Australian Government
Department of the Environment

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.

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: $7,352
  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/topics/about-us/legislation/environment-protection-and-biodiversity-conservation-act-1999

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:

Isis Central Sugar Mill — Cordalba to Booyal Cane Rail Re-establishment

1 Summary of proposed action

1.1 **Short description**

Isis Central Sugar Mill is proposing to re-establish the cane railway between Cordalba and Booyal within the Bundaberg Regional Council area, Queensland (See attached Figure 1) . The cane railway corridor is an existing corridor and is approximately 18km long and is freehold in tenure.

1.2

Bend points of existing corridor line

Name	Lat	Long	Name	Lat	Long	Name	Lat	Long
1	-25.2180	152.0610	23	-25.1885	152.1360	45	-25.1687	152.1650
2	-25.2178	152.0620	24	-25.1880	152.1360	46	-25.1675	152.1660
3	-25.2170	152.0630	25	-25.1873	152.1370	47	-25.1659	152.1670
4	-25.2167	152.0640	26	-25.1865	152.1380	48	-25.1631	152.1680
5	-25.2166	152.0670	27	-25.1854	152.1390	49	-25.1596	152.1690
6	-25.2158	152.0690	28	-25.1852	152.1400	50	-25.1572	152.1700
7	-25.2156	152.0700	29	-25.1860	152.1430	51	-25.1562	152.1720
8	-25.2102	152.0830	30	-25.1860	152.1440	52	-25.1548	152.1740
9	-25.2092	152.0850	31	-25.1850	152.1470	53	-25.1527	152.1750
10	-25.2075	152.0870	32	-25.1847	152.1490	54	-25.1514	152.1770
11	-25.1980	152.0960	33	-25.1833	152.1530	55	-25.1522	152.1830
12	-25.1923	152.1050	34	-25.1829	152.1530	56	-25.1526	152.1840
13	-25.1870	152.1110	35	-25.1823	152.1530	57	-25.1532	152.1890
14	-25.1867	152.1130	36	-25.1808	152.1540	58	-25.1530	152.1900
15	-25.1877	152.1180	37	-25.1796	152.1550	59	-25.1520	152.1910
16	-25.1882	152.1180	38	-25.1783	152.1560	60	-25.1504	152.1920
17	-25.1905	152.1210	39	-25.1779	152.1570	61	-25.1492	152.1940
18	-25.1911	152.1220	40	-25.1779	152.1570	62	-25.1485	152.1960
19	-25.1914	152.1230	41	-25.1780	152.1590	63	-25.1479	152.1990
20	-25.1906	152.1260	42	-25.1768	152.1620	64	-25.1479	152.2000
21	-25.1907	152.1290	43	-25.1761	152.1620	65	-25.1489	152.2010
22	-25.1896	152.1310	44	-25.1754	152.1630	66	-25.1492	152.2020

#Zipped shapefile Cordalba_To_Booyal_Easement of the corridor is included.

1.3 **Locality and property description**

The proposed action will take place between Cordalba and Booyal, Bundaberg Regional Council, Queensland.

1.4 **Size of the development footprint or work area (hectares)** 65ha (existing easement area)

1.5 **Street address of the site** NA

1.6 **Lot description**

LotPlan — 2RP22930, 71SP280897, 81SP280896, 21SP280900, 61SP280898 and 51SP280899

1.7 **Local Government Area and Council contact (if known)**
The proposed action is not subject to local planning approval. (Bundaberg Regional Council)

1.8 **Time frame**
1 September 2016 to 1 September 2017.

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?		
			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
1.11	**State assessment** Is the action subject to a state or territory environmental impact assessment?		
			Yes, you must also complete Section 2.5
1.12	**Component of larger action** Is the proposed action a component of a larger action?		
			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
1.14	**Australian Government funding** Has the person proposing to take the action received any Australian Government grant funding to undertake this project?		No
1.15	**Great Barrier Reef Marine Park** Is the proposed action inside the Great Barrier Reef Marine Park?		No

2 Detailed description of proposed action

2.1 Description of proposed action

Isis Central Sugar Mill, a company that owns and operates the Isis Central Sugar Mill near Childers, Bundaberg Regional Council in Queensland, is proposing to re-establish the cane railway between Cordalba and Booyal within the Bundaberg Regional Council (See a Figure 1). This cane railway will extend the existing 322km of cane railway currently owned and operated by the Isis Central Sugar Mill and will enable cane to be transported from Booyal to the Mill rather than along the Bruce Highway by multilift bins on trucks.

This cane railway was approved as a rail corridor by the Queensland Parliament on 23 December 1909 and was opened on May 6th 1913. Operations on the corridor ceased by the Isis Central Sugar Mill in 1964 (see Figure 2 for corridor in 1964). The rail corridor is held in freehold tenure by the Isis Central Sugar Mill and includes lots 2 on RP22930, 71 on SP280897, 81 on SP280896, 21 on SP280900, 61 on SP280898 and 51 on SP280899 (Figure 1). The corridor consists of an existing cleared access track, a fence in disrepair which fences the corridor from adjoining lots and a track which has been built up on a formation and cut into the existing landscape. There are some sections which still contain sleepers and track. The water crossings contain some existing intact bridges or remnants of bridges including the revetments and abutments. The Isis Central Sugar Mill proposes to re-instate the use as a cane railway in the corridor by undertaking clearing to lay new concrete sleepers, welded steel tracks, stone ballast, access track and maintain the existing fence to fence out stock. The corridor and access track is currently being utilised as an access track through the Cordalba Sate Forest.

It is not proposed to clear the entire area only what is necessary to allow for the re-establishment or the rail corridor, access track, bridges and fence. The freehold rail corridor ranges in width from approximately 30m -40m. The clearing where the track will be located is approximately 5m wide. Clearing for an access track will be 5m in width although this will only be undertaken where feasible. For example in the instances of water crossings, no access track will exist. Access will be from either side of the watercrossing or on the rail itself. Clearing will be undertaken to facilitate the maintenance and establishment of fencelines along the boundary of the freehold corridor. It is anticipated that this clearing will only be 5m wide. The intention is to selectively clear and to preserve native vegetation where possible. The clearing will only be undertakn where necessary to ensure the cane railway allows safe passage for the locomotives and that there is safe access for maintenance.

This is the first phase of a project which will reconnect the Booyal area to the Isis Central Sugar Mill via the existing corridor which will save trucks transporting the cane up the Bruce Highway via semitrailers. The second phase of the project is to establish a new connection into the North Burnett Regional Council via a route from Booyal to Degilbo. The second phase is subject to a feasibility study which is currently underway.

2.2 Alternatives to taking the proposed action

The alternative to this option is transporting cane along the Bruce Highway. This adds traffic to an already crowded highway, adds slow and turning vehicles to the highway, adds to CO_2 emissions from multiple trucks travelling back and forth from the farm to the mill and back to the farm. The option to re-enstate the existing rail corridor provides the best environmental outcome as clearing will be within previously disturbed areas and will save multiple trucks traveling along the Bruce Highway during the sugar cane harvesting season. Taking slow and turning vehicles off the Bruce Highway will greatly improve safety.

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

NA — the are no alternative locations, time frames or activities

2.4 Context, planning framework and state / local government requirements

Local Government

The re-establishment of the rail corridor is not assessable development against the local government planning requirements.

Queensland

Forest products and quarry material

Section 45 of the *Forestry Act 1959* makes all forest products and quarry material on all Crown lands the property of the Crown. Where clearing or earthworks will occur in a council road reserve or a boundary watercourse (Woco Creek) a permit from the Department of Agriculture and Fisheries will be required.

Waterway barrier works

The *Sustainable Planning Regulation (SPR) 2009* schedule 3 table 4 item 5 makes constructing or raising waterway barrier works assessable development unless it is under a self assessable code.

Schedule 3 Part 2 Table 4 Item 2 of the *SPR 2009* makes operational works for constructing or raising waterway barrier works self assessable for temporary, minor or rebuilt on a regular basis works. The self assessable code relevant to this

development is Code for self-assessable Development Minor waterway barrier works Part 3: culvert crossings Code number: WWBW01 April 2013. In addition the following is not classed as waterway barrier works:

- New single span bridges are not waterway barrier works when the abutments do not extend into the waterway beyond the high bank; the bank revetment works do not extend beyond the toe of the bank; and no scour protection is placed on the bed of the waterway upstream, downstream or under the structure.
- New multi-span bridges are not waterway barrier works when:
    - the pier/pile and/or pier/pile platform are completely outside the low flow channel in Amber and Green waterways; and
    - the abutments do not extend into the waterway beyond the high bank and the abutment revetment works do not extend into the waterway beyond the toes of the banks; and
    - bed scour protection is placed at or below the natural bed level of the waterway, and does not change the characteristics of the low flow channel. In Purple, Red, Amber and Green waterways, bed scour protection cannot extend more than 20 metres upstream and 20 metres downstream of the structure. In Grey waterways, bed scour protection cannot extend more than 5m beyond the footprint of the bridge in any direction.

It is proposed to design the bridges in accordance with the requirements so they do not meet the requirements for waterway barrier works and to design bridges and crossings in accordance with the self assessable codes. For works that do not fall under the works that are not waterway barrier works or the self assessable codes, a development application will be required.

Native Vegetation Clearing
The clearing of native vegetation under the *Vegetation Management Act 1999* for the re-establishment of the corridor is exempt under the *SPR 2009* schedule 24 part 2 item 2(c) — clearing on freehold land necessary for essential management.

essential management — necessary to maintain infrastructure including any core airport infrastructure, buildings, fences, helipads, roads, stockyards, vehicular tracks, watering facilities and constructed drains other than contour banks, other than to source construction material

Clearing will be to maintain the existing infrastructure including the built corridor, bridges, access track and fencelines. This meets the definition of essential management.

Protected plants
Section 89(1) of the *Nature Conservation Act 1992* restricts the taking of particular protected plants.

Section 261ZC of the *Nature Conservation (Wildlife Management) Regulation 2006* makes routine maintenance of existing infrastructure exempt. Routine maintenance, of existing infrastructure means — necessary to maintain other infrastructure including any core airport infrastructure, buildings, fences, helipads, oil and gas pipelines, roads, stockyards, vehicular tracks, water pipelines, watering facilities and constructed drains other than contour banks.

Clearing will be to maintain the existing infrastructure including the built corridor, bridges, access track and fencelines. This meets the definition of routine maintenance.

Protected animals
Section 88(2) of the Nature Conservation Act 1992 restricts the taking of particular protected animals. Section 332 of the Nature Conservation (Wildlife Management) Regulation 2006 indicates a person must not tamper with an animal breeding place unless under an approved species management program. If breeding places are found along the route a species management program will be required.

Cultural heritage
Clearing for the existing corridor will be undertaken in accordance with Section 23(1) of the *Aboriginal Cultural Heritage Act 2003* which states *a person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage* (the "cultural heritage duty of care").

There is no other Queensland State legislation relevant to this proposed action.

2.5 Environmental impact assessments under Commonwealth, state or territory legislation
NA — the application is not subject to an environmental impact assessment.

2.6 Public consultation (including with Indigenous stakeholders)
A meeting with the Queensland Department of Infrastructure, Local Government and Planning was held (8 June 2016) to identify all interested parties and relevant legislation. All parties with an interest were at the meeting.

The Bundaberg Regional council has been consulted on the project and identified they have no issues.

The corridor consists of freehold lots owned by the Isis Central Sugar Mill. The majority of the corridor is surrounded by the Cordalba State Forest except three lots in the north. All interested parties sharing a boundary with the corridor will be consulted including any parties with a grazing lease within the Cordalba State Forest.

2.7 A staged development or component of a larger project

The re-establishment of the rail corridor between Cordalba and Booyal is being considered separate as the second phase of the project is to establish a new connection into the North Burnett Region via a route from Booyal to Degilbo. The second phase is subject to a feasibility study which is currently underway and will be subject to a route identification to determine the most appropriate route. If the second phase does not get undertaken, the first stage from Cordalba to Booyal will still go ahead.

3 Description of environment & likely impacts

3.1 Matters of national environmental significance

The proposed action will occur in an existing rail corridor that had been in operation for approximately 50 years up to 1964 (Figure 2). The corridor contains an existing cleared access track, a fence in disrepair which fences the corridor from adjoining lots and a track which has been built up and cut into the existing landscape. There are some sections which still contain sleepers and track. The water crossings contain some existing intact bridges or remnants of bridges including the revetments and abutments. The Isis Central Sugar Mill proposes to re-instate the use as a cane railway in the corridor by undertaking clearing to lay new concrete sleepers, welded steel tracks, stone ballast, access track and maintain the existing fence to fence out stock.

The proposed action will involve clearing of native vegetation where it has grown into the corridor infrastructure, access track and fence.

The existing corridor (freehold lots 2 on RP22930, 71 on SP280897, 81 on SP280896, 21 on SP280900, 61 on SP280898 and 51 on SP280899 (Figure 1)) is mapped by the regulated vegetation management map (RVMM) as containing Category B (remnant) and Category X (non-remnant) (Figure 3).

Regional ecosystem mapping version 8.0 maps the vegetation within the corridor as being heterogeneous polygons containing a mix of 'of concern' regional ecosystems 12.3.11, 12.9-10.3, 12.12.28, 12.11.19 and 'least concern' regional ecosystems 12.9-10.2, 12.9-10.19, 12.9-10.21, 12.11.6, 12.11.18, 12.12.5 (Figure 4). The watercourses are mapped as containing least concern regional ecosystem 12.3.7 (Figure 4).

Site inspection found the vegetation along the corridor to be typical of the area and surrounds and is dominated by Eucalyptus and Corymbia woodlands and open forests. The understorey was generally dominated by Acacia leiocalyx, Casuarina littoralis, Lophostemon suaveolens and Melaleuca in the wetter areas. Grasses were a mix of native and non-native species with lantana dominating within watercourses. Vegetation within the corridor is regrowth which has established since the rail corridor operation ceased in 1964 (Figure 2). This was evident when compared to the remnant vegetation surrounding the corridor within the adjoining Cordalba State Forest where trees had a greater DBH and contained hollows. Vegetation within corridor had considerably smaller DBH's and did not contain hollows due to the young age.

Site inspection confirmed the presence of 'of concern' regional ecosystems 12.3.11, 12.9-10.3, 12.11.19, 12.12.28 and 'least concern' regional ecosystems 12.3.7, 12.9-10.2, 12.9-10.19, 12.11.18, 12.12.5, 12.12.7 and non-remnant vegetation.

A targeted search of the areas containing essential habitat was undertaken for Phascolarctos cinereus (Koala) and Crinia tinnula (Wallum Froglet). Searches for koala were also undertaken in the area not mapped as essential as the corridor contained koala food trees. Recordings of wallum froglets were played in the watercourses where there were permanent waterholes and calls were listened for along the route. Koala searches including scanning the canopies of trees, looking for scratch marks on smooth barked trees (E. tereticornis, E. molucaccana and C. citriodora) and scats around the bases of trees. Searches for hollows within the trees were also undertaken for other wildlife breeding places within the corridor.

The trees along the corridor are regrowth from when rail operations ceased in 1964 (Figure 2). The trees in the corridor had considerably smaller DBH's than the surrounding trees within the state forest and did not contain hollows due to the young age of the trees. No signs of koala were observed within the corridor, only small scratch marks on the smooth barked trees were observed (likely from lizards and goannas). No wallum froglets were observed or heard. The habitat along the route was not considered the correct habitat for the wallum froglets as they are generally riparian rather than swamps.

See site inspection report for regional ecosystem determination and habitat assessment (Attachment 3).

3.1 (a) World Heritage Properties

No significant impact to occur to World Heritage Properties

3.1 (b) National Heritage Places

No significant impact to occur to National Heritage Places

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

No significant impact to occur to Wetlands of International Importance (declared Ramsar wetlands)

3.1 (d) Listed threatened species and ecological communities

Description

Listed Threatened Ecological Communities

See Attachment 1 for EPBC protected matters search 02/07/16.
See Attachment 2 for Wildlife online search 2 July 2016

Community	Regional Ecosystem	Confirmed Remnant Regional Ecosystem Mapping v8.0 within the existing corridor	Comments	Site visit notes
Lowland Rainforest of Subtropical Australia	12.3.1. 12.5.13, 12.8.3, 12.8.4, 12.8.13, 12.11.1, 12.11.10, 12.12.1 and 12.12.16	12.3.7, 12.3.11, 12.9-10.2, 12.9-10.3, 12.9-10.19, 12.9-10.21, 12.11.6, 12.11.18, 12.11.19, 12.12.5, 12.12.28,	No Lowland Rainforest of Subtropical Australia mapped within the existing corridor or the surrounds (Department of the Environment 2016o).	Site inspection confirmed 'of concern' regional ecosystems 12.3.11, 2.9-10.3, 12.11.18, 12.12.28 No Lowland Rainforest of Subtropical Australia was found to occur in the corridor. There will be no impact to Lowland Rainforest of Subtropical Australia.

Comment notes taken from the Approved Conservation Advice for the Lowland Rainforest of Subtropical Australia
http://www.environment.gov.au/biodiversity/threatened/communities/pubs/101-conservation-advice.pdf

Listed threatened species

Scientific Name	Common name	Status	Habitat and distribution	Comments
Plants				
Cycas megacarpa		Endangered	Scattered and localised on clay-loam soils over various substrates, usually on sloping country in wet eucalypt forests or rainforests. This species ranges from near Mount Morgan south to near Goomeri in Queensland, occurring in locally more mesic microhabitats, becoming quite sporadic and occurring further inland in the south of the range (The Cycad Pages 2012).	The proposed action will be within the range for Cycas megacarpa. The corridor is not within sloping country. Wildlife Online did not identify Cycas megacarpa within the search area. Site inspection did not identify Cycas megacarpa within the existing corridor. The proposed action will not have a significant impact on a population of Cycas megacarpa, Cycas megacarpa habitat or interfere with the recovery of the species.
Cycas ophiolitica		Endangered	This species reaches its best development on red clays over serpentinites in the region between Marlborough and Rockhampton. Substantial intergradation occurs with C. media and C. megacarpa respectively	The proposed action occurs south of the known range for Cycas ophiolitica. The corridor is not within sloping country. Wildlife Online did not identify Cycas ophiolitica within the search area. Site inspection did not identify Cycas ophiolitica

			north and south of this region, and plants from throughout the range may show characters of these taxa (The Cycad Pages 2012).	within the existing corridor. The proposed action will not have a significant impact on a population of Cycas ophiolitica, habitat for Cycas ophiolitica or interfere with the recovery of the species.
Macrozamia pauli-guilielmi		Endangered	Southern Queensland, Burnett, Darling Downs and western Moreton districts. Scattered in open woodland, almost always on siliceous sand deposits from old beach dunes (The Cycad Pages 2012).	The proposed action occurs within the general region of Macrozamia pauli-guilielmi. The corridor is not on siliceous sand deposits from old beach dunes. Wildlife Online did not identify Macrozamia pauli-guilielmi within the search area. Site inspection did not identify Macrozamia pauli-guilielmi within the existing corridor. The proposed action will not have a significant impact on a population of Macrozamia pauli-guilielmi, habitat for Macrozamia pauli-guilielmi or interfere with the recovery of the species.
Alectryon ramiflorus	Isis tamarind	Endangered	Alectryon ramiflorus is known from a few small populations in south eastern Queensland. The main population exists at Cordalba Forest Reserve and consists of approximately 37 plants. Four other smaller populations of one to three plants grow on the roadside and in riverine remnants near Childers. These populations are very fragmented and surrounded by agricultural land (DEHP 2013). In general, its habitat is confined to remnant microphyll vine forest growing on hillslopes, gullies and alluvial terraces with shallow pale brown, gravelly sandy clay soil. As these communities are fire sensitive, their distribution is affected by fire history patterns and the presence of natural fire barriers (DEHP 2013).	The proposed action occurs within the know area of Alectryon ramiflorus. The corridor contains Eucalyptus and Corymbia woodland and open forests not microphyll vine forest growing on hillslopes, gullies and alluvial terraces with shallow pale brown, gravelly sandy clay soil where Alectryon ramiflorus is known to occur. Wildlife Online did identify Alectryon ramiflorus within the search area. Site inspection did not identify Alectryon ramiflorus within the existing corridor. The proposed action will not have a significant impact on a population of Alectryon ramiflorus, habitat for Alectryon ramiflorus or interfere with the recovery of the species.
Bosistoa transversa	Three-leaved Bosistoa	Vulnerable	Bosistoa transversa grows in wet sclerophyll forest, dry sclerophyll forest and rainforest up to 300 m in altitude. Associated vegetation includes Argyrodendron trifoliolatum, Syzygium hodgkinsoniae, Endiandra pubens, Dendrocnide photinophylla, Acmena ingens, Diploglottis australis and	The proposed action occurs within the general region Bosistoa transversa. The corridor contains Eucalyptus and Corymbia woodland and open forests not wet sclerophyll forest, dry sclerophyll forest and rainforest up to 300 m in altitude where Bosistoa transversa is known to occur. Wildlife Online did not identify Bosistoa

			Diospyros mabacea (Queensland Herbarium 2012) in (DEHP 2014).	transversa within the search area. Site inspection did not identify Bosistoa transversa within the existing corridor. The proposed action will not have a significant impact on a population of Bosistoa transversa, habitat for Bosistoa transversa or interfere with the recovery of the species.
Cossinia Australiana	Cossinia	Endangered	Cossinia australiana occurs from 20 to 520 m altitude. The species appears to prefer ecotonal situations around dry rainforest edges, although it also occurs as scattered individual plants within closed forest communities. It grows in araucarian microphyll vine forest and relict semi-evergreen vine thicket on a variety of soils, including red volcanic soil and black loam. Trees and shrubs which C. australiana is often associated include Alyxia ruscifolia (chain fruit), Capparis arborea (brush caper berry), Drypetes deplanchei (yellow tulip), Flindersia australis (crow's ash), Owenia venosa (crow's apple) and Siphonodon australis (ivory- wood). Associated vine species include Cissus oblonga, Malaisia scandens and Melodorum leichhardtii (Borsboom and Wang, 1997; Queensland Herbarium, 2012) in (DEHP 2014).	The proposed action occurs within the know area of Cossinia australiana. The corridor contains Eucalyptus and Corymbia woodland and open forests not araucarian microphyll vine forest and relict semi-evergreen vine thicket where Cossinia Australiana is known to occur. Wildlife Online did not identify Cossinia Australiana within the search area however it is known to south of the corridor (near Booyal). Site inspection did not identify Cossinia Australiana within the existing corridor. The proposed action will not have a significant impact on a population of Cossinia Australiana, habitat for Cossinia Australiana or interfere with the recovery of the species.
Cupaniopsis shirleyana	Wedge-leaf Tuckeroo	Vulnerable	Cupaniopsis shirleyana occurs at 20 to 550 m elevation. Recorded in a variety of rainforest types including vine thicket and dry rainforest. Occurs on hillsides, mountain tops, lower slopes of valleys, stream beds and along riverbanks. Grows in a variety of soil types (Queensland Herbarium, 2012) in (DEHP 2014).	The proposed action occurs within the general area of Cupaniopsis shirleyana. The corridor contains Eucalyptus and Corymbia woodland and open forests not vine thicket and dry rainforest where Cupaniopsis shirleyana is known to occur. Wildlife Online did not identify Cupaniopsis shirleyana within the search area. Site inspection did not identify Cupaniopsis shirleyana within the existing corridor. The proposed action will not have a significant impact on a population of Cupaniopsis shirleyana, habitat for Cupaniopsis shirleyana or interfere with the recovery of the species.
Phaius australis	Lesser Swamp-orchid	Endangered	Phaius australis grows in areas where soils are almost always damp, but not flooded for lengthy periods. Sands are	The proposed action occurs within general area of Phaius australis. The corridor contains Eucalyptus and Corymbia woodland

			generally the underlying soil type. P. australis are usually found in coastal habitats between swamps and forests or in suitable areas further inland. This includes swampy sclerophyll forest dominated by melaleucas, swampy forest that often have scleorphyll emergents, or fringing open forest and melaleuca swamp forest associated with rainforest species. P. australis has also been recorded in wallum, sedgeland, rainforest and closed forest. They often grow in deep shade, but can also occur in full sun. This species occurs at higher altitudes in northern Queensland. (Barker 1995)) in (DEHP 2014).	and open forests not swampy sclerophyll forest dominated by melaleucas, swampy forest that often have scleorphyll emergents, or fringing open forest and melaleuca swamp forest associated with rainforest species where Phaius australis is known to occur. Wildlife Online did not identify Phaius australis within the search area. Site inspection did not identify Phaius australis within the existing corridor. The proposed action will not have a significant impact on a population of Phaius australis, habitat for Phaius australis or interfere with the recovery of the species.
Phebalium distans	Mt Berryman Phebalium	Critically Endangered	Phebalium distans is found on red soils in vineforest, semi-evergreen vine thicket and open forest ecosystems and ecotones, generally above 200 m elevation. Associated species include Acacia disparrima subsp. disparrima, Croton insularis, Phebalium nottii, Flindersia australis, Owenia venosa, Flindersia spp., Denhamia parvifolia, Capparis spp., Carissa ovata (Queensland Herbarium, 2012) in (DEHP 2014).	The proposed action occurs within the general area of Phebalium distans. The corridor contains Eucalyptus and Corymbia woodland and open forests. The corridor did not contain the associated species. Wildlife Online did not identify Phebalium distans within the search area. Site inspection did not identify Phebalium distans within the existing corridor. The proposed action will not have a significant impact on a population of Phebalium distans, habitat for Phebalium distans or interfere with the recovery of the species.
Rhaponticum australe	Austral Cornflower, Native Thistle	Vulnerable	Rhaponticum australe grows in eucalypt open forest with a grassy understorey and in grasslands on black clay soil. It is often found on roadsides and on road or rail reserves associated with Chloris gayana, Cirsium vulgare, Eucalyptus tereticornis and Angophora floribunda (Queensland Herbarium, 2012)) in (DEHP 2014).	The proposed action occurs within the general area of Phebalium distans. The corridor is located on landzones 3, 9-10, 11 and 12. The soils where Rhaponticum australe would occur would be associated with landzone 4 (black clay soil). Wildlife Online did not identify Rhaponticum australe within the search area. Site inspection did not identify Rhaponticum australe within the existing corridor. The proposed action will not have a significant impact on a population of Rhaponticum australe, habitat for Rhaponticum australe or interfere with the recovery of the species.

Birds				
Botaurus poiciloptilus	Australasian Bittern	Endangered	The Australasian bittern inhabits shallow (less than 30cm deep), permanent freshwater and brackish swamps or lagoons that are densely vegetated (e.g. tall reeds, sedges, lignum). They also inhabit bore drains with tussocky vegetation and occasionally saltmarsh. They use temporary pools when population densities are high and deep swamps when breeding. (Storr 1984; Pringle 1985; Marchant & Higgins 1990; Garnett 1992a; Pizzey & Knight 1997) in (DEHP 2014).	The proposed action occurs in a corridor that contains Eucalyptus and Corymbia woodland and open forests. Botaurus poiciloptilus inhabits shallow, permanent freshwater and brackish swamps or lagoons that are densely vegetated. This habitat does not occur along the corridor. Wildlife online did not identify Botaurus poiciloptilus. The proposed action will not affect Botaurus poiciloptilus habitat, will not affect an important population of Botaurus poiciloptilus and will not interfere with the recovery of the species.
Cyclopsitta diophthalma coxeni	Coxen's fig-parrot	Endangered	Based on published records, its historical distribution was known to extend from the Mary River (Gympie) in Queensland, south to the Richmond River in New South Wales and west to the Bunya Mountains. Other authors considered the distribution reached Maryborough in the north and the Macleay River in the south. Unconfirmed records strongly suggest the range extends further north in Queensland to the greater Bundaberg area and to locations near Rockhampton. Its population levels may be very low but the double-eyed fig-parrot is by no means extinct, as several confirmed records exist and credible sightings continue to be reported. The bird's preferred habitat was probably lowland rainforest, especially in alluvial areas, but little of this remains. Recent records are from a spectrum of rainforest types (Araucarian (coniferous) rainforest, warm subtropical rainforest, cool subtropical rainforest and cool temperate rainforest) from sea level to approximately 1000 m altitude. Birds also use thin strips of gallery rainforest, littoral rainforest and coastal bloodwood,	Wildlife online did identify 1 record of Cyclopsitta diophthalma coxeni. The proposed action will occur in a corridor that contains Eucalyptus and Corymbia woodland and open forests. Cyclopsitta diophthalma coxeni prefers lowland rainforest, especially in alluvial areas. It is known in alluvial areas within woodlands where fig or other food trees occur. Habitat may occur within some areas of regional ecosystem 12.3.7 along the watercourses. Minimal clearing in the watercourses will occur only for the re-establishment of the bridges. Site inspection did not identify Cyclopsitta diophthalma coxeni. The proposed action will not affect habitat for Cyclopsitta diophthalma coxeni, an important population of Cyclopsitta diophthalma coxeni and will not interfere with the recovery of the species.

			melaleuca and cabbage palm forest where fig densities are high (e.g. near Bundaberg). The subspecies has been reported from riparian corridors through woodland, open woodland and cleared land where fig or other food trees occur, as well as from isolated fruiting trees in gardens and cultivated farmlands (DEHP 2013)	
Erythrotriorchis radiates	Red Goshawk	Vulnerable	The red goshawk has an enormous home range covering between 50 and 220 square kilometres. It prefers a mix of vegetation types with its habitat including tall open forest, woodland, lightly treed savannah and the edge of rainforest. In partly cleared parts of eastern Queensland, it is associated with gorge and escarpment country (DEHP 2013).	Wildlife online did not identify Erythrotriorchis radiates. The proposed action will occur in a corridor that contains Eucalyptus and Corymbia woodland and open forests. Habitat may occur along the corridor. Erythrotriorchis radiates has an enormous home range covering between 50 and 220 square kilometres. The proposed action will not affect an important population of Erythrotriorchis radiates scripta and will not interfere with the recovery of the species.
Geophaps scripta scripta	Squatter Pigeon (southern)	Vulnerable	Most habitats close to water including grassy woodlands and open forests that are dominated by eucalypts, scrub and disturbed grazed areas and is known within the Burnett Marry area (Department of the Environment 2016a).	There is the potential for habitat to occur within the proposed action area near dams and the watercourses in open grassy areas. The proposed action is for the re-establishment of a cane rail corridor. The proposed works in the areas near permanent water will not have a significant impact on this species or species habitat. Minimal clearing in these areas is proposed for watercourse crossings. The wildlife online search did not identify Geophaps scripta scripta. The proposed action will not affect an important population of Geophaps scripta scripta and will not interfere with the recovery of the species.
Lathamus discolour	Swift Parrot	Endangered	The Swift Parrot is endemic to south-eastern Australia. It breeds only in Tasmania, and migrates to mainland Australia in autumn (Higgins 1999; Swift Parrot Recovery Team 2001), undertaking the longest migration of any parrot species in the world (Tzaros 2002) in (Department of the Environment 2016b).	The proposed action will occur in a corridor that contains Eucalyptus and Corymbia woodland and open forests. Habitat may occur along the corridor. Wildlife online did not identify Lathamus discolour. The proposed action is for the establishment of a linear cane rail corridor. The proposed action will not affect an important population or breeding place of Lathamus discolour and

			In northern New South Wales and south-eastern Queensland the Lathamus discolour inhabits Narrow-leaved Red Ironbark (E. crebra), Forest Red Gum forests and Yellow Box forest (Kennedy & Tzaros 2005; Swift Parrot Recovery Team 2001) in (Department of the Environment 2016b).	will not interfere with the recovery of the species.
Neochmia ruficauda ruficauda	Star Finch (eastern), Star Finch (southern)	Endangered	The distribution of the Star Finch (eastern) is very poorly known. The Star Finch (eastern) occurs only in central Queensland. The Star Finch (eastern) occurs mainly in grasslands and grassy woodlands that are located close to bodies of fresh water (Garnett 1993; Gould 1865; Holmes 1996). It also occurs in cleared or suburban areas such as along roadsides and in towns (Baldwin 1975; Cayley 1932; Holmes 1996, 1998; Marshall 1932) in (Department of the Environment 2016c).	The proposed action will occur in a corridor that contains Eucalyptus and Corymbia woodland and open forests within the Wide Bay area. Neochmia ruficauda ruficauda is known to occur in central Queensland in grasslands and grassy woodlands. The proposed action is unlikely in the distribution area for Neochmia ruficauda ruficauda. Wildlife online did not identify Neochmia ruficauda ruficauda. The proposed action will not affect an important population or breeding place of Neochmia ruficauda ruficauda and will not interfere with the recovery of the species.
Poephila cincta cincta	Southern Black-throated Finch	Endangered	The Black-throated Finch (southern) occurs at two general locations: in the Townsville region, where it is considered to be locally common at a few sites around Townsville and Charters Towers (BTF Recovery Team 2004; Garnett & Crowley 2000); and at scattered sites in central-eastern Queensland (between Aramac and Great Basalt Wall National Park) (BAAM 2011; BTF Recovery Team 2004). The Black-throated Finch (southern) occurs mainly in grassy, open woodlands and forests, typically dominated by Eucalyptus, Corymbia and Melaleuca, and occasionally in tussock grasslands or other habitats (for example freshwater wetlands), often along or near watercourses, or in the vicinity of water (Baldwin 1976; Britton & Britton 2000; BTF Recovery Team 2004; Ley & Cook 2001; NRA 2005; Wieneke 1989). Almost all recent records of the finch from south	The proposed action will occur in a corridor that contains Eucalyptus and Corymbia woodland and open forests. Habitat for Poephila cincta cincta may occur along the corridor. Wildlife online did not identify Lathamus discolour. The proposed action is for the establishment of a linear cane rail corridor south of the main population of Poephila cincta cincta. The proposed action will not affect an important population or breeding place of Poephila cincta cincta and will not interfere with the recovery of the species.

			of the tropics have been in riparian habitat (Baldwin 1976; BTF Recovery Team 2004; Ley & Cook 2001). The subspecies is thought to require a mosaic of different habitats in which it can find seed during the wet season (Mitchell 1996). in (Department of the Environment 2016d)	
Rostratula australis	Australian Painted Snipe	Endangered	The Australian Painted Snipe generally 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. Typical sites include those with rank emergent tussocks of grass, sedges, rushes or reeds, or samphire; often with scattered clumps of lignum Muehlenbeckia or canegrass or sometimes tea-tree (Melaleuca). The Australian Painted Snipe sometimes utilises areas that are lined with trees, or that have some scattered fallen or washed-up timber (Marchant & Higgins 1993) in (Department of the Environment 2016e).	The proposed action occurs in a corridor that contains Eucalyptus and Corymbia woodland and open forests. Rostratula australis inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans. This habitat does not occur along the corridor. Wildlife online did not identify Rostratula australis. The proposed action will not affect Rostratula australis habitat, will not affect an important population of Rostratula australis and will not interfere with the recovery of the species.
Turnix melanogaster	Black-breasted Button-quail	Vulnerable	The Black-breasted Button-quail is restricted to rainforests and forests, mostly in areas with 770-1200 mm rainfall per annum (Bennett 1985; Hughes & Hughes 1991; Marchant & Higgins 1993). They prefer drier low closed forests, particularly semi-evergreen vine thicket, low microphyll vine forest, araucarian microphyll vine forest and araucarian notophyll vine forest (Bennett 1985; Hughes & Hughes 1991; Marchant & Higgins 1993; Milledge 2000; Smyth et al. 2001). They may also be found in low, dense acacia thickets and, in littoral area, in vegetation behind sand dunes (Smith & Mathieson 2004) in (Department of the Environment 2016f).	The proposed action occurs in a corridor that contains Eucalyptus and Corymbia woodland and open forests. Turnix melanogaster inhabits drier low closed forests, particularly semi-evergreen vine thicket, low microphyll vine forest, araucarian microphyll vine forest and araucarian notophyll vine forest. This habitat does not occur along the corridor. Wildlife online did not identify Turnix melanogaster. The proposed action will not affect Turnix melanogaster habitat, an important population of Turnix melanogaster and will not interfere with the recovery of the species.
Mammals				

Chalinolobus dwyeri	Large-eared Pied Bat, Large Pied Bat	Vulnerable	The species' current distribution is also poorly known. Records exist from Shoalwater Bay, north of Rockhampton, Queensland, through to the vicinity of Ulladulla, NSW in the south (Hoye 2005). Despite the large range, it has been suggested that the species is far more restricted within the species' range than previously understood (NSW DECC 2007d) in (Department of the Environment 2016g). In Queensland, further records are known from sandstone escarpments in the Carnarvon, Expedition Ranges and Blackdown Tablelands. It is likely that these areas support a high proportion of the Queensland populations of the Large-eared Pied Bat, although estimates of the number of individuals present and their distribution in these areas has not been established. Additional records exist in the Scenic Rim near the NSW/Queensland border. The populations in this area appear to be reliant on the presence of roosts in volcanic rock types (Hoye 2005) in (Department of the Environment 2016g). Chalinolobus dwyeri roost in Sandstone cliffs and fertile woodland valley habitat within close proximity of each other is habitat of importance to the Large-eared Pied Bat (NSW DECC 2007d). 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 (Gynther 2011 pers. comm. cited in Hoye 2005; Mathieson 2011 pers. comm. cited in Hoye 2005)) in (Department of the Environment 2016g).	The proposed action occurs in a corridor that contains Eucalyptus and Corymbia woodland and open forests. Ranges and cliffs are located west of the proposed action area where roost are likely. Wildlife online did not identify Chalinolobus dwyeri. The proposed action will not affect Chalinolobus dwyeri roosting habitat, an important population of Chalinolobus dwyeri and will not interfere with the recovery of the species.
Dasyurus hallucatus	Northern Quoll	Endangered	The present distribution of the northern quoll has contracted throughout its former range and in Queensland it is now	The proposed action occurs in a corridor that contains Eucalyptus and Corymbia woodland and open forests. The corridor is

			fragmented into a number of populations with the highest densities found in Cape York, the Atherton Tablelands and the Mackay-Whitsunday area. Occasionally there are records of northern quolls as far south as Maleny on the Sunshine Coast hinterland. (Watt 1993; Braithwaite and Griffiths 1994; Maxwell et al. 1996) in (DEHP 2014). The northern quoll occurs in a range of habitats, including open dry sclerophyll forest and woodland, riparian woodland, low dry vine thicket, the margins of notophyll vineforest, mangroves, sugarcane farms and in urban areas. They are most abundant in hilly or rocky areas close to permanent water in (DEHP 2014).	relatively flat with no hilly or rocky areas where Dasyurus hallucatus are most abundant. Wildlife online did not identify Dasyurus hallucatus. The proposed action will not affect Dasyurus hallucatus habitat, an important population of Dasyurus hallucatus and will not interfere with the recovery of the species.
Nyctophilus corbeni	Corben's Long-eared Bat	Vulnerable	In Queensland, the South-eastern Long-eared Bat is mainly recorded in the Brigalow Belt South Bioregion, extending eastwards to the Bunya Mountains National Park. It has been recorded as far north as the Expedition Range and Dawson River areas. Its westerly range extends into the Mulgalands Bioregion and west of Bollon (Department of the Environment 2016h). The South-eastern Long-eared Bat occurs in a range of inland woodland vegetation types, including box, ironbark and cypress pine woodlands. The species also occurs in Buloke woodland, Brigalow woodland, Belah woodland, Smooth-barked Apple, Angophora leiocarpa, woodland; River Red Gum, Eucalyptus camaldulensis, forests lining watercourses and lakes, Black Box, Eucalyptus largiflorens, woodland, dry sclerophyll forest. Throughout inland Queensland, the species habitat is dominated by various	The proposed action occurs in a corridor that contains Eucalyptus and Corymbia woodland and open forests. In the Bundaberg region. There is potential habitat for Nyctophilus corbeni within the corridor however the corridor is east of the known range of the Nyctophilus corbeni. Wildlife online did not indentify Nyctophilus corbeni. The proposed action will not affect Nyctophilus corbeni habitat, an important population of Nyctophilus corbeni and will not interfere with the recovery of the species.

			eucalypt and bloodwood species, and various types of tree mallee with it being most abundant in vegetation with a distinct canopy and a dense cluttered shrub layer (Dominelli 2000; Ellis et al. 1999; Koehler 2006; Lumsden 1994; McFarland et al. 1999; Parnaby 1995; Turbill & Ellis 2006) in (Department of the Environment 2016h).	
Petauroides Volans	Greater Glider	Vulnerable	The greater glider is restricted to eastern Australia, occurring from the Windsor Tableland in north Queensland through to central Victoria (Wombat State Forest), with an elevational range from sea level to 1200 m above sea level. An isolated inland subpopulation occurs in the Gregory Range west of Townsville (Winter et al., 2004), and another in the Einasleigh Uplands (Vanderduys et al., 2012) in (Department of the Environment 2016i). It is typically found in highest abundance in taller, montane, moist eucalypt forests with relatively old trees and abundant hollows (Andrews et al., 1994; Smith et al., 1994, 1995; Kavanagh 2000; Eyre 2004; van der Ree et al., 2004; Vanderduys et al., 2012). The distribution may be patchy even in suitable habitat (Kavanagh 2000). The greater glider favours forests with a diversity of eucalypt species, due to seasonal variation in its preferred tree species (Kavanagh 1984) in (Department of the Environment 2016i).	Wildlife online did indentify Petauroides Volans. The proposed action occurs in a corridor that contains Eucalyptus and Corymbia woodland and open forests. The trees within the corridor are regrowth since the rail corridor ceased in 1964 and as a result the trees within the corridor are not as mature as the trees in the surrounding Cordalba State Forest and as a result do not contain hollows which the Petauroides Volans prefers. The clearing will be linear for the re-establishment of the cane rail, access track and fence. Although Petauroides Volans could glide the width of the corridor (generally 30-40m wide) trees within the corridor will remain where clearing is not necessary for infrastructure and will provide landing and take of points for Petauroides Volans. The corridor is surrounded by Cordalba State Forest which is protected under the Forestry Act 1959. Habitat will remain in the immediate area. The proposed action will not affect Petauroides Volans breeding habitat, will not affect an important population of Petauroides Volans, will not isolate habitat for Petauroides Volans and will not interfere with the recovery of the species.
Phascolarctos cinereus	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory	Vulnerable	Koalas live over a range of open forest and woodland communities but ultimately their habitat is defined by the presence of a select group of food trees. Koalas are found in higher densities where food trees are growing on more fertile soils and along watercourses. They do, however, remain in areas where their	The corridor is located in a *known likely to occur area* on the koala's modelled distribution map. Assessment against the Koala habitat assessment tool scored greater than five and therefore the area is considered critical to the survival of the koala.

			habitat has been partially cleared and in urban areas (DEHP 2014). The distribution of koalas covers much of Queensland, New South Wales and Victoria, and a small area in South Australia (DEHP 2014). Queensland Vegetation Management Act 1999 essential habitat mapping maps Of concern regional ecosystem 12.3.11 and 12.11.18 as essential habitat for Phascolarctos cinereus.	Wildlife online identified 1 record for Phascolarctos cinereus. The proposed action occurs in a corridor that contains Eucalyptus and Corymbia woodland and open forests which is known habitat for Phascolarctos cinereus. Koala searches including scanning the canopies of trees, looking for scratch marks on smooth barked trees (E. tereticornis, E. molucaccana and C. citriodora) and scats around the bases of trees did not locate any signs of koala in the corridor. Trees within the corridor will remain where clearing is not necessary for infrastructure and will provide a connection to adjoining habitat for Phascolarctos cinereus. The corridor is surrounded by Cordalba State Forest which is protected under the Forestry Act 1959. Habitat will remain in the immediate area. The proposed action will not affect Phascolarctos cinereus connectivity to habitat in the area, will not impact Phascolarctos cinereus habitat, will not impact an important population of Phascolarctos cinereus and will not interfere with the recovery of the species.
Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	The Grey-headed Flying-fox is Australia's only endemic flying-fox and occurs in the coastal belt from Rockhampton in central Queensland to Melbourne in Victoria (Tidemann 1998). However, only a small proportion of this range is used at any one time, as the species selectively forages where food is available. As a result, patterns of occurrence and relative abundance within its distribution vary widely between seasons and between years (Department of the Environment 2016j). The Grey-headed Flying-fox requires foraging resources and roosting sites. It is a canopy-feeding frugivore and	Wildlife online did not indentify Pteropus poliocephalus. The proposed action occurs in a corridor that contains Eucalyptus and Corymbia woodland and open forests which is a known foraging resource for Pteropus poliocephalus. The corridor did not contain a current roost for Pteropus poliocephalus nor does the corridor contain suitable habitat for a roost for Pteropus poliocephalus. Trees within the corridor will remain where clearing is not necessary for infrastructure and will retain a foraging resource for Pteropus poliocephalus. The corridor is surrounded by Cordalba State Forest which is protected under the Forestry Act 1959.

			nectarivore, which utilises vegetation communities including rainforests, open forests, closed and open woodlands, Melaleuca swamps and Banksia woodlands. It also feeds on commercial fruit crops and on introduced tree species in urban areas. The primary food source is blossom from Eucalyptus and related genera but in some areas it also utilises a wide range of rainforest fruits (Eby 1998). None of the vegetation communities used by the Grey-headed Flying-fox produce continuous foraging resources throughout the year. As a result, the species has adopted complex migration traits in response to ephemeral and patchy food resources (Duncan et al. 1999; Eby 1996, 1998; Nelson 1965a; Parry-Jones & Augee 1992; Spencer et al. 1991) in (Department of the Environment 2016j). The Grey-headed Flying-fox roosts in aggregations of various sizes on exposed branches. Roost sites are typically located near water, such as lakes, rivers or the coast (van der Ree et al. 2005). Roost vegetation includes rainforest patches, stands of Melaleuca, mangroves and riparian vegetation (Nelson 1965a; Ratcliffe 1931), but colonies also use highly modified vegetation in urban and suburban areas (Birt et al. 1998; Tidemann & Vardon 1997; van der Ree et al. 2005). The species can maintain fidelity to roost sites for extended periods (Lunney & Moon 1997), although new sites have been colonised (Tidemann & Vardon 1997) in (Department of the Environment 2016j).	Habitat and foraging resources will remain in the immediate area. The proposed action will not affect Pteropus poliocephalus habitat and foraging resources in the area, will not impact Pteropus poliocephalus roosts or roosting habitat, impact on an important population of Pteropus poliocephalus and will not interfere with the recovery of the species.
Reptiles				
Delma torquate	Collared Delma	Vulnerable	The Delma torquate prefers habitat with the presence of rocks, logs, bark and other coarse woody debris, and mats of leaf litter (typically 30–100 mm thick)	Wildlife online did not indentify Delma torquate nor is Cordalba State Forest listed as a known population for Delma torquate, however habitat for Delma torquate could

			appears to be an essential characteristic of the Collared Delma microhabitat and is always present where the species occurs (Brigalow Belt Reptiles Workshop 2010; Davidson 1993). This may be the limiting factor for the Collared Delma recolonising in recently burnt areas (Peck 2003) in (Department of the Environment 2016k). The Collared Delma normally inhabits eucalypt-dominated woodlands and open-forests in Queensland Regional Ecosystem Land Zones (LZ) (Brigalow Belt Reptiles Workshop 2010): • LZ 3 - Alluvium (river and creek flats) • LZ 9 - Undulating country on fine-grained sedimentary rocks • LZ 10 - Sandstone ranges (Department of the Environment 2016k)	occur along the corridor particularly in the northern section where landzone 9-10 occurs. Clearing within the corridor will be limited to that necessary for infrastructure and will retain the presence of rocks, logs, bark and other coarse woody debris, and mats of leaf litter. Logs from clearing can remain in the corridor further enhancing habitat for Delma torquate. The corridor is surrounded by Cordalba State Forest which is protected under the Forestry Act 1959. Habitat will remain in the immediate area. The proposed action will not affect Delma torquate habitat, will not impact on an important population of Delma torquate and will not interfere with the recovery of the species.
Egernia rugosa	Yakka Skink	Vulnerable	The known distribution of the Yakka Skink extends from the coast to the hinterland of sub-humid to semi-arid eastern Queensland. This vast area covers portions of the Brigalow Belt (North and South), Mulga Lands, South-east Queensland, Einasleigh Uplands, Wet Tropics and Cape York Peninsula Biogeographical Regions. Locations range from the Queensland/New South Wales border to Mungkan Kandju National Park (NP) on Cape York Peninsula, and from Bundaberg and the region west of Gympie to Mariala NP west of Charleville (Brigalow Belt Reptiles Workshop 2010; Cogger 2000; Wilson & Knowles 1988) in (Department of the Environment 2016l). The Yakka Skink is known to occur in open dry sclerophyll forest, woodland and scrub (Brigalow Belt Reptiles Workshop 2010; Cogger 2000; Wilson & Knowles 1988). The core habitat of this species is within the Mulga Lands and Brigalow Belt South Bioregions (TSN	Wildlife online did not indentify Egernia rugosa, however habitat for Egernia rugosa Egernia rugosa could occur along the corridor particularly in the northern section where landzone 9-10 occurs. Clearing within the corridor will be limited to that necessary for infrastructure and will retain the presence of logs. Logs from clearing can remain in the corridor further enhancing habitat for Egernia rugosa. The corridor is surrounded by Cordalba State Forest which is protected under the Forestry Act 1959. Habitat will remain in the immediate area. The corridor occurs in the south east Queensland bioregion which is outside of the core habitat for Egernia rugose. The proposed action will not affect Egernia rugosa habitat, will not impact on an important population of Egernia rugosa and will not interfere with the recovery of the species.

			2008b) in (Department of the Environment 2016l). It occurs in a wide variety of vegetation types within Queensland Regional Ecosystem Land Zones (LZ) (Brigalow Belt Reptiles Workshop 2010): • LZ 3 - Alluvium (river and creek flats) • LZ 4 - Clay plains not associated with current alluvium • LZ 5 - Old loamy and sandy plains • LZ 7 - Ironstone jump-ups • LZ 9 - Undulating country on fine-grained sedimentary rocks • LZ 10 - Sandstone ranges The Yakka Skink is commonly found in cavities under and between partly buried rocks, logs or tree stumps, root cavities and abandoned animal burrows (Brigalow Belt Reptiles Workshop 2010; TSN 2008a). The species often takes refuge in large hollow logs and has been known to excavate deep burrow systems, sometimes under dense ground vegetation (Cogger 2000; Ehmann 1992b; Wilson & Knowles 1988). In cleared habitat, this species can persist where there are shelter sites such as raked log piles, deep gullies, tunnel erosion/sinkholes and rabbit warrens. The species has also been found sheltering under sheds and loading ramps (Brigalow Belt Reptiles Workshop 2010; TSN 2008a). This species is not generally found in trees or rocky habitats (Chapple 2003) in (Department of the Environment 2016l).	
Elseya albagula	Southern Snapping Turtle	Critically Endangered	Found only in Queensland in the Fitzroy, Mary and Burnett Rivers and associated smaller drainages in south eastern Queensland. Within the river system the white-throated snapping turtle prefers	Wildlife online did not indentify Elseya albagula. The watercourse crossings along the corridor are associated with ephemeral creeks and do not run all year round. This is not the preferred habitat for Elseya albagula.

			clear, flowing, well-oxygenated waters (Department of the Environment 2016m)..	All watercourse crossing will be contrasted so waterflow is not impacted. The proposed action will not affect Elseya albagula habitat, will not impact on an important population of Elseya albagula and will not interfere with the recovery of the species.
Furina dunmalli	Dunmall's Snake	Vulnerable	Dunmall's Snake occurs primarily in the Brigalow Belt region in the south-eastern interior of Queensland. Records indicate sites at elevations between 200–500 m above sea level. The snake is very rare or secretive with limited records existing. It has been recorded at Archokoora, Oakey, Miles, Glenmorgan, Wallaville, Gladstone, Lake Broadwater, Mount Archer, Exhibition Range National Park, roadside reserves between Inglewood and Texas, Rosedale, Yeppoon and Lake Broadwater Conservation Park (Cogger et al. 1993; Covacevich et al. 1988; Covacevich et al. 1996a; McDonald et al. 1991) in (Department of the Environment 2016n). 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 (Acacia harpophylla), other Wattles (A. burowii, A. deanii, A. leioclyx), native Cypress (Callitris spp.) or Bull-oak (Allocasuarina luehmannii) (Brigalow Belt Reptiles Workshop 2010; Covacevich et al. 1988; Stephenson & Schmida 2008). • Various Blue Spotted Gum (Corymbia citriodora), Ironbark (Eucalyptus crebra and E. melanophloia), White Cypress Pine (Callitris glaucophylla) and Bulloak open forest and woodland associations on sandstone derived soils (Brigalow Belt Reptiles	Wildlife online did not indentify Furina dunmalli, however habitat for Furina dunmalli could occur along the corridor where it is dominated by Corymbia citriodora and Eucalyptus crebra. Clearing within the corridor will be limited to that necessary for infrastructure and will retain the presence of logs and ground litter. Logs from clearing can remain in the corridor further enhancing habitat for Egernia rugosa. The corridor is surrounded by Cordalba State Forest which is protected under the Forestry Act 1959. Habitat will remain in the immediate area. The corridor occurs in the south east Queensland bioregion which is outside of the core habitat for Furina dunmalli however there are records nearby at Rosedale. The proposed action will not affect Furina dunmalli habitat, will not impact on an important population of Furina dunmalli and will not interfere with the recovery of the species.

			Workshop 2010; Stephenson & Schmida 2008, Threatened Species Network 2008). The species has been found sheltering under fallen timber and ground litter (Brigalow Belt Reptiles Workshop 2010; Cogger et al. 1993) and may use cracks in alluvial clay soils (QLD DERM 2010; Richardson 2006) in (Department of the Environment 2016n).	

Nature and extent of likely impact

No clearing of the threatened ecological community Lowland Rainforest of Subtropical Australia (regional ecosystems 12.3.1. 12.5.13, 12.8.3, 12.8.4, 12.8.13, 12.11.1, 12.11.10, 12.12.1 and 12.12.16) will occur as part of the proposed action. The clearing associated with the proposed action will not reduce the extent of Lowland Rainforest of Subtropical Australia, will not fragment existing communities of Lowland Rainforest of Subtropical Australia, will not impact survival or recovery of Lowland Rainforest of Subtropical Australia and will not cause a substantial reduction in the quality or integrity of an occurrence Lowland Rainforest of Subtropical Australia.

No listed flora were found along the proposed corridor where the action will be undertaken. Listed flora are known to occur in close proximity to the corridor however the corridor does not contain the habitat which these species are associated with. The proposed action will not impact on a listed vulnerable, endangered or Critically Endangered flora species. The proposed action will not lead to a long-term decrease in the size of a population or modify habitat of a listed flora species, reduce the area of occupancy or fragment a population of a listed flora species, will not adversely affect habitat critical to the survival of a listed flora species, will not disrupt the reproduction or introduce disease to a protected flora species and will not interfere with the recovery of any listed vulnerable, endangered or Critically Endangered flora species.

Habitat for listed vulnerable, endangered and critically endangered bird species may occur along the corridor where the proposed action is to occur. The clearing along the corridor will be to re-establish existing rail infrastructure, access and fences. The clearing along the corridor will be limited to establishing this infrastructure. No listed bird species were identified during the site visits. No breeding places for birds were observed along the corridor. Clearing will be linear and the area is surrounded by the Cordalba State Forest where potential habitat will remain in the surrounding area. The proposed action will not lead to a long-term decrease in the size of a population or modify habitat of a listed bird species, reduce the area of occupancy or fragment a population of a listed bird species, will not adversely affect habitat critical to the survival of a listed bird species, will not disrupt the reproduction or introduce disease to a protected bird species and will not interfere with the recovery of any listed vulnerable, endangered or critically endangered plant species.

Habitat for listed vulnerable and endangered mammals may occur along the corridor where the proposed action is to occur. Habitat for Petauroides Volans and Phascolarctos cinereus occurs along the corridor. Searches for Phascolarctos cinereus were undertaken during the site inspection and no evidence of Phascolarctos cinereus along the corridor was observed. The clearing along the corridor will be to re-establish existing rail infrastructure, access and fences. The clearing along the corridor will be limited to establishing this infrastructure. Although Petauroides Volans will be able to glide the distance across the corridor trees will be retained in the corridor to allow for landing and taking off platforms for Petauroides Volans. Clearing will be linear and the area is surrounded by the Cordalba State Forest where potential habitat will remain in the surrounding area. Sequential clearing in accordance with the Nature Conservation (Koala) Conservation Plan 2006 will occur. This will ensure any fauna will have the time to move on from areas to be cleared. The proposed action will not lead to a long-term decrease in the size of a population or modify habitat of a listed mammal species, reduce the area of occupancy or fragment a population of a listed mammal species, will not adversely affect habitat critical to the survival of a listed mammal species, will not disrupt the reproduction or introduce disease to a protected mammal species and will not interfere with the recovery of any listed vulnerable or endangered mammal species.

Habitat for listed vulnerable and critically endangered reptiles may occur along the corridor where the proposed action is to occur. The clearing along the corridor will be to re-establish existing rail infrastructure, access and fences. The clearing along the corridor will be limited to establishing this infrastructure. Habitat including rocks, logs, bark and other coarse woody debris, and mats of leaf litter will still remain in the corridor where infrastructure is not located. Selected felled trees will be retained in the corridor to provide habitat for vulnerable and critically endangered reptiles. Clearing will be linear and the area is surrounded by the Cordalba State Forest where potential habitat will remain in the surrounding area. Sequential clearing in accordance with the Nature Conservation (Koala) Conservation Plan 2006 will occur. This will ensure any reptiles will have the time to move on from areas to be cleared. The proposed action will not lead to a long-term decrease in the size of a population or modify habitat of a listed reptile species, reduce the area of occupancy or fragment a population of a listed reptile species, will not adversely affect habitat critical to the survival of a listed reptile species, will not disrupt the reproduction or introduce disease to a protected reptile species and will not interfere with the recovery of any listed vulnerable or critically endangered reptile species.

3.1 (e) Listed migratory species

No significant impact to occur to migratory species

3.1 (f) Commonwealth marine area

No significant impact to occur to Commonwealth marine area

3.1 (g) Commonwealth land

No significant impact to occur to Commonwealth land

3.1 (h) The Great Barrier Reef Marine Park

No significant impact to occur to The Great Barrier Reef Marine Park

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

No significant impact to occur to A water resource, in relation to coal seam gas development and large coal mining development

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

3.2 (a)	**Is the proposed action a nuclear action?**	No	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	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	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	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	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

3.3 (a) Flora and fauna

The proposed action will occur in an existing rail corridor that had been in operation for approximately 50 years up to 1964 (Figure 2).

The existing corridor (freehold lots 2 on RP22930, 71 on SP280897, 81 on SP280896, 21 on SP280900, 61 on SP280898 and 51 on SP280899 (Figure 1)) is mapped by the regulated vegetation management map (RVMM) as containing Category B (remnant) and Category X (non-remnant) (Figure 3).

Regional ecosystem mapping version 8.0 maps the vegetation within the corridor as being heterogeneous polygons containing a mix of 'of concern' regional ecosystems 12.3.11, 12.9-10.3, 12.12.28, 12.11.19 and 'least concern' regional ecosystems 12.9-10.2, 12.9-10.19, 12.9-10.21, 12.11.6, 12.11.18, 12.12.5 (Figure 4). The watercourses are mapped as containing least concern regional ecosystem 12.3.7 (Figure 4).

Site inspection found the vegetation along the corridor to be typical of the area and surrounds and is dominated by Eucalyptus and Corymbia woodlands and open forests. The understorey was generally dominated Acacia leiocalyx, Casuarina littoralis, Lophostemon suaveolens and Melaleuca in the wetter areas. Grasses were a mix of native and non-native species with lantana dominating within watercourses. Vegetation within the corridor is regrowth which has established since the rail corridor operation ceased in 1964. This was evident when compared to the remnant vegetation surrounding the corridor within the state forest where trees had a greater DBH and contained hollows. Vegetation within corridor had considerably smaller DBH's and did not contain hollows due to the age.

Site inspection confirmed the presence of 'of concern' regional ecosystems 12.3.11, 12.9-10.3, 12.11.19, 12.12.28 and 'least concern' regional ecosystems 12.3.7, 12.9-10.2, 12.9-10.19, 12.11.18, 12.12.5, 12.12.7 and non-remnant vegetation.

Of concern regional ecosystem 12.3.11 and 12.11.18 are mapped as essential habitat for Phascolarctos cinereus (Koala) and least concern regional ecosystem 12.3.7 is mapped as essential habitat for Crinia tinnula (Wallum froglet).

A targeted search of the areas containing essential habitat was undertaken for Phascolarctos cinereus (Koala) and Crinia tinnula (Wallum Froglet). Searches for koala were also undertaken in the area not mapped as essential habitat as the corridor contained koala food trees. Recordings of wallum froglets were played in the watercourses where there were permanent waterholes. Koala searches including scanning the canopies of trees, looking for scratch marks on smooth barked trees (E. tereticornis, E. molucaccana and C. citriodora) and scats around the bases of trees. Searches for hollows within the trees were also undertaken for other wildlife breeding places.

The trees along the corridor are regrowth from when rail operations ceased in 1964 (Figure 2). The trees in the corridor had considerably smaller DBH's than the surrounding trees within the state forest and did not contain hollows due to the age of the trees. No signs of koala were observed within the corridor, only small scratch marks on the smooth barked trees were observed (likely from lizards and goannas). No wallum froglets were observed or heard. The habitat along the route was not considered the correct habitat for the wallum froglets as they are generally riparian rather than swamps.

3.3 (b) Hydrology, including water flows

The corridor is located within the Burrum drainage basin and the Gregory River sub drainage Basin. The Gregory River is located approximately 10km to the north of the corridor. The mouth of the Gregory River is approximately 35km to the east where it meets the Burrum and Isis Rivers at Burrum Heads.

The proposed corridor traverses Emu Creek, Big Sandy Creek, Little Sandy Creek, Dingo Creek, Middle Creek, Woco Creek and one un-named watercourse. These watercourses range from green (low risk) to purple (major risk) on the Queensland Waterway map made under the Fisheries Act 1994.

3.3 (c) Soil and Vegetation characteristics

Soils mapping Wilson (1997) maps the majority of the corridor as Brooweena apart form a small area of Kolan in the north and a small area of Gigoon in the central section. Wilson (1997) describes these soils as:

- Brooweena (Bw) — Sodic textured contrast soil with a loamy surface and abundant (>20%) rock fragments throughout the profile over highly fractured fine grained sedimentary rock.
- Kolan (Ko) — Sodic textured contrast soil with a shallow (<0.3m) loamy surface over a red mottled, grey or brown clay subsoil on moderately weathered fine grained sedimentary rocks
- Gigoon (Gn) — Sodic texture contrast with a coarse sandy surface over a brown or grey clay subsoil on weathered granite

The topography is described by Wilson (1997) as hillslopes or rises and low hills and hills. Elevation of the corridor ranges from approximately 40m AHD in the east at Cordalba to approximately 130m in the west near Booyal.

The mapped soils are described as sodic which have dispersive properties. Slopes are generally between 0% and 10% with the flatter land occurring in the west. Therefore the erosion potential on site is considered moderate.

3.3 (d) Outstanding natural features

The corridor is surrounded by Cordalba State Forest which contains a mix of open eucalypt forest, with remnant patches of hoop pine providing a variety of habitats for flora and fauna.

The Cordalba State Forest open to camping, mountain bike riders and bushwalkers.

3.3 (e) Remnant native vegetation

The corridor and the surrounding Cordalba State Forest is mapped as containing remnant and non-remnant vegetation. Regional ecosystem mapping version 8.0 maps the vegetation within the corridor as being heterogeneous polygons containing a mix of 'of concern' regional ecosystems 12.3.11, 12.9-10.3, 12.12.28, 12.11.19 and 'least concern' regional ecosystems 12.9-10.2, 12.9-10.19, 12.9-10.21, 12.11.6, 12.11.18, 12.12.5 (Figure 4). The watercourses are mapped as containing least concern regional ecosystem 12.3.7 (Figure 4).

Site inspection confirmed the presence of 'of concern' regional ecosystems 12.3.11, 12.9-10.3, 12.11.19, 12.12.28 and 'least concern' regional ecosystems 12.3.7, 12.9-10.2, 12.9-10.19, 12.11.18, 12.12.5, 12.12.7 and non-remnant vegetation within the corridor.

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

NA

3.3 (g) Current state of the environment

The vegetation along the corridor is typical of the area and surrounds and is dominated by Eucalyptus and Corymbia woodlands and open forests. The understorey was generally dominated Acacia leiocalyx, Casuarina littoralis, Lophostemon suaveolens and Melaleuca in the wetter areas. Grasses were a mix of native and non-native species with lantana dominating within watercourses. Vegetation within the corridor is regrowth which has established since the rail corridor operation ceased in 1964 (Figure 2). This was evident when compared to the remnant vegetation surrounding the corridor within the state forest where trees had a greater DBH and contained hollows. Vegetation within corridor had considerably smaller DBH's and did not contain hollows due to the age.

Two category 3 restricted matter plants under the Biosecurity Act 2014 were identified during site the inspection. Sporobolus spp. (GRT) was found to occur sporadically along the corridor generally in the north east of the route. Lantana camara (Lantana) was found to occur generally along the entire corridor particularly areas associate with watercourses or water flow areas. A number of other non-native species were also observed.

The south western section of the Cordalba State Forest is under a grazing lease with cattle grazing on the corridor due to the poor state of the existing fences.

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

There are no Commonwealth Heritage Places or other places recognised as having heritage values identified within the project area.

3.3 (i) Indigenous heritage values

The corridor is an existing rail corridor which ceased operation in 1964 (Figure 2). Any action undertaken will be undertaken in accordance with the duty of care guidelines.

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

There are no other important or unique values of the environment.

3.3 (k) Tenure of the action area (eg freehold, leasehold)

Freehold Lots 2 on RP22930, 71 on SP280897, 81 on SP280896, 21 on SP280900, 61 on SP280898 and 51 on SP280899.

3.3 (l) Existing land/marine uses of area

Grazing and access through the Cordalba State Forest and access for grazing.

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

NA

4 Environmental outcomes

Not applicable

5 Measures to avoid or reduce impacts

To reduce the impact associated with establishing a cane rail link between Isis Central Sugar Mill and Booyal the existing corridor was chosen to reduce the overall environmental impact. By utilising the existing corridor there will be less disturbance to remnant vegetation and fauna habitat. The use of the existing corridor allows for the re-use of current infrastructure including the formed track that is built up and cut into the landscape also reducing the amount of earthworks associated with the action. It also allows for existing watercourse crossings to be utilised and the use of the existing access track.

All works associated with the proposed action will be undertaken in accordance with an Environmental Management Plan. The Environmental Management Plan will include measures to mitigate environmental impact. The Environmental Management Plan includes measures associated with:

- Protected areas
    - Protecting the values (forest products and quarry material) of Cordalba State Forest
- Vegetation
    - Sequential clearing requirements in accordance with Nature Conservation (Koala) Conservation Plan 2006 which will allow fauna to move on from the clearing area
    - Retention of trees to provide landing and taking off platforms for gliders
    - Retention of cleared vegetation on site for habitat for ground dwelling fauna
- Fauna
    - Spotter catcher requirements when clearing in a breeding place
- Pests
    - Washdown requirements
    - Reporting new infestations
- Waste
    - Waste reduction
- Sediment and erosion
    - Installation of sediment and erosion controls
    - Retention of vegetation
    - Watercourse protection
- Watercourses
    - Waterway barrier work requirements
    - Watercourse protection

The implementation of the Environmental Management Plan will ensure there will be minimal impact on the environment from the proposed action.

Any works within a coloured waterway under the Fisheries Act 1994 where it is waterway barrier works will be done in accordance with the self assessable code or a permit will be gained.

6 Conclusion on the likelihood of significant impacts

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

X	No, complete section 5.2
	Yes, complete section 5.3

6.2 Proposed action IS NOT a controlled action.

The proposed action will occur in an existing rail corridor that had been in operation for approximately 50 years up to 1964 (Figure 2). The corridor contains an existing cleared access track, a fence in disrepair which fences the corridor from adjoining lots and a track which has been built up and cut into the existing landscape. There are some sections which still contain sleepers and track. The water crossings contain some existing intact bridges or remnants of bridges including the revetments and abutments. By utilising the existing corridor the environmental impact from the action is reduced.

Assessment of Matter of National Environmental Significance potentially impacted by the project undertaken in this referral has identified impacts from the re-establishment of the rail corridor between the Isis Central Sugar Mill and Booyal (the action) will not have a significant impact on a Matter of National Environmental Significance. The re-establishment of the cane railway will occur in areas that may contain potential habitat to Matter of National Environmental Significance however it has been determined the impact will not be significant. The clearing will be linear and will only occur in a previously cleared corridor and clearing will only occur if required for infrastructure, all other vegetation will be retained. As a result the impacts to listed flora, mammals, birds and reptiles is not considered significant.

Although there may be the likelihood of listed birds, mammals, reptiles and plants and their habitat occurring within the existing corridor the works will not have a significant impact and the clearing will not further fragment remnant vegetation and significant habitat. Clearing associated with the works will occur in an already disturbed footprint surrounded by large expanse of vegetation protected within the Cordalba State Forest. The proposed action will not lead to a long-term decrease in the size of a population or modify habitat of a listed species, reduce the area of occupancy or fragment a population of a listed species, will not adversely affect habitat critical to the survival of a listed species, will not disrupt the reproduction or introduce disease to a listed species and will not interfere with the recovery of any listed species. The proposed action is not considered to have a significant impact on a Matter of National Environmental Significance.

6.3 Proposed action IS a controlled action

	Matters likely to be impacted
	World Heritage values (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)
	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)

7 Environmental record of the responsible party

		Yes	No
7.1	**Does the party taking the action have a satisfactory record of responsible environmental management?** **Provide details** Yes the Isis Central Sugar Mill currently holds environmental authorities under the Environmental Protection Act 1992 for its milling operations.	X	
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?** **If yes, provide details**		X
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?** **If yes, provide details of environmental policy and planning framework** Isis Central Sugar Mill Company Limited is committed to protecting the environment and minimising our environmental impact. As a business involved in agriculture and food, we recognise that we are deeply connected to the health of the land and ecosystems. Isis Central Sugar Mill Company Limited will meet this commitment by adhering to the following principles and beliefs: o maintaining an effective environmental system o proactively assessing, monitoring and managing environmental impacts, risks and incidents while complying with regulatory requirements o ensuring our employees and stakeholders are appropriately informed of our policies and they are aware of their environmental responsibilities o ensuring ongoing monitoring and review at the highest level Ultimate responsibility for overseeing the Company Environmental policy rests with the Isis Central Sugar mill Company Limited Board. The Isis Central Sugar Mill Company Limited Board has delegated responsibility for implementation of the Environmental policy to Management.	Yes	
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)**		X

8 Information sources and attachments

(For the information provided above)

8.1 References

Department of the Environment (2016a). Geophaps scripta scripta in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Fri, 22 Jul 2016 22:57:41 +1000.

Department of the Environment (2016b). Lathamus discolor in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Fri, 22 Jul 2016 23:16:09 +1000.

Department of the Environment (2016c). Neochmia ruficauda ruficauda in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Fri, 22 Jul 2016 23:23:16 +1000.

Department of the Environment (2016d). Poephila cincta cincta in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Fri, 22 Jul 2016 23:30:42 +1000.

Department of the Environment (2016e). Rostratula australis in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Fri, 22 Jul 2016 23:38:47 +1000.

Department of the Environment (2016f). Turnix melanogaster in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Fri, 22 Jul 2016 23:39:34 +1000.

Department of the Environment (2016g). Chalinolobus dwyeri in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Sat, 23 Jul 2016 08:11:34 +1000.

Department of the Environment (2016h). Nyctophilus corbeni in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Sat, 23 Jul 2016 08:27:27 +1000.

Department of the Environment (2016i). Conservation Advice Petauroides Volans greater glider

http://www.environment.gov.au/biodiversity/threatened/species/pubs/254-conservation-advice-20160525.pdf

Department of the Environment (2016j). Pteropus poliocephalus in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Sat, 23 Jul 2016 10:20:34 +1000.

Citation: Department of the Environment (2016k). Delma torquata in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Sat, 23 Jul 2016 10:24:33 +1000.

Department of the Environment (2016l). Egernia rugosa in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Sat, 23 Jul 2016 10:21:27 +1000.

Department of the Environment (2016m). Conservation Advice Elseya albagula, White-throated snapping turtle http://www.environment.gov.au/biodiversity/threatened/species/pubs/81648-conservation-advice.pdf

Department of the Environment (2016n). Furina dunmalli in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat. Accessed Sun, 24 Jul 2016 09:17:37 +1000.

Department of the Environment (2016o). Approved Conservation Advice for the Lowland Rainforest of Subtropical Australia
http://www.environment.gov.au/biodiversity/threatened/communities/pubs/101-conservation-advice.pdf

Department of Environment and Heritage Protection (2014) Species profiles
https://environment.ehp.qld.gov.au/species-search/

Department of Environment and Heritage Protection (2013) Wildlife and ecosystems
https://www.ehp.qld.gov.au/wildlife-ecosystems/index.html

The Cycad Pages (2012) Genus Cycas © 1998-2012 Royal Botanic Gardens Sydney, Written and maintained by Ken Hill 1998-2010
http://plantnet.rbgsyd.nsw.gov.au/PlantNet/cycad/cyckey.html

Wilson, P.R. (1997) Soils and Agricultural Suitability of the Childers Area, Queensland Department of Natural Resources, Queensland Brisbane

8.2 Reliability and date of information

- EPBC Act Protected Matters Report – created 02/07/16
- Queensland Wildlife online search 2 July 2016
- Regional ecosystem mapping version 8.0
- Regulated Vegetation Management Map version 1.3.1
- Site inspection notesJune/July 2016
- Various Qld GIS datasets (extracted 2016):
    - Bundaberg Regional Council DCDB
    - Protected areas of Qld
    - Qld heritage places

8.3 Attachments

		✓ attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the project locality (section 1)	☐ ✓	Figure 1 Location Figure 2 1964 Aerial Photo Figure 3 Regulated Vegetation Map Figure 4 Re Map
	GIS file delineating the boundary of the referral area (section 1)	✓	Cordalba_To_Booyal_Easement.zip
	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)		
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 3 Isis_Railway_Existing_Notes_July_2016
technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)		
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 action[1].

Project title:

9.1 Person proposing to take action

1. Name and Title:	Peter Hawe Company Secretary / Business Development Manager
2. Organisation (if applicable):	Isis Central Sugar Mill Company Limited Organisation name should match entity identified in ABN/ACN search
3. EPBC Referral Number (if known):	
4: ACN / ABN (if applicable):	ACN 009 657 078
5. Postal address	Private Mail Bag 1, CHILDERS QLD 4660
6. Telephone:	07 4126 4400
7. Email:	Peter.hawe@isissugar.com.au
8. Name of proposed proponent (if not the same person at item 1 above and if applicable):	N/A
9. ACN/ABN of proposed proponent (if not the same person named at item 1 above):	N/A

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:

[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.*

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)).

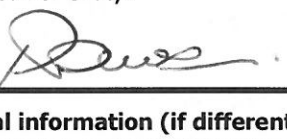
COMPLETE THIS SECTION ONLY IF YOU WOULD LIKE TO APPLY FOR A WAIVER

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:

☐ not applicable.

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.
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 25/7/2016.

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	Jane Barratt
Title	Ms
Organisation	WBB Environmental
ACN / ABN (if applicable)	19 063 737 908
Postal address	PO Box 8307, Bargara, Qld 4670
Telephone	0438 820 380
Email	Jane@wbbe.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 25/7/16

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)?