Compliance Report – Eton Range Realignment Project, May 2022

EPBC Approval 2015/7552

May 2021 - April 2022



Australian Government





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Document control options

Departmental approvals

Refer to the appropriate Risk Assessment Tool for relevant reviewer and approver

| Date | Name | Position | Action required (Review/endorse/approve) |
|------------|----------------|--|---|
| 05/05/2022 | Tim Dalton | Senior Environmental Officer (Contractor) | Document for Review and Approval |
| | Patrick Aprile | District Director (Mackay/Whitsunday) | Approve |

| Prepared by | Tim Dalton |
|----------------------|---|
| Title | Senior Environmental Officer (Contractor) |
| District & Region | Mackay/Whitsunday |
| Branch & Division | PDO |
| Project/program | Eton Range Realignment Project |
| Project number | 242/33B/8 |
| Project location | Mackay Regional Council |
| Status | Revision 1 |
| DMS | 450/642 |

Proponent and Approved Action

| Detail | Applicable details |
|---------------------------|---|
| EPBC Reference Number: | 2015/7552 |
| Project Name: | Eton Range Realignment Project |
| Proponent: | Department of Transport and Main Roads |
| ABN: | 39 407 690 291 |
| Proposed Action: | To realign the Peak Downs Highway at Eton Range between Mackay and Nebo, Queensland |
| Reporting Period: | May 2021 – April 2022 |
| Date Prepared: | May 2022 |

Declaration of Accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed

Full name \ /Pa

Patrick Aprile

Position District Director (Mackay/Whitsunday District)

Organisation Department of Transport and Main Roads (ABN - 39 407 690 291)

Date 11/05/2022

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1. Introduction

In October 2020 the Department of Transport and Main Roads (TMR) completed the construction of the Eton Range Realignment Project (herein referred to as 'the Project'). TMR submitted a referral for the Project to the former federal Department of the Environment (now Department of the Agriculture, Water and the Environment, DAWE) for impacts to matters of national environmental significance (MNES) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 27 August 2015.

In September 2015 DoE determined the Project a controlled action under the EPBC Act due to potential significant impacts MNES protected under Section 18 and 18A, Part 3 of the EPBC Act. In March 2016 DoE granted the Project approval with conditions. Construction commenced on the 4 April 2016.

Condition 16 of the approval requires that TMR prepares and publishes an annual report that assesses compliance with each of the conditions of the approval. This report is prepared for the period from May 2021 - April 2022.

2. Description of Activity

2.1 **Project location**

The Project is located approximately 35km south west of Mackay on the Peak Downs Highway. The Peak Downs Highway is part of the State Strategic Road Network in recognition of its importance to the economy of both Mackay and Queensland. The highway is part of the Emerald to Mackay freight corridor supporting the mining and agricultural industries of the Bowen and Galilee Basins (refer to Figure 1). The Eton Range is the main transport corridor across the Clarke – Connors Range.

2.2 Description of the Project

Key elements of the Project included the following:

- Sequential clearing of vegetation and ground preparation works to accommodate construction activities;
- Installation of drainage infrastructure including new culverts ranging in size from 1/600RCP to 3/2100RCP, as well as a culvert specifically for use as a fauna passage;
- General bulk earthworks which include approximately 400,000m³ of road excavation and 280,000 m² of road embankment;
- Installation of complex longitudinal drainage systems in the centre median ranging in size from 1/450 RCP to 1/1500RCP, approximately 1 km long, with numerous branch pits and grated inlet pits;
- Excavation and concrete lining of an elaborate surface catch and batter drainage system to intercept and direct overland flow to controlled outlet points, over 3200 m³ of reinforced concrete;
- Rehabilitation of approximately 950 m of existing roadway;
- Installation of an elaborate barrier system which includes w-beam, thriebeam and concrete barriers and other road furniture including road signs; and
- 6.4 hectares of landscaping/revegetation works, with approximately 4 hectares of 1:1 slope to stabilise and vegetate.

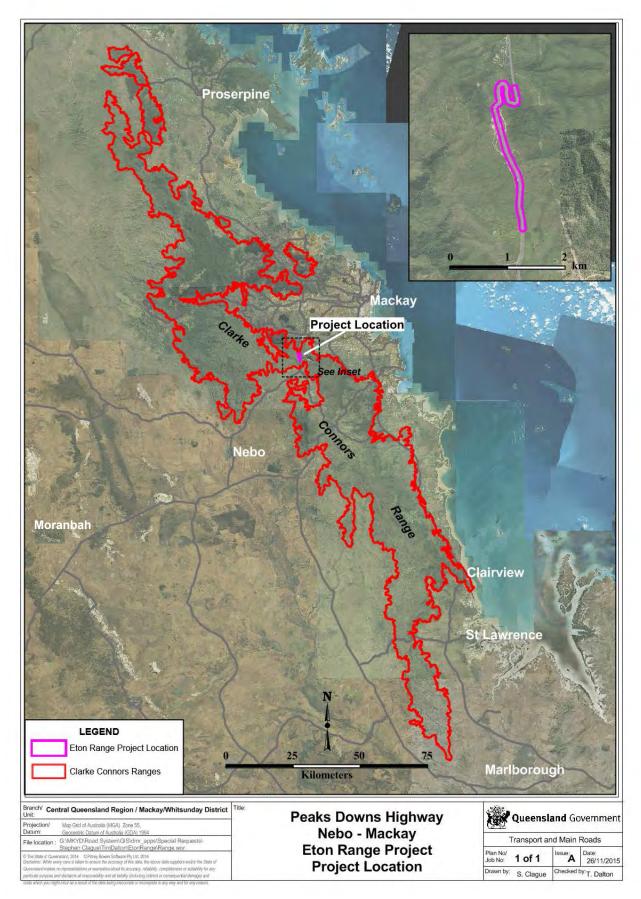


Figure 1: Project Locality

2.3 Project progress

The Project was completed and fully opened to traffic on 1 October 2020. Post construction works completed between May 2021 and April 2022 included:

- Completion of a two year fauna underpass monitoring program; and
- Completion of additional clearing along fauna exclusion fence lines.

2.4 Matters of national environmental significance (MNES)

The Project was assessed as having the potential to have a significant impact on the following MNES:

• Koala (Phascolarctos cinereus).

3. Compliance with Approval Conditions

Table 1 provides details of the compliance with the Project's EPBC Act approval conditions during the reporting period.

Table 1 Compliance with EPBC Approval

| Condition | Condition | Comp | oliance | | | Evidence/comments/notable events |
|-----------|--|-----------|-------------|-------------------|-------------------|---|
| number | | Compliant | Observation | Non- Compliant | Non Applicable | |
| 1 | During construction, there must be no koala mortality attributable to construction activity. | ✓ | ✓ | | | No koala fatalities occurred during clearing or project related activities. On the 09/08/2021 a truck driver reported to Padaminka Nature Refuge Koala Rescue & Care a koala on the Eton Range upper hairpin behind a concrete barrier. The animal was not visible when Padaminka Nature Refuge Koala Rescue & Care attended the sighting location. On the 13/08/2021 a deceased koala was identified within the Eton Range Realignment Project footprint at the start of the upper hairpin. It is unknown whether this was the same animal observed previously by the truck driver. The deceased animal was taken to Padaminka Nature Refuge Koala Rescue & Care for tissue samples and a body score. A subsequent investigation on the 13/08/21 identified an additional healthy koala in a tree next to Eton Range rest area. The animal was captured and released outside the fauna exclusion fencing. It was then identified that a that a fauna fence gate had been left open by a member of the public who had illegally accessed the adjacent property. Locks have since been installed on all project gates, however there is continued vandalism of the gates and locks. Ensuring that the fauna fence gates remain closed will be difficult because of their continued illegal use. |
| 2 | The approval holder must not clear koala habitat outside the project clearing limits shown in the clearance plans at Appendix 1. | v | | | | Clearing undertaken during the reporting period was limited to the removal of vegetation within 5m of fauna exclusion fence lines. This clearing was approved in the <i>Variation of Conditions Attached to Approval</i> dated 24/08/2020. Ongoing clearing of regrowth adjacent to the fence lines will be undertaken as apart of routine maintenance works. |
| 3 | For the ongoing protection of the koala in the project area , the approval holder must design, construct and implement koala protection measures, including fencing and a fauna underpass, prior to completion . These protection measures must be maintained by the approval holder for the life of approval . | ✓ | | | | Construction on the dedicated fauna underpass and the associated fauna fencing has been completed. Vegetation maintenance works along the Project's fence lines was undertaken in the reporting period. |

| Condition | | | oliance | | | Evidence/comments/notable events |
|-----------|--|-----------|-------------|-------------------|-------------------|---|
| number | | Compliant | Observation | Non- Compliant | Non Applicable | |
| 4 | To inform adaptive management after completion, the approval holder must monitor the use of the fauna underpass and road kill within the project area, sufficient to assess the level of koala mortality from road strike and the ability of koalas to safely cross the Peak Downs Highway within the project area. | ✓ | | | | Monitoring of the fauna underpass and roadkill within the project area has been completed. This work was undertaken during two successional koala breeding seasons (2020 and 2021) to determine the effectiveness of the infrastructure at providing safe passage for koalas. The monitoring data showed an increase in fauna interactions with the culverts as the monitoring regime progressed. No Koala movement through the culverts was recorded during either monitoring period, however modified and improved egress and signs of Koala movement along the fence lines indicates learned behaviours and may eventually lead to successful crossings. It was also observed that feral cats had become habitual to the fauna culverts, which may result in ambush and increased predation of animals using the underpasses. Ongoing monitoring of koalas within and adjacent to the Eton Range will be adhoc and shall be recorded in the <i>Koala Mapping Mackay & Whitsundays Areas</i> BioCollect project. |
| 5 | For the duration of the monitoring undertaken under Condition 4, the approval holder must publish the results of the monitoring for koala at least annually on the approval holder's website. | ~ | | | | The full results of the underpass monitoring has been provided on TMR's website. |

| Condition | Condition | Compliance | | | | Evidence/comments/notable events |
|-----------|---|------------|-------------|-------------------|-------------------|---|
| number | | Compliant | Observation | Non- Compliant | Non Applicable | |
| 6 | To compensate for residual impacts to the koala , the approval holder must within two years of commencement , provide a financial contribution of not less than \$270,942 for research and research related work by suitably qualified experts that will contribute to the better protection and long term conservation of the koala . The research and research related work must include, but is not limited to: a. The provision of \$47,300 to study koala population management units across the Clarke-Connors Range. b. The provision of \$64,468 to undertake landscape analysis and modelling to predict future koala road-kill hotspots along the Nebo stretch of the Peak Downs Highway. c. The provision of \$138,014 to study koala habitat use and movement patterns in the vicinity of the Eton-Nebo stretch of the Peak Downs Highway. d. The provision of \$21,160 for investment planning for the installation of wildlife barriers and underpasses on the Peak Downs | • | | | | Research and research related work commenced on the 21st July 2016. On ground surveys began in August 2016 and were completed in September 2018. TMR received the drafted koala research reports from CQ University in November 2018. The final CQ University invoice was processed upon receipt of these drafted reports. A total of \$287,442.00 was provided to CQ University for the research project. |
| 7 | Highway between Eton and Nebo. Within six months of commencement , the approval holder must provide to the Department a time-line of the proposed expenditure on research and research related work described in Condition 6. | ✓ | | | | The time-line of proposed expenditure was provided to DoE on the 16 th June 2016. |
| 8 | During the conduct of the research and research related work, progress must be reported to the Department annually and published on the approval holder's website. | ~ | | | | Research commenced in July 2016. The first annual report was published in July 2017. No summary report was published after the completion of the second and final year of the research as the data was to be shortly included in the published reports. |

| Condition number | Condition | Compliance | | | Evidence/comments/notable events | |
|---------------------|--|------------|-------------|-------------------|----------------------------------|---|
| number | | Compliant | Observation | Non- Compliant | Non Applicable | |
| 9 | The approval holder must provide the results of the research and research related work to the Department and publish a summary of the results of the research on the approval holder's website within 12 months of the completion of the research. The summary of the results of the research must remain on the approval holder's website for the life of approval. | ~ | | | | Data collection and on ground surveys were completed in September 2018.Drafted reports were provided to TMR for review in November 2018. Finalisedreports were submitted to TMR in March 2019 (which is considered formalcompletion of the research). The reports were distributed to stakeholders anduploaded to TMR's website in April 2019.Eton Range Realignment Project Department of Transport and Main Roads(tmr.qld.gov.au) |
| 10 | The research described under Condition 6 must be peer reviewed. | ✓ | | | | The research has been split up into three individual publications. Two of the publications have been submitted for peer review, while the third has been published in Australian Mammalogy and is available via the below link. <u>Koala road kills are linked to landscape attributes on Central Queensland's Peak</u> <u>Downs Highway (csiro.au)</u> |
| 11 | To compensate for residual impacts to the koala , the approval holder must, within 12 months of the research being completed, expend not less than \$200,000 in applying the findings of the research and research related work described under Condition 6 by designing, constructing, and implementing wildlife protection and/or diversion infrastructure on existing parts of the Peak Downs Highway between Eton and Nebo. | * | | | | In excess of \$200,000 has now been spent at Denison and Stockyard Creek to address two of the priority hotspot locations identified in the research undertaken as per Condition 6. A formal letter was provided to the Department on the 31/08/2020 advising of this. |
| 12 | Within 12 months of expending funds to design, construct and implement wildlife protection and/or diversion infrastructure as described under Condition 11, the approval holder must provide to the Department and publish on the approval holder's website, a report on the nature of the wildlife protection and/or diversion infrastructure funded and a plan for monitoring and assessing the effectiveness of this infrastructure in delivering a conservation gain for the koala. The published report must remain on the approval holder's website for the life of approval. | ~ | | | | The Wildlife Protection - Monitoring and Assessment Plan was provided to DAWE on the 10/02/2020. The report was also distributed to stakeholders and uploaded to TMR's website. <u>Eton Range Realignment Project Department of Transport and Main Roads</u> (tmr.qld.gov.au) |

| Condition number | Condition | Compliance | | | | Evidence/comments/notable events |
|------------------|--|---|-------------|-------------------|-------------------|--|
| | | Compliant | Observation | Non- Compliant | Non Applicable | |
| 13 | Within six months of the conclusion of monitoring activity under the plan described under Condition 12, the approval holder must provide to the Department and publish on the approval holder's website, a report on the outcomes of the monitoring and assessment in delivering conservation gain (if any) for the koala. The published report must remain on the approval holder's website for the life of approval. | * | | | | Monitoring activities at Stockyard and Denison Creek were completed in December 2020. Successful crossings of koalas occurred at the Denison Creek underpass. Based on the data, in excess of 80 crossings are expected each breeding season at Denison Creek. Koala activity was also observed at the nearby Stockyard Creek underpass. Refer to Figures 13 – 15. Overall, the infrastructure was shown to be effective at funnelling koalas away from the road towards the safety of the underpass. It was also determined the infrastructure assisted in preventing or reducing koala deaths. The monitoring report was provided to the Department via email on the 20/01/2021. The monitoring report has also been uploaded to the project website. |
| 14 | Within 20 days after the commencement of construction, the proponent must advise the Department in writing of the actual date of commencement of construction. | ~ | | | | TMR advised DAWE on the 4 th April 2016 of the date of construction commencement. |
| 15 | The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media. | × | | | | The Eton Range Project is now completed. Accurate records substantiating all activities associated with or relevant to the conditions of approval are available upon request. |
| 16 | Within three months of every 12 month anniversary of the commencement of construction, the approval holder must publish a report on their website addressing compliance with each of the conditions of this approval over the previous 12 months. The published report must remain on the approval holder's website for the life of approval. Non- compliance with any of the conditions of this approval must be reported to the Department at the same time as the compliance report is published. | Image: A start of the start of | | | | This report is the sixth and final compliance report for the Project and will be published on TMR's website. |

| Condition | Condition | | liance | | | Evidence/comments/notable events |
|-----------|---|-----------|-------------|-------------------|-------------------|--|
| number | | Compliant | Observation | Non- Compliant | Non Applicable | |
| 17 | Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister. | | | | ~ | To date, there has been no direction from the Minister to complete an independent audit. |
| 18 | If, at any time after five years from the date of this approval, the approval holder has not commenced construction, then the approval holder must not commence construction without the written agreement of the Minister. | ~ | | | | The Project commenced on the 4 th April 2016. |

4. Site Photos



Figure 1: Fauna exclusion fence post maintenance, nth alignment



Figure 3: Fauna exclusion fence post maintenance, nth alignment



Figure 2: Fauna exclusion fence post maintenance, sth alignment



Figure 4: Fauna exclusion fence post maintenance, sth alignment

5. Monitoring Photos – Eton Range Fauna Underpass



Figure 13: Bandicoot using Project fauna underpass



Figure 13: Wallaby and joey using Project fauna underpass



Figure 15: Koala traversing Project fauna fenceline



Figure 14: Feral cat using Project fauna underpass