EPBC 2016/7656 Annual Compliance Report

Great Northern Highway Upgrade Stage 2:
Muchea to Wubin – Muchea North

21 September 2018 – 21 September 2019

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1	18/11/2019	Draft for internal review	N/A
2	20/11/2019	Final for publication	N/A

1 INTRODUCTION

Great Northern Highway forms part of the National Highway Network and provides a strategic freight link between Perth and the State's north, as well as Darwin and the Northern Territory. Between 2000 and 2009, Stage One of the Great Northern Highway Muchea to Wubin Upgrade project was completed, which saw 76 km of the highway upgraded to National Highway standard.

In 2014 a comprehensive planning review was undertaken of the full Muchea to Wubin link along the highway. A series of construction packages were prioritised following the review, which included town bypasses, wider roads, more passing lanes, flattening crests and easing curves, safer roadsides, more rest stops and additional facilities for heavy vehicles.

Jointly funded by the Australian and Western Australian Governments, the $384.8 million project will improve road safety, increase freight efficiency and reduce traffic delays, improve travel times and access, improve roadside amenities, and enhance the environmental value of roadsides.

The key objectives for the project include:

- Improved safety
- Increased freight efficiency and reduced traffic delays
- Improved network reliability - improving travel times and enhancing network access
- Enhanced travel wellbeing - improvements in roadside amenities for rest and driver information
- Contribution to sustainable and viable communities - by balancing community concerns, economic, community safety and network access issues
- Enhancement of the environment - by undertaking practices to retain and improve the environmental value of roadsides.

1.1 Approval under the Environment Protection and Biodiversity Conservation Act 1999

Proposed construction of the Muchea North (Old Gingin Road to Chittering Roadhouse) package was referred to the Department of the Environment and Energy (DoEE; 'the Department') for assessment under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The referral was determined to be a Controlled Action with the controlling provision being "listed threatened species and communities"—namely, Carnaby's Cockatoo (*Calyptorhyncus latirostris*) and the Star Sun-orchid (*Thelymitra stellata*). The referred works were assessed through Preliminary Documentation. The Department issued conditioned approval for these works to proceed on 10 August 2018 (EPBC 2016/7656).

1.1.1 Purpose of this Report

Construction of the Controlled Action commenced on 21 September 2018. This compliance report has been produced as required by Condition 12 of EPBC approval 2016/7656. Table 1 of this report outlines the compliance with each condition of approval over the 12-month period between 21 September 2018 and 21 September 2019.

The construction of the Controlled Action has not yet been completed, hence reporting will continue annually under Condition 12 of EPBC 2016/7656.

2 COMPLIANCE

Condition No.	Condition	Status
1	The approval holder must not clear more than 52.5 hectares of Carnaby's Black Cockatoo habitat within the project area and can only clear up to six of the hollows identified as 'hollow with evidence of use' and up to eight of the hollows identified as 'suitable hollows', in Attachment 1.	Compliant. 41.29 ha of Carnaby's Black Cockatoo habitat; 5 hollows identified as 'hollow with evidence of use'; and 7 hollows identified as 'suitable hollows' have been cleared (**Attachment 1**).
2	To mitigate impacts to the Carnaby's Black Cockatoo, the approval holder must undertake all efforts to avoid clearing the known nesting hollow and suitable nesting hollow identified in Attachment 2. Within one month of the completion of clearing, the approval holder must provide the Department with evidence that these hollows have not been cleared or a detailed assessment of why clearing of these hollows could not be avoided.	Compliant. The suitable nesting hollow and known nesting hollow identified in Attachment 2 have not been cleared, as confirmed to the Department in an email on 11 April 2019 (**Attachment 2**).
3	Within 7 days prior to clearing of any area of Carnaby's Black Cockatoo habitat, the approval holder must investigate and document all potential nesting trees within the area to be cleared to determine if there are any hollows that are being utilised, or are capable of being utilised, by the Carnaby's Black Cockatoos for nesting. The investigation must be undertaken by a suitably qualified person.	Compliant. All potential nesting trees within the approved area to be cleared were investigated no more than 7 days prior to each clearing event (**Attachment 3**). Survey and clearing commencement dates are summarised as follows: • Inspection on 19 September 2018 • Clearing on 21 September 2018 Fauna specialists (Evan Webb and Colleen McDonald of 360 Environmental Pty Ltd) were commissioned by the Contractor (WBHO) to undertake a pre-clearing assessment. A report was provided which is included as **Attachment 3** which

Condition No.	Condition	Status
	a. If any Carnaby's Black Cockatoo(s) is detected utilising any hollow in any tree, the approval holder must: i. clearly identify and mark the identified nesting tree ii. maintain a register of nesting trees iii. only clear the identified nesting tree and vegetation within a 10 metre radius of the tree, if a suitably qualified person has verified that the hollow in the tree are no longer being used by the Carnaby's Black Cockatoo iv. record the location of any known nesting hollow or suitable nesting hollow, identified during the investigations, that are additional to the nesting hollows identified in Attachment 1.	addresses all the requirements of this Condition. Appendix A of that report provides the information required to demonstrate the appropriate qualifications of the fauna specialists engaged and confirmation that they meet the definition of 'suitably qualified person'. The report provided as evidence in **Attachment 3** demonstrates that no clearing of any black cockatoo nesting tree identified as being utilised by a black cockatoo was cleared until it was confirmed that any chick(s) had fledged the hollow. A summary register of how these trees have been managed has been provided as part of **Attachment 3** for ease of reference.
4	To mitigate and offset the loss of known nesting hollows and suitable nesting hollow the approval holder must: a. install at least three artificial nesting hollows for each known nesting hollow and suitable nesting hollow cleared b. install at least ten of the artificial nesting hollows required by Condition 4.a prior to the clearing of any known nesting hollow or suitable nesting hollow with all remaining hollows to be installed prior to the beginning of the next breeding	Compliant. a. A total of 12 trees with either known or suitable nesting hollows were cleared. Thirty-nine (39) artificial nest boxes (Cockatubes®, fabricated by Landcare Serpentine Jarrahdale) have been installed at locations as provided in the Evidence of Installation Record attached as part of **Attachment 4**. An artificial nest box register has been maintained, which is also provided in **Attachment 4**. b. As above c. Main Roads WA commissioned Phoenix Environmental to undertake baseline monitoring of confirmed and suitable nesting hollows recorded within the Muchea North EPBC Act Approval Boundary and wider baseline survey study area. The initial baseline monitoring program was conducted in the 2017-

Condition No.	Condition	Status
	season following the commencement of the action. c. maintain the pre-impact breeding density of the Carnaby's Black Cockatoo within the project area by undertaking adaptive management of the artificial nesting hollows to maximise the likelihood that the installed artificial nesting hollows are used by the Carnaby's Black Cockatoo d. adaptive management may cease when at least one artificial nesting hollow for each known nesting hollow cleared has shown evidence of use by the Carnaby's Black Cockatoo, as verified by the suitable qualified person, for three consecutive years; the artificial nesting hollow in use for three consecutive years need not be the same artificial nesting hollow each year e. if after nine years from commencement of the action the outcome identified in Condition 4.d is not met, the approval holder must i. submit to the Minister for approval the details of an offset that meets the requirements of the EPBC Environmental Offsets Policy and will compensate for the permanent loss of known Carnaby's Black Cockatoo breeding hollows	2018 breeding season (August 2017 – February 2018) and assessed hollow usage of suitable nesting hollows and hollows with evidence of use within the study area. Phoenix was subsequently commissioned to undertake a second year of monitoring for hollow usage within the study area in the 2018-2019 breeding season. The resulting report (**Attachment 4**) incorporates the results of the second monitoring season into the nesting hollow usage dataset for Muchea North. d. The required period of three consecutive years has not yet been achieved. e. Not applicable for the 2018-2019 reporting period. f. Main Roads commissioned Phoenix Environmental Sciences to undertake the required monitoring as provided in **Attachment 4**.

Condition No.	Condition	Status
	ii. submit to the Department a detailed assessment of the factors that cause the failure to achieve the outcome identified in Condition 4.d f. Each artificial nesting hollow installed must: i. be inspected at least twice a year by a suitably qualified person during the peak breeding season to record any evidence of use by the Carnaby's Black Cockatoo and to identify any maintenance requirements ii. be monitored and maintained in accordance with relevant artificial hollow guidance for the life of the approval, with maintenance actions, if required, undertaken outside of the breeding season and before the commencement of the next breeding season iii. not be installed in a manner that requires additional clearing of Carnaby's Black Cockatoo habitat or within 10 metres of the edge of the road seal to reduce the risk of vehicle strike.	
5	For the purposes of Condition 4, the maximum number of hollows to be cleared that are additional to the hollows identified in Attachment 1 must not exceed four and at least	Compliant.

Condition No.	Condition	Status
	half of all artificial nesting hollows installed must be installed within 500 m of the project area.	A total of twelve trees were felled as part of the clearing activities, therefore not exceeding the number of trees identified in Attachment 1. Evidence of this is provided in **Attachment 3**. Thirty four (34) of the thirty nine (39) artificial nesting hollows have been installed within 500 m of the project area (**Attachment 5**).
6	All data, enquiries and findings of the monitoring required by Condition 4 must be provided to the Department, DBCA and published on the approval holder's website to contribute to broader research into the use of artificial nesting hollows by the Carnaby's Black Cockatoo. Publication must occur within one year of the environmental outcome identified in Condition 4.d being achieved or after nine years from the commencement of the action if the environment outcome is not met by that time.	Not applicable. A time period of one year from the outcome identified in Condition 4.d has not yet been reached.
7	To mitigate impacts to the Carnaby's Black Cockatoo, the approval holder must revegetate at least 19.69 hectares of land with species that are known to provide foraging and breeding habitat for the Carbaby's Black Cockatoo, in the area identified in Attachment 3. The objective of revegetation works is to re-establish a self-sustaining vegetation cover, integrate with the surrounding ecosystem, which provides Carnaby's Black Cockatoo habitat. The approval holder must adhere to the following during all revegetation works:	Compliant. a. Revegetation activities commenced on 20 August 2019, approximately 11 months after commencement of the action. b. No flora species identified as Carnaby's Black Cockatoo habitat have or will be planted within 10 metres of the edge of the road seal. A final revegetation report including figures will be produced to demonstrate compliance with this Condition. c. Revegetation works commenced in August 2019 and are not yet complete. d. Completion criteria have yet to be achieved. e. Completion criteria have yet to be assessed.

Condition No.	Condition	Status
	a. revegetation must begin within one year of commencement of the action and must have commenced within all the areas identified for revegetation in Attachment 3, within one year of the completion of construction b. flora species identified as Carnaby's Black Cockatoo habitat must not be planted within 10 metres of the edge of the road seal to reduce the risk of vehicle strike c. revegetation works may cease once a suitably qualified person has verified that the revegetated areas meet the completion criteria d. once the completion criteria have been achieved, all areas of revegetation must be inspected once every 2 years, during Spring, for at least a further 20 years to ensure the completion criteria are being maintained e. undertaken corrective actions to improve vegetation quality within the revegetated areas, within 3 months of becoming aware that an area of revegetation no longer meets the completion criteria; corrective actions may cease once the completion criteria have again been achieved.	
8	To mitigate impacts to the Carnaby's Black Cockatoo, the approval holder must prepare and submit a *Construction Environmental Management Plan* (CEMP) for the approval of	Compliant.

Condition No.	Condition	Status
	the Minister. The approval holder must not commence the action unless the Minister has approved the CEMP. The approved CEMP must be implemented. The CEMP must be prepared in accordance with the Department's Environmental Management Plan Guidelines and include, but not be limited to: a. design principles and practices to minimise clearing of Carnaby's Black Cockatoo habitat – for example, road micro-alignment, traffic management alternatives to side roads b. measures to prevent impacts to Carnaby's Black Cockatoo habitat during construction, including to: i. prevent and/or control site access, weeds, *Phytophthora* dieback, erosion, dust and fire ii. delineate vegetation to be retained through, for example, the erection of temporary fencing or signage to avoid accidental clearing or disturbance outside of the impact area c. management measures, including in relation to fencing and access controls, to permanently restrict access to adjacent road reserves	The Minister approved the CEMP on 5 September 2018 (**Attachment 6**) and the action commenced on 21 September 2019. Main Roads has implemented the approved CEMP.

Condition No.	Condition	Status
	d. objectives, targets and completion criteria for post construction rehabilitation measures such as site clean-up and weed management, including information on the mapping, monitoring and removal of noxious weeds e. objectives and targets for landscaping and revegetation works required by Condition 7, including details on site preparation works, seeding planting programs, success rates, ongoing management post establishment and details of replanting requirements if success rates are not achieved f. clear objectives and performance indicators for all management actions, mitigation measures and practices prescribed by the CEMP including details of the monitoring to be undertaken to demonstrate the effectiveness of the measures g. corrective actions for circumstances where an action, mitigation measure or practice prescribed by the CEMP fails to meet, or is unlikely to meet, its prescribed objectives, and trigger action points at which these corrective actions will be implemented h. timeframes for implementing the above measures.	
9	To compensate for the loss of up to 52.5 hectares of foraging habitat, and 744 potential	Compliant.

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	breeding trees for the Carnaby's Black Cockatoo the approval holder must, within one year after the commencement of the action, provide the Department with the offset attributes, shapefiles and textual descriptions and maps to clearing define the location and boundaries of the Ioppolo Road Offset and Banovich Road Offset, that the approval holder has transferred to the DBCA.	Main Roads provided a letter and information to the Department on 12 November 2018 to satisfy the requirements of this Condition. Please see **Attachment 7** for a copy of the letter and associated information as follows: • Offset attributes table, Shapefile and map defining the location and boundary of the offset area • A textual description of the offset property including relevant figure and biological surveys.
10	Within 30 days after the commencement of the action, the approval holder must advise the Department in writing of the actual date of commencement.	Compliant. The action commenced on 21 September 2018, with written notification provided to the Department by email on 27 September 2018 (**Attachment 8**).
11	The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the plan required by this approval (Condition 8), and make them available upon request to the Department. Such records may be subject to audit by the Department of an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of this approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	Compliant. Main Roads has maintained records in accordance with this condition and their legal obligations under the WA *State Records Act 2000*.
12	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,	Compliant. This 2018/2019 Compliance Assessment Report will be published on the Main Roads website at the same time as the provision of this report to the Department.

Condition No.	Condition	Status
	including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. Reports must remain on the website for the life of this approval. The approval holder must continue to comply with this condition until such time as agreed to in writing by the Minister.	This is the first Compliance Assessment Report for this approval.
13	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. The Minister has not yet directed Main Roads to conduct an independent audit of compliance with EPBC 2016/7761's conditions of approval.
14	The approval holder may choose to revise a management plan approved by the Minister under Condition 8 without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the revised plan would not be likely to have a new or increased impact. If the approval holder makes this choice they must notify the Department in writing that the approved plan has been revised and provide the Department,	Compliant. The approved CEMP was revised on 25 October 2018. An email was sent to the Department including a letter outlining the differences between the approved and revised plan, the reasons for the revision and an electronic copy of the revised plan. Please see **Attachment 9** for a copy of this letter.

Condition No.	Condition	Status
	at least four weeks before implementing the revised plan, with: a. an electronic copy of the revised plan; b. an explanation of the differences between the revised plan and the approved plan; and c. the reasons the approval holder considers that taking the action in accordance with the revised plan would not be likely to have a new or increased impact.	
15	The approval holder may revoke their choice under Condition 14 at any time by notice to the Department. If the approval holder revokes the choice to implement a revised plan, without approval under section 143A of the Act, the plan approved by the Minister must be implemented.	Not applicable. Main Roads has not elected to revoke their choice under Condition 14.
16	If the Minister gives a notice to the approval holder that the Minister is satisfied that the taking of the action in accordance with the revised plan would be likely to have a new or increased impact, then: a. Condition 14 does not apply, or ceases to apply, in relation to the revised plan; and b. The approval holder must implement the plan approved by the Minister.	Not applicable. No notice from the Minister was received in relation the CEMP amended in accordance with Condition 14.

Condition No.	Condition	Status
	To avoid any doubt, this condition does not affect any operation of Conditions 14 and 15 in the period before the day the notice is given.	
17	Conditions 14, 15 and 16 are not intended to limit the operation of section 143A of the EPBC Act which allows the approval holder to submit a revised plan to the Minister for approval.	Compliant. A revised CEMP was provided to the Department as per Condition 14 above.
18	Unless otherwise agreed to in writing by the Minister, the approval holder must publish all management plans referred to in these conditions of approval on their website for the duration of this approval. Each management plan must be published on the website within 1 month of being approved by the Minister or being submitted under Condition 12 and must remain on the website for the life of this approval.	Compliant. The approved CEMP was first published on Main Roads' website on 2 October 2018. The plan is available here: https://project.mainroads.wa.gov.au/home/gnhmucheatowubin/Pages/enviro.aspx

3 ATTACHMENTS

Attachment	Title
Attachment 1	Carnaby's Black Cockatoo habitat and hollows clearing
Attachment 2	Memo and Cover email closing out Condition 2
Attachment 3	Reports for inspection of potential Carnaby's Black Cockatoo nesting trees before clearing & Summary Register
Attachment 4	Artificial nest box installation evidence (including artificial nest box resister and results of nest box baseline monitoring)
Attachment 5	Artificial nest box installation locations
Attachment 6	Ministerial approval of the CEMP
Attachment 7	Notification to the Department of offset properties
Attachment 8	Notification of commencement of action
Attachment 9	Notification to the Department of CEMP revision

Attachment 1: Carnaby's Black Cockatoo habitat and Trees with suitable hollows clearing

Attachment 2: Reports for inspection of potential Carnaby's Black Cockatoo nesting trees before clearing

Attachment 3: Reports for inspection of potential Carnaby's Black Cockatoo nesting trees before and after clearing (including Summary Register)

Attachment 4: Attachment 4: Artificial nest box installation evidence (including artificial nest box register and results of nest box baseline monitoring)

Attachment 5: Artificial nest box locations

Attachment 6: Ministerial approval of the CEMP

Attachment 7: Notification to the Department of offset properties

Attachment 8: Attachment 8: Notification of commencement of action

Attachment 9: Attachment 9: Notification to the Department of CEMP revision