Pyrenees Highway (Sec 2) Ch 10.9 – 15.0km Safer Roads Infrastructure Project, Green Gully, Victoria

Compliance Assessment Report No. 2 October 2023 EPBC Reference 2016/7809

Date: 30 October 2023

Version: 1.0

Prepared for
Department of Agriculture, Water and the Environment
Director, Environmental Audit Section
Office of Compliance
Environmental Standards Division
CANBERRA ACT



Document information

Criteria	Details
Document title:	Compliance Assessment Report No. 2 October 2023 (EPBC Reference 2016/7809)
Document owner:	Department of Transport
Document author(s):	Tina Whatley
Version	1.0
Issue date:	30 October 2023
File Number:	

This document is copyright. This document is published publicly for the purpose of compliance to the EPBC Act Permit requirements and is for general information only.

Department of Transport, 195-229 Lyttleton Terrace, Bendigo, Victoria 3550

Telephone 133 778

© Copyright State of Victoria,

Department of Transport and Planning 2023

Except for any logos, emblems, trademarks, artwork and photography this document is made available under the terms of the Creative Commons Attribution 3.0 Australia license.

This document is also available in an accessible format at transport.vic.gov.au.

Contents

1	Terms, Abbreviations and Definitions	5
2	Executive Summary	6
3	Introduction	6
4	Background	7
4.1	Purpose of this Document	7
4.2	Environmental Protection & Biodiversity Act 1999 Requirements	8
4.2.1	EPBC Approval	8
4.2.2	Performance and Compliance Reporting	8
4.2.3	Non-Compliance Reporting	8
5	Project Compliance	9
5.1	Compliance with EPBC Conditions of Approval	9
6	Performance and Compliance of EPBC ACT 2016/7809	_ 11
7	Acknowledgement	25
8	Appendix A – Project Map	27
9	Appendix B - Condition 1, Photos - Limits of Works	31
10	Appendix C – Fauna Management Plan Reports	43
10.1	Fauna Management Plan – Implementation week 1 (12-15 March 2019)	45
10.2	FAUNA MANAGEMENT PLAN - IMPLEMENTATION WEEK 2 (19 – 22 MARCH 2019)	46
10.3	FAUNA MANAGEMENT PLAN - IMPLEMENTATION WEEK 3 (25 – 29 MARCH 2019)	48
10.4	FAUNA MANAGEMENT PLAN - IMPLEMENTATION WEEK 4 (2 – 5 APRIL 2019)	49
10.5	FAUNA MANAGEMENT PLAN - IMPLEMENTATION WEEK 5 (10 APRIL 2019)	51

1 Terms, Abbreviations and Definitions

The terms, abbreviations and definitions that have been used in this document are listed in the below table.

Table 1.0: List of Terms and Abbreviations

Term / Abbreviation	Definition			
Approval Holder	Department of Transport formerly VicRoads. ABN 61 760 960 480			
DoE	Department of Environment			
DoAWE	Department of Agriculture, Water and Environment			
DEECA	Department of Energy, Environment and Climate Action			
EPBC Act	Environmental Protection and Biodiversity Conservation Act 1999			
ha	Hectare			
Compliant	The requirements of the condition have been carried out			
Not Applicable /Not Required / Noted	The requirements of conditions were not triggered during the reporting period or were no longer applicable to the reporting period			
Non-compliant / NC	Implementation of the condition has not been carried out in accordance with condition			
NVR	Native vegetation removal			
VicRoads	The Department of Transport, which was formerly VicRoads. This report refers to the Department of Transport, Victoria, as the approval holder.			
RRV	Regional Roads Victoria			
VicRoads website – EPBC commitments for the Pyrenees Highway (Sec 2) Ch 10.9 – 15.0km Safer Roads Infrastructure Project	The VicRoads EPBC commitments page can be accessed via the following hyperlink VicRoads Commonwealth EPBC Act1999 commitments page			

2 Executive Summary

The approval of the EPBC Act referral 2016/7809 was issued to the Department of Transport and Planning (formerly VicRoads) on the 18th May 2018 for construction of a Safer Roads Infrastructure Project on the Pyrenees Highway (Sec 2) between road chainage 10.9 km and 15.0 km. The location of the project is between Castlemaine and Newstead, Victoria.

VicRoads the original Project approval holder is now a part of the Department of Transport and Planning (DTP). This report recognises the DTP as the approval holder and authority for the project.

In accordance with Condition 9 of the *Environment Protection and Biodiversity Conservation Act 1999* approval (EPBC 2016/7809), within 3 months of every 12month anniversary of the commencement of construction (7th March 2019), the DTP must publish a report on the VicRoads website addressing compliance with each of the conditions of this approval. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval will be provided to the Department at the same time as the compliance report is published.

This compliance number two (2) report addresses the current status of the Pyrenees Highway (Sec 2) road chainage 10.9 km and 15.0 km Safer Roads Infrastructure Project against the conditions for approval of the EPBC Referral Act 2016/7809 for the environmental activities carried out between July 2020 – December 2021. This is the second report to be prepared under the EPBC Act approval 2016/7809 for this Project.

3 Introduction

The Pyrenees Highway is a "B" class rural Highway. This road classification typically has two 3.3 metre sealed lanes and 2.0 m unsealed shoulders. This section of Highway is a 2-way 2-lane road with a posted speed limit of 90 km/hr to 100 km/hr. The vehicle traffic volumes along this section of the Pyrenees Highway is approximately 5,900 vehicles per day with 11% of the traffic being heavy vehicles. The terrain throughout the 4.1 km stretch is undulating with several curves, with either unsealed shoulders or sealed shoulders. There are numerous trees and drop offs in close proximity to the road pavement.

VicRoads (DTP) was awarded Traffic Accident Commission (TAC) Project funding under the Safe System Road Infrastructure Program by the Victorian State Government in 2015-16 to complete road safety improvement works on the Pyrenees Highway (Sec 2) between road chainage 10.90 km and 15.00 km. Funding was granted based on the crash history and the need to address deficiencies and unprotected hazards throughout this section of highway. Four run-off road incidents were recorded within the project area between 2009 and 2013. All incidents involved vehicles colliding with trees.

Improvements and implementation of road safety treatments to this stretch of highway will benefit all road users and assist in reducing serious trauma.

A Google Earth aerial image of the Project area can be found in Appendix A of this report.

4 Background

The purpose of this road safety project is to reduce the severity and occurrence of run-off road accidents through targeted road safety improvements to the Pyrenees Highway between road chainage 10.90 km and 15.00 km. The implemented road safety works include:

- Installation of 23 safety barriers at various location throughout the project area with a mix of steel beam guard fences and wire rope safety barriers to be installed.
- Minor widening of the existing road formation and batter flattening.
- Tree and vegetation removal to enable road safety improvements.
- Sealing of road shoulders and side road bellmouths.
- Extension of existing culverts.

All safety works were undertaken in accordance with current Austroads and VicRoads Guidelines. The safety upgrades will provide benefits to the community and road users which include:

- wire rope safety and guard fence barrier installations to reduce the severity of any runoff road crashes.
- removal or protection of identified fixed hazards in close proximity to the road pavement (i.e. trees, culverts and drop-offs next to the road) that cannot be protected with barrier treatments, such as guard fence or wire rope safety barrier.
- improved safety through bellmouth sealing of unsealed intersections with the Pyrenees Highway and sealing the road shoulders at selected locations.

Project works were carried out and completed between the 7th March 2019 and 21st June 2019

4.1 Purpose of this Document

The purpose of this document is to assess the compliance of the Pyrenees Highway (Sec 2) Ch 10.9 – 15.0 km Safe Systems Roads Infrastructure Project (SSRIP) with the EPBC Conditions of approval EPBC 2016/7809.

The EPBC conditions of approval includes the requirement to:

- Publish a report every 12 months within 3 months of the commencement of the action on compliance
 with each of the conditions of approval, including implementation of any management plans as
 specified in the approval conditions. This includes provision of details / evidence of any noncompliances with the conditions of approval.
- Prepare, publish and implement a Construction Environmental Management Plan (CEMP) for the project that incorporated the requirement to avoid impacts to the EPBC Act 1999 listed Swift Parrot (Lathamus discolor).
- Implement the Wildlife CSI (2016) Fauna Management Protocol for Swift Parrot.; and
- Compensate for the loss of 0.6 ha of Swift Parrot habitat.
- Ensure that the Offset site (Deep Lead) is managed in accordance with the offset management plan for a period of at least 10 years commencing from the date the offset is secured.

4.2 Environmental Protection & Biodiversity Act 1999 Requirements

The objective of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is to manage and protect flora and fauna of national and international significance including ecological communities and heritage places of national environmental significance.

4.2.1 EPBC Approval

Approval of the Commonwealth Minister for the Environment is required under the EPBC Act if an 'action' will have or is likely to have a significant impact on a matter of national environmental significance. Due to potential impacts on a threatened species, Swift Parrot, the project was referred to the then Department of Environment and Energy (DoEE) now known as the Department of Agriculture, Water and the Environment DoAWE.

A decision was issued by the Department on the 17th January 2017 determining that the proposal was a "controlled action" thereby requiring assessment and approval under the EPBC Act before it could proceed. The relevant controlling provisions were:

- Listed threatened species and communities (sections 18 & 18A) being:
 - Swift parrot (Lathamus discolor)

Final approval was issued to VicRoads on the 18th May 2018 with a variation of the conditions of approval issued on the 18th July 2018 for the Proposed Action: To undertake road safety improvement works over approximately 4.1 km of the Pyrenees Highway at Green Gully, approximately 1 km east of Newstead, Victoria (see EPBC Act referral 2016/7809).

The EPBC Approval Notice and the variation of the conditions of approval for this Project can be found on the DoAWE website via the following hyperlinks as listed below:

- EPBC Act Notices 2016/7809 Decision on Approval of Action: Approved with Conditions
- EPBC Act Notices 2016/7809 Notification of Variation to Approval

4.2.2 Performance and Compliance Reporting

Under Condition 9 of the approved EPBC Act referral 2016/7809, an annual compliance assessment report is required to be published on VicRoads website within 3 months of every 12-month anniversary of the date of commencement of construction (7 June 2020), addressing compliance with each of the conditions of the approval.

4.2.3 Non-Compliance Reporting

There were four non-compliance occurrences during this reporting period. These occurred under Condition 6 and 9 of the Approval and are detailed in Section 6, Table 2.0 of this report.

In summary, one non-compliance related to the offset site not managed in accordance with the Offset Management Plan. Two of the non-compliances involved not providing a compliance report for two years or having the report published on VicRoads website. One non-compliance involved late submission of this report with no approval from DoAWE to extend the date of publishing.

5 Project Compliance

5.1 Compliance with EPBC Conditions of Approval

As required in the EPBC Act approval dated 18th May 2018 from the DoAWE, this report has been prepared to provide the Department with a status update on each of the conditions of approval.

The Department of Transport has not complied with all the conditions referenced in the EPBC Act approval 2016/7809 for the annual reporting period. A summary of the performance, compliance, and non-compliances with each of the 11 conditions of approval has been provided in Section 6 of this report.

6 Performance and Compliance of EPBC ACT 2016/7809

The table below provides details of the status of compliance with the conditions of the EPBC Act approval notice (EPBC 2016/7809) for the Pyrenees Highway (Sec 2) Ch 10.9 - 15.0km road safety improvement works.

Table 2.0: EPBC Act Approval Notice 2016/7809 Compliance Results

Item	Conditions of the Approval	Compliant / Non-Compliant / Not Applicable	Evidence to support claims regarding compliance or non-compliance
1	The approval holder must not clear more than: a) 0.6 hectares of Swift parrot habitat, b) including 146 Swift parrot habitat trees at the project area (Annexure A).	a) Non-compliant b) Compliant	 General Comments: No construction activity outside the construction footprint (Limits of Works) is a specific requirement of the VicRoads Contract Specification for these works. A Project Construction Environmental Management Plan (CEMP) was prepared and implemented by the Contractor (Enoch Civil) to meet the requirements of Condition 3 of the Approval. This document can be accessed via the following hyperlink to the VicRoads EPBC commitments website as follows.

Three non-compliances (NC) occurred with regard to Condition 1 of the Approval: two occurred during the Construction period and one NC occurred outside of the Construction period.

In summary the total project understorey native vegetation removal (NVR) increase is a 134 m2 from the three non-compliances (NC), as recorded, from the original approved 0.6322 ha to 0.6454 ha. These are detailed below, including indicating site reinstatement to be undertaken for two of the sites as detailed below.

- NC 1 Limits of Works Change Additional Native Vegetation Removal (understorey) Ch 13.900 13.980 km LHS (South Side) was required for a Guard Fence installation in a cut batter area due to insufficient works area. This area is identified in the Ecolinks (2016) Report as Habitat Zone O. The works required a limit of works amendment widening by 0.5 1.0 m, which resulted in an additional 90 m2 of understorey native vegetation removal. A detailed email was sent to the Post Approvals and EPBC Monitoring, including Kahli Beissner, on the 13th March 2019 on this matter. To mitigate this loss, RRV reduced the works footprint / Limits of Works (LOW) in two other areas to decrease the area of impact across the total project area (i.e. 0.6322 ha). Native vegetation removal (NVR) reductions were undertaken in the following areas of the Project site:
 - Ch 11.405 11.860 km Wire Rope Safety Barrier (WRSB) RHS (North side) Sheets / Plans 5 7. This area is identified in the Ecolinks (2016) Report as Habitat Zone J. Area of impact was reduced by minimising fill batter width on this section and reducing the LOW. On the 10 April 2019 amendments to the LOW of a reduction in 0.5 m of working width was determined with the Contractor on a section of batter works from Ch 11.435 11.580 km. Overall change to understorey NVR is 145 m x 0.5 m = 72.5 m2 reduction from the original area of impact of 232 m2 on this section of barrier works. Final total understorey NVR for barrier section is 159.5 m2.
 - ◆ Ch 13.575 13.695 km WRSB LHS (south side of Hwy) section with a 3.0m offset (o/s) from edge of traffic lane was converted to Guard Fence with a 2.0 m o/s. This area is identified in the Ecolinks (2016) Report as Habitat Zone N. This section of works had an original 5.5 m LOW from the edge of traffic lane, which was reduced to 5.0 m for a 90 m section length of the works. This resulted in retaining two Grey Box trees (1 small 250 mm dbh & 1 large 700 mm dbh) that were approved for removal and a reduced understorey impact of 45 m2. Overall change to understorey NVR is a 45 m2 reduction from original 117 m2. Final total understorey NVR for barrier section is 72 m2 and retention of two Grey Box trees (No 74 & 75 − Ecolinks Report).

NB. Total NVR Project Change from 0.6322 ha to 0.6295 ha. Net NVR reduction of 27 m2.

NC 2 – Environmental Incident Ch 13.575 – 13.695 km LHS (south side of Hwy). As noted above in NC 1, this section of barrier works had an original 5.5m LOW from edge of traffic lane, which was reduced to 5.0 m for a 90 m section length of works. This resulted in an overall change to NVR reduction of 45m2 reduction from the original 117 m2 impacted. Final total understorey NVR for barrier section was reduced to 72 m2 after changes.

At this site an environmental incident was identified by RRV on the 8^{th} May 2019 in which topsoil had been windrowed outside of the defined LOW from Ch 13.605-13.695km. This activity resulted in the stripping and burying of understorey native vegetation. The assessed impacted area was over a 90 m length section of works with an average impact width of 0.47 m This resulted in an understorey NVR impact that was measured at 42m2. RRV actions were on the incident were as follows:

- A Non-conformance and an environmental incident report was raised and logged on the matter. The DELWP (Vic) were informed.
- Outcome of incident was that the Contractor was penalised under the Contract environmental damage clause with a Contract deduction of \$16,720.00.
- The area was raked over and upon further inspection the site was found to be successfully regenerating naturally, no further action was taken.

NB. Total NVR Project Change from 0.6295 ha to 0.6337 ha. NVR overall net increase for Project is 15 m2.

- NC 3 Environmental Incident Ch 14.040 14.070 km RHS Guard fence section. An incident occurred outside of the Construction period during works to rectify a barrier terminal that was constructed as part of this Project. The Incident was identified on the 16th June 2020 by RRV staff. The incident involved the contractor stripping native understorey with topsoil outside of the barrier formation and the original approved LOW in the area is identified in the Ecolinks (2016) Report as Habitat Zone P. RRV actions on the incident were as follows:
 - An initial environmental incident report was raised and logged on the matter. The DELWP were also informed.
 - Extent of the incident was investigated on the 30 June 2020. The total area of understorey native vegetation impacted by the incident was determined to be 119 m2.
 - The area was raked over and upon further inspection the site was found to be successfully regenerating naturally, no further action was taken.

		NB. Total NVR Project Change from 0.6337 ha to 0.6456 ha. NVR overall net increase for Project is 134 m2.
		The approval holder must not clear more than:
		b) 0.6 hectares of Swift parrot habitat, including 146 Swift Parrot habitat trees at the project area
		The Project is complaint with this condition with regard to Swift parrot habitat trees. RRV post Community consultation and re-review of the Project through January / February 2019, retained six (6) of the trees originally approved for removal through amendments to the Construction works. This reduced the footprint of the works further than originally approved. The following trees in road chainage order as identified in the Ecolinks (2016) Report were retained:
		- Tree 100 @ 11.042km – 250 mm Grey Box. RHS
		- Tree 102 @ 11.050km – 200 mm Grey Box. RHS
		- Tree 15 @ 11.454km – 300 mm Grey Box. LHS
		- Tree 48 @ 12.468km – 200 mm Grey Box. LHS
		- Tree 74. @ 13.595km – 250 mm Grey Box. LHS (outline above)
		- Tree 75. @ 13.672km – 700 mm Grey Box. LHS (outlined above)
2 The approval holder must ensure tha	·	Prior to commencement of the Action,
removal of Swift parrot habitat is under in accordance with the Fauna Manage Plan		 RRV prepared the Construction Contract for this Project. This included Contract specific clauses on the requirement to comply with / implement the approved Fauna Management Plar (Protocol). A requirement of Contract also included a pre-commencement of works site induction by a zoologist on the implementation of the Protocol.
		Under the requirements of Contract, the Contractors (Enoch Civil) Project Management Plan (th CEMP) Pyrenees Hwy Sec 2 Ch 10.9 – 15km addressed the requirements of the Construction Contract and incorporated the requirements of compliance with the Fauna Management Plan (Protocol). This document, published online on the 14th February 2019 prior to commencement of the Action, is available for viewing on the VicRoads EPBC commitments page can be accessed in the following hyperlink: Enoch Civil Construction Environmental Management Plan Pyrenees Hwy (Sec 2) Ch 10.9 - 15.0 km
		• RRV commenced the Action on the 7 th March 2019, with tree and native vegetation remove occurring during the period of the 12 th March to the 12 th April 2019 the following actions activities were undertaken:

3 Prior to commencement of construction, the approval holder must develop a Construction Environmental Management Plan (CEMP). The approval holder must not commence construction until the CEMP has been published. Once published, the approved CEMP must be implemented. The CEMP must: a) be prepared by a suitably qualified expert. b) include measurable performance indicators to avoid and mitigate impacts to Swift parrot habitat and Swift parrots surrounding the project area.	 A qualified zoologist from Wildlife CSI was engaged to implement the Fauna Management Plan (Protocol) by VicRoads in conjunction with Enoch Civil. This included providing a precommencement of works site induction on the requirements and implementation of the Plan to Enoch Civil and RRV staff. The zoologist conducted onsite pre-start site checks and attended all tree removals and site ground stripping works as required / identified during the Construction period. Weekly reports were also prepared by the Zoologist on their onsite attendance over the five-week period from the 12th March 2019 – 12 April 2019. These reports were generated during the period of tree removals and top soil stripping and detail activities undertaken in compliance with Fauna Management Plan (Protocol). These reports are attached to Appendix C. RRV representatives conducted daily / weekly site surveillance inspections to ensure that the Fauna Management Plan (Protocol) was implemented by Enoch Civil, and the zoologist was onsite during works, as required. The Zoologist did not identify the presence of Swift parrots within the Project works areas during their onsite attendance to implement the Fauna Management Plan (Protocol). Prior to commencement of the Action, the following steps were undertaken by RRV in the development, approval and publishing of the CEMP: RRV prepared the Construction Contract for this Project. This included Contract environmental Management Plan (CEMP) that addressed this condition of approval, specifically CEMP requirements a) to g). The Contractor (Enoch Civil) prepared and submitted a <i>Project Management Plan (the CEMP) Pyrenees Hwy Sec 2 Ch 10.9 – 15km</i> to for review and approval by RRV, which was subject to a third-party environmental auditor review (detailed below). This document was finalised on the 14th February 2019, after final review and confirmation that this document was finalised on the environmental management cl
---	---

- c) include measures for identification and marking of the clearing footprint prior to commencement of construction and establishment of no-go zones and buffers to avoid impacts on Swift parrot habitat and Swift parrots surrounding the project area.
- d) include weed management measures.
- e) include pest and disease management measures (including measures to prevent the occurrence of dieback by Phytophtora cinnamon during construction)
- f) include sediment and erosion controls measures.
- g) ensure that all personnel are trained on the requirements of the CEMP.

- identified by the auditor were addressed by Enoch Civil prior to finalisation, approval and publishing of the document online.
- RRV published the approved version of the Enoch Civil *Project Management Plan (the CEMP)*Pyrenees Hwy Sec 2 Ch 10.9 15km on the VicRoads EPBC Act commitments website on the 14th

 February 2019. This document can be viewed via the following hyperlink: Enoch Civil

 Construction Environmental Management Plan Pyrenees Hwy (Sec 2) Ch 10.9 15.0 km
- The Contractor (Enoch Civil) was subject to a third-party environmental auditor review (detailed below) as arranged by RRV. This audit conducted by Right Path Environmental P/L on the 17th April 2019. The purpose of the audit was to assess the management of the works for compliance with the environmental requirements of the contract specification and the Contractors environmental management systems and procedures developed for this project, legislative requirements and EPA 'best practice" environmental management guidelines. This audit also assessed compliance with the EPBC Act 1999 approval conditions as this project has been determined to be a "Controlled Action" by the Commonwealth DOEE. The outcomes of the Audit were as follows:
 - The Audit was able to identify evidence that confirmed that Enoch Civil has complied with the vast majority of its contractual obligations associated with compliance with both the contract specification and permit / approval conditions as assessed.
 - Four improvement opportunities and one non-conformance were identified and were generally of a minor nature. They were mostly associated with the management of systems, associated with the maintenance of records and in one instance, the development of a process to demonstrate plant hygiene. One improvement opportunity is associated with the implementation of sediment controls.
 - Of the two observations recorded, one was beyond the scope of the works, and relates to the application of erosion control for some of the shoulder widening works. The second observation relates to not having water quality monitoring equipment on site, ready for use in the event of rain and subsequent flow in Green Gully Creek.

In general, the audit was able to identify sufficient subjective evidence and though the maintenance of records an observation of controls on site, to determine that works associated with the Pyrenees Highway Safer Road Infrastructure Project are managed with the clear intent of meeting the environmental objectives/obligations set by the contract specification and approval conditions.

4	Prior to the commencement of the action, to compensate for the loss of 0.6 hectares of Swift parrot habitat, the approval holder must, for the long-term protection of Swift parrot habitat, enter into a legal mechanism to secure an offset containing at least 4.5 hectares of Swift parrot habitat at Deep Lead as identified in Attachment A, or another offset agreed to by the Minister in writing.	Compliant	 RRV secured an Offset site containing 4.523 hectares of Swift parrot habitat at Deep Lead under a Victorian Bushbroker agreement registered under Section 69 of the Conservation, Forests and Lands Act 1987 (Vic) in November / December 2018. Evidence of the legal mechanism to secure the Offset site are registered / stated in following documents: Section 69 Landowner Agreement (LA-BB-3018) under the Victorian Conservation Forests & lands Act 1987 signed by a representative of the DELPW Secretary, dated 8th November 2018. A copy of this document can be provided if so requested. VIC Cert - Register Search Statement Volume 11912 Folio 567 (Certificate of Title - with AR699965K). This Certificate of Title document, dated 4th December 2018, registers the Section 72(1) Agreement on Title under the Victorian Conservation Forests & lands Act 1987. Details of the above Offset site documentary evidence of securing the site and legal mechanism details were provided to the DoAWE Post Approvals Section via email correspondence (Hagen Ganahl) on the 21 December 2018. These evidences are also detailed and listed under approval Condition 5 below. The DoAWE (Kahli Beissner) confirmed in written correspondence to RRV that Condition 4 had been adequately addressed on the 11th January 2019.
5	Within 14 Days of the offset, required under condition 4, being secured the approval holder must provide the Department with: a) written evidence demonstrating that the offset has been secured. b) shapefiles and offset attributes that clearly define the location and boundaries of the offset site.		 RRV with reference to Condition 4 evidences and correspondence with the DoAWE, the necessary evidence that the Offset had been secured is as follows: a) written evidence demonstrating that the offset has been secured: RRV provided the following Offset documentary evidence to the DoAWE Post Approvals Section via email correspondence (Hagen Ganahl) on the 21 December 2018 is as follows: Section 69 Landowner Agreement (LA-BB-3018) under the Victorian Conservation Forests & lands Act 1987 signed by a representative of the DELPW Secretary, dated 8th November 2018. A copy of this document can be provided if requested. VIC Cert - Register Search Statement Volume 11912 Folio 567 (Certificate of Title - with AR699965K). This Certificate of Title document, dated 4th December 2018, registers the Section 72(1) Agreement on Title under the Victorian Conservation Forests & lands Act 1987. DELWP - Native vegetation Credit Register. Allocated Credit Extract - Credit ID: 2018-0915, dated 20th December 2018. The DoAWE (Kahli Beissner) confirmed in written correspondence that Condition 5 a) had been adequately addressed on the 11th January 2019.

			 b) shapefiles and offset attributes that clearly define the location and boundaries of the offset site. RRV provided the DoAWE the required following Offset site information as follows: required GIS shapefiles on the 11th January 2019; and An Excel table of Offset attributes on the 16th January 2019 The DoAWE (Kahli Beissner) confirmed in written correspondence to RRV that Condition 5 b) had been adequately addressed on the 17th January 2019.
6	The approval holder must ensure the Deep Lead offset site is managed in accordance with the Offset Management Plan at Deep Lead for a period of at least 10 years commencing from the day the offset is secured.	Compliant	The Credit Trading Agreement for the purchase of the Offset legally requires that the site is managed in accordance with the Section 69 Landowner Agreement (varied agreement No AR699965k) under the Victorian Conservation Forests & lands Act 1987. The Agreement under Schedule 1 includes the Site Management Plan for Credit Site BB-3018-LA01 and incorporates the Commonwealth DoEE approved Biosis (Dec 2017) Old Glenorchy Rd, Deep Lead, Victoria - Offset Management Plan (EPBC 2016/7809) prepared for VicRoads. The Offset site, as secured, is required to be managed in accordance with the Biosis (Dec 2017) Old Glenorchy Road, Deep Lead, Victoria Offset Management Plan (EPBC 2016/7809), version 04 (signed 7th July 2018) for a period of at least 10 years commencing from the day the offset is secured (Dec
			 2018). Table 11 of the Offset Management Plan outlines the reporting schedule, in summary: Annual Monitoring / Management Action reports are to be prepared by the Offset site owner; and Audit reports at 1, 4, 8 and 10 year intervals by the Approval holder.
			RRV arranged in November 2019 for Biosis P/L to undertake the first-year audit (year 1) report and field assessment of the Offset Site. The Field assessment occurred on the 28 th November 2019. The Biosis audit involves consideration of:
			The Offset Management Plans (OMP) – Biosis (2017b) and Brett Lane & Associates (2017), which included assessment and site review of the schedule of management actions and performance targets of the Offset management Plan.
			Approval conditions for EPBC Approval 2016/7809; and
			The Year 1 monitoring report for the offset site (Practical Ecology 2020).
			The annual monitoring report was prepared by Practical Ecology, on behalf of the offset site owner. The report was submitted to the Department of Transport (DoT) on 01/12/2021. Biosis assisted the

DoT to provide comments on the draft report, and these were incorporated into the final offset site monitoring report by Practical Ecology and submitted to DoT on 01/05/2020.

The Biosis (July 2020) "Old Glenorchy Road Deep Leed Offset Site, Year 1 Audit Report" is the first Audit and Annual Monitoring / Management Actions Report completed for the offset site and was finalised on the 28 July 2020. The Audit identified four (4) non-compliances, as listed below, with recommended actions:

- Boundary fencing: Repair and maintain property boundary fencing in accordance with DSE 2012.
- Annual monitoring of woody weeds and herbaceous weeds: Undertake future weed
 monitoring within the correct monitoring timeframe.
- Monitor tree and shrub regeneration and overstory condition: Undertake future monitoring within the correct monitoring timeframe. Make notes on weed occurrence during regular site surveillance visits.
- Prepare and submit an annual report: Submit future monitoring reports within the required timeframe.

RRV Liaised with the Offset owner and the DELPW to address the non-compliance as identified by the site audit. Actions undertaken are listed below:

- In response to findings of the Year 1 independent Audit, Deep Lead Property Pty Ltd agreed to install new boundary fencing in order to meet the requirements for effective protection of the site, and in line with BushBroker Standards for Management Fencing (DSE 2012c), with fence installation to commence in Summer 2021. Due to COVID the replacement of fence was delayed and was completed by the third-year anniversary of the site December 2021.
- No Woody Weeds have been identified within the Swift Parrot Offset Site and control of herbaceous weeds within the broader property have been undertaken during April and October with spot spraying occurring within the offset area.
- September 2020 was the first implementation of new methodology being applied the site
 to accurately identify circumstances where Yellow Gum may not be seen to be regenerating
 effectively or where ecologically thinning of understory species should be considered in
 order to ensure adequate recruitment of Yellow Gum as the key food source for Swift
 Parrot. This trial monitoring was viewed as successful in its ability to identify locations within
 the offset area that may require targeted thinning of understory species, specifically Acacia
 pycnantha, in order to reduce competition to allow for adequate regeneration of Yellow
 Gum.

	The management/reporting period for the Swift Parrot Offset area is Oct - Oct each year
	and reports have been received (see below)
	The Biosis (July 2020) offset site audit report is published on the VicRoads EPBC Act commitments website and can be viewed via the attached hyperlink:
	https://www.vicroads.vic.gov.au/planning-and-projects/environment/epbc-commitments
	Annual monitoring reports have been prepared on behalf of the offset site owner. Report have been submitted to the Department of Transport and Planning (DTP) for the following years:
	Year 2: Oct 2019 – Oct 2020 All Reporting (Practical Ecology)
	Year 3: Oct 2020 – Oct 2021 All Reporting (Practical Ecology)
	Year 4: Oct 2021 – Oct 2022 Summary Report (Bush Blocks), Monitoring Report (Ecocentric Environmental), Landowners Report (Bush Blocks)
Non-Compliant	The Year 3 Oct 2020 – Oct 2021 annual monitoring report prepared by Practical Ecology, on behalf of the offset site owner identified 2 non-compliance as listed below:
	 Outstanding non-compliance – Year 1: There is one outstanding item of non-compliance as identified in Biosis Year 1 Audit Report, which is the matter of the boundary fence of the broader property. As discussed in Section 3.1, the new fence is due to be completed by the anniversary of OMP commencement, being December 2021. Non-Compliance – Year 3: There is one matter of non-compliance for Year 3- where Objective 5 states that there must be no fresh ground disturbances by pest animals observed in the offset area. Rabbit control is therefore to be prioritised in Year 4, both within the Swift Parrot Offset area, and across the broader offset site.
	Actions undertaken for 2 non-compliances identified in the Year 3 annual monitoring report are as below:
	 Installation of the new property fencing was completed in October 2022, including removal of the old boundary fence.
	 In response to an increase in rabbit activity observed in Year 3, fumigation works were completed, with staged hand collapsing of warrens in progress. No rabbits were observed in Year 4. Similarly, no observations of foxes, direct or indirect, or of other pest animals have been recorded.

			•
7	Within 14 days after the commencement of the action, the approval holder must advise the Department in writing of the actual date of commencement.	Compliant	Notice of commencement of construction works was provided to the DoAWE for the Project on the 7 th March 2019, with physical works also commencing on this date. The DoAWE (DoEE) confirmed the Commencement of the Action in correspondence to RRV on the 15 th March 2019.
8	The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement any management plans and offset management measures required by this 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.	Not Applicable	Records of the implementation of management plans / offset management measures are being maintained and are available for auditing purposes. RRV to comply with any request made by the Minister. No actions to date, as no requests have been received from the Minister.
9	Within three months of every 12-month anniversary of the commencement of the action, the approval holder must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and noncompliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published.	Compliant Non-Compliant	RRV sought approval from the DoAWE to extend the date of publishing originally due on the 6 th June 2020 to the 24 July 2020. This was confirmed by the DoAWE Compliance Division (Tom Long) on the 29 th June 2020. RRV published this report, including supporting documents, on the 28 July 2020, listed below, on the VicRoads EPBC Commitments website. This site can be accessed via the attached hyperlink: https://www.vicroads.vic.gov.au/planning-and-projects/environment/epbc-commitments Three non-compliances (NC) occurred with regards to Condition 9 of the Approval: • Year 2: 2020/2021 Compliance Report not complete or published. • Year 3:2021/2022 Compliance Report not complete or published.

			 Year 4: 2022/2023 Report not complete until October 2023 and no approval from DoAWE to extend the date of publishing was sought. Reports originally due in June of each reporting year. DTP published this report on the 30th October 2023 on the VicRoads EPBC Commitments website. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval have also been provided to the Department (DoAWE) at the same time.
10	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.	Not Applicable	RRV to comply with any request made by the Minister. No actions to date, as no requests have been received from the Minister.
11	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans and monitoring programs referred to in these conditions of approval on its website. Each management plan and monitoring programs must be published on the website before the commencement of construction.	Compliant	RRV published prior to commencement of Construction works (7th March 2019) the following Project documents, listed below, on its VicRoads EPBC Commitments website. This website page contains links to the VicRoads projects that are required to report annually on their compliance with conditions set by the Commonwealth for protection of MNES. For further information refer to the attached link to the VicRoads site: VicRoads Commonwealth EPBC Act1999 commitments page Pyrenees Highway (Sec 2) Ch10.9 - 15.0km Safer Roads Infrastructure Project list of published documents as of the 7th March 2019 and attached hyperlinks: • EPBC 2016/7809 Preliminary Documentation Pyrenees Highway (Sec 2) Ch10.9 - 15.0km Safer Roads Infrastructure Project EPBC 2016-7809 Prelim Documentation 30-6-2017 [PDF 15Mb] • Offset Management Plan Old Glenorchy Road, Deep Lead, Victoria: Offset Management Plan (EPBC 2016/7809) [PDF 4.2Mb] • Project Environmental Protection Strategy Pyrenees Highway Sec 2 Ch 10.9 15.0kmPEPS 20181210 1 [PDF 16Mb]

	•	Construction Environmental Management Plan
		Pyrenees Highway (Sec 2) Ch10.9 - 15.0km Project6 Management Plan [PDF 75Mb]

7 Acknowledgement

8 Appendix A – Project Map

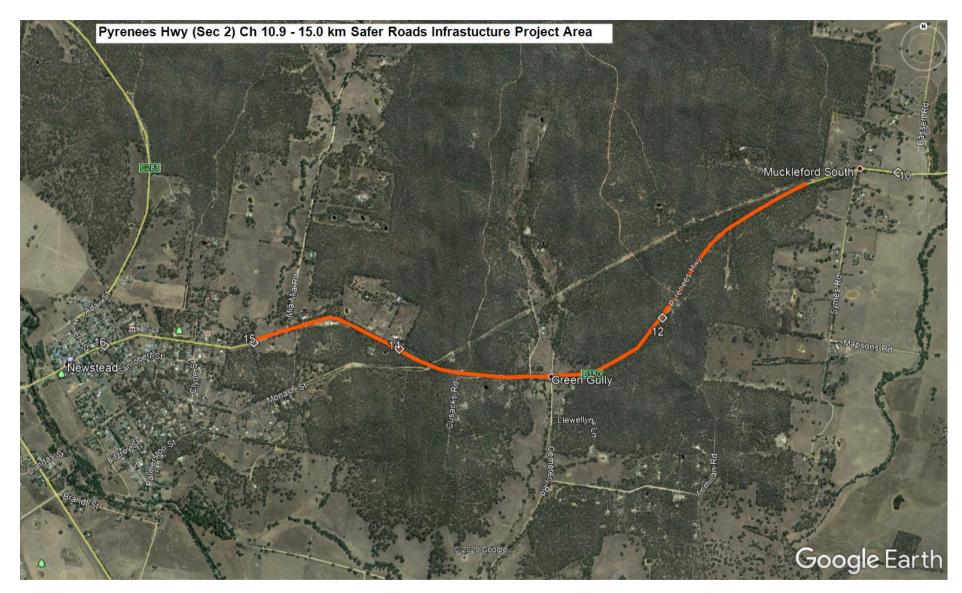


Figure 1. Aerial image of the Project area of the Pyrenees Hwy (Sec 2) Ch 10.9 – 15.0km

9 Appendix B - Condition 1, Photos - Limits of Works



Plate 1. Pyrenees Hwy (Sec 2) Ch 11.125 - 11.390 km RHS, Limits of Works, 7th March 2019.



Plate 2. Pyrenees Hwy (Sec 2) Ch 12.980 – 13.325km LHS, Limits of Works, 7th March 2019.



Plate 3. Pyrenees Hwy (Sec 2) Ch 13.700 - 13.9255km LHS, Limits of Works, 7th March 2019.



Plate 4. Pyrenees Hwy (Sec 2) Ch 13.705 - 14.065km LHS, Limits of Works, 7th March 2019.



Plate 5. Pyrenees Hwy (Sec 2) Ch 14.000 – 14.070km RHS, Limits of Works, 7th March 2019.



Plate 6. Pyrenees Hwy (Sec 2) Ch 14.720 – 14.880km HHS, Limits of Works, 7th March 2019.



Plate 7. Pyrenees Hwy (Sec 2) Ch 10.195 - 11.047 km LHS, Limits of Works, 8th May 2019.



Plate 8. Pyrenees Hwy (Sec 2) Ch 10.195 – 11.047 km LHS, Limits of Works, 8th May 2019.



Plate 9. Pyrenees Hwy (Sec 2) Ch 11.615 – 11.880 km LHS, Limits of Works, 8th May 2019.



Plate 10. Pyrenees Hwy (Sec 2) Ch 12.405 – 12.570 km LHS, Limits of Works, 8th May 2019.



Plate 11. Pyrenees Hwy (Sec 2) Ch 13.100 - 13.325 km LHS, Limits of Works, 8th May 2019.



Plate 12. Pyrenees Hwy (Sec 2) Ch 13.705 - 14.065 km LHS, Limits of Works, 14th June 2019.



Plate 13. Pyrenees Hwy (Sec 2) Ch 14.800 - 14.705 km RHS, Limits of Works, 14th June 2019



Plate 14. Pyrenees Hwy (Sec 2) Ch 13.925 – 13.700 km RHS, Limits of Works, 14th June 2019.



Plate 15. Pyrenees Hwy (Sec 2) Ch 13.120 – 12.995 km RHS, Limits of Works, 14th June 2019.



Plate 16. Pyrenees Hwy (Sec 2) Ch 12.800 – 12.575 km RHS, Limits of Works, 14th June 2019.



Plate 17. Pyrenees Hwy (Sec 2) Ch 12.560 - 12.445 km RHS, Limits of Works, 14th June 2019.



Plate 18. Pyrenees Hwy (Sec 2) Ch 11.880 – 11.405 km RHS, Limits of Works, 14th June 2019.

This Page has been Left Blank

10 Appendix C – Fauna Management Plan Reports

This Page has been Left Blank

10.1 Fauna Management Plan – Implementation week 1 (12-15 March 2019)



PO Box 374, Woodend Victoria 3442, Australia Phone: + 61(0)3 5423 5282 Mobile: 0431 25 24 77 peter@wildlifecsi.com.au www.wildlifecsi.com.au www.wildlifecsi.com.au ACN 121 459 390 ABN 29 121 459 390

28 March 2019

Peter Woods Vic Roads Northern Regional Office 57-61 Lansell Street East Bendigo 3550

Dear Peter.

RE: Pyrenees Highway Ch.10.9 - 15.0km - Fauna Management Week 1 Report.

Wildlife CSI Pty Ltd attended the Pyrenees Highway Ch. 10.9 to 15.0km site from the 12th to the 15th March 2019. On the 12th we provided contractors and sub-contractors with a contractor induction to the Fauna Management Plan (Appendix 2 and 3). We emphasised the environmental importance of the area, in particular two threatened species, the Swift Parrot and Brush-tailed Phascogale. Photographs of each species were shown to contractors.

Wildlife CSI monitored tree removal for impacts to fauna, in particular trees marked as habitat trees (hollows, fissures, cracks, spouts or nests that could harbour fauna). Prior to tree removal commencing, Wildlife CSI undertook an inspection of the works area for Swift Parrots. The works area was also inspected for flowering Eucalypts to which Swift Parrots are attracted. The pre works inspection involved listening and looking for Swift Parrot activity for approximately 20 minutes. Swift Parrot monitoring was undertaken throughout the day and week as the work location progressed and changed.

There were several Grey Box eucalypts in flower in this week's work areas. Several flowering Grey Box were removed as part of the work. There were no Swift Parrots detected during the week at the work sites. A colleague had indicated that Swift Parrots had been recorded in Victoria this week, in the Melbourne area.

Four habitat trees were removed this week (tree numbers 68, 83, 85 and 158). These trees have varying sizes of hollows or spouts. Each hollow/spout was inspected from an elevated work platform. There was no fauna species resident or any indication of occupancy. There were no Brush-tailed Phascogale encountered during tree removal works this week. There were no other fauna species directly impacted on by the works this week.

Wildlife CSI also inspected the road side ground litter layer for fauna prior to stripping of top soil. This involved walking the section of road side to be stripped, looking for ground fauna (e.g. reptiles), ground harbour such as rocks and logs and turning them over. No fauna was detected.

During the week several birds' species were noted in or close to the works area: Brown Tree Creeper, Wedge-tailed Eagle, Red-rumped Parrot, Galah, and Australian Magpie.

Yours Sincerely

10.2 FAUNA MANAGEMENT PLAN - IMPLEMENTATION WEEK 2 (19 – 22 MARCH 2019)



PO Box 374, Woodend Victoria 3442, Australia Phone: + 61(0)3 5423 5282 Mobile: 0431 25 24 77 peter@wildlifecsi.com.au www.wildlifecsi.com.au ACN 121 459 300 aBN 20 121 459 300

5 April 2019

Peter Woods Vic Roads Northern Regional Office 57-61 Lansell Street East Bendigo 3550

Dear Peter,

RE: Pyrenees Highway Ch.10.9 - 15.0km - Fauna Management Week 2 Report.

Wildlife CSI Pty Ltd attended the Pyrenees Highway Ch. 10.9 to 15.0km site from the 19th to the 22nd March 2019 (Week 2)

Wildlife CSI monitored tree removal for impacts to fauna, in particular trees marked as habitat trees (hollows, fissures, cracks, spouts or nests that could harbour fauna). Prior to tree removal commencing, Wildlife CSI undertook an inspection of the works area for Swift Parrots. The works area was also inspected for flowering Eucalypts to which Swift Parrots are attracted. The pre works inspection involved listening and looking for Swift Parrot activity for approximately 20 minutes. Swift Parrot monitoring was undertaken throughout the day and week as the work location progressed and changed.

There were several Grey Box eucalypts in flower in this week's work areas. Several flowering Grey Box were removed as part of the work. There were no Swift Parrots detected during the week at the work sites.

Two habitat trees were removed this week (tree numbers \$1 and \$6). Tree number \$1 had no fauna. Tree number \$6 had a large hollow that was occupied by a female Common Brushtail Possum. The possum was successfully removed from the hollow and relocated into a nest box within 20 meters of tree \$6 (nest box location Eastings 0240740 Northings 5889509; Photo 1). One Bougainville Skink (Lerista bougainvillii) was crushed by a BobCat on site. One Pobblebonk Frog (Limnodynastes dumerilii) was captured at a tree stump and relocated (capture site: eastings 0240928 northings 5889432; release site: eastings 0240935 northings 5889427). One Sugar Glider (Petaurus breviceps) ran off from a small hollow in Tree number 4 (Eastings 0243418 Northings 5890366) into a nearby tree.

Yours Sincerely,



PO Box 374, Woodend Victoria 3442, Australia Phone: +61(0)3 5423 5282 Mobile: 0431 25 24 77 peter@wildlifecsi.com.au www.wildlifecsi.com.au ACN 121 459 390 ABN 29 121 459 390



Photo 1: Brushtail Possum nest box, Pyrenees Highway, Newstead

10.3 FAUNA MANAGEMENT PLAN - IMPLEMENTATION WEEK 3 (25 – 29 MARCH 2019)



PO Box 374, Woodend Victoria 3442, Australia Phone: +61(0)3 5423 5282 Mobile: 0431 25 24 77 peter@wildlifecsi.com.au www.wildlifecsi.com.au www.wildlifecsi.com.au ABN 29 121 459 390 ABN 29 121 459 390

5 April 2019

Peter Woods Vic Roads Northern Regional Office 57-61 Lansell Street East Bendigo 3550

Dear Peter,

RE: Pyrenees Highway Ch.10.9 - 15.0km - Fauna Management Week 3 Report.

Wildlife CSI Pty Ltd attended the Pyrenees Highway Ch. 10.9 to 15.0km site from the 25th to the 29th March 2019 (Week 3).

Wildlife CSI monitored tree removal for impacts to fauna, in particular trees marked as habitat trees (hollows, fissures, cracks, spouts or nests that could harbour fauna). Prior to tree removal commencing, Wildlife CSI undertook an inspection of the works area for Swift Parrots. The works area was also inspected for flowering Eucalypts to which Swift Parrots are attracted. The pre works inspection involved listening and looking for Swift Parrot activity for approximately 20 minutes. Swift Parrot monitoring was undertaken throughout the day and week as the work location progressed and changed.

There were several Grey Box eucalypts in flower in this week's work areas. Several flowering Grey Box were removed as part of the work. There were no Swift Parrots detected during the week at the work sites.

Two habitat trees were removed this week (tree numbers 18 and 61). There was no fauna in these two habitat trees. Tree number 9 had not been identified as a habitat tree however, it had a hollow with nesting material, most likely a Sugar Glider nest (lots of green leaves). Also tree number 115 was not previously identified as a habitat tree but had a medium size hollow, but no fauna.

There were no fauna species directly impacted on by the works this week.

Yours Sincerely.

10.4 FAUNA MANAGEMENT PLAN - IMPLEMENTATION WEEK 4 (2 – 5 APRIL 2019)

Fauna Conservation, Management & Research Consultants

PO Box 374, Woodend Victoria 3442, Australia Phone: +61(0)3 5423 5282 Mobile: 0431 25 24 77 peter@wildlifecsi.com.au www.wildlifecsi.com.au www.wildlifecsi.com.au ACN 121 459 390 ABN 29 121 459 390

5 April 2019

Peter Woods Vic Roads Northern Regional Office 57-61 Lansell Street East Bendigo 3550

Dear Peter.

RE: Pyrenees Highway Ch.10.9 - 15.0km - Fauna Management Week 4 Report.

Wildlife CSI Pty Ltd attended the Pyrenees Highway Ch. 10.9 to 15.0km site from the 2nd to the 5th April 2019 (Week 4). The final week of tree clearing.

Wildlife CSI monitored tree removal for impacts to fauna, in particular trees marked as habitat trees (hollows, fissures, cracks, spouts or nests that could harbour fauna). Prior to tree removal commencing, Wildlife CSI undertook an inspection of the works area for Swift Parrots. The works area was also inspected for flowering Eucalypts to which Swift Parrots are attracted. The pre works inspection involved listening and looking for Swift Parrot activity for approximately 20 minutes. Swift Parrot monitoring was undertaken throughout the day and week as the work location progressed and changed.

There were several Grey Box eucalypts in flower in this week's work areas. Several flowering Grey Box were removed as part of the work. There were no Swift Parrots detected during the week at the work sites.

Seven habitat trees were removed this week (tree numbers 25, 37, 50, 54, 60, 141, 147). Habitat Tree number 25 was retained in the road reserve to enhance fauna habitat (Photo 1). Tree number 37 had an Owlet Nightjar (Aegotheles cristatus) in a hollow. My advice was to cut this tree down to the hollow and leave it overnight and inspect the hollow next morning. The Owlet Nightjar had successfully left this hollow overnight. Not related directly to the project, but within the project area, I witnessed an Eastern Grey Kangaroo hit by a truck. The kangaroo was alive and managed to get itself off the road. We inspected the kangaroo (a male) and it had either a broken leg or hip or both. It was not able to stand up. The decision was made to euthanize this animal via blunt force trauma to the back of the head. Tree number 50 had a very good hollow and a Common Ringtail Possum (Pseudocheirus peregrines) nest. There was one dead (it had died long ago) juvenile Common Ringtail Possum in the hollow. There was no other fauna directly impacted on by the works.

Yours Sincerely



PO Box 374, Woodend Victoria 3442, Australia Phone: + 61(0)3 5423 5282 Mobile: 0431 25 24 77 peter@wildlifecsi.com.au www.wildlifecsi.com.au ACN 121 459 390 ABN 29 121 459 390



Photo 1: Hollow logs placed in road reserve as habitat

10.5 FAUNA MANAGEMENT PLAN - IMPLEMENTATION WEEK 5 (10 **APRIL 2019)**



PO Box 374, Woodend Victoria 3442, Australia Phone: + 61(0)3 5423 5282 Mobile: 0431 25 24 77
peter@wildlifecii.com.au
www.wildlifecii.com.au
ACN 121 459 390
ABN 29 121 459 390

10 April 2019

Peter Woods Senior Environmental Officer Northern Region Regional Roads Victoria (VicRoads) 53-61 Lansell Street East Bendigo, VIC 3550

Email: peter.woods@roads.vic.gov.au

Dear Peter.

RE: Pyrenees Highway Ch.10.9 - 15.0km - Fauna management, road side edge inspections.

As requested by Tim Hare (Enoch Civil), I undertook an inspection of several road side verges on the Pyrenees Highway between chainages 10.9 and 15.0 km. The verges inspected will be cleared and grubbed to enable various works to be undertaken (extend shoulder, culvert extensions etc.). The limit of works varies from the road edge across the site. It is approximately 2-3 meters in some instances. The inspection involved looking for animal harbour such as burrows, extent of ground litter (leaves, branches etc), and rocks.

Much of the road verge within 3 meters of the road edge is degraded or has relatively low cover and provides no significant fauna habitat (Photo 1 is an example of low cover in the road verge).



Photo 1: Pyrenees Highway, showing limited ground cover for fauna habitat

Of the sites inspected, there were three sites that in my view contained potential habitat for fauna. The fauna species would most likely be reptiles and amphibians (particularly at culverts). The three sites are shown in Photos 2, 3 and 4.



PO Box 374, Woodend Victoria 3442, Australia Phone: +61(0)3 5423 5282 Mobile: 0431 25 24 77 peter@wildlifecsi.com.au www.wildlifecsi.com.au ACN 121 459 390 ABN 29 121 459 390



Photo 2: Pyrenees Highway, showing ground cover for fauna habitat (CH 11.115 - CH 11.150 LHS formation widening (fill construction))



Photo 3: Pyrenees Highway, showing ground cover for fauna habitat (CH 13.610 - CH 13.690 LHS formation widening (fill construction))



Photo 4: Pyrenees Highway, showing culvert and rocks; potential for fauna habitat (CH 11.14)



PO Box 374, Woodend Victoria 3442, Australia Phone: +61(0)3 5423 5282 Mobile: 0431 25 24 77 peter@wildlifecsi.com.au www.wildlifecsi.com.au ACN 121 459 390 ABN 29 121 459 390

It is recommended that these three sites be monitored for fauna during the clearing and grubbing of ground litter, rocks and top soil.

Yours sincerely,