



Annual Compliance Report

Lawson South Residential Development (EPBC 2010/5549)

11th December 2016 – 12th December 2017

December 2017

Prepared by the ACT Government

This report demonstrates how the Suburban Land Agency (previously known as the Land Development Agency), Transport Canberra and City Services and the ACT Parks and Conservation Service (PCS), have complied with the conditions in the approval decision for the Lawson South Residential Development (EPBC 2010/5549).

Specifically:

- Suburban Land Agency (the proponent) are responsible for complying with conditions 1-11, 14, 15 and 21;
- Transport Canberra and City Services (TCCS) are responsible for complying with conditions 7 and 10.
- PCS are responsible for complying with conditions 12 and 13; and
- The Suburban Land Agency and the PCS are jointly responsible for complying with conditions 16-20 and 23 in the approval decision.


In addition, this report also demonstrates how the PCS has implemented the management plan for the Jarramlee environmental offset site on behalf of the Suburban Land Agency (the proponent).


Note: A transfer of management responsibility commenced on 15 December 2017 for Reservoir Hill from the Suburban Land Agency to Transport Canberra and City Services.


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.

Declaration:

Signed: 
Full name: Thomas Gordon
Position: Executive Director, Greenfield
Organisation: Suburban Land Agency
Date: 21/12/2017

Signed: 
Full name: Danjel Iglesias
Position: Director
Organisation: ACT Parks and Conservation Service
Date: 20/12/2017

Signed: 
Full name: Stephen Alegria
Position: Director
Organisation: Transport Canberra and City Services
Date: 21/12/2017

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1. Compliance with conditions in EPBC Approval Decision

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
Conditions attached to the approval				
1	All ground disturbed as a result of construction within the Inner Asset Protection Zone (IAPZ) and Golden Sun Moth (GSM) habitat within Reservoir Hill must be rehabilitated, by re-establishment of native grass species, no later than 30 days after completion of construction within the IAPZ and GSM habitat within Reservoir Hill.	Suburban Land Agency	Compliant/ not applicable	<p>All ground within the IAPZ has been rehabilitated with native grass species nominated in the EPBC approval as part of the Stage 1 civil construction works.</p> <p>Stage 2 has not commenced construction as yet so this is not applicable.</p> <p>The landscape construction works in Reservoir Hill are complete and the native grasses have been planted where disturbance has occurred. The native grass has been maintained over the past year to ensure it is established.</p>
2	The person taking the action must not plant trees where they could shade GSM habitat within Reservoir Hill and GSM and Natural Temperate Grassland (NTG).	Suburban Land Agency	Compliant	No trees are proposed in the habitat area.

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
3	The person taking the action must ensure that the GSM habitat within Reservoir Hill and Belconnen Naval Transmitting Station are separated from residential development by vehicular roads.	Suburban Land Agency	Compliant	The open space that the GSM habitat and NTG are located in are separated by either edge roads (Wanderlight Avenue and Dawn Crescent) or fire roads.
4	The person taking the action must prevent sediment, eroded material, untreated and uncontrolled stormwater from entering the Belconnen Naval Transmitting Station and the GSM habitat within Reservoir Hill.	Suburban Land Agency	Compliant	<p>Appropriate sediment and erosion control measures were in place during the civil construction of Stage 1 to ensure sediment, eroded material, untreated and uncontrolled stormwater did not enter the former Belconnen Naval Transmitting Station.</p> <p>No measures were required during Stage 1 civil works to protect GSM habitat within Reservoir Hill as these works were downslope of the hill.</p> <p>The landscape construction works in Reservoir Hill have not commenced as yet so this is not applicable.</p>

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
5	<p>The person taking the action must engage a suitably qualified expert to prepare an Environmental Management Plan (EMP) to maintain or improve the GSM habitat within Reservoir Hill.</p> <p>The EMP must be submitted to the Minister for approval by 1 July 2013. The approved EMP must be implemented within 12 months of the date of this approval.</p> <p>The EMP must address, but not necessarily be limited to:</p>	Suburban Land Agency	Compliant	Submitted 14 th June 2013 Approved 11 December 2013.
5a	measures to maintain or improve the quality and condition of the Golden Sun Moth habitat within Reservoir Hill through appropriate management actions, including, and not limited to, weed control and biomass management as informed by a suitably qualified expert;	Suburban Land Agency	Compliant	Details were included in the EMP

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
5b	measures to prevent the access of unauthorised vehicles into the Golden Sun Moth habitat on Reservoir Hill, prior to, during and post construction. Measures must include, but not necessarily be limited to:	Suburban Land Agency	Compliant	Details were included in the EMP
5b)i	temporary fences to prevent access by unauthorised vehicles;	Suburban Land Agency	Compliant	Details were included in the EMP
5b)ii	replacement of the temporary fences required in Condition 5) b) i) with permanent structures, such as bollards, that will prevent access by unauthorised vehicles; and	Suburban Land Agency	Compliant	Details were included in the EMP
5b)iii	maintenance of the permanent structures required in Condition 5) b) ii) so that the area remains inaccessible by unauthorised vehicles, with structures to be repaired or replaced as required.	Suburban Land Agency	Compliant	Details were included in the EMP

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
5c	<p>details of a baseline survey of the quality and condition of the Golden Sun Moth habitat within Reservoir Hill to be conducted by a suitably qualified expert during an optimal ecological time prior to the commencement of construction within Golden Sun Moth habitat within Reservoir Hill.</p> <p>The survey information, specifically the baseline data, must:</p>	Suburban Land Agency	Compliant	<p>Details in the EMP</p> <p>The first annual monitoring of GSM within Reservoir Hill occurred in the summer of 2016-17, one year after the commencement of construction within the GSM habitat on Reservoir Hill, as per the condition. The second annual (2017-18) monitoring event is underway.</p>
5c)i	be published and maintained on the person taking the action's website within 30 days of the surveys being completed. The baseline data must be sufficient to enable the active monitoring and maintenance of the Golden Sun Moth values; and	Suburban Land Agency	Non - compliant	Published online 14 August 2017.
5c)ii	be used to ensure that the Golden Sun Moth habitat quality and condition are maintained or improved as required by Condition 5) a)	Suburban Land Agency	Compliant	Results of subsequent monitoring will inform changes to land management

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
5d	details of an annual monitoring survey to determine the quality and condition of the Golden Sun Moth habitat within Reservoir Hill to be conducted by a suitably qualified expert during an optimal ecological time. The first annual survey must be undertaken within one year of commencement of construction within Golden Sun Moth habitat within Reservoir Hill. Annual monitoring surveys must continue to be undertaken unless cessation is agreed to in writing by the Minister;	Suburban Land Agency	Compliant	Details were included in the EMP. The first annual monitoring of GSM within Reservoir Hill occurred in the summer of 2016-17, one year after the commencement of construction within the GSM habitat on Reservoir Hill, as per the condition. The second annual (2017-18) monitoring event is underway.
5e	details of corrective actions to be undertaken should the monitoring required in Condition 5) d) indicate a decline, as determined by a suitably qualified expert, in the quality or condition of the Golden Sun Moth habitat within Reservoir Hill; and	Suburban Land Agency	Compliant	Details were included in the EMP. The Monitoring Report states that the “GSM population does not so far appear to have been adversely affected by the changes in site management” (p 13).
5f	details of the administration arrangements for the measures referred to in Conditions 5) a) to 5) e).	Suburban Land Agency	Compliant	Details were included in the EMP

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
6	The person taking the action must install interpretive educational signage at no less than five locations along the boundary of GSM habitat within Reservoir Hill. The signage must:	Suburban Land Agency	Compliant	The interpretive signage, in accordance with the Development Approval and Detail Design Acceptance, has been installed.
6a	contain information on the ecological values being retained and the threats to these values; and	Suburban Land Agency	Non-compliant	Signs are installed in Reservoir Hill but need to be updated so they reflect the threats to the values.
6b	be maintained so that the information remains accessible, with signs to be replaced or updated as required.	Suburban Land Agency	Compliant	The signs remain in good condition
7	The person taking the action must ensure that, during the management of the Outer Asset Protection Zone (OAPZ):	Suburban Land Agency and TCCS	Not applicable	No OAPZ management occurred in the last year. Biomass within the OAPZ is not required to be managed to meet applicable fuel management standards until Stage 2 of development has commenced.
7a	Grass and other flora is not slashed to a height less than 300mm above the ground	Suburban Land Agency and TCCS	Not applicable	

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
7b	The removal or movement of rocks to facilitate the slashing of grass and other flora is prevented	Suburban Land Agency and TCCS	Not applicable	
7c	The slashing of grass and other flora be restricted to occurring within the OAPZ	Suburban Land Agency and TCCS	Not applicable	
7d	All grass clippings and biomass removed must be mulched and spread or caught and removed to prevent windrows or clumps of slashed biomass forming on top of grassland flora	Suburban Land Agency and TCCS	Not applicable	
7e	All machinery and equipment involved in the slashing of grass and flora are free from flora reproductive matter (for example seeds) prior to entering the OAPZ	Suburban Land Agency and TCCS	Not applicable	
7f	A log book is maintained that records all management actions including date, time and details of machinery, equipment and personnel as well as details of hygiene measures undertaken to demonstrate compliance with this condition	Suburban Land Agency and TCCS	Not applicable	

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
7g)i	<p>Slashing or any other biomass management must not be undertaken:</p> <p>When the use of vehicles or machinery could result in the churn or compaction of soil due to high levels of soil moisture</p>	Suburban Land Agency and TCCS	Not applicable	
7g)ii	<p>Slashing or any other biomass management must not be undertaken:</p> <p>During peak times of significant weed seeding as determined by a suitably qualified expert</p>	Suburban Land Agency and TCCS	Not applicable	
7g)iii	<p>Slashing or any other biomass management must not be undertaken:</p> <p>When Golden Sun Moths are flying or within two days of when Golden Sun Moths have been flying, as determined by as suitably qualified expert.</p>	Suburban Land Agency and TCCS	Not applicable	

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
8	<p>Prior to the commencement of actions to manage or reduce biomass within the OAPZ, a detailed baseline ecological survey must be undertaken by a suitably qualified expert at an optimal ecological time within the OAPZ to gain sufficient baseline ecological information to identify and map the extent and condition of all listed threatened species and ecological communities or their habitat and any weed species.</p> <p>This information must be published and maintained on the person taking the action's website within 30 days after the completion of surveys.</p>	Suburban Land Agency, TCCS	Compliant	
9	<p>The person taking the action must control weed species detected in the baseline ecological survey required by Conditions 2C) and 8 to ensure that the abundance and cover of weed species does not increase. Weed control must be informed by a suitably qualified expert and be undertaken in a manner that does not impact non-target flora or listed threatened species and ecological communities.</p>	Suburban Land Agency	Compliant	The site has been managed for weeds over the past year in accordance with the condition.

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
10	Should biomass management within the OAPZ be undertaken three or more times in any two year period, the person taking the action must conduct an ecological assessment using a suitably qualified expert. The ecological assessment must be undertaken at an optimal ecological time no earlier than six months following the last biomass management activity, and be sufficient to detect any changes in ecological condition from the baseline survey required by Condition 8.	TCCS	Not applicable	Biomass within the OPAZ is not required to be managed to meet applicable fuel management standards until Stage 2 of development has commenced.

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
11	<p>Within 30 days of the surveys required by Condition 5d) and 10, a suitably qualified expert must assess whether there has been a decline in the ecological condition of habitat for the GSM and NTG within the OAPZ and or GSM habitat within Reservoir Hill, if a decline is detected, the person taking the action must prepare, within 30 days for the approval of the Minister, a Restoration Plan for the restoration of the ecological condition of the OAPZ and of the GSM habitat within Reservoir Hill.</p> <p>The Restoration Plan must include, but not necessarily be limited to:</p>	Suburban Land Agency, TCCS	Not applicable	No decline detected.
11a	Required or adaptive changes to existing management activities;	Suburban Land Agency, TCCS	Not applicable	
11b	Active management actions to restore the ecological condition to the baseline and the extent identified within the baselines surveys, including, objectives, performance criteria and management responsibilities; and	Suburban Land Agency, TCCS	Not applicable	

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
11c	Protocols for ongoing monitoring and reporting.	Suburban Land Agency, TCCS	Not applicable	
12	<p>To compensate for the impacts from the action to the Golden Sun Moth and Natural Temperate Grasslands, the person taking the action must develop an Offset Strategy. The Offset Strategy must be submitted to the Minister for approval within six months of the commencement of construction.</p> <p>The Offset Strategy must include, but not necessarily be limited to:</p> <p>(The approved offset strategy must be implemented and be published and maintained on the person taking the action's website).</p>	PCS	Compliant	<p>Submitted 14th June 2013</p> <p>Approved 11 December 2013</p>
12a	Administration arrangements to conserve, in perpetuity, the McGregor West offset area;	PCS	Compliant	Details included in the Offset Strategy

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
12b	Provision of not less than \$972, 000 (GST exclusive) to facilitate management of the McGregor West offset area including estimated timeframes, budgets and ongoing operational costs;	PCS	Compliant	Details included in the Offset Strategy. Funding has been secured to manage the offset site in perpetuity. Over the life of the approval decision this amount is \$1.9M. Ongoing funding to manage the site in perpetuity is \$69,000.
12c	The process and timing for incorporating the McGregor West offset area within the ACT Nature Reserve System;	PCS	Compliant	Details included in the Offset Strategy
12d	Results of surveys undertaken by a suitably qualified expert at an optimal ecological time to demonstrate the extent of Golden Sun Moth habitat in the McGregor West offset area; and	PCS	Compliant	Details included in the Offset Strategy
12e	A map that defines the extent of Natural Temperate Grasslands and habitat for the Golden Sun Moth habitat in the McGregor West offset area as a result of Condition 12d).	PCS	Compliant	Details included in the Offset Strategy

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
13	<p>To manage the McGregor West Offset area, the person taking the action must develop an Offset Management Plan (OMP), for approval by the Minister.</p> <p>The OMP must include but not necessarily be limited to:</p> <p>(The OMP must be submitted to the Minister for approval by 1 July 2013. The approved OMP must be implemented).</p>	PCS	Compliant	<p>Submitted 14th June 2013</p> <p>Approved 11 December 2013.</p>
13a	A map that clearly defined the locating and boundaries of the offset area including offset attributes and shapefiles;	PCS	Compliant	Details included in the Offset Management Plan
13b	Measures to conserve, in perpetuity, the McGregor West offset area as habitat for the Golden Sun Moth and Natural Temperate Grassland;	PCS	Compliant	Details included in the Offset Management Plan
13c	Details of administrative arrangements;	PCS	Compliant	Details included in the Offset Management Plan

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
13d	Details of an appropriate monitoring program to be undertaken by a suitably qualified expert, including aims, methodology and reporting, to determine whether the Golden sun Moth and Natural Temperate Grassland values have degraded at the McGregor West offset area.	PCS	Compliant	Details included in the Offset Management Plan
13e	Details of contingency measures should the monitoring required by Condition 13d) determine that the Golden Sun Moth and Natural Temperate Grassland values have degraded at the McGregor West offset area.	PCS	Compliant	Details included in the Offset Management Plan

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
14	<p>If, after two years, the monitoring required by Condition 11c) identifies that the actions outlined in the Restoration Plan for restoration of the ecological condition of the OAPZ and/or the GSM habitat within Reservoir Hill have been unsuccessful as determined by a suitably qualified expert, then the person taking the action must develop an Additional Offset Strategy (AOS). The AOS must be submitted to the Minister for approval within six months of determining that actions were unsuccessful.</p> <p>The AOS must include, but not necessarily be limited to:</p> <p>(The AOS must be implemented within 12 months of the date of the approval of the AOS).</p>	Suburban Land Agency	Not applicable	Only the baseline monitoring has occurred to date. The second year of monitoring is taking place in 2017/18.
14a)i	Details of the proposed additional offset including acquisition and management of land containing an unsecured population of Golden Sun Moth; and/or	Suburban Land Agency	Not applicable	

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
14a)ii	Details of the proposed additional offset including funding arrangements and proposed measures that demonstrably improve Golden Sun Moth habitat at another site; and	Suburban Land Agency	Not applicable	
14a)iii	Details of the proposed additional offset including details of an administrative arrangements including timeframes, responsibilities, and accountabilities.	Suburban Land Agency	Not applicable	
14b	Details of an appropriate monitoring program to be undertaken by a suitably qualified expert including aims, methodology, reporting, to determine whether the values at the proposed sit(s) in Condition 14a) are improved;	Suburban Land Agency	Not applicable	
14c	Contingency measures should be monitoring determine that the values re not improved by the management measures; and	Suburban Land Agency	Not applicable	Only the baseline monitoring has occurred to date.
14d	Details how the proposed funding and management aligns with (and does not duplicate) the existing Offset Strategy as required by Condition 12).	Suburban Land Agency	Not applicable	

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
General Conditions				
15	Within 30 days after the commencement of the action, the person taking the action must advise the department in writing of the actual date of commencement.	Suburban Land Agency	Not applicable – reported in prior year	The Commonwealth Government were advised on 24 September 2013 that construction commenced on 12 September 2013.
16	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 offset, OMP and, if required the Restoration Plan and any other report, strategies, agreements however described 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.	Suburban Land Agency, PCS and TCCS	Compliant	All relevant documentation is maintained on ACT Government files.

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
17	Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish and maintain a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and 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.	Suburban Land Agency, PCS and TCCS	2015-16 report non-compliant 2016-17 report non-compliant	The 2015-16 report was published on 16 December 2016. The 2016-17 report was published on 21 December 2017 All reports are now available on the ACT Government Offsets Register and can be found here.
18	Upon the direction of the Minister, the person taking the action must ensure that an independent audit of the compliance with the conditions of approval is conducted and report submitted to the Minister. The independent auditor must be approved by the Minister and the audit report must address the criteria to the satisfaction of the Minister.	Suburban Land Agency, PCS and TCCS	Not Applicable	No direction given.

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
19	If the person taking the action wishes to carry out an activity otherwise than in accordance with the Offset Strategy, OMP and, if required, the Restoration Plan or AOS, and any other report, strategies, agreements however described 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 the Offset Strategy, OMP and, if required, the Restoration Plan or AOS, and any other report, strategies, agreements however described.	Suburban Land Agency, PCS and TCCS	Compliant	The Jarramlee Offset Management Plan is being revised to fulfil commitments within the West Belconnen Strategic Assessment (WBSA). Commitments for both the WBSA and Lawson approval decision will be within a signal OMP, which will be submitted to the Department of Environment and Energy for approval.

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
20	If the Minister believes that it is necessary or convenient for the better protection of the listed threatened species and communities and Commonwealth land to do so, the Minister may request that the person taking the action make specified revisions to the Offset Strategy, OMP and, if required, the Restoration Plan or AOS, and any other report, strategies, agreements however described as specified in the conditions and submit the revised Offset Strategy, OMP and, if required, the Restoration Plan or AOS, and any other report, strategies, agreements however described for the Minister's written approval.	Suburban Land Agency and PCS	Not Applicable	No request made.
21	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.	Suburban Land Agency	Not applicable – action commenced	Action commenced on 12 September 2013 and substantially commenced by January 2014.

Condition Number	Condition	Responsibility	Compliant / Non-compliant / Not applicable	Description
22	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans, ecological surveys, reports, strategy and agreement however described referred to in these conditions of approval on their website. Each management plan, ecological surveys, reports, strategy and agreement must be published on the website within 30 days of being approved.	Suburban Land Agency and PCS	Non-compliant	<p>The publication dates for reports prepared as part of this approval decision are as follows:</p> <ul style="list-style-type: none"> • Approved more than 30 days before the publishing date. Monitoring of Golden Sun Moth Synemon Plana and its Habitat at Reservoir Hill. Published online 14 August 2017.

2. 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 Suburban Land Agency (the proponent).

There was a total expenditure during the reporting period of \$195,781.00. Total expenditure over the life of the offset to date: \$32,033.96 (2013-14) + \$160,690.72 (2014-15) + \$185,849.26 (2015-16) + \$195,781.00 (2016-17) = \$573,460.94

Activity	Description (from OMP)	Estimated Timeframe for Completion (as described in OMP)	Actions / Comments	Expenditure (GST) Total expenditure to date (from 29 November 2017)
Biomass management plan	<p>The plan will guide:</p> <ul style="list-style-type: none"> The grazing and/or burning regime to maintain understory biomass at levels that benefit the golden sun moth (GSM) and natural temperate grassland (NTG) as well as comply with the requirements of a strategic firefighting advantage zone. The location of internal fences along Ginninderra Creek and/or Gooromon Ponds Creek to ensure the biomass within the GSM habitat along the riparian corridor can be appropriately managed. The installation of stock grazing infrastructure. 	2013-14	<ul style="list-style-type: none"> The Jarramlee Restoration Plan has taken the place of a site specific biomass management plan. The Restoration Plan will outline methods to meet the requirements to enhance and increase NTG and GSM habitat. Soil sampling, site history, and floristic mapping have guided the recommended actions. The Restoration Plan is in draft format and will be completed once ACT Heritage and Conservation Research has commented on actions. Cattle have been excluded from the NTG area on the western side of the reserve during spring/summer 2016 and 2017 to allow the native plants to germinate. The cattle have also been removed from the triangle paddock (Figure 1) east of the sealed road to Jarramlee Homestead for spring 2017, where high quality NTG present. 	\$16,855.00

Activity	Description (from OMP)	Estimated Timeframe for Completion (as described in OMP)	Actions / Comments	Expenditure (GST) Total expenditure to date (from 29 November 2016 to 28 November 2017)
Consult with ACT Heritage Unit	<ul style="list-style-type: none"> Inform the ACT Heritage Unit of operational or habitat restoration works which could impact Aboriginal scatters recorded in Jarramlee. Seek advice from the ACT Heritage Unit prior to upgrading the fence on the ACT/NSW border along the Bicentennial National Trail (BNT). 	As is required	The ACT Heritage unit were consulted on the replacement of all fences. Advice will be sort for the future NTG restoration work.	Nil
Fencing	<ul style="list-style-type: none"> Upgrade to 'vandal resistant' gates along the BNT. Repair or replace other boundary fences as needed. Fence off Ginninderra and/or Gooromon Ponds Creek as guided by the biomass management plan to protect stream banks from stock trampling. The ACT Heritage Unit needs to be advised of any planned upgrade or replacement to the heritage fence on the ACT/NSW border fence along the BNT. 	2014-15	<ul style="list-style-type: none"> The boundary fence on the northern and western side of the triangle paddock was replaced maintain security of livestock (Figure 1). 	\$16,100
Stock grazing preparation	<ul style="list-style-type: none"> Install mains fed troughs to supply stock water from Ginninderra Creek and Gooromon Ponds Creek. 	2014-15	<ul style="list-style-type: none"> The mains fed troughs project was completed in March 2017. Three water troughs were installed in each of the top paddocks, including under boring the Ginninderra Creek to lay water pipes to connect the troughs to the water mains. This will allow more effective control of stock and reduce erosion on the Ginninderra Creek (Figure 2). 	\$39,493

Activity	Description (from OMP)	Estimated Timeframe for Completion (as described in OMP)	Actions / Comments	Expenditure (GST) Total expenditure to date (from 29 November 2016 to 28 November 2017)
			<ul style="list-style-type: none"> Temporary water tanks were used in the top paddocks while the troughs were being installed to allow crash grazing of these paddocks. Investigations are being made to install additional water troughs into the BNT on the southern side of Jarramlee to replace the need for temporary water tanks that require regular filling. This work is planned for mid 2018. 	
Signage	<ul style="list-style-type: none"> 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"> Signage installation had been postponed until the final nature reserve boundary was confirmed (i.e. as part of the West Belconnen Strategic Assessment process). This only took effect in July 2016. The guiding document for the Urban Reserve sign standards is also still in preparation. The signage for Jarramlee will be postponed further until this is finalised 	Nil
Riparian restoration	<ul style="list-style-type: none"> Undertake stream bank protection works at the confluence of Ginninderra Creek and Gooromon Ponds Creek to protect GSM habitat from erosion. Revegetate with indigenous shrubs within other sections of the riparian zone to provide habitat for woodland and migratory birds. Planting should be done in small patches along the riparian corridor avoiding GSM habitat. Seed advice from ACT Government ecologists on plant species selection and on the location of the revegetation works. 	2015-16	<ul style="list-style-type: none"> A conflict exists between the requirement to graze the GSM habitat along the riparian corridor to maintain suitable habitat structure and the need to protect the riparian corridor from stock to minimise erosion and impact to the riparian environment. A consultant was engaged (in 2016) to assess and provide rehabilitation recommendations. As per the recommendations the cattle have been removed from the site. Initially they will still be used to actively manage the Chilean Needle Grass biomass for GSM breeding season and seed load downstream. This will only be away from the worst section of stream bank erosion. This will be in a controlled rotational grazing cell format so as to lessen the impact from stock. Mowing has started on the riparian zone. The river bank from the confluence has been mowed using a tractor with slasher and a team of brush cutters. This will be undertaken on a 	\$9,518

Activity	Description (from OMP)	Estimated Timeframe for Completion (as described in OMP)	Actions / Comments	Expenditure (GST) Total expenditure to date (from 29 November 2016 to 28 November 2017)
			<p>regular basis when the GSM is not actively flying. The on ground work commenced in October 2016.</p> <ul style="list-style-type: none"> • Further advice is being sought from experts and consultants on alternative means of protecting and restoring the riparian corridor. This will involve both engineering solutions and revegetation. • Riparian restoration works will continue once this advice is received. 	
Connectivity and GSM habitat restoration	Engage an external contractor to rehabilitate the area between Jarramlee and Dunlop Grasslands Nature Reserve to improve GSM habitat connectivity.	2016-17	<ul style="list-style-type: none"> • The original GSM habitat connectivity project was postponed due to the cost and practicality of the project. • Alternative measures to improve the GSM habitat connectivity are being included as part of the West Belconnen Strategic Assessment. This includes the protection and management of Lot 2 Wallaroo Road. • Additionally, the Jarramlee Restoration Plan is being developed as a whole of site approach to GSM habitat and NTG restoration (see the Biomass Management Plan section) • Remediation works occurred in a plot historically damaged by vehicles. The site was revegetated with native grasses and forbs to increase the area of native grasslands within the site. Maintenance on this site continued over the 16/17 period. 	\$540
Weed control	<ul style="list-style-type: none"> • Reduce the impact of weeds of concern, namely: serrated tussock, St John's wort, African love grass, Patterson's curse, sweet briar, blackberry and saffron and scotch thistles. • Until results on the current research on Chilean needle grass control within golden sun moth habitat are available, 	On-going	<ul style="list-style-type: none"> • Weed control was undertaken across Jarramlee for: <ul style="list-style-type: none"> – St John's wort – Jan 2017 – Blackberry/woody weeds – Feb 2017 – Chilean needle grass –Nov 2016/Oct 2017 – Serrated tussock –Nov 2016/Nov 2017 – African love grass – Feb/Oct/Nov 2017 – Scotch/Saffron thistle – July/Sept 2017 • Chilean needle grass and serrated tussock were treated twice 	\$37,504

Activity	Description (from OMP)	Estimated Timeframe for Completion (as described in OMP)	Actions / Comments	Expenditure (GST) Total expenditure to date (from 29 November 2016 to 28 November 2017)
	<p>Chilean needle grass control should be limited to areas outside of GSM habitat.</p> <ul style="list-style-type: none"> 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. Protect native plant species from off-target damage. To maintain an open grassland structure regenerating trees and shrubs should be removed from outside woodlots. 		<p>during this period due to their abundance and invasiveness.</p> <ul style="list-style-type: none"> Chilean needle grass control was limited to areas outside of the riparian corridor where it is the primary habitat for the GSM. A phased program for removing/treating Blackberry and other woody weeds was started in 2014 to minimise impacts on woodland bird habitat. Plants were initially sprayed but not removed to leave structure for nesting birds. In 2017, some of the dead plants have been slashed to reduce harbor for rabbits and enhance grassland areas. Four habitat connectivity plots were planted in May 2015 to increase native habitat for woodland birds as the woody weeds are gradually reduced. Slashing and herbicide are used in the plots to reduce the weeds. In 2017, each planting also had a buffer sprayed around it, as well as a weed mat installed to reduce competition from other vegetation. 	
Golden sun moth research	<ul style="list-style-type: none"> Research into golden sun moth life cycle, habitat requirements or translocation 	2015-16	<ul style="list-style-type: none"> Golden Sun Moth translocation research was completed in 2013-14 and 2014-15. This was co-ordinated by PCS and funded by the Land Development Agency. The ACT Government has committed \$100,000 p.a. for research as part of the Gungahlin Strategic Assessment. This includes additional funding to test GSM translocation methods. The West Belconnen Strategic Assessment (which includes Jarramlee) also commits to undertaking similar research. Details of this research will be included in the West Belconnen Strategic Assessment planning documents. 	Nil

Activity	Description (from OMP)	Estimated Timeframe for Completion (as described in OMP)	Actions / Comments	Expenditure (GST) Total expenditure to date (from 29 November 2017 to 28 November 2017)
Vertebrate pest control (rabbits)	<ul style="list-style-type: none"> Undertake a low risk control program Spotlight counts in spring and autumn Map active warrens in winter and control rabbits in spring Follow up control may be necessary 	On-going	<ul style="list-style-type: none"> Few active warrens present. These are primarily in blackberry bushes. The blackberries are currently being controlled to reduced blackberry harbour. In July 2016 all active rabbit warrens were mapped. Fumigation of active rabbit warrens will take place in Jan 2018 by a licenced contractor. Follow up control will be conducted as necessary. Seasonal rabbit monitoring is ongoing. Spotlighting is conducted in spring and autumn to monitor rabbit and other pest species numbers 	Nil
Monitoring golden sun moth population	<ul style="list-style-type: none"> The golden sun moth population will also be surveyed once in every five year period. Priority will be given to undertaking these surveys in years where emergence of golden sun moth in other sites in the ACT is high. 	Following a review of GSM monitoring methods, Jarramlee GSM will be monitored every 3 years. This means that GSM monitoring will be consistent across all PCS managed offset reserves, allowing direct comparison between sites to determine if changes in numbers are due to seasonal differences or are site related.	<ul style="list-style-type: none"> Monitoring was undertaken in Nov/Dec 2016. GSM abundance was considered to be low – moderate across Jarramlee. In total, 304 individuals were sighted (average 38 GSM/hour or 3 per 100m transect). GSM are present across the majority of the reserve, excluding the exotic dominated, non-Chilean Needle Grass areas. Higher density populations are centred around Ginninderra Creek, in the CNG. Monitoring of GSM is being undertaken in the 2017 flight season. 	\$5,863

Activity	Description (from OMP)	Estimated Timeframe for Completion (as described in OMP)	Actions / Comments	Expenditure (GST) Total expenditure to date (from 29 November 2016 to 28 November 2017)
Monitor extent and quality of golden sun moth habitat and natural temperate grassland	<ul style="list-style-type: none"> The extent and quality of golden sun moth habitat and natural temperate grassland will be re-mapped in 2015 and then every four years thereafter 	Following a review of GSM monitoring methods, GSM habitat monitoring will be incorporated into the vegetation monitoring. This will take place every 3 years, along with the GSM monitoring. The timing and methods will be consistent across the offset reserves. Re-mapping of vegetation and GSM habitat will take place in 10 years, or when considered necessary.	<ul style="list-style-type: none"> Quality of GSM habitat was monitored in 2016 using 8 x 100m vegetation transects across the reserve. Average native cover in a transect was 40% Three of the transects recorded Chilean Needle Grass, utilised by GSM as a habitat species. Transect 1 recorded the highest non-CNG exotic cover, and also recorded no GSM. The remaining transects recorded native or exotic GSM feed species, and flying moths. Extent of NTG was mapped in 2016, as conditions during 2015 mapping were not ideal, and the definition of NTG has been changed. The mapping exercise identified 11.3ha of NTG, 33.6 ha of native grassland and 44.85 ha of exotic grassland. GSM habitat mapping and grassland condition mapping is taking place in 2017. This will produce consistent maps across all of the offset reserves. 	\$3,908
Staff resources	<ul style="list-style-type: none"> PCS are currently supporting 0.7 FTE Senior Ranger position to implement the management plan for the Jarramlee offset. 	On-going	A Senior Ranger has been engaged to deliver on the actions outlined in the Offset Management Plan. PCS is also providing in-kind support with 0.2 FTE of a GSO9 working on the project.	\$66,000.00 plus 0.2 FTE GSO9 position (in-kind)

3. Other Actions.

Below are actions that have been undertaken within the offset area and are additional to those described within the offset management plan.

Activity	Description	Actions / Comments	Expenditure (ex. GST) Total expenditure to date (from 29 November 2016 - 28 November 2017)
Subsidence	We are experiencing subsidence in an area that is above de-commissioned sewage infrastructure	<p>In December 2016, the consultant's completed Preliminary Site Investigation Report was client approved with clear recommendations to undertake further site investigations to delineate the nature and extent of the subsidence problem at Jarramlee. In May 2017, funding was approved by Treasury to commence stage 2 works (Appropriation: BSYC – Jarramlee Nature Reserve 2017-19). In October 2017, a consultant was engaged to undertake Detailed Site Investigation works. Currently, an Environmental Significance Opinion (ESO), Construction and Environmental Management Plan (CEMP) and a Section 57 Heritage Report have all been lodged, pending approval. An independent EPA approved auditor has also been engaged to review and certify the consultant's draft Sampling Analysis and Quality Plan (SAQP). Therefore, Detailed Site Investigations are only anticipated to commence on site in late January and will principally involve the following key tasks:</p> <ol style="list-style-type: none"> 1. Geotechnical surveys (dual magnetic frequency survey); 2. Hydrological testing (including in Ginninderra Creek); 3. Excavation soil tests (test pits). 	Nil
Pink Tailed Worm Lizard	The site is identified as suitable habitat for the Pink Tailed Worm Lizard	<ul style="list-style-type: none"> • Pink Tailed Worm Lizard habitat assessment was undertaken in November 2016. The results of this assessment will assist in site planning. • The assessment identified 1.16 ha of high quality potential habitat, 2.62 ha of moderate quality potential habitat and 3.58 ha of low quality potential habitat. Low quality potential habitat 	\$3,309.00

Activity	Description	Actions / Comments	Expenditure (ex. GST) Total expenditure to date (from 29 November 2016 - 28 November 2017)
		<p>is unlikely to still support PTWL.</p> <ul style="list-style-type: none"> • Much of the rock at Jarramlee is deeply embedded, and as such if PTWL are present they are likely to be at low density. • PTWL will not be monitored at the site, as the monitoring methods are considered too invasive, and potentially damaging for the species. If a non-invasive monitoring technique is developed this decision will be reconsidered. 	
Bird Monitoring	Several rare and threatened bird species have been reported anecdotally in the area	<ul style="list-style-type: none"> • Bird surveys were undertaken in Jarramlee twice each in summer, autumn and winter of 2017. Final report for 2017 will be delivered by February 2018. • The survey recorded three species listed as threatened in the ACT: Scarlet Robin, Little Eagle and Superb Parrot. • The survey also recorded 3 species listed as threatened in NSW: Diamond Firetail, Dusky Woodswallow and Flame Robin. • The survey results indicate that Jarramlee provides habitat for a wide range of woodland and grassland bird species. 	\$4,309

***Note:** to ensure that the annual reports most accurately reflect expenditure from year to year, the annual financial reporting cycle will start and complete 2 weeks prior to the date the reports are due, i.e. for this report (due 12th December) the figures include expenditure (based on invoices received) up to 28th November 2017.

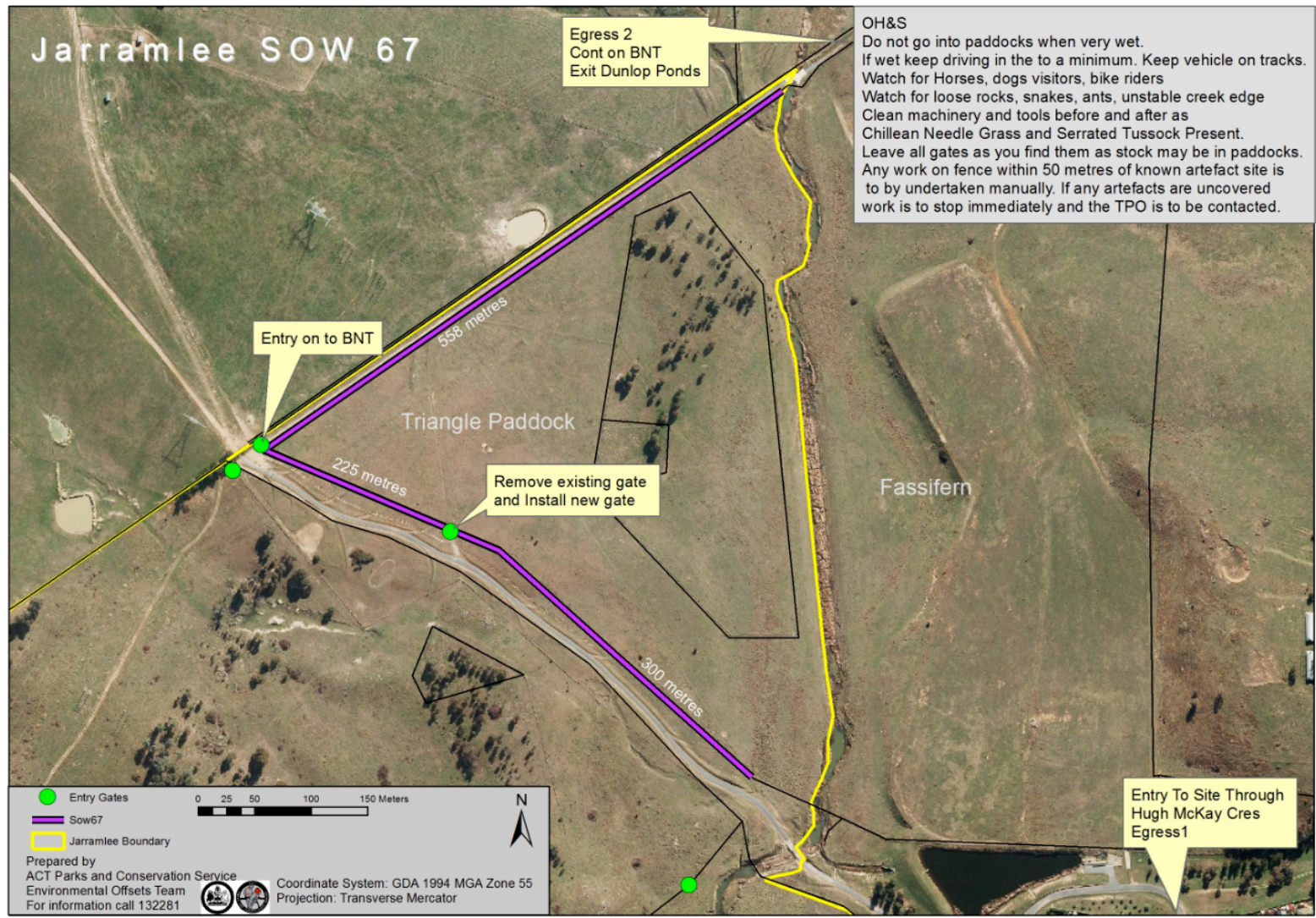


Figure 1. Location of fencing in the “Triangle Paddock”

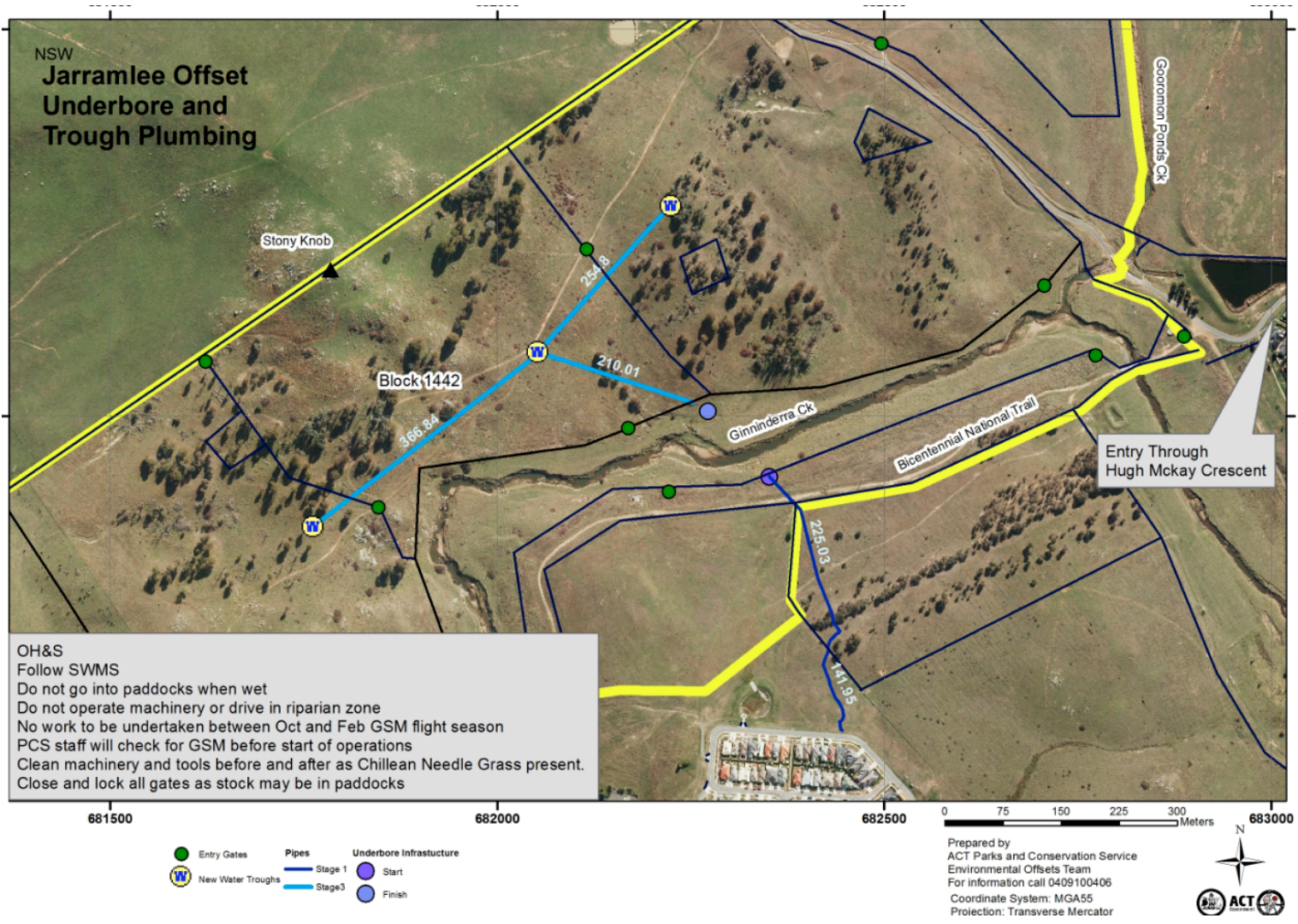


Figure 2. Water troughs and plumbing infrastructure to facilitate the management of biomass within the GSM habitat