



mainroads
WESTERN AUSTRALIA

Broome - Cape Leveque Road Upgrade SLK 25 - 102.6 (EPBC 2013/6984)

EPBC Act Compliance Report

Main Roads Western Australia

2 August 2018 – 1 August 2019

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1 INTRODUCTION

1.1 Background

The Cape Leveque Road is located in the Shire of Broome and runs from the Broome Highway, east of Broome townsite, to the northern Dampier Peninsula for a length of approximately 200 kilometres (km). The road is a main transport link, providing access for Aboriginal communities (including Beagle Bay, Lombadina/Djarindjin, Kooljaman and One Arm Point) and outstations, pastoral stations, pearling industries and tourist destinations.

Various sections of the Cape Leveque Road have been upgraded to a sealed standard over the last ten years. Main Roads Western Australia (Main Roads) proposes to upgrade 77.6 km (Straight Line Kilometre (SLK) 25 to 102.6) of the unsealed section of the Cape Leveque Road. The proposed upgrade involves construction of a new road generally parallel to the existing unsealed road. Road user safety and reduced maintenance are two of the key reasons for the proposed upgrade.

1.2 Approval under the *Environment Protection and Biodiversity Conservation Act 1999*

On 3 September 2013, the Department of Environment and Energy (then Department of Sustainability, Environment, Water, Population and Communities) received a referral under the EPBC Act from Main Roads (Main Roads Western Australia 2013) to upgrade the road between SLK 25 and 102.6.

On the 27 September 2013, Main Roads received formal advice from the Department of Environment and Energy (the Department) that the proposed upgrade was considered to be a 'controlled action' requiring assessment and approval under the EPBC Act. The proposed action was assessed at the Preliminary Documentation level of assessment.

Main Roads received approval from the Department on the 6 July 2015 subject to a number of Conditions (EPBC 2013/6984; Department of the Environment 2015). A copy of the Approval Notice is provided in Appendix A.

1.3 Purpose of this Report

This compliance report has been produced as required by Condition 3 of EPBC 2013/6984. Table 1 of this report outlines compliance with each approval condition over the 12 month period between 2 August 2018 and 1 August 2019 since the commencement of action (the reporting period).

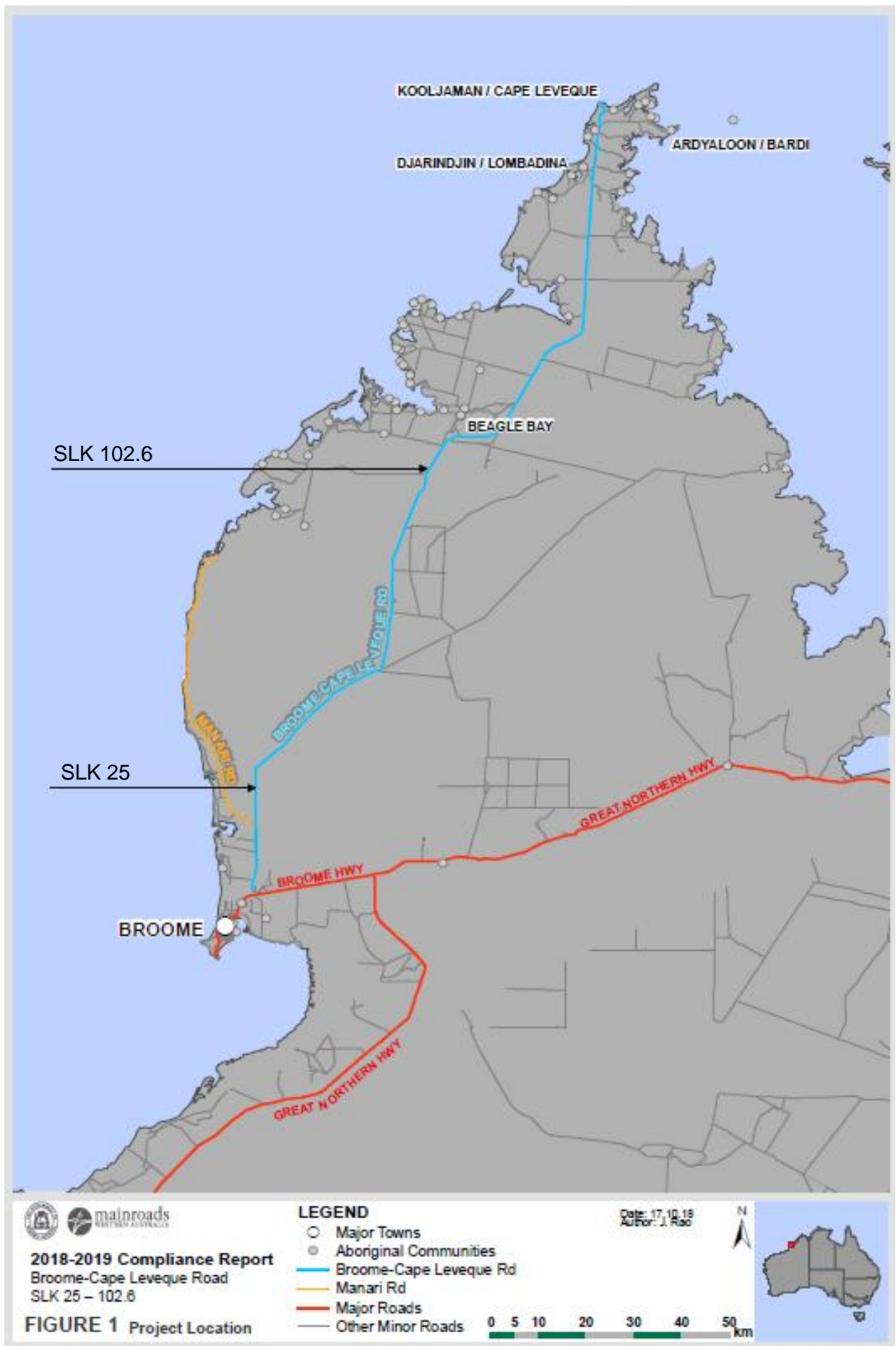


Figure 1. Project Location

2 COMPLIANCE

2.1 Overview of Project Status

The Broome-Cape Leveque Road Upgrade Project aims to both minimise the environmental footprint of works and maximise Aboriginal employment and local businesses for the communities of the Dampier Peninsular. Local engagement, participation and ownership is paramount to ensure social, environmental and economic opportunities are fully utilised.

Pre-construction and construction activities are well underway, with site clearing and preparation works ongoing. All areas cleared of vegetation are inspected beforehand by authorised cultural monitors and rangers undertaking Bilby management. In this context, the vegetation which ranges from eucalypt woodland to pindan grassland with scattered trees and a variably dense, thicket-forming, middle layer of wattles and annual sorghum, is not considered to be of significance. The project site has a relatively uniform environment, dominated by low-relief undulation red sandplains. Annual wildfire and prescribed burning as the primary land management tool, has affected the diversity and structure of cleared areas.

Main Roads engaged the services of Environmental Heritage and Social Impact Services (EHSIS) to ensure the rights and responsibilities of Traditional Owners are respected and upheld. On ground works commenced in March 2019 with nominated cultural heritage monitors providing clearance for the clearing of vegetation along the new road alignment. Additional works included clearing the works footprint for borrow pits, off shoot drains and parking bays.

Based in Beagle Bay, the Nyul Nyul Rangers are contracted via the Kimberley Land Council to deliver specialised Greater Bilby Management, which delivers key components of the Project's Greater Bilby Management Plan. Pre-clearing Greater Bilby surveys by Nyul Nyul Rangers were undertaken in accordance with the Project's Greater Bilby Management Plan. Four large culverts to function as drainage and as fauna underpasses was installed during the reporting period.





There was very little evidence of Greater Bilby activity identified within the project area, in terms of recent and older burrows, scats and tracks. There were no active burrows requiring any Greater Bilby to be relocated from site this reporting period. No Greater Bilby individuals were trapped in the 2019 reporting period.












Figure 2. Aerial Imagery of clearing works at Design, and Construction Phases










2.2 Compliance against Conditions of EPBC 2013/6984







Table 1: Compliance against EPBC 2013/6984 Conditions








Condition		Compliance	Evidence
General Conditions			
1	Within 10 days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement.	 Compliant	<p>As per the definition of 'Commencement of Action' in EPBC 2013/6984, the Project commenced on 2 August 2017, with the clearing of small amounts of native vegetation for geotechnical investigations.</p> <p>The DotEE were advised of the Commencement of Action via a letter dated 9 August 2017.</p>
2	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plan 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.	 Compliant	<p>Main Roads WA has maintained all records in accordance with this condition and legal obligations, under the <i>State Records Act 2000</i> (Western Australia).</p>
3	Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with the conditions of this approval over the previous 12 months, including implementation of any management plans as specified in the conditions. The compliance reports must remain on their website for a minimum of 12 months (beginning on the date of publication). Non-compliance with any of the conditions of this approval must be reported to the Department at the same time as the compliance report is published. The person taking the action must continue to annually publish the report on their website addressing compliance with each of the conditions of this approval until such time as agreed to in writing by the Minister.	 Non-Compliant	<p>This Report has been prepared pursuant to this condition and will be published on the Main Roads website. However, this report will not be published on the Main Roads WA website prior to the 3 November 2019, and as such Main Roads considers this a non-compliance.</p> <p>Once it was identified that the report was not posted on its website, Main Roads undertook measures for it to be posted as soon as possible.</p>
4	The person taking the action must notify any non-compliance with this approval to the Department in writing within two business days of the person taking the action becoming aware of non-compliance.	 Compliant	<p>Several non-compliances were identified during the reporting period and report to DotEE:</p> <ul style="list-style-type: none"> Condition 12 – clearing of 6.47 ha of vegetation was undertaken between SLK 25 and 84 without conducting pre-clearing Bilby surveys. Condition 4 – the DotEE was not notified of the non-compliance (relating to Condition 12) within the specified two




Condition		Compliance	Evidence
			<p>business days of Main Roads becoming aware of the non-compliance.</p> <ul style="list-style-type: none"> Condition 15(c) – to date no threats management has occurred. <p>These non-compliances were discussed with the DotEE through several letters dated 23 November 2018, 24 January 2019 and 4 February 2019. An inspection of the site was undertaken by DotEE officers on 13 December 2018 and in a letter to Main Roads dated 17 January 2020 it was confirmed that no compliance action would be taken regarding this matter.</p> <p>Main Roads advised the Department of Agriculture, Water and the Environment (DAWE) of the non-compliance with Condition 3 within two business days, i.e. the non-compliance was identified on 19 July 2021 and reported on 21 July 2021.</p>
5	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 of the Minister.	 Not Applicable	The Minister has not requested an independent audit of the Project.
6	If the person taking the action wishes to carry out any activity otherwise than in accordance with the management plan as specified in the conditions, the person taking the action must submit to the Department for the Minister's written approval a revised version of that management plan. The varied activity shall not commence until the Minister has approved the varied management plan in writing. The Minister will not approve a varied management plan unless the revised management plan would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised management plan, that management plan must be implemented in place of the management plan originally approved.	 Not Applicable	No variations to the Management Plans specified in EPBC 2013/6984 have been implemented during the reporting period.
7	If the Minister believes that it is necessary or convenient for the better protection of listed threatened species and communities to do so, the Minister may request that the person taking the action make specified revisions to the management plan specified in the conditions and submit the revised management plan for the Minister's written approval. The person taking the action must comply with any such request. The revised approved management plan must be implemented. Unless the Minister has approved the revised management plan, then the person	 Not Applicable	The Minister has not requested specific revisions to the Management Plans.

Condition		Compliance	Evidence
	taking the action must continue to implement the management plan originally approved, as specified in the conditions.		
8	If, at any time after five years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister.	 Not Applicable	The Commencement of Action date was 2 August 2018, which is within 5 years of the date of approval (6 July 2015)
9	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish the management plan referred to in these conditions of approval on their website. The management plan must be published on the website within one month of being approved. The person taking the action must notify the Department within five business days of publishing the management plan on their website, and the management plan must remain on their website for the period this approval has effect.	 Not Applicable	All Management Plans referred to in EPBC 2013/6984 were published on Main Roads WA's website prior to the reporting period of this report.
Greater Bilby (<i>Macrotis lagotis</i>)			
10	To ensure there is no decline in the local Greater Bilby population as a result of roadkill on the sealed Cape Leveque Road, the person taking the action must submit a Roadkill Monitoring and Adaptive Management Plan (RMAMP) for the Minister's approval. The RMAMP must provide sufficient detail (timing, effort and methodology) to detect the level of impact of roadkill on the local Greater Bilby population during the construction phase and operational phase. Commencement of the action must not occur unless the Minister has approved the RMAMP. The approved RMAMP must be implemented. The RMAMP must:	 Compliant	The RMAMP was submitted for the Minister's approval prior to the reporting period. Minister's Approval was obtained on the 6 July 2015. The following sub-conditions relate to the content of the RMAMP and are therefore considered to not be applicable to this reporting period.
	a. be developed and endorsed by a suitably qualified ecologist and a linear infrastructure ecologist	 Compliant	The RMAMP was approved on the 6 July 2015.
	b. include survey methodology and effort to be implemented that are sufficient to determine the baseline local Greater Bilby population and the location of high density Greater Bilby areas	 Compliant	The RMAMP was approved on the 6 July 2015.
	c. include sufficient monitoring methodology and effort to determine baseline Greater Bilby roadkill rates on the unsealed Cape Leveque Road prior to commencement of the action	 Compliant	The RMAMP was approved on the 6 July 2015.

Condition		Compliance	Evidence
	d. include sufficient monitoring methodology to determine Greater Bilby roadkill rates on the sealed Cape Leveque Road during the construction phase and operational phase	 Compliant	The RMAMP was approved on the 6 July 2015.
	e. include appropriate Greater Bilby roadkill trigger values and adaptive management measures to be implemented should Greater Bilby roadkill trigger values be reached during the construction phase and operational phase	 Compliant	The RMAMP was approved on the 6 July 2015.
	f. include the requirement for ongoing monitoring and adaptive management measures until such time as it can be demonstrated that there is no decline in the local Greater Bilby population as a result of roadkill for three successive years	 Compliant	The RMAMP was approved on the 6 July 2015.
	g. include the requirement to provide a report on survey findings and effectiveness of adaptive management to the Department annually by 30 June each year following commencement of the action, until such time as it can be demonstrated that there is no decline in the local Greater Bilby population as a result of roadkill for three successive years.	 Compliant	The RMAMP was approved on the 6 July 2015.
11	To minimise impacts to the Greater Bilby during the construction phase, the person taking the action must develop a Greater Bilby Induction Training and Awareness Program (GBITAP). The GBITAP must:	 Compliant	A GBITAP has been developed in collaboration with the Nyul Nyul Ranger Group. Nyul Nyul Rangers are actively involved in the project and key to management of the Greater Bilby.
	a. be delivered to all employees and contractors prior to the commencement of the action and to any new employees and contractors arriving during the construction phase	 Compliant	The GBITAP is delivered twice a week at the Broome Project Office to all new starters on the Project as part of the project specific environmental induction.
	b. provide education on the appearance, characteristics and behaviour of the Greater Bilby sufficient to allow employees and contractors to accurately identify the species	 Compliant	The GBITAP includes material on how to identify signs of Bilby as well as their behavioural characteristics.
	c. include maps of high density Greater Bilby areas	 Compliant	The GBITAP and associated Environmental Induction provide details on the Project's Construction EMP which contains maps of high density areas.
	d. institute a signposted speed limit of no greater than 60 km/h, along with educational signage to increase awareness of Greater Bilby presence, at high	 Compliant	The Project operates with between a 60 km/h to 40 km/h signposted speed limit at all construction areas, depending on where personnel are operating. Speed limits are signposted with traffic control signage.

Condition	Compliance	Evidence
density Greater Bilby areas and 200m either side of high density Greater Bilby areas to be observed by all employees and contractors	Compliant	
e. include instructions on threats to the Greater Bilby and how to avoid or reduce impacts to the Greater Bilby through measures including, but not limited to, road awareness and waste management.	 Compliant	The GBITAP and associated Environmental Induction provide details on the Project's Construction EMP which contains management measures that are communicated to personnel working on the road. Measures include waste management, roadkill and sighting reporting system.
12 To minimise impacts to the Greater Bilby as a result of onsite works during the construction phase, the person taking the action must ensure that a suitably qualified ecologist implements the <i>Cape Leveque Road Greater Bilby Relocation Protocol, October 2014</i> in conducting pre-clearance surveys and relocation of Greater Bilby individuals, if present. All Greater Bilby deaths must be recorded.	 Compliant	<p>Main Roads has engaged the services of suitably qualified ecologists to manage the trapping and relocation program.</p> <p>No Greater Bilby deaths were recorded. An updated protocol is being prepared in consultation with the Department of Biodiversity, Conservation and Attractions (DBCA), Environs Kimberley and qualified ecologists.</p> <p>Evidence of the Trapping and Relocation Protocol being carried out (in a previous survey period) is provided in Appendix B.</p>
13 To minimise impacts to the Greater Bilby of the sealed Cape Leveque Road during the operational phase, the person taking the action must ensure that the Cape Leveque Road upgrade is designed, constructed and maintained in a manner that minimises the potential for Greater Bilby roadkill from public use of the sealed road through avoidance, deterrence and increased visibility, including in particular:	 Not Applicable	The road is still under construction and therefore this condition is currently not applicable.
a. installation of signage educating the public of Greater Bilby presence at high density Greater Bilby areas and 200m either side of high density Greater Bilby Areas	 Not Applicable	The construction of the road is not at a stage where these measures are required
b. the use of coloured pavement at high density Greater Bilby areas and 200m either side of high density Greater Bilby areas	 Not Applicable	The construction of the road is not at a stage where these measures are required
c. the use of audible rumble strips at high density Greater Bilby areas and 50m either side of high density Greater Bilby areas.	 Not Applicable	The construction of the road is not at a stage where these measures are required

Condition		Compliance	Evidence
14	In order to minimise the potential of the proposed action to facilitate the increased spread of feral cats, foxes and weeds, the person taking the action must:	 Compliant	Effective management of feral cats, foxes and weeds have been implemented.
	a. fence all standing pools of water resulting from the action	 Compliant	No dams were constructed along the project during this reporting period. All dams previously constructed have been fenced (Appendix C).
	b. remove or fence all rubbish generated as a result of the action at the end of each working day	 Compliant	All rubbish is appropriately contained in closed bins and removed off-sight. All food waste is bagged for disposal. No feral animals have been recorded at rubbish disposal points.
	c. weeds must be managed and controlled in accordance with the Cape Leveque Road Upgrade Revegetation Management Plan, October 2014.	 Not Applicable	No weeds have been recorded in the clearing area as of the reporting period.
Offsets			
15	To offset the residual significant impact to the Greater Bilby, the person taking the action must ensure that the offsets program is undertaken by a suitably qualified ecologist, including:	 Compliant	The offset program is being undertaken and managed by the DBCA.
	a. a baseline survey to determine the area of occupancy of the Greater Bilby and its threats on the Dampier Peninsula must be developed and undertaken in conjunction with DPaW and Traditional Owner Rangers. The survey must use established techniques and record signs of Greater Bilby, signs of introduced predators, habitat characteristics, fire history and grazing pressure. This baseline survey must be undertaken on SLK 90-102.6 prior to the commencement of the action. The baseline survey must be undertaken on SLK 25-90 prior construction occurring in SLK 25-90.	 Not Applicable	The DBCA, in collaboration with local Ranger groups and NGOs are currently undertaking occupancy surveys across the Dampier Peninsula which commenced in early 2017. Survey techniques were developed by the DBCA. In addition to this, Main Roads commissioned GHD Pty Ltd to undertake a baseline Greater Bilby Survey on the SLK 25 – 102.6 section between October and December 2015. As these actions were completed prior to the reporting period, this condition is considered 'Not Applicable' for the purpose of this Report.
	b. an annual and ongoing survey must be developed and implemented in conjunction with DPaW and Traditional Owner Rangers. This survey must commence within six months of completion of the baseline survey and continue for at least two years, and monitor:	 Compliant	The offset program is being undertaken and managed by the DBCA who are implementing this with local Ranger groups.

Condition	Compliance	Evidence
i. at least four locations of the Greater Bilby population using DNA fingerprinting techniques ii. the population of introduced predators through the use of camera traps iii. grazing pressure, food resources and fire history.		
c. a threat management program must be submitted to the Minister for approval prior to implementation. The threat management program must be developed and implemented in conjunction with DPaW and Traditional Owner Rangers and must address either introduced predators, fire regimes or grazing pressure or a combination of these threats at high priority sites for the Greater Bilby. The threat management program must include an adaptive management component. Threat management must commence within one year of commencement of the action and continue for at least one year. At least \$120,000 is to be spent on direct threat abatement action per year of the threat management program	 Non-Compliant	<p>As part of the offset program funding arrangement, the DBCA are responsible for developing a Threat Management Plan (TMP) based on the findings of on-ground surveys. The TMP was completed in March 2019. The TMP was submitted to the DoEE on 19 March 2019 for the Minister's approval.</p> <p>Main Roads has extensively consulted with DAWE regarding its eligibility to comply with the condition, given DBCA was responsible for preparing the TMP. Previous non-compliance with this condition has been reported within previous compliance reports. It is worth noting that the 'formal' commencement of action consisted of very minor preliminary works, including test pitting (and collection of soil samples for geotechnical investigation) and the clearing of 0.4 ha for the construction of a single dam. Practical commencement of action was in May 2017.</p>
d. at a minimum, \$600,000 is to be provided to DPaW to enable development and implementation of the offsets program. Evidence of expenditure must be provided to the Minister within three months of the final payment	 Not Applicable	<p>Main Roads has provided the DBCA with the stated funds in two instalments. The final instalment was paid to the State Offset Fund on 10 May 2016 for release to DBCA once specific milestones are completed.</p> <p>As this condition was satisfied prior to the reporting period, it is considered 'Not Applicable' for the purpose of this report.</p>
e. provision of information to the annual compliance report required by the conditions attached to this approval reporting on the survey findings, ongoing monitoring and effectiveness of adaptive management measures to address threats to the Greater Bilby, for the duration that the offsets program is implemented.	 Compliant	<p>Results for the annual surveys and progress of the Dampier Peninsula Bilby Project is included in Appendix D.</p>

APPENDIX A – EPBC 2013/6984 Approval Notice



Australian Government
Department of the Environment

Approval

Cape Leveque Road upgrade (SLK 25-102.6) Shire of Broome, Western Australia (EPBC 2013/6984)

This decision is made under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999*.

Proposed action

person to whom the approval is granted Main Roads Western Australia

proponent's ABN 50 860 676 021

proposed action To upgrade approximately 77.6 kilometres of Cape Leveque Road (SLK 25 – 102.6) within the Shire of Broome, Western Australia; as described in the referral received by the Department on 3 September 2013 [See EPBC Act referral 2013/6984].

Approval

Controlling Provision	Decision
Listed threatened species and communities (sections 18 & 18A)	Approved
Listed migratory species (sections 20 & 20A)	Approved

conditions of approval

This approval is subject to the conditions specified below.

expiry date of approval

This approval has effect until 31 December 2035.

Decision-maker

name and position Dr Simon Banks
Assistant Secretary
Assessments (NSW/ACT) and Fuel Branch

signature

date of decision 6 July 2015

Conditions attached to the approval

1. Within 10 days after the **commencement of the action**, the person taking the action must advise the **Department** in writing of the actual date of commencement.
2. The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of **approval**, including measures taken to implement the management plan 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.
3. Within three months of every 12 month anniversary of the **commencement of the action**, the person taking the action must publish a report on their website addressing compliance with the conditions of this **approval** over the previous 12 months, including implementation of any management plans as specified in the conditions. The compliance reports must remain on their website for a minimum of 12 months (beginning on the date of publication). Non-compliance with any of the conditions of this **approval** must be reported to the **Department** at the same time as the compliance report is published. The person taking the action must continue to annually publish the report on their website addressing compliance with each of the conditions of this **approval** until such time as agreed to in writing by the **Minister**.
4. The person taking the action must notify any non-compliance with this **approval** to the **Department** in writing within two business days of the person taking the action becoming aware of non-compliance.
5. 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 of the **Minister**.
6. If the person taking the action wishes to carry out any activity otherwise than in accordance with the management plan as specified in the conditions, the person taking the action must submit to the **Department** for the **Minister's** written approval a revised version of that management plan. The varied activity shall not commence until the **Minister** has approved the varied management plan in writing. The **Minister** will not approve a varied management plan unless the revised management plan would result in an equivalent or improved environmental outcome over time. If the **Minister** approves the revised management plan, that management plan must be implemented in place of the management plan originally approved.
7. If the **Minister** believes that it is necessary or convenient for the better protection of listed threatened species and communities to do so, the **Minister** may request that the person taking the action make specified revisions to the management plan specified in the conditions and submit the revised management plan for the **Minister's** written approval. The person taking the action must comply with any such request. The revised approved management plan must be implemented. Unless the **Minister** has approved the revised management plan, then the person taking the action must continue to implement the management plan originally approved, as specified in the conditions.

8. If, at any time after five years from the date of this **approval**, the person taking the action has not **substantially commenced** the action, then the person taking the action must not **substantially commence** the action without the written agreement of the **Minister**.
9. Unless otherwise agreed to in writing by the **Minister**, the person taking the action must publish the management plan referred to in these conditions of **approval** on their website. The management plan must be published on the website within one month of being approved. The person taking the action must notify the **Department** within five business days of publishing the management plan on their website, and the management plan must remain on their website for the period this **approval** has effect.

Greater Bilby (*Macrotis lagotis*)

10. To ensure there is no decline in the **local Greater Bilby population** as a result of **roadkill** on the sealed **Cape Leveque Road**, the person taking the action must submit a Roadkill Monitoring and Adaptive Management Plan (RMAMP) for the **Minister's** approval. The RMAMP must provide sufficient detail (timing, effort and methodology) to detect the level of impact of **roadkill** on the **local Greater Bilby population** during the **construction phase** and **operational phase**. **Commencement of the action** must not occur unless the **Minister** has approved the RMAMP. The approved RMAMP must be implemented. The RMAMP must:
 - a. be developed and endorsed by a **suitably qualified ecologist** and a **linear infrastructure ecologist**
 - b. include survey methodology and effort to be implemented that are sufficient to determine the baseline **local Greater Bilby population** and the location of **high density Greater Bilby areas**
 - c. include sufficient monitoring methodology and effort to determine baseline Greater Bilby **roadkill** rates on the unsealed **Cape Leveque Road** prior to **commencement of the action**
 - d. include sufficient monitoring methodology to determine Greater Bilby **roadkill** rates on the sealed **Cape Leveque Road** during the **construction phase** and **operational phase**
 - e. include appropriate Greater Bilby **roadkill** trigger values and adaptive management measures to be implemented should Greater Bilby **roadkill** trigger values be reached during the **construction phase** and **operational phase**
 - f. include the requirement for ongoing monitoring and adaptive management measures until such time as it can be demonstrated that there is no decline in the **local Greater Bilby population** as a result of **roadkill** for three successive years
 - g. include the requirement to provide information to the annual compliance report required by the conditions attached to this **approval** reporting on survey findings, ongoing monitoring and effectiveness of adaptive management, until such time as it can be demonstrated that there is no decline in the **local Greater Bilby population** as a result of **roadkill** for three successive years.

11. To minimise impacts to the Greater Bilby during the **construction phase**, the person taking the action must develop a Greater Bilby Induction Training and Awareness Program (GBITAP). The GBITAP must:
 - a. be delivered to all **employees and contractors** prior to the **commencement of the action** and to any new **employees and contractors** arriving during the **construction phase**
 - b. provide education on the appearance, characteristics and behaviour of the Greater Bilby sufficient to allow **employees and contractors** to accurately identify the species
 - c. include maps of **high density Greater Bilby areas**
 - d. institute a signposted speed limit of no greater than 60km/hr, along with educational signage to increase awareness of Greater Bilby presence, at **high density Greater Bilby areas** and 200m either side of **high density Greater Bilby areas** to be observed by all **employees and contractors**
 - e. include instructions on threats to the Greater Bilby and how to avoid or reduce impacts to the Greater Bilby through measures including, but not limited to, road awareness and waste management.
12. To minimise impacts to the Greater Bilby as a result of onsite works during the **construction phase**, the person taking the action must ensure that a **suitably qualified ecologist** implements the *Cape Leveque Road Greater Bilby Relocation Protocol, October 2014* in conducting pre-clearance surveys and relocation of Greater Bilby individuals, if present. All Greater Bilby deaths must be recorded.
13. To minimise impacts to the Greater Bilby of the sealed **Cape Leveque Road** during the **operational phase**, the person taking the action must ensure that the **Cape Leveque Road** upgrade is designed, constructed and maintained in a manner that minimises the potential for Greater Bilby **roadkill** from public use of the sealed road through avoidance, deterrence and increased visibility, including in particular:
 - a. installation of signage educating the public of Greater Bilby presence at **high density Greater Bilby areas** and 200m either side of **high density Greater Bilby areas**.
 - b. the use of **coloured pavement** at **high density Greater Bilby areas** and 200m either side of **high density Greater Bilby areas**
 - c. the use of audible rumble strips at **high density Greater Bilby areas** and 50m either side of **high density Greater Bilby areas**.
14. In order to minimise the potential of the proposed action to facilitate the increased spread of feral cats, foxes and weeds, the person taking the action must:
 - a. **fence** all **standing pools** of water resulting from the action
 - b. remove or **fence** all **rubbish** generated as a result of the action at the end of each working day
 - c. manage and control weeds in accordance with the *Cape Leveque Road Upgrade Revegetation Management Plan, October 2014*.

Offsets

15. To offset the residual significant impact to the Greater Bilby, the person taking the action must ensure that the **offsets program** is undertaken by a **suitably qualified ecologist**, including:
- a. a baseline survey to determine the area of occupancy of the Greater Bilby and its threats on the Dampier Peninsula must be developed and undertaken in conjunction with **DPaW** and Traditional Owner Rangers. The survey must use established techniques and record signs of Greater Bilby, signs of introduced predators, habitat characteristics, fire history and grazing pressure. This baseline survey must be undertaken on SLK 90-102.6 prior to **commencement of the action**. The baseline survey must be undertaken on SLK 25-90 prior **construction** occurring in SLK 25-90.
 - b. an annual and ongoing survey must be developed and implemented in conjunction with **DPaW** and Traditional Owner Rangers. This survey must commence within six months of completion of the baseline survey and continue for at least two years, and monitor:
 - i. at least four locations of the Greater Bilby population using DNA fingerprinting techniques
 - ii. the population of introduced predators through the use of camera traps
 - iii. grazing pressure, food resources and fire history.
 - c. a threat management program must be submitted to the **Minister** for approval prior to implementation. The threat management program must be developed and implemented in conjunction with **DPaW** and Traditional Owner Rangers and must address either introduced predators, fire regimes or grazing pressure or a combination of these threats at high priority sites for the Greater Bilby. The threat management program must include an adaptive management component. Threat management must commence within one year of **commencement of the action** and continue for at least one year. At least \$120,000 is to be spent on direct threat abatement action per year of the threat management program
 - d. at a minimum, \$600,000 is to be provided to **DPaW** to enable development and implementation of the **offsets program**. Evidence of expenditure must be provided to the **Minister** within three months of the final payment
 - e. provision of information to the annual compliance report required by the conditions attached to this **approval** reporting on the survey findings, ongoing monitoring and effectiveness of adaptive management measures to address threats to the Greater Bilby, for the duration that the **offsets program** is implemented.

Definitions:

- a) **Approval:** The approval to take the approved action under section 133 of the EPBC Act.
- b) **Cape Leveque Road:** The approximately 77.6km length of Cape Leveque Road between SLK 25 and 102.6, illustrated in Attachment F of the referral, and any amendments.
- c) **Coloured pavement:** Pavement of a shade that improves the visibility of the Greater Bilby by increasing the colour contrast between the species and the road surface.
- d) **Commencement of the action:** The clearing of any vegetation or construction of any infrastructure, excluding fences and signage, associated with the proposed action.
- e) **Construction:** Includes any preparatory works required to be undertaken including clearing vegetation, the erection of any onsite temporary structures and the use of heavy duty equipment for the purpose of breaking the ground or laying sealed road.
- f) **Construction phase:** The time period from initial clearing of vegetation, breaking of ground or erection of onsite structures (whichever occurs first) until such time as the **Cape Leveque Road** upgrade is completed, all temporary onsite structures are removed and the road is open to the public and fully operational. The **construction phase** does not include regular road maintenance works.
- g) **Department:** The Australian Government Department administering the *Environment Protection and Biodiversity Conservation Act 1999*.
- h) **DPaW:** Western Australian Department of Parks and Wildlife and successor agencies.
- i) **Employees and contractors:** Refers to any Main Roads Western Australia employees or employees contracted by Main Roads Western Australia working onsite.
- j) **Fence:** Provision of a barrier sufficient to prevent access by feral cats and foxes.
- k) **High density Greater Bilby area:** Any 6ha area that includes or is immediately adjacent to the **proposed disturbance route**, containing three or more signs of Greater Bilby. Signs of Greater Bilby may include sightings (in person or via camera), active burrows, inactive burrows, diggings, scratching or scats.
- l) **Linear infrastructure ecologist:** Refers to an independent person, approved by the **Minister**, with relevant tertiary qualifications and a minimum of five years experience in the ecological impacts and management of linear infrastructure.
- m) **Local Greater Bilby Population:** The population size and distribution of Greater Bilby that is determined by a **suitably qualified ecologist** as likely to be impacted by the proposed action as derived from surveys conducted prior to referral and the baseline population surveys required by this **approval**.
- n) **Minister:** The Minister administering the *Environment Protection and Biodiversity Conservation Act 1999* and includes a delegate of the Minister.
- o) **Offsets program:** The program outlined in *Bilby (Macrotis lagotis) Offset Priorities for Dampier Peninsula Populations, West Kimberley, October 2014*, published as part of Preliminary Documentation on Main Roads Western Australia's website.
- p) **Operational phase:** The time period beginning at the completion of the **construction phase** and continuing for the life of the **approval**.

- q) **Proposed disturbance route:** The proposed new road route (including borrow pits) as illustrated in Attachment F of the referral, and any amendments.
- r) **Roadkill:** Vehicle(s) and/or equipment and/or machinery striking, colliding or crushing Greater Bilby in a manner that results in mortality to the Greater Bilby.
- s) **Rubbish:** Consumable or any other waste that may be attractive to feral cats and foxes.
- t) **Standing pool:** Pool of water greater than or equal to 2m² that has the potential to persist for greater than or equal to one week created by human activity.
- u) **Substantially commence:** As per **commencement of the action**.
- v) **Suitably qualified ecologist:** Refers to an independent person, approved by the **Minister**, with relevant tertiary qualifications and a minimum of five years experience in Australian mammal fauna surveys in the region.

APPENDIX B – Evidence of Greater Bilby Trapping and Relocation Works



APPENDIX C – Evidence of fencing at Construction Water Dams



APPENDIX D – Evidence of Dampier Peninsula Bilby Project (Offset Program)

Refer to <https://library.dbca.wa.gov.au/static/FullTextFiles/072286.pdf>