



**Land  
Development  
Agency**  
CANNONVILLE



**ACT**  
Government



## **Compliance Report**

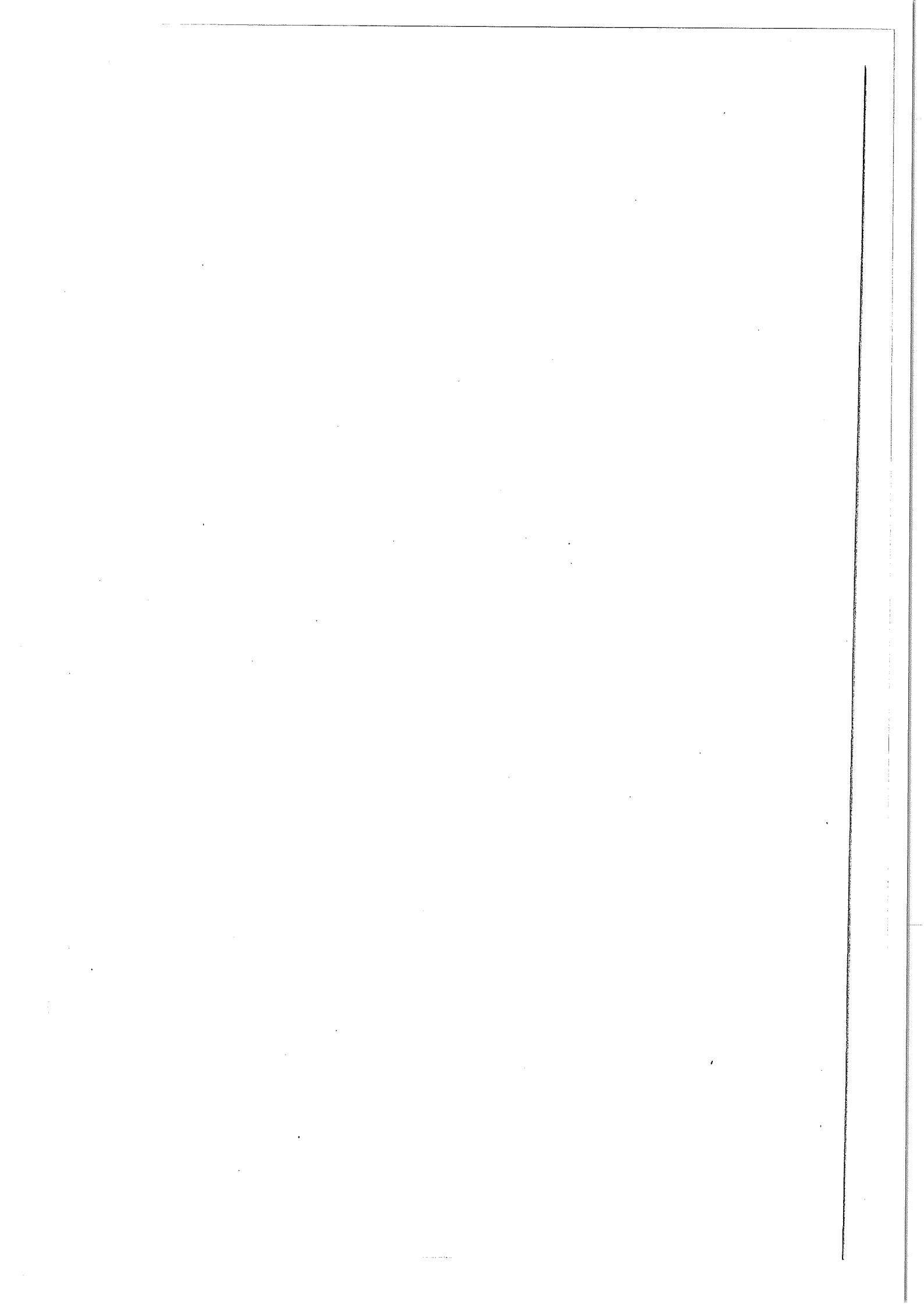
**The development of cabin, camping and possible  
hotel accommodation on Block 799 Gungahlin,  
ACT**

**(EPBC 2010/5750)**

**1<sup>st</sup> May 2016 – 30<sup>th</sup> April 2017**

**Version-1 April 2016**

**Prepared by the Land Development Agency and the Environment Planning and Sustainable  
Development Directorate on behalf of the ACT Government**



This report demonstrates how the Land Development Agency (LDA) and the ACT Parks and Conservation Service (PCS) have complied with the conditions in the approval decision for the development of cabin, camping and possible hotel accommodation on Block 799 Gungahlin, ACT (EPBC 2010/5648).

Specifically, the LDA (the proponent) are responsible for complying with conditions 1a, 1b, 1c, 2 and 4, in the approval decision. The LDA and the PCS are jointly responsible with for complying with conditions 1d, 3, 5, 6, 7, 8, 9 and 10 in the approval decision.

In addition, this report also demonstrates how the ACT Parks and Conservation Service has implemented the management plan for the Bonner environmental offset area on behalf of the LDA (the proponent).

The ACT Parks and Conservation Service form part of the Environment Planning and Sustainable Development Directorate.

#### Declaration of Accuracy

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

Signed:



Full name: Nicholas Holt

Position: Director

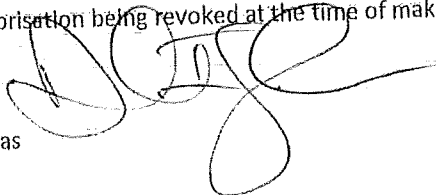
Organisation: Urban Infill – Land Development Agency

Date: 26<sup>th</sup> April 2017

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

Signed: Daniel Iglesias

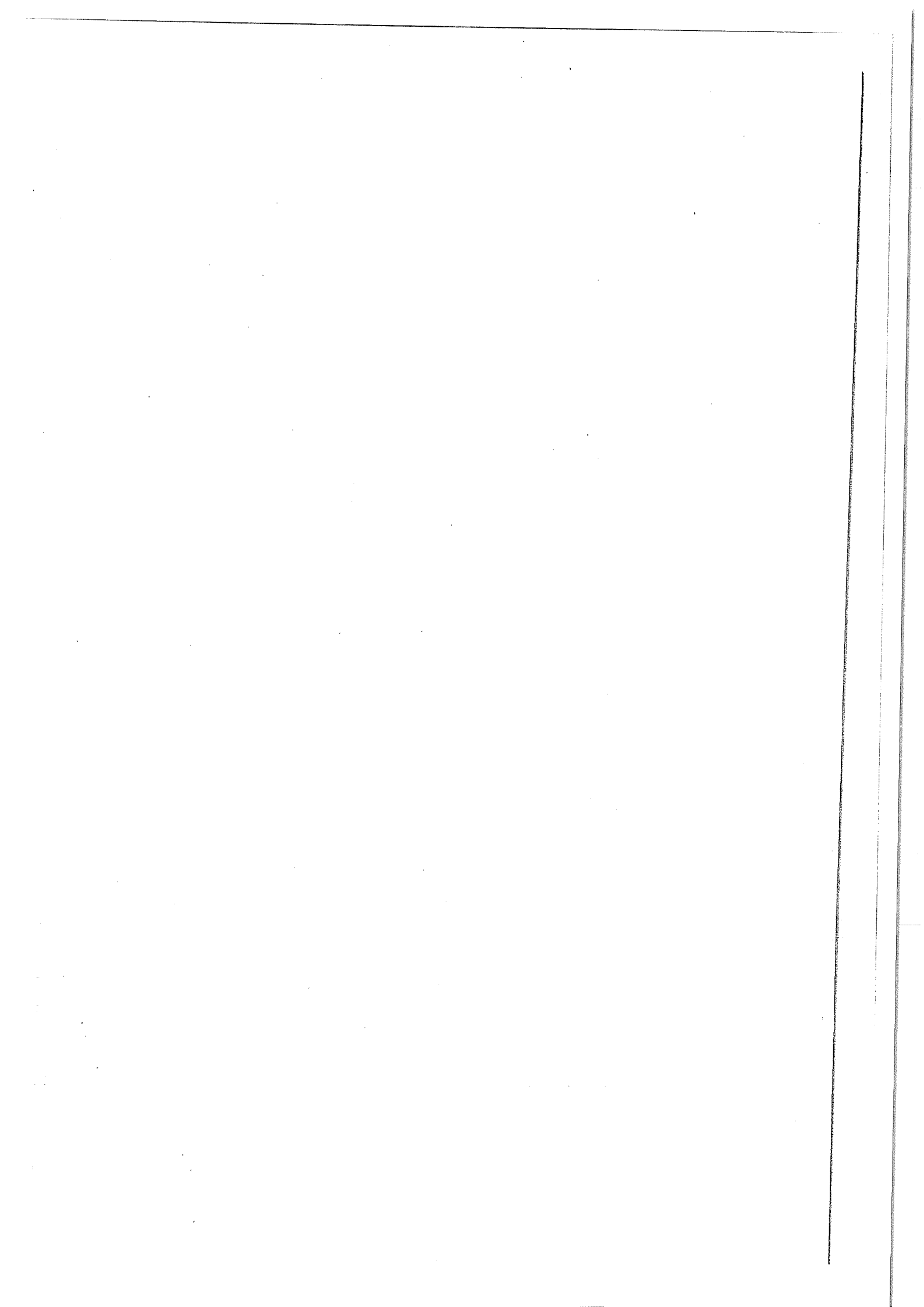


Full name: Daniel Iglesias

Position: Director

Organisation: ACT Parks and Conservation Service, Environment Planning and Sustainable Development Directorate

Date: 27/04/2017



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### Compliance with conditions in EPBC Approval Decision

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
1(a)	<p>To offset impacts on the Striped Legless Lizard (<i>Delma impar</i>), the person taking the action must develop an offset strategy, to be approved by the Minister, that protects habitat for the species in perpetuity. The proposed offset strategy must include measures to:</p> <p>a. protect habitat for the Striped Legless Lizard:</p> <p>(i) at a ratio of approximately 3:1 for habitat to be removed, which adjoins an existing conservation reserve in north Canberra that is known to contain habitat for the species; or</p> <p>(ii) at a ratio of approximately 4:1 for habitat to be removed, if the offset area does not adjoin an existing conservation reserve in north Canberra that is known to contain habitat for the species.</p>	LDA	Compliant	Complete. Letter from Commonwealth stating compliance with condition dated 18 <sup>th</sup> November 2013
1(b)	Provide the department with a textual description and map to clearly define the location and boundaries of the offset area, including the offset attributes, a shapefile and spatial data about its proximity to Striped Legless Lizard habitat within an existing conservation reserve.	LDA	Compliant	Complete. Letter from Commonwealth stating compliance with condition dated 18 <sup>th</sup> November 2013
1(c)	Outline the process and timing for incorporating the offset area into a conservation reserve.	LDA	Compliant	Complete. <ul style="list-style-type: none"> <li>Mulanggari West was incorporated into Mulanggari</li> </ul>

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
				Grasslands Nature Reserve 12 December 2014.
				<ul style="list-style-type: none"> <li>Gungaharra North was incorporated into Gungaharra Grassland Nature Reserve 12 December 2014.</li> </ul>
1(d)	<p>Prepare a plan, in consultation with a relevant qualified species expert, to:</p> <ul style="list-style-type: none"> <li>(i) manage the offset area as habitat for the Striped Legless Lizard; and</li> <li>(ii) monitor the Striped Legless Lizard population within the offset area</li> </ul> <p>Prior to commencement of the proposed action, the proposed offset strategy must be submitted to the Minister for written approval. The approved offset strategy must be implemented.</p>	LDA/PCS	Compliant	<p>Complete. The information provided as part of this condition were approved as follows:</p> <ul style="list-style-type: none"> <li>Offset management plan – approved 18<sup>th</sup> November 2013</li> </ul> <p>The offset management plan is published on the <u>EPSDD Offsets Register</u></p>
2	<p>To offset impacts on the Golden Sun Moth (<i>Synemon plana</i>), the person taking the action must develop an offset strategy, to be approved by the Minister, that either:</p> <ul style="list-style-type: none"> <li>a) protects habitat for the species in perpetuity, at a ratio of 3:1, including measures to: <ul style="list-style-type: none"> <li>(i) protect known habitat for the Golden Sun Moth that adjoins an existing conservation reserve in north Canberra;</li> <li>(ii) provide the department with a textual description and map to clearly define the</li> </ul> </li> </ul>	LDA	Compliant	Complete. Letter from Commonwealth stating compliance with condition dated 18 <sup>th</sup> November 2013

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
	<p>location and boundaries of the offset area, including the offset attributes, a shapefile and spatial data about its proximity to Golden Sun Moth habitat within an existing conservation reserve;</p> <p>(iii) outline the process and timing for incorporating the offset area into a conservation reserve; and</p> <p>(iv) manage the offset area as habitat for the Golden Sun Moth;</p> <p>b) or contributes to research in, or improved management of, existing grassland reserves that contain habitat for the Golden Sun Moth.</p> <p>Prior to commencement of the proposed action, the offset strategy must be submitted to the Minister for written approval. The approved offset strategy must be implemented.</p>			
3	<p>By 30 April of the first three years following 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 or strategies as specified in the conditions. 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.</p>	LDA/PCS	Compliant	<p>The publication dates for compliance reports due annually by 30<sup>th</sup> April prepared as part of this approval decision were as follows:</p> <ul style="list-style-type: none"> <li>• 2014-15 Report – 5<sup>th</sup> June 2015</li> <li>• 2015-16 Report – 28<sup>th</sup> April 2016</li> </ul> <p>To address this non-compliance, PCS and the EPSDD communication team has developed formal procedures for the preparation and publication of EPBC compliance reports. These procedures have been approved by EPSDD Executive</p>

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
4	Within 10 business days of commencement of the action, the person taking the action must advise the Minister in writing the actual date of commencement.	LDA	Compliant	and will be implemented by EPSDD staff.  The proponent the Land Development Agency took possession of the development site on 12 <sup>th</sup> May 2014 to commence construction. The Commonwealth was notified in writing on 15 <sup>th</sup> May 2014.
5	If the person taking the action wishes to carry out any activity otherwise than in accordance with the plans or strategies referred to in Conditions 1 and 2, then the person taking the action must submit for the Minister's written approval a revised version of the plan or strategy. The varied activity shall not commence until the Minister has approved the varied plan or strategy in writing. If the Minister approves a revised plan or strategy, that plan or strategy must be implemented in place of the plan or strategy originally approved. Unless the Minister has approved the revised plan or strategy, then the person taking the action must continue to implement the plan or strategy originally approved, referred to in Conditions 1 and 2.	LDA/PCS	Not applicable	
6	If the Minister believes that it is necessary or convenient for the better protection of listed threatened species and ecological communities to do so, the Minister may request that the person taking the action make specified revisions to the plan or strategy approved pursuant to Condition 1 and 2, and submit the revised plan or strategy	LDA/PCS	Not applicable	

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
	for the Minister's written approval. The person taking the action must comply with any such request. The revised approved plan or strategy must be implemented. Unless the Minister has approved the revised plan or strategy, then the person taking the action must continue to implement the plan or strategy originally approved, referred to in Condition 1 and 2.			
7	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.	LDA/PCS	Not applicable	
8	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans, strategies and reports referred to in these conditions of approval on their website. Each plan, strategy and report must be published on the website within one month of being finalised.	LDA/PCS	Non-compliant	<p>The publication date for the <i>offset management plan: Extension to Gungaharra Grasslands and Mulanggari Nature Reserves</i> prepared as part of this approval decision was 18<sup>th</sup> May 2015.</p> <p>The publication date for the 2015 <i>Striped Legless Lizard Monitoring Report – Gungaharra and Mulanggari Reserves</i> prepared was 20 April 2016. This report was finalised on 3 February 2016.</p> <p>The 2016 Striped Legless Lizard Report has not been finalised</p>

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
9	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the above conditions of approval, including measures taken to implement any plans or strategies 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.	LDA/PCS	Compliant	This plan and report were published outside the 30 day publishing timeline. All approved plans, strategies and reports are now centrally published on the <u>EPSDD Offsets Register</u> .  The LDA and PCS are maintaining all information on the implementation of the actions in the offset management plan.
10	If, at any time after five years from the date of this approval, the Minister notifies the person taking the action in writing that the Minister is not satisfied that there has been commencement of the action, the action must not thereafter be commenced without the written agreement of the Minister.	LDA/PCS	Not applicable	

### Implementation of the offset management plan

The following table describes how the ACT Parks and Conservation Service (Environment Planning and Sustainable Development Directorate) has undertaken the management actions described within the offset management plan for the 2016-17 reporting season on behalf of the Land Development Agency (the proponent).

Activity	Description	Estimated Timeframe for Completion (as described in OMP)	Comments	Expenditure (ex. GST) within the 2016-17 reporting season
<p>Planning and Review</p> <p>Biomass management</p>	<p>Develop a biomass management plan for the offset area. This plan will guide the grazing and/or burning regime to manage understorey biomass at levels and of a structure which benefits the striped legless lizard and golden sun moth.</p> <p>This plan will follow the recommendations in Osborne (2013) on managing the biomass within the striped legless lizard habitat and advice from qualified experts on managing biomass in golden sun moth habitat.</p> <p>The plan will also direct the rangers on how and when to monitor biomass to determine when biomass reduction is required.</p>	<p>2014-15</p>	<ul style="list-style-type: none"> <li>The biomass within both offset areas is being managed at levels suitable for the Striped Legless Lizard and Golden Sun Moth through grazing (cattle), and native animals (kangaroos).</li> <li>Grazing occurred within a small section of the Gungaharra offset area in October 2016 to reduce biomass to increase movement capacity of Striped Legless Lizards as advised by ACT Government ecologists.</li> <li>Grazing occurred in the Mulanggari offset area in October 2016 and then again in February through to March 2017 to reduce biomass to allow for increase movement of Striped Legless Lizards as advised by ACT Government ecologists. In addition to weed control in Striped Legless Lizard habitat areas.</li> <li>New boundary fences were installed at both sites in 2015 to facilitate this grazing. Additionally a fencing contractor has been engaged to upgrade boundary fencing in Gungaharra and installation of gates at</li> </ul>	

Activity	Description	Estimated Timeframe for Completion (as described in OMP)	Comments	Expenditure (ex. GST) with in the 2016-17 reporting season
Biomass management (cont'd)			<p>Mulangari to allow ease of cattle movement. This work will be completed by the end of April 2017. Fencing tasks delivered are outlined below.</p> <ul style="list-style-type: none"> <li>• The biomass management practices are currently seen as sufficient to maintain the values within the offset areas. A distinct biomass management plan is currently not considered necessary for these sites.</li> <li>• To further support Rangers to manage grassland biomass, the ACT Government is adopting the rapid biomass assessment method developed by Morgan (2015) and calibrating this method to suit ACT grassland ecosystems. This method will provide Rangers with a tool to measure grassland habitat structure that also reflects biomass levels within the offset areas. This method will enable Rangers to make better informed decisions on biomass management requirements, and assist in informing Rangers if changes to the current biomass management regime are required at either site.</li> </ul>	

Activity	Description	Estimated Timeframe for Completion (as described in OMP)	Comments	Expenditure (ex. GST) within the 2016-17 reporting season
Environment Impact Statement (EIS)	Seek advice from CPR to determine if an EIS is required before undertaking any works which could impact the soil or vegetation.	As needed	CPR was consulted and an Environmental Significant Opinion was sought and approval given for the rock mattress crossing at Mulunggari.	-
Consult with ACT Heritage Unit	Inform the ACT Heritage Unit of operational or habitat restoration works which could impact potential cultural heritage sites within the offset areas.	As needed	The Heritage Unit was consulted and advice was given on the rock mattress crossing at Mulunggari.	-
Assets and Infrastructure				
Fencing	<p>Repair or replace internal and boundary fences as needed.</p> <p>Remove old fencing.</p> <p>Install new fence to divide the Mulunggari West offset area.</p> <p>Install new access gates and stiles.</p> <p>Need to install 2 barrier gates at the western edge of Block 789 to discourage vehicle access and illegal dumping within or adjacent to offset area.</p> <p>Fencing will commence in 2015-16 in line with the completion of the biomass management strategy</p>	2014-15	<ul style="list-style-type: none"> <li>Mulunggari had two new access gates installed to provide greater ease of movement for grazing.</li> <li>Gungaderra had one new access gate and fencing installed to shore up the Block 789 and 788 (boundary) fence line from illegal access. Wildlife friendly fencing was installed in addition to a kangaroo gate into block 789. This project will be completed by the end of April</li> </ul>	

Activity	Description	Estimated Timeframe for Completion (as described in OMP)	Comments	Expenditure (ex. GST) within the 2016-17 reporting season
Stock Grazing Preparation	Install 2 new troughs connected to water mains for Gungaharra North and 1 in Mulanggarri West. Clean out existing dam in Mulanggarri West.	2014-15	<ul style="list-style-type: none"> <li>Temporary stock water tanks were utilised as an alternative to permanent stock water points. These are being trialled as a more flexible stock water option when crash grazing stock.</li> </ul>	\$5,378
Tracks and Trails	No formed tracks will be established within the offset area to reduce soil disturbance with the striped legless lizard or golden sun moth habitat. Establish slashed tracks only as needed and avoiding striped legless lizard and golden sun moth habitat if possible.	2016-17	<ul style="list-style-type: none"> <li>No new slashed tracks have been established within the offset areas.</li> <li>Slashing was conducted on the northern boundary at both sites and on existing tracks as part of the annual Bushfire Operations Program. This was done in November 2017 and again in February due to the rate of grass growth.</li> <li>Box culvert drawings and specifications were produced in June for a crossing across the Mulanggarri drainage line, however it was decided a less invasive method would be used</li> <li>A contractor has been engaged to build a rock mattress crossing as an alternative to the box culvert. This work has been postponed due to inclement weather conditions; however, it should be completed in May 2017.</li> </ul>	\$ 4800

Activity	Description	Estimated Timeframe for Completion (as described in OMP)	Comments	Expenditure (ex. GST) within the 2016-17 reporting season
General Information Signage	Design, construct and install reserve signage to identify the reserve to the public including use related information.	2014-15	<ul style="list-style-type: none"> <li>PCS is currently developing a concept plan for the greater Gungahlin Grasslands, which will provide a framework for sign design and installation requirements at the two offset areas. The plan is scheduled to be finalised in 2017/18.</li> </ul>	-
Interpretation Signage	Install interpretation signage as part of the broader interpretation program for offset areas.	2015-16	<ul style="list-style-type: none"> <li>The Gungahlin Grasslands concept plan has been delayed and will not commence until 2017/18.</li> </ul>	-
Weeds and Vertebrate Pests				

Activity	Description	Estimated Timeframe for Completion (as described in OMP)	Comments	Expenditure (ex. GST) within the 2016-17 reporting season
Weed control	<p>Reduce the impact of weeds of concern, namely: Chilean needle grass, serrated tussock, African love grass and tall fescue. Contain Chilean needle grass within golden sun moth habitat zones. Reduce the impact and spread of Chilean needle grass within all remaining areas.</p> <p>Reduce the impact of other weeds of concern, namely: St John's wort, Patterson's curse, sweet briar, blackberry, saffron thistle and Scotch thistle.</p> <p>Prevent further spread of phalaris.</p> <p>Reduce the impact of woody weeds,</p> <p>To minimise impact on woodland bird habitat, control large woody weeds in a phased approach including control methods such as stem injection or frill poison to leave temporary standing structure.</p> <p>To maintain an open grassland structure within the striped legless lizard and golden sun moth habitats regenerating trees and shrubs should be removed.</p>	Ongoing	<ul style="list-style-type: none"> <li>• Weed control was undertaken across Gungaharra for: <ul style="list-style-type: none"> <li>- Serrated Tussock and African Love Grass June 2016</li> <li>- Patterson's Curse – October 2016</li> <li>- St John's Wort – January 2017</li> <li>- Blackberry – March 2017</li> <li>- Woody weeds – February 2017</li> <li>- Chilean Needle Grass</li> </ul> </li> <li>• Weed control was undertaken across Mulanggarri for: <ul style="list-style-type: none"> <li>- Serrated Tussock and African Love Grass May 2017</li> <li>- St John's Wort – November 2015</li> <li>- Pattersons Curse – October 2016</li> <li>- Woody weeds – February 2017</li> </ul> </li> <li>• Stock grazing was implemented in both offset areas in 2016-17 to reduce biomass to enable more effective grassy weed (Serrated Tussock and African Lovegrass) control which is scheduled to be undertaken in May 2016.</li> </ul>	\$ 11292

Activity	Description	Estimated Timeframe for Completion (as described in OMP)	Comments	Expenditure (ex. GST) within the 2016-17 reporting season
Vertebrate pest control	<p>Undertake a low risk control program. Spotlight counts in spring and autumn. Map active rabbit warrens in winter and fumigate in spring. Follow up fumigation may be necessary. Undertake fox and cat control programs as practicable.</p>	Ongoing	<ul style="list-style-type: none"> <li>• Both Gungaharra and Mulangari were included in the Canberra Nature Park spring 2016 and autumn 2017 rabbit surveys.</li> <li>• Very low numbers were observed.</li> <li>• Follow up monitoring to occur in spring 2017</li> </ul>	-
Enhancement				
Site clean-up	Remove dumped waste, old fencing wire, building waste etc.	2014-15	<ul style="list-style-type: none"> <li>• Old building waste in Gungaharra was removed in June 2016.</li> </ul>	- In house

Activity	Description	Estimated Timeframe for Completion (as described in OMP)	Comments	Expenditure (ex. GST) within the 2016-17 reporting season
Biomass Management (Ecological Purposes)	<p>Until the biomass management plan is developed the following guidelines apply:</p> <ul style="list-style-type: none"> <li>• Tree cover should be managed at no more than 10% within areas of striped legless lizard habitat.</li> <li>• Specific requirements when grazing striped legless lizard or golden sun moth habitat: <ul style="list-style-type: none"> <li>– Crash graze over short periods.</li> <li>– No grazing in spring / early summer before native seed set.</li> <li>– Where possible, grass should not be grazed below 20cm.</li> <li>– It is important to maintain tussock structure and inter-tussock spaces.</li> </ul> </li> <li>• Follow specific requirements when burning striped legless lizard or golden sun moth habitat (as described in offset management plan).</li> <li>• Vehicles to remain on tracks.</li> <li>• Minimise unnecessary impact on soil.</li> </ul> <p>There will be no ripping or ploughing, use of heavy equipment or pasture improvement in areas of striped legless lizard habitat</p>	As needed	<ul style="list-style-type: none"> <li>• No tree planting has occurred</li> <li>• Grazing has been undertaken utilising the specific requirements listed. It was undertaken in September 2016</li> <li>• Grazing was reintroduced into the Mulanggari Offset as the high fuel loads at the end of February 2017 were of concern.</li> <li>• An ecological burn incorporating part of the Gungaderra Offset and the greater Gungaderra grasslands was undertaken at the beginning of April 2017</li> </ul>	-

Activity	Description	Estimated Timeframe for Completion (as described in OMP)	Comments	Expenditure (ex. GST) within the 2016-17 reporting season
Community Engagement				
Interpretation Plan	It is proposed that the offset areas will be included in an interpretation plan, which will highlight the natural and cultural values in the offset areas, the adjacent reserves and in the broader Gungahlin landscape.	2015-16	<ul style="list-style-type: none"> <li>An interpretation program will be guided by the Gungahlin Grasslands concept plan. This plan has been delayed and will not commence until 17/18</li> </ul>	-
Monitoring				
Monitoring Striped Legless Lizard population	Initial monitoring was undertaken in 2012. Follow up monitoring was also undertaken in 2013. Additional monitoring is required in 2014 and 2015 and thereafter annual monitoring for two years, at five year intervals.	2013-15 and then 2020 and 2021	<ul style="list-style-type: none"> <li>As per recommendations the Striped Legless Lizard population was monitored in spring 2016 within both offset areas.</li> <li>In addition the vegetation was surveyed at both offset areas.</li> <li>Refer to Section 3 for a summary of the results and report.</li> </ul>	\$ 23450
Staffing	To deliver the actions outlined in this plan, resources to support a part time Senior Ranger (Ranger Grade 3) position and vehicle are required for the first 3 years and then 0.1 FTE thereafter.	2014-15 to 2016-17	<ul style="list-style-type: none"> <li>Due to staff turnover a Senior Ranger (0.4 of a full time position) re-commenced from 1<sup>st</sup> July 2015 to assist deliver the actions outlined in the offset management plan.</li> <li>In addition, TAMS are currently supporting 0.1 FTE field staff position to assist the Senior Ranger deliver the actions in the offset management plan. The field staff position is funded by the overall offsets program.</li> </ul>	\$38,786 (from 30/3/16 to 30/4/17)

Activity	Description	Estimated Timeframe for Completion (as described in OMP)	Comments	Expenditure (ex. GST) within the 2016-17 reporting season
Training	All personnel involved in managing striped legless lizards habitat and populations must be trained in the requirements and appropriate management of the species.	As needed	<ul style="list-style-type: none"> <li>The Senior Ranger and field staff working within the offset areas are provided with up to date information on the management requirements and threats to the Striped Legless Lizard and Golden Sun Moth. They also receive supported by ACT Government Ecologists to assist make informed land management decisions. Several documents have been developed to assist the implementation staff including - MINES management guidelines and advice for contractors working with MINES</li> </ul>	-
<b>Total expenditure (2016-17 reporting season)</b>				<b>\$89,604</b>
<b>Total expenditure (all years)</b>				<b>\$109,198.68</b>

## Results of the Striped Legless Lizard Monitoring Program

- The objective of the project was to provide information regarding the distribution and relative abundance of the Striped Legless Lizard at the Mulanggari and Gungaderra monitoring sites. This will inform PCS' ongoing management of the offset sites with the aim of ensuring the long-term suitability of the habitat for SLL and stability of the populations.
- A baseline survey of the Striped Legless Lizard population within the offset areas was undertaken in spring 2013. This was co-ordinated by ACT Government ecologists using internal staff resources and volunteers.
- A follow-up survey undertaken by qualified consultants engaged by the ACT Government was completed in spring 2014, spring 2015 and spring 2016
- To undertake the surveys five grids each consisting of 30 tiles were set up in each offset area. These were checked 10 times between October to December for lizards. NB: one of the grids surveyed in the Gungaderra Grasslands Nature Reserve was just outside the offset area. The figures in Table 1 for the Gungaderra Grasslands include results based on the survey of all five grids (i.e. including the grid outside the offset area) and also for only the four grids surveyed within the offset area. Both were greater than the number of observations recorded in 2013, but slightly less than the total observed in 2014.
- For Mulanggari offset area the 2015 total observations were lower than both 2013 and 2014. The lower observation counts were described as not indicating a decline in the population (Biosis 2016). The 2015 survey results highlight that in 2013 Mullangari grid two and grid five recorded six and nine observations respectively, which in the 2015 survey reduced to two and three observations respectively. Both of these grids are low in the landscape and therefore likely have the thickest grass cover, potentially impacting lizard movement and potential observations (M. Mulvaney, 2016 pers. comm.).
- An additional survey will be undertaken in spring 2016 to gain further insight into the population trends within the offset areas.
- The 2015 survey report describes the method used in both the 2013, 2014 and 2015 surveys in full. This method is consistent with the ACT Government survey guidelines (ACT Government 2011) for the Striped Legless Lizard. The exception is that to reduce the impact of hand capture on the lizards (e.g. tail loss that can occur during capture and subsequent re-capture) individuals were captured only if species identification could not be made readily by direct visual observation (i.e. prior to capture). This was consistent with the advice provided by Osborne (2013) and which was included in the approved offset management plan for these offset areas.
- The 2016 SLL monitoring season was likely influenced by unusual weather conditions. Sightings of SLL at both sites were initially low, increasing over time and peaking in early-mid November before dropping off sharply in late November. The wet 2016 winter and cold and wet early spring are likely to have influenced results by reducing early captures, providing unsuitable conditions for SLL to move around and find the tiles. The hot late spring and early summer likely shortened the survey season, with sightings dropping off sharply by late November, before the end of the monitoring period.
- Table 1 provides the total number of sightings recorded at each site for each of the 2014, 2015 and 2016 monitoring seasons. Although the total sightings differ between years at each site, this difference is likely attributed to factors which influence SLL tile occupation (i.e. seasonal conditions, herbage mass, etc.). To further investigate these factors, quantitative analysis utilising SLL data from a number of sites and multiple seasons is currently being undertaken. Based on previous surveys of and visits to the offset sites, the current habitat condition of Mulanggari and Gungaderra appears stable, with some improvements evident through the control of significant weeds. Significant weed infestations and biomass at each of these sites will need to be continuously managed, however the sites currently support populations which are not currently considered to be in danger of loss.

**Table 1. 2014, 2015 and 2016 monitoring season SLL sighting totals**

Offset Site	No. of grids	No. of tiles	Total Sightings 2013	Total Sightings 2014	Total Sightings 2015	Total Sightings 2016
Mulanggari	5	150	32	37	22	48
Gungaderra	5	150	21	41	32	34

## **ACT Environmental Offsets – 2016 Grassland Mapping Report**

### **Mulanggari**

This site supports one plant community types (PCT): ‘ACT16 Yellow Box - Red Gum Tableland Grassy Woodland’, with the following zones.

- 1.034 ha of Zone 1: Native dominated – Low diversity – Canopy.
- 13.126 ha of Zone 2: Native dominated – Low diversity – No canopy.
- 8.765 ha Zone 3: Exotic dominated – Low diversity – No canopy.

### **Gungaderra**

Two PCTs were mapped at this site: ‘ACT16 Yellow Box - Red Gum Tableland Grassy Woodland’, and ‘ACT25 *Eucalyptus macrorhyncha* Tableland Grass / Shrub Forest’. The following zones were recorded.

- 0.897 ha of ACT16 Zone 1: Native low diversity – Canopy.
- 5.425 ha of ACT16 Zone 2: Native low diversity – No canopy.
- 6.720 ha of ACT16 Zone 3: Exotic low diversity – No canopy.
- 2.399 ha of ACT25 Zone 1: Native moderate to high diversity – No canopy.
- 1.696 ha of ACT25 Zone 2: Native low diversity – Canopy.
- 2.265 ha of ACT25 Zone 3: Native low diversity – No canopy.
- 0.691 ha of ACT25 Zone 4: Exotic low diversity – Canopy.
- 1.449 ha of ACT25 Zone 5: Exotic low diversity – No canopy.

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