



Referral of proposed action

What is a referral?

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) provides for the protection of the environment, especially matters of national environmental significance (NES). Under the EPBC Act, a person must not take an action that has, will have, or is likely to have a significant impact on any of the matters of NES without approval from the Australian Government Environment Minister or the Minister's delegate. (Further references to 'the Minister' in this form include references to the Minister's delegate.) To obtain approval from the Environment Minister, a proposed action should be referred. The purpose of a referral is to obtain a decision on whether your proposed action will need formal assessment and approval under the EPBC Act.

Your referral will be the principal basis for the Minister's decision as to whether approval is necessary and, if so, the type of assessment that will be undertaken. These decisions are made within 20 business days, provided sufficient information is provided in the referral.

Who can make a referral?

Referrals may be made by or on behalf of a person proposing to take an action, the Commonwealth or a Commonwealth agency, a state or territory government, or agency, provided that the relevant government or agency has administrative responsibilities relating to the action.

When do I need to make a referral?

A referral must be made for actions that are likely to have a significant impact on the following matters protected by Part 3 of the EPBC Act:

- World Heritage properties (sections 12 and 15A)
- National Heritage places (sections 15B and 15C)
- Wetlands of international importance (sections 16 and 17B)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A)
- Protection of the environment from nuclear actions (sections 21 and 22A)
- Commonwealth marine environment (sections 23 and 24A)
- Great Barrier Reef Marine Park (sections 24B and 24C)
- A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
- The environment, if the action involves Commonwealth land (sections 26 and 27A), including:
 - actions that are likely to have a significant impact on the environment of Commonwealth land (even if taken outside Commonwealth land);
 - actions taken on Commonwealth land that may have a significant impact on the environment generally;
- The environment, if the action is taken by the Commonwealth (section 28)
- Commonwealth Heritage places outside the Australian jurisdiction (sections 27B and 27C)

You may still make a referral if you believe your action is not going to have a significant impact, or if you are unsure. This will provide a greater level of certainty that Commonwealth assessment requirements have been met.

To help you decide whether or not your proposed action requires approval (and therefore, if you should make a referral), the following guidance is available from the Department's website:

- the Policy Statement titled Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. Additional sectoral guidelines are also available.

- the Policy Statement titled Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies.
- the Policy Statement titled Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources.
- the interactive map tool (enter a location to obtain a report on what matters of NES may occur in that location).

Can I refer part of a larger action?

In certain circumstances, **the Minister may not accept a referral for an action that is a component of a larger action and may request the person proposing to take the action to refer the larger action for consideration under the EPBC Act (Section 74A, EPBC Act)**. If you wish to make a referral for a staged or component referral, read 'Fact Sheet 6 Staged Developments/Split Referrals' and contact the Referrals Gateway (1800 803 772).

Do I need a permit?

Some activities may also require a permit under other sections of the EPBC Act or another law of the Commonwealth. Information is available on the Department's web site.

Is your action in the Great Barrier Reef Marine Park?

If your action is in the Great Barrier Reef Marine Park it may require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If a permission is required, referral of the action under the EPBC Act is deemed to be an application under the GBRMP Act (see section 37AB, GBRMP Act). This referral will be forwarded to the Great Barrier Reef Marine Park Authority (the Authority) for the Authority to commence its permit processes as required under the Great Barrier Reef Marine Park Regulations 1983. If a permission is not required under the GBRMP Act, no approval under the EPBC Act is required (see section 43, EPBC Act). The Authority can provide advice on relevant permission requirements applying to activities in the Marine Park.

The Authority is responsible for assessing applications for permissions under the GBRMP Act, GBRMP Regulations and Zoning Plan. Where assessment and approval is also required under the EPBC Act, a single integrated assessment for the purposes of both Acts will apply in most cases. Further information on environmental approval requirements applying to actions in the Great Barrier Reef Marine Park is available from <http://www.gbrmpa.gov.au/> or by contacting GBRMPA's Environmental Assessment and Management Section on (07) 4750 0700.

The Authority may require a permit application assessment fee to be paid in relation to the assessment of applications for permissions required under the GBRMP Act, even if the permission is made as a referral under the EPBC Act. Further information on this is available from the Authority:

Great Barrier Reef Marine Park Authority

2-68 Flinders Street PO Box 1379

Townsville QLD 4810

AUSTRALIA

Phone: + 61 7 4750 0700

Fax: + 61 7 4772 6093

www.gbrmpa.gov.au

What information do I need to provide?

Completing all parts of this form will ensure that you submit the required information and will also assist the Department to process your referral efficiently. If a section of the referral document is not applicable to your proposal enter N/A.

You can complete your referral by entering your information into this Word file.

Instructions

Instructions are provided in blue text throughout the form.

Attachments/supporting information

The referral form should contain sufficient information to provide an adequate basis for a decision on the likely impacts of the proposed action. You should also provide supporting documentation, such as environmental reports or surveys, as attachments.

Coloured maps, figures or photographs to help explain the project and its location should also be submitted with your referral. Aerial photographs, in particular, can provide a useful perspective and context. Figures should be good quality as they may be scanned and viewed electronically as black and white documents. Maps should be of a scale that clearly shows the location of the proposed action and any environmental aspects of interest.

Please ensure any attachments are below three megabytes (3mb) as they will be published on the Department's website for public comment. To minimise file size, enclose maps and figures as separate files if necessary. If unsure, contact the Referrals Gateway (email address below) for advice. Attachments larger than three megabytes (3mb) may delay processing of your referral.

Note: the Minister may decide not to publish information that the Minister is satisfied is commercial-in-confidence.

How do I pay for my referral?

From 1 October 2014 the Australian Government commenced cost recovery arrangements for environmental assessments and some strategic assessments under the EPBC Act. If an action is referred on or after 1 October 2014, then cost recovery will apply to both the referral and any assessment activities undertaken. Further information regarding cost recovery can be found on the Department's website at:

<http://www.environment.gov.au/epbc/publications/cost-recovery-cris>

Payment of the referral fee can be made using one of the following methods:

- **EFT Payments can be made to:**

BSB: 092-009

Bank Account No. 115859

Amount: \$7352

Account Name: Department of the Environment.

Bank: Reserve Bank of Australia

Bank Address: 20-22 London Circuit Canberra ACT 2601

Description: The reference number provided (see note below)

- **Cheque** - Payable to "Department of the Environment". Include the reference number provided (see note below), and if posted, address:

The Referrals Gateway
Environment Assessment Branch
Department of the Environment
GPO Box 787
Canberra ACT 2601

- **Credit Card**

Please contact the Collector of Public Money (CPM) directly (call (02) 6274 2930 or 6274 20260 and provide the reference number (see note below).

Note: in order to receive a reference number, submit your referral and the Referrals Gateway will email you the reference number.

How do I submit a referral?

Referrals may be submitted by mail or email.

Mail to:

Referrals Gateway
Environment Assessment Branch
Department of Environment
GPO Box 787
CANBERRA ACT 2601

- If submitting via mail, electronic copies of documentation (on CD/DVD or by email) are required.

Email to: epbc.referrals@environment.gov.au

- Clearly mark the email as a 'Referral under the EPBC Act'.
- Attach the referral as a Microsoft Word file and, if possible, a PDF file.
- **Follow up with a mailed hardcopy including copies of any attachments or supporting reports.**

What happens next?

Following receipt of a valid referral (containing all required information) you will be advised of the next steps in the process, and the referral and attachments will be published on the Department's web site for public comment.

The Department will write to you within 20 business days to advise you of the outcome of your referral and whether or not formal assessment and approval under the EPBC Act is required. There are a number of possible decisions regarding your referral:

The proposed action is NOT LIKELY to have a significant impact and does NOT NEED approval

No further consideration is required under the environmental assessment provisions of the EPBC Act and the action can proceed (subject to any other Commonwealth, state or local government requirements).

The proposed action is NOT LIKELY to have a significant impact IF undertaken in a particular manner

The action can proceed if undertaken in a particular manner (subject to any other Commonwealth, state or local government requirements). The particular manner in which you must carry out the action will be identified as part of the final decision. You must report your compliance with the particular manner to the Department.

The proposed action is LIKELY to have a significant impact and does NEED approval

If the action is likely to have a significant impact a decision will be made that it is a *controlled action*. The particular matters upon which the action may have a significant impact (such as World Heritage values or threatened species) are known as the *controlling provisions*.

The controlled action is subject to a public assessment process before a final decision can be made about whether to approve it. The assessment approach will usually be decided at the same time as the controlled action decision. (Further information about the levels of assessment and basis for deciding the approach are available on the Department's web site.)

The proposed action would have UNACCEPTABLE impacts and CANNOT proceed

The Minister may decide, on the basis of the information in the referral, that a referred action would have clearly unacceptable impacts on a protected matter and cannot proceed.

Compliance audits

If a decision is made to approve a project, the Department may audit it at any time to ensure that it is completed in accordance with the approval decision or the information provided in the referral. If the project changes, such that the likelihood of significant impacts could vary, you should write to the Department to advise of the changes. If your project is in the Great Barrier Reef Marine Park and a decision is made to approve it, the Authority may also audit it. (See "*Is your action in the Great Barrier Reef Marine Park*," p.2, for more details).

For more information

- call the Department of the Environment Community Information Unit on 1800 803 772 or
- visit the web site <http://www.environment.gov.au/epbc>

All the information you need to make a referral, including documents referenced in this form, can be accessed from the above web site.

Referral of proposed action

Project title: Goomong Road Kandanga Creek Bridge No 19 Timber Bridge Replacement

1 Summary of proposed action

NOTE: You must also attach a map/plan(s) and associated geographic information system (GIS) vector (shapefile) dataset showing the location and approximate boundaries of the area in which the project is to occur. Maps in A4 size are preferred. You must also attach a map(s)/plan(s) showing the location and boundaries of the project area in respect to any features identified in 3.1 & 3.2, as well as the extent of any freehold, leasehold or other tenure identified in 3.3(i).

1.1 Short description

Use 2 or 3 sentences to uniquely identify the proposed action and its location.

Gympie Regional Council (GRC) proposes to upgrade the dilapidated Goomong Road timber bridge No 19 that spans Kandanga Creek at Kandanga, Queensland. Goomong Road is a Council maintained sealed double lane road that provides access to local rural properties. The existing single lane timber bridge at the project location has been identified in Council's Timber Bridge Replacement Program. Works will entail replacement of the existing structure with a new bridge at the same location.

1.2 Latitude and longitude

Latitude and longitude details are used to accurately map the boundary of the proposed action. If these coordinates are inaccurate or insufficient it may delay the processing of your referral.

location point	Latitude			Longitude		
	degrees	minutes	seconds	degrees	minutes	seconds
1	26°	21'	39.79"S	152°	42'	10.08"E

The Interactive Mapping Tool may provide assistance in determining the coordinates for your project area.

If the area is less than 5 hectares, provide the location as a single pair of latitude and longitude references. If the area is greater than 5 hectares, provide bounding location points.

There should be no more than 50 sets of bounding location coordinate points per proposal area.

Bounding location coordinate points should be provided sequentially in either a clockwise or anticlockwise direction.

If the proposed action is linear (eg. a road or pipeline), provide coordinates for each turning point.

Also attach the associated GIS-compliant file that delineates the proposed referral area. If the area is less than 5 hectares, please provide the location as a point layer. If greater than 5 hectares, please provide a polygon layer. If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer (refer to GIS data supply guidelines at [Attachment A](#)).

Do not use AMG coordinates.

1.3 Locality and property description

Provide a brief physical description of the property on which the proposed action will take place and the project location (e.g. proximity to major towns, or for off-shore projects, shortest distance to mainland).

The Project is located approximately 4 km north-east of Kandanga township within Queensland's Mary Valley and is within road reserve tenured land approximately 80m east of the interchange between Goomong Road and Mary Valley Road.

1.4 Size of the development footprint or work area (hectares)

The development footprint is less than 0.2ha

1.5 Street address of the site

Goomong Road Bridge, Goomong Road, Kandanga

1.6 **Lot description**
Describe the lot numbers and title description, if known.
The Project area is within road reserve tenured land.

1.7 **Local Government Area and Council contact (if known)**
If the project is subject to local government planning approval, provide the name of the relevant council contact officer.
The Project is located within the Gympie Regional Council local government area but is not subject to a local government planning approval.

1.8 **Time frame**
Specify the time frame in which the action will be taken including the estimated start date of construction/operation.
Commencement of construction is anticipated in September 2016 (may be sooner if approvals are granted) with completion of construction anticipated in February 2017 (subject to weather).

1.9	Alternatives to proposed action Were any feasible alternatives to taking the proposed action (including not taking the action) considered but are not proposed?	✓	No
			Yes, you must also complete section 2.2
1.10	Alternative time frames etc Does the proposed action include alternative time frames, locations or activities?	✓	No
			Yes, you must also complete Section 2.3. For each alternative, location, time frame, or activity identified, you must also complete details in Sections 1.2-1.9, 2.4-2.7 and 3.3 (where relevant).
1.11	State assessment Is the action subject to a state or territory environmental impact assessment?	✓	No
			Yes, you must also complete Section 2.5
1.12	Component of larger action Is the proposed action a component of a larger action?	✓	No
			Yes, you must also complete Section 2.7
1.13	Related actions/proposals Is the proposed action related to other actions or proposals in the region (if known)?	✓	No
			Yes, provide details:
1.14	Australian Government funding Has the person proposing to take the action received any Australian Government grant funding to undertake this project?		No
		✓	Yes, provide details: The project will be delivered with the assistance of funding from the Australian Government, Department of Infrastructure and Regional Development – Bridges Renewal Programme – Round Two. Gympie Regional Council – Goomong Road Bridge – IMS# 060780-15QLD-BR2. (\$955,500 Commonwealth and \$955,500 Council)
1.15	Great Barrier Reef Marine Park Is the proposed action inside the Great Barrier Reef Marine Park?	✓	No
			Yes, you must also complete Section 3.1 (h), 3.2 (e)

2 Detailed description of proposed action

NOTE: It is important that the description is complete and includes all components and activities associated with the action. If certain related components are not intended to be included within the scope of the referral, this should be clearly explained in section 2.7.

2.1 Description of proposed action

This should be a detailed description outlining all activities and aspects of the proposed action and should reference figures and/or attachments, as appropriate.

The Project proposes to replace the dilapidated Goomong Road timber bridge with a new multi-span concrete bridge adjacent to and immediately south of the existing bridge structure. The area required for the above listed works is referred to as the 'Project footprint'. Refer to Attachment A for Civil Engineering Drawings showing the Project area and the Project footprint of the proposed bridge layout.

2.2 Alternatives to taking the proposed action

This should be a detailed description outlining any feasible alternatives to taking the proposed action (including not taking the action) that were considered but are not proposed (note, this is distinct from any proposed alternatives relating to location, time frames, or activities – see section 2.3).

Goomong Road is a 'no through' road that predominantly services a number of rural landholdings. The existing timber bridge over Kandanga Creek has been assessed as requiring replacement due to ongoing safety and flooding issues. As there is no alternative access available for the residents and agricultural businesses along Goomong Road, not undertaking the Project is not considered to be an option.

2.3 Alternative locations, time frames or activities that form part of the referred action

If you have identified that the proposed action includes alternative time frames, locations or activities (in section 1.10) you must complete this section. Describe any alternatives related to the physical location of the action, time frames within which the action is to be taken and alternative methods or activities for undertaking the action. For each alternative location, time frame or activity identified, you must also complete (where relevant) the details in sections 1.2-1.9, 2.4-2.7, 3.3 and 4. Please note, if the action that you propose to take is determined to be a controlled action, any alternative locations, time frames or activities that are identified here may be subject to environmental assessment and a decision on whether to approve the alternative.

There are no proposed alternative time frames or activities associated with the delivery of the Project.

2.4 Context, planning framework and state/local government requirements

Explain the context in which the action is proposed, including any relevant planning framework at the state and/or local government level (e.g. within scope of a management plan, planning initiative or policy framework). Describe any Commonwealth or state legislation or policies under which approvals are required or will be considered against.

Gympie Regional Council is responsible for the management of the locally-government controlled road network. This Project is needed in order to significantly improve the safety and flood immunity of Goomong Road. State legislation or policies that have bearing on this Project are discussed in Table 1.

Table 1 Relevant legislation and policies

Legislation/Policy	Requirement	Administering Authority
<i>Aboriginal Cultural Heritage Act 2003</i>	Under the Aboriginal Cultural Heritage Act 2003, a Duty of Care applies at all times to all persons undertaking a land-use activity. GRC have undertaken searches of the Cultural Heritage database and register for the Project which have not indicated any specific cultural heritage matters are relevant to the Project.	Department of Aboriginal and Torres Strait Islander Partnerships (DATSIP)
<i>Environmental Protection Act 1994</i> <i>Environmental Protection Regulation 2008</i>	All persons have an obligation to not carry out any activity that causes or is likely to cause environmental harm unless all reasonable and practicable measures are taken to prevent or minimise harm. Onsite construction works are required to comply with the Regulation and the following relevant EPPs: <ul style="list-style-type: none"> <i>Environmental Protection (Air) Policy 2008</i> 	Department of Environment and Heritage Protection (EHP)

	<ul style="list-style-type: none"> • <i>Environmental Protection (Noise) Policy 2008</i> • <i>Environmental Protection (Water) Policy 2009</i> <p>The General Environmental Duty (GED) and Duty to Notify set out under Section 320 – 320G of the Environmental Protection Act 1994 remains applicable at all times for all persons undertaking works on site.</p>	
<i>Fisheries Act 1994</i>	The encroachment of the new bridge into Kandanga Creek may require approval under the <i>Fisheries Act 1994</i> for waterway barrier works.	Department of State Development, Infrastructure and Planning (DSDIP)
<i>Land Protection (Pest and Stock Route Management) Act 2002</i>	Landowners must control Class 1 and 2 pest species, whilst Class 3 declared pests require treatment adjacent to environmentally significant areas.	Department of Agriculture and Fisheries (DAF)
<i>Native Title Act 1993</i>	Notification required for works over unallocated State land (i.e. Kandanga Creek) in accordance with Section 24KA of the Native Title Act 1993. The granting of reserve tenure over land is for a specific purpose (road). Given the nature of the proposed works which will be within the scope of uses permitted under the reserve tenured title, the risk of native title being evoked over the land is limited.	Department of Natural Resources and Mines (NRM)
<i>Nature Conservation Act 1992 (NC Act)</i> <i>Nature Conservation (Wildlife Management) Regulation 2006</i>	The bridge replacement works will be managed by an approved species management program (SMP) for tampering with animal breeding places under Section 332 (5) of the <i>Nature Conservation (Wildlife Management) Regulation 2006</i> . The SMP is required for impact to confirmed and potential breeding habitat for the NC Act listed 'vulnerable' frog species <i>Adelotus brevis</i> .	Department of Environment and Heritage Protection (EHP)
<i>Vegetation Management Act 1999 (VM Act)</i>	The Project Area is mostly contained within road reserve tenure in which the vegetation is mapped on the Department of Natural Resources and Mines' Regulated Vegetation Management Map as containing remnant vegetation. The works are not assessable under the <i>Vegetation Management Act 1999</i> assessment framework if works remain within the road reserve as a vegetation clearing exemption exists to maintain infrastructure located within road tenure designated under the <i>Land Act 1994</i> .	Department of Natural Resources and Mines (NRM)
<i>Water Act 2000</i>	Under Section 50 of the Water Regulation 2002, excavating or placing fill in a watercourse, lake or spring is permitted if the excavation is carried out within the Riverine Protection Permit Exemption Requirements 2013. GRC are exempt from requiring a Riverine Protection Permit if the volume of material excavated from within the bed and banks of Kandanga Creek is less than 500m ³ , and/or the volume of fill placed is less than 150m ³ .	Department of Natural Resources and Mines (NRM)

2.5 Environmental impact assessments under Commonwealth, state or territory legislation

If you have identified that the proposed action will be or has been subject to a state or territory environmental impact statement (in section 1.11) you must complete this section. Describe any environmental assessment of the relevant impacts of the project that has been, is being, or will be carried out under state or territory legislation. Specify the type and nature of the assessment, the relevant legislation and the current status of any assessments or approvals. Where possible, provide contact details for the state/territory assessment contact officer.

Describe or summarise any public consultation undertaken, or to be undertaken, during the assessment. Attach copies of relevant assessment documentation and outcomes of public consultations (if available).

Not applicable. No environmental impact assessments are required or have been undertaken under Commonwealth or State legislation.

2.6 Public consultation (including with Indigenous stakeholders)

Your referral must include a description of any public consultation that has been, or is being, undertaken. Where Indigenous stakeholders are likely to be affected by your proposed action, your referral should describe any consultations undertaken with Indigenous stakeholders. Identify the relevant stakeholders and the status of consultations at the time of the referral. Where appropriate include copies of documents recording the outcomes of any consultations.

No indigenous stakeholders have been identified for the proposed works. Discussion has been undertaken over a number of years with landholders along Goomong Road. These discussions/letters of concern covered issues regarding the state of the bridge, insurance claims resulting from the state of the bridge, bridge loads, vehicle usage, speed reductions and traffic calming on bridge. The discussions regarding the need to upgrade have generally been informal between the residents, respective Council directors/managers, the divisional councillor and Infrastructure portfolio councillor. The bridge upgrade project has been endorsed by Council, Minute number M18/02/16 (March 2016) states "That Council accepts the offer of funding from the Minister for Infrastructure and Regional Development for the replacement of Goomong Road and Kandanga Creek Road bridges, and confirm that Council's contribution of \$1.876m will be provided in the 2016/17 budget". The project was announced by the Mayor 18/01/16 and a copy of the media release is on Council's website https://www.gympie.qld.gov.au/media-releases/-/asset_publisher/NPXn6UxnltQA/content/council-successful-in-gaining-federal-funding-for-two-bridge-replacements-18-january-2016 The project has been reported in The Gympie Times (19/01/16) following the Ministers announcement <http://www.gympietimes.com.au/news/new-bridges-to-bring-safety-and-efficiency-dividen/2902833/>

2.7 A staged development or component of a larger project

If you have identified that the proposed action is a component of a larger action (in section 1.12) you must complete this section. Provide information about the larger action and details of any interdependency between the stages/components and the larger action. You may also provide justification as to why you believe it is reasonable for the referred action to be considered separately from the larger proposal (eg. the referred action is 'stand-alone' and viable in its own right, there are separate responsibilities for component actions or approvals have been split in a similar way at the state or local government levels).

The Project is independent from any other bridge upgrade works in the area and will not be procured as a staged project.

3 Description of environment & likely impacts

3.1 Matters of national environmental significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest.

Your assessment of likely impacts should refer to the following resources (available from the Department's web site):

- specific values of individual World Heritage properties and National Heritage places and the ecological character of Ramsar wetlands;
- profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;
- *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance*; and
- associated sectoral and species policy statements available on the web site, as relevant.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The Minister has prepared four marine bioregional plans (MBP) in accordance with section 176. It is likely that the MBP's will be more commonly relevant where listed threatened species, listed migratory species or a Commonwealth marine area is considered.

Note that even if your proposal will not be taken in a World Heritage area, Ramsar wetland, Commonwealth marine area, the Great Barrier Reef Marine Park or on Commonwealth land, it could still impact upon these areas (for example, through downstream impacts). Consideration of likely impacts should include both direct and indirect impacts.

3.1 (a) World Heritage Properties

Description

Not applicable. There are no World Heritage Properties within a 2 km radius of the Project.

Nature and extent of likely impact

Address any impacts on the World Heritage values of any World Heritage property.

No World Heritage Properties will be directly or indirectly impacted by the Project.

3.1 (b) National Heritage Places

Description

Not applicable. There are no National Heritage Places within a 2 km radius of the Project.

Nature and extent of likely impact

Address any impacts on the National Heritage values of any National Heritage place.

No National Heritage Places will be directly or indirectly impacted by the Project.

3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

Description

The EPBC Act Protected Matters Search Tool indicates that the Project is located upstream of the Great Sandy Strait (including Great Sandy Strait, Tin Can Bay and Tin Can) which is a Wetland of International Importance (Ramsar). The Project is located within the Mary River catchment which flows into the Great Sandy Strait at River Heads, approximately 100km north of the Project area.

Nature and extent of likely impact

[Address any impacts on the ecological character of any Ramsar wetlands.](#)

No declared Ramsar wetlands will be directly or indirectly impacted by the Project due to the restricted Project footprint, the implementation of appropriate sediment and erosion controls to minimise the impacts to water quality and the upstream distance of the works in reference to the location of the Great Sandy Strait Ramsar wetland.

3.1 (d) Listed threatened species and ecological communities

Description

A search of the Department of the Environment's (DotE) EPBC Act Protected Matters Search Tool was conducted using a 2 km buffer around the Project footprint. A copy of the EPBC Act Protected Matters Report is included as Attachment B of this referral.

Previous field surveys

A number of field ecological surveys have been undertaken within the Project area including an initial ecological assessment (NCES, July 2015 - Attachment C) followed by a targeted amphibian and aquatic survey (NCES, December 2015 – Attachment D).

Listed threatened species

Listed threatened species identified as a result of both desktop (which includes the EPBC Act Protected Matters Search Tool and Wildlife Online database) and field investigations have been assigned a likelihood of occurrence within the Project area based on the following criteria:

- Unlikely to occur – The species has not been previously recorded in the desktop search extent (within a 2 km radius of the Project area) AND/OR current known distribution does not encompass the Project area AND/OR suitable habitat is generally lacking within the Project area.
- May occur – The species has not been recorded in the desktop search extent, although species' distribution incorporates Project area AND potentially suitable habitat occurs within the Project area.
- Likely to occur – The species has been recorded in the desktop search extent AND potentially suitable habitat is present within the Project area.
- Confirmed present – The species has been recorded during field surveys within the Project area.

Threatened flora species

The EPBC Act Protected Matters Report (refer to Attachment B) identified 9 threatened flora species as potentially occurring within 2 km of the Project footprint. Field investigations did not identify the presence of any threatened flora species within the Project footprint or within 100m of the Project. A likelihood of occurrence assessment has been prepared as Table 2 for the 9 flora species identified in the EPBC Act Protected Matters Report and this assessment has been based on habitat preferences, known populations and distributions sourced from DotE's Species Profile and Threats Database (DotE, 2016).

Table 2 - Threatened flora species likelihood of occurrence assessment

Species name	EPBC Act Status	Habitat	Likelihood of Occurrence within the Project Area
<i>Arthraxon hispidus</i> Hairy joint Grass	Vulnerable	Hairy-joint Grass is found in or on the edges of rainforest and in wet eucalypt forest, often near creeks or swamps, as well as woodland. In south-east Queensland, Hairy-joint Grass has also been recorded growing around freshwater springs on coastal foreshore dunes, in shaded small gullies, on creek banks, and on sandy alluvium in creek beds in open forests, and also with bog mosses in mound springs (DotE, 2016).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>May occur due to potential habitat present within the Project area</p>
<i>Bosistoa transversa</i> Three-leaved Bosistoa	Vulnerable	Three-leaved Bosistoa grows in wet sclerophyll forest, dry sclerophyll forest and rainforest up to 300 m in altitude. Associated vegetation includes <i>Argyrodendron trifoliolatum</i> , <i>Syzygium hodgkinsoniae</i> , <i>Endiandra pubens</i> , <i>Dendrocnide photinophylla</i> , <i>Acmena ingens</i> , <i>Diploglottis australis</i> and <i>Diospyros mabacea</i> (DotE, 2016).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>May occur due to potential habitat present within the Project area</p>
<i>Cryptocarya foetida</i> Stinking Cryptocarya	Vulnerable	Littoral rainforest on sandy or basalt soils (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>
<i>Fontainea rostrata</i>	Vulnerable	<i>Fontainea rostrata</i> is known from ten sites in the Gympie district, Teddington Weir and Mt Theebine near Glenwood, in Queensland, covering a distance of 100 km. This species occurs in notophyll vine forest on soil derived from metamorphic rock. The population size of <i>Fontainea rostrata</i> is unknown (DotE, 2016).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>May occur due to potential habitat present within the Project area</p>
<i>Macadamia ternifolia</i> Small-fruited Queensland nut, Gympie nut	Vulnerable	Small-fruited Queensland Nut has a specialised habitat requirement, and the species generally occurs in fertile, basalt-derived soils on steep southern slopes. Associated species include <i>Argyrodendron trifoliolatum</i> - <i>Dissiliaria baloghioides</i> alliance in the Blackall Range area and Araucarian	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field

		microphyll-notophyll mixed tall closed forest at Mt Pinbarren. (DotE, 2016).	investigations. Unlikely to occur due to lack of potential habitat and previous records within the Project area
<i>Phaius australis</i> Lesser swamp-orchid	Endangered	Commonly associated with coastal wet health/sedgeland wetlands, swampy grassland or swampy forest and are often associated with Broad-leaved paperbark or swamp mahogany (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. Unlikely to occur due to lack of potential habitat and previous records within the Project area
<i>Phebalium distans</i> Mt Berryman Phebalium	Critically Endangered	Mt Berryman Phebalium is found in semi-evergreen vine thicket on red volcanic soils, or in communities adjacent to this vegetation type. Geology of the area in which this species occurs is deeply weathered basalt with undulating to hilly terrain. Soils range from red-brown earths to brown clays (derived from siltstone and mudstones), and lithosols to shallow, gravelly krasnozems (very dark brown loam), derived from the Main Range Volcanics of the Tertiary period (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. Unlikely to occur due to lack of potential habitat and previous records within the Project area
<i>Thesium australe</i> Austral toadflax	Vulnerable	Austral Toadflax is semi-parasitic on roots of a range of grass species, notably Kangaroo Grass (<i>Themeda triandra</i>). It occurs in subtropical, temperate and subalpine climates over a wide range of altitudes. It occurs on soils derived from sedimentary, igneous and metamorphic geology on a range of soils including black clay loams to yellow podzolics and peaty loams. It occurs in shrubland, grassland or woodland, often on damp sites (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. Unlikely to occur due to lack of potential habitat and previous records within the Project area
<i>Triunia robusta</i>	Endangered	The main habitat is notophyll vine forest, or mixed tall open forest developing a rainforest understorey in the absence of fire. Most populations occur within 25 m of streams, on south or south-east facing slopes or river terraces, with a few populations at higher topographic positions away from watercourses. <i>Triunia robusta</i> occurs on well-drained soil, either clayey sand, loamy sand or loams, derived	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. May occur due to potential habitat present within the Project area

		from felsite substrate, alluvium or arenite mudrock (DotE, 2016).	
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No EPBC Act listed threatened flora species were located within the Project area during field investigations. Four threatened flora species have been identified as potentially occurring (may occur) due to suitable habitat being present within the Project area and five are considered unlikely to occur. Note that *Streblus pendulinus* (endangered – EPBC Act) was identified within the Project area during the 2015 surveys. However, as at 21 May 2015, *S. pendulinus* has been accepted as a Norfolk Island endemic. Between 18 April 2012 and 21 May 2015, *S. brunonianus* (which is not a threatened species) was treated as a synonym of *S. pendulinus* and was recorded as such during the July 2015 surveys.

Threatened fauna species

The EPBC Act Protected Matters Report (refer to Attachment B) identified 21 threatened fauna species as potentially occurring within a 2 km radius of the Project area, consisting of nine bird species, two fish species, one insect species, one frog species, four mammal species and four reptile species. Desktop studies including a review of available fauna record databases (Wildlife Online) within a 5 km radius of the Project area indicate historical records of the following Commonwealth listed fauna species:

- *Phascolarctos cinereus* (koala) – ‘vulnerable’ under the EPBC Act and NC Act
- *Pteropus poliocephalus* (grey-headed flying fox) - ‘vulnerable’ under the EPBC Act
- *Maccullochella mariensis* (Mary River cod) – ‘endangered’ under the EPBC Act
- *Neoceratodus forsteri* (Australian lungfish) - ‘vulnerable’ under the EPBC Act
- *Elusor macrurus* (Mary River turtle) – ‘endangered’ under the EPBC Act and NC Act
- *Eelseya albagula* (southern snapping turtle) – ‘critically endangered’ under the EPBC Act and ‘endangered’ under the NC Act

A likelihood of occurrence assessment has been prepared and detailed in Table 3 for the 21 potentially occurring threatened fauna species based on habitat preferences noted in DotE’s Species Profile and Threats Database (DotE, 2016), known populations and distributions.

Table 3 - Threatened fauna species likelihood of occurrence assessment

Species name	EPBC Act Status	Habitat	Likelihood of Occurrence within the Project Area
Birds			
<i>Anthochaera phrygia</i> Regent honeyeater	Critically Endangered	Mostly occur in dry box-ironbark eucalypt woodland and dry sclerophyll forest associations, wherein they prefer the most fertile sites available, e.g. along creek flats, or in broad river valleys and foothills (DotE, 2016).	<ul style="list-style-type: none"> • Species habitat does not occur within the Project area. • Not previously recorded within 5 km of the Project area. • Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>
<i>Botaurus poiciloptilus</i> Australasian bittern	Endangered	Occurs in or over water in tall reed beds, sedges, rushes, cumbungi, lignum, also in drains in tussocky paddocks occasionally saltmarsh, and brackish wetlands (DotE, 2016).	<ul style="list-style-type: none"> • Species habitat does not occur within the Project area. • Not previously recorded within 5 km of the Project area. • Not observed during field investigations.

			Unlikely to occur due to lack of potential habitat and previous records within the Project area
<i>Cyclopsitta diophthalma coxeni</i> Coxen's fig parrot	Endangered	Coxen's Fig-Parrot occurs in rainforest habitats including subtropical rainforest, dry rainforest, littoral and developing littoral rainforest, and vine forest (DotE, 2016).	<ul style="list-style-type: none"> • Species habitat occurs within the Project area. • Not previously recorded within 5 km of the Project area. • Not observed during field investigations. <p>May occur due to potential habitat present within the Project area</p>
<i>Dasyornis brachypterus</i> Eastern Bristle Bird	Endangered	The Eastern Bristlebird inhabits low dense vegetation in a broad range of habitat types including sedgeland, heathland, swampland, shrubland, sclerophyll forest and woodland, and rainforest. It occurs near the coast, on tablelands and in ranges. The Eastern Bristlebird is found in habitats with a variety of species compositions, but are defined by a similar structure of low, dense, ground or understorey vegetation (DotE, 2016)	<ul style="list-style-type: none"> • Species habitat does not occur within the Project area. • Not previously recorded within 5 km of the Project area. • Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>
<i>Erythrotriorchis radiatus</i> Red goshawk	Vulnerable	Prefers mosaic of vegetation types of wooded and forested areas. Areas close to permanent water also preferred. Variation in structures provides cover for ambush of prey with areas open enough for fast attack and flight. Nesting occurs in tall trees within 1km of permanent water (DotE, 2016).	<ul style="list-style-type: none"> • Species habitat does not occur within the Project area. • Not previously recorded within 5 km of the Project area. • Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>
<i>Geophaps scripta scripta</i> Squatter pigeon	Vulnerable	Squatter Pigeon (southern) habitat is generally defined as open-forests to sparse, open-woodlands and scrub that are mostly dominated in the overstorey by Eucalyptus, Corymbia, Acacia or Callitris species, including remnant, regrowth or partly modified vegetation communities that are within 3 km of water bodies or courses (DoE, 2016).	<ul style="list-style-type: none"> • Species habitat does not occur within the Project area. • Not previously recorded within 5 km of the Project area. • Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>

<i>Lathamus discolor</i> Swift parrot	Endangered	Prefers dry open eucalypt forest and woodlands on the mainland with a preference for some eucalypt species. Also often in urban areas, parks and gardens, farmlands and remnant eucalypt patches. Breeding only occurs in Tasmania. Infrequently recorded in Queensland (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>
<i>Rostratula australis</i> Australian painted snipe	Endangered	Inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans. They also use inundated or waterlogged grassland or saltmarsh, dams, rice crops, sewage farms and bore drains (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>
<i>Turnix melanogaster</i> Black-breasted button-quail	Vulnerable	Rainforest and forests experiencing 770-1200 mm rainfall per annum. Prefers low closed forest in particular semi-evergreen vine thicket and other vine forest complexes. Required deep leaf litter. Nests within rainforest or under lantana thicket (DotE, 2016).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>May occur due to potential habitat present within the Project area</p>
Fish			
<i>Maccullochella mariensis</i> Mary River Cod	Endangered	Mary River cod occur in a variety of habitat types within the Mary River system, from high gradient, rocky, upland streams, to large, slow-flowing pools in lowland areas. Anecdotal accounts by anglers and landowners often describe the ideal cod habitat as comprising deep, shaded, slow flowing pools with plenty of snags and log-piles. Similar habitat types are utilised by the closely related Murray cod and trout cod in the Murray River system (DotE, 2016).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Previously recorded within 5 km of the Project area. Not observed during targeted field investigations. <p>Likely to occur due to potential habitat present within the Project area and previous records</p>
<i>Neoceratodus forsteri</i> Australian lungfish	Vulnerable	The Australian Lungfish requires still or slow-flowing, shallow, vegetated pools with clear or turbid water in which to spawn and feed. The species is restricted to areas of	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Previously recorded within 5 km of the Project area.

		permanent water and cannot live in saline waters or migrate through sea water (DotE, 2016).	<ul style="list-style-type: none"> Not observed during targeted field investigations. <p>Likely to occur due to potential habitat present within the Project area and previous records</p>
Frogs			
<i>Mixophyes iteratus</i> Giant Barred Frog	Endangered	Occurs in uplands and lowlands in rainforest and wet sclerophyll forest, including farmland. Populations have been found in disturbed areas with vegetated riparian strips on cattle farms and in regenerated logged areas. Many sites where the Southern Barred Frog is known to occur are the lower reaches of streams which have been affected by major disturbances such as clearing, timber harvesting and urban development in their headwaters (DotE, 2016).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Not previously recorded within 5 km of the Project area (Wildlife online), however local undocumented records exist. Not observed during targeted field investigations. <p>Likely to occur due to potential habitat present within the Project area and previous local records</p>
Insects			
<i>Phyllodes imperialis smithersi</i> Pink Underwing Moth	Endangered	The Pink Underwing Moth is found below the altitude of 600 m in undisturbed, subtropical rainforest. It occurs in association with the vine <i>Carronia multisepealea</i> , a collapsed shrub that provides the food and habitat the moth requires in order to breed. Where <i>C. multisepealea</i> attains an upright form, the association with the moth does not occur (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>
Mammals			
<i>Chalinolobus dwyeri</i> Large-eared Pied Bat	Vulnerable	Sandstone cliffs and fertile woodland valley habitat within close proximity of each other is habitat of importance to the Large-eared Pied Bat. Records from south-east Queensland suggest that rainforest and moist eucalypt forest habitats on other geological substrates (rhyolite, trachyte and basalt) at high elevation are of similar importance to the species (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>
<i>Dasyurus hallucatus</i> Northern Quoll	Endangered	The Northern Quoll occupies a diversity of habitats across its range which includes rocky areas, eucalypt forest and woodlands, rainforests, sandy lowlands and beaches, shrubland, grasslands and desert (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field

			investigations. Unlikely to occur due to lack of potential habitat and previous records within the Project area
<i>Phascolarctos cinereus</i> (combined populations of Qld, NSW and the ACT) Koala	Vulnerable	Koalas naturally inhabit a range of temperate, sub-tropical and tropical forest, woodland and semi-arid communities dominated by <i>Eucalyptus</i> species (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Previously recorded within 5 km of the Project area. Not observed during field investigations. May occur due to lack of potential habitat but previous records within the Project area
<i>Pteropus poliocephalus</i> Grey-headed flying fox	Vulnerable	Occurs in roost sites commonly formed in gullies, typically not far from water and usually in vegetation with a dense canopy. Bats commute daily to foraging areas, typically within 15km of the day roost where they feed on a wide variety of flowering and fruiting plants including the blossoms of eucalypts (DotE, 2016).	<ul style="list-style-type: none"> No flying fox roost sites occur within the Project area. Previously recorded within 5 km of the Project area. Not observed during field investigations. May occur due to presence of potential foraging habitat and previous records within the Project area
Reptiles			
<i>Delma torquata</i> Collared Delma	Vulnerable	In the eastern parts of the species' range (i.e. the Toowoomba Range), suitable habitats are commonly associated with exposed rocky outcrops on ridges or slopes in vegetation communities dominated by Narrow-leafed Ironbark (<i>Eucalyptus crebra</i>) (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. Unlikely to occur due to lack of potential habitat and previous records within the Project area
<i>Elseya albagula</i> Southern snapping turtle	Critically endangered	The white-throated snapping turtle is recognised as a habitat specialist. Within the Mary River system the white-throated snapping turtle prefers clear, flowing, well-oxygenated water (DotE, 2016).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Previously recorded within 5 km of the Project area. Not observed during targeted field investigations. Likely to occur due to presence of potential habitat and previous records within the Project area
<i>Elusor macrurus</i> Mary River turtle	Endangered	The Mary River Turtle is endemic to the Mary River. It occurs from Kenilworth, to the area upstream of	<ul style="list-style-type: none"> Species habitat occurs within the Project area.

		the Mary River Tidal Barrage at Tiaro. The Mary River Turtle occurs in flowing, well-oxygenated sections of streams. Its habitat consists of riffles (particularly productive parts of a river that are shallow with fast-flowing, aerated water) and shallow stretches alternating with deeper, flowing pools (DotE, 2016).	<ul style="list-style-type: none"> • Previously recorded within 5 km of the Project area. • Not observed during targeted field investigations. <p>Likely to occur due to potential habitat present within the Project area and previous records</p>
<i>Furina dunmalli</i> Dunmall's Snake	Vulnerable	Dunmall's Snake has been found in a broad range of habitats, including forests and woodlands on black alluvial cracking clay and clay loams dominated by Brigalow (<i>Acacia harpophylla</i>), other Wattles (<i>A. burowii</i> , <i>A. deanii</i> , <i>A. leioclyx</i>), native Cypress (<i>Callitris spp.</i>) or Bull-oak (<i>Allocasuarina luehmannii</i>) (DotE, 2016).	<ul style="list-style-type: none"> • Species habitat does not occur within the Project area. • Not previously recorded within 5 km of the Project area. • Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>

Results of the assessment indicate that five threatened fauna species are considered likely to occur within the Project area (giant barred frog, Mary River cod, Australian lungfish, southern snapping turtle and Mary River turtle). Three threatened fauna species have been identified as potentially occurring (may occur) due to suitable habitat being present and thirteen were considered unlikely to occur. A targeted survey was undertaken for Giant barred frog, Mary River cod, Australian lungfish, Southern snapping turtle and Mary River turtle which did not locate any of these species within the Project area (Refer Attachment D). None of the target species were identified during the targeted survey work.

Threatened ecological communities

The EPBC Act Protected Matters Report identified that the critically endangered *Lowland Rainforest of Subtropical Australia* threatened ecological community (TEC) was likely to occur in the Project area, whilst the critically endangered *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* TEC may occur in the Project area.

A targeted ecological assessment was undertaken to determine the presence of any EPBC Act listed TECs within the Project area in July 2015. None of the vegetation observed within the survey area conformed to the description of the *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* TEC, however the presence of the critically endangered *Lowland Rainforest of Subtropical Australia* TEC was assessed as occurring in association with the mapped regional ecosystem (RE) 12.3.1 (refer to Attachment A for mapping showing the location of the TEC). The vegetation community (RE 12.3.1) flanking Kandanga Creek was identified as conforming to key diagnostic characteristics and condition thresholds prescribed of the Lowland Rainforest of Subtropical Australia TEC listing advice (TSSC, 2015) including:

- Distribution of the ecological community is primarily in the NSW North Coast and South Eastern Queensland bioregions, according to Interim Biogeographic Regionalisation for Australia (IBRA) version 6.1 (2004).
- The ecological community occurs on soils derived from basalt or alluvium, or enriched rhyolitic soils, or basaltically enriched metasediments.
- The ecological community generally occurs at an altitude less than 300 m above sea level.
- The ecological community typically occurs in areas with high annual rainfall (>1,300 mm).
- The ecological community is typically more than 2 km inland from the coast.
- The structure of the ecological community is typically a tall (20 m–30 m) closed forest, often with multiple canopy layers.

- Patches of the ecological community typically have high species richness (at least 30 woody species from Appendix A of the Lowland Rainforest of Subtropical Australia listing advice).

The vegetation flanking Kandanga Creek meets the condition threshold for the *Lowland Rainforest of Subtropical Australia* TEC as summarised in Table 4 (grey shading indicates applicable criteria).

Table 4 - Condition threshold for the Lowland Rainforest of Subtropical Australia TEC

Patch Type (evidence of remnant vegetation & regeneration status)	A Natural remnant evident by the persistence of mature residual trees from Appendix B. AND	B Some residual trees from Appendix B are present plus evidence of either; natural regeneration AND/OR regeneration with active management* ² AND	C A non-remnant patch that has recovered through a) natural regeneration AND/OR b) supplementary planting that has stature and quality that is reflective of the 'Description' * ³ AND
Patch Size (excludes buffer zone)	≥ 0.1 ha AND	≥ 1 ha AND	≥ 2 ha AND
Canopy Cover (over entire patch)* ⁴	Emergent/canopy/subcanopy* ⁴ cover is ≥ 70% AND		
Species Richness (over entire patch)	contains ≥ 40 native woody species* ⁵ from Appendix A AND	contains ≥ 30 native woody species* ⁵ from Appendix A AND	
Percent of total vegetation cover that is native * ⁶ (use sample plot)	≥70% of vegetation * ⁶ is native	≥50% of vegetation * ⁶ is native	
Notes: *1 Evidence of natural regeneration is shown by the presence of seedlings of a range of native species that did not originate through deliberate plantings. *2 A patch that is actively managed has regular (e.g. every 1–2 years) on the ground human regenerative activity such as weed control or supplementary plantings. *3 Closed canopy, 20–30 m tall, of representative species (e.g. white booyong, hoop pine, figs, brush box, yellow carabeen, red cedar, rosewood, white beech) *4 Canopy cover (projective foliage cover) is estimated over the entire patch. When assessing the ecological community, the canopy includes the emergents and subcanopy (everything above 10 m tall). Canopy/sub-canopy includes all trees and vines (native and non-native). *5 Woody species are trees, shrubs or vines that contain wood or wood fibres that consist mainly of hard lignified tissues. Excluded from woody species are graminoids, other herbs and non-woody vines. *6 Total vegetation cover includes emergents/canopy/subcanopy and understorey and ground layers.			

The impacts to the Lowland Rainforest of Subtropical Australia TEC are further discussed in the following sections.

Nature and extent of likely impact

Address any impacts on the members of any listed threatened species (except a conservation dependent species) or any threatened ecological community, or their habitat.

During construction there is potential for adverse impacts to matters afforded protection under the EPBC Act and on the surrounding environment. The impacts to the environment as a result of the Project are primarily associated with clearing vegetation, earthworks and mechanical machinery movements which may result in the following:

- Injury or mortality of native fauna
- Loss of habitat and vegetation
- Temporary noise and dust pollution
- Increase in run-off, sedimentation and discharge of pollutants
- Increased risk of exotic species being introduced
- Changes in overland hydrology

Generally, impacts to native species and their habitat will be managed during construction through the implementation of an Environmental Management Plan (Construction) which includes provisions relating to sediment and erosion control, pest management and other environmental management controls. An assessment of the potential impacts as a result of the Project has been undertaken in accordance with the DotE’s Significant Impact Guidelines 1.1 – Matters of National Environmental Significance.

Table 5 outlines the potential impacts from the Project for each of the matters confirmed present or considered likely to occur within the Project area. Threatened flora and fauna species potentially present or considered unlikely to occur within the Project area are not likely to be directly or indirectly impacted as a result of the Project; therefore, the nature and extent of impacts to these species has not been analysed further for this Project.

Table 5 - Nature and extent of likely impacts

Species Name	EPBC Act Status	Potential Impacts from the Project
Fauna		
<i>Mixophyes iteratus</i> – giant barred frog	Endangered	<p>This species was identified as being likely to occur within the Project area due to suitable habitat being present within the Project area and known (yet undocumented) records within 5 km of the Project area. However, this species has not been observed during the field investigations within the Project footprint, including the 2015 targeted surveys. Therefore, the giant barred frog is considered to have a low probability of occurring as a significant population within the Project footprint.</p> <p>The targeted surveys included:</p> <ul style="list-style-type: none"> • Timing that coincided with the species’ breeding period (September – March), when adult frogs are more readily detected. • Survey methods consistent with those recommended for the giant barred frog in the DotE’s Survey Guidelines for Australia’s Threatened Frogs (Department of the Environment, Water, Heritage and the Arts, 2010) – spotlighting and call playback. • Targeted habitat assessments to confirm the species’ likelihood of occurrence. The targeted giant barred frog surveys were undertaken after heavy rainfall. Each night, two hours were spent spotlighting and employing call-playback surveys along a 100 m transect in available riparian vegetation within and adjacent to the construction footprint. <p>Habitat within the Project footprint is considered to have limited importance to the ongoing health and viability of any local populations of giant barred frogs, which occur within the Mary River catchment. The Project is considered unlikely to have significant impacts to the giant barred frog given the following:</p> <ul style="list-style-type: none"> • The absence of a significant population within the Project footprint

		<ul style="list-style-type: none"> The provision of a EHP approved Species Management Program (SMP) to manage impacts to breeding habitat for the State listed vulnerable frog species <i>Adelotus brevis</i>. <p>The SMP will include mitigation measures in the design and during the construction phases of the works (i.e. limiting the clearing footprint, the installation and maintenance of erosion and sediment controls and the engagement of a fauna spotter/catcher during clearing works with appropriate frog hygiene protocols in place). These measures would also mitigate impacts to any giant barred frog individuals that may be present within the area. In this regard, no further analysis of the impacts of the Project to this species has been undertaken.</p>
<i>Maccullochella mariensis</i> – Mary River cod	Endangered	<p>This species was identified as being likely to occur within the Project area due to suitable habitat being present within the Project area and known records within 5 km of the Project area. However, this species was not observed during the 2015 targeted surveys. Therefore, the Mary River cod is considered to have a low probability of occurring as a significant population within the Project footprint.</p> <p>The targeted surveys included:</p> <ul style="list-style-type: none"> Timing that coincided with the most active period for the species, and outside of the main breeding period (i.e. December), when adult fish are more readily detected. Survey methods consistent with those recommended for the Mary River cod in the DotE's Australian Government's Survey Guidelines for Australia's Threatened Fish (Commonwealth Government, 2011). Targeted habitat assessments to confirm the species' likelihood of occurrence. <p>Habitat within the Project footprint is considered to have limited importance to the ongoing health and viability of the local population of Mary River cod. The Project is considered unlikely to have significant impacts to the Mary River cod given the following:</p> <ul style="list-style-type: none"> The absence of a significant population within the Project footprint. The provision of a EHP approved Species Management Program (SMP) to manage impacts to breeding habitat for the State listed vulnerable species <i>Adelotus brevis</i>. <p>The SMP will include mitigation measures in the design and during the construction phases of the works (i.e. limiting the clearing footprint, the installation and maintenance of erosion and sediment controls). These measures would also mitigate impacts to any Mary River cod individuals that may be present within the area. In this regard, no further analysis of the impacts of the Project to this species has been undertaken.</p>
<i>Neoceratodus forsteri</i> – Australian lungfish	Vulnerable	<p>This species was identified as being likely to occur within the Project area due to suitable habitat being present within the Project area and undocumented local records within 5 km of the Project area. However, this species was not observed during the 2015 targeted surveys. Therefore, the Australian lungfish is considered to have a low probability of occurring as a significant population within</p>

		<p>the Project footprint.</p> <p>The targeted surveys included:</p> <ul style="list-style-type: none"> • Timing that coincided with the most active period for the species, and outside of the main breeding period (i.e. December), when adult fish are more readily detected. • Survey methods consistent with those recommended for the Australian lungfish in the DotE's Australian Government's Survey Guidelines for Australia's Threatened Fish (Commonwealth Government, 2011). • Targeted habitat assessments to confirm the species' likelihood of occurrence. <p>Habitat within the Project footprint is considered to have limited importance to the ongoing health and viability of the local population of Australian lungfish. The Project is considered unlikely to have significant impacts to the Australian lungfish given the following:</p> <ul style="list-style-type: none"> • The absence of a significant population within the Project footprint. • The provision of a EHP approved Species Management Program (SMP) to manage impacts to breeding habitat for the State listed vulnerable species <i>Adelotus brevis</i>. <p>The SMP will include mitigation measures in the design and during the construction phases of the works (i.e. limiting the clearing footprint, the installation and maintenance of erosion and sediment controls). These measures would also mitigate impacts to any Australian lungfish individuals that may be present within the area. In this regard, no further analysis of the impacts of the Project to this species has been undertaken.</p>
<p><i>Elseya albagula</i> southern snapping turtle</p>	<p>Critically endangered</p>	<p>This species was identified as being likely to occur within the Project area due to suitable habitat being present within the Project area and known records within 5 km of the Project area. However, this species was not observed during the 2015 targeted surveys. Therefore, the southern snapping turtle is considered to have a low probability of occurring as a significant population within the Project footprint.</p> <p>The targeted surveys included:</p> <ul style="list-style-type: none"> • Survey methods consistent with those recommended for the southern snapping turtle in the DotE's Australian Government's Survey Guidelines for Australia's Threatened Reptiles (Commonwealth Government, 2011). • Targeted habitat assessments to confirm the species' likelihood of occurrence. <p>Habitat within the Project footprint is considered to have limited importance to the ongoing health and viability of the local population of southern snapping turtle. The Project is considered unlikely to have significant impacts to the southern snapping turtle given the following:</p> <ul style="list-style-type: none"> • The absence of a significant population within the Project footprint. • The provision of a EHP approved Species Management Program (SMP) to manage impacts to breeding habitat for the State listed vulnerable species <i>Adelotus brevis</i>.

		<p>The SMP will include mitigation measures in the design and during the construction phases of the works (i.e. limiting the clearing footprint, the installation and maintenance of erosion and sediment controls). These measures would also mitigate impacts to any southern snapping turtle individuals that may be present within the area. In this regard, no further analysis of the impacts of the Project to this species has been undertaken.</p>
<i>Elusor macrurus</i> – Mary River turtle	Endangered	<p>This species was identified as being likely to occur within the Project area due to suitable habitat being present within the Project area and known records within 5 km of the Project area. However, this species was not observed during the 2015 targeted surveys. Therefore, the Mary River turtle is considered to have a low probability of occurring as a significant population within the Project footprint.</p> <p>The targeted surveys included:</p> <ul style="list-style-type: none"> • Survey methods consistent with those recommended for the Mary River turtle in the DotE’s Australian Government’s Survey Guidelines for Australia’s Threatened Reptiles (Commonwealth Government, 2011). • Targeted habitat assessments to confirm the species’ likelihood of occurrence. <p>Habitat within the Project footprint is considered to have limited importance to the ongoing health and viability of the local population of Mary River turtle. The Project is considered unlikely to have significant impacts to the Mary River turtle given the following:</p> <ul style="list-style-type: none"> • The absence of a significant population within the Project footprint. • The provision of a EHP approved Species Management Program (SMP) to manage impacts to breeding habitat for the State listed vulnerable species <i>Adelotus brevis</i>. <p>The SMP will include mitigation measures in the design and during the construction phases of the works (i.e. limiting the clearing footprint, the installation and maintenance of erosion and sediment controls). These measures would also mitigate impacts to any Mary River turtle individuals that may be present within the area. In this regard, no further analysis of the impacts of the Project to this species has been undertaken.</p>
Threatened Ecological Communities		
<i>Lowland Rainforest of Subtropical Australia</i>	Critically Endangered	<p>The Lowland Rainforest of Subtropical Australia TEC was confirmed present either side of Goomong Road, flanking Kandanga Creek during the 2015 field investigations. An assessment against DotE’s Significant Impact Assessment Guidelines has been undertaken in Table 6.</p>

Table 6 – Assessment of Significant Impacts on the Lowland Rainforest of Subtropical Australia TEC

Significant Impact Criteria	Response
Reduce the extent of an ecological community	The proposed works will result in the permanent removal of approximately 800m ² of the TEC on the southern side of Goomong Road.
Fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines	The proposed works are adjacent to the existing Goomong Road formation and will not result in a new fragmentation to the TEC. The proposed works require additional clearing of the TEC immediately south of the existing roadway, thereby increasing the width of the existing fragmentation of the TEC.
Adversely affect habitat critical to the survival of an ecological community	The extent of the TEC in the vicinity of the Project footprint was observed to extend at least 1km upstream and downstream of the Project Area. Therefore, due to the extent of the TEC in the locality, it is considered the 800m ² of TEC edge vegetation proposed to be cleared does not constitute habitat critical to the survival of the TEC.
Modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns	The proposed works will not modify or destroy abiotic factors, rather the works will necessitate the complete removal of the TEC from within the Project footprint.
Cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting	The proposed works will remove all features associated with the Lowland Rainforest of Subtropical Australia TEC within the Project footprint. Areas of the TEC that occur outside of the direct Project footprint will not incur substantial changes in species composition.
Cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to: — assisting invasive species, that are harmful to the listed ecological community, to become established, or — causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community, or	The proposed works will remove all features associated with the Lowland Rainforest of Subtropical Australia TEC within the Project footprint. Areas of the TEC that occur directly adjacent to the Project footprint may be impacted by introduced light penetration and introduction of invasive weed species.
Interfere with the recovery of an ecological community.	A Recovery Plan is not currently in place; however, the planning, implementation and coordination of recovery actions for this TEC does not involve additional actions beyond that which are anticipated to be implemented through management plans for areas which currently contain this TEC (DotE, 2016). The approved Conservation Advice for the TEC outlines priority recovery actions required for the ecological community, and recommends, as a priority action, to 'protect and conserve remaining areas of the ecological community. Further clearance and fragmentation of this critically endangered ecological community should be avoided'. This Project could be considered to interfere with this action, as the area of this TEC within the Project footprint will be removed.

3.1 (e) Listed migratory species

Description

The EPBC Act Protected Matters Report (Attachment C) lists 13 migratory bird species consisting of marine, terrestrial and wetland species as potentially occurring within 2 km of the Project area. Table 7 presents a summary of the migratory species identified in the EPBC Act Protected Matters Report and their likelihood of occurrence to occur within the Project area.

Table 7 – Migratory Species Likelihood of Occurrence Assessment

Species Name	EPBC Act Status	Habitat	Likelihood of Occurrence within Project Footprint
<i>Apus pacificus</i> fork-tailed swift	Migratory (marine)	Low to very high airspace over a variety of habitats (semi-arid to rainforest) (Morcombe, 2003).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>May occur due to presence of potential habitat but no previous records within the Project area</p>
<i>Cuculus optatus</i> oriental cuckoo, Horsefield's cuckoo	Migratory (terrestrial)	Occurs on rainforest edges, river plains and leafy trees in paddocks (Pizzey and Knight, 2007).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>May occur due to presence of potential habitat but no previous records within the Project area</p>
<i>Hirundapus caudacutus</i> white-throated needletail	Migratory (terrestrial)	Mostly aerial when visiting Australia in the non-breeding season, although most often recorded above open forest and rainforest (Pizzey and Knight, 2007).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Previously recorded within 5 km of the Project area. Not observed during field investigations. <p>Likely to occur due to presence of potential habitat and previous records within the Project area</p>
<i>Merops ornatus</i> rainbow bee-eater	Migratory (terrestrial)	Open forests, woodlands, shrublands, farmland and urban areas. Often close to permanent water (DotE, 2016).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Previously recorded within 5 km of the Project area. Not observed during field investigations. <p>Likely to occur due to presence of potential habitat and previous records within the Project area</p>
<i>Monarcha melanopsis</i> black-faced monarch	Migratory (terrestrial)	Range of habitats including rainforest, open forest, scrub, woodland, gullies, mangroves and gardens (Queensland Museum, 2007).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations.

			May occur due to presence of potential habitat but no previous records within the Project area
<i>Monarcha trivirgatus</i> spectacled monarch	Migratory (terrestrial)	Understorey of mountain/lowland rainforests, thickly wooded gullies, mostly below well covered canopy's (Pizzey and Knight, 2007).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Previously recorded within 5 km of the Project area. Not observed during field investigations. <p>Likely to occur due to presence of potential habitat and previous records within the Project area</p>
<i>Myiagra cyanoleuca</i> satin flycatcher	Migratory (terrestrial)	Tall forests in wetter habitats such as gullies, but not rainforest (DotE, 2016).	<ul style="list-style-type: none"> Species habitat does not occur within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>
<i>Rhipidura rufifrons</i> rufous fantail	Migratory (terrestrial)	Rainforest and wet forests with thick understorey, swamps and mangroves. Often moves about close to the ground. May overfly open areas during migration (Australian Museum, 2008).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Previously recorded within 5 km of the Project area. Not observed during field investigations. <p>Likely to occur due to presence of potential habitat and previous records within the Project area</p>
<i>Ardea alba</i> great egret, white egret	Migratory (wetlands)	Prefer shallow, flowing waterbodies but can be seen in a wide range of wetland habitats (Pizzey and Knight, 2007).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Not previously recorded within 5 km of the Project area. Not observed during field investigations. <p>May occur due to presence of potential habitat but no previous records within the Project area</p>
<i>Ardea ibis</i> cattle egret	Migratory (wetlands)	Woodlands, wetlands, dams, rivers and open grassy areas (Queensland Museum, 2007).	<ul style="list-style-type: none"> Species habitat occurs within the Project area. Previously recorded within 5 km of the Project area. Not observed during field investigations. <p>Likely to occur due to presence of potential habitat and previous records within the Project area</p>
<i>Gallinago hardwickii</i> Latham's snipe, Japanese snipe	Migratory (wetlands)	Permanent and ephemeral wetlands, usually freshwater with low dense vegetation, however also	<ul style="list-style-type: none"> Species habitat occurs within the Project area.

		in saline or brackish water with disturbed habitat (Pizzey and Knight, 2007).	<ul style="list-style-type: none"> • Not previously recorded within 2 km of the Project area. • Not observed during field investigations. <p>May occur due to presence of potential habitat but no previous records within the Project area</p>
<i>Pandion haliaetus</i> osprey	Migratory (wetlands)	Littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands. They are mostly found in coastal areas but occasionally travel inland along major rivers, particularly in northern Australia. They require extensive areas of open fresh, brackish or saline water for foraging (DotE, 2016).	<ul style="list-style-type: none"> • Species habitat does not occur within the Project area. • Not previously recorded within 2 km of the Project area. • Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>
<i>Tringa nebularia</i> common greenshank, greenshank	Migratory (wetlands)	A wide variety of inland wetlands and sheltered coastal habitats of varying salinity. It occurs in sheltered coastal habitats, typically with large mudflats and saltmarsh, mangroves or seagrass. Habitats include embayments, harbours, river estuaries, deltas and lagoons and are recorded less often in round tidal pools, rock-flats and rock platforms (DotE, 2016)	<ul style="list-style-type: none"> • Species habitat does not occur within the Project area. • Not previously recorded within 2 km of the Project area. • Not observed during field investigations. <p>Unlikely to occur due to lack of potential habitat and previous records within the Project area</p>

Nature and extent of likely impact

[Address any impacts on the members of any listed migratory species, or their habitat.](#)

Five migratory species are considered 'likely' to occur within the Project area due to presence of suitable habitat and existing records, and five species may occur within the Project area due to the presence of suitable habitat. However, the Project area is not considered to provide important habitat for these migratory species due to existing disturbances (e.g. existing road infrastructure) and limited high value habitat for migratory and wetland avifauna in the Project area (i.e. a lack of large open wetlands). Therefore, utilisation of the Project area by migratory species is likely to be low. In this regard, the localised potential impacts to migratory species' habitat as a result of the Project are expected to be negligible. The following impacts could be experienced in a limited and localised capacity during the construction phase of the Project prior to the implementation of appropriate mitigation measures, but are likely to be negligible following the application of mitigation measures outlined in Section 4 of this referral:

- Direct removal of habitat
- Injury or mortality of migratory species
- Degradation of habitat through introduction of exotic species

Generally, management of impacts on migratory species will be considered and documented through the Environmental Management Plan (Construction). The Significant Impact Guidelines 1.1 state that a project is deemed to have a significant impact on a migratory species where the project results in any of the following:

- Substantially modify, destroy or isolate an area of important habitat for a migratory species.
- An invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species.
- Seriously disrupts the lifecycle of an ecologically significant proportion of the population of a

migratory species.

The Project area is not considered to comprise core or unique habitat for any of the identified migratory listed species and hence any long-term impacts are expected to be minimal. Nonetheless, a number of the mitigation measures for inclusion in the construction stage of the Project, including the requirement for a fauna spotter/catcher to be onsite during the vegetation clearing works, provisions for the construction contractor to control invasive species within the works area and the inclusion of erosion and sediment controls for the full duration of the works. Therefore, significant impacts to migratory bird species protected under the EPBC Act are unlikely.

3.1 (f) Commonwealth marine area

(If the action is in the Commonwealth marine area, complete 3.2(c) instead. This section is for actions taken outside the Commonwealth marine area that may have impacts on that area.)

Description

Not applicable. No Commonwealth marine areas are present within a 2 km radius of the proposed works.

Nature and extent of likely impact

[Address any impacts on any part of the environment in the Commonwealth marine area.](#)

No direct or indirect impacts will occur to a Commonwealth marine area as a result of the proposed works.

3.1 (g) Commonwealth land

(If the action is on Commonwealth land, complete 3.2(d) instead. This section is for actions taken outside Commonwealth land that may have impacts on that land.) **Description**

If the action will affect Commonwealth land also describe the more general environment. The Policy Statement titled *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* provides further details on the type of information needed. If applicable, identify any potential impacts from actions taken outside the Australian jurisdiction on the environment in a Commonwealth Heritage Place overseas.

Not applicable. No Commonwealth land is present within the vicinity of the Project.

Nature and extent of likely impact

Address any impacts on any part of the environment in the Commonwealth land. Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
- natural and physical resources;
- the qualities and characteristics of locations, places and areas;
- the heritage values of places; and
- the social, economic and cultural aspects of the above things.

No direct or indirect impacts will occur to Commonwealth land as a result of the Project.

3.1 (h) The Great Barrier Reef Marine Park

Description

Not applicable. The Project is not in the vicinity of the Great Barrier Reef Marine Park.

Nature and extent of likely impact

Address any impacts on any part of the environment of the Great Barrier Reef Marine Park.

No direct or indirect impacts will occur to the Great Barrier Reef Marine Park as a result of the Project.

Note: If your action occurs in the Great Barrier Reef Marine Park you may also require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If so, section 37AB of the GBRMP Act provides that your referral under the EPBC Act is deemed to be an application under the GBRMP Act and Regulations for necessary permissions and a single integrated process will generally apply. Further information is available at www.gbrmpa.gov.au

3.1 (i) A water resource, in relation to coal seam gas development and large coal mining development

Description

If the action is a coal seam gas development or large coal mining development that has, or is likely to have, a significant impact on water resources, the draft *Policy Statement Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources* provides further details on the type of information needed.

Not applicable. The Project does not involve coal seam gas development or large scale mining development or is likely to impact upon water resources.

Nature and extent of likely impact

Address any impacts on water resources. Your assessment of impacts should refer to the draft *Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources*.

No direct or indirect impacts will occur to water resources as a result of the Project.

3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

You must describe the nature and extent of likely impacts (both direct & indirect) on the whole environment if your project:

- is a nuclear action;
- will be taken by the Commonwealth or a Commonwealth agency;
- will be taken in a Commonwealth marine area;
- will be taken on Commonwealth land; or

- will be taken in the Great Barrier Reef marine Park.

Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
- natural and physical resources;
- the qualities and characteristics of locations, places and areas;
- the heritage values of places; and
- the social, economic and cultural aspects of the above things.

3.2 (a)	Is the proposed action a nuclear action?	✓	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

3.2 (b)	Is the proposed action to be taken by the Commonwealth or a Commonwealth agency?	✓	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

3.2 (c)	Is the proposed action to be taken in a Commonwealth marine area?	✓	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(f))

3.2 (d)	Is the proposed action to be taken on Commonwealth land?	✓	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))

3.2 (e)	Is the proposed action to be taken in the Great Barrier Reef Marine Park?	✓	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))

3.3 Other important features of the environment

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed above). If at Section 2.3 you identified any alternative locations, time frames or activities for your proposed action, you must complete each of the details below (where relevant) for each alternative identified.

3.3 (a) Flora and fauna

Flora

The State's Wildlife Online database holds records for 200 flora species that have previously been recorded within a 5 km radius of the Project area. The flora species list is comprised of one indeterminate species, nine fern species, two species of conifer, 12 lower dicot species, 30 monocot species and 146 higher dicot species. The following conservation significant flora species were listed as being previously recorded within a 5 km radius of the Project area:

- *Picris conyzoides* – 'vulnerable' under the NC Act
- *Macadamia integrifolia* (Macadamia nut) – 'vulnerable' under the EPBC Act and NC Act
- *Zieria verrucosa* – 'vulnerable' under the EPBC Act and NC Act
- *Pterostylis* sp. (*Gundiah W. W. Abell AQ72188*) – 'near threatened' under the NC Act

Field surveys undertaken in 2015 did not record the presence of any conservation significant flora species within the Project area or within 100m of the Project area (the survey area) (refer Attachment D). Note that *Streblus pendulinus* (endangered – EPBC Act) was identified within the Project area during the 2015 surveys. However, as at 21 May 2015, *S. pendulinus* has been accepted as a Norfolk Island endemic. Between 18 April 2012 and 21 May 2015, *S. brunonianus* (which is not a threatened species) was treated as a synonym of *S. pendulinus* and was recorded as such during the July 2015 surveys.

Fauna

The State's Wildlife Online database holds records for 55 fauna species that have previously been recorded within a 5 km radius of the Project area. The fauna species list is comprised of 14 amphibian species, 31 bird species, six mammal species, one fish species and three reptile species. The following conservation significant fauna species were listed as being previously recorded within a 5 km radius of the Project area:

- *Adelotus brevis* (tusks frog) – 'vulnerable' under the NC Act
- *Phascolarctos cinereus* (koala) – 'vulnerable' under the EPBC Act and NC Act
- *Pteropus poliocephalus* (grey-headed flying fox) - 'vulnerable' under the EPBC Act
- *Maccullochella mariensis* (Mary River cod) – 'endangered' under the EPBC Act
- *Neoceratodus forsteri* (Australian lungfish) - 'vulnerable' under the EPBC Act
- *Elusor macrurus* (Mary River turtle) – 'endangered' under the EPBC Act and NC Act
- *Eseya albagula* (southern snapping turtle) – 'critically endangered' under the EPBC Act and 'endangered' under the NC Act

Field surveys undertaken in 2015 recorded the presence of *Adelotus brevis* (tusks frog) within the Project area (refer Attachment E). Targeted aquatic assessments were undertaken for the conservation significant aquatic species identified above, however none were recorded within the Project area (refer Attachment E).

3.3 (b) Hydrology, including water flows

The works are proposed within the Kandanga Creek sub-catchment, which is located within the Mary River catchment.

Kandanga Creek (in the vicinity of Goomong Road) is a permanent flowing fifth order watercourse with clearly defined bed and banks which is flanked by intact native riparian vegetation (although limited in extent at times) and cleared agricultural land along intermittent sections. Kandanga Creek

in the immediate vicinity of the Project Area is characterised by a continuous long pool of variable depth with significant instream coarse woody debris and overhanging riparian vegetation. The aquatic habitat within Kandanga Creek was observed to be in good ecological condition, with little evidence of aquatic weed incursion or sedimentation from off-stream sources. A mix of native and exotic vegetation is present fringing the watercourse including a diversity of aquatic macrophytes that extend to the edge of the watercourse. A moderate sized pool is present immediately upstream and downstream of the existing bridge which contain sufficient permanent water to provide habitat for fish species.

The 2014 Mary River Catchment Waterwatch Results reported that Kandanga Creek received a rating of 'B'. The Report Card grade is determined by comparing the Waterwatch measurements to the appropriate water quality guidelines for the sample site. For each of the water quality parameters assessed (pH, oxygen saturation, electrical conductivity and turbidity), calculations are made of the number of samples at that site which comply with the water quality objectives for lowland freshwater creek systems as defined in the *Environmental Protection (Water) Policy 2009 Mary River environmental values and water quality objectives*. A score of 'B' indicates between 66 and 80 percent compliance. The water quality sampled within Kandanga Creek as part of the local Waterwatch sampling program was determined to be within the prescribed guidelines more than two thirds of the time, and is considered to have good water quality most of the time (MRCCC, 2014).

3.3 (c) Soil and Vegetation characteristics

Site Topography

The landscape within the Project area is characterised by flat to gently undulating alluvial plains flanking Kandanga Creek.

Geology and Soil Type and Characteristics

The Project area is underlain by Quaternary aged alluvial deposits consisting primarily of clay, silt, sand and gravel (flood plain alluvial).

Vegetation Characteristics

Vegetation characteristics of the Project area are discussed in Section 3.3 (e).

3.3 (d) Outstanding natural features

The confluence of Kandanga Creek with the Mary River is present approximately 1km downstream of the Project area. No unacceptable impacts are expected to occur to the Mary River by the proposed works.

3.3 (e) Remnant native vegetation

Remnant vegetation is mapped within the Project Area on the Queensland Department of Natural Resources and Mines' Regulated Vegetation Mapping. The vegetation present within the Project Area is mapped as 'endangered' Regional Ecosystem (RE) 12.3.1, which is described as 'Gallery rainforest (notophyll vine forest) on alluvial plains'. Remnant vegetation was observed to extend to the boundaries of the maintained road verge and is present within the road reserve on both sides of the existing road formation. The canopy within the remnant vegetation was observed to be approximately 27m high with a crown cover density of approximately 30%, and dominated by mature *Casuarina cunninghamiana* (river oak), *Grevillea robusta* (silky oak) and *Flindersia schottiana* (bumpy ash) over a dense mid-canopy dominated by *Waterhousea floribunda* (weeping lily pily) and *Castanospermum australe* (black bean).

3.3 (f) Gradient (or depth range if action is to be taken in a marine area)

The landscape within the Project footprint is characterised by flat to gently undulating land positioned on alluvial plains flanking Kandanga Creek.

3.3 (g) Current state of the environment

[Include information about the extent of erosion, whether the area is infested with weeds or feral animals and whether the area is covered by native vegetation or crops.](#)

A detailed description of the current state of the environment is provided within the Environmental Assessment Report (NCES, 2015a) included as Attachment D of this referral. The environmental features within the Project can be summarised as follows:

- The Project is located within a rural area that has been extensively cleared for agriculture;
- The Project will impact a relatively small section of remnant vegetation with weeds present at moderate densities; and
- The Lowland Rainforest of Subtropical Australia TEC is present within the Project disturbance footprint. The remnant vegetation within the Project area meets the condition thresholds for classification as a TEC.

The existing road formation of Goomong Road is immediately flanked by non-remnant vegetation typical of a maintained road verge. Exotic grass species such as *Chloris gayana* (Rhodes grass) and *Setaria sphacelata* (South African pigeon grass) dominate the road verges which are regularly slashed to form a low continuous cover. Areas that are unmaintained are dominated by exotic grass species, low woody weeds and exotic vine species. A flora survey undertaken for the Project (NCES, 2015a) identified the following pest species declared under the State's *Land Protection (Pest and Stock Route Management) Regulation 2003* within the Project footprint:

- *Dolichandra unguis-cati* (cat's claw creeper) – Class 3
- *Celtis sinensis* (Chinese Celtis) – Class 3
- *Lantana camara* (lantana) – Class 3

Cat's claw creeper and Lantana are listed as Weeds of National Significance (WONS) by the Australian Weeds Committee. The remnant vegetation (Lowland Rainforest of Subtropical Australia TEC) was observed to have a high dominance of invasive weed species, particularly in the understorey.

3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values

No Commonwealth Heritage Places were identified by the Protected Matters Search.

3.3 (i) Indigenous heritage values

A search of the QLD Government's Cultural Heritage Database and Register indicated that the site has not been previously subject to findings of Aboriginal and Torres Strait Islander artefacts and cultural items. Management actions regarding protection of potential items of cultural heritage will be defined within the Construction Environmental Management Plan to be prepared for the Project, and will include actions such as restricting all works within the defined extent of the construction area and prohibiting access to exclusion zones. In the instance of discovery of cultural heritage artefacts onsite, construction shall cease immediately in the vicinity of the find. Any items found shall be left in an 'as-found' condition and a temporary barrier shall be erected to prevent access to the find. Contact will be made with the Superintendent who will liaise with DATSIP and the local Aboriginal party.

3.3 (j) Other important or unique values of the environment

[Describe any other key features of the environment affected by, or in proximity to the proposed action \(for example, any national parks, conservation reserves, wetlands of national significance etc.\).](#)

No other important or unique values of the environment have been identified that are relevant to this referral.

3.3 (k) Tenure of the action area (e.g. freehold, leasehold)

Road reserve and Unallocated State Land

3.3 (l) Existing land/marine uses of area

The existing land use within the Project area is that of the existing Goomong Road formation and bridge traversing Kandanga Creek. The balance of the area consists of vegetated areas comprising a mixture of remnant and non-remnant vegetation.

3.3 (m) Any proposed land/marine uses of area

The land is proposed to continue to be used for local transport purposes.

4 Environmental outcomes

Provide descriptions of the proposed environmental outcomes that will be achieved for matters of national environmental significance as a result of the proposed action. Include details of the baseline data upon which the outcomes are based, and the confidence about the likely achievement of the proposed outcomes. Where outcomes cannot be identified or committed to, provide explanatory details including any commitments to identify outcomes through an assessment process.

If a proposed action is determined to be a controlled action, the Department may request further details to enable application of the draft *Outcomes-based Conditions Policy 2015* and *Outcomes-based Conditions Guidance 2015* (<http://www.environment.gov.au/epbc/consultation/policy-guidance-outcomes-based-conditions>), including about environmental outcomes to be achieved, details of baseline data, milestones, performance criteria, and monitoring and adaptive management to ensure the achievement of outcomes. If this information is available at the time of referral it should be included.

General commitments to achieving environmental outcomes, particularly relating to beneficial impacts of the proposed action, CANNOT be taken into account in making the initial decision about whether the proposal is likely to have a significant impact on a matter protected under the EPBC Act. (But those commitments may be relevant at the later assessment and approval stages, including the appropriate level of assessment, and conditions of approval, if your proposal proceeds to these stages).

Invasive Species

The following objectives have been identified for the construction phase of the works with respect to weed control and pest management:

- Control existing weeds within the Project area;
- Prevent the establishment of new weeds within the Project area; and
- Minimise the spread of weeds outside the Project area as a result of construction activities.

No Class 1 or Class 2 declared pest plants were identified within the Project area prior to the commencement of works. However, the risk of declared plant species becoming established in the Project area during and immediately following construction works is high. The Construction Contractor will be responsible for the control of declared weeds within the works area as per obligations under the *Land Protection (Pest and Stock Route Management) Act 2002*. Furthermore, GRC have committed to a 12 month weed control program within the adjoining Lowland Rainforest of Subtropical Australia TEC, specifically targeting the WONS cat's claw creeper which has been identified as a key-threatening process under the EPBC Act.

5 Measures to avoid or reduce impacts

Note: If you have identified alternatives in relation to location, time frames or activities for the proposed action at Section 2.3 you will need to complete this section in relation to each of the alternatives identified.

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

For any measures intended to avoid or mitigate significant impacts on matters protected under the EPBC Act, specify:

- what the measure is,
- how the measure is expected to be effective, and
- the time frame or workplan for the measure.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

Provide information about the level of commitment by the person proposing to take the action to achieve the proposed environmental outcomes and implement the proposed mitigation measures. For example, if the measures are preliminary suggestions only that have not been fully researched, or are dependent on a third party's agreement (e.g. council or landowner), you should state that, that is the case.

Note, the Australian Government Environment Minister may decide that a proposed action is not likely to have significant impacts on a protected matter, as long as the action is taken in a particular manner (section 77A of the EPBC Act). The particular manner of taking the action may avoid or reduce certain impacts, in such a way that those impacts will not be 'significant'. More detail is provided on the Department's web site.

For the Minister to make such a decision (under section 77A), the proposed measures to avoid or reduce impacts must:

- clearly form part of the referred action (eg be identified in the referral and fall within the responsibility of the person proposing to take the action),
- be must be clear, unambiguous, and provide certainty in relation to reducing or avoiding impacts on the matters protected, and
- must be realistic and practical in terms of reporting, auditing and enforcement.

More general commitments (eg preparation of management plans or monitoring) and measures aimed at providing environmental offsets, compensation or off-site benefits CANNOT be taken into account in making the initial decision about whether the proposal is likely to have a significant impact on a matter protected under the EPBC Act. (But those commitments may be relevant at the later assessment and approval stages, including the appropriate level of assessment, if your proposal proceeds to these stages).

GRC have included a number of mitigation measures in the design and construction of the Project to reduce the impacts to matters protected under the EPBC Act. These measures include:

- Locating the proposed new bridge structure within the existing road reserve;
- Redesigning batters to reduce impact on the Lowland Rainforest of Subtropical Australia TEC;
- Engaging a qualified fauna spotter catcher during clearing works and requiring a pre-construction fauna survey to be undertaken;
- Environmental training and awareness for construction personnel;
- The preparation and implementation of an Environmental Management Plan (Construction) including erosion and sediment control provisions;
- The preparation and implementation of a Rehabilitation Plan to guide rehabilitation of degraded road reserve with suitable native species once construction is complete;
- Committing to a 12 month targeted weed control program within areas of TEC adjacent to the Project area.

Table 8 outlines the proposed mitigation measures to minimise impacts to the Lowland Rainforest of Subtropical Australia TEC.

Table 8 - Measures intended to avoid or mitigate significant impacts on matters protected under the EPBC Act

Mitigation Measure	Effectiveness
Minimise the footprint of the road, associated infrastructure, and workspace areas, particularly through intact vegetation.	The Project footprint has been designed to reduce the extent of vegetation clearing required to that necessary for the bridge replacement works. The extent of clearing of the Lowland Rainforest of Subtropical Australia TEC has been limited to 800m ² .
Additional workspace and laydown areas shall be located in previously cleared areas.	This mitigation measure will further minimise the clearing required for the Project and reduce impacts to the Lowland Rainforest of Subtropical Australia TEC.
Works within Kandanga Creek have been designed and will be carried out in accordance with the Riverine Protection Permit Exemption Requirements.	This mitigation measure will further minimise the clearing required for the Project and reduce impacts to the Lowland Rainforest of Subtropical Australia TEC.
Clearing shall be restricted to areas required for construction purposes with plans and areas on site to be clearly marked with the limits of disturbance.	This mitigation measure will further minimise the clearing required for the Project and reduce impacts to the Lowland Rainforest of Subtropical Australia TEC.
Areas of environmental and declared weed infestations shall be identified and treated prior	This mitigation measure will assist in reducing the spread of a key threatening process to the Lowland Rainforest of Subtropical Australia

to construction to restrict movement of weed material and ensure weeds are not spread to new areas or communities.	TEC.
Weed hygiene declaration forms are to be provided for all plant/vehicles working within the project area.	This mitigation measure will assist in reducing the spread of a key threatening process to the Lowland Rainforest of Subtropical Australia TEC.
A Rehabilitation Plan is to be prepared to guide rehabilitation of disturbed areas upon completion of construction works. Revegetation shall consist of locally occurring native species removed by the Project.	This mitigation measure will assist in reinstating locally occurring native species adjacent to Kandanga Creek and encourage the establishment and resilience of local native species, thereby creating a vegetated buffer to the Lowland Rainforest of Subtropical Australia TEC.
A 12-month revegetation maintenance and weed control program is to be undertaken upon completion of rehabilitation works. Weed control will be undertaken within revegetated areas and within the adjoining TEC.	This mitigation measure will assist in reducing the spread of a key threatening process to the Lowland Rainforest of Subtropical Australia TEC.

With reference to the recommended mitigation measures, the Project is considered to adequately address impacts to the Lowland Rainforest of Subtropical Australia TEC and, with the implementation of appropriate mitigation measures, reduce the residual impacts to levels acceptable by the Commonwealth.

6 Conclusion on the likelihood of significant impacts

Identify whether or not you believe the action is a controlled action (ie. whether you think that significant impacts on the matters protected under Part 3 of the EPBC Act are likely) and the reasons why.

6.1 Do you THINK your proposed action is a controlled action?

- No, complete section 6.2
 Yes, complete section 6.3

6.2 Proposed action IS NOT a controlled action.

Specify the key reasons why you think the proposed action is NOT LIKELY to have significant impacts on a matter protected under the EPBC Act.

The Project will not result in any impacts on world or national heritage matters or commonwealth marine areas. The Project is not a nuclear action. The potential indirect impacts to the integrity of the Great Sandy Strait Ramsar wetland and other downstream ecosystems are likely to be very limited or negligible, and can be readily managed through the inclusion of erosion and sediment control measures during construction and consideration of water quality protection measures during the design and construction phases of the Project. The Project is located within a small footprint to the overall catchment of the Mary River, and is a considerable distance (more than 100 km upstream) from the Ramsar wetland, with several artificial barriers between the project site and the estuary.

Ecological investigations and assessments undertaken to date and included within this referral have identified several EPBC listed threatened and migratory species with potential to occur within the Project area. The potential impacts on these species have been assessed. It was subsequently concluded that potential impacts of the Project's construction and operation on listed threatened and migratory species will not be significant.

The impact to the Lowland Rainforest of Subtropical Australia TEC is not likely to constitute a 'significant impact' as there is approximately 1.6 ha of the Lowland Rainforest of Subtropical Australia TEC (i.e. RE 12.3.1) mapped along Kandanga Creek within 5 km of the Project area. 800m² of the TEC is required to be removed from the existing disturbed and fragmented edge of the community in order to upgrade the dilapidated Goomong Road Bridge. The total area of the TEC to be removed equates to 5 % of the 1.6 ha of mapped RE 12.3.1 within a 5 km radius. In this regard, the Project will remove a relatively small amount of the Lowland Rainforest of Subtropical Australia TEC in the locality. Given the mitigation measures proposed and the relatively small amount of the TEC required to be removed in comparison to the relatively large amount of the TEC mapped in the surrounding locality, the Project is not expected to have a significant impact to the Lowland Rainforest of Subtropical Australia TEC. It is considered the activity should not be considered a controlled action for the purposes of the *Environment Protection and Biodiversity Conservation Act 1999*.

6.3 Proposed action IS a controlled action

Type 'x' in the box for the matter(s) protected under the EPBC Act that you think are likely to be significantly impacted. (The 'sections' identified below are the relevant sections of the EPBC Act.)

Matters likely to be impacted

- | | |
|--------------------------|--|
| <input type="checkbox"/> | World Heritage values (sections 12 and 15A) |
| <input type="checkbox"/> | National Heritage places (sections 15B and 15C) |
| <input type="checkbox"/> | Wetlands of international importance (sections 16 and 17B) |
| <input type="checkbox"/> | Listed threatened species and communities (sections 18 and 18A) |
| <input type="checkbox"/> | Listed migratory species (sections 20 and 20A) |
| <input type="checkbox"/> | Protection of the environment from nuclear actions (sections 21 and 22A) |

	Commonwealth marine environment (sections 23 and 24A)
	Great Barrier Reef Marine Park (sections 24B and 24C)
	A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
	Protection of the environment from actions involving Commonwealth land (sections 26 and 27A)
	Protection of the environment from Commonwealth actions (section 28)
	Commonwealth Heritage places overseas (sections 27B and 27C)

Specify the key reasons why you think the proposed action is likely to have a significant adverse impact on the matters identified above.

7 Environmental record of the responsible party

NOTE: If a decision is made that a proposal needs approval under the EPBC Act, the Environment Minister will also decide the assessment approach. The EPBC Regulations provide for the environmental history of the party proposing to take the action to be taken into account when deciding the assessment approach.

	Yes	No
<p>7.1 Does the party taking the action have a satisfactory record of responsible environmental management?</p> <p>Provide details GRC undertakes all necessary environmental 'duty of care' for all projects. To date, GRC has successfully implemented its 'duty of care' to the environment, as per section 319 of the Queensland <i>Environmental Protection Act 1994</i>. All construction projects are undertaken within the relevant environmental legislation and approvals are gained for all works where required. Environmental impact minimisation and mitigation measures are implemented for all projects and these requirements are communicated to relevant parties through a number of processes and documents, including: Environmental Management Plans, contract documentation and toolbox talks on-site. All of these documents are also utilised during audits to ensure documented processes are implemented on the ground and where there are discrepancies, GRC and its contractors are responsible parties to understand these shortfalls and rectify these situations, where appropriate. In addition, if unforeseen circumstances do arise and unexpected environmental impacts are experienced, GRC and its contractors have and are willing to rectify such situations to ensure minimal damage is done, as well as restoration of the environment in accordance with GRC procedural instructions or direction given by the responsible environmental agency.</p>	✓	
<p>7.2 Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources?</p> <p>If yes, provide details</p>		✓
<p>7.3 If the party taking the action is a corporation, will the action be taken in accordance with the corporation's environmental policy and planning framework?</p> <p>If yes, provide details of environmental policy and planning framework Gympie Regional Council's vision for the region is to be the natural choice to live, work and play. To assist in achieving this vision council will implement policies and procedures to ensure that the environment is sustainably managed and healthy. Council is committed to minimising the impact to the environment from activities under its control. Council's Environment Strategy supports this vision. Annually council develop, review and enhance the Environment Strategy so that it is innovative, balanced and achievable and encourages the responsible stewardship of the Gympie region.</p>	✓	

7.4 Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

✓

Provide name of proposal and EPBC reference number (if known)

Prior to formation of Gympie regional Council:

- Cooloola Shire Council/Waste management/Cooloola/QLD/replacement of the existing sewage treatment plant and bunding of 14ha of woodland - 2005/1945
- Cooloola Shire Council/Waste management/Tin Can Bay/QLD/Expansion of sewage treatment capacity - 2005/1943
- COOLOOLA SHIRE COUNCIL/Waste Management (sewerage)/Rainbow Beach/Queensland/Sewage Treatment Plant Upgrade - 2005/1944

8 Information sources and attachments

(For the information provided above)

8.1 References

- List the references used in preparing the referral.
- Highlight documents that are available to the public, including web references if relevant.

Australian Museum (2008) Birds in Backyards – Bird Finder; Australian Museum (AM), Sydney, NSW. Available from: <http://www.birdsinbackyards.net/>. Last updated 8 June 2008

Department of the Environment (DotE) (2016) Species Profile and Threats Database. Available from: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>. Accessed: 22 March 2016

Department of the Environment (DotE) (2011a). Survey Guidelines for Australia's Threatened Fish. Available from: <http://www.environment.gov.au/system/files/resources/6c9817ee-517b-4c13-9d8c-e66a61514f53/files/survey-guidelines-fish.pdf> Accessed 22 November 2016

Department of the Environment (DotE) (2010) Survey guidelines for Australia's threatened frogs. Available from: <http://www.environment.gov.au/system/files/resources/ff3eb752-482d-417f-8971-f93a84211518/files/survey-guidelines-frogs.pdf>. Accessed: 22 March 2016

Department of the Environment (DotE) (2011b). Survey Guidelines for Australia's Threatened Reptiles. Available from: <http://www.environment.gov.au/system/files/resources/eba674a5-b220-4ef1-9f3a-b9ff3f08a959/files/survey-guidelines-reptiles.pdf> Accessed: 22 November 2015

Department of Environment and Resource Management (2010). Environmental Protection (Water) Policy 2009 Mary River environmental values and water quality objectives Basin No. 138, including all tributaries of the Mary River. Water Quality & Ecosystem Health Policy Unit Department of Environment and Resource Management. Brisbane.

DISITIA (2016), Wildlife Online. Department of Science, Information Technology, Innovation and the Arts, Queensland Government, Brisbane. <https://environment.ehp.qld.gov.au/report-request/species-list/>

Mary River Catchment Coordinating Committee (2014). 2014 Mary River Catchment Waterwatch Results, (2014). Available from: <http://mrccc.org.au/reports/2014wholecatchmentwwreport-2/> Accessed: 3 March 2016

Morcombe, M. (2003) Field Guide to Australian Birds (2nd Edition), Steve Parish Publishing, Archerfield.

Pizzey, G. and Knight, F. (2007) The Field Guide to the Birds of Australia. Harper Collins Publishing. Sydney, Australia.

Queensland Museum (2007) Wildlife of Greater Brisbane, Queensland Museum, South Brisbane.

Threatened Species Scientific Committee (TSSC), 2015. Commonwealth Listing Advice on Lowland Rainforest of Subtropical Australia. Available from: <http://www.environment.gov.au/cgi-bin/sprat/public/publicshowcommunity.pl?id=101&status=Critically+Endangered>. Accessed: 22 March 2016.

8.2 Reliability and date of information

For information in section 3 specify:

- source of the information;
- how recent the information is;
- how the reliability of the information was tested; and
- any uncertainties in the information.

The information in Section 3 was sourced from the references indicated in the text and was the most up-to-date information available at the time of writing.

8.3 Attachments

Indicate the documents you have attached. All attachments must be less than three megabytes (3mb) so they can be published on the Department's website. Attachments larger than three megabytes (3mb) may delay the processing of your referral.

		✓ attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the project locality (section 1)	✓	Attachment B1 & B2 – Civil Drawings, Attachment D – Site Environmental Assessment
	GIS file delineating the boundary of the referral area (section 1)	✓	Attachment F – Site Location gda94 Zip File
	figures, maps or aerial photographs showing the location of the project in respect to any matters of national environmental significance or important features of the environments (section 3)	✓	Attachment A1 & A2 – TEC Extent
If relevant, attach	copies of any state or local government approvals and consent conditions (section 2.5)		
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)		
	copies of any flora and fauna investigations and surveys (section 3)	✓	Attachment D - Site Environmental Assessment, Attachment E – Targeted Amphibian & Aquatic Survey
	technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)	✓	Attachment B1 & B2 – Civil Drawings, Attachment D - Site Environmental Assessment, Attachment E – Targeted Amphibian & Aquatic Survey
	report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		

9 Contacts, signatures and declarations

NOTE: Providing false or misleading information is an offence punishable on conviction by imprisonment and fine (s 489, EPBC Act).

Under the EPBC Act a referral can only be made by:

- the person proposing to take the action (which can include a person acting on their behalf); or
- a Commonwealth, state or territory government, or agency that is aware of a proposal by a person to take an action, and that has administrative responsibilities relating to the action¹.

Project title: Gympie regional Council/Goomong Road Bridge Replacement/Kandanga QLD.

9.1 Person proposing to take action

This is the individual, government agency or company that will be principally responsible for, or who will carry out, the proposed action.

If the proposed action will be taken under a contract or other arrangement, this is:

- the person for whose benefit the action will be taken; or
- the person who procured the contract or other arrangement and who will have principal control and responsibility for the taking of the proposed action.

If the proposed action requires a permit under the Great Barrier Reef Marine Park Act², this is the person requiring the grant of a GBRMP permission.

The Minister may also request relevant additional information from this person.

If further assessment and approval for the action is required, any approval which may be granted will be issued to the person proposing to take the action. This person will be responsible for complying with any conditions attached to the approval.

If the Minister decides that further assessment and approval is required, the Minister must designate a person as a proponent of the action. The proponent is responsible for meeting the requirements of the EPBC Act during the assessment process. The proponent will generally be the person proposing to take the action³.

1. Name and Title:

Mr Glenn Alexander

2. Organisation (if applicable):

Gympie Regional Council

3. EPBC Referral Number (if known):

4: ACN / ABN (if applicable):

5. Postal address PO Box 155, Gympie QLD 4570

6. Telephone: (07) 5481 0473

7. Email: glenn.alexander@gympie.qld.gov.au

8. Name of proposed proponent (if not the same person at item 1 above and if applicable):

¹ If the proposed action is to be taken by a Commonwealth, state or territory government or agency, section 8.1 of this form should be completed. However, if the government or agency is aware of, and has administrative responsibilities relating to, a proposed action that is to be taken by another person which has not otherwise been referred, please contact the Referrals Gateway (1800 803 772) to obtain an alternative contacts, signatures and declarations page.

² If your referred action, or a component of it, is to be taken in the Great Barrier Reef Marine Park the Minister is required to provide a copy of your referral to the Great Barrier Reef Marine Park Authority (GBRMPA) (see section 73A, EPBC Act). For information about how the GBRMPA may use your information, see http://www.gbrmpa.gov.au/privacy/privacy_notice_for_permits.

9. ACN/ABN of proposed proponent (if not the same person named at item 1 above):

COMPLETE THIS SECTION ONLY IF YOU QUALIFY FOR EXEMPTION FROM THE FEE(S) THAT WOULD OTHERWISE BE PAYABLE

- I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:
- an individual; OR
 - a small business entity (within the meaning given by section 328-110 (other than subsection 328-119(4)) of the *Income Tax Assessment Act 1997*); OR
 - not applicable.

If you are small business entity you must provide the Date/Income Year that you became a small business entity:

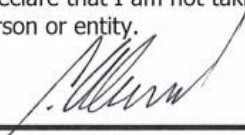
Note: You must advise the Department within 10 business days if you cease to be a small business entity. Failure to notify the Secretary of this is an offence punishable on conviction by a fine (regulation 5.23B(3) *Environment Protection and Biodiversity Conservation Regulations 2000 (Cth)*).

COMPLETE THIS SECTION ONLY IF YOU WOULD LIKE TO APPLY FOR A WAIVER

- I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the [EPBC Regulations](#). Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made:
- Declaration
- not applicable.

I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.
I understand that giving false or misleading information is a serious offence.
I agree to be the proponent for this action.
I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature



Date

16/5/16

9.2 Person preparing the referral information (if different from 8.1)

Individual or organisation who has prepared the information contained in this referral form.

Name Joshua Lee
Title Mr
Organisation North Coast Environmental Services Organisation name should match entity identified in ABN/ACN search
ACN / ABN (if applicable) 44 851 168 122
Postal address PO Box 9566, Pacific Paradise 4564

Telephone (07) 5450 5652
Email jlee@northcoastenv.com.au

Declaration I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.
I understand that giving false or misleading information is a serious offence.

Signature



Date 17/05/2016

REFERRAL CHECKLIST

NOTE: This checklist is to help ensure that all the relevant referral information has been provided. It is not a part of the referral form and does not need to be sent to the Department.

HAVE YOU:

- ✓ Completed all required sections of the referral form?
- Included accurate coordinates (to allow the location of the proposed action to be mapped)?
- Provided a map showing the location and approximate boundaries of the project area?
- Provided a map/plan showing the location of the action in relation to any matters of NES?
- Provided a digital file (preferably ArcGIS shapefile, refer to guidelines at Attachment A) delineating the boundaries of the referral area?
- Provided complete contact details and signed the form?
- Provided copies of any documents referenced in the referral form?
- Ensured that all attachments are less than three megabytes (3mb)?
- Sent the referral to the Department (electronic and hard copy preferred)?

Geographic Information System (GIS) data supply guidelines

If the area is less than 5 hectares, provide the location as a point layer. If the area greater than 5 hectares, please provide as a polygon layer. If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer.

GIS data needs to be provided to the Department in the following manner:

- Point, Line or Polygon data types: ESRI file geodatabase feature class (preferred) or as an ESRI shapefile (.shp) zipped and attached with appropriate title
- Raster data types: Raw satellite imagery should be supplied in the vendor specific format.
- Projection as GDA94 coordinate system.

Processed products should be provided as follows:

- For data, uncompressed or lossless compressed formats is required - GeoTIFF or Imagine IMG is the first preference, then JPEG2000 lossless and other simple binary+header formats (ERS, ENVI or BIL).
- For natural/false/pseudo colour RGB imagery:
 - If the imagery is already mosaiced and is ready for display then lossy compression is suitable (JPEG2000 lossy/ECW/MrSID). Prefer 10% compression, up to 20% is acceptable.
 - If the imagery requires any sort of processing prior to display (i.e. mosaicing/colour balancing/etc) then an uncompressed or lossless compressed format is required.

Metadata or 'information about data' will be produced for all spatial data and will be compliant with ANZLIC Metadata Profile. (http://www.anzlic.org.au/policies_guidelines#guidelines).

The Department's preferred method is using ANZMet Lite, however the Department's Service Provider may use any compliant system to generate metadata.

All data will be provided under a Creative Commons license (<http://creativecommons.org/licenses/by/3.0/au/>)