



Transport
Roads & Maritime
Services

Devil's Pulpit Pacific Highway Upgrade

Compliance Report March 2018 to February 2019

1 Introduction

1.1 The Project

The Devils Pulpit Upgrade is part of the Pacific Highway Upgrade Program, a joint commitment by the Australian and NSW governments to improve the standard of the Pacific Highway between Hexham and the Queensland border. The Upgrade is 7.36 kilometres in length, located between 65.64 and 73 kilometres north of Grafton.

1.2 Project approval

The Project was approved under Part 9 of the *Environment Protection and Biodiversity Conservation Act 1999* on 14 February 2011.

1.3 Purpose of this report

This is the seventh report reporting on compliance with the Department of the Environment conditions of approval for the project (EPBC 2010/5586). As required by condition 10, this report will report on compliance against each condition in the conditions of approval, including implementation of any management plans that have been approved by the Minister.

Condition 10. Within three months of every 12 month anniversary after the substantial commencement of the action, the person taking the action must submit to the department an annual report addressing compliance with each of the conditions of this approval, including implementation of any management plans that have been approved by the Minister. Annual reports must be provided until the Minister is satisfied that the person taking the action has complied with all conditions of this approval.

1.4 Activities and progress during the reporting period

In June 2017, monitoring under the Ecological Monitoring Program commenced (see below for more information). The revised Offset Plan was submitted to the Department of Environment and Energy for approval on 15 December 2017. Roads and Maritime received comments on the plan from the Department on 5 October 2018. Roads and Maritime is currently making changes to the plan for resubmission. Road kill and monitoring of fauna fence for maintenance is undertaken regularly as part of Roads and Maritime's regular asset maintenance activities.

Vegetation rehabilitation

The landscape maintenance contract was completed at the end of June 2016. RMS Regional Maintenance Delivery now maintains the vegetation under the routine maintenance contract for RMS roads. Monitoring of the vegetated connectivity corridor was undertaken in accordance with the Ecological Monitoring Program.

Ecological monitoring program

The second year of post-construction monitoring was undertaken from June 2018 to February 2019. The monitoring completed for the reporting period included:

- Targeted threatened species monitoring for the Rufous Bettong, Wallum Froglet, Green-thighed Frog, Yellow-bellied Glider, Squirrel Glider, Brush-tailed Phascogale, Koala and Spotted-tailed Quoll. The Greater Glider and Long-nosed Potoroo are also considered target threatened species.
- Fauna underpass monitoring (motion detection cameras and scat/ track searches at ten structures).
- Rope bridge monitoring with motion detection cameras (one rope bridge).
- Vegetated median monitoring (spotlighting, nest box monitoring and arboreal hair tubes; two medians)
- Restoration of vegetated connectivity corridor (vegetation) monitoring.
- Road kill monitoring.

The following target threatened species were recorded during the Year 4 monitoring reporting period:

- Green-thighed Frog.
- Yellow-bellied Glider.
- Squirrel Glider.
- Brush-tailed Phascogale.
- Koala.
- Long-nosed Potoroo.
- Greater Glider.

Rufous Bettong, Wallum Froglet and Spotted-tailed Quoll were target species not recorded.

Assessment of the monitoring results against the performance measures of mitigation measures being monitored found:

- Fauna Underpass: No complete crossings of target threatened species have been recorded to date, though crossings by a number of native non-threatened species have been recorded. Varying levels of fauna activity between structures and limited results at a number of structures (including no complete crossings at C3) indicate varying suitability or quality of

each in providing fauna connectivity. Significant rainfall events in early 2017 resulted in damage at some structures, including:

- Scouring at the inlet and/ or outlet of five culvert structures, causing pooling of water within or at the entrance to the subject culverts.
- Damage to the fauna furniture.

Roads and Maritime is currently in the process of undertaking repair works for these structures which are expected to be completed by mid 2020.

- Rope Bridge: Three target threatened species (Squirrel Glider, Brush-tailed Phascogale and Yellow-bellied Glider) and four other native species have been recorded on the rope bridge. Direction movements have been recorded by six of these species, though complete crossings have only been recorded for the Feathertail Glider.
- Vegetated medians: Clearing phase surveys and post construction monitoring have indicated Yellow-bellied Glider and Greater Glider movements at the southern median. No glider movements at the northern median have been recorded.
- Vegetation Connectivity Corridor: Recruitment and growth of native species has been recorded across the corridor, however exotic groundcovers (including weeds) are present and reducing native species recruitment in some areas in the southern half of the corridor.
- Road Kill Monitoring: 19 road kills were recorded in total. None of these were threatened species. Most of the road kills were located in areas without fauna fence, except for two barn owls which were in an area with fauna fence.

The following recommendations are being implemented to improve the outcomes of the monitoring program:

- Completing repair/rectification work of underpasses to improve fauna usage of underpasses.
- Weed species diversity and cover in the southern half of the vegetated connectivity corridor will continue to be monitored to ensure that native species cover or growth is not affected.

1.5 Non-compliance

There were no non-compliances during the reporting period.

Compliance with approvals

Condition	Status	Comment
<p>Condition 1. <i>The person taking the action must carry out the action in accordance with the conditions of this approval and as described in the referral documentation received 23 July 2010 and the variation information submitted 8 November 2010. Where the referral or variation information and these conditions are inconsistent, these conditions shall prevail to the extent of the inconsistency.</i></p>	Compliant	Noted.
<p>Condition 2 <i>The person proposing to take the action must not clear more than 58 hectares of vegetation within the footprint of the action.</i></p>	Compliant	All clearing and grubbing for the project was completed in the previous reporting period. A total of 46.47 hectares was cleared.
<p>Condition 3 <i>To minimise impacts on listed threatened species and migratory species, if the person taking the action intends to undertake preparatory works as part of the Pacific Highway Upgrade, a plan must be submitted to the Minister for approval outlining all preparatory works to be undertaken. This plan must be approved by the Minister prior to any preparatory works being undertaken. The plan must include, but not be limited to:</i></p> <p><i>a) the location of all preparatory works to be undertaken;</i></p> <p><i>b) the area (in hectares) to be impacted;</i></p> <p><i>c) an assessment of the quality vegetation to be impacted by the preparatory works; and</i></p> <p><i>d) an assessment of the likely impacts of the preparatory works on habitat for threatened species and migratory species.</i></p>	Compliant	The Preparatory Works Plan was approved on 13 December 2011.

<p>FLORA AND FAUNA MANAGEMENT PLAN</p> <p>Condition 4 <i>To mitigate impacts on listed threatened species and migratory species, the person taking the action must submit a detailed Flora and Fauna Management Plan to the Minister for approval prior to substantial commencement of the action. This plan must be approved by the Minister prior to substantial commencement of the action. The approved plan must be implemented. The Flora and Fauna Management Plan must include, but not be limited to, the following requirements:</i></p> <ul style="list-style-type: none"> a) <i>Measures to be implemented to avoid, suppress and control the spread of weeds, plant pathogens and invasive species and to measure other indirect impacts that may result from the proposal during construction;</i> b) <i>Measures to manage aquatic habitat on-site to at least maintain habitat values for the Oxleyan Pygmy Perch;</i> c) <i>An Ecological Restoration Plan detailing the rehabilitation of vegetation to occur within the footprint of the action;</i> d) <i>Engagement of a suitably qualified expert to undertake pre-clearing fauna searches within the footprint of the action, including searches of nests, hollow bearing trees, logs, existing culverts and existing bridges to ensure that the area is free of Spotted-tail Quoll, Grey-headed Flying-fox, Regent Honeyeater, Swift Parrot and any other EPBC Act listed species.</i> e) <i>Measures to relocate an/or ensure the appropriate care of individuals of EPBC Act listed fauna species that are located during</i> 	<p>Compliant</p>	<p>The Flora and Fauna Management Plan was approved 9 February 2012.</p> <p>During the reporting period monitoring and maintenance of vegetation rehabilitation occurred.</p>
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<p><i>searches referred to in Condition 4(d), in accordance with the RTA's Fauna Rescue Framework;</i></p> <p>f) <i>The Flora and Fauna Management Plan must include clear key milestones, monitoring, performance indicators, corrective actions and timeframes for the completion of all actions outlined in the plan.</i></p>		
<p>SPOTTED-TAIL QUOLL MANAGEMENT PLAN</p> <p><i>Condition 5. The person taking the action must submit a management plan for the Spotted-tail Quoll to the Minister for approval prior to the substantial commencement of the action. This plan must be approved by the Minister prior to substantial commencement of the action. The approved plan must be implemented. The management plan must include, but not be limited to, the following requirements:</i></p> <p>a. <i>The construction, ongoing monitoring, maintenance and repair of permanent fauna crossings, fauna exclusion fencing and associated infrastructure that will ensure safe and effective movement of the Spotted-tail Quoll across the Pacific Highway Upgrade;</i></p> <p>b. <i>An independent, suitably qualified expert is to verify that the design, location and number of fauna crossings are appropriate;</i></p> <p>c. <i>The construction, ongoing monitoring, maintenance and repair of permanent fauna exclusion fencing that will restrict Spotted-tail Quoll from crossing the Pacific Highway Upgrade and facilitate the use of fauna crossings;</i></p>	<p>Compliant</p>	<p>The Spotted-tail Quoll Management Plan was approved 9 February 2012.</p> <p>Fauna crossing surveys, along with other threatened species monitoring in accordance with the Ecological Monitoring Program was undertaken throughout the year.</p>

<p><i>d. Conduct research that:</i></p> <ul style="list-style-type: none"> <i>i. Determines the effectiveness of various designs of fauna crossing structures to facilitate the effective movement of the Spotted-tailed Quoll across various types of linear infrastructure and avoid injury or death due to crossing;</i> <i>ii. determines the effectiveness of the fauna crossings constructed for the Pacific Highway Upgrade to maintain the viability of the Spotted-tail Quoll population affected by the Pacific Highway Upgrade;</i> <i>iii. determines the effectiveness of the existing culverts, to be repaired and maintained consistent with Conditions 5(a) to 5(c), to maintain the viability of the Spotted-tail Quoll population affected by the highway;</i> <i>iv. . identifies potential and actual threats to the viability of Spotted-tail Quoll populations affected by the Pacific Highway Upgrade;</i> <i>v. Have the research reviewed by a suitably qualified expert. Documentation of the review must be submitted to the Minister with documentation of research outcomes;</i> <i>vi. Implement recommendations made as a result of the research.</i> <p><i>e. The plan must include clear key milestones, performance indicators, corrective actions and timeframes for the completion of all commitments and actions outlined in the plan.</i></p>		
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<p><i>f. If it is determined the fauna crossings and culverts monitored, consistent with condition 5(a), are not effective to maintain the viability of the Spotted-tailed Quoll population affected by the Pacific Highway Upgrade, the person taking the action must submit an amended Management Plan for the Spotted-tailed Quoll to the Minister for approval. The amended strategy must include appropriate measures to ameliorate impacts on the affected Spotted-tailed Quoll population;</i></p> <p><i>g. All actions must be developed in consultation with a suitably qualified expert.</i></p> <p><i>h. The plan must integrate with and build on management plans for other nearby highway upgrade projects for the Spotted-tail Quoll.</i></p>		
<p>SOIL AND WATER MANAGEMENT PLAN</p> <p><i>Condition 6. To mitigate impacts on listed threatened species, the person taking the action must submit a detailed Soil and Water Management Plan, to be developed in consultation with I&I NSW (Fisheries), to the Minister for approval prior to substantial commencement of the action. This plan must be approved by the Minister prior to substantial commencement of the action. The approved plan must be implemented. The Soil and Water Management Plan must include, but not be limited to:</i></p> <p><i>a) Details of the water monitoring program to be implemented before, during and after construction to determine baseline water conditions, water quality objectives for the site as they relate to the Oxleyan Pygmy Perch, as well as the performance and effectiveness of mitigation measures to be</i></p>	Compliant	The Soil and Water Management Plan was approved 9 February 2012 and implemented.

<p><i>used to mitigate water quality and hydrologic impacts. The program must include but not be limited to:</i></p> <ul style="list-style-type: none"> <i>i. A minimum of two (2) baseline data sites in Tabbimoble Floodway No. 2 and a minimum of two(2) in Tabbimoble Floodway No. 3, determined in consultation with I&I NSW (Fisheries);</i> <i>ii. Baseline water conditions must include data describing water quality, pH levels and hydrological parameters such as stream flows and velocity;</i> <i>iii. Water conditions must be monitored at monthly intervals before, during and after construction for a length of time to be determined in consultation with I&I NSW (Fisheries);</i> <i>iv. The identification of thresholds that will trigger corrective actions and the actions that will be implemented within 24 hours if a threshold is reached or exceeded. If such an event occurs, this is to be reported to the department within 2 weeks of the event occurring;</i> <i>v. Monitoring of the effectiveness of mitigation measures, which should include samples during and post rainfall events. Contaminant concentrations and flow volumes entering and discharging from treatment systems on-site must be quantified and contaminant loads calculated;</i> <i>vi. Reporting arrangements to the department, including procedures and time frames for reporting any non compliance; and</i> 		
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| <p>vii. <i>Results of the Monitoring Program (including data and its interpretation) is to be made publicly available on the website of the person taking the action including data and its interpretation within three months of every 12 month anniversary of the substantial commencement of the action.</i></p> <p>b) <i>Details and location of all permanent erosion and sediment control, as well as pollution control measures, to be implemented during construction and operation of the Pacific Highway Upgrade. All erosion and sediment control measures must be best practice based on industry guidelines and must be certified, in consultation with I&I NSW (Fisheries) and approved by the department. These measures must include, but not be limited to:</i></p> <p>i. <i>All waterway crossings within the footprint of the Pacific Highway Upgrade to be in accordance with the fish classification for each waterway based on state guidelines, unless otherwise agreed to by I&I NSW (Fisheries) and the department.</i></p> <p>ii. <i>Any in-stream works in Class 1 waterway (as defined in the state guidelines) to be conducted outside the spawning season of the Oxleyan Pygmy Perch (October to December inclusive);</i></p> <p>iii. <i>In-stream works in Class 1 waterways (as defined in the state guidelines) must not be undertaken on a day when a rainfall event is forecast. If a rainfall event occurs, in-stream work must only recommence once</i></p> | | |
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<p><i>dry weather is forecast and Tabbimoble No. 2 and No. 3 have returned to a non-flowing state;</i></p> <p><i>iv. No stockpiles to occur in the floodplain zone between Tabbimoble Floodway No. 2 and Tabbimoble Floodway No. 3;</i></p> <p><i>v. Chemicals and fuels to be stored and bunded so that the floor of the bund is above the 1 in 20 year flood event and the top of the bund above the 1 in 100 year flood event. No chemicals and fuels to be stored in the floodplain zone between Tabbimoble Floodway No. 2 and Tabbimoble Floodway No. 3;</i></p> <p><i>vi. The area within 50 meters of Tabbimoble No. 2 and Tabbimoble Floodway No. 3 to be fully stabilised before the commencement of the next spawning season of the Oxleyan Pygmy Perch;</i></p> <p><i>vii. Measures to ensure that any waters treated on site will be suitable for the Oxleyan Pygmy Perch (based on best available knowledge on the Oxleyan Pygmy Perch and results of monitoring outlined in Condition 6(a)) prior to release from water treatment areas implemented as part of the Pacific Highway Upgrade;</i></p> <p><i>viii. Measures to be implemented for events such as rainfall events and fuel and chemical spills;</i></p> <p><i>ix. Measures to be implemented to monitor, review and update the effectiveness of the sediment and erosion control measures implemented.</i></p>		
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<p>OFFSET PLAN</p> <p>Condition 7. <i>The person taking the action must submit an Offset Plan for approval by the Minister within 12 months of the date of this approval to provide for the conservation and management in perpetuity of a minimum of 152 hectares of habitat for the Grey-headed Flying-fox, the Spotted-tail Quoll, the Regent Honeyeater and the Swift Parrot. The approved plan must be implemented. The Offset Plan must include, but not be limited to:</i></p> <ul style="list-style-type: none"> a. <i>The acquisition and conservation of land containing a minimum of 152 hectares of habitat for the Grey-headed Flying-fox, the Spotted-tail Quoll, the Regent Honeyeater and the Swift Parrot that is of equal or greater quality to that to be removed for the Pacific Highway Upgrade;</i> b. <i>The land referred to at condition 7(a) must be located within 50km of the Pacific Highway upgrade at Devil's Pulpit, unless otherwise agreed to by the department.</i> c. <i>The land referred to at condition 7(a) must be protected by a legal instrument under relevant nature conservation legislation on the title of the area within 18 months of the date of this approval.</i> d. <i>The instrument referred to in Condition 7(c) must provide for:</i> <ul style="list-style-type: none"> i. <i>The protection of the land in perpetuity</i> ii. <i>Prevent any future development</i> 	<p>Compliant</p>	<p>Following three requests for extensions of time to submit the Offset Plan, a draft Offset Plan was submitted to the Department of Environment and the NSW EPA for review on 13 June 2014. No comments were received from the Department of Environment. A final Offset Plan was submitted to the Department of Environment for approval on 17 October 2014. An updated final Offset Plan was submitted to the Department on 15 December 2017. Roads and Maritime received comments on the plan from the Department on 5 October 2018. Roads and Maritime is currently making changes to the plan for resubmission.</p>
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<p><i>activities</i></p> <p><i>iii. Ensure the active management of the land;</i></p> <p><i>e. The land referred to at Condition 7(a) must provide linkages to existing habitat for the species of concern.</i></p> <p><i>f. The Offset Plan must include a clear commitment to ongoing management of the land at Condition 7(a). Management works must be consistent with advice from a suitably qualified expert. These measures must commence within 3 months of the legal protection of the land.</i></p> <p><i>g. The Plan must include key milestones, performance indicators, corrective actions and timeframes for the completion of all actions outlined in the Plan.</i></p> <p><i>h. The Plan must include clear outline of funding for the management in perpetuity of the land at Condition 7(a).</i></p> <p><i>i. The Plan must be developed in consultation with the department.</i></p>		
<p>STANDARD ADMINISTRATIVE CONDITIONS</p> <p><i>Condition 8. Within 10 business days of the substantial commencement of the action, the person taking the action must advise the department in writing of the actual date of substantial commencement.</i></p>	Compliant	The action was substantially commenced on 13 February 2012. The Department was advised of substantial commencement of the action on 21 September 2017.
<p><i>Condition 9. If, after 3 years from the date of this approval, the person taking the action has not</i></p>	Compliant	The action was substantially commenced on 13 February 2012.

<p><i>substantially commenced the action to the satisfaction of the Minister, the person taking the action must obtain the written agreement of the Minister to commence or continue taking the action.</i></p>		
<p><i>Condition 10. Within three months of every 12 month anniversary after the substantial commencement of the action, the person taking the action must submit to the department an annual report addressing compliance with each of the conditions of this approval, including implementation of any management plans that have been approved by the Minister. Annual reports must be provided until the Minister is satisfied that the person taking the action has complied with all conditions of this approval.</i></p>	Compliant	<p>The first annual compliance report for the period February 2012 to February 2013 was submitted on 10 July 2013.</p> <p>The second annual compliance report for the period March 2013 to February 2014 was submitted on 30 May 2014 (with a revised version being sent on 11 August 2014).</p> <p>A third annual compliance report for the period March 2014 – February 2015 was not submitted within three months of the third 12 month anniversary and was therefore a non-compliance.</p> <p>A fourth annual compliance report for the period March 2015 – February 2016 was not submitted within three months of the fourth 12 month anniversary and was therefore a non-compliance.</p> <p>These reports were submitted in March 2017 addressing those non-compliances.</p>
<p><i>Condition 11. Upon the direction of the Minister, the person taking the action 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.</i></p>	Compliant	<p>No direction from the Minister has been received to undertake an independent audit of compliance with the conditions of approval. Regardless of this, independent audits of the project have been regularly undertaken and results of these are available on request.</p>
<p><i>Condition 12. If the person taking the action wishes to carry out any activity otherwise than in accordance with the plans, reports or strategies referred to in this approval, the person taking the action must submit for the Minister's approval a revised version of any such plan, report or strategy. The varied activity shall not</i></p>	Compliant	<p>No activities have been carried out otherwise than in accordance with the Conditions of Approval during the reporting period.</p>

<p><i>commence until the Minister has approved the varied plan, report or strategy in writing. If the Minister approves such a revised plan, report or strategy, that plan, report or strategy must be implemented in place of the plan, report or strategy originally approved.</i></p>		
<p><i>Condition 13. If the Minister believes that it is necessary or desirable for the better protection of listed migratory species and listed threatened species and ecological communities to do so, the Minister may request that the person taking the action make specified revisions to the plans, report or strategies approved pursuant to the conditions of this approval and submit the revised plan, report or strategy for the Minister's approval. The person taking the action must comply with any such request. The revised approved plan, report or strategy must be implemented. Unless the Minister has approved the revised plan, report or strategy, then the person taking the action must continue to implement the plan, report or strategy originally approved under this approval.</i></p>	Compliant	No requests for revisions to approved plans have been received from the Minister to date.
<p><i>Condition 14. The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of this approval, including measures taken to implement the management plans 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 may also be publicised through the general media.</i></p>	Compliant	Noted. All records are available upon request by the Department.