsequent to its taking. These arrangements allow for projects of significance to the community and economy to be delivered on land acquired, where necessary, by the State Government on the developer's behalf. This ensures that projects can be delivered with significantly reduced risks, whilst the interests of landholders are addressed through the checks and balanced enshrined in the statutory resumption process.

##### **Approval trigger**

Where the state recognises a project can benefit from the State's powers of land acquisition under the process prescribed in the *Acquisition of Land Act 1967*.

##### **Relevance to NGBR Project**

The NGBR Project will aim to acquire the land for the final rail corridor through voluntary acquisition. This relies on successful negotiations resulting in the private sale between Adani and landholders. Should acquisition by negotiated agreement not be possible Adani will seek the CG to invoke compulsory acquisition powers under the SDPWO Act via the AL Act.

#### 20.4.2 Building Act 1975 and Plumbing and Drainage Act 2002

The *Building Act 1975* (Building Act) and *Plumbing and Drainage Act 2002* (Plumbing and Drainage Act) classifies and regulates certain aspects of buildings and structures both of a commercial and or domestic nature. Under SP Act assessable building work or plumbing and drainage work is taken to be self-assessable development and will require a permit to be issued by a private building certifier. Various aspects of the NGBR Project will require approvals under these acts. These approvals will be associated aspects of buildings, structures or regulated plumbing and/or drainage within permanent or temporary premises to be established as part of the NGBR Project.

#### 20.4.3 Coastal Protection and Management Act 1995

The *Coastal Protection and Management Act 1995* (Coastal Act) provides for the protection, conservation, rehabilitation and management of the coast including its resources and biological diversity. The Coastal Act designates coastal management districts (CMDs) over certain coastal areas for various reasons including the occurrence of erosion prone areas, undeveloped areas and areas that may be subject to high impacts in the future. Section 70 of the Coastal Act designates statutory erosion prone areas within the coastal zone by reference to an erosion prone area plan. An erosion prone area is an area within the coastal zone that may be subject to erosion or tidal inundation and is normally subject to natural cycles of erosion and accretion of sand. Schedule 3 of the SP Regulation identifies works within tidal waters and reclamation of land within tidal waters as assessable development. Tidal water is defined as the sea and any part of a harbour, shoreline or watercourse ordinarily within the ebb and flow of the tide at spring tides. Tidal works are defined under the Coastal Act as works in, on or above land under tidal water, or land that would or may be under tidal water because of development on or near land. Prescribed tidal work is defined under Section 14 of the *Coastal Protection and Management*

*Regulation 2003* as tidal work that is completely or partly within a local government tidal area and includes integral parts of the structure that extends onto land above the high water mark.

Under the Coastal Act, the Chief Executive considering an application for tidal works must consider:

- Natural coastal, riverine and estuarine processes
- Natural topography and drainage of coastal land, including, for example, the integrity of dune systems and natural surface run-off
- Coastal wetlands and other coastal ecological systems, including, for example, the wildlife, biological diversity and water quality of the wetlands or systems. Coastal wetlands include tidal wetlands, estuaries, salt marshes, melaleuca or other coastal swamps, mangrove areas, marshes, lakes or minor coastal streams
- Places or objects that have cultural heritage, landscape, historical, anthropological, archaeological or aesthetic significance or value
- Public access to foreshore.

For the purposes of the Coastal Act, the coastal zone includes all landward features, ecological or natural processes or human activities that affect, or potentially affect, the coast or coastal resources.

The Coastal Act also makes provisions for the development of the *Queensland Coastal Plan*; this has been discussed in detail in Section 20.6.5.

### **Approval trigger**

Under the SP Regulation, operational works that are defined as tidal works, prescribed tidal works within tidal waters and operational works for filling and excavating within the declared coastal zone under the Coastal Act are assessable development. The construction of bridges (piles and abutments), culverts and other structures in tidal waters is classified as tidal work and must be assessed under the Coastal Act. All filling and excavation associated with the construction of the rail formation, bridges and/or culvert structures or other ancillary infrastructure within the declared erosion prone area is operational works and must be assessed under the Coastal Act.

### **Relevance to NGBR Project**

An application for tidal works or prescribed tidal works will be required for the NGBR Project where the construction is required within tidal waters.

An application for works within a CMD will be required for the NGBR Project where construction is required within a designated erosion prone area.

#### 20.4.4 Environmental Protection Act 1994

Part 2 of the *Environmental Protection Act 1994* (EP Act) describes the objective of the Act as:

- *To protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends (ecologically sustainable development).*

The EP Act utilises a number of mechanisms to achieve its objectives these include creating a 'general environmental duty', licencing of Environmentally Relevant Activities (ERAs) and issuing the Environmental Protection Policies (EPPs) and Regulations under the Act.

Section 319 of the EP Act conveys the general environmental duty, which states:

- *A person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm*

An ERA is defined under the EP Act as:

- *An agricultural ERA as defined in Section 75 of the EP Act*
- *A resource activity as defined in Section 107 of the EP Act*
- *An activity prescribed under Schedule 2 of the Environmental Protection Regulation 2008 (EP Reg) which includes:*
  - *Waste management*
  - *Water treatment services.*

The formation of Environmental Protection Policies (EPPs) under the EP Act is discussed later in this section.

### **Environmentally relevant activities**

ERAs are predominantly industrial activities which have potential to release contaminants to the environment. Section 19 of the EP Act makes provision that an ERA may be prescribed where the Governor in Council is satisfied that a contaminant will be released and cause harm to the environment when undertaking an activity.

The EP Act makes provisions for the registration of 'suitable operators' to undertake ERAs; a suitable operator is a person or corporation who has been registered by the Department of Environment and Heritage Protection (DEHP) as being suitable to carry out an ERA; an application for an environmental authority (EA) to carry out an ERA will not be approved unless the proponent is registered as a suitable operator.

Schedule 2 of the EP Regulation identifies ERAs and details the applicable thresholds and aggregate environmental scores (AES).

There are two levels of ERAs, namely:

- ERAs with an AES, which are considered to present a higher environmental risk
- ERAs without an AES, which are considered to present a lower environmental risk.

Different annual fees apply to each ERA and vary depending on the type of ERA and the individual threshold or the intensity of the ERA.

### **Approval requirements for ERAs**

The EP Act provides for a single, staged EA process for all ERAs. Under the EP Act, a proponent must make a single application for an EA which covers all relevant activities that form an ERA project. An ERA project is defined in the EP Act as all prescribed ERAs carried out, or proposed to be carried out, as a single integrated operation.

In March 2013, the *Environmental Protection (Greentape Reduction) and Other Legislation Amendment Act 2012* (the Greentape Reduction Act) was enacted primarily as an amendment to the licensing framework under the EP Act. The Greentape Reduction Act introduced a staged application process for EAs for all ERAs. The stages are generally as outlined below:

- Application stage—where the application will be validated as properly made



- Information stage—where the information contained in the application will be assessed to enable the administering authority to decide the application and where further information may be requested from the applicant
- Notification stage—where the application documents will be made available for the public to make submissions
- Decision stage—where a decision is made to approve with conditions or refuse the application, including the Land Court process for applications relating to a mining lease
- Post-decision dealings—where processes such as amending, amalgamating, suspending and cancelling an environmental authority are dealt with.

Not all ERA applications are subject to all stages outlined above. Depending on the level of risk of the relevant activity, the application for the ERA may undergo only the application and decision stage with an approval being granted subject to standard conditions.

An application for an EA will be one of the following types.

- Standard application
- Variation application
- Site-specific application.

A standard application is made where an ERA project is subject to the eligibility criteria and standard conditions for component ERAs. A variation application is made where the component ERAs are compliant with the eligibility criteria but the proposed ERA seeks to change the standard conditions. A site-specific application is made where the component ERAs are noncompliant with the eligibility criteria. A standard application may be lodged where the proposed ERA can meet both the eligibility criteria and standard conditions prescribed for the activity. Where the eligibility criteria can be met for an eligible ERA, but a change is required to one or more of the standard conditions based on operational needs, a variation application must be lodged. Where the eligibility criteria cannot be met, a site-specific application must be lodged with DEHP which outlines detailed information regarding the proposed activity and the potential environmental impacts which may occur as a result of the activity.

Table 20-1 outlines the ERAs likely to be required for the NGBR Project based on the NGBR Project description (Volume 2 Appendix B Revised project description). The table indicates which ERAs will be subject to a standard application.

Table 20-1 Schedule 2 ERAs

ERA	Trigger / threshold	NGBR Project activities
16 Extractive and screening activities	Extracting, other than by dredging, a total of 5,000 tonnes or more of material, in a year, from an area or screening 5,000 tonnes or more of material in a year. Subject to a standard application.	Quarries and borrow pits located along alignment
63 Sewage treatment	Operating 1 or more sewage treatment works at a site that has a total daily peak design capacity of at least 21	Sewage treatment plants at construction camps, laydown areas and rolling stock depot.

ERA	Trigger / threshold	NGBR Project activities
	equivalent persons (EP). Subject to a standard application.	
64 Water treatment	Treating 10 ML or more raw water in a day. Carrying out, in a day, advanced treatment (i.e. treatment of water that has been treated in a sewage treatment plant) of 5 ML or more of water, allowing the release of waste to the environment.	Treatment of raw water (harvested from surface or groundwater) for use as potable water.

### Contaminated land

Activities with the potential to cause land contamination are listed as 'notifiable activities' under Schedule 3 of the EP Act. Under Section 371 of the EP Act, the owner or occupier of the land on which a 'notifiable activity' takes place must notify DEHP of the activity within 22 business days of becoming aware of the activity. Land on which a notifiable activity has taken place is recorded in the Environmental Management Register (EMR). Furthermore, land is recorded in the Contaminated Land Register (CLR) when scientific investigation proves it is contaminated and action must be taken to remediate or manage the land. Actions associated with land on the CLR may include measures to prevent migration of contaminants or removal of contaminants and off-site treatment. Under Section 424 of the EP Act, a proponent must have a disposal permit to remove, treat or dispose of soil on the EMR or CLR. Both the EMR and CLR are administered by DEHP.

### Approval trigger

Where the NGBR Project activities proposed comprise an ERA under the EP Act, an environmental authority will be required to undertake the relevant activities.

Where development occurs on a property listed on the EMR or CLR, supporting information associated with any material change of use for sensitive land use activities will be required to demonstrate that the land is either not contaminated, can be remediated to enable the proposed use to occur with limited risk through a site management plan, or the new development is not located in the vicinity of potential contamination.

### Relevance to NGBR Project

The NGBR Project proposes several activities deemed to be ERAs and will therefore require an EA prior to commencement of any activities.

An assessment of potential contaminated land relevant to the NGBR Project is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 5 Topography, geology, soils and land contamination, including a comprehensive search of the EMR / CLR. Additionally, the outcomes of a preliminary site contamination assessment will provide an indication on the likely level of contamination over the relevant site and propose any remediation required.

Where remediation requires the removal of contaminated soil from the site, a disposal permit will be required. The disposal permit will outline the amount of soil to be removed, how it is to be

transported, treated (where applicable) and how it must be disposed of in a licensed/approved facility.

#### 20.4.5 Fisheries Act 1994

The purpose of the *Fisheries Act 1994* (Fisheries Act), is to provide for the use, conservation and enhancement of the community's fisheries resources and fish habitats. The Fisheries Act and the *Fisheries Regulation 2008* (Fisheries Regulation) are administered by the Department of Agriculture, Fisheries and Forestry (DAFF) and provide for the management, use, development and protection of fisheries resources and fish habitats and the management of aquaculture activities. The Act's objective is to provide for the use, conservation and enhancement of the community's fisheries resources and fish habitats through the application of the principles of ecologically sustainable development. If a polluting matter is likely to affect fisheries resources or a fish habitat, the Chief Executive of DAFF may issue a notice to restore fish habitat requiring the responsible person to take action to manage the situation.

The SP Regulation assigns the Chief Executive administering the *Fisheries Act 1994 (Qld)* as the assessment manager for fisheries development in certain situations.

#### Approval trigger

The following activities require approval under the Fisheries Act through the SP Regulation:

- Removal, destruction or damage of marine plants
- Building or operational works in a declared fish habitat area
- Aquaculture in tidal water, marine and freshwater
- Waterway barrier works.

#### Relevance to NGBR Project

The NGBR Project will entail construction of waterway crossings that are likely to trigger an operational works permit for constructing or raising waterway barrier works along 16 major waterways. The NGBR Project crosses an approximate total of 459 waterways, including minor waterways and overland flow paths. Potential changes to water quality as a result of the NGBR Project could affect fisheries resources and fish habitats protected by the Fisheries Act.

Additionally, the NGBR Project may require the removal of marine plants (i.e. mangroves) during the construction of waterway crossings or at other points along the final rail corridor. Marine plants have been identified within coastal waterways crossed by the final rail corridor and will have the potential to be disturbed during the construction of drainage or bridge structures in these areas (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 6 Nature conservation).

#### 20.4.6 Land Act 1994

The objective of the *Land Act 1994* (Land Act) is for land administered under the Act to be managed for the benefit of the people of Queensland on the basis of the following seven principles: sustainability, evaluation, development, community purpose, protection, consultation and administration.

The application process for reconfiguring a lot is administered under the IDAS process of the SP Act, the ability to create new titles and subdivide these titles is provided for under the Land Act. An application under the Land Act is also required for temporary or permanent closure of a road that is not a State-controlled road.

**Approval trigger**

The following activities require approval under the Land Act:

- Subdivision of land otherwise known as reconfiguring a lot
- Changes of tenure
- Leasing of tenure
- Temporary or permanent road closure not involving a State-controlled road.

**Relevance to NGBR Project**

Relevant provisions of the Land Act will be applicable in dealings related to obtaining new tenure over or reconfiguring parcels of land required for establishment of the final rail corridor or associated ancillary infrastructure required as part of the NGBR Project.

Temporary or permanent closure of local roads may be required for establishment of site access roads, in which case an application under the Land Act will be required.

**20.4.7 Queensland Heritage Act 1992**

The *Queensland Heritage Act 1992* (QH Act) is the principal legislation protecting non-Indigenous cultural heritage in Queensland. The QH Act establishes the Queensland Heritage Council, which administers the Queensland Heritage Register and various local heritage registers.

To be entered as a State Heritage Place in the Queensland Heritage Register, a place or item must satisfy one or more of the following criteria listed under Section 35 of the QH Act:

- a. *The place is important in demonstrating the evolution or pattern of Queensland's history.*
- b. *The place demonstrates rare, uncommon or endangered aspects of Queensland's cultural heritage.*
- c. *The place has potential to yield information that will contribute to an understanding of Queensland's history.*
- d. *The place is important in demonstrating the principal characteristics of a particular class of cultural places.*
- e. *The place is important because of its aesthetic significance.*
- f. *The place is important in demonstrating a high degree of creative or technical achievement at a particular period.*
- g. *The place has a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.*
- h. *The place has a special association with the life or work of a particular person, group or organisation of importance in Queensland's history.*

**Approval trigger**

Under the QH Act, penalties can apply for damage caused to places or items on the Queensland Heritage Register or a local heritage register. Additional protection may be provided through local planning schemes.

### Relevance to NGBR Project

An assessment of any existing heritage listed places along the NGBR Project alignment has been undertaken (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 15 Cultural heritage).

The National Heritage List and Commonwealth Heritage List did not contain any non-Indigenous heritage places relevant to the study area. Furthermore, a search of the Queensland Heritage Register did not identify any non-Indigenous heritage places within the proposed NGBR Project footprint. The specific requirements relating to the management and mitigation of unearthing an item or place of heritage significance is detailed in the cultural heritage management plans prepared for the NGBR Project. In the event that an archaeological artefact is unearthed during excavation works DEHP are required to be notified as per Part 9, Item 89 of the QH Act.

The NGBR Project footprint is unlikely to impact any known places of non-Indigenous heritage value and there is low potential for previously unidentified non-Indigenous heritage places to be impacted.

#### 20.4.8 Transport Infrastructure Act 1994

The objective of the *Transport Infrastructure Act 1994* (TI Act) is to provide a regime that allows for and encourages effective integrated planning and efficient management of a system of transport infrastructure. In respect to roads, Section 2 (b) states that the TI Act established a regime under which:

- (i) A system of roads of national and State significance can be effectively planned and efficiently managed, and*
- (ii) Influence can be exercised over the total road network in a way that contributes to overall transport efficiency, and*
- (iii) Account is taken of the need to provide adequate levels of safety, and community access to the road network, and*
- (iv) Impacts on development from environmental emissions generated by State-controlled roads are addressed by the development.*

Pursuant to Section 2(d), the objectives of the TI Act with regard to rail are to establish a regime that:

- (i) Contributes to overall transport effectiveness and efficiency*
- (ii) Provides for the safety of railways and persons at, on or near railways*
- (iii) Contributes to lower transport costs by allowing the maximum flexibility in rail transport operations consistent with achieving safety objectives*
- (iv) Allows railway managers and operators to make decisions on a commercial basis.*

As such the TI Act facilitates the development of new road and rail corridors of state significance. This includes granting of leases over rail or road transport tenure to other parties to manage transport systems in accordance with the TI Act.

Under Section 46 of the TI Act, approval is required to conduct works within the corridor of a State-controlled road. Interruption to traffic flow on a State-controlled road would also require a traffic control permit. Prior to applying for a traffic control permit, the applicant will be required to obtain a road corridor permit which grants the user permission to access the State-controlled road to undertake relevant activities.

Additionally, the TI Act establishes the regime under which port authorities plan for the future development of strategic port land. Specifically, provisions confirm that port authorities are the assessment manager for all assessable development under the SP Act on strategic port land and that land use plans are required by all port authorities as the principal tool for development assessment. Strategic port land at the Port of Abbot Point can only be utilised for port related functions. All land identified as strategic port land is not subject to local government planning schemes.

The Port of Abbot Point comprises strategic port land and any development within this area is therefore assessable under the *Port of Abbot Point Land Use Plan (2010)* (refer Section 20.7.2).

### **Approval trigger**

Permanent or temporary works, including the widening of a State-controlled road corridor will trigger an approval under the TI Act. This may also include the temporary closure resulting in interference to traffic flows.

Similarly, the interference of existing rail corridors for the permanent or temporary works will also trigger an approval under the TI Act.

### **Relevance to NGBR Project**

The NGBR Project intersects four State-controlled roads; crossing treatments comprise either at grade, road over rail or road under rail configurations. Where construction of the treatments will result in the interference of traffic flows along State-controlled roads, a permit to undertake works in accordance with the TI Act will be required.

The NGBR Project involves works within existing rail corridor land as defined by the TI Act. In particular the NGBR Project crosses the existing North Coast Line, where it is part of the Queensland Rail network and the existing Abbot Point branch line which is part of the Newlands system where it is part of the Aurizon network. Approval will be required to undertake these works in accordance with the TI Act.

As part of the acquisition of land process for the NGBR corridor, it is possible that lands acquired by Adani for rail or road corridor purposes, will be surrendered to the State. This land would then be administered under the TI Act whereby a lease may be granted back to Adani to manage the new rail system in accordance with the TI Act.

#### **20.4.9 Vegetation Management Act 1999**

The *Vegetation Management Act 1999* (VM Act) in conjunction with the SP Act, regulates the clearing of native vegetation, excluding grasses and mangroves (which are administered under the *Nature Conservation Act 1992* and *Fisheries Act 1994*, respectively). Under the SP Regulation, operational work that is the clearing of native vegetation is to be assessed against the purposes of the VM Act.

Any clearing of native vegetation for the NGBR Project is assessed against the relevant bioregional state code within Module 8 of the State development assessment provisions (DSDIP 2013e).

The type of vegetation clearing application required is dependent on the nature of vegetation to be cleared. The Department of Natural Resources and Mines administers mapping of regulated vegetation with the following categories:

- Category A – areas subject to compliance notices, offsets and voluntary declarations

- Category B – remnant vegetation
- Category C – high-value regrowth vegetation
- Category R – regrowth vegetation within 50 m of a watercourse in priority catchments
- Category X – areas not regulated under the VM Act.

Vegetation clearing applications are only assessable where the clearing is for a relevant purpose identified in Section 22A of the VM Act. The NGBR Project has been declared a coordinated project under the SDPWO Act and therefore may be considered a relevant purpose under the VM Act. The required development application for clearing of native vegetation will be assessed against the policy for vegetation management offsets, which forms Appendix A of the State development assessment provisions (DSDIP 2013e; refer Section 20.6.3)..

### Approval trigger

Under the VM Act, all remnant vegetation and high value regrowth (including endangered, of concern and least concern REs) and all native vegetation on State land (regardless of conservation status) is protected. Clearing of vegetation on State land is also listed as assessable development under the SP Regulation. Any clearing of native vegetation (except grasses and mangroves) will require a development permit under the VM Act.

### Relevance to NGBR Project

The NGBR Project will require removal of approximately 2,571 ha of remnant vegetation within the NGBR Project footprint containing a nominal 100 m final rail corridor as well as ancillary infrastructure areas. This area of vegetation clearing includes approximately 145 ha of endangered REs, 210 ha of of-concern REs, and 2,216 ha of least concern REs. Vegetation clearing permits will be required prior to any clearing activities.

Pursuant to the VM Act, Division 6, Section 21 (3) – if the Chief Executive is a concurrence agency for the application, a Property Vegetation Management Plan (PVMP) must be provided by the applicant. For a PVMP to be lodged it will be necessary for a site visit to take place in order to validate the extent of mapped remnant vegetation and where required, prepare a Property Map of Assessable Vegetation (PMAV). Any PMAV prepared for the NGBR Project will be submitted to the Department of Natural Resources and Mines for certification. Any mapping errors or inaccurate mapping data within Departmental mapping of regulated vegetation will be resolved through this process. The PVMP and PMAV will be submitted for the NGBR Project as part of the operational works application for clearing of native vegetation.

Confirmation will be sought from the Chief Executive as to whether the NGBR Project is considered a relevant purpose under Section 22A of the VM Act.

#### 20.4.10 Water Act 2000

The *Water Act 2000* (Water Act) controls the allocation and sustainable management of water resources in Queensland. The department administering the Water Act controls access to water through a system of water authorisations, including water licences, water permits, water allocations and interim water allocations. These authorisations allow the holder to take or interfere with water. Water permits would typically be used where water supply activities have a reasonably foreseeable conclusion date, such as water supply activities for construction. Riverine protection permits may also be required under the Water Act to excavate or place fill in a watercourse, lake or spring. Watercourses are defined under Section 5 of the Water Act, whereas lake and spring are defined under Schedule 4 of the Water Act.

In Queensland, regulated Groundwater Management Areas (GMAs), which is a general term used to include declared artesian and subartesian groundwater management areas, have been established to protect groundwater resources. The water resources in these GMAs are subject to management and are either established through a Water Resource Plan (WRP), a Local Water Management Policy or as defined by Schedule 11 of the *Water Regulation 2002* (the *Water Regulation 2002* is considered separately below).

The Water Act prescribes a water resource planning process by which WRPs are made. A WRP is a framework to balance water in a catchment between human consumptive use and environmental needs. Water resource plans are implemented through resource operations plans (ROPs), which define the WRP area, the water resources of that area, distribution to users, water allocations, infrastructure operating rules, environmental flows, water trading rules, performance monitoring, (DERM 2012) and the process for making unallocated water available (DERM 2010a).

### **Water Resource (Burdekin Basin) Plan 2007**

The Water Resource (Burdekin Basin) Plan 2007 applies to the segment of the NGBR Project situated within the Burdekin Basin. The purpose of the Water Resource (Burdekin Basin) Plan 2007 is as follows:

- To define the availability of water in the plan area
- To provide a framework for sustainably managing water and the taking of water
- To identify priorities and mechanisms for dealing with future water requirements
- To provide a framework for establishing water allocations
- To provide a framework for reversing, where practicable, degradation that has occurred in natural ecosystems
- To regulate the taking of overland flow water.

The Water Resource (Burdekin Basin) Plan 2007 applies to the following:

- Water in a watercourse or lake
- Water in springs
- Overland flow water.

The Burdekin Resource Operations Plan 2009 implements the provisions made by the Water Resource (Burdekin Basin) Plan 2007 by specifying rules and operational requirements for managing surface water resources in:

- The Burdekin Haughton and Bowen Broken water supply schemes
- The lower Burdekin, Haughton and Bowen River water management areas
- Other areas within the Burdekin Basin.

The Burdekin Resource Operations Plan 2009 sets out rules that guide supplemented water management in the two water supply schemes, flow access rules and volumetric limits for un-supplemented water, and how water allocations can be traded and changed in other ways. The Burdekin Resource Operations Plan 2009 also implements strategies to support a range of ecological outcomes and the water and ecosystem monitoring requirements that will be used to assess the effectiveness of the implemented *Water Resource (Burdekin Basin) Plan 2007*.



## Water Regulation 2002

The *Water Regulation 2002* is subordinate to the *Water Act* and defines subartesian GMAs. It also details the purpose of use (such as stock / domestic use) that do not require authorisation to take water and, by omission, those purposes that do require authorisation.

### Highlands declared subartesian area

From its southern extent to the Suttor River crossing, the NGBR Project final rail corridor lies within the Highlands Subartesian Area, as defined under Schedule 11 of the *Water Regulation 2002*. Within the Highlands Subartesian Area, water licenses and/or development permits are not required for stock or domestic bores and generally, development permits are not required for groundwater monitoring bores. Other groundwater-related activities, such as drilling of test pumping bores, and undertaking pumping tests, require permits from Department of Natural Resources and Mines, as well as a development permit for drilling and construction of water bores.

Long-term extraction of groundwater or interference (whether actively or passively) with surface water or other groundwater sources requires authorisation by way of a licence. The SP Act provides the mechanism (through IDAS), via which assessment of a proposed development is undertaken, and under which a development permit is granted.

### Undeclared areas

From the Suttor River crossing to the Bruce Highway, approximately 13 km southwest of Abbot Point, there are no identified GMAs.

### Bowen declared subartesian area

From the Bruce Highway, approximately 13 km southwest of Abbot Point, to the Abbot Point Coal Terminal, the NGBR Project final rail corridor lies within the Bowen Subartesian Area, as defined under Schedule 11 of the *Water Regulation 2002*. Water licenses and/or development permit requirements within the Bowen Subartesian Area are as per the Highlands Subartesian Area, discussed previously.

## Approval trigger

A water licence under Part 6 of the *Water Act* will be required where overland water flow will be disturbed by the construction of the final rail corridor.

A riverine protection permit may be required where disturbance to the bed and banks of any freshwater streams is proposed and the disturbance is not related to any of the following:

- Self-assessable development under the SP Act (refer to Section 20.3.2)
- Other development permits for prescribed assessable development issued under SP Act
- Another licences or permits have been obtained under the *Water Act*.

Additionally, where drainage lines along the alignment are determined as watercourses under the *Water Act*, relevant permits will be required where it is proposed to excavate or place fill in a watercourse, lake or spring under Section 266 of the *Water Act*.

## Relevance to NGBR Project

Several watercourses and drainage lines are crossed by the NGBR Project final rail corridor. Depending on the nature of the relevant watercourse, suitable crossing treatments are proposed including a range of engineered culverts and bridges.

The construction of these bridges may require an approval for riverine protection permits for any vegetation clearing within the high banks of the watercourse (where not associated with self-assessable development under the SP Act), water licences for interference with the watercourse and permits for temporary placement of fill / excavation within the watercourse during construction. Section 814(2)(a)(i) of the Water Act precludes the requirement for separate permits to be obtained for these activities where they are permitted or required, or happens as a necessary and unavoidable part of some other activity that is permitted or required under:

- A licence, permit or other authority under another section of the Water Act, or
- A development permit for prescribed assessable development.

The holder of an environmental authority (for a resource activity) may be exempt from requiring a riverine protection permit, providing the minimum requirements can be met under the riverine protection permit exemption requirements (DNRM 2013a). Although Adani is the holder of an environmental authority (for a resource activity), this exemption is unlikely to apply to the NGBR Project given that the environmental authority does not apply to the land to be developed for the NGBR Project.

The NGBR Project will require development approvals for operational works where crossings of watercourses are required. In this regard, it is likely that referral to the Chief Executive administering the Water Act will be required and specific licences for taking or interfering with water from a watercourse, lake or spring will apply to the NGBR Project for the purposes of water supply, primarily during construction.

Smaller drainage lines are to be re-directed with longitudinal drainage lines along the NGBR Project final rail corridor. A water licence will be required for the proposed interference of a watercourse determined by an authorised officer in accordance with the Water Act.

A construction water supply strategy was included in the NGBR Project EIS at Volume 2 Appendix H3. Potentially suitable water sources will continue to be refined during detailed design. Activities related to construction water supply with approval requirements include:

- Establishment of groundwater bores
- Establishment of new water storages
- Extraction from existing surface water storages

Water permits may be required for construction water supply. A water permit is specific to a particular use. As such, separate water permits would be required to extract groundwater from a bore or surface water from an existing storage. Water permits for the take of water will be required to meet the requirements of any relevant WRP – notably the Water Resources (Burdekin Basin) Plan for the segment of the NGBR Project within the Burdekin Basin. The Department of Natural Resources and Mines may request additional information to support an application for a water permit, such as an analysis of possible drawdown impacts to surrounding water users or groundwater dependent ecosystems.

A development permit under the SP Act (refer Section 20.3.2) may be required for works to take water, such as groundwater bores, in-stream storages, pump stations and pipes. Prior to submission of a development application, Adani will seek permission from relevant landholders prior to submitting an application for a development permit. A riverine protection permit would also be required for the establishment of any in-stream storage.

It is noted that groundwater bores in an undeclared area do not formally require a water permit or development permit. Controls are in place for the taking of water without a water entitlement,

including the Minimum construction requirements for water bores in Australia (National Uniform Drillers Licensing Committee 2012), and any requests for information from the Department of Natural Resources and Mines.

Under the Water Resource (Burdekin Basin) Plan 2007, water storages that are for collecting overland flow and are less than 250 ML are self-assessable, providing they comply with the 'Code for self-assessable development for taking overland flow water using limited capacity works' (State of Queensland 2011). A water permit and development permit will be required where such storages exceed 250 ML.

## 20.5 Other applicable legislation

### 20.5.1 Aboriginal Cultural Heritage Act 2003 (Qld)

The *Aboriginal Cultural Heritage Act 2003* (ACH Act) regulates the management and protection of Aboriginal cultural heritage. The ACH Act imposes a 'duty of care' on the proponent of a development to take all reasonable and practicable measures to ensure they do not harm or, to the extent that harm cannot be avoided, minimise harm to Aboriginal cultural heritage. This applies whether or not such places are recorded in the Department of Aboriginal and Torres Strait Islanders and Multicultural Affairs (DATSIMA) Cultural Heritage Database and Register. Under Part 7 of the ACH Act, a cultural heritage management plan is required as part of an EIS.

#### **Approval trigger**

Section 87 of the ACH Act requires that a cultural heritage management plan be developed where an EIS is required for the NGBR Project.

#### **Relevance to NGBR Project**

An Indigenous cultural heritage assessment was undertaken for the NGBR Project (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 15 Cultural heritage). The NGBR Project falls within the Native Title claim areas of the following Indigenous groups:

- Juru People (QC10/5 - QUD554/10)
- Juru People #2 (QC12/1 - QUD0007/12)
- Birri People (QC98/12 - QUD6244/98)
- Jangga People (QC98/10 PRC - QUD6230/98; QC98/10 DET - QUD6230/98).

It should be noted that a small section in the south of the study area traverses an unclaimed area (with respect to registered Native Title claim determination areas). Potential Indigenous cultural heritage of significance within this unclaimed area has been discussed with the neighbouring Jangga People due to the proximity of the area to that Traditional Owner group's registered Native Title claim determination area.

A separate, parallel assessment of the occurrence of and extent of Aboriginal cultural heritage items and places will be undertaken and cultural heritage management plans prepared. Consultation with relevant Aboriginal parties and development of cultural heritage management plans for the NGBR Project is currently being undertaken by Adani.

### 20.5.2 Clean Energy Act 2011 (Cth)

A Carbon Pricing Mechanism under the *Clean Energy Act 2011* took effect on 1 July 2012 and established a mechanism to set a price on carbon emissions, which is commonly referred to as the Carbon Tax. The Carbon Tax applies to entities with operational control over facilities that emit in excess of 25,000 tonnes of carbon dioxide equivalent (CO<sub>2</sub>-e) per financial year. Liable entities are required to surrender an equivalent number of carbon units as their Scope 1 emissions. This carbon price has been initially set at \$23 during the 2012-13 financial year, \$24.15 during 2013-14, and \$24.50 during 2014-15. From 1 July 2015 the carbon price will be determined by a market-based emissions trading scheme.

### 20.5.3 Disaster Management Act 2003 (Qld)

One of the main objectives of the *Disaster Management Act 2003* is to mitigate the potential adverse effects of an event. This is achieved primarily by establishing disaster management groups and plans for the State, disaster districts and local government areas. The regional study area of the NGBR Project complies with the Act through the provision of the Mackay District Disaster Management Plan (Department of Community Safety 2011) and Local Disaster Management Plans from Isaac Regional Council (Isaac Regional Council 2012) and Whitsunday Regional Council (Whitsunday Regional Council 2010). An NGBR Project specific emergency management plan will be developed in consultation with the relevant disaster management planning groups and state/local government agencies.

### 20.5.4 Energy Efficiency Opportunities Act 2006 (Cth)

The Energy Efficiency Opportunities program requires businesses to identify, evaluate and publicly report cost effective energy saving opportunities. Participation in Energy Efficiency Opportunities is mandatory for corporations that use more than 0.5 PJ of energy per year.

Should the NGBR Project operations surpass this threshold, it will be mandatory to report under the Energy Efficiency Opportunities program. Participation will need to be assessed based on actual energy consumption to determine the first year the threshold is exceeded.

### 20.5.5 Explosives Act 1999 (Qld)

Explosives in Queensland are controlled through the *Explosives Act 1999* (Explosives Act) and the *Explosives Regulation 2003*. The Queensland Government regulates who may make, own, use, store, transport and dispose of explosives through a dedicated explosives inventory.

#### **Approval trigger**

Where an entity requires the transport, storage or use of regulated explosives, relevant permits are required for the activities.

#### **Relevance to NGBR Project**

The NGBR Project may require the use of regulated explosives during the construction of the final rail corridor, particularly in areas of difficult terrain where significant cutting is required via blasting. Permits will be required for the storage, transport and use of these explosives under the Explosives Act.

### 20.5.6 Forestry Act 1959 (Qld)

The purpose of the *Forestry Act 1959* is to provide for forest reservations, the management, silvicultural treatment and protection of State forests, and the sale and disposal of forest

products and quarry material, the property of the State forests, timber reserves and on other lands; and for other purposes.

All forest products and quarry materials on all State lands are the property of the State. In accordance with Section 45 of the Forestry Act, all forest products or quarry material on land that is under a lease or other entitlement granted is also the property of the State.

### **Relevance to NGBR Project**

A sales permit will be required to take and use State owned forest products and quarry material as defined in the *Forestry Act 1959*. Native title will need to be adequately addressed prior to the issue of a sales permit, where applicable (refer Section 20.5.10).

#### 20.5.7 Land Protection (Pest and Stock Route Management) Act 2002 (Qld)

The *Land Protection (Pest and Stock Route Management) Act 2002* provides the framework for the management of pest species and the management of Queensland's stock route network. Under the Act, certain declared pest species carry a responsibility for owners of land where those species are present.

Under the *Land Protection (Pest and Stock Route Management) Act 2002*, the management of the State stock route network is shared between the State government and local government. Local governments are responsible for day-to-day administration and management as well as network maintenance, while the Department of Natural Resources and Mines is responsible for providing policy and legislative advice, operational guidelines, and compliance support, reviewing decisions, managing asset maintenance, and training local government stock route officers (DNRM, 2013).

A stock route is defined as a road reserve or road corridor, generally in the width of 60 – 1,600 m that is used for the purposes of walking or stock grazing. Stock routes do not have a separate title or tenure as does a road reserve. Once a stock route's declaration is removed it remains a road but is no longer named a stock route (DERM, 2010). Stock routes are managed by the relevant local governments over which they traverse.

### **Approval trigger**

Where the activities associated with a project have the potential to introduce or exacerbate the spread of weeds and pests, a specific weed and pest management plan may be required for the project. This plan will outline how the proponent will seek to manage the spread or introduction of weeds and pests during the life of the project.

Where a project impacts on existing stock routes, negotiations with the relevant state / local regulatory authority will be required in conjunction with affected stakeholders to determine the requirements for appropriate crossings and other relevant infrastructure.

### **Relevance to NGBR Project**

The ecological assessment (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 6 Nature conservation) undertaken for the NGBR Project identified a number of declared pest species. A weed and pest management plan will be developed for the NGBR Project and implemented throughout the construction and operations phase.

The NGBR Project will have an impact upon nine gazetted stock routes. Where the NGBR Project intersects these stock route networks, mitigation and management measures will be

developed in consultation with relevant State and local government agencies to protect its inherent values and to ensure it is available to serve its intended purpose.

#### 20.5.8 Local Government Act 2009 (Qld)

The purpose of the *Local Government Act 2009* (LG Act) is to provide for:

- The way in which a local government is constituted and the nature and extent of its responsibilities and powers
- A system of local government in Queensland that is accountable, effective, efficient and sustainable.

The LG Act empowers local governments to make local laws that are suitable to their particular needs and resources, and that achieve the purpose and principles of Local government, without unnecessary administrative red tape. Local laws are created under Chapter 3 of the LG Act.

The NGBR Project is located within two local government areas, namely the Whitsunday Regional Council and the Isaac Regional Council.

The following local laws are applicable to the NGBR Project:

##### **Whitsunday Regional Council**

- Local Government Facilities and Areas Local Law 2011
- Nuisances and Pests Local Law 2011
- Roads Local Law 2011.

##### **Isaac Regional Council**

- Local Law No. 3 (Community and Environmental Management) 2011
- Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2011.

#### 20.5.9 National Greenhouse and Energy Reporting Act 2007 (Cth)

The *National Greenhouse and Energy Reporting Act 2007* (NGER Act) establishes the National Greenhouse and Energy Reporting Scheme under which liable entities are required to report on their greenhouse gas (GHG) emissions. The *National Greenhouse and Energy Reporting Regulations 2008* provide details that enable compliance with National Greenhouse and Energy Reporting Scheme, including the content of the reports that are to be provided. The Regulations also provide information that enables an entity to determine if it is liable to report under National Greenhouse and Energy Reporting Scheme. Liable entities report on their GHG emissions using the methods provided in the National Greenhouse and Energy Reporting (Measurement) Determination 2008.

##### **Approval trigger**

Under the NGER Act, companies with GHG emissions, energy use, or energy consumption greater than specified thresholds are obliged to report their emissions, energy use and energy production.

##### **Relevance to NGBR Project**

GHG emissions associated with the NGBR Project may need to be reported under National Greenhouse and Energy Reporting Scheme; a detailed assessment of GHG emissions associated with the NGBR Project is provided in Volume 1 Chapter 11 Greenhouse gas.

#### 20.5.10 Native Title (Queensland) Act 1993 (Qld)

The purpose of the *Native Title (Queensland) Act 1993* is to validate past acts of the Queensland government in response to the recognition of Native Title by the High Court of Australia in 1992. For example, under Section 17 of the Act, the ownership of natural resources by the Queensland government is validated.

Native Title claims and determinations and ILUAs are controlled under the *Native Title Act 1993 (Cth)* (refer to Section 20.3.1). A Native Title assessment of the NGBR Project is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 15 Cultural heritage.

#### 20.5.11 Nature Conservation Act 1992 (Qld)

The *Nature Conservation Act 1992 (NC Act)* is the framework for the establishment and management of protected areas, native flora and native fauna. In accordance with the definitions sets out in Part 5, Division 2 of the NC Act, wildlife, including native flora and fauna, may be prescribed under the NC Act as extinct in the wild, endangered, vulnerable, near threatened or least concern – all of which are considered protected wildlife. To ‘take’ native flora and fauna has a broad meaning under the NC Act, which includes removal, injury or destruction. Under Section 62 of the NC Act, a person must not take, use, keep or interfere with a cultural or natural resource of a protected area, including protected flora and fauna. Furthermore it is an offence under Sections 88 and 89 of the NC Act to take protected flora and fauna that are outside of a protected area, without a licence, permit or other authority.

The NC Act allows for the preparation of conservation plans at the discretion of the Minister administering the NC Act, or where a person applies for a licence to take or use protected flora and fauna. The NC Act allows for protected animals to be taken in accordance with conservation plans. A conservation plan made under the NC Act may prescribe offences and the use or development of land and activities in an area identified under the plan as, or including, a critical habitat or an area of major interest.

Under Section 332 of the *Nature Conservation (Wildlife Management) Regulation 2006* an activity that will ‘tamper’ with the confirmed breeding place of a protected animal must be undertaken in accordance with an approved species management program. To tamper under the Regulation means to damage, destroy, mark, move or dig up. The *Nature Conservation (Wildlife Management) Regulation 2006* also controls the granting of damage mitigation permits where an animal:

- a. Is causing, or may cause, damage to property, or
- b. Represents a threat to human health or wellbeing.

#### **Approval trigger**

Any activity that may have, or may have the potential to, impact on wildlife or its values in an area, may be seen as a threatening process and may require an application under the NC Act commensurate or subsequent to the development approval process (applications under the NC Act are outside of the IDAS process). In particular, the effect of the NGBR Project on endangered, vulnerable, or rare wildlife, or the habitat on which that wildlife depends, will be considered with regard to the obligations under Section 73 of the NC Act.

Under Section 89 of the NC Act, a licence, permit or authority (issued under the NC Act), or an exemption, is required to ‘take’ protected plants.

Under the NC Act, a flora survey must be undertaken prior to clearing in a 'high risk' area. Trigger maps of high risk areas are administered by the Department of Environment and Heritage Protection. Surveys within a 'high risk' area must be undertaken in accordance with the relevant flora survey guidelines (State of Queensland 2014b). A clearing permit is required for any endangered, vulnerable or near threatened plants identified either by a flora survey under the NC Act, or if a person otherwise becomes aware of their presence outside a high risk area.

#### **Relevance to NGBR Project**

The NGBR Project requires the clearing of areas of vegetation protected under the NC Act. Subsequent permits and an approved species management plan will therefore be required for the NGBR Project.

#### 20.5.12 Plant Protection Act 1989 (Qld)

The *Plant Protection Act 1989* provides for the prevention, control and removal of pests harmful to plant species. The Act enables the declaration of pest species and pest quarantine areas, and empowers the Governor in Council to make regulations regarding those species and areas. The Act also provides for the appointment by the chief executive of inspectors to exercise powers under the Act and any regulation.

#### **Approval trigger**

The Act carries the following obligations for business and landowners:

- Business documents relating to a pest quarantine area to be kept for 7 years
- Inspector to be notified within 24 hours of becoming aware of a notifiable pest
- Directions provided by inspector regarding pest infestations to be followed
- Information request notice from an inspector to be fulfilled.

#### **Relevance to the NGBR Project**

Adani will be required to fulfil its obligations under the *Plant Protection Act 1989*, including notification of any notifiable pests under Schedule 2 of the *Plant Protection Regulation 2002*. Adani will also be required to comply with any requests or directions provided given by an appointed inspector.

#### 20.5.13 Regional Planning Interests Bill 2013 (Qld)

The Regional Planning Interests Bill 2013 passed through Queensland Parliament on 20 March 2014 and is expected to commence on a date to be proclaimed.

The Regional Planning Interests Bill 2013 proposes:

*An Act [RPI Act] to manage the impact of resource activities and other regulated activities on areas of the State that contribute, or are likely to contribute, to Queensland's economic, social and environmental prosperity.*

The RPI Act provides the framework for implementing a range of statutory regional plans, including the Mackay, Isaac and Whitsunday Regional Plan 2012 (refer Section 20.6.6).

The RPI Act seeks to protect areas of regional interest, being:

- A priority agricultural area
- A priority living area



- A strategic cropping area
- A strategic environmental area.

Priority agricultural or living areas and strategic environmental areas may be mapped on a regional plan. Strategic cropping areas are mapped on the 'Trigger Map for Strategic Cropping Land in Queensland', as per the *Strategic Cropping Land Act 2011* (refer Section 20.5.14).

Although Section 89 of the Bill repeals the *Strategic Cropping Land Act 2011*, existing protections for strategic cropping land will migrate to the RPI Act (DSDIP 2014b) – including:

- The strategic cropping land mitigation fund
- Strategic cropping land mitigation conditions
  - Payment to the mitigation fund
  - Mitigation deed.

The key restriction under Section 18 of the RPI Act states that:

*A person must not wilfully carry out, or allow the carrying out of, a resource activity or regulated activity in an area of regional interest unless the person holds, or is acting under, a regional interests authority for the activity.*

Section 12 of the RPI Act defines a resource activity as “an activity for which a resource authority is required to lawfully carry out”. As the NGBR project does not require a resource authority, it does not meet the definition of a resource activity under the Act.

Section 16 of the RPI Act defines a regulated activity as an activity prescribed under a regulation for the area. A draft Regional Planning Interests Regulation was released on 20 March 2014. Targeted consultation on the regulation is planned prior to the commencement of the Act (DSDIP 2014a). Under Part 4 of the draft regulation, broadacre cropping is a regulated activity for a strategic environmental area. No other regulated activities are prescribed.

### **Approval trigger**

A resource activity or regulated activity that is likely to have an impact on an area of regional interest must have a regional interests authority under the RPI Act. Protection decisions and compliance certificates under the *Strategic Cropping Land Act 2011* function as regional interest authorities under the RPI Act.

### **Relevance to the NGBR Project**

The NGBR Project crosses areas on the 'Trigger Map for Strategic Cropping Land in Queensland'. These are areas of regional interest under the RPI Act. Priority agricultural or living areas and strategic environmental areas are not mapped under the current Mackay, Isaac and Whitsunday Regional Plan. It is expected that such areas of regional interest will be mapped in the plan following the commencement of the RPI Act.

However, the NGBR Project does not currently meet the definition of a resource activity or a regulated activity under the RPI Act and draft regulations – as such, approval under the RPI Act is not considered necessary.

#### 20.5.14 Strategic Cropping Land Act 2011 (Qld)

Strategic cropping land (SCL) is a finite resource that is subject to competing land uses in agriculture, mining and urban development. The *Strategic Cropping Land Act 2011* (SCL Act)

intends to control development in relation to SCL in order to maintain the long-term viability of the food and fibre industry and support economic growth for regional communities.

The purpose of the SCL Act is to:

- Protect land that is highly suitable for cropping, and
- Manage the impacts of development on that land, and
- Preserve the productive capacity of that land for future generations.

In order to achieve its purpose, the SCL Act makes measures to:

- Identify potential SCL
- Provide criteria to decide whether or not land is SCL
- Establish protection and management areas
- Provide for development assessment
- Impose conditions on development
- Prevent permanent impacts on SCL in protection areas, unless development occurs in exceptional circumstances
- Require mitigation to be paid by proponents if SCL is permanently impacted in a management area or where development occurs in exceptional circumstances.

Different development assessment rules apply in the protection and management areas.

If a proposed development falls within a protection area, land that is confirmed as SCL against the criteria will not be able to be permanently impacted, except in limited exceptional circumstances (i.e. there is no reasonable alternative to the location of the proposed development or the development provides a significant community benefit).

If the project is determined to be an 'exceptional circumstance', the applicant will still be required to make all efforts to avoid and minimise any temporary or permanent impacts on SCL and mitigate any permanent impacts.

If the proposed development falls within the management area, the applicant will be required to avoid and minimise, to the maximum extent possible, any temporary or permanent impacts on identified SCL. If SCL cannot be avoided and will be permanently impacted, the development may only proceed if the assessment manager determines that there is an overriding need for the development. The applicant will still be required to mitigate any permanent impacts.

### **Approval trigger**

An application for development under the SP Act on SCL or potential SCL must meet the requirements under Chapter 2, Part 3, Division 2 of the SCL Act.

### **Relevance to NGBR Project**

The NGBR Project traverses some areas of SCL (trigger area) (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 5 Topography, geology, soils and land contamination). An initial multi criteria analysis undertaken for the NGBR Project sought to minimise any potential impacts of the alignment on areas of SCL. Where the NGBR Project will unavoidably have a permanent impact on areas confirmed to be SCL, an approval will be required under the SP Act and Adani will be required to comply with the mitigation requirement under Chapter 5, Part 2, Division 1 of the SCL Act..

The SCL Act will be repealed on commencement of the RPI Act (refer Section 20.5.13).

#### 20.5.15 Transport (Rail Safety Act) 2010 (Qld)

The *Transport (Rail Safety Act) 2010* was enacted to regulate entities involved in rail operations to ensure that model national rail safety standards are achieved so far as is reasonably practicable. The aim of the legislation is to provide for improvement of the safe carrying out of railway operations including the management of risks associated with railway operations and promote public confidence in the safety of transport of persons or freight by rail. The Rail Safety Act imposes obligations on:

- Rail transport operators including rail infrastructure managers
- Rolling stock operators
- Contractors directly connected to rail transport operators and the employees of these contractors
- Rail safety workers
- Road authorities
- Rail safety regulator.

#### **Approval trigger(s) – Rail Safety Act**

Rail infrastructure managers and rolling stock operators must be accredited to operate in accordance with Rail Safety Act. This accreditation is required when controlling rail facilities including (but not limited to) railway track, associated track structures, signalling systems, depots and when operating rolling stock on a railway.

#### **Relevance to NGBR Project**

Adani have obtained a rail safety accreditation as rail infrastructure manager and rolling stock operator as part of the Carmichael Coal Mine Project. This accreditation was approved by the Department of Transport and Main Roads on 31 July 2012. An application for variation to the accreditation for inclusion of rail operations associated with the NGBR Project was submitted on 24 July 2013 and is currently being considered by the Department of Transport and Main Roads.

#### 20.5.16 Work Health and Safety Act 2011 (Qld)

The *Work Health and Safety Act 2011* (WHS Act) regulates dangerous goods and major hazard facilities within Queensland. A licence for storage and handling of hazardous materials, particularly dangerous goods and combustible liquids may be required where the storage of hazardous materials on-site exceeds the relevant thresholds outlined in the WHS Act

This licence is administered by the Department of Justice and Attorney-General and will be required for the storage and handling of fuel and other chemicals in quantities listed under the WHS Act.

#### **Approval trigger**

The storage of dangerous goods and combustible liquids will require a licence where the relevant thresholds are exceeded.

### Relevance to NGBR Project

During construction and operation of the NGBR Project a number of hazardous substances will be used. Volume 1 Chapter 18 Hazard, risk, health and safety provides an indicative list of the hazardous substances that will be used, the likely quantities that will be stored on site and the purpose for the substance. Where these quantities exceed the relevant thresholds under the WHS Act, relevant permits / licences will be required.

#### 20.5.17 Waste Reduction and Recycling Act 2011 (Qld)

The *Waste Reduction and Recycling Act 2011* (WRR Act) establishes a framework which modernises waste management and resource recovery practices in Queensland. The WRR Act promotes waste avoidance and reduction and encourages resource recovery and efficiency.

The WRR Act defines a waste management hierarchy, as the preferred order in which waste and resource management options should be considered. The waste management hierarchy is as follows.

- 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.

### Approval trigger

The key provisions of the WRR Act relevant to the NGBR Project include:

- A requirement to prepare waste management plans
- Product stewardship arrangements for any waste products that are identified as a growing problem for landfill in the future
- Strengthened litter and illegal dumping offences, including public reporting of vehicle related littering offences
- Potential application for approval of resource for beneficial use where a resource is considered to have a beneficial use other than disposal by the chief executive.

### Relevance to NGBR Project

The waste management hierarchy has been considered in the development of the waste management strategy for the NGBR Project (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 13 Waste).

#### 20.5.18 Water Supply (Safety and Reliability) Act 2008 (Qld)

The *Water Supply (Safety and Reliability) Act 2008* (Qld) (WSSR Act) contains certain regulatory provisions from the Water Act relating to water and sewerage service providers and dam safety. The WSSR Act also contains provisions for recycled and drinking water.

Water dams are regulated under the WSSR Act; dams containing hazardous waste are regulated separately under the EP Act (refer to Section 20.4.4). Under the Guidelines for Failure Impact Assessment of Water Dams (State of Queensland 2012), a dam which exceeds the relevant size criteria must undergo a failure impact assessment to obtain a failure impact rating. Failure impact rating is defined in terms of the number of people at risk in the event of the dam failing. A dam assessed as having a failure impact rating of at least Category 1 is classed as a referable dam under the WSSR Act. Referable dams under the WSSR Act are also assessable development under the SP Act.

### Approval trigger

A failure impact assessment of any proposed dams will be required where the proposed dam will be more than 10 m in height and have a storage capacity of more than 1,500 ML or 750 ML where the catchment area is greater than 3 times its maximum surface area at capacity.

### Relevance to NGBR Project

Water storage dams are proposed as part of the temporary construction camps associated with the NGBR Project. It is not anticipated that the dams will reach a size or capacity requiring a failure impact assessment.

A construction water supply strategy was included in the NGBR Project EIS at Volume 2 Appendix H3. Potentially suitable water sources will continue to be refined during detailed design. Activities related to construction water supply with approval requirements include:

- Establishment of groundwater bores
- Establishment of new water storages
- Extraction from existing surface water storages

Failure impact assessment will be required for any new water storages that exceed the volumetric approval trigger.

## 20.6 State and regional policies

### 20.6.1 Environmental protection policies

#### Environmental Protection (Air) Policy 2008

The purpose of the *Environmental Protection (Air) Policy 2008* (EPP Air) is to achieve the objectives of the EP Act in relation to air quality. Section 7 of the EPP Air lists the following environmental values to be protected:

- The qualities of the air environment that are conducive to protecting the health and biodiversity of ecosystems, and*
- The qualities of the air environment that are conducive to human health and wellbeing, and*
- The qualities of the air environment that are conducive to protecting the aesthetics of the environment, including the appearance of buildings, structures and other property, and*
- The qualities of the air environment that are conducive to protecting agricultural use of the environment.*

Section 9 of the EPP Air identifies the following management hierarchy for an activity involving air emissions:

- a. *Firstly—avoid*
- b. *Secondly—recycle*
- c. *Thirdly—minimise*
- d. *Fourthly—manage.*

Schedule 1 of the EPP Air details the air quality objectives for protecting those environmental values listed under Section 7 of the EPP Air.

An assessment of the NGBR Project against the EPP Air and air quality objectives is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 10 Air quality.

### **Environmental Protection (Noise) Policy 2008**

The purpose of the *Environmental Protection (Noise) Policy 2008* (EPP Noise) is to ensure the objective of the EP Act is upheld in relation to the acoustic environment. Section 7 of the EPP Noise lists the following environmental values to be protected:

- a. *The qualities of the acoustic environment that are conducive to protecting the health and biodiversity of ecosystems, and*
- b. *The qualities of the acoustic environment that are conducive to human health and wellbeing, including by ensuring a suitable acoustic environment for individuals to do any of the following:*
  - i) *Sleep*
  - ii) *Study or learn*
  - iii) *Be involved in recreation, including relaxation and conversation, and*
- c. *The qualities of the acoustic environment that are conducive to protecting the amenity of the community.*

The management hierarchy for noise is detailed in Section 9 of the EPP Noise and involves the following:

- a. *Firstly – avoid*
- b. *Secondly – minimise, in the following order of preference:*
  - i) *Firstly – orientate an activity to minimise noise*
  - ii) *Secondly – use best available technology*
- c. *Thirdly – manage.*

Schedule 1 of the EPP Noise details the acoustic quality objectives for sensitive receptors.

An assessment of the NGBR Project against the EPP Noise and acoustic quality objectives is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 12 Noise and vibration.

### **Environmental Protection (Water) Policy 2009**

The purpose of the *Environmental Protection (Water) Policy 2009* (EPP Water) is to ensure the objective of the EP Act is upheld in relation to all Queensland waters, including those in rivers, streams, wetlands, lakes, aquifers, estuaries and coastal areas. Environmental values and water quality guidelines are determined according to a process detailed in the National Water

Quality Management Strategy, Implementation Guidelines and Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC). Environmental values and water quality objectives are categorised by region and sub-basin and documented under Schedule 1 of the EPP Water.

The environmental values of waters traversed by the NGBR Project are not defined under Schedule 1 of the EPP Water however the Burdekin Water Quality Improvement Plan (Dight 2009) will apply.

An assessment of the NGBR Project against the EPP Water and water quality objectives is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 9 Water resources.

### **Environmental Protection (Waste Management) Regulation 2000**

The objective of the *Environmental Protection (Waste Management) Regulation 2000* is set out in Section 4 as protecting the environment by:

- Minimising the impact of waste on the environment including, in particular, the impact of waste so far as it directly affects human health
- Establishing an integrated framework for minimising and managing waste under the principles of ecologically sustainable development.

The *Environmental Protection (Waste Management) Regulation 2000* identifies the following:

- Offences for littering, waste dumping, unlawful disposal of hypodermic needles and unlawful activities at waste facilities
- A waste tracking system that tracks the movement of regulated waste to ensure correct disposal
- Clinical and related waste management planning including segregation, storage and disposal
- Requirements for managing polychlorinated biphenyls
- Design rules for waste equipment.

It is noted that the *Environmental Protection (Waste Management) Regulation 2000* is currently under review to be incorporated into the *Waste Reduction and Recycling Act 2011* (refer Section 20.5.17).

The provisions of this regulation apply to the NGBR Project and relevant waste management measures will be implemented throughout the construction and operation stages of the NGBR Project. Waste management measures identified for the NGBR Project are included in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 13 Waste.

#### 20.6.2 State planning policies

State planning policies are created under Part 4 of the SP Act and enforced through local planning schemes. A local planning scheme must reflect the elements outlined in an SPP. Where the provisions of a local planning scheme and a state planning policy are inconsistent, the policy overrides the planning scheme. As such, state planning policies also provide guidance on assessment decisions under a local planning scheme. Additionally, state planning policies inform the overall policy direction of regional plans.

As of December 2013, a single State Planning Policy (SPP) replaces the multiple policies previously in existence. The SPP sets out the following state interests:

- Liveable communities
- Housing supply and diversity
- Agriculture
- Development and construction
- Mining and extractive resources
- Tourism
- Biodiversity
- Coastal environment
- Cultural heritage
- Water quality
- Emissions and hazardous activities
- Natural hazards
- Energy and water supply
- State transport infrastructure
- Strategic airports and aviation facilities
- Strategic ports

#### **Liveable communities**

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*(2) maintaining or enhancing areas of high scenic amenity, and important views and vistas that contribute to natural and visual amenity*

*(3) maintaining or enhancing opportunities for public access and use of natural areas, rivers, dams and creeks*

*(9) locating development in areas currently serviced by state infrastructure, and where this cannot be achieved, facilitating development in a logical and orderly sequence to enable the cost-effective delivery of state infrastructure to service development.*

An assessment of the impact of the NGBR Project on scenic amenity is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 4 Scenic amenity and lighting. As concluded in these assessments, while the changes would be permanent, they are not considered significant in the context of the broader local area due to the low lying topography and overall lack of significant landscape elements.

The NGBR Project includes environmental design features that will preserve opportunities for public access and use of natural areas, rivers, dams and creeks. All identified existing roads, excluding road reserves, are proposed to be preserved in accordance with the relevant design criteria (refer Volume 2 Appendix B Revised project description). The NGBR Project crosses location of a potential future dam (RA8 Suttor River Dam Site). The NGBR Project has been



planned as far from the main body of the site as practicable and consultation will be undertaken with Department of Natural Resources and Mines and Department of Energy and Water Supply.

The NGBR Project is proposed in accordance with the Galilee Basin Coal Infrastructure Framework (State of Queensland 2013a), Galilee Basin Development Strategy (State of Queensland 2013b) and is within the proposed Galilee Basin State Development Area – the purpose of which is to facilitate development of the Galilee Basin. The NGBR Project is therefore compatible with the measure of “facilitating development in a logical and orderly sequence to enable the cost-effective delivery of state infrastructure to service development”.

### **Housing supply and diversity**

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*(4) providing sufficient land to support the projected workforce population where housing is required for non-resident workforce accommodation associated with large-scale approved mining, agriculture, industry or infrastructure projects. The land should either be:*

*(a) within an existing township—where the accommodation can be appropriately integrated and potential adverse impacts on nearby sensitive uses mitigated*

*(b) outside an existing township—where the accommodation is completely separate from the township and self-sufficient.*

The temporary construction camps will be completely separate from existing townships and will be self-sufficient. The NGBR Project is therefore considered compatible with the SPP.

### **Agriculture**

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*(2) protecting Agricultural Land Classification (ALC) Class A and Class B land for sustainable agricultural use by:*

*(b) avoiding locating non-agricultural development on or adjacent to ALC Class A or Class B land*

*(4) facilitating growth in agricultural production and a strong agriculture industry by:*

*(a) considering the value and suitability of land for current or potential agricultural uses when making land use decisions*

The NGBR Project final rail corridor largely avoids land mapped as Class A land and, where practicable, traverses the outer edges of Class B land. Consultation with landholders in relation to limiting the effects of fragmentation is ongoing. In the course of consultation, mitigation measures such as provision of stock crossings, limiting vehicle movement to designated access tracks and compensation agreements are being discussed.

### **Development and construction**

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*(1) identifying suitable land for residential, commercial, retail and industrial development, and providing a mix of zone types and locations that consider existing and anticipated demand, the nature of surrounding land uses, opportunities for mixed uses, and the physical constraints of the land*

*(2) planning for the infrastructure required to support residential, retail, commercial, industrial and mixed-use development based on planning assumptions and the demand on infrastructure outlined in a priority infrastructure plan*

*(7) considering state-led initiatives, including state development areas and priority development areas and allowing for complementary surrounding land uses and services.*

The NGBR Project is proposed in accordance with the Galilee Basin Coal Infrastructure Framework (State of Queensland 2013a), Galilee Basin Development Strategy (State of Queensland 2013b) and is within the proposed Galilee Basin State Development Area – the purpose of which is to facilitate development of the Galilee Basin. The NGBR Project is therefore considered to be located within suitable land for industrial development.

### **Mining and extractive resources**

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*For extractive resources:*

*(2) protecting KRAs [key resource areas] by providing for appropriate separation distances or other mitigation measures between the resource/processing area of the KRA and sensitive land uses to minimise conflict with the use of land in a KRA for an extractive industry*

*For coal, mineral, petroleum and gas resources:*

*(a) the importance of areas identified as having valuable coal, minerals, petroleum and gas resources, and areas of mining and resource tenures*

*(b) opportunities to facilitate mutually beneficial coexistence between coal, minerals, petroleum and gas resource development operations and other land uses*

The NGBR Project does not cross any KRAs and is therefore consistent with the SPP with regards to extractive resources. Potential sterilisation of resource tenures was considered as part of the NGBR Project EIS (refer NGBR Project EIS Volume 1 Chapter 3 Land use and tenure). A resource sterilisation study was undertaken at this time, which determined that no major resource potential for coal, hydrocarbons or minerals existed (Xenith 2013). Furthermore, the NGBR Project realignment was identified to accommodate requests to minimise known/potential sterilisation of coal and/or encroachment on existing mining tenements. As such, the assessment of the NGBR Project has considered the importance of coal, mineral, petroleum and gas resources.

The NGBR Project is proposed in accordance with the Galilee Basin Coal Infrastructure Framework (State of Queensland 2013a), Galilee Basin Development Strategy (State of Queensland 2013b) and is within the proposed Galilee Basin State Development Area – the purpose of which is to facilitate development of the Galilee Basin. The Galilee Basin Coal Infrastructure Framework minimises regional impacts of the coal development of the Galilee Basin on other land uses. Furthermore, as a multi-user, common access rail corridor, the NGBR Project facilitates mutually beneficial coexistence between coal development operations.

## Tourism

The planning scheme measures recommended by the SPP are not considered relevant to the NGBR Project. The NGBR Project is associated with the development of the resource industry in the Galilee Basin and is not expected to significantly contribute to tourism in the region.

## Biodiversity

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*For national environmental significance:*

*(1) considering matters of national environmental significance in the local government area, and the requirements of the Environment Protection and Biodiversity Conservation Act 1999*

*For state environmental significance:*

*(2) identifying matters of state environmental significance*

*(3) locating development in areas that avoids significant adverse impacts on matters of state environmental significance*

*(4) maintaining or enhancing ecological connectivity*

*(5) facilitating the protection of matters of state environmental significance by requiring development to, in order of priority:*

*(a) avoid significant adverse environmental impacts*

*(b) mitigate significant adverse environmental impacts, where these cannot be avoided*

*(c) where applicable, offset any residual adverse impacts*

Environmental values were considered in the initial multi-criteria assessment to determine preliminary investigation corridor for the NGBR Project. The preliminary investigation corridor was subsequently refined to the final rail corridor and adjacent ancillary infrastructure areas through concept level engineering and design work undertaken by Aarvee Associates.

Potential impacts on matters of national environmental significance are assessed in Volume 2 Appendix D Revised matters of national environmental significance, while potential impacts on matters of state significance are assessed in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 6 Nature conservation.

During detailed design, a comprehensive survey of ecological values will be undertaken. The findings of the survey will allow micro-scale adjustments to clearing footprints, further avoiding and minimising impacts to matters of state and national significance. The survey will also inform the final offset package, to mitigate any residual adverse impacts.

## Coastal environment

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*(1) facilitating the protection of coastal processes and coastal resources*

*(2) maintaining or enhancing the scenic amenity of important natural coastal landscapes, views and vistas*

*(4) facilitating coastal-dependent development in areas adjoining the foreshore in preference to other types of development, where there is competition for available land on the coast*

*(5) maintaining or enhancing opportunities for public access and use of the foreshore in a way that protects public safety and coastal resources.*

The far northern extent of the NGBR Project is within the coastal zone of Abbot Point. As Abbot Point is an existing development, it is not considered that the NGBR Project poses a significant impact to existing coastal processes, coastal resources or scenic amenity in that area. Further, the NGBR Project in this zone is considered a coastal-dependent development, due to its relationship to the Port of Abbot Point, which is necessarily a coastal development.

Within the coastal zone, the NGBR Project crosses the Bruce Highway. The proposed treatment for the Bruce Highway is a below-grade separation (refer Volume 2 Appendix B Revised project description). As such, the NGBR Project is considered to maintain public access opportunities.

### **Cultural heritage**

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*For all cultural heritage:*

*(1) considering the location and cultural heritage significance of world heritage properties and national heritage places, and the requirements of the Environment Protection and Biodiversity Conservation Act 1999*

*For indigenous cultural heritage:*

*(2) considering and integrating matters of Aboriginal cultural heritage and Torres Strait Islander cultural heritage to support the requirements of the Aboriginal Cultural Heritage Act 2003 and the Torres Strait Islander Cultural Heritage Act*

*For non-Indigenous cultural heritage:*

*(3) considering the location and cultural heritage significance of Queensland heritage places*

*(4) identifying heritage places of local cultural heritage significance and heritage areas*

*(5) facilitating the conservation and adaptive re-use of heritage places of local cultural heritage significance and heritage areas so that the cultural heritage significance of the place or area is retained*

*(6) including requirements that development on or in heritage places of local cultural heritage significance or heritage areas*

*(a) avoids, or otherwise minimises, adverse impacts on the cultural heritage significance of the place or area*

*(b) does not compromise the cultural heritage significance of the place or area.*

Potential impacts on matters of national environmental significance, including world heritage properties and national heritage places, are assessed in Volume 2 Appendix D Revised matters of national environmental significance.

Indigenous and non-Indigenous cultural heritage is considered in Volume 2 Appendix C NGBR Project realignment report and Volume 1 Chapter 15 Cultural heritage. A number of known items or places of Indigenous cultural heritage were identified in proximity to the NGBR Project, whereas no sites of non-Indigenous cultural heritage were identified. It is considered that the implementation of mitigation measures incorporated into cultural heritage management plans for the NGBR Project will appropriately avoid, mitigate and manage impacts to Indigenous and non-Indigenous cultural heritage sites. A minor realignment of the NGBR Project is proposed in the vicinity of Mount Roundback, in order to avoid a rock art site of significant Indigenous cultural heritage potential, as identified in the NGBR Project EIS.

### **Water quality**

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*(1) facilitating the protection of environmental values and the achievement of water quality objectives for Queensland waters*

*(6) protecting the natural and built environment (including infrastructure) and human health from the potential adverse impacts of acid sulfate soils by:*

*(a) identifying areas with high probability of containing acid sulfate soils*

*(b) providing preference to land uses that will avoid or minimise the disturbance of acid sulfate soils*

*(c) including requirements for managing the disturbance of acid sulfate soils to avoid or minimise the mobilisation and release of contaminants*

*(8) including requirements that development in water catchments is undertaken in a manner which contributes to the maintenance and enhancement (where possible) of water quality to protect the drinking water and aquatic ecosystem environmental values in those catchments.*

Water quality objectives were determined for the assessment of the NGBR Project (refer Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 9 Water resources). Existing water quality within the catchments of the NGBR Project did not meet the identified objectives. As such, the relevant objectives are not practicable for the management of water quality for the NGBR Project. Water quality will therefore be primarily managed via implementation of appropriately design and installed erosion and sediment controls (in accordance with the Erosion and Sediment Control Plan), and thereafter in accordance with threshold levels above background (where practicable, i.e. where stream flow occurs), to be determined in consultation with the Department of Natural Resources and Mines.

As committed to in NGBR Project EIS Volume 1 Chapter 5 Topography, geology, soils and land contamination, surveys of potential acid sulfate soils will be undertaken prior to construction of the NGBR Project. An acid sulfate soil management plan will be developed, if necessary, to manage and mitigate any potential impacts regarding acid sulfate soils. This approach is consistent with the Terms of Reference for the NGBR Project, and is acceptable to the Department of Environment and Heritage Protection.

Water quality will be managed through the Water Quality Management Plan and Erosion and Sediment Control Plan (refer Volume 2 Appendix H Revised environmental management plan framework). Flood modelling and analysis will continue during detailed design to further refine hydrological estimates and design of structures in accordance with the relevant design criteria,

including criteria for velocity and scour protection that provide a measure of protection to water quality.

### **Emissions and hazardous activities**

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*(1) locating industrial land uses and major sport, recreation and entertainment facilities in areas that avoid, mitigate and manage the adverse impacts of emissions on sensitive land uses*

*(2) locating and managing development for activities involving the use, storage and disposal of hazardous materials and hazardous chemicals, dangerous goods and flammable or combustible substances to avoid or mitigate potential adverse impacts on surrounding uses, and minimise the health and safety risks to communities and individuals*

*(3) protecting the following existing and approved land uses or areas from encroachment by development that would compromise the ability of the land use to function safely and effectively:*

*(f) industrial land in a state development area, or an enterprise opportunity area or employment opportunity area identified in a regional plan*

*(6) planning for development involving the storage of hazardous chemicals that exceed a hazardous chemicals flood hazard threshold in a flood hazard area, to minimise the likelihood of inundation of flood waters from creeks, rivers, lakes or estuaries on storage areas.*

Noise and air emissions of the NGBR Project are assessed in Volume 2 Appendix C NGBR Project realignment report, NGBR Project EIS Volume 1 Chapter 10 Air quality and NGBR Project EIS Volume 1 Chapter 12 Noise and vibration. Noise and air emissions will be managed through a Noise Management Plan, Dust Management Plan and Coal Dust Management Plan (refer Volume 2 Appendix H Revised environmental management plan framework). Any complaints regarding noise and air emissions will be managed in accordance with a complaints management procedure.

Use, storage and disposal of hazardous chemicals, dangerous goods and flammable or combustible substances will be undertaken in accordance with the relevant Australian Standards. An assessment of hazards and risks associated with the NGBR Project, including hazards associated with hazardous substances, is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 18 Hazard, risk, health and safety. An Emergency Management Plan will be developed, including specific emergency response plans for potential hazards and risks (refer Volume 2 Appendix H Revised environmental management plan framework). Adani commits to engaging with emergency service providers, including Queensland Fire and Emergency Services and Queensland Police Service, for input into the Emergency Management Plan.

The NGBR Project is proposed in accordance with the Galilee Basin Coal Infrastructure Framework (State of Queensland 2013a), Galilee Basin Development Strategy (State of Queensland 2013b) and is within the proposed Galilee Basin State Development Area – the purpose of which is to facilitate development of the Galilee Basin. The NGBR Project is therefore considered to be compatible with the safe and effective operation of industrial land within a state development area.

## Natural hazards

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*(3) including provisions that require development to:*

*(a) avoid natural hazard areas or mitigate the risks of the natural hazard, and*

*(b) support, and not unduly burden, disaster management response or recovery capacity and capabilities*

*(c) directly, indirectly and cumulatively avoid an increase in the severity of the natural hazard and the potential for damage on the site or to other properties*

*(d) maintain or enhance natural processes and the protective function of landforms and vegetation that can mitigate risks associated with the natural hazard*

*(5) maintaining erosion prone areas within a coastal management district as development-free buffer zones unless:*

*(a) the development cannot be feasibly located elsewhere*

*(b) it is coastal-dependent development, or is temporary, readily relocatable or able to be abandoned development.*

An assessment of the interaction of the NGBR Project and natural hazards is provided in NGBR Project EIS Volume 1 Chapter 17 Climate and natural hazards, while the impacts of the NGBR Project on regional emergency services are discussed in NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts. An Emergency Management Plan will be developed, including specific emergency response plans for potential hazards and risks (refer Volume 2 Appendix H Revised environmental management plan framework). Adani commits to engaging with emergency service providers, including Queensland Fire and Emergency Services and Queensland Police Service, for input into the Emergency Management Plan.

The far northern extent of the NGBR Project is within the coastal zone of Abbot Point. Erosion prone areas, due to both long term trends and tidal inundation due to sea level rise, border the NGBR Project within in this area. The NGBR Project in this zone is considered a coastal-dependent development, due to its relationship to the Port of Abbot Point, which is necessarily a coastal development. As such, it is not considered that the NGBR Project conflicts with the SPP.

## Energy and water supply

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*(2) protecting existing and approved future major electricity infrastructure locations and corridors (including easements), electricity substations, and bulk water supply infrastructure locations and corridors (including easements) from development that would compromise the corridor integrity, and the efficient delivery and functioning of the identified infrastructure.*

The NGBR Project crosses location of a potential future dam (RA8 Suttor River Dam Site). The NGBR Project has been planned as far from the main body of the site as practicable and consultation will be undertaken with Department of Natural Resources and Mines and Department of Energy and Water Supply.

Discussions with relevant electricity, water and gas service providers will be undertaken during detailed design of the NGBR Project to establish the most effective protection, relocation or modification for service crossings, and to minimise the potential for disruption. Adani will also ensure compliance with the relevant health and safety legislation during the construction and operation of the NGBR Project.

### **State transport infrastructure**

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*(4) protecting state transport infrastructure and existing and future state transport corridors and networks from development that may adversely affect the safety and efficiency of the infrastructure, corridors and networks*

An assessment of the potential impacts of the NGBR Project on the external road network, including State-controlled roads, is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 14 Transport. The assessments conclude that due to the relatively low existing traffic volumes on these roads the performance of all key roads is anticipated to operate satisfactorily at level of service C or better.

Grade separate crossings are currently proposed for all State-controlled roads, excluding Suttor Developmental Road, to preserve the safety and efficiency of that infrastructure (refer Volume 2 Appendix B Revised project description). Adani will continue to consult with the Department of Transport and Main Roads for the development of an infrastructure agreement, which includes details in regard to potential future grade separation of the Suttor Development Road.

Adani will develop a traffic impact assessment and pavement impact assessment (forming the road impact assessment), road use management plan and traffic management plan, in consultation with the Department of Transport and Main Roads for State-controlled roads and local governments for local roads, prior to commencement of construction (refer Volume 2 Appendix G Revised commitments).

### **Strategic airports and aviation facilities**

The planning scheme measures recommended by the SPP are not considered relevant to the NGBR Project. The NGBR Project is not in proximity to a strategic airport identified in the SPP.

### **Strategic ports**

The following planning scheme measures recommended by the SPP are considered relevant to the NGBR Project:

*(2) facilitating development surrounding strategic ports that is compatible with, depends upon or gains significant economic advantage from being in proximity to a strategic port, or supports the strategic port's role as a freight and logistics hub*

*5) identifying and protecting key transport corridors (including freight corridors) linking strategic ports to the broader transport network*

*(6) considering statutory land use plans for strategic ports and the findings of planning and environmental investigations undertaken in relation to strategic ports.*

The far northern extent of the NGBR Project is located at the Port of Abbot Point, which is a strategic port under the SPP. The NGBR Project is compatible, dependant and gains significant economic advantage from being in proximity to the Port of Abbot Point; It supports the strategic port's role as a coal export terminal. The NGBR Project is also consistent with the intent of the



relevant precincts under the Abbot Point State Development Area Development Scheme 2012 (refer Section 20.7.2).

Within the coastal zone, the NGBR Project crosses the State-controlled Bruce Highway and private Abbot Point Road, at multiple locations. The proposed treatment for the Bruce Highway is a below-grade separation, whereas Abbot Point road will be preserved through a combination of at-grade and grade-separated treatments (refer Volume 2 Appendix B Revised project description). As such, the NGBR Project is considered to protect transport corridors linking the Port of Abbot Point to the broader transport network.

The NGBR Project realignment is located within South to North Rail Corridor Precinct of the Galilee Basin State Development Area. This precinct is to accommodate future rail infrastructure and associated activities in the Galilee Basin. The NGBR Project realignment is defined as 'rail infrastructure' under the Proposed Galilee Basin State Development Area Draft Development scheme (State of Queensland 2014a) and is considered to be a use that is consistent with the preferred land use intent of the land use designation.

### 20.6.3 Queensland Government Environmental Offsets Policy 2008

The Queensland Government Environmental Offsets Policy 2008 (QGEOP) (Environmental Protection Agency 2008) provides a framework for the use of environmental offsets in Queensland, in order to counter-balance unavoidable, negative environmental impacts that result from an activity or a development. This policy is based on the premise that offsets are used consistently and transparently across the State, and are only considered after all environmental impacts have been avoided and minimised and all other government environmental standards have been met.

The QGEOP is based on seven basic principles that guide the way in which offsets are used to contribute to ecologically sustainable development, these being:

- Offsets will not replace or undermine existing environmental standards or regulatory requirements, or be used to allow development in areas otherwise prohibited through legislation or policy
- Environmental impacts must first be avoided, then minimised, before considering the use of offsets for any remaining impact
- Offsets must achieve an equivalent or better outcome
- Offsets must provide environmental values as similar as possible to those being lost
- Offset provision should minimise the time-lag between the impact and delivery of the offset
- Offsets must provide additional protection to environmental values at risk, or additional management actions to improve environmental values
- Offsets must be legally secured for the duration of the offset requirement.

Where possible, the QGEOP supports the development of offset packages that meet the combined requirement of policies administered by the Commonwealth and Queensland Government. This coordinated approach to offsets across jurisdictions means that specific offsets sought under one policy will not also be sought under another policy, providing that the offsets package satisfies the requirements of both policies.

The QGEOP provides the principles and guidelines for applying and developing more detailed 'specific-issue' offset policies, namely:

- Policy for vegetation management offsets
- Queensland Biodiversity Offset Policy
- Marine Fish Habitat Offset Policy.

### **Policy for vegetation management offsets**

The policy for vegetation management offsets forms Appendix A of the State development assessment provisions (DSDIP 2013e) and sets the requirements for an offset as a condition of a development approval considered necessary or desirable for achieving the purpose of the SP Act and VM Act.

An offset proposed under the PVMO must be ecologically equivalent to the proposed clearing, as determined through bio-condition assessment and the Ecological Equivalence Methodology Guideline (DERM 2011a). Where an offset is of a lower ecological standard than the proposed clearing, the ratio of offset to clearing area must be increased.

### **Queensland Biodiversity Offset Policy**

The purpose of the Queensland Biodiversity Offset Policy version 1, 2011 (QBOP) is to increase the long-term protection and viability of State significant biodiversity values by offsetting residual impacts from development. The QBOP defines the application of the policy to include development managed under the SP Act including activities classified as ERAs under the EP Act.

The QBOP defines State significant biodiversity values to include regional ecosystems that are endangered or of concern, essential habitat, regrowth of regional ecosystems that are endangered or of concern, watercourses, protected animals and protected plants. Protected animals under the QBOP are those listed as endangered, vulnerable, near threatened and special least concern animals under the *Nature Conservation Act 1992* (refer to Section 20.5.11). Protected plants under the QBOP are those listed as extinct in the wild, endangered, vulnerable or near threatened under the *Nature Conservation Act 1992*.

A biodiversity offset will apply under the QBOP once all practical and reasonable efforts have been taken to avoid and minimise impacts on State significant biodiversity values. Offsets will only be acceptable when all reasonable attempts have been made to avoid and reduce impacts on the relevant biodiversity values and, as such, cannot be presented as a primary mitigation approach.

An offset proposed under the QBOP must be ecologically equivalent to the proposed clearing, as determined through the Ecological Equivalence Methodology Guideline (DERM 2011a). In order for the proposed offset area to be considered acceptable, the QBOP has identified criteria for each state significant biodiversity value. DEHP have developed the Galilee Basin Offset Strategy version 1, 2013 to support the QBOP and provide direction to proponents who need to locate an offset site as part of the conditions of an EA under the EP Act. The Galilee Basin Offset Strategy version 1, 2013 identifies offset sites within the region with strategic conservation value and identifies corridors across the landscape that have the potential to provide linkages to adjacent bioregions.

Vegetation clearing for the NGBR Project that carries offset obligations under the QBOP is quantified in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 6 Nature conservation. The requirements for offset obligations in reference to the Galilee Basin Offset Strategy version 1, 2013 are discussed further in Volume 2 Appendix E Revised offsets.

### Marine Fish Habitat Offset Policy

Marine Fish Habitat Offset Policy sets the requirements for offsets to counterbalance permanent or temporary impacts or loss on fisheries resources or fish habitat relevant to fisheries development approval decisions under the Fisheries Act and SP Act.

Offsets under this policy may be either direct or indirect offsets. Direct offsets involve spatial areas of fish habitat as a surrogate for loss or gain of fisheries productivity. Direct offsets must comply with the following principles:

- Equivalent or better environmental outcomes
- Similar environmental values
- Additional protection and management.

Where the above principles cannot be achieved using direct offsets, indirect offsets may be considered as compensation based on loss of function and services values of fish habitat.

#### 20.6.4 Social Impact Assessment Guidelines 2013

The scope and structure of the social impact assessment is primarily based on the CGs Social Impact Assessment Guidelines (DSDIP, July 2013) and the associated Guideline for Managing the Impacts of Major Projects in Resource Communities (DSDIP, July 2013). As per the Guidelines, the following elements have been developed as part of the social impact assessment process:

- Identification of study area and stakeholders
- Development of a social baseline
- An overview of state government legislation and policies that complement the mitigation measures for the social impacts that are directly related to the NGBR Project
- Explanation of research methods used to collect data and information, including community engagement process
- Identification and assessment of direct social impacts potentially arising from the NGBR Project, particularly in the area of:
  - Community and stakeholder engagement
  - Workforce management
  - Housing and accommodation
  - Local business and industry content
  - Health and community wellbeing.
- Development of mitigation and management strategies for direct impacts based on adaptive management principles
- Proposed monitoring framework.

#### 20.6.5 Queensland Coastal Plan

The Queensland Coastal Plan has been prepared under the Coastal Act (refer to Section 20.4.3) and commenced on 3 February 2012. At its commencement the Queensland Coastal Plan comprised of two parts:

- State Policy for Coastal Management

- State Planning Policy 3/11: Coastal Protection.

State Planning Policy 3/11 and the subsequent Draft Coastal Protection State Planning Regulatory Provision were replaced by the provisions under the coastal environment state interest of the SPP (refer Section 20.6.2).

### **State policy for coastal management**

The State Policy for Coastal Management is prepared under the Coastal Act. The policy provides direction and guidance about the management of coastal land in Queensland to achieve the objectives of the Coastal Act.

The State Policy for Coastal Management applies to management planning, activities, decisions and works that are not assessable development under the SP Act and therefore not subject to the State Planning Policy 3/11: Coastal Protection.

The State Policy for Coastal Management applies to coastal land and its resources within the coastal zone including:

- Land under tidal waters
- Erosion prone areas
- Land at risk from storm tide inundation or permanent inundation due to sea level rise (i.e. coastal hazard areas)
- Coastal roads and esplanades
- Reserves and unallocated State land
- Other parcels of land adjacent to the foreshore.

Coastal resources under this policy relate to the natural and physical features, processes, places or objects of the coastal zone that have ecological, economic or social value. This includes areas of high ecological significance. Development assessable under the State Policy for Coastal Management must consider the outcomes of the management policies provided.

The overarching policy outcomes identified in the State Policy for Coastal Management are outlined as follows:

- Natural coastal processes including erosion and accretion are able to occur without interruption
- Structures (including all infrastructure) in erosion prone areas are designed, located and managed to ensure that impacts on coastal processes are avoided or minimised
- Dunes are to be protected and dune vegetation is maintained and enhanced
- Protect areas of high ecological significance and conserve other ecological values
- The living culture of indigenous traditional owners and their connection with cultural resources on the coast and in marine areas is maintained and enhanced
- Public access and use of the coast is maintained and enhanced for current and future generations
- Buildings and structures (including all infrastructure) are established on state coastal land only where they are essential, provide a public service, and cannot be feasibly located elsewhere

- Driving on beaches is not supported unless required for access and is actively managed to prevent significant impacts on ecological values and ensure a safe environment for other beach users
- Management and use of coastal land is guided by plans of management
- Coastal land managers achieve effective coastal management through regular monitoring, reviewing and reporting mechanisms
- Knowledge and awareness of coastal resources and their management is shared with the community
- The community is engaged in coastal management decision-making processes.

Where the NGBR Project falls within the coastal zone and does not comprise assessable development under the SP Act, the NGBR Project will need to comply with the management policies outlined in the State Policy for Coastal Management.

#### 20.6.6 Mackay, Isaac and Whitsunday regional plan

The NGBR Project final rail corridor is located entirely within the boundaries of the Mackay, Isaac and Whitsunday Regional Plan (MIWRP) and subsequently needs to consider the relevant provisions throughout project design. The MIWRP is a statutory plan that establishes a vision and direction for the region to 2031 and provides certainty about where the region is heading and provides a framework to respond to challenges and opportunities that may arise.

The MIWRP seeks to achieve its purpose through a series of desired regional outcomes (DROs). The DROs articulate the preferred direction for proposed development and land use outcomes in the region, and include specific policies and programs to manage the growth of the region to 2031.

The MIWRP plan also provides regional narratives for the three areas of Mackay, Isaac and Whitsunday. The Whitsunday narrative provides information on the key communities of Proserpine, Bowen, Airlie Beach, Cannonvale, Collinsville and the coastal towns and islands. The Isaac narrative provides information on the key communities of Moranbah, Clermont, Middlemount, Dysart and Glenden, Coppabella, Nebo and the coastal towns. The narratives also outline key opportunities and challenges regarding rural settlements, economy and employment, residential, community services, and infrastructure.

Table 20-2 outlines the overarching principles for each DRO and identifies how the development of the NGBR Project addresses the relevant outcomes.

Table 20-2 Mackay, Isaac and Whitsunday regional plan - desired regional outcome assessment

Desired regional outcome	NGBR Project response
<b>1. Sustainability, climate change and natural hazards</b>	
<p><b>Sustainability</b> Decision-making supports ecologically sustainable development.</p>	<p>The NGBR Project has been designed to minimise potential adverse ecological impacts through a route selection study and multi criteria analysis. The NGBR Project final rail corridor has been refined based on several criteria including minimising ecological impacts. A detailed assessment of the potential impacts of the NGBR Project on ecological values is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 6 Nature conservation.</p>
<p><b>Climate change</b> The generation of GHG is reduced through land-use planning and development design, and long-term climate change impacts are considered in planning decisions.</p>	<p>The NGBR Project will be developed in accordance with industry best practice which aims to minimise the generation of GHG during the construction and operation phases. This is achieved through the use of energy efficient equipment and energy minimisation where practical. A detailed GHG emissions assessment is provided in Section 12 of Volume 1 Additional information to the Environmental Impact Statement.</p>
<p><b>Natural hazards</b> The resilience of communities, development, essential infrastructure, natural environments and economic sectors to recognised hazards, including the anticipated effects of climate change, is increased.</p>	<p>The NGBR Project has been designed to accommodate the potential impacts of increased occurrence in natural hazards as a result of climate change. A detailed assessment of the likely impacts of climate change on the NGBR Project is provided in Volume 1 Chapter 17 Climate and natural hazards.</p>
<b>2. Regional landscapes</b>	
<p><b>Regional landscape values</b> Manage and enhance the values of the regional landscape to optimise their ability to contribute to the region's liveability, lifestyle, health and economy. Optimise multiple community benefits through coordinated planning, management and investment in regional landscape areas.</p>	<p>The NGBR Project will seek to minimise impacts to the landscape and visual environment through its design and appropriate mitigation where required. Adverse impacts to socio-economic values and lifestyle will also be minimised as best as practical. A detailed scenic amenity and lighting assessment is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 4 Scenic amenity and lighting; a socio-economic assessment is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts.</p>
<p><b>Green space network</b> An integrated green space network caters for a range of community and environmental needs.</p>	<p>The NGBR Project has been designed to minimise impacts to existing and proposed greenspace networks where practical. A detailed land use impact assessment has been undertaken and is provide in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 3</p>

Desired regional outcome	NGBR Project response
	Land use and tenure.
<b>3. Biodiversity</b>	
<p><b>Biodiversity</b> The region's natural assets, biodiversity values and ecological services are protected, managed and enhanced to improve their resilience to the anticipated effects of climate change and other threats.</p>	<p>The NGBR Project has been designed to minimise the potential for adverse ecological impacts and loss of biodiversity. Where required, offsets for clearing any protected species have been proposed.</p> <p>A detailed assessment of the potential impacts of the NGBR Project on ecological values is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 6 Nature conservation; the NGBR Project offsets strategy is provided in Volume 2 Appendix E Revised offsets.</p>
<p><b>Water quality, waterway health and wetlands</b> The ecological health, environmental values and water quality of coastal, surface, ground waters and wetlands are protected.</p>	<p>The NGBR Project has been designed to minimise adverse impacts to water quality and aquatic ecosystems throughout the life of the project. Where required appropriate mitigation and management measures have been proposed and ongoing monitoring programs will be implemented where necessary.</p> <p>A detailed water resources assessment for the NGBR Project is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 9 Water resources; an assessment of aquatic ecology is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 6 Nature conservation.</p>
<p><b>Coastal environment</b> Coastal resources are managed while protecting human life and property from the hazards of natural fluctuations in coastal processes.</p>	<p>This section of the regional plan has been suspended by the implementation of the Coastal Protection State Planning Regulatory Provision – this has been addressed in section 20.6.5).</p>
<p><b>Air quality and noise</b> The environment is protected to maintain the health and wellbeing of the community and the natural environment through effective management of air quality and noise.</p>	<p>The NGBR Project will incorporate appropriate mitigation measures and management plans to minimise the impacts of construction and operational activities on air quality and ambient noise levels. A detailed assessment of the potential impacts of the NGBR Project to air quality and noise levels is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 10 Air quality and Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Chapter 12 Noise and vibration, respectively.</p>
<b>4. Natural resource management</b>	
<b>Natural resource management</b>	The NGBR Project will support the coal industry in the region by providing a direct and

Desired regional outcome	NGBR Project response
<p>The management and use of natural resources enhance community, economic and landscape values.</p>	<p>efficient transport route from the northern Galilee Basin to Abbot Point. It is expected that the construction and operation of the NGBR Project will result in significant job creation in the region and will subsequently enhance economic viability.</p> <p>Additionally, the NGBR Project final rail corridor has been selected to minimise sterilisation and fragmentation of cropping land and mineral resources.</p> <p>Assessments of socio-economic impacts associated with the NGBR Project are provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts. Assessments of land use impacts are provided in and Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Chapter 3 Land use and tenure.</p>
<p><b>Ecosystem-dependent economic resources</b></p> <p>Ecosystems are sustainably managed, ensuring their cultural, social, economic and environmental services and values are protected.</p>	<p>The NGBR Project has been designed to minimise adverse impacts to terrestrial and aquatic ecosystems throughout the life of the project. Consultation with stakeholders and other interested parties has been undertaken through the EIS process to identify any public concerns regarding the impacts of the NGBR Project to socio-economic factors including the use of natural systems.</p> <p>A detailed consultation report is provided in Volume 2 Appendix I Revised public consultation. Assessments of ecological impacts associated with the NGBR Project are provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 6 Nature conservation. Assessments of socio-economic impacts are provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts.</p>
<p><b>Mineral and extractive industries</b></p> <p>Mineral, petroleum and extractive resources are managed for current and future use, and their extraction, processing, transport and downstream value-adding continue to contribute to the economy</p>	<p>The NGBR Project will support the coal industry in the region by providing a direct and efficient transport route from the Galilee Basin to Abbot Point. It is expected that the construction and operation of the NGBR Project will result in significant job creation in the region and will subsequently enhance economic viability.</p> <p>Additionally, the NGBR Project final rail corridor has been selected to minimise sterilisation and fragmentation of mineral resources and associated tenure.</p> <p>Assessments of socio-economic impacts associated with the NGBR Project are provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts.</p>
<p><b>Planning and managing agricultural land</b></p> <p>The region's agricultural production areas are protected and sustainably managed to ensure their continuing contribution to the economy, and to mitigate the anticipated effects of climate</p>	<p>The NGBR Project final rail corridor has been selected to minimise sterilisation and fragmentation of cropping land.</p> <p>Assessments of land use impacts associated with the NGBR Project are provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1</p>



Desired regional outcome	NGBR Project response
change.	Chapter 3 Land use. Assessments of soils impacts associated with the NGBR Project are provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 5 Topography, geology, soils and land contamination.
<p><b>Regional water supply</b></p> <p>Water, as a valuable and finite regional resource, is planned and managed on a total water cycle basis.</p> <p>Water is recognised as a valuable and finite resource which is managed on a total water cycle basis.</p>	<p>The water requirements and subsequent management of water resources associated with the NGBR Project will be managed in accordance with the relevant regulatory requirements including water resource plans for the region.</p> <p>The NGBR Project water demand, supply and management are discussed in Volume 2 Appendix C NGBR Project realignment report, NGBR Project EIS Volume 1 Chapter 9 Water resources and NGBR Project EIS Volume 2 Appendix H3 Construction water supply strategy.</p> <p>Where required appropriate water permits, approvals, licences and allocations will be acquired prior to extracting any water from natural sources; this is described in more detail in section 20.4.10.</p>
5. Strong communities	
<p><b>Social planning</b></p> <p>Social planning is incorporated into planning processes to manage and respond to changing communities, and support community wellbeing and quality of life.</p> <p><b>Addressing social and locational disadvantage</b></p> <p>Social and locational disadvantage in communities is recognised and addressed.</p> <p><b>Community engagement, capacity building and identity</b></p> <p>Strong, connected and functional communities exist as a result of grassroots community development, engagement and participation, and maintaining and improving a community's sense of shared identity.</p>	Assessments of social impacts associated with the NGBR Project are provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts.
<p><b>Healthy and safe communities</b></p> <p>Quality of life is enhanced by offering healthy and safe environments that promote active living and healthy lifestyles, and provide accessible health services.</p>	The construction and operations of the NGBR Project will be undertaken in accordance with appropriate risk management procedures and safety management plans. A hazard and risk assessment and a health a safety assessment has been undertaken for the NGBR Project and is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 18 Hazard, risk, health and safety.
<p><b>Strengthening resource communities</b></p> <p>The long-term viability of resource communities is sustained by</p>	Several temporary construction camps are proposed during the construction of the NGBR Project; these camps will be designed in accordance with the requirements of the relevant

Desired regional outcome	NGBR Project response
<p>enhancing liveability, providing diverse housing and employment options and accommodating the needs of the resource sector.</p>	<p>local planning schemes and will provide appropriate accommodation services for the NGBR Project workforce.</p> <p>Further detail regarding the design principles of these camps is provided in Volume 2 Appendix B Revised project description; a socio-economic assessment is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts.</p>
<p><b>Engaging Aboriginal and Torres Strait Islander people</b> Traditional Owners and Elders are actively engaged in planning and development processes, and their connectivity with Country is understood, considered and respected.</p> <p><b>Aboriginal and Torres Strait Islander social and economic equity</b> Aboriginal and Torres Strait Islander people have equitable access to opportunities that promote a high standard of living, good economic prospects and general wellbeing.</p>	<p>Agreements with the relevant Native Title holders and Traditional Owner groups associated with the land crossed by the NGBR Project final rail corridor will be entered into and agreed in parallel to the EIS process.</p> <p>A detailed assessment of cultural heritage issues associated with the NGBR Project is included in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 15 Cultural heritage.</p> <p>A comprehensive socio-economic assessment has been undertaken for the NGBR Project and is included in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts.</p>
6. Strong economy	
<p><b>Economic leadership and coordination</b> Strong economic leadership attracts, coordinates and drives regional economic development, innovation and investment.</p> <p><b>Integrated economic, land-use and infrastructure planning</b> Suitable land, infrastructure and facilities are available and managed to enable sustainable economic and employment growth in the region.</p> <p><b>Resilient and sustainable economy</b> The economy grows through increasing levels of human-capital, knowledge-capital and natural-capital and is resilient to external factors through multiple strong industry sectors that provide diverse employment opportunities.</p> <p><b>Primary industries</b> Maintain existing and expand sustainable and economically viable primary industries, and diversify opportunities in the region.</p> <p><b>Resource sector</b> Manage mining and extractive resources to maximise economic</p>	<p>The NGBR Project will support the coal industry in the region by providing a direct and efficient transport route from the Galilee Basin to Abbot Point. It is expected that the construction and operation of the NGBR Project will result in significant job creation in the region and will subsequently enhance economic viability.</p> <p>A detailed socio-economic assessment is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts.</p>

Desired regional outcome	NGBR Project response
opportunities and other community benefits, while minimising negative environmental and social impacts for present and future generations.	
<p><b>Tourism</b></p> <p>Continue to develop the region's distinctive and sustainable tourist destinations, which offer a diverse range of activities and unique experiences to attract domestic and international visitors.</p>	<p>The NGBR Project is associated with the development of the resource industry in the Galilee Basin and is not expected to significantly contribute to the existing tourism industry in the region.</p>
<b>7. Managing growth</b>	
<p><b>Efficient use of land</b></p> <p>Land and infrastructure are used efficiently, taking into account costs of servicing, projected demand on/from existing urban infrastructure and employment.</p>	<p>The NGBR Project has been designed to minimise potential adverse impacts through a route selection study and multi criteria analysis. Subsequently, the NGBR Project has sought to minimise impacts to existing infrastructure.</p> <p>Volume 2 Appendix B Revised project description outlines the proposed use of and subsequent demand on existing infrastructure; an assessment of the potential impacts of the NGBR Project on existing land use and infrastructure is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 3 Land use and tenure.</p>
<p><b>Planning for growth</b></p> <p>Development Areas and Identified Growth Areas are secured for delivering medium and long-term growth opportunities, and catering for projected demand requires comprehensive planning and infrastructure delivery.</p>	<p>N/A – the NGBR Project does not intersect any development areas or identified growth areas.</p>
<p><b>Rural residential development</b></p> <p>Rural residential development is planned to ensure efficient delivery of services and infrastructure, preventing further fragmentation of agricultural land, and avoiding loss of areas with biodiversity and landscape values.</p>	<p>N/A – the NGBR Project does not propose any 'rural residential' development.</p>

Desired regional outcome	NGBR Project response
<p><b>Housing choice and affordability</b> Housing meets the needs of the community, considering all lifecycle stages, varying demands, and economic circumstances.</p>	N/A – the NGBR Project does not propose permanent accommodation facilities. The accommodation proposed will comprise temporary facilities specifically catering for NGBR Project temporary construction workforce only.
<b>8. Urban form</b>	
<p><b>Urban form</b> The form of the region's cities and towns responds to local climate, character and identity, and supports compact, accessible, active and healthy communities.</p>	N/A – the NGBR Project does not propose any 'urban' development.
<p><b>Heritage, arts and cultural development</b> The region's unique heritage places and experiences are identified, protected and valued, with further opportunities for arts and cultural development provided.</p>	The NGBR Project will be developed to minimise impacts to existing heritage places where relevant. A detailed heritage assessment for the NGBR Project is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 15 Cultural heritage.
<p><b>Centres</b> Regional centres and towns are the focal point for the provision of retail, commercial and community services, economic growth and diversity.</p>	N/A – the NGBR Project does propose any development in regional centres.
<p><b>Rural communities</b> Rural communities benefit from growth and are serviced by appropriate levels of infrastructure and support services.</p>	<p>The construction and operation of the NGBR Project is expected to result in significant job creation in the region and will subsequently enhance economic growth in rural communities; the communities are also expected to benefit from any proposed upgrades to existing infrastructure associated with the NGBR Project.</p> <p>A detailed socio-economic assessment is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts.</p>
<b>9. Infrastructure</b>	
<p><b>Infrastructure planning</b> Efficient, well-planned infrastructure supports population growth, economic opportunities and service provision in a sustainable manner.</p>	<p>The NGBR Project comprises a significant infrastructure development in the region. The NGBR Project will support economic growth in the region by supporting the growth of the resource industry in the Galilee Basin. It is expected that the construction and operation of the NGBR Project will result in significant job creation in the region and will subsequently enhance economic viability.</p> <p>A detailed socio-economic assessment is provided in Volume 2 Appendix C NGBR Project</p>

Desired regional outcome	NGBR Project response
	realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts.
<p><b>Protecting key sites and corridors</b> Current and future infrastructure sites and corridors are identified, protected and managed.</p> <p><b>Information and communication technology</b> All communities in the region are provided with modern, reliable, accessible and affordable information and communication services.</p>	<p>The NGBR Project seeks to address the need for a north-south rail corridor from the Galilee basin to Abbot Point.</p> <p>An assessment of the impacts of the NGBR Project on existing land use and existing and proposed infrastructure has been undertaken and is included in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 3 Land use and tenure.</p>
<p><b>Waste and recycling</b> The region's waste is minimised, re-used or recycled, and promotes energy recovery.</p> <p><b>Sewerage</b> The provision and management of sewage treatment infrastructure is planned, timed and managed, and is protected from encroachment by incompatible development.</p>	<p>A comprehensive assessment of the waste and sewerage generation associated with the construction and operational activities of the NGBR Project is provided in Volume 2 Appendix B Revised project description and Volume 1 Chapter 13 Waste; the chapter subsequently outlines the proposed management of the relevant streams in accordance with the principles of waste reduction and recycling where required.</p>
<p><b>Social infrastructure</b> Social infrastructure is planned and located, accessible, adaptable and responsive to demographic change.</p>	<p>N/A – no social infrastructure is proposed as part of the NGBR Project.</p>
<b>10. Transport</b>	
<p><b>Integrated transport and land use</b> Provide highly connected transport networks to facilitate strong links within and between communities and activity centres to enable high levels of accessibility, route and mode choice.</p> <p><b>Efficient, accessible and safe transport</b> An efficient, sustainable and integrated transport system exists for the region that is safe and accessible.</p> <p><b>Freight</b> The efficient and effective movement of freight supports regional growth.</p>	<p>The NGBR Project will require use of the existing transport network during construction for movement of staff, construction equipment and materials. The impacts of these uses on the functionality of the existing transport system are assessed in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 14 Transport. Where required, upgrades to existing road networks will be undertaken to minimise any adverse impacts to traffic movements.</p>

### 20.6.7 Coal Plan 2030

The *Coal Plan 2030* identifies the infrastructure requirements for the coal industry in Queensland over the next 20 years to accommodate a forecast in potential growth of the industry to production levels up to 340 mtpa by 2030. The plan identifies the need to establish additional rail capacity to transport coal from the Galilee Basin to Abbot Point.

The NGBR Project will address this need for additional infrastructure and will provide a direct and efficient route from the Galilee Basin to Abbot Point with a capacity of up to 100 mtpa.

#### **Coal Infrastructure Program of Actions 2008**

In 2008, the Queensland Government, with the support of the Queensland Resources Council, developed the Coal Infrastructure Program of Actions (CIPA) (DIP 2008) to ensure that the infrastructure needs of the coal industry would continue to be met. The strategy addresses physical infrastructure needs as well as 'soft' infrastructure including skills and housing provision and recognising the vital role of social infrastructure in the sustainable growth of the coal industry.

An audit of the program in 2009 identified completed, committed and planned projects including \$20 million for skills programs and \$28.5 million for housing and planning. Housing and planning projects primarily focused on the acquisition of houses and construction of new houses to provide additional social housing to the Bowen Basin, Mackay/Whitsunday region and the Rockhampton/Livingstone area.

The CIPA stipulates that the Queensland Government will continue to support sustainable development by (among other things):

- Continuing to provide additional social housing in coal mining regions
- Undertaking a range of planning studies to provide demographic and social data upon which government agencies can make informed and robust decisions in respect to the social infrastructure needs of coal mining communities
- Completing the Bowen Abbot Point Accommodation and Community Infrastructure Study which aims to ensure the supply of community infrastructure can meet population growth as a result of the potential industrial development in the region.

With respect to the CIPA, the social impact assessment has where possible recommended sharing of project information with appropriate regional and local agencies such as, sharing workforce details with the local council, and housing agencies, developing project emergency planning in consultation with regional emergency services (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts).

### 20.6.8 Queensland Land Access Policy Framework 2010

The Queensland Land Access Policy Framework 2010 aims to foster improved relationships between the agriculture and resource sectors. These laws came into effect from mid-December 2010 for the minerals and coal exploration sector and provide landowners with greater protection and security about their rights related to land access by resource companies. The framework also sets out a standard for conduct and compensation and provides landholders with a clear framework for negotiated compensation.

Resource companies must comply with the Land Access Code (Queensland Government 2010) which includes guidelines and requirements relating to communication regarding entry and

conduct of activities, access points for entry, treatment of livestock and property and pest management, among others.

Whilst the Queensland Land Access Policy Framework and the Land Access Code do not necessarily relate directly to the NGBR Project given it comprises an infrastructure project, the NGBR Project is committed to undertaking fair and reasonable land access and acquisition practices in accordance with the objectives of the policy and the code. Evidence of this approach being successfully applied to date is included in Volume 2 Appendix I Revised public consultation.

#### 20.6.9 Northern Economic Triangle Infrastructure Plan 2007

The Northern Economic Triangle Infrastructure Plan 2007 is a commitment by the Queensland Government to foster sustainable economic, social and community growth through the emergence of Mount Isa, Townsville and Bowen as a triangle of mining, mineral processing and industrial development (DSDIP 2013b).

The Northern Economic Triangle Infrastructure Plan aims to ensure the provision of critical infrastructure that underpins private sector investment in mining, minerals processing and industrial development over the next 50 years (DSDIP 2013b). The Northern Economic Triangle Infrastructure Plan is a strategic response by the Queensland Government to:

- Raise the regional and international profile of north-west and north Queensland
- Expand mining and mineral processing operations to supply world markets
- Recognise the global boom in demand for minerals and metals
- Recognise opportunities for development presented by large international companies seeking locations for value-adding projects on the east coast of Queensland
- Promote collaborative solutions for the provision of critical infrastructure and opportunities for private sector investment.

The NGBR Project facilitates the aims of the Northern Economic Triangle Infrastructure Plan by providing critical infrastructure to transport coal from the northern Galilee Basin to the Port of Abbot Point thereby promoting mining and industrial development in the region. Additionally, the NGBR Project will have a maximum capacity of 100 mtpa and will expand the international supply of coal product to global markets.

#### 20.6.10 Draft Moving Freight Strategy 2013

The draft Moving Freight Strategy 2013 seeks to develop a more integrated multi-modal freight system by outlining actions to move freight onto rail and support the agricultural sector whilst improving the efficiency of road freight.

The priorities of the draft Moving Freight Strategy 2013 include:

- Expand the use of rail freight
- Increase road freight network access
- Greater freight infrastructure investment
- Support future freight growth
- Better freight policy and information
- Engage industry for better freight outcomes.

The existing rail network supports a significant portion of general freight movement between south-east Queensland and the northern and south-western Queensland markets. These rail systems tend to be congested and shared by passenger, freight and coal transport.

The draft Moving Freight Strategy 2013 seeks to improve the capacity and efficiency of the existing freight system by increasing the use of rail for transport of freight within the State. The NGBR Project will contribute to this strategy by providing a direct transport route for coal product from the Galilee Basin to the Port of Abbot Point. This will subsequently aim to minimise the potential coal-related congestion on the existing rail network by directing coal train movements from the northern Galilee Basin directly to Abbot Point, which could enable potential capacity for non-coal freight on the existing rail network.

#### 20.6.11 Policy for the Maintenance and Enhancement of Water Quality in Central Queensland (2003)

The Policy for the Maintenance and Enhancement of Water Quality in Central Queensland 2003 provides a non-regulatory Head of Agreement for collaborative planning and management of water quality by local government, industry and landholders. This policy was created by the former Queensland Department of Local Government and Planning (2003). It provides guidance for implementing strategies for river health and water quality. The policy also recognises the importance of accurately assessing, valuing, monitoring and reporting on the condition of the region's water resources for planning and management.

The guiding principles of the policy will be taken into consideration during the development of surface and groundwater management plans for the NGBR Project (this is discussed in further detail in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 9 Water resources).

#### 20.6.12 Shaping Tomorrow's Queensland

The Shaping Tomorrow's Queensland (DIP 2009) strategy was developed following the Queensland Government Growth Management Summit in March 2010, which identified strategies for managing future growth in Queensland. This strategy includes an approach for strengthening regions, through the development of a *Queensland Regionalisation Strategy* to encourage population growth and economic development (including the creation of jobs) outside south-east Queensland and a regional first homeowners' grant of \$4,000 and the relocation of some government functions to regional areas.

#### 20.6.13 Royalties for the Region Initiative 2012

To support economic growth and infrastructure provision across the resource communities, the Queensland Government has developed the Royalties for the Region Initiative (Royalties for Regions). The aim of the Royalties for Regions is to help regions hosting major resource developments receive genuine long-term royalty benefits through better planning and targeted infrastructure investment. The program will help resource communities better manage the consequences of resource sector development, seize economic opportunities and encourage growth (Queensland Government 2013c).

As advised by the CGs Office (2013b), this initiative is used by the Queensland Government as a tool to mitigate cumulative impacts from resources projects. Although the NGBR Project is not a resource project, it is considered to be relevant to this initiative as it enables other regional projects to realise royalties that result from their respective projects.



#### 20.6.14 Regional and Resource Towns Action Plan 2013

To further assist Queensland regional towns impacted by the mining industry, the Queensland Government has developed the Regional and Resource Towns Action Plan (action plan). This action plan identifies short-term initiatives and 'on the ground' projects to address local issues, such as housing and land availability, affordability and supply blockages. The action plan identifies short-term initiatives and 'on the ground' projects which can be underway in the next 12 to 24 months to respond to these local issues while at the same time complementing the planning reforms underway (DSDIP 2013d).

As advised by the CGs Office (2013a), this plan is used by the Queensland Government as a tool to mitigate cumulative impacts from resources projects. Although the NGBR Project is not a resource project, it is considered to be relevant to this plan as it enables other regional projects to realise royalties that result from their respective projects.

#### 20.6.15 Queensland Resources and Energy Sector Code of Practice for Local Content 2013

The Queensland Resources and Energy Sector Code of Practice for Local Content (the code) is an industry led and owned self-regulated initiative.

Compliance with the code is voluntary but strongly encouraged, particularly among the membership of the Queensland Resources Council (QRC) (QRC, 2013). The code is designed specifically for companies investing in significant greenfield and brownfield investment projects, with an aim at providing full, fair and reasonable opportunity for capable local industries to compete for the supply of goods and services for these projects. It should be noted that Adani is a full member of the QRC.

The code is designed to assist Queensland operating resources and energy companies in supporting local and capable industry participation in significant greenfield and brownfield projects to provide local employment and procurement opportunities.

The overarching principle of the code is:

*In accordance with a 'voluntary' self-regulatory regime, provide full, fair and reasonable opportunity for capable local industry to compete for the supply of goods and services for significant projects.*

Under the code, Queensland operating resources and energy companies are encouraged to:

- Adopt the principle of 'full, fair and reasonable' opportunity for capable local industry to participate and the associated delivery framework
- Access the (secure) local content section of the QRC website to view guidance notes for participating resources and energy companies
- Access the publicly available information about the Queensland Resources and Energy Sector Code of Practice for Local Content for broader information
- Complete a Code Industry Report (CIR) annually to assist the QRC in completing the proposed annual Code Effectiveness Report
- Participate in an annual forum of resources and energy companies and stakeholders where the code, company initiatives and associated commercial and government-funded programs will be discussed
- Participate on the Code Steering Committee as appropriate (QRC, 2013).

The code is of particular relevance to those significant investment projects proceeding through the Queensland Government's Environmental Impact Statement (EIS) processes (Coordinator-General or Department of Environment and Heritage Protection). Therefore, the management and mitigation measures identified in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 16 Social and economic impacts have been developed with consideration to this code to facilitate local engagement including employment, training and development, contracting and procurement of people, goods and services for the NGBR Project.

## 20.7 Local planning instruments

### 20.7.1 Overview

The following section demonstrates the compliance of the NGBR Project against relevant planning schemes in order to identify permits required for construction and operation of the NGBR Project. The majority of the properties immediately affected by the NGBR Project are zoned as rural, and are located within the jurisdictions of the following planning schemes:

- Properties within the Abbot Point State Development Area (the NGBR Project commencement chainage 2.2 km to chainage 21.3 km) regulated by the *Abbot Point State Development Area Development Scheme (2012)*
- Properties within the Whitsunday Regional Council area (chainage 21.3 km – chainage 277.9 km) regulated by the *Bowen Shire Planning Scheme (2006)*
- Properties within the Isaac Regional Council area (chainage 277.9 km – chainage 313.8 km) regulated by the *Belyando Shire Planning Scheme (2008)*.

A summary of key development intents for each zone in accordance with the relevant planning scheme has been provided in the sections below.

### 20.7.2 Abbot Point State Development Area development Scheme

All proposals for material change of use developments within the Abbot Point State Development Area (APSDA) must comply with the objectives of the Abbot Point State Development Area Development Scheme 2012 and the intents of the relevant land use precincts. Alternately, the CG may use discretionary powers to approve certain types of development inconsistent with the development scheme.

The NGBR Project falls within the following land use precincts under the development scheme:

- Environmental management/materials transportation precinct
- Industry precinct
- Restricted development precinct
- Infrastructure and corridors precinct.

The NGBR Project constitutes an 'infrastructure facility' under the development scheme and is considered to be a use that 'may meet the purpose of the land use designation'. As such it is therefore considered a consistent use in the above precincts.

The consistency of the NGBR Project with the general intent and purpose of each precinct has been discussed below.

### **Environmental management / materials transportation precinct**

One of the intents for this precinct is to provide infrastructure where it is essential for transportation between the Industry Precinct and the Port of Abbot Point in a manner which ensures areas of ecological significance are recognised and managed.

The NGBR Project will provide for the transport of coal from the proposed Carmichael Coal Mine and additional third-party users to the Port of Abbot Point. The impact on areas of ecological significance has been detailed within this EIS and will be managed in accordance with an approved environmental management plan. The NGBR Project has been developed so as to avoid and manage the impact on areas of ecological significance and is therefore considered consistent with the intent of this precinct.

### **Industry precinct**

One of the intents for this precinct is to provide for the establishment of light industrial uses requiring co-location with regional, State and national significance industry and local utilities, waste disposal, extractive industry, and infrastructure facilities; provided they do not compromise the establishment of future industry of Regional, State and national significance.

The NGBR Project rail infrastructure constitutes an 'infrastructure facility' under the *Abbot Point State Development Area Development Scheme 2012* and is therefore considered consistent with the intent of this precinct. The NGBR Project will provide State and nationally significant rail infrastructure to support the growth of the coal industry in the region.

### **Restricted development precinct**

The key intent of this precinct is to restrict incompatible land uses from establishing near the Industry Precinct and to provide for the physical separation of significant industrial and infrastructure activities from sensitive land uses outside the APSDA.

The NGBR Project is considered a compatible use to be established near the Industry Precinct. The NGBR Project will provide an appropriate buffer between this precinct and the sensitive areas identified within or outside APSDA and is therefore considered consistent with the intent of this precinct.

### **Infrastructure and corridors precinct:**

The intent of this precinct is to provide for the establishment of necessary infrastructure for development sites within the APSDA including essential services and infrastructure corridors. Infrastructure facilities and local infrastructure are given priority over alternate land uses.

The NGBR Project constitutes an 'infrastructure facility' in the context of the APSDA Development Scheme and is therefore considered consistent with the intent of the precinct.

### **Port of Abbot Point Land Use Plan 2010**

The Port of Abbot Point Land Use Plan has been prepared in accordance with the statutory provisions of the TI Act. It sets out the planning and development intent of North Queensland Bulk Ports (NQBP) for the strategic port land at the Port of Abbot Point. The Port of Abbot Point Land Use Plan is the principal tool used by NQBP as the assessment manager for assessing development on strategic port land at the Port of Abbot Point.

There are two assessment processes that apply to development on strategic port land:

- NQBP's 'Port Development Consent' process

- Assessment under the SP Act.

### **Port development consent**

Port development consent must be obtained for development on port land unless an exemption for the proposal has been granted by NQBP. This process is utilised prior to an application being made under SP Act or where an application does not trigger approval under the SP Act. The purpose of this process is to ensure that the proposed development is commercially and corporately supported by NQBP and to ensure that the best outcomes are being achieved for the ongoing operation and development of the port.

### **Assessment under the Sustainable Planning Act 2009 (Qld)**

NQBP has the responsibilities of assessment manager under the SP Act for development including material change of use applications (including environmentally relevant activities) and operational works including tidal works within strategic port land tidal areas.

A proposed development will be assessed against the Port of Abbot Point Land Use Plan, the associated development guidelines and relevant State legislation, to determine:

- Consistency with the desired environmental outcomes for the Port
- Correlation with the relevant land use designation
- The ability of the development to meet relevant development assessment principles and criteria in the Development Guidelines.

### **Relevance to NGBR Project - Port of Abbot Point Land Use Plan 2010**

The northern extent of the NGBR Project final rail corridor lies within the boundaries of the Port of Abbot Point Land Use Plan and this section of the NGBR Project and any proposed infrastructure within the jurisdiction of the plan will therefore require an application for a material change of use. This application will be assessed under the provisions of the Port of Abbot Point Land Use Plan. Where NQBP determine that part or all of the NGBR Project within the bounds of the Port of Abbot Point Land Use Plan is exempt development or otherwise removes itself from being the assessment manager, a material change of use application under SDPWO Act may be required.

#### 20.7.3 Whitsunday Regional Council Community Plan 2011-2021: Our Conversation with our Community

The Whitsunday Regional Council Community Plan 2011-2021: Our Conversation with our Community (WRCCP) is a long term planning document prioritising the emerging opportunities and challenges identified by the community. The community plan is based on five key themes:

- Economy (growth and diversification of our economy, tourism, agriculture)
- Infrastructure (water and sewerage, roads and transport, parks and gardens, social and community infrastructure)
- Planning our Community (strategic planning, built environment)
- Natural Environment (environmental sustainability, protection and conservation), and
- Community (people culture and lifestyle; sport and recreation).

Under these key themes, the Community Plan outlines future opportunities and challenges identified by the Whitsunday community and proposed actions and goals for the future. Some

key goals of relevance to the NGBR Project social impact assessment and the formulation of relevant mitigation strategies include:

- Advocating the Whitsundays as the region to live, work, play and invest
- Promoting economic growth and stimulus in the region by both the private sector and all spheres of government
- Promote economic and employment opportunities whilst at the same time promoting our quality of life
- Advocating and promoting mining and industrial developments to house permanent workforces in the Whitsunday region
- Advocating for alternative modes of transport for freight and logistics other than the Bruce Highway.

#### 20.7.4 Isaac Regional Council Isaac Region 2020 Vision 2009 – 2019 (Community Plan)

The Isaac Region 2020 Vision (Isaac Region Community Plan) is a long-term, strategic planning document prepared under the *Local Government Act 2009*. The Isaac Region Community Plan identifies values, existing assets and resources and prioritises opportunities and challenges the Isaac region community has identified as important. The following list is a sub-set of actions identified as priorities in the Isaac Region Community Plan to be considered when formulating social impact management strategies for the NGBR Project:

- Affordable and available housing
- Safe roads and transport (including signage, impact of heavy industry on Peak Downs Highway and other local roads)
- Maintaining a safe community, especially for children, youth and the aged
- Conserving natural environment and build places for recreation
- Minimising cumulative impacts of coal mining (including improved monitoring and management by proponents)
- Managing integration of FIFO workforce and camps into local communities or supporting local migration into the communities
- Raise awareness and plan for the impact of industry related activities on infrastructure
- Integrating mine closure planning into decision making about community relations investments and implementation of social impact management strategies (to contribute to town sustainability when mining industry or project changes or is impacted by factors such as global markets)
- Provision of transport and power supply infrastructure (IRC, 2009).

#### 20.7.5 Bowen Shire Planning Scheme 2006

Land use activities on properties within the Whitsunday Regional Council area, particularly from approximately chainage 21.3 km to chainage 277.9 km are regulated by the *Bowen Shire Planning Scheme 2006*.

**Desired environmental outcomes**

Table 20-5 identifies relevant desired environmental outcomes (DEOs) and demonstrates the NGBR Project's compliance.

Table 20-3 DEOs - Bowen Shire Planning Scheme 2006

Desired environmental outcome (DEO)	NGBR Project compliance
<p>a) Development does not adversely affect the values of the Shire's natural environment including coastal areas, wetlands, beaches, headlands, waterways, Protected Areas, undeveloped hillslopes, and areas of significant native vegetation, from any adverse effects accruing from clearing, soil degradation and pollution due to erosion and contamination, acidification, salinity, waste disposal and any modifications to natural processes.</p>	<p>The NGBR Project has been developed in order to avoid sensitive areas and be co-located with existing infrastructure. The development of the NGBR Project will be undertaken in accordance with an approved environmental management plan (EMP) in order to manage and minimise any adverse impacts on cultural, heritage and ecological significance.</p> <p>Impacts to these values resulting from the NGBR Project will be offset in accordance with relevant State and Commonwealth policies (refer Volume 2 Appendix E Revised offsets).</p> <p>It is therefore considered the NGBR Project is consistent with this DEO.</p>
<p>b) Development does not adversely affect the quality and quantum of water available for a range of consumptive uses throughout the Shire.</p>	<p>A combination of water bores, surface water harvesting and water pipelines will be used to supply water for the construction and operational activities.</p> <p>Impacts on water quality are discussed further in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 9 Water resources. The development of the NGBR Project will be undertaken in accordance with an approved EMP in order to manage and minimise any adverse impacts on water quality.</p> <p>It is therefore considered the NGBR Project is consistent with this DEO.</p>
<p>c) Risks to safety, property and the environment are not increased by the interaction of development and natural or other hazards, including flooding, bushfire, disturbance of acid sulfate soils, storm surge, cyclonic weather events and landslide.</p>	<p>Risks associated with flooding, bushfire, disturbance of acid sulfate soils, storm surge, cyclonic weather events and landslide are discussed further in Volume 2 Appendix C NGBR Project realignment report, NGBR Project EIS NGBR Project EIS Volume 1 Chapter 17 Climate and natural hazards and NGBR Project EIS Volume 1 Chapter 18 Hazard, risk, health and safety. The development of the NGBR Project will be undertaken in accordance with an approved EMP in order to manage and minimise risks to safety, property and the environment.</p> <p>It is therefore considered the NGBR Project is consistent with this DEO.</p>
<p>d) Development protects the economic values of natural resources including good quality</p>	<p>The NGBR Project is for the development of a multi-user rail infrastructure to support the</p>

Desired environmental outcome (DEO)	NGBR Project compliance
agricultural land, extractive and mineral resources, vegetation and water.	local mining industry and future generations. The NGBR Project has been developed in order to avoid sensitive areas and be co-located with existing infrastructure. It is therefore considered that the NGBR Project is consistent with this DEO.
e) Development provides a benefit to and satisfies an economic demand of residents of the area in which it is located.	The NGBR Project is for the development of a multi-user rail infrastructure to support the local mining industry and future generations. This infrastructure is necessary for the efficient operation of mining activities which operate in a globally competitive environment and will contribute to the economic stability of local residents, creating employment and economic growth in the area. It is therefore considered the NGBR Project is consistent with this DEO.
f) Opportunities for maintaining and improving employment resulting from advancements in information technology and emerging business/industry trends are maximised.	The NGBR Project will increase employment opportunities and increase the long term viability of jobs for local residents, contributing to both employment and economic growth in the area. It is therefore considered the NGBR Project is consistent with this DEO.
g) The Shire's tourism industry is strengthened and expanded based on the sustainable use of natural, cultural and man-made assets and the orderly provision of services and facilities.	The NGBR Project is for a railway and does not include tourism related businesses. However the final rail corridor has been located to avoid sensitive and visually prominent areas, therefore minimising further impacts on natural tourism assets in the region. It is therefore considered the NGBR Project is consistent with this DEO.
h) Bowen continues to function as the main business centre and administrative hub for the Shire.	The NGBR Project will not impact upon the function of Bowen as the main business centre as it does not provide any commercial activities. The NGBR Project will house the operational workforce within Bowen consistent with this DEO. Activities associated with servicing the new facilities will increase commercial activity in Bowen and contribute to the achievement of this DEO.
i) Growth and community development within the Shire focussed on the existing Bowen and Collinsville urban areas to facilitate the efficient use, timely and orderly expansion and continued operation of infrastructure.	The NGBR Project will not impact upon urban growth and community development in the Shire as it does not provide any permanent residential or commercial areas. The NGBR Project will house the operational workforce within Bowen consistent with this DEO. The development will provide important rail infrastructure to support the local mining

Desired environmental outcome (DEO)	NGBR Project compliance
	<p>industry.</p> <p>It is therefore considered the NGBR Project is consistent with this DEO.</p>
<p>j) Development facilitates diverse housing choice, including affordable housing that is responsive to the changing demographic structure of the Shire’s population and promotes equity in access to goods and services.</p>	<p>The NGBR Project will provide temporary housing (construction camps) for construction workforce. Permanent workers will be likely to locate in existing urban areas. It is therefore considered the NGBR Project does not conflict with this DEO.</p>
<p>k) Development promotes the efficient use and provides for the orderly expansion of the Shire’s movement system, including motorised and non-motorised modes.</p>	<p>The NGBR Project is for the development of a multi-user rail infrastructure to support the local mining industry.</p>
<p>l) Development occurs in an area:</p> <ul style="list-style-type: none"> <li>i. Which is suitable and compatible with the nature of the development; and</li> <li>ii. In which services and facilities required in respect of the development are existing, planned or provided by the development.</li> </ul>	<p>The NGBR Project is for the development of a multi-user rail infrastructure to support the local mining industry. The NGBR Project location is appropriate as it will move coal from the Carmichael Coal Mine and other third-party mines in the Galilee Basin to the Port of Abbot Point for multiple parties.</p> <p>The NGBR Project is considered to occur in areas both suitable for the nature of the project and where services and facilities required are either existing or planned. Additionally, the location of the NGBR Projects considered the most suitable alignment.</p>
<p>m) Development does not adversely affect:</p> <ul style="list-style-type: none"> <li>i. The community’s health and safety.</li> <li>ii. The amenity enjoyed by people in different areas of the Shire.</li> <li>iii. The safe and efficient operation of the transport, energy and other infrastructure supporting the Shire and surrounding region.</li> </ul>	<p>The NGBR Project will be developed in accordance with an EMP (refer to Volume 2 Appendix H Revised environmental management plan framework); this EMP will outline relevant management strategies for addressing social and community related impacts. It is anticipated that the NGBR Project will benefit the community through the provision of employment and business opportunities.</p> <p>A detailed scenic amenity and lighting assessment has been undertaken and is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 4 Scenic amenity and lighting; the scenic amenity assessment outlines management strategies to minimise the impacts of the NGBR Project on landscape and visual values.</p> <p>Additionally, the NGBR Project will be operated under best practice industrial standards to ensure safe and efficient operation of the project and all supporting infrastructure.</p> <p>The NGBR Project will increase rail infrastructure in the region that will support</p>



Desired environmental outcome (DEO)	NGBR Project compliance
	<p>the mining industry in a globally competitive environment.</p> <p>A detailed hazard, risk, health and safety assessment has been undertaken and is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 18 Hazard, risk, health and safety. This assessment outlines how the risk management plan will reduce risks from the NGBR Project on public health and safety.</p> <p>It is therefore considered the NGBR Project is consistent with this DEO.</p>
<p>n) Development reflects the community's reasonable expectations and harmonises with the natural environment and does not prejudice the Shire's existing scenic amenity, particularly along the coastal plain.</p>	<p>The NGBR Project has been developed in order to avoid sensitive areas and be co-located with existing infrastructure where practicable. The development of the NGBR Project will be undertaken in accordance with an approved EMP in order to manage and minimise any adverse impacts on scenic amenity. In the majority of cases, the NGBR Project will have minimal impacts on scenic amenity due to the distance between the Project and sensitive receptors and the presence of vegetative and topographic screening (NGBR Project EIS Volume 1 Chapter 4 Scenic amenity and lighting). Impacts of the NGBR Project realignment are not considered to significantly affect existing scenic amenity due to its proximity to the existing Newlands line (Volume 2 Appendix C NGBR Project realignment report).</p> <p>It is therefore considered the NGBR Project is consistent with this DEO.</p>
<p>o) The community values of places and landscapes reflecting the community's history and identity are not detrimentally affected by development.</p>	<p>The NGBR Project will be developed in accordance with an approved cultural heritage management plan. The cultural heritage management plan will be developed in consultation with the local community to ensure the community values of places and landscapes reflecting the community's history and identity are not detrimentally affected by development. Furthermore, it is considered unlikely that any places of non-Indigenous heritage will be located within the final rail corridor (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 2 Appendix L Cultural heritage).</p> <p>It is therefore considered the NGBR Project is consistent with this DEO.</p>

**Zones**

The NGBR Project is primarily located within the Rural Zone of the *Bowen Shire Planning Scheme 2006*. The proposed uses associated with the development of the NGBR Project best

conforms to the definition of ‘Major Utilities’, ‘Accommodation Building’ and ‘General Industry’ under Schedule 1 of the planning scheme. The development of ‘Major Utilities’, ‘Accommodation Building’ and ‘General Industry’ are all identified as Impact Assessable within the Rural Zone pursuant to Part 3 of the scheme. Therefore, the NGBR Project will require a material change of use application to be lodged with Whitsunday Regional Council for assessment against the relevant codes set out in the planning scheme.

**Rural zone code**

Section 3.3 of the scheme sets out that the Rural Zone is intended primarily for rural uses and associated activities, such as grazing, agriculture and horticulture. Development within this zone should not adversely affect the amenity in this locality, or impact adversely mineral and extractive resources and associated transport routes.

The development of the NGBR Project has been appropriately located and designed to minimise impacts to the natural environment and values of scenic amenity and will be managed in accordance with a detailed EMP which will aim to mitigate any residual impacts. The NGBR Project has been located to correlate with existing transport corridors where practical and will not impact on existing coal transport routes. The NGBR Project is therefore considered to be generally consistent with the intent of this code.

20.7.6 Belyando Shire Planning Scheme 2008

Land use activities on properties located within the Isaac Regional Council area, particularly properties extending from chainage 277.9 km to chainage 313.8 km along the final rail corridor are regulated by the *Belyando Shire Planning Scheme 2008*.

**Desired environmental outcomes (DEO)**

Table 20-4 identifies relevant DEOs under the *Belyando Shire Planning Scheme 2008* and demonstrates the NGBR Project’s compliance.

Table 20-4 DEOs - Belyando Shire Planning Scheme 2006

Desired environmental outcome (DEO)	NGBR Project compliance
<p>DEO 3.1: The natural environment and cultural heritage</p> <p>The main intent of DEO 3.1 is to protect the items and places of cultural, heritage, and ecological significance in Belyando Shire against inappropriate development.</p>	<p>The NGBR Project has been developed in order to avoid sensitive areas and be co-located with existing infrastructure. The development of the NGBR Project will be undertaken in accordance with an approved EMP (refer to Volume 2 Appendix H Revised environmental management plan framework) in order to manage and minimise any adverse impacts on cultural, heritage and ecological significance. The NGBR Project has been developed in order to avoid sensitive cultural (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 2 Appendix L Cultural Heritage) and ecological areas (refer to Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 2 Appendix F Nature conservation). It is therefore considered the NGBR Project is consistent with this DEO.</p>
<p>DEO 3.2: Economic development</p> <p>The intent of DEO 3.2 is to protect the viability of the mining industry, while the</p>	<p>The NGBR Project is for the development of a multi-user rail infrastructure to support the local mining industry. It is therefore considered the</p>

Desired environmental outcome (DEO)	NGBR Project compliance
<p>economy of Belyando Shire is diversified in a manner that supports the intended land use structure and character of the urban centres of Clermont and Moranbah and the rural parts of the Shire.</p>	<p>NGBR Project is consistent with this DEO.</p>
<p><b>DEO 3.3: Community wellbeing</b>                      The intent of DEO 3.3 is to ensure development is consistent with community expectations and needs, while contributing to community wellbeing through the enhancement of core community elements (including the built environment, services, facilities, employment and infrastructure).</p>	<p>The NGBR Project will be developed in accordance with an EMP (refer to Volume 2 Appendix H Revised environmental management plan framework); this plan will outline relevant management strategies for addressing social and community related impacts. It is anticipated that the NGBR Project will benefit the community through the provision of employment and business opportunities.</p> <p>A detailed hazard, risk, health and safety assessment has been undertaken and is provided in Volume 2 Appendix C NGBR Project realignment report and NGBR Project EIS Volume 1 Chapter 18 Hazard, risk, health and safety. This assessment outlines how the risk management plan will reduce risks from the NGBR Project on public health and safety.</p> <p>Residual impacts relating to air, noise and vibration are anticipated to be insignificant based on the assessments provided in Volume 2 Appendix C NGBR Project realignment report, NGBR Project EIS Volume 2 Appendix I Air quality and NGBR Project EIS Volume 2 Appendix J Noise and vibration.</p> <p>The NGBR Project will increase rail infrastructure in the region, which will in turn support the mining industry growth and development within the region as required under the draft Moving Freight strategy (refer to Section 20.6.10). It is therefore considered the NGBR Project is consistent with this DEO.</p>

**Zones**

The NGBR Project is primarily located within the Rural Zone. The proposed uses associated with the development of the NGBR Project best conforms to the definition of ‘Railway Activities’, ‘Accommodation Building’ and ‘Public Utilities’ under Part 2 of the planning scheme. The development of ‘Accommodation Buildings’, ‘Railway Activities’ and ‘Public Utilities’ are all identified as Impact Assessable within the Rural Zone pursuant to Part 4 of the scheme. Therefore, the NGBR Project will require a material change of use application to be lodged with Isaac Regional Council for assessment against the relevant codes set out in the planning scheme.

**Rural zone code**

Section 4.1.2.2 of the scheme sets out that the Rural Zone is intended primarily for rural uses and associated activities, such as grazing, intensive agriculture and intensive animal industry. Development within this zone should not compromise the existing mining and extractive industries, or impact adversely on infrastructure. The code also requires that development does not adversely impact on areas of conservation, cultural and high landscape values.

The development of the NGBR Project has been appropriately located and designed to minimise impacts to the natural environment and will be managed in accordance with a detailed EMP which will aim to mitigate any residual impacts. The NGBR Project is therefore considered to be generally consistent with the intent of this code Summary of approvals required.

20.7.7 Nebo Shire Planning Scheme 2008

**Desired environmental outcomes (DEO)**

The *Nebo Shire Planning Scheme 2008* has identified several DEOs for the area. The DEOs have been characterised into three categories: ecological processes and natural systems; economic development; and the cultural, economic, physical and social well-being of people and communities. Table 20-4 identifies relevant DEOs under the *Nebo Shire Planning Scheme 2008* and demonstrates the NGBR Project’s compliance.

**Zones**

The NGBR Project is primarily located within the Rural Zone. The proposed uses associated with the development of the NGBR Project best conform to the definition of ‘Major Utility’ under Part 7 of the planning scheme. The development of a ‘Major Utility’ is identified as impact assessable within the Rural Zone pursuant to Part 3 of the scheme. Therefore, the NGBR Project will require a material change of use application to be lodged with Isaac Regional Council for assessment against the relevant codes set out in the planning scheme should the Galilee Basin State Development Area not be declared as proposed.

**Rural zone code**

Section 4.2 of the scheme sets out that the Rural Zone is intended to accommodate a range of traditional, new and emerging agricultural and primary industry activities together with areas of natural and/or landscape significance. Development within this zone should not compromise the existing mining and extractive industries, or impact adversely on infrastructure. The code also requires that development does not adversely impact on areas of conservation, cultural and high landscape values.

The development of the NGBR Project realignment has been appropriately located and designed to minimise impacts to the natural environment and will be managed in accordance with a detailed EMP (Volume 2 Appendix H Revised environmental management plan framework) which will aim to mitigate any residual impacts. The NGBR Project realignment is therefore considered to be generally consistent with the intent of this code.

Table 20-5 DEOs - Nebo Shire Planning Scheme 2008

Desired environmental outcome (DEO) and applicable strategies <sup>1</sup>	NGBR Project realignment compliance
<p><b>Ecological Processes and Natural Systems</b></p> <p>(1) The values of significant natural features and areas are protected, maintained and enhanced.</p> <p>(2) The Shires rivers and creek systems, and associated catchment areas are protected from adverse impacts and incompatible development.</p> <p>(3) Remnant vegetation and, in particular, riparian corridors are protected, maintained and</p>	<p>The NGBR Project realignment has considered the location of sensitive natural features. The position of the final rail corridor adjacent to the Newlands line has minimised disturbance to sensitive areas of importance to the local area. The development of the NGBR Project will be undertaken in accordance with an approved EMP (refer to Volume 2</p>

Desired environmental outcome (DEO) and applicable strategies <sup>1</sup>	NGBR Project realignment compliance
<p>enhanced to maximise biodiversity and area of flora and fauna habitat.</p> <p>(5) Areas displaying significant landscape values in the Shire area protected from encroachment by incompatible development.</p>	<p>Appendix H Revised environmental management plan framework) in order to manage and minimise any impacts on any areas of ecological significance. Potential impacts on sensitive ecological areas are described in Section 6.</p> <p>It is therefore considered the NGBR Project is consistent with this DEO.</p>
<p><b>Economic development</b></p> <p>(6) Good quality agricultural land (GQAL) and other rural lands capable of supporting primary production activities are protected as a significant economic resource.</p> <p>(7) Necessary infrastructure, which is protected from incompatible development, is provided in a timely and cost effective manner to support the ongoing development and future establishment of coal mining uses to ensure continued economic development within the Shire.</p>	<p>The NGBR Project is a multi-user rail infrastructure developed to support the mining industry. The NGBR Project realignment co-location with existing rail infrastructure has minimised potential impact on Good Quality Agricultural Land (GQAL) and Strategic Cropping Land (SCL) within the Nebo Shire. Potential impacts on soils are described in Section 5.</p> <p>It is therefore considered the NGBR Project is consistent with this DEO.</p>
<p><b>Cultural, Economic, Physical and Social Well Being of People and Communities</b></p> <p>(12) The standards of the built environment respond appropriately to the inland climate, individual character and identity of the different townships, the health, safety well-being and amenity of the community.</p> <p>(13) The values of areas or places of cultural heritage significance are protected, maintained and enhanced.</p> <p>(14) The community has access to adequate public open spaces and cultural, recreational and social facilities and activities.</p> <p>(16) The urban localities accommodate a range of uses, new coal mining worker camps, associated services and residential types and lot sizes to reflect community needs.</p> <p>(18) The provision and safe operation of necessary infrastructure in accordance with the differing needs of the urban and rural localities of the Shire.</p> <p>(19) The safety of the communities is maintained by ensuring development does not occur in</p>	<p>The NGBR Project will be developed in accordance with an EMP (refer to Volume 2 Appendix H Revised environmental management plan framework). This plan will outline relevant management strategies for addressing cultural, social and community related impacts. It is anticipated that the NGBR Project will benefit the community through the provision of employment and business opportunities.</p> <p>A detailed hazard, risk, health and safety assessment has been undertaken for the NGBR Project EIS and is provided in the NGBR Project EIS Volume 1 Chapter 18 Hazard, risk, health and safety. This assessment outlines how the risk management plan will reduce risks from the NGBR Project realignment on public health and safety. No new risks additional to those identified in the NGBR Project EIS have been identified as a result of the realignment.</p> <p>The NGBR Project realignment will not impact on any places listed on the Queensland Cultural Heritage Register.</p>

Desired environmental outcome (DEO) and applicable strategies <sup>1</sup>	NGBR Project realignment compliance
<p>areas prone to bushfire, flood and / or landslide</p>	<p>Construction works will be undertaken in accordance with a Cultural heritage management plan. Potential impacts on cultural heritage are described in Section 13.</p> <p>The nearest sensitive receptor to the section of the NGBR Project realignment under the Nebo Shire Planning Scheme is four kilometres south-east. Potential impacts relating to air quality, noise and vibration at this sensitive receptor are anticipated to be insignificant based on the assessment provided in Section 9 and 11.</p> <p>The NGBR Project will increase rail infrastructure in the region, which will in turn support the mining industry growth and development within the region as required under the draft Moving Freight strategy.</p> <p>It is therefore considered the NGBR Project is consistent with this DEO.</p>

<sup>1</sup> Numbering of applicable strategies is as stated in *Nebo Shire Planning Scheme 2008* – only applicable strategies are reproduced.

## 20.8 Summary of approvals required

The following table outlines the approvals required for the NGBR Project based on the relevant activities proposed and indicates the anticipated timing of attaining each approval.

This EIS seeks to obtain endorsement, via recommendations and conditions within the CG’s evaluation report, for the NGBR Project. Some aspects, the subject of the EIS, are also deemed assessable development under schedule 3 of the Sustainable Planning Act 2009, a regulation, a local planning scheme or local by-laws.

It is acknowledged that further information (in the form of detailed site layout designs and final site-based management material) to support future approvals will be provided prior to formal lodgement of applications with the relevant assessment manager/s. This process is not expected to commence until after the CG has issued an evaluation report under the SDPWO Act.

The timing presented in Table 20-6 relates to the preparation of abovementioned development applications and supporting information. However, appropriate conditions are sought from the Coordinator-General through the current EIS process.

Table 20-6 Project approvals register

Legislation	Approval / permit required	Comments	Timing – preparation and lodgement of application material	Project wide <sup>1</sup>	Site preparation / civil works <sup>2</sup>	100 m corridor including rail line and passing loops	Accommodation camps <sup>3</sup>	Rail depot (storage and manufacturing yard)	Rolling stock maintenance depot	Concrete batching plants	Temporary lay down areas (track and road crossings)	Temporary lay down areas (waterway crossings)	Water way crossings	Turning circles	Water supply <sup>4</sup>	Haulage and transport of plant / materials during construction and operations	Quarries and borrow pits	Ongoing railway operation and maintenance <sup>5</sup>	Road crossings	Rail crossings	Stock route crossings	
Commonwealth approval requirements																						
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Controlled action assessment via Environmental Impact Statement	Assessment in parallel with State assessment under SDPWO Act	In progress	X																		
<i>Native Title Act 1993</i>	Indigenous land use agreement	Being undertaken as a concurrent process	In progress	X																		
<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i>	General duty of care	Proponent has a responsibility under the Act to report the discovery of anything reasonably suspected to be Aboriginal remains.	Draft EIS Cultural heritage management plans in progress	X																		
State approval requirements																						
<i>State Development and Public Works Organisation Act 1971</i>	Coordinated Project assessment via Environmental Impact Statement	Assessment by CG in parallel with EPBC Act assessment	In progress	X																		
	Development approval under the APSDA Development Scheme	Within the APSDA	Post AEIS	X																		
	Declaration of Galilee Basin State Development Area	Remainder of NGBR Project not located within APSDA or on strategic port land	Post AEIS	X																		
	Material change of use under final development scheme for Galilee Basin State Development area	Remainder of NGBR Project not located within APSDA or on strategic port land	Post AEIS	X																		
	Declaration as a Private Infrastructure Facility (PIF)	Remainder of NGBR Project not located within APSDA or on strategic port land or new SDA	Post AEIS	X																		

Legislation	Approval / permit required	Comments	Timing – preparation and lodgement of application material	Project wide <sup>1</sup>	Site preparation / civil works <sup>2</sup>	100 m corridor including rail line and passing loops	Accommodation camps <sup>3</sup>	Rail depot (storage and manufacturing yard)	Rolling stock maintenance depot	Concrete batching plants	Temporary lay down areas (track and road crossings)	Temporary lay down areas (waterway crossings)	Water way crossings	Turning circles	Water supply <sup>4</sup>	Haulage and transport of plant / materials during construction and operations	Quarries and borrow pits	Ongoing railway operation and maintenance <sup>5</sup>	Road crossings	Rail crossings	Stock route crossings
<i>Sustainable Planning Act 2009 (SP Act)</i>	Community Infrastructure designation (CID)	This may apply across the entire NGBR Project footprint within or not within APSDA, SPL or a new SDA.	Post AEIS	X																	
	Material change of use under Belyando Shire Planning Scheme (including ERAs)	Lodged as an application under the IDAS process; assessed by the Isaac Regional Council	Post AEIS			X	X	X	X								X				
	Material change of use under Bowen Shire Planning Scheme (including ERAs)	Lodged as an application under the IDAS process; assessed by the Whitsunday Regional Council	Post AEIS			X	X	X	X								X				
	Material change of use under Nebo Shire Planning Scheme (including ERAs)	Lodged as an application under the IDAS process; assessed by Isaac Regional Council	Post AEIS			X															
	Development permit for reconfiguration of a lot under Belyando Shire Planning Scheme	Lodged as an application under the IDAS process; assessed by the Isaac Regional Council	Post AEIS			X	X		X									X			
	Development permit for reconfiguration of a lot under Bowen Shire Planning Scheme	Lodged as an application under the IDAS process; assessed by the Whitsunday Regional Council	Post AEIS			X	X		X									X			
	Development permit for reconfiguration of a lot under Nebo Shire Planning Scheme	Lodged as an application under the IDAS process; assessed by Isaac Regional Council	Post AEIS			X															
	Development permit for operational works under Belyando Shire Planning Scheme	Lodged as an application under the IDAS process; assessed by the Isaac Regional Council	Post AEIS		X								X	X				X			
	Development permit for operational works under Bowen Shire Planning Scheme	Lodged as an application under the IDAS process; assessed by the Whitsunday Regional Council	Post AEIS		X								X	X				X			



Legislation	Approval / permit required	Comments	Timing – preparation and lodgement of application material	Project wide <sup>1</sup>	Site preparation / civil works <sup>2</sup>	100 m corridor including rail line and passing loops	Accommodation camps <sup>3</sup>	Rail depot (storage and manufacturing yard)	Rolling stock maintenance depot	Concrete batching plants	Temporary lay down areas (track and road crossings)	Temporary lay down areas (waterway crossings)	Water way crossings	Turning circles	Water supply <sup>4</sup>	Haulage and transport of plant / materials during construction and operations	Quarries and borrow pits	Ongoing railway operation and maintenance <sup>5</sup>	Road crossings	Rail crossings	Stock route crossings
	Development permit for operational works under Nebo Shire Planning Scheme	Lodged as an application under the IDAS process; assessed by Isaac Regional Council	Post AEIS		X																
State Approval requirements coordinated under the Sustainable Planning Act 2009																					
<i>Aboriginal Cultural Heritage Act 2003</i>	General duty of care and cultural heritage management plan with each relevant Indigenous group	Being undertaken concurrently.	Draft EIS and cultural heritage management plans in progress	X																	
<i>Coastal Protection and Management Act 1995</i>	Works within tidal waters	Only required where the NGBR Project is developed within tidal waters	Post AEIS			X						X	X								
<i>Environmental Protection Act 1994</i>	ERA 16 Extractive and screening activities	Extracting, other than by dredging, a total of 5000 tonnes or more of material, in a year, from an area or screening 5000 tonnes or more of material in a year	Post AEIS		X												X				
	ERA 33 Crushing, milling, grinding or screening	Crushing, grinding, milling or screening more than 5000 tonnes of material in a year	Post AEIS														X				
	ERA 63 Sewage treatment	Operating 1 or more sewage treatment works at a site that has a total daily peak design capacity of at least 21 EP.	Post AEIS				X		X												

Legislation	Approval / permit required	Comments	Timing – preparation and lodgement of application material	Project wide <sup>1</sup>	Site preparation / civil works <sup>2</sup>	100 m corridor including rail line and passing loops	Accommodation camps <sup>3</sup>	Rail depot (storage and manufacturing yard)	Rolling stock maintenance depot	Concrete batching plants	Temporary lay down areas (track and road crossings)	Temporary lay down areas (waterway crossings)	Water way crossings	Turning circles	Water supply <sup>4</sup>	Haulage and transport of plant / materials during construction and operations	Quarries and borrow pits	Ongoing railway operation and maintenance <sup>5</sup>	Road crossings	Rail crossings	Stock route crossings	
	ERA 64 Water treatment	Treating 10 ML or more raw water in a day.  Carrying out, in a day, advanced treatment (i.e. treatment of water that has been treated in a sewerage treatment plant) of 5 ML or more of water, allowing the release of waste to waterways	Post AEIS				X		X													
<i>Environmental Protection Act 1994</i>	Suitability statement required for development on land listed on the EMR / CLR	Site assessment required to determine level of contamination and if any remediation required.	Post AEIS		X		X		X				X				X					
	Disposal permit for removing or disposing of contaminated soil	Required where contaminated soil is proposed to be removed from site	Post AEIS		X		X		X				X				X					
<i>Fisheries Act 1994</i>	Development permit for removal of / damage to marine plants	Required where the NGBR Project will involve damage to marine plants, likely in areas within the coastal zone and under tidal influence i.e. watercourse crossings at the northern end of the final rail corridor	Post AEIS		X							X	X									
	Development permit for carrying out Operational Works / Waterway Barrier Works Permit	Required where temporary or permanent waterway barrier works are required for construction and operation works.	Post AEIS		X							X	X									
<i>Forestry Act 1959</i>	Permit to search for and to get samples of quarry material	To occur early to inform the EIS process.	Granted														X					
	Sales Permit		Post AEIS														X					

Legislation	Approval / permit required	Comments	Timing – preparation and lodgement of application material	Project wide <sup>1</sup>	Site preparation / civil works <sup>2</sup>	100 m corridor including rail line and passing loops	Accommodation camps <sup>3</sup>	Rail depot (storage and manufacturing yard)	Rolling stock maintenance depot	Concrete batching plants	Temporary lay down areas (track and road crossings)	Temporary lay down areas (waterway crossings)	Water way crossings	Turning circles	Water supply <sup>4</sup>	Haulage and transport of plant / materials during construction and operations	Quarries and borrow pits	Ongoing railway operation and maintenance <sup>5</sup>	Road crossings	Rail crossings	Stock route crossings
<i>Land Act 1994</i>	Permit for temporary road closure	May be required for establishment of site access roads	Post AEIS		X																
	Reconfiguring a lot	Required where land parcels are required to be reconfigured or tenure converted	Post AEIS	X																	
<i>Land Protection (Pest and Stock Route Management) Act 2002</i>	Permit for activity in a Stock Route area		Post AEIS																		X
<i>Transport Infrastructure Act 1994</i>	Road control permit / traffic control permit	Required for works within a State-controlled road corridor and to control traffic during works on a State-controlled road	Post AEIS		X														X	X	
<i>Transport (Rail Safety Act) 2010</i>	Railway Manager accreditation (infrastructure and operator)	Concurrent process	In progress	X																	
<i>Vegetation Management Act</i>	Development permit for Operational Works – clearing vegetation	Where clearing of assessable vegetation is required a PMAV and PVMP will be developed	Post AEIS		X	X	X	X	X		X	X	X	X	X		X		X	X	X
<i>Water Act 2000</i>	Riverine protection permit		Post AEIS									X	X		X						
	Permit to take water (temporary)		Post AEIS												X						
	Water allocation		Post AEIS												X						
	Water licence		Post AEIS												X						
<i>Explosives Act 1999</i>	Permit for use, handling or transport of explosives		Post AEIS		X											X	X				

Legislation	Approval / permit required	Comments	Timing – preparation and lodgement of application material	Project wide <sup>1</sup>	Site preparation / civil works <sup>2</sup>	100 m corridor including rail line and passing loops	Accommodation camps <sup>3</sup>	Rail depot (storage and manufacturing yard)	Rolling stock maintenance depot	Concrete batching plants	Temporary lay down areas (track and road crossings)	Temporary lay down areas (waterway crossings)	Water way crossings	Turning circles	Water supply <sup>4</sup>	Haulage and transport of plant / materials during construction and operations	Quarries and borrow pits	Ongoing railway operation and maintenance <sup>5</sup>	Road crossings	Rail crossings	Stock route crossings
<i>National Greenhouse and Energy Reporting Act 2007</i>	General duty of care	Where a report on GHG emissions associated with the NGBR Project is required under NGER	Post AEIS	X																	
<i>Nature Conservation Act 1992</i>	Permit to take / clear protected plants	Approval required to clear endangered, vulnerable or near threatened plants.  Survey in accordance with flora survey guidelines required in high risk areas (State of Queensland 2014b).	Post AEIS		X	X	X	X	X		X	X	X	X	X		X		X	X	X
<i>Strategic Cropping Land Act 2011 and Strategic Cropping Land Regulation 2011</i>	Approval in accordance with SPP	Approval required where the NGBR Project will unavoidably have a permanent impact on areas of SCL (refer Section 20.5.14 regarding repeal)	Post AEIS	X																	
<i>Transport Infrastructure Act 1994</i>	Port development consent on strategic port land	On strategic port land in accordance with the Port of Abbot Point Land Use Plan, administered by NQBP	Post AEIS	X																	
<i>Work Health and Safety Act 2011</i>	Permit for storage / use of dangerous goods	Where the relevant thresholds are exceeded	Post AEIS		X		X	X	X							X	X				
<i>Waste Reduction and Recycling Act 2011</i>	Approval of resource for beneficial use	Where resources may be diverted from waste disposal streams and be reused as part of waste management strategy	Post AEIS	X																	

'X' indicates environmental approval / permit / licence potentially required.

<sup>1</sup> - where an approval is considered to be applicable 'Project wide' it is assumed to include all components of the NGBR Project, whether across the entirety of the NGBR Project footprint or not

<sup>2</sup> - Site preparation and civil works includes: Final rail corridor site preparation (clearing and grubbing vegetation, temporary drainage and fencing, establishment of site access), formation earthworks (cut & fill), track works and signalling.

<sup>3</sup> - Camps includes: Accommodation camps, waste treatment / storage / disposal (solid and liquid), water treatment, solid waste management, water treatment

<sup>4</sup> - Water supply includes: Water supply infrastructure (to support construction and later ongoing operation activities)

<sup>5</sup> – Ongoing railway operations: Rolling stock maintenance (provisioning, marshalling yards, fuel storage and refuelling, maintenance, etc.), track and signalling maintenance facilities

## 20.9 Conclusion

A range of legislation and approvals are applicable to the NGBR Project at the Commonwealth, State and local government level. As outlined in the previous sections, numerous approvals will be required prior to and /or during the construction and / or operation of the NGBR Project.

The NGBR Project comprises a range of activities across multiple planning instruments and therefore it is the preferred option to have the NGBR Project designated as a CID, SDA and/or PIF by the CG under the SDPWO Act. This approach will coordinate and simplify matters associated with acquisition of contiguous land tenure, Native Title, development approvals and planning for consistent future development. Where one or more of these designations are not granted, approval will be sought under the relevant local planning schemes and will subsequently require several different applications for each component of the NGBR Project (generally on lot-by-lot basis). This approach will significantly increase the regulatory burden on the relevant assessment managers.

Adani is actively working to reduce the complexity and administrative burden associated with the large number of approvals required for the Project. Adani seeks that the CG acknowledge and endorse each of the relevant approvals set out in this report, together with any other approvals the CG identifies, via recommendations and conditions within the CG's evaluation report.

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Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
A	Michael Goodall	Philip Bradley		01/04/2014		01/04/2014
0	Michael Goodall	Philip Bradley		03/04/2014		03/04/2014

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