
# Annual Compliance Report

9 July 2021 to 8 July 2022 EPBC 2014/7306

Springview Village One, Springfield, Ipswich City, Queensland
Stockland Development Pty Ltd

30 September 2022

Job No: 8473 E

Stockland | kalina
SpringEdd

# Document control

Document: Annual Compliance Report 9 July 2021 to 8 July 2022 EPBC 2014/7306, prepared by Saunders Havill Group for Stockland Development Pty Ltd.

## Document Issue

| Issue | Date | Prepared By | Checked By |
|---|---|---|---|
| A | 28/09/2022 | MD / HS | JB |
| B | 30/09/2022 | HS | HS |

Prepared by

ABN 24 144 972 949
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# 1. Introduction

Saunders Havill Group (SHG) have prepared this Annual Compliance Report (ACR) for the Springview Village One project at Springfield, Queensland on behalf of Stockland Development Pty Limited (Stockland). In 2018, the Springview Village One project was rebranded Kalina Springfield and all project references use the latter name herein.

This report provides an assessment of the project's compliance with the approval granted under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (ref EPBC 2014/7306) and is specifically required by condition 10 of the approval granted on 14 September 2016 (refer **Appendix A**). The reporting period for this ACR is the twelve months ending on 8 July, 2022.

Kalina Springfield is located approximately 2.5 kilometres (km) north of Springfield Central and is adjacent to existing urban development comprising residential housing and Springfield Anglican College in the Ipswich City local government area (refer **Figure 1**). Within the project area, an impact to no more than 39.75 ha of Matters of National Environmental Significance (MNES) habitat being Koala habitat was permitted under the approval conditions. A land-based offset accompanied this clearing to counterbalance the impacts and is located in the locality of Calvert, approximately 40 km west of the project.

## 1.1. Approval summary

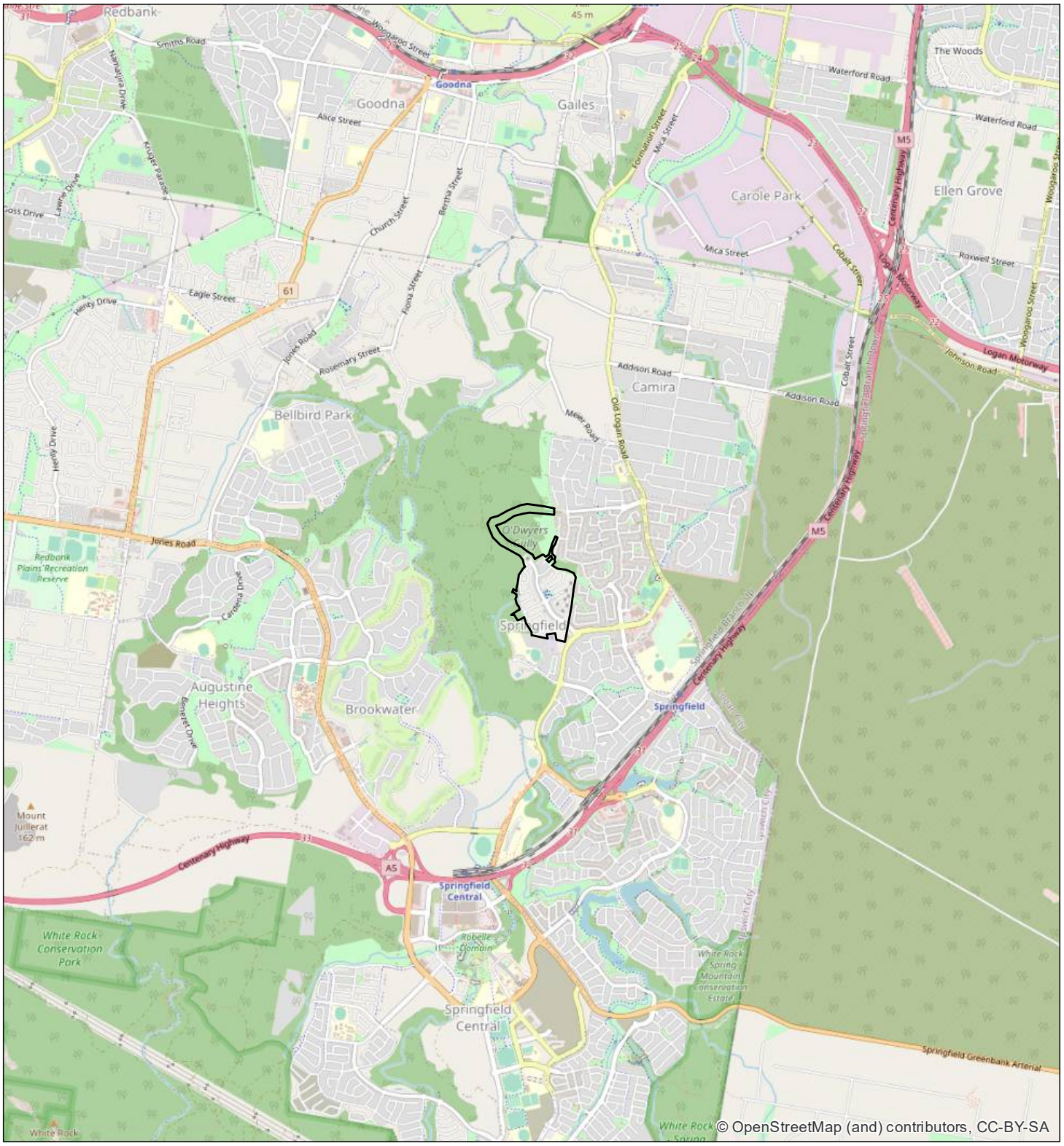
There are three approval documents issued under the EPBC Act relevant to the project:

1. *Approval* dated 12 June, 2016.
2. *Notice of Transfer of Approval* dated 16 June, 2017.
3. *Variation to Conditions Attached to Approval* dated 12 June, 2018.

**Table 1** summarises the approval details under the EPBC Act relevant to Kalina Springfield. The approval was granted by the Australian Government Department of Agriculture, Water, and the Environment. The approval is currently administered by the Department of Climate Change, Energy, the Environment and Water (the Department).

**Table 1: EPBC Act approval summary**

| | |
|---|---|
| Department reference | EPBC 2014/7306 |
| Approval holder, ACN | Stockland Development Pty Limited, 000 064 835 |
| Approval date | 14 September 2016 |
| Expiry date of approval | 30 September 2041 |
| Approved action | To develop Springview Village One residential development at Lot 43 on SP2442290 at the junction of Mur Boulevard and Panorama Drive, Springfield, Queensland as described in the referral received by the Department on 15 August 2014. |
| Controlling provision | Approved - listed threatened species and communities (sections 18 & 18A) |
| Address | Mur Boulevard, Springfield Queensland 4300 |




**Legend**

EPBC Act approved Clearance Area

***Figure 1***

*Site Context*

EPBC 2014/7306
Kalina Springfield - Residential Development

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***File ref.*** 8473 E Figure 1 ACR4 Site Context A
***Date*** *28/07/2022*
***Project*** *Kalina Annual Compliance Report #4*

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0 0.5 1 2 *km*

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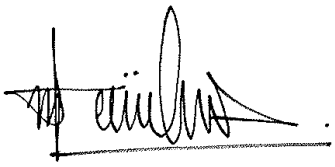
*Scale (A4): 1:50,000 [GDA 1994 MGA Z56]*



*Layer Source:* *© State of Queensland 2022*

## 1.2. Declaration of accuracy

In making this declaration, I am aware that sections 490 and 491 of the 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 | Murray Saunders |
| Position | Director |
| Organisation | Saunders Havill Group (ABN 24 144 972 949) |
| Date | 30 September 2022 |

# 2. Description of activities – impact area

The Kalina Springfield project is a residential development situated in Springfield, a suburb of Ipswich City. The development encompasses the establishment of residential land parcels and open space areas, and construction is ongoing.

A total of 397 residential allotments have been created during the first four years of construction. Works on-site commenced on 9 July 2018 (refer **Figure 2**). Clearing commenced with a high level of diligence afforded by Stockland to minimise potential harm to Koala and other fauna potentially residing on-site where a Fauna Spotter Catcher attended at all times. Furthermore, minimising disturbances to neighbours was also an ongoing priority.

During the reporting period, the following activities were under construction or established in the project area:

- residential land parcels (**Photo set 1**);
- internal road network and associated infrastructure (**Photo set 1**); and
- planting for landscaping purposes (**Photo 2**).

Vegetation clearing occurred during this reporting period within the north-eastern extent of the site (known as Stage 15 of the Kalina project) (refer **Photo 3**). This clearing was completed in accordance with approvals from state and / or local administering authorities in place, where applicable. Additionally, the clearing was completed in accordance with the approval under the EPBC Act during the reporting period.

Ongoing stability and rehabilitation efforts to support previous construction in accordance with industry standards and to mitigate potential impacts on the surrounding environment were observed during the site inspection on 5 July 2022. These were in satisfactory condition. The stability and rehabilitation activities were completed with approvals from state and / or local administering authorities in place, where applicable. Minor defects were observed including litter and damaged boundary fences. Refer to **Photo 4** and **Photo 5** for the status of rehabilitation works in association with the gully line along the northern interface, and **Photo 6** for the status of rehabilitation works at the Lotus Place bund.

Sediment and erosion control measures continued to be observed within and bounding the works extent (refer to **Photo 7** and **Photo 8**). It is noted minor erosion was observed in the rehabilitation area to the west of the site, which is likely a result of the heavy rain events throughout the reporting period in 2022 (refer to **Photo 9**). Observed sediment and erosion control measures were concentrated along the interface between the retained bushland area and works extent, and in association with utility infrastructure (e.g. drainage culverts, stormwater basins). Demarcation of recent clearing extents and areas to retain in the form of fencing and / or bunting was observed (reflecting correlating approvals).

**Photo set 1: New allotments and builds during the reporting period.**

**Photo 2: New landscaping along western interface.**

**Photo 3: New clearing area with newly installed fence and mulch.**

**Photo 4: Progress of rehabilitation areas in drainage areas in the north.**

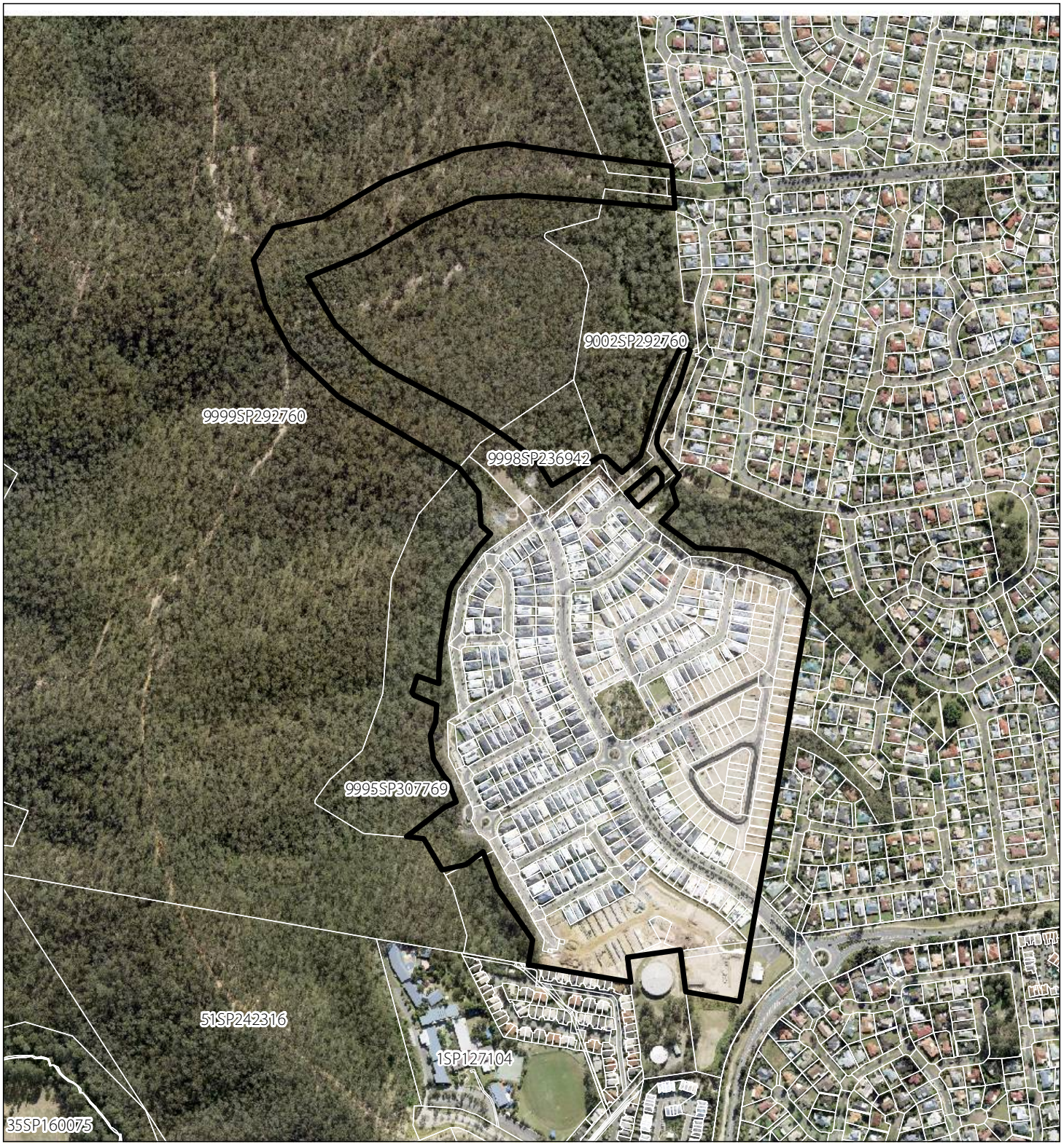
**Photo 5: Rehabilitation progressing in the northern drainage interface.**

**Photo 6:** **Progress of rehabilitation area at Lotus Place.**

**Photo 7:** **Erosion and sediment controls adjacent an outlet.**

**Photo 8:** **Erosion and sediment controls**

**Photo 9:** **Minor evidence of erosion within rehabilitation area towards the western extent, to be rectified as part of management measures.**




**Legend**

Qld DCDB

EPBC Act approved Clearance Area

***Figure 2***

*Site Aerial*

EPBC 2014/7306
Kalina Springfield - Residential Development

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***File ref.*** 8473 E Figure 2 ACR4 Site Aerial A
***Date*** *28/07/2022*
***Project*** *Kalina Annual Compliance Report #4*

0 50 100 200 300 *m*

*Scale (A4): 1:8,000 [GDA 1994 MGA Z56]*

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*Layer Source: © State of Queensland 2022, Metromap 2022*

## 2.1. Koala habitat

The Kalina Springfield project was deemed a controlled action based on impacts to the vulnerable-listed Koala species. Field survey effort conducted across the site during the referral process determined that Koalas occur on-site infrequently and at an implied low usage. This finding has been supported by subsequent fauna spotter catcher reports undertaken for clearing works in 2018 and 2019 which showed Koalas were not observed during pre-clearance surveys. These documents are provided in the first- and second-year annual compliance reports (available on the Kalina Stockland website).

During the 2020-2021 reporting period, no fauna spotter catcher inspections were undertaken as no vegetation clearing occurred. In this reporting period (2021-2022), fauna spotter catcher inspections were undertaken for clearing in February and April 2022. These surveys failed to locate any Koalas in the survey location during the pre-clearance survey or while clearing works were underway.

Surveys have been completed on the development area periphery to ascertain Koala usage and presence, and continue to be undertaken at the end of each reporting period. The results are discussed in **Sections 2.1.1** and **2.1.2**.

### 2.1.1 Unmanned aerial vehicle thermal imagery survey

During the 2018 to 2019 reporting period (*i.e.*, ACR Year 1), subsequent to the commencement of on-site clearing works, an aerial survey using a mounted thermal camera was deployed to identify the presence of *Phascolarctos cinereus* (Koala). A CASA qualified pilot operated the unmanned aerial vehicle (UAV) (*i.e.*, drone) and completed pre- and post-flight procedures as required by their licence. The UAV survey was completed on 2 November 2018. The survey identified no Koalas on-site or in the immediate vicinity.

The UAV survey has not been completed since as it was deemed unnecessary in assisting the understanding of Koala presence / absence at this stage. Alternate surveys, specifically Spot Assessment Technique (SAT) surveys and opportunistic sightings, were considered to provide sufficient information in understanding presence / absence where usage is low and detectable through implementing this survey method.

### 2.1.2 SAT survey

Surveys were undertaken across the site and surrounding vegetation to measure Koala activity using the SAT, originally developed by the Australian Koala Foundation. The SAT method involves identifying a non-juvenile tree of any species within the site that is either observed to have a Koala or scats, or is known to be a food tree or otherwise important for Koalas, and recording any evidence of Koala usage of that tree including presence, identifiable scratches or scats. The nearest non-juvenile tree is then identified and the same data recorded. The number of trees showing evidence of Koala activity is expressed as a percentage of the total number of trees sampled to indicate the frequency of Koala usage. The next closest non-juvenile tree to the first tree is then assessed and so on until 30 trees have been surveyed. Assessment of each tree involves a systematic search for Koala scats beneath the tree within a 1 m radius of the trunk. After approximately 2 minutes of searching for scats, the base of the trunk is observed for scratches and the crown for Koala.

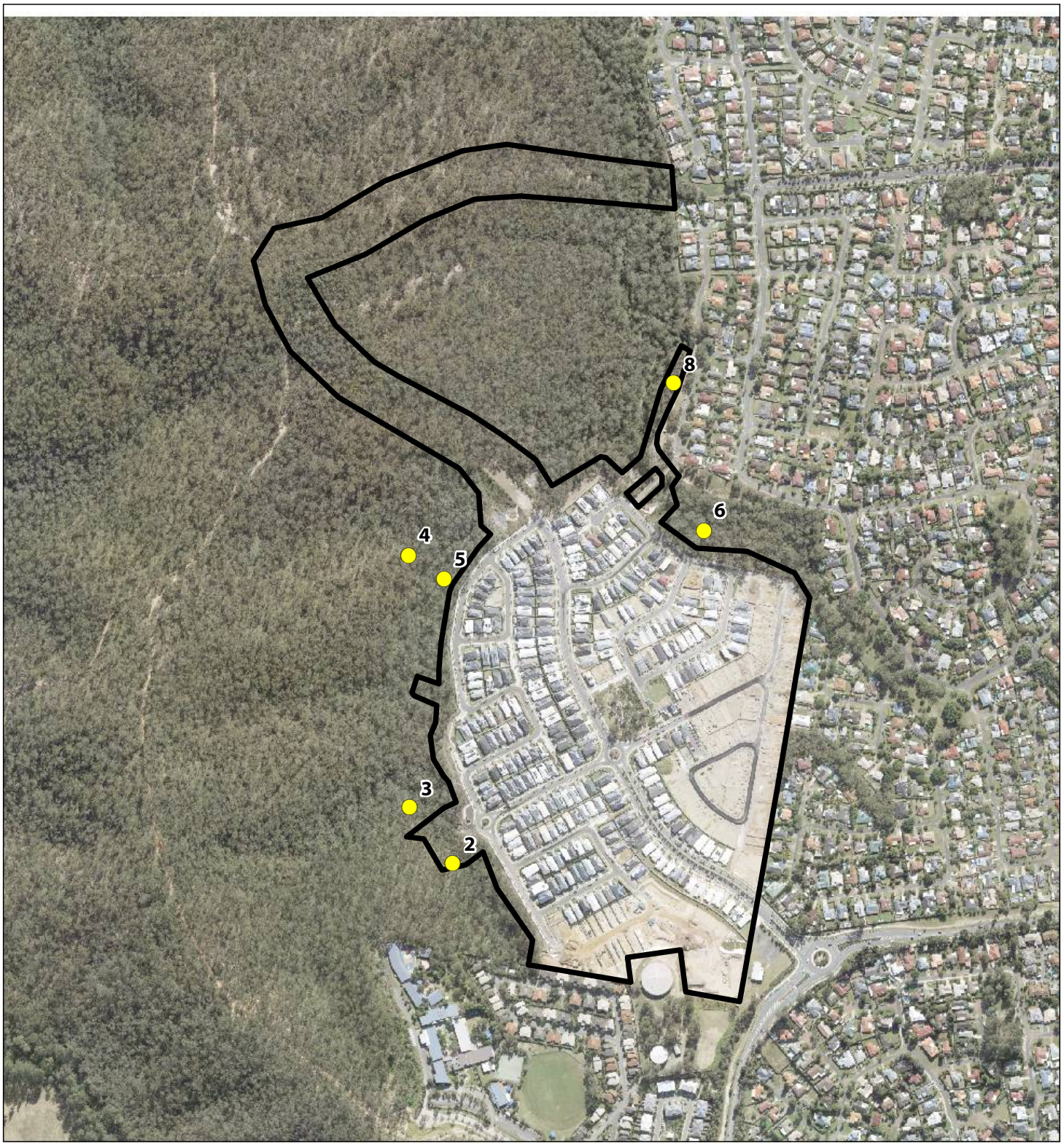
A total of six SAT surveys were completed within retained vegetation areas on 5 July 2022 (refer **Figure 3**). The locations surveyed during this reporting period were completed as close as possible to those completed in the previous reporting period for consistency. The results of the SAT surveys over the three reporting periods completed to date are provided in **Table 2**.

All surveys produced low Koala activity results as defined within the Australian Koala Foundation Koala activity classification table using the East Coast (med-high) benchmark assessment category[1] (refer **Table 2**). Detailed results of the SAT survey for this reporting period are provided in **Appendix B** and zero (0) trees were recorded with Koala faecal pellets during the survey effort. Vegetation characteristics associated with SAT survey locations are shown in **Photos 10-12.**

**Table 2: SAT survey results summary**

| SAT survey site ID | 2022 reporting period | | 2021 reporting period | | 2020 reporting period | | 2019 reporting period | |
|---|---|---|---|---|---|---|---|---|
| | Evidence of Koala activity (%) | Koala use (east coast med-high) | Evidence of Koala activity (%) | Koala use (east coast med-high) | Evidence of Koala activity (%) | Koala use (east coast med-high) | Evidence of Koala Activity (%) | Koala use (east coast med-high) |
| **1** | N/A | N/A | N/A | N/A | N/A | N/A | 0.00 | Low |
| **2** | 0.00 | Low | 0.00 | Low | 0.00 | Low | 6.67 | Low |
| **3** | 0.00 | Low | 0.00 | Low | 10.00 | Low | 6.67 | Low |
| **4** | 0.00 | Low | 0.00 | Low | 3.33 | Low | 0.00 | Low |
| **5** | 0.00 | Low | 3.33 | Low | 0.00 | Low | 0.00 | Low |
| **6** | 0.00 | Low | 6.67 | Low | 0.00 | Low | 3.33 | Low |
| **7** | N/A | N/A | N/A | N/A | N/A | N/A | 3.33 | Low |
| **8** | 0.00 | Low | 6.67 | Low | 13.33 | Low | 0.00 | Low |

[1] Phillips, S & Callaghan, J 2011, 'The *Spot Assessment Technique*: a tool for determining localised levels of habitat use by Koalas *Phascolarctos cinereus*', *Australian Zoologist*, 35(3), pg. 774-780.




**Legend**

EPBC Act approved Clearance Area

SAT location (2022)

***Figure 3***

*SAT Surveys*

EPBC 2014/7306
Kalina Springfield - Residential Development

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***File ref.*** 8473 E Figure 3 ACR4 SAT Surveys A
***Date*** *28/07/2022*
***Project*** *Kalina Annual Compliance Report #4*

0 50 100 200 300 *m*

*Scale (A4): 1:8,000 [GDA 1994 MGA Z56]*

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*Layer Source: © State of Queensland 2022, Metromap 2022*

**Photo 10: Vegetation within SAT 2 – no scats found.**

**Photo 11: Vegetation within SAT 6 – no scats found.**

**Photo 12: Vegetation within SAT 3 – no scats found.**

## 2.2. Department site visit

On 25 September 2018, three Department representatives from the Environmental Audit Section visited the Kalina Springfield construction site to assess compliance with conditions 1 and 2 of the approval. A site walkover was completed and a brief of site works was provided to the Department. Subsequent to the site visit, the Department confirmed in writing that Stockland were compliant with conditions 1 and 2 of the approval. This letter of confirmation from the Department is included in the 2019 Annual Compliance Report.

No site visits by the Department have occurred since the visit on 25 September 2018.

# 3. Description of activities – offset area

The 65 ha offset area in accordance with Condition 2 of the EPBC Act approval occurs across one land parcel that comprises confirmed Koala habitat. The offset parcel (described as 230/CH311791) is situated within Ipswich City local government area (refer **Figure 4**). Under Ipswich City Council's (ICC) Nature Conservation Strategy, the site is mapped as Core Habitat, and is within a large contiguous vegetation area of predominantly eucalypt forest. The offset area was legally secured on 6 June 2018 using the Voluntary Declaration (VDec) process administered under the *Vegetation Management Act 1999*. The securement of the offset occurred after the action was referred to the Department. As part of the VDec application, an Offset Management Plan (OMP) was prepared and came into force across the site. The VDec and OMP can be accessed online: https://www.stockland.com.au/residential/qld/kalina/news-and-events/offset-management-plan.

The primary outcomes and milestones to managing the offset area are as follows:

> Outcome #1: *By 20 years after the commencement of construction, there must be a gain in Koala habitat quality to nine across the whole offset area.*
>
> Outcome #2: *For the life of the approval, the approval holder must ensure no net loss in the extent of Koala habitat in the offset area.*
>
> Milestone #1: *By five years after the commencement of construction, a gain in Koala habitat quality to nine must be achieved in more than 50% of the offset area through rehabilitation.*

Five years after commencement is 8 July 2023.

Existing key threats to Koalas and Koala habitat within the offset area identified in the OMP include:

- wild dog attacks;
- habitat degradation through weed invasion, of particular concern *Lantana camara* (Lantana) and *Opuntia stricta* (Common Prickly Pear);
- unauthorised public access;
- erosion caused by vehicular access and loss of vegetation cover; and
- habitat loss from fire.

To meet the primary outcomes, existing threats to the offset site were identified and management actions designed to improve Koala habitat quality to nine across the entirety of the offset area. In accordance with condition 3 of the federal approval, to compensate for impacts to Koala habitat, detailed outcomes and milestones must be achieved. Baseline values were recorded in July and August 2018. The quality of vegetation will be measured across future years through continued habitat improvement monitoring assessments to measure the success of vegetation management efforts.

Five photo reference points were established during the 2019 ACR reporting period to assist in assessing the ongoing monitoring of site condition. A map of the reference sites and geo-referenced photo points is contained in the OMP Annual Report in **Appendix C**.

The current quality and extent of vegetation are influenced by several factors, including the presence and intensity of invasive flora and fauna, and vegetation community characteristics (*e.g.*, species diversity, canopy cover, ecologically dominant layer). The OMP identifies several management actions to be undertaken to improve Koala habitat quality and meet the primary outcomes for the offset area, as follows:

1. Weed management.
2. Infill planting.
3. Erosion mitigation.
4. Access infrastructure.
5. Fire management.
6. Fencing.
7. Wild dog management.

Details on the progress of these actions are provided in **Table 3**. This table is reviewed annually as part of the Annual Compliance Report in accordance with condition 10 of the approval and the resultant status of actions discussed accordingly. The table will be reviewed in conjunction with the OMP Annual Report prepared by Cherish the Environment Foundation Limited. The OMP Annual Report for this reporting period is provided in **Appendix C**.

It is noted that during this reporting period, the site and wider South East Queensland region experienced higher than average rainfall. This is attributed to the declared La Nina climatic event which resulted in significant levels of rainfall across eastern Australia between October 2021 to June 2022. Subsequently, flood events occurred in the area in both February and May 2022. Rainfall affects vegetation growth, soil erosion, and weed regrowth. These affects have been managed during the reporting period, as detailed within **Table 3**.


Legend

- Calvert offset site
- Major road
- Watercourse

*Figure 4*

*Legally Secured Offset Area*

EPBC 2014/7306
Kalina Springfield - Residential Development

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*File ref.* 8473 E Figure 4 ACR3 Legally Secured Offset Area A
*Date* 3/08/2021
*Project* Kalina Annual Compliance Report #3

0 0.5 1 2 3 km

N

*Scale (A4):* 1:85,000 [ GDA 1994 MGA Z56 ]

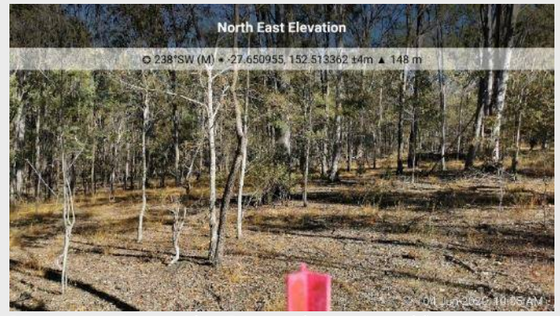
saunders havill group



*Layer Source:* © State of Queensland 2021,Nearmap 2021

**Table 3: Summary of offset site actions during reporting period.**

| Management action | Monitoring action | Improvement proposed | Timeframe | | Progress to June 2022 | Evidence of progress |
|---|---|---|---|---|---|---|
| | | | Trigger-based | Progress to 2022 | | |
| Erosion mitigation | Inspect completed mitigation measures. | - Repair significant erosion points where possible and feasible<br>- Repair work involves re-profiling and re-directing overland water flow away from erosion path using cross-drainage<br>- Cross-drainage to be located along all permanent access tracks at appropriate intervals<br>- Allow for future maintenance of cross-drainage throughout the site | - approximately one month post completion; and<br>- approximately two weeks post first minor rainfall event; and<br>- approximately two weeks post first major rainfall event. | - Assessment and mitigation actions complete. Inspections post severe rain events completed.<br>- Major rain event in February and May 2022 resulted in minimal erosion. | The previous diversions and increases in ground cover due to stock removal have resulted in no evidence of significant erosion resulting from the February and May 2022 rain events.<br><br>It is noted, rainfall recorded at Amberley BoM site (19 km from site) shows a significant deficit in mean monthly rainfall from June to December 2020 of 146 mm or 35%. Rainfall in March 2021 was 216 mm exceeded the monthly mean by 131 mm. Rainfall from October 2021 to June 2022 was significantly above the mean monthly rainfall, as a result of the La Nina Climate event. Flood events occurred in the area in both February and May 2022, where the total rainfall recorded was 657.2 mm and 284.0 mm respectively. | - |
| Access infrastructure | Inspect existing and new access infrastructure. | - Construction and/or re-opening of tracks to facilitate weed management, infill planting establishment and maintenance, fence line construction and maintenance, pest management and fire protection activities | Existing access infrastructure:<br>- approximately two weeks post major rainfall event.<br>New access infrastructure:<br>- approximately one month post completion; and<br>- approximately two weeks post first minor rainfall event; and<br>- approximately two weeks post first major rainfall event. | - Maintenance tracks and cross drainage maintained x 2.<br>- Inspections post severe rain events completed.<br>- Downed vegetation removed, access maintained. | Inspections immediately following severe rain events were conducted to assess and ensure any erosion could be repaired. No repairs were required, however there has been further deposition in the cross road drainage from the February 2022 and May 2022 event which will require maintenance. | - |
| Weed management | Assess weed infestations and success of weed reduction measures. | - An intensive, 5-year weed management program is proposed for remnant and regrowth parts of the offset area<br>- Primary weed treatment process to commence as soon as practical, with follow-up weed treatment undertaken annually<br>- After first 3-years, required management intensity should reduce significantly<br>- Weed management will occur in two phases throughout the approval period: | Weed reduction measures:<br>- approximately six months post completion. | - Inspections to assess regrowth conducted.<br>- Increase in overall ground vegetation, including weeds post February 2022 rain event. | There are currently emergent weeds such as fleabane and lantana regrowth following the February and May 2022 rain events. Further weed treatment will be required in the coming months.<br><br>Fleabane (*Conyza spp.*) is an annual or biennial weed which is widespread in south east Queensland. It readily germinates in wet autumn conditions. | Example comparison photos to show dry conditions in previous reporting period and emergent weed growth (fleabane and lantana). |

| Management action | Monitoring action | Improvement proposed | Timeframe | | Progress to June 2022 | Evidence of progress |
|---|---|---|---|---|---|---|
| | | | Trigger-based | Progress to 2022 | | |
| | | ○ Intensive weed management until year 6; and<br>○ Ad-hoc weed management from year 6 until the end of the approval period. | | | | 4 June 2020:<br>  <br>RE12.9-10.7 Regrowth – Dry conditions, weed free<br>29 May 2021:<br>  <br>Increase in leaf and ground cover<br>30 June 2022<br>  <br>Increase in leaf and ground cover. |
| Fire management | Assess suitability of fire breaks and access tracks. | - At this stage in the project, fire management activities have been limited to fire exclusion and asset protection.<br>- Prescribed burning is restricted within the V-Dec area until a Fire Management | - approximately one month post fire event | - Boundary firebreaks slashed x 2 along with access tracks and inter-rows of the in-fill plantings. | Slashing of all boundary and maintenance tracks as well as inter-rows of the in-fill plantings has continued to be maintained to reduce fuel loads. There have been no fires in or near the site. | - |

| Management action | Monitoring action | Improvement proposed | Timeframe | | Progress to June 2022 | Evidence of progress |
|---|---|---|---|---|---|---|
| | | | Trigger-based | Progress to 2022 | | |
| | | Plan is developed (to be reviewed/endorsed or similar by the rural fire brigade or other relevant stakeholder prior to implementation) | | | | |
| Infill planting | Assess success of infill planting. | - A small, one hectare patch of open, grassy area in south-east corner of 230CH311971 will require infill planting<br>- Approximately 400 trees typical of regional ecosystems 12.9-10.2 and 12.9-10.3 will be planted in the area | - approximately six months post completion | - Completed and maintained weed free. | The infill area is established and trees continue to grow steadily with reasonable growth due to wet conditions. The area is maintained weed free in the rows and slashed between the rows to reduce both competition and fire risk.<br><br>Post-plant weed control was conducted in January 2021, May 2021, and May 2022. Post-plant spray has been effective (weeds and grass along the tree rows is dead or dying). Planted trees are healthy and show no signs of spray damage. | Infill site condition:<br>4 June 2020:<br>  <br>RE12.9-10.2 Regrowth – Infill area, dry conditions<br>29 May 2021:<br>  <br>Increase in tree growth and ground cover<br>30 June 2022:<br>  <br>Steady increase in tree growth |

| Management action | Monitoring action | Improvement proposed | Timeframe | | Progress to June 2022 | Evidence of progress |
|---|---|---|---|---|---|---|
| | | | Trigger-based | Progress to 2022 | | |
| Pest and animal management | Assess presence of pests and suitability of boundary fencing.<br><br>Undertake pest management. | - There is no internal fencing on the property – boundary fencing will be constructed, repaired and maintained to exclude domestic stock and pests<br>- Pest animals such as wild dogs will be addressed via a control program that will be implemented at the discretion of the landholder<br>- The fencing is schedules to be established / constructed within 12-months of the V-Dec being certified and must be in place for the duration of the approval<br>- A wild dog control program will occur ad hoc during the approval period | - ad hoc as part of property management | - Boundary fencing installed so the entire site excludes stock.<br>- Wildlife cameras at strategic locations to monitor for species richness. No feral species, e.g. wild dogs or pigs, captured on camera. | There continues to be no evidence of wild dogs or pigs presence across the site. | - |

# 4. EPBC approval conditions compliance table

The EPBC approval conditions for the Kalina Springfield, Springfield are replicated in **Table 4** with a designation on compliance or non-compliance if the condition was applicable during the reporting period, and evidence and comments as necessary. A copy of the EPBC approval and conditions is provided in **Appendix A**.

**Table 4: EPBC approval conditions compliance table**

| Condition number / reference | Condition | Is the project compliant with this condition? | Evidence / comments |
|---|---|---|---|
| **1** | The approval holder must not clear more than 39.75 hectares of Koala habitat. Clearing must not occur outside of the clearance area. | Compliant | The approval holder has not cleared more than 39.75 ha of Koala habitat since the commencement of the action. Clearing has not occurred outside of the clearance area. |
| **2** | To compensate for the loss of Koala habitat, the approval holder must:<br>a) secure, prior to the commencement of construction, a minimum of 65 hectares of Koala habitat within the offset area; and<br>b) provide the Department with relevant evidence on securing the offset area and the offset attributes clearly defining the location and boundary of the offset within 10 business days of lodgement of the offset with the Titles Office. | Compliant | a) An offset site, accounting for 65 ha (located at 40-160 Harrison Road, Calvert QLD 4340 (230/CH311791)), was secured prior to the commencement of construction. Clearing works began on 9 July 2018 and the offset site was secured on 6 June 2018.<br>b) The Department was notified of the offset securement and provided with relevant evidence on 7 June 2018. The Queensland Government Department of Natural Resources, Mines and Energy administers the VDec process and land titles, and therefore notification to the Titles Office would have occurred on 7 June 2018 at the latest. |

| Condition number / reference | Condition | Is the project compliant with this condition? | Evidence / comments |
|---|---|---|---|
| **3** | To compensate for the impacts to Koala habitat, the approval holder must achieve the following outcomes and milestones as compared to baseline values for Koala habitat quality and extent:<br>a) Outcomes<br>• By 20 years after the commencement of construction, there must be a gain in Koala habitat quality to nine across the whole offset area; and<br>• For the life of the approval, the approval holder must ensure no net loss in the extent of Koala habitat in the offset area.<br>b) Milestones<br>• By five years after the commencement of construction, a gain in Koala habitat quality to nine must be achieved in more than 50% of the offset area through rehabilitation. | Not applicable | a) The 20-year outcome has not surpassed and is due to occur in 2038. No net loss of Koala habitat in the offset area has occurred to date.<br>b) The 5-year milestone has not surpassed and is due to occur in 2023. Habitat quality monitoring is being undertaken across the offset site in accordance with the approved OMP. Habitat quality monitoring results are reported annually to assess the progress towards achieving a gain in Koala habitat quality to nine in more than 50% of the offset area through rehabilitation works and natural regeneration.<br>Benchmark site condition assessments were completed in July and August 2018 to record current vegetation condition. The Offset Management Plan describes baseline site condition (refer to the Stockland Kalina development website). Offset Management Plan Annual Report (June 2022) describes the ongoing site condition (refer **Appendix C**.<br>Site rehabilitation progress, including weed and pest management and infill planting, to the end of the fourth Annual Compliance Report reporting period indicates site condition is tracking towards achieving the five-year milestone. Future assessments will be completed to allow future verification of management action successes. |
| **4** | The approval holder must have an Offset Management Plan in place. The Offset Management Plan must:<br>a) include monitoring and be designed so that the results are adequate to inform adaptive management and demonstrate whether the outcomes and milestones | Compliant | An OMP is in place and has applied to the offset area since 6 June 2018. The OMP was developed to respond to condition 4.<br>a) Monitoring timeframes have been scheduled to occur both trigger-based and recurring. An inspection is completed annually |

| Condition number / reference | Condition | Is the project compliant with this condition? | Evidence / comments |
|---|---|---|---|
| | required by these conditions are on track to be achieved (before they are due) and have been achieved (at the time they are due);<br>b) include contingency measures to mitigate the risks of not achieving the outcomes and milestones required by these conditions;<br>c) be prepared in consultation with a suitably qualified person, and include written evidence of how the suitably qualified person's advice has been considered;<br>d) be in accordance with the Koala Habitat Offset Report; and<br>e) demonstrate how the plan is consistent with the Koala Conservation Advice. | | to support the progress towards outcomes and milestones, as dictated in condition 3, and ensure they are achieved.<br>b) Contingency measures to mitigate the risk of not achieving the outcomes and milestones in condition 3 are included within Sections 5, 7 and 9 of the OMP (refer to Stockland Kalina development website).<br>c) Cherish the Environment Foundation Limited prepared the OMP in consultation with Saunders Havill Group who have experience in coordinating offset management plans seeking to deliver an improvement of Koala habitat.<br>d) The Koala Habitat Offset Report and OMP propose consistent management actions and the latter expands upon key parameters (*e.g.*, timing of events, monitoring, and reporting) relating to demonstrating compliance.<br>e) The Koala Conservation Advice was reviewed as part of preparing the OMP. The Koala Conservation Advice identifies the main threats to the Koala as loss and fragmentation of habitat, vehicle strike, disease, and predation by dogs. The OMP and VDec support the protection of Koala habitat from fragmentation and loss. Pest and animal management measures have also been incorporated into the OMP and progress on these management measures is reviewed annually. Further, no formed roads intersect the offset site. |

| Condition number / reference | Condition | Is the project compliant with this condition? | Evidence / comments |
|---|---|---|---|
| **5** | The Offset Management Plan must be implemented. Unless otherwise agreed to in writing by the Minister, the approval holder must publish the Offset Management Plan on their website prior to the commencement of construction and the Offset Management Plan must remain on the website for the life of the approval. The results of the Offset Management Plan must be included in the annual compliance report required under condition 10. | Compliant | The OMP was implemented in 2018 and has continued to be implemented across all reporting periods to the date of this annual compliance report.<br><br>An OMP Annual Report presenting the results of management and monitoring actions over the offset site in accordance with the OMP during each reporting period has been completed. The 2019, 2020 and 2021 OMP Annual Reports were provided in the respective Annual Compliance Reports. The 2022 OMP Annual Report is provided in **Appendix C**.<br><br>The OMP was published on the approval holders' website prior to the commencement of construction, and remains published on the approval holders' website to date (located at https://www.stockland.com.au/residential/qld/kalina/news-and-events/offset-management-plan). |
| **6** | If, at any time during the life of the approval, the approval holder identifies that the outcomes or milestones required under these conditions are not on track to be achieved, the approval holder must report to the Department in writing within 20 business days of becoming aware. The report must state the cause, the response measures (including timeframes for reporting the success of those measures to the Department) and the actions to prevent further occurrences. | Compliant | The approval holder did not identify that the outcomes or milestones required under these conditions were not on track to being achieved. Therefore, no report notifying the Department was completed during the reporting period. |
| **7A** | If the Minister is not satisfied that the outcomes or milestones required by these conditions are likely to be achieved, or is not satisfied that there is sufficient evidence that the outcomes or | Not applicable | The approval holder has not received a request from the Minister to submit a plan to monitor, manage, avoid, mitigate, offset, record or report on, impacts to Koala habitat. |

| Condition number / reference | Condition | Is the project compliant with this condition? | Evidence / comments |
|---|---|---|---|
| | milestones required by these conditions are likely to be achieved, the Minister may (in writing) request the approval holder to submit a plan for the Minister's approval, to monitor, manage, avoid, mitigate, offset, record or report on, impacts to Koala habitat. | | |
| **7B** | The Minister may set a timeframe in which the plan must be submitted, and may designate that the plan must be prepared or reviewed by a suitably qualified person. | Not applicable | The approval holder has not received a request from the Minister to submit a plan specified in condition 7A, therefore a timeframe was not set by the Minister to submit the plan. |
| **7C** | If the Minister approves the plan in writing then the approval holder must implement that plan (or a revised version if approved in writing by the Minister or otherwise allowed under these conditions).<br><br>Note: Cost recovery does not apply to a plan required under this condition. | Not applicable | The approval holder has not received a request from the Minister to submit a plan specified in condition 7A. This condition is not applicable. |
| **8** | Within 20 business days after the commencement of construction, the approval holder must advise the Department in writing of the actual date of the commencement of construction. | Compliant | The actual date of the commencement of construction was 9 July 2018. The Department was notified of the commencement of construction on 19 July 2018. |
| **9** | The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the Offset 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 | Compliant | The Saunders Havill Group records and holds all relevant information for this EPBC approval on behalf of the approval holder. Electronic records of all material are held collectively by the Saunders Havill Group and approval holder and will be made available upon request in accordance with section 458 of the EPBC Act, or if required to verify compliance with the conditions of approval. |

| Condition number / reference | Condition | Is the project compliant with this condition? | Evidence / comments |
|---|---|---|---|
| | will be posted on the Department's website. The results of audits may also be publicised through the general media. | | |
| **10** | Within three months of every 12 month anniversary of the commencement of construction, the approval holder must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of the Offset Management Plan as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. Reports must remain on the website for the period this approval has effect. The approval holder may cease preparing and publishing compliance reports required by this condition with written agreement of the Minister to do so. | Compliant | The anniversary of the commencement of the action is 9 July, annually. The annual deadline for publishing the report addressing compliance with each of the conditions of the approval (*i.e.*, this Annual Compliance Report) is 8 October. When this deadline is a non-business day in Brisbane, the next business day is taken to be the deadline. Documentary evidence providing proof of the date of publication will be provided to the Department when the report is published.<br><br>The Annual Compliance Report for the 12 month period ending 8 July 2021 (i.e., Year 3) was published on the Stockland Kalina development website on 8 October 2021. The Department was notified of the report publication and provided with evidence on 8 October 2021.<br><br>This report details compliance for Year 4 of the project (period from 9 July 2021 to 8 July 2022, inclusive) and will be published on the Stockland Kalina development website prior to close of business 8 October 2022. The Department will be notified of this when it occurs.<br><br>The approval holder and Saunders Havill Group have not become aware of a potential or suspected non-compliance with the conditions during the reporting period. |
| **11** | Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with the conditions of | Not applicable | The Minister has not provided a direction to complete an independent audit of compliance. |

| Condition number / reference | Condition | Is the project compliant with this condition? | Evidence / comments |
|---|---|---|---|
| | 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. | | |
| **12** | If, at any time after five years from the date of this approval, the approval holder has not substantially commenced the action, then the approval holder must not substantially commence the action without the written agreement of the Minister. | Not applicable | The action commenced on 9 July 2018. |

# 5. Appendices

## Appendix A

EPBC approval and conditions granted 14 September, 2016

## Appendix B

SAT survey results – raw data

## Appendix C

Offset Management Plan – Annual Report June 2022

# Appendix A

## EPBC approval and conditions granted

## 14 September 2016

## Approval

**Springview Village One, Springfield, Ipswich City, Queensland (EPBC 2014/7306)**

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** | Cherish Enterprises Pty Ltd<br>ACN: 052 055 811 |
| **proposed action** | To develop Springview Village One residential development at Lot 43 on SP2442290 at the junction of Mur Boulevard and Panorama Drive, Springfield, Queensland as described in the referral received by the Department on 15 August 2014 [See EPBC Act referral 2014/7306]. |

**Approval decision**

| Controlling Provision | Decision |
|---|---|
| Listed threatened species and communities (sections 18 & 18A) | Approve |

**conditions of approval**

This approval is subject to the conditions specified below.

**expiry date of approval**

This approval has effect until 30 September 2041.

**Decision-maker**

| | |
|---|---|
| **name and position** | James Barker<br>Assistant Secretary<br>Assessments (QLD, Vic, Tas) and Sea Dumping Branch |
| **signature** |  |
| **date of decision** | 14 / 9 / 2016 |

**Conditions attached to the approval**

1. The **approval holder** must not clear more than 39.75 hectares of **Koala habitat.** Clearing must not occur outside of the **clearance area**.

2. To compensate for the loss of **Koala habitat**, the **approval holder** must:

   a) **secure**, prior to the **commencement of construction**, a minimum of 65 hectares of **Koala habitat** within the **offset area**; and

   b) provide the **Department** with relevant evidence on securing the **offset area** and the **offset attributes** clearly defining the location and boundary of the offset within 10 **business days** of lodgement of the offset with the **Titles Office**.

3. To compensate for the impacts to **Koala habitat**, the **approval holder** must achieve the following outcomes and milestones as compared to **baseline values** for **Koala habitat quality** and **extent**:

   a) Outcomes

      - By 20 years after the **commencement of construction**, there must be a gain in **Koala habitat quality** to nine across the whole **offset area**; and

      - For the life of the approval, the **approval holder** must ensure no net loss in the **extent** of **Koala habitat** in the **offset area.**

   b) Milestones

      - By five years after the **commencement of construction**, a gain in **Koala habitat quality** to nine must be achieved in more than 50% of the **offset area** through rehabilitation.

4. The **approval holder** must have an Offset Management Plan in place. The Offset Management Plan must:

   a) include monitoring and be designed so that the results are adequate to inform adaptive management and demonstrate whether the outcomes and milestones required by these conditions are on track to be achieved (before they are due) and have been achieved (at the time they are due);

   b) include contingency measures to mitigate the risks of not achieving the outcomes and milestones required by these conditions;

   c) be prepared in consultation with a **suitably qualified person**, and include written evidence of how the **suitably qualified person**'s advice has been considered;

   d) be in accordance with the **Koala Habitat Offset Report**; and

   e) demonstrate how the plan is consistent with the **Koala Conservation Advice**.

5. The Offset Management Plan must be implemented. Unless otherwise agreed to in writing by the **Minister**, the **approval holder** must publish the Offset Management Plan on their website prior to the **commencement of construction** and the Offset Management Plan must remain on the website for the life of the approval. The results of the Offset Management Plan must be included in the annual compliance report required under condition 10.

6. If, at any time during the life of the approval, the **approval holder** identifies that the outcomes or milestones required under these conditions are not on track to be achieved, the **approval holder** must report to the **Department** in writing within 20 **business days** of becoming aware. The report must state the cause, the response measures (including timeframes for reporting the success of those measures to the **Department**) and the actions to prevent further occurrences.

7A. If the **Minister** is not satisfied that the outcomes or milestones required by these conditions are likely to be achieved, or is not satisfied that there is sufficient evidence that the outcomes or milestones required by these conditions are likely to be achieved, the **Minister** may (in writing) request the **approval holder** to submit a plan for the **Minister**'s approval, to monitor, manage, avoid, mitigate, offset, record or report on, impacts to **Koala habitat**.

7B. The **Minister** may set a timeframe in which the plan must be submitted, and may designate that the plan must be prepared or reviewed by a **suitably qualified person**.

7C. If the **Minister** approves the plan in writing then the **approval holder** must implement that plan (or a revised version if approved in writing by the **Minister** or otherwise allowed under these conditions).

Note: Cost recovery does not apply to a plan required under this condition.

8. Within 20 **business days** after the **commencement of construction**, the **approval holder** must advise the **Department** in writing of the actual date of the **commencement of construction**.

9. The **approval holder** must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the Offset 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.

10. Within three months of every 12 month anniversary of the **commencement of construction**, the **approval holder** must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of the Offset Management Plan as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the **Department** at the same time as the compliance report is published. Reports must remain on the website for the period this approval has effect. The **approval holder** may cease preparing and publishing compliance reports required by this condition with written agreement of the **Minister** to do so.

11. Upon the direction of the **Minister**, the **approval holder** must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the **Minister**. The independent auditor must be approved by the **Minister** prior to the commencement of the audit. Audit criteria must be agreed to by the **Minister** and the audit report must address the criteria to the satisfaction of the **Minister**.

12. If, at any time after five years from the date of this approval, the **approval holder** has not **substantially commenced** the action, then the **approval holder** must not **substantially commence** the action without the written agreement of the **Minister**.

**Definitions**

**Approval holder**: means the person to whom the approval is granted, or any person acting on their behalf, or to whom approval is transferred under section 145B of the **EPBC Act**.

**Baseline values**: baseline **extent** is 65 hectares and baseline **Koala habitat quality** is seven, as described in the **Koala Habitat Offset Report**.

**Business days**: measured in relation to the doing of any action, any day other than a Saturday, a Sunday, or a public holiday that occurs in Queensland.

**Clearance area**: the area labelled as 'Referral Area' in Map 1.

**Commencement of construction**: any preparatory works required to be undertaken including clearing vegetation, the erection of any onsite temporary structures and the use of heavy equipment for the purposes of breaking the ground for road construction, buildings or infrastructure.

**Department**: the Australian Government Department administering the **EPBC Act**.

**EPBC Act:** the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

**EPBC Act Environmental Offsets Policy**: Department of Sustainability, Environment, Water, Population and Communities (2012). *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy (October 2012)*. Commonwealth of Australia, Canberra.

**EPBC Act offsets assessment guide**: the *offsets assessment guide* tool and *how to use the offsets assessment guide* document that accompany the **EPBC Act Environmental Offsets Policy**.

**Extent**: the coverage of **Koala habitat** measured in hectares.

**Koala**: *Phascolarctos cinereus* (combined populations of Queensland, New South Wales and the Australian Capital Territory) listed as a threatened species under the **EPBC Act**.

**Koala Conservation Advice**: Threatened Species Scientific Committee (2012). *Approved Conservation Advice for* Phascolarctos cinereus *(combined populations of Queensland, New South Wales and the Australian Capital Territory).* Commonwealth of Australia, Canberra.

**Koala habitat**: habitat containing tree species whose leaves are consumed by the **Koala**, including *Eucalyptus moluccana, Eucalyptus propinqua, Eucalyptus tereticornis, Corymbia citriodora,* and *Lophostemon confertus.*

**Koala habitat Quality**: means the **Koala habitat** quality score comprised of site condition, site context and species stocking rate calculated in accordance with the requirements of the **EPBC Act offsets assessment guide**.

**Koala Habitat Offset Report**: the document provided to the **Department** named '*Koala Habitat Offset Report - 40-100 Harrison Road, Calvert*'. Prepared by Cherish the Environment Foundation (Appendix J to *'Response to Request for Additional Information - Springview Village One, Springfield, QLD (EPBC 2014/7306)*, dated 6 June 2016).

**Minister**: the Australian Government Minister administering the **EPBC Act** and includes a delegate of the **Minister**.

**Offset area**: the area labelled as 'Offset Area' in Map 2.

**Offset attributes**: means electronic files including '.xls' files and ESRI shapefiles containing '.shp', '.shx' and '.dbf' files capturing the relevant attributes of the offset area/s, including the **EPBC Act** reference number, the physical address of the offset area/s, coordinates of the boundary points in decimal degrees, the **EPBC Act** protected matters that the offset area/s compensates for, any additional **EPBC Act** protected matters benefiting from the offset/s and the size of the offset area/s (in hectares).

**Secure**: means long-term protection under a legal mechanism that is establishing a covenant on the title as a voluntary declaration under the *Vegetation Management Act 1999* (Qld).

**Substantially commence/d**: means creation of residential allotments, roadways and infrastructure services (sewerage, electricity, water, stormwater) associated with the action. This does not include preparatory works.

**Suitably qualified person**: A person who has professional qualifications, training, skills and/or experience related to the **Koala** and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

**Titles Office**: means the relevant authority responsible for registering the land title transaction.

## Map 1: Clearance Area labelled as 'Referral Area'


SITE LOCALITY PLAN

0.1 0.05 0 0.1 0.2 0.3 Kilometres

A3 Scale 1:9,000

## Map 2: Offset Area


**OFFSET MAP**

**40-160 Harrison Road, Calvert, Queensland**
**Lot 230 CH311791 & Lot 1 CC2262**

**LEGEND**

Offset Area (Lot 230 CH311791)

Property Boundary

Printed 04 August, 2016 | Imagery: 2014 | Job 43797

Australian Government
Department of the Environment and Energy

# NOTICE OF TRANSFER OF APPROVAL

## Springview Village One, Springfield, Ipswich City, Queensland (EPBC 2014/7306)

This decision is made under (Section 145B) of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

## Proposed transfer of approval

| | |
|---|---|
| **Transferor (holder of approval)** | Cherish Enterprises Pty Ltd<br>ACN: 052 055 811 |
| **Transferee (person proposing to accept the transfer of approval)** | Stockland Development Pty Limited<br>ACN: 000 664 835 |
| **proposed action** | To develop Springview Village One residential development at Lot 43 on SP2442290 at the junction of Mur Boulevard and Panorama Drive, Springfield, Queensland, as described in the referral received by the Department on 15 August 2014<br>[See EPBC Act referral 2014/7306] |

## Transfer Decision

| | |
|---|---|
| **Person to whom the approval is transferred** | Stockland Development Pty Limited<br>ACN: 000 664 835 |
| **Proposed action** | To develop Springview Village One residential development at Lot 43 on SP2442290 at the junction of Mur Boulevard and Panorama Drive, Springfield, Queensland, as described in the referral received by the Department on 15 August 2014<br>[See EPBC Act referral 2014/7306] |

## Person authorised to make decision

| | |
|---|---|
| **Name and position** | Rod Whyte<br>Director<br>Post Approvals Section<br>Compliance and Enforcement Branch |
| **Signature** | |
| **Date of decision** | 16 June 2017 |

Australian Government
Department of the Environment and Energy

# VARIATION TO CONDITIONS ATTACHED TO APPROVAL

Springview Village One, Springfield, Ipswich City, Qld (EPBC 2014/7306)

This decision to vary conditions of approval is made under section 143 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

## Approved action

| | |
|---|---|
| Person to whom the approval is granted | Stockland Development Pty Limited<br><br>ACN: 052 055 811 |
| Approved action | To develop Springview Village One residential development at Lot 43 on SP2442290 at the junction of Mur Boulevard and Panorama Drive, Springfield, Queensland as described in the referral received by the Department on 15 August 2014 [See EPBC Act referral 2014/7306]. |

## Variation

| | |
|---|---|
| Variation of conditions of approval | The variation is:<br>Delete Map 1 and definition of 'Clearance area' attached to the approval and substitute with Map 1 and definition of 'Clearance area' specified below. |
| Date of effect | This variation has effect on the date the instrument is signed |

## Person authorised to make decision

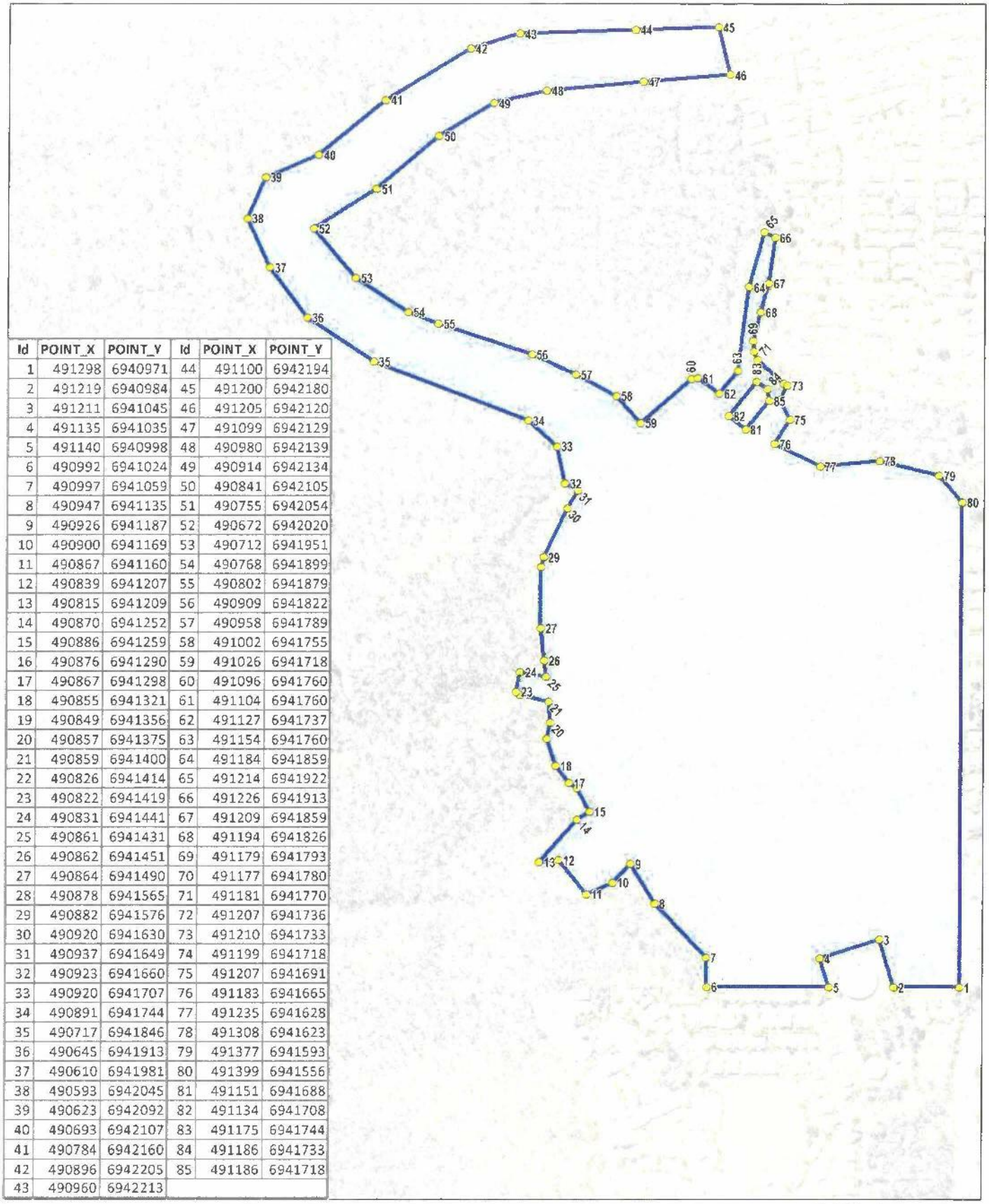
| | |
|---|---|
| Name and position | Greg Manning<br>Assistant Secretary<br>Assessments (WA, SA, NT) and Post Approvals Branch |
| Signature |  |
| Date of decision | 12 June 2018 |

## Definition

**Clearance area:** the area labelled as 'Clearance area' in Map 1.

**Map 1** attached to the approval

See over.




| Id | POINT_X | POINT_Y | Id | POINT_X | POINT_Y |
|---|---|---|---|---|---|
| 1 | 491298 | 6940971 | 44 | 491100 | 6942194 |
| 2 | 491219 | 6940984 | 45 | 491200 | 6942180 |
| 3 | 491211 | 6941045 | 46 | 491205 | 6942120 |
| 4 | 491135 | 6941035 | 47 | 491099 | 6942129 |
| 5 | 491140 | 6940998 | 48 | 490980 | 6942139 |
| 6 | 490992 | 6941024 | 49 | 490914 | 6942134 |
| 7 | 490997 | 6941059 | 50 | 490841 | 6942105 |
| 8 | 490947 | 6941135 | 51 | 490755 | 6942054 |
| 9 | 490926 | 6941187 | 52 | 490672 | 6942020 |
| 10 | 490900 | 6941169 | 53 | 490712 | 6941951 |
| 11 | 490867 | 6941160 | 54 | 490768 | 6941899 |
| 12 | 490839 | 6941207 | 55 | 490802 | 6941879 |
| 13 | 490815 | 6941209 | 56 | 490909 | 6941822 |
| 14 | 490870 | 6941252 | 57 | 490958 | 6941789 |
| 15 | 490886 | 6941259 | 58 | 491002 | 6941755 |
| 16 | 490876 | 6941290 | 59 | 491026 | 6941718 |
| 17 | 490867 | 6941298 | 60 | 491096 | 6941760 |
| 18 | 490855 | 6941321 | 61 | 491104 | 6941760 |
| 19 | 490849 | 6941356 | 62 | 491127 | 6941737 |
| 20 | 490857 | 6941375 | 63 | 491154 | 6941760 |
| 21 | 490859 | 6941400 | 64 | 491184 | 6941859 |
| 22 | 490826 | 6941414 | 65 | 491214 | 6941922 |
| 23 | 490822 | 6941419 | 66 | 491226 | 6941913 |
| 24 | 490831 | 6941441 | 67 | 491209 | 6941859 |
| 25 | 490861 | 6941431 | 68 | 491194 | 6941826 |
| 26 | 490862 | 6941451 | 69 | 491179 | 6941793 |
| 27 | 490864 | 6941490 | 70 | 491177 | 6941780 |
| 28 | 490878 | 6941565 | 71 | 491181 | 6941770 |
| 29 | 490882 | 6941576 | 72 | 491207 | 6941736 |
| 30 | 490920 | 6941630 | 73 | 491210 | 6941733 |
| 31 | 490937 | 6941649 | 74 | 491199 | 6941718 |
| 32 | 490923 | 6941660 | 75 | 491207 | 6941691 |
| 33 | 490920 | 6941707 | 76 | 491183 | 6941665 |
| 34 | 490891 | 6941744 | 77 | 491235 | 6941628 |
| 35 | 490717 | 6941846 | 78 | 491308 | 6941623 |
| 36 | 490645 | 6941913 | 79 | 491377 | 6941593 |
| 37 | 490610 | 6941981 | 80 | 491399 | 6941556 |
| 38 | 490593 | 6942045 | 81 | 491151 | 6941688 |
| 39 | 490623 | 6942092 | 82 | 491134 | 6941708 |
| 40 | 490693 | 6942107 | 83 | 491175 | 6941744 |
| 41 | 490784 | 6942160 | 84 | 491186 | 6941733 |
| 42 | 490896 | 6942205 | 85 | 491186 | 6941718 |
| 43 | 490960 | 6942213 | | | |

**Legend**

Background land parcels

Clearance Area coordinate points

Clearance Area
The approval holder must not clear more than 39.75 hectares of Koala habitat. Clearing must not occur outside of the Clearance Area with the exception of works for rehabilitation or landscape activities approved by Ipswich City Council that will ultimately improve Koala habtiat.

*Map 1*

***File ref.*** *8473 E F08_05 Map 1*

***Date*** *17/05/2018*
***Project*** *8473 E*

0 25 50 100 150 200 250 m

N

*Scale (A4): 1:6,500 (GDA 1994 MGA Z56)*

Stockland

saunders havill group

# Appendix B

## SAT survey results – raw data

Site: SAT 2

| Tree ID | Scientific name | Common name | DBH (mm) | Scat |
|---|---|---|---|---|
| **1** | *Eucalyptus moluccana* | Gum-topped gum | 340 | Nil |
| **2** | *Eucalyptus moluccana* | Gum-topped gum | 270 | Nil |
| **3** | *Eucalyptus moluccana* | Gum-topped gum | 290 | Nil |
| **4** | *Eucalyptus moluccana* | Gum-topped gum | 230 | Nil |
| **5** | *Eucalyptus moluccana* | Gum-topped gum | 150 | Nil |
| **6** | *Eucalyptus moluccana* | Gum-topped gum | 180 | Nil |
| **7** | *Corymbia citriodora* | Spotted gum | 390 | Nil |
| **8** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 260 | Nil |
| **9** | *Eucalyptus moluccana* | Gum-topped gum | 350 | Nil |
| **10** | *Eucalyptus propinqua* | Small-fruited grey-gum | 170 | Nil |
| **11** | *Eucalyptus moluccana* | Gum-topped gum | 180 | Nil |
| **12** | *Eucalyptus moluccana* | Gum-topped gum | 180 | Nil |
| **13** | *Eucalyptus fibrosa* | Gum-topped gum | 250 | Nil |
| **14** | *Eucalyptus siderophloia* | Northern grey ironbark | 210 | Nil |
| **15** | *Eucalyptus moluccana* | Gum-topped gum | 120 | Nil |
| **16** | *Eucalyptus moluccana* | Gum-topped gum | 170 | Nil |
| **17** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 220 | Nil |
| **18** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 350 | Nil |
| **19** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 220 | Nil |
| **20** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 200 | Nil |
| **21** | *Eucalyptus moluccana* | Gum-topped gum | 130 | Nil |
| **22** | *Eucalyptus moluccana* | Gum-topped gum | 200 | Nil |
| **23** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 190 | Nil |
| **24** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 140 | Nil |
| **25** | *Eucalyptus moluccana* | Gum-topped gum | 220 | Nil |
| **26** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 160 | Nil |
| **27** | *Eucalytpus fibrosa* | Broad-leaved ironbark | 140 | Nil |
| **28** | *Eucalyptus moluccana* | Gum-topped gum | 230 | Nil |
| **29** | *Corymbia citriodora* | Spotted gum | 320 | Nil |
| **30** | *Eucalyptus moluccana* | Gum-topped gum | 290 | Nil |
| **Total scats recorded** | | | | **0** |
| **Percentage of scats recorded** | | | | **0.00%** |
| **Level of Koala usage (based on East Coast Med-High Activity Category)** | | | | **Low** |

Site: SAT 3

| Tree ID | Scientific name | Common name | DBH (mm) | Scat |
|---|---|---|---|---|
| **1** | *Corymbia citriodora* | Spotted gum | 260 | Nil |
| **2** | *Corymbia citriodora* | Spotted gum | 210 | Nil |
| **3** | *Corymbia citriodora* | Spotted gum | 200 | Nil |
| **4** | *Corymbia citriodora* | Spotted gum | 230 | Nil |
| **5** | *Corymbia citriodora* | Spotted gum | 150 | Nil |
| **6** | *Corymbia citriodora* | Spotted gum | 240 | Nil |
| **7** | *Eucalyptus moluccana* | Gum-topped gum | 200 | Nil |
| **8** | *Corymbia citriodora* | Spotted gum | 230 | Nil |
| **9** | *Corymbia citriodora* | Spotted gum | 150 | Nil |
| **10** | *Corymbia citriodora* | Spotted gum | 280 | Nil |
| **11** | *Corymbia citriodora* | Spotted gum | 150 | Nil |
| **12** | *Corymbia citriodora* | Spotted gum | 190 | Nil |
| **13** | *Eucalyptus siderophloia* | Northern grey ironbark | 310 | Nil |
| **14** | *Eucalyptus siderophloia* | Northern grey ironbark | 280 | Nil |
| **15** | *Eucalyptus tereticornis* | Forest red gum | 260 | Nil |
| **16** | *Corymbia citriodora* | Spotted gum | 300 | Nil |
| **17** | *Eucalyptus siderophloia* | Northern grey ironbark | 190 | Nil |
| **18** | *Corymbia citriodora* | Spotted gum | 340 | Nil |
| **19** | *Lophostemon sauveolens* | Swamp box | 210 | Nil |
| **20** | *Eucalyptus moluccana* | Gum-topped gum | 250 | Nil |
| **21** | *Eucalyptus siderophloia* | Northern grey ironbark | 150 | Nil |
| **22** | *Eucalyptus siderophloia* | Northern grey ironbark | 230 | Nil |
| **23** | *Eucalyptus siderophloia* | Northern grey ironbark | 240 | Nil |
| **24** | *Eucalyptus siderophloia* | Northern grey ironbark | 200 | Nil |
| **25** | *Eucalyptus moluccana* | Gum-topped gum | 250 | Nil |
| **26** | *Eucalyptus siderophloia* | Northern grey ironbark | 160 | Nil |
| **27** | *Eucalyptus siderophloia* | Northern grey ironbark | 410 | Nil |
| **28** | *Eucalyptus siderophloia* | Northern grey ironbark | 280 | Nil |
| **29** | *Corymbia citriodora* | Spotted gum | 350 | Nil |
| **30** | *Corymbia citriodora* | Spotted gum | 160 | Nil |
| **Total scats recorded** | | | | **0** |
| **Percentage of scats recorded** | | | | **0.00%** |
| **Level of Koala usage (based on East Coast Med-High Activity Category)** | | | | **Low** |

Site: SAT 4

| Tree ID | Scientific name | Common name | DBH (mm) | Scat |
|---|---|---|---|---|
| **1** | *Eucalyptus moluccana* | Gum-topped gum | 320 | Nil |
| **2** | *Corymbia citriodora* | Spotted gum | 190 | Nil |
| **3** | *Corymbia citriodora* | Spotted gum | 240 | Nil |
| **4** | *Corymbia citriodora* | Spotted gum | 340 | Nil |
| **5** | *Corymbia citriodora* | Spotted gum | 150 | Nil |
| **6** | *Corymbia citriodora* | Spotted gum | 160 | Nil |
| **7** | *Corymbia citriodora* | Spotted gum | 150 | Nil |
| **8** | *Eucalyptus moluccana* | Gum-topped gum | 220 | Nil |
| **9** | *Eucalyptus tereticornis* | Forest red gum | 230 | Nil |
| **10** | *Corymbia citriodora* | Spotted gum | 210 | Nil |
| **11** | *Eucalyptus moluccana* | Gum-topped gum | 190 | Nil |
| **12** | *Eucalyptus moluccana* | Gum-topped gum | 330 | Nil |
| **13** | *Lophostemon confertus* | Brush box | 200 | Nil |
| **14** | *Lophostemon confertus* | Brush box | 130 | Nil |
| **15** | *Eucalyptus siderophloia* | Northern grey ironbark | 290 | Nil |
| **16** | *Corymbia citriodora* | Spotted gum | 110 | Nil |
| **17** | *Eucalyptus moluccana* | Gum-topped gum | 200 | Nil |
| **18** | *Corymbia citriodora* | Spotted gum | 190 | Nil |
| **19** | *Eucalyptus moluccana* | Gum-topped gum | 290 | Nil |
| **20** | *Eucalyptus moluccana* | Gum-topped gum | 170 | Nil |
| **21** | *Corymbia citriodora* | Spotted gum | 310 | Nil |
| **22** | *Eucalyptus moluccana* | Gum-topped gum | 230 | Nil |
| **23** | *Eucalyptus moluccana* | Gum-topped gum | 240 | Nil |
| **24** | *Eucalyptus moluccana* | Gum-topped gum | 360 | Nil |
| **25** | *Eucalyptus moluccana* | Gum-topped gum | 240 | Nil |
| **26** | *Eucalyptus moluccana* | Gum-topped gum | 120 | Nil |
| **27** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 360 | Nil |
| **28** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 400 | Nil |
| **29** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 170 | Nil |
| **30** | *Eucalyptus moluccana* | Gum-topped gum | 300 | Nil |
| **Total scats recorded** | | | | **0** |
| **Percentage of scats recorded** | | | | **0.00%** |
| **Level of Koala usage (based on East Coast Med-High Activity Category)** | | | | **Low** |

Site: SAT 5

| Tree ID | Scientific name | Common name | DBH (mm) | Scat |
|---|---|---|---|---|
| **1** | *Eucalyptus siderophloia* | Northern grey ironbark | 470 | Nil |
| **2** | *Lophostemon confertus* | Brush box | 100 | Nil |
| **3** | *Lophostemon confertus* | Brush box | 100 | Nil |
| **4** | *Lophostemon confertus* | Brush box | 110 | Nil |
| **5** | *Eucalyptus siderophloia* | Northern grey ironbark | 330 | Nil |
| **6** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 210 | Nil |
| **7** | *Eucalyptus siderophloia* | Northern grey ironbark | 210 | Nil |
| **8** | *Lophostemon confertus* | Brush box | 160 | Nil |
| **9** | *Eucalyptus propinqua* | Small-fruited grey-gum | 130 | Nil |
| **10** | *Lophostemon confertus* | Brush box | 120 | Nil |
| **11** | *Lophostemon confertus* | Brush box | 140 | Nil |
| **12** | *Lophostemon confertus* | Brush box | 100 | Nil |
| **13** | *Eucalyptus propinqua* | Small-fruited grey-gum | 180 | Nil |
| **14** | *Corymbia citriodora* | Spotted gum | 160 | Nil |
| **15** | *Eucalyptus siderophloia* | Northern grey ironbark | 240 | Nil |
| **16** | *Corymbia citriodora* | Spotted gum | 130 | Nil |
| **17** | *Eucalyptus propinqua* | Small-fruited grey-gum | 180 | Nil |
| **18** | *Eucalyptus tereticornis* | Forest red gum | 240 | Nil |
| **19** | *Lophostemon confertus* | Brush box | 130 | Nil |
| **20** | *Lophostemon confertus* | Brush box | 130 | Nil |
| **21** | *Lophostemon confertus* | Brush box | 140 | Nil |
| **22** | *Lophostemon confertus* | Brush box | 130 | Nil |
| **23** | *Lophostemon confertus* | Brush box | 160 | Nil |
| **24** | *Lophostemon confertus* | Brush box | 140 | Nil |
| **25** | *Corymbia citriodora* | Spotted gum | 110 | Nil |
| **26** | *Lophostemon confertus* | Brush box | 100 | Nil |
| **27** | *Eucalyptus siderophloia* | Northern grey ironbark | 450 | Nil |
| **28** | *Lophostemon confertus* | Brush box | 140 | Nil |
| **29** | *Corymbia citriodora* | Spotted gum | 190 | Nil |
| **30** | *Eucalyptus propinqua* | Small-fruited grey-gum | 190 | Nil |
| **Total scats recorded** | | | | **0** |
| **Percentage of scats recorded** | | | | **0.00%** |
| **Level of Koala usage (based on East Coast Med-High Activity Category)** | | | | **Low** |

Site: SAT 6

| Tree ID | Scientific name | Common name | DBH (mm) | Scat |
|---|---|---|---|---|
| **1** | *Eucalyptus siderophloia* | Northern grey ironbark | 550 | Nil |
| **2** | *Lophostemon sauveolens* | Swamp box | 120 | Nil |
| **3** | *Acacia disparrima* | Hickory Wattle | 180 | Nil |
| **4** | *Acacia disparrima* | Hickory Wattle | 540 | Nil |
| **5** | *Acacia disparrima* | Hickory Wattle | 210 | Nil |
| **6** | *Acacia disparrima* | Hickory Wattle | 190 | Nil |
| **7** | *Acacia disparrima* | Hickory Wattle | 160 | Nil |
| **8** | *Acacia disparrima* | Hickory Wattle | 130 | Nil |
| **9** | *Lophostemon sauveolens* | Swamp box | 120 | Nil |
| **10** | *Eucalyptus acmenoides* | White Mahogany | 510 | Nil |
| **11** | *Acacia disparrima* | Hickory Wattle | 190 | Nil |
| **12** | *Acacia disparrima* | Hickory Wattle | 180 | Nil |
| **13** | *Acacia disparrima* | Hickory Wattle | 200 | Nil |
| **14** | *Eucalyptus tereticornis* | Forest red gum | 210 | Nil |
| **15** | *Lophostemon sauveolens* | Swamp box | 190 | Nil |
| **16** | *Angophora leiocarpa* | Smooth-barked apple | 220 | Nil |
| **17** | *Angophora leiocarpa* | Smooth-barked apple | 240 | Nil |
| **18** | *Eucalyptus siderophloia* | Northern grey ironbark | 440 | Nil |
| **19** | *Acacia disparrima* | Hickory Wattle | 190 | Nil |
| **20** | *Petalostigma pubescens* | Quinine Bush | 200 | Nil |
| **21** | *Eucalyptus siderophloia* | Northern grey ironbark | 370 | Nil |
| **22** | *Eucalyptus siderophloia* | Northern grey ironbark | 170 | Nil |
| **23** | *Acacia disparrima* | Hickory Wattle | 240 | Nil |
| **24** | *Acacia disparrima* | Hickory Wattle | 110 | Nil |
| **25** | *Acacia disparrima* | Hickory Wattle | 210 | Nil |
| **26** | *Lophostemon sauveolens* | Swamp box | 190 | Nil |
| **27** | *Lophostemon sauveolens* | Swamp box | 200 | Nil |
| **28** | *Eucalyptus siderophloia* | Northern grey ironbark | 140 | Nil |
| **29** | *Lophostemon sauveolens* | Swamp box | 130 | Nil |
| **30** | *Acacia disparrima* | Hickory Wattle | 230 | Nil |
| **Total scats recorded** | | | | **0** |
| **Percentage of scats recorded** | | | | **0.00%** |
| **Level of Koala usage (based on East Coast Med-High Activity Category)** | | | | **Low** |

Site: SAT 8

| Tree ID | Scientific name | Common name | DBH (mm) | Scat |
|---|---|---|---|---|
| **1** | *Eucalyptus fibrosa* | Broad-leaved ironbark | 460 | Nil |
| **2** | *Corymbia citriodora* | Spotted gum | 230 | Nil |
| **3** | *Eucalyptus propinqua* | Small-fruited grey-gum | 210 | Nil |
| **4** | *Lophostemon confertus* | Brush box | 100 | Nil |
| **5** | *Lophostemon confertus* | Brush box | 150 | Nil |
| **6** | *Eucalyptus siderophloia* | Northern grey ironbark | 360 | Nil |
| **7** | *Eucalyptus siderophloia* | Northern grey ironbark | 130 | Nil |
| **8** | *Lophostemon confertus* | Brush box | 180 | Nil |
| **9** | *Lophostemon confertus* | Brush box | 150 | Nil |
| **10** | *Lophostemon confertus* | Brush box | 190 | Nil |
| **11** | *Eucalyptus siderophloia* | Northern grey ironbark | 180 | Nil |
| **12** | *Eucalyptus siderophloia* | Northern grey ironbark | 280 | Nil |
| **13** | *Eucalyptus siderophloia* | Northern grey ironbark | 280 | Nil |
| **14** | *Lophostemon sauveolens* | Swamp box | 150 | Nil |
| **15** | *Corymbia intermedia* | Pink bloodwood | 220 | Nil |
| **16** | *Eucalyptus siderophloia* | Northern grey ironbark | 350 | Nil |
| **17** | *Eucalyptus propinqua* | Small-fruited grey-gum | 220 | Nil |
| **18** | *Corymbia citriodora* | Spotted gum | 120 | Nil |
| **19** | *Eucalyptus siderophloia* | Northern grey ironbark | 370 | Nil |
| **20** | *Eucalyptus siderophloia* | Northern grey ironbark | 380 | Nil |
| **21** | *Eucalyptus siderophloia* | Northern grey ironbark | 240 | Nil |
| **22** | *Corymbia citriodora* | Spotted gum | 150 | Nil |
| **23** | *Eucalyptus siderophloia* | Northern grey ironbark | 500 | Nil |
| **24** | *Eucalyptus siderophloia* | Northern grey ironbark | 610 | Nil |
| **25** | *Eucalyptus acmenoides* | White Mahogany | 310 | Nil |
| **26** | *Eucalyptus siderophloia* | Northern grey ironbark | 210 | Nil |
| **27** | *Eucalyptus siderophloia* | Northern grey ironbark | 150 | Nil |
| **28** | *Eucalyptus acmenoides* | White Mahogany | 190 | Nil |
| **29** | *Eucalyptus siderophloia* | Northern grey ironbark | 330 | Nil |
| **30** | *Corymbia intermedia* | Pink bloodwood | 290 | Nil |
| **Total scats recorded** | | | | **0** |
| **Percentage of scats recorded** | | | | **0.00%** |
| **Level of Koala usage (based on East Coast Med-High Activity Category)** | | | | **Low** |

# Appendix C

## Offset Management Plan – Annual Report June 2022

# Offset Management Plan
# Annual Report June 2022

## Koala Habitat Offset
## 40-100 Harrison Road Calvert
## EPBC 2014/7306

Stockland Development Pty Ltd

**Prepared by Cherish the Environment Foundation Limited**

June 2022

Cherish the Environment Foundation Limited
Hayden Centre, 37 South Street, Ipswich Qld 4305
PO Box 191, Ipswich Qld 4305
ABN 41 154 545 589

# 1. Contents

# 2. Introduction and Background

## 2.1. Introduction

This report outlines progress in management and conformity with the approved Offset Management Plan (EPBC 2014/7306) for 2019.

### Property Details

The property is located at 40-100 Harrison Road,  Calvert and described as Lot 230 CH311971

## 2.2. Management Objectives

The overarching management intent for the offset area is the removal of weeds, reduction of threats and protection of native vegetation to prevent the loss of biodiversity, maintain ecological processes and improve koala habitat quality. The successful implementation of proposed management mechanisms will assist with the creation of a self-sustaining, continuous area of high quality koala habitat supporting their population within the local landscape. This will help to achieve ICC's vision to create a locally significant conservation area within the Little Liverpool Range Corridor.

Natural regeneration and regrowth will be encouraged in open/sparse areas and areas of remnant vegetation will be managed to enhance and sustain their ecological condition and local environmental values to reduce their exposure to threatening processes including weed invasion, pests, pollution, clearing and disturbance.

## 2.3. Management Outcomes

The management strategies aim to protect and improve the value of the offset area as koala habitat. This will be primarily achieved through rehabilitation of the offset area (weed control) and implementation of other strategies such as restricting human and livestock access and fire management within the offset area. Management of the site will be undertaken for a minimum of ten years with ultimate weed control to achieve less than 5% total weed coverage. The intensity of management will be driven by the results of condition assessments completed on a regular basis. These assessments will be used to inform future determinations of koala habitat quality and are anticipated to show an improvement within five years across 50% of the offset area.

The dominant feature regarding ecological benefit within the offset area will be achieved through rehabilitation of the vegetation communities, thereby improving the quality of the habitats provided. It is expected that the greatest ecological benefit/improvement of the offset site may be attained within a year. This result is possible because as soon as the area is gazetted as an offset, it will be subject to a targeted management regime including ongoing management of weeds and grazing livestock as well as protection from self-assessable vegetation clearing.

The management outcome for the declared area is that the vegetation within meets the criteria, thresholds and descriptions outlined in the definition of remnant vegetation in the VMA. Additionally, that the entire declaration area is controlled and managed for the removal and suppression of declared weed species. Management outcomes are consistent with the requirements EPBC Act *Environmental Offsets Policy* and generally in accordance with management outcomes of the *Queensland Environmental Offsets Policy 2014.*

# 3. Offset Management Actions 2022

The management actions listed in the Offset Management plan to deliver improved koala habitat quality are detailed below along with progress and actions to June 2022.

The core objective of the Offset Management Plan is to maintain and enhance the koala habitat values throughout the declaration area. This will be primarily achieved through weed management works. Other management actions will also contribute however these are viewed as secondary to weed management. As such, monitoring and reporting will be undertaken to confirm if this primary objective has been or is going to be achieved. This includes both short term and long term criteria to measure success. The area, which is already functioning as koala habitat, is to be managed through weed removal and cooperative fire management and predator exclusion.

Rainfall affects vegetation growth, erosion, and weed growth. Rainfall recorded at Amberley BoM site ( 19 km from site) shows significant amounts of rain above the mean monthly rainfall from October 2021 to June 2022, as a result of the La Nina Climate event. Flood events occurred in the are in both February and May 2022.

Summary Actions

A summary of planned actions and progress is attached in Table 1.

**Table 1 Planned Actions And Progress to June 2021**

| Management action | Monitoring action | Timeframe | |
|---|---|---|---|
| | | Trigger-based | Progress to 2022 |
| Erosion mitigation | • inspect completed mitigation measures | • approximately one month post completion; and<br>• approximately two weeks post first minor rainfall event; and<br>• approximately two weeks post first major rainfall event | • Assessment and mitigation actions complete. Inspections post severe rain events completed. Major rain event in February and May 2022 resulted in minimal erosion. |
| Access infrastructure | • inspect existing and new access infrastructure | Existing access infrastructure:<br>• approximately two weeks post major rainfall event<br>New access infrastructure:<br>• approximately one month post completion; and<br>• approximately two weeks post first minor rainfall event; and<br>• approximately two weeks post first major rainfall event | • Maintenance tracks and cross drainage maintained x 2.<br>• Inspections post severe rain events completed.<br>• Downed vegetation removed, access maintained. |
| Weed management | • assess weed infestations and success of weed | Weed reduction measures:<br>• approximately six months post completion | • Inspections to assess regrowth conducted.<br>• Increase in overall ground vegetation, |

| Management action | Monitoring action | Timeframe | |
|---|---|---|---|
| | | Trigger-based | Progress to 2022 |
| | reduction measures | | including weeds post February 2022 rain event. |
| Fire management | • assess suitability of fire breaks and access tracks | • approximately one month post fire event | • Boundary firebreaks slashed x 2 along with access tracks and inter-rows in the in-fill plantings. |
| Infill planting | • assess success of infill planting | • approximately six months post completion | • Completed and maintained weed free. |
| Pest and animal management | • assess presence of pests and suitability of boundary fencing<br>• undertake pest management | • ad hoc as part of property management | • Boundary fencing erected so the entire site excludes stock.<br>• Wildlife cameras at strategic locations to monitor for species richness. No feral species, eg. wild dogs or pigs, captured on camera. |

## 3.1. Erosion Mitigation

Significant active erosion points must be repaired where possible and feasible (i.e. likely to succeed or be effective). Repair work involves re-profiling (where appropriate) and re-directing overland water flow away from the erosion path using cross-drainage. Cross-drainage should be located along all permanent access tracks at appropriate intervals. Allowance should be made for future maintenance of cross-drainage throughout the site.

**Progress to May 2019**

Cut-off diversion drains to prevent ongoing erosion were constructed at several locations on old and unused access tracks.

**Progress to June 2020**

No major storm events received and overall rainfall only 64% of long term average (Amberley BoM).

Previously constructed erosion control diversion drains on abandoned tracks and washouts were inspected and are in serviceable condition.

**Progress to June 2021**

The previous diversions and increases in ground cover due to stock removal have resulted in no evidence of significant erosion resulting from the March 2021 rain event.

**Progress to June 2022**

The previous diversions and increases in ground cover due to stock removal have resulted in no evidence of significant erosion resulting from the February and May 2022 rain events.

## 3.2. Access Infrastructure

The construction and/or re-opening of tracks will be necessary to facilitate weed management, infill planting establishment and maintenance, fence line construction and maintenance, pest management and fire protection activities.

**Progress to May 2019**

A track network was carefully designed and constructed across the property that meets management requirements. All tracks have cross drainage to prevent erosion as required. The tracks are to a standard that is accessible by standard high clearance vehicles and are maintained and slashed regularly for fire management.

Inspections immediately following severe rain events were conducted to assess and ensure any erosion could be repaired.

**Progress to June 2020**

Tracks were slashed and maintained twice through the period. This involved repair to the cut-off drains due largely to settlement.

Inspections immediately following severe rain events were conducted to assess and ensure any erosion could be repaired.

**Progress to June 2021**

Inspections immediately following severe rain events were conducted to assess and ensure any erosion could be repaired. No repairs were required, however there has been some deposition in the cross road drainage from the March 2021 event which will require maintaining to improve capacity.

**Progress to June 2022**

Inspections immediately following severe rain events were conducted to assess and ensure any erosion could be repaired. No repairs were required, however there has been further deposition in the cross road drainage from the February 2022 and May 2022 event which will require maintenance.

## 3.3. Weed Management

The weed management actions aim to improve the flora and fauna values of the area through weed removal and promoting native species growth and will provide the greatest positive impact on koala habitat.

An intensive, 5-year weed management program is proposed for the remnant and regrowth parts of the offset area. The primary weed treatment process will begin as soon as practical, with follow-up weed treatment undertaken annually. After the first three years, the required management intensity should reduce significantly.

Weed management will occur in two phases throughout the approval period

1. Intensive weed management until year 6; and
2. Ad-hoc weed management from year 6 until the end of the approval period.

**Progress to May 2019**

Comprehensive primary weed treatment process commenced across the entire site with emphasis on lantana and prickly pear in June 2019 and completed in October 2019. The main areas for more intensive assessment are the drainage lines where the lantana was dense and is now open. The methodology involved setting out transects and predominantly hand pulling/ digging of weeds. This labour intensive process achieved excellent results with little chemical use.

**Progress to June 2020**

Follow up weed treatment commenced in June 2020 with an ongoing focus on lantana, climbing asparagus and prickly pear.

**Progress to June 2021**

Weeds have not been in sufficient abundance to trigger intervention following inspections to February 2021. This was due mainly to the previous comprehensive weed control and prevailing dry conditions.

There are now emergent weeds such as fleabane and lantana regrowth following the March rain event.

Fleabane (Conyza spp.) is an annual or biennial weed which is widespread in south east Queensland. It readily germinates in wet autumn conditions.

**Progress to June 2022**

There are currently emergent weeds such as fleabane and lantana regrowth following the February and May 2022 rain events. Further weed treatment will be required in the coming months.

## 3.4. Fire Management

At this stage in the project, fire management activities have been limited to fire exclusion and asset protection. Prescribed burning (for fuel reduction or regeneration initiation) is restricted within the V-Dec area until a Fire Management Plan is developed. This plan will need to be reviewed/endorsed or similar by the rural fire brigade or other relevant stakeholder prior to implementation.

Strategic fire access tracks were initially established in consultation with neighbours where possible along the property boundary and at other strategic locations. Neighbours are resistant to any prescribed burning and are vigilant in fire management.

Well maintained tracks provide for rapid deployment and gates have been installed at strategic locations on boundary fencing to allow for movement across boundaries.

**Progress to May 2019**

Slashing of all boundary and maintenance tracks as well as inter-rows of the in-fill plantings is maintained to reduce fuel loads.

**Progress to June 2020**

Slashing of all boundary and maintenance tracks as well as inter-rows of the in-fill plantings is maintained to reduce fuel loads.

**Progress to June 2021**

Slashing of all boundary and maintenance tracks as well as inter-rows of the in-fill plantings is maintained to reduce fuel loads. There have been no fires in or near the site.

**Progress to June 2022**

Slashing of all boundary and maintenance tracks as well as inter-rows of the in-fill plantings has continued to be maintained to reduce fuel loads. There have been no fires in or near the site.

## 3.5. Infill Planting

A small, one hectare patch of open, grassy area in the south-east corner of Lot 230 CH311971 will require infill planting. Approximately 400 trees typical of regional ecosystems 12.9-10.2 and 12.9-10.3 will be planted in the area.

**Progress to May 2019**

The infill area was planted in March 2018 with some being replaced in October 2018 following severe frost damage. The area is maintained weed free in the rows and slashed between the rows to reduce both competition and fire risk.

**Progress to June 2020**

The infill area is established but growth is slow due to the continuing dry conditions and competition from established trees. The area is maintained weed free in the rows and slashed between the rows to reduce both competition and fire risk.

Post-plant weed control conducted in January 2020 and April 2020. Post-plant spray has been effective (weeds and grass along the tree rows is dead or dying). Planted trees are healthy and show no signs of spray damage.

Perimeter and inter-rows were slashed in April 2020.

**Progress to June 2021**

The infill area is established and trees continue to grow steadily although slow due to the continuing dry conditions and competition from established trees. The area is maintained weed free in the rows and slashed between the rows to reduce both competition and fire risk.

Post-plant weed control was conducted in January 2021 and May 2021. Post-plant spray has been effective (weeds and grass along the tree rows is dead or dying). Planted trees are healthy and show no signs of spray damage.

The perimeter and inter-rows were slashed in January 2021. Appendix C Photo Point 2 shows the infill site condition in June 2020 and June 2021.

**Progress to June 2022**

The infill area is established and trees continue to grow steadily with reasonable growth due to wet conditions. The area is maintained weed free in the rows and slashed between the rows to reduce both competition and fire risk.

Post-plant weed control was conducted in January 2021, May 2021 and May 2022. Post-plant spray has been effective (weeds and grass along the tree rows is dead or dying). Planted trees are healthy and show no signs of spray damage.

Appendix C Photo Point 2 shows the infill site condition in June 2020, June 2021 and June 2022.

## 3.6. Pest and Animal Management

There is no internal fencing on the property. Boundary fencing will be constructed, repaired and maintained to exclude domestic stock and pests. Pest animals such as wild dogs will be addressed via a control program that will be implemented at the discretion of the landholder.

This fencing is scheduled to be established/constructed within 12 months of the V-Dec being certified and must be in place for the duration of the approval.

A wild dog control program will occur ad hoc during the approval period.

**Progress to May 2019**

Fencing has been repaired/ replaced along the entire eastern boundary, and new fencing erected on the northern and north western boundaries.

Wildlife cameras have been deployed and are regularly monitored. Animals captured include kangaroos, wallabies, bandicoots, echidnas, and possums. There has been no evidence or wild dogs or pigs presence across the site.

**Progress to June 2020**

Fencing has been inspected regularly and repaired as required, mainly due to limbs falling across the fence.

Wildlife cameras have been deployed and are regularly monitored. Due to the drought and lack of water on site, a small water station was deployed to attract wildlife to the camera. The water station was popular with a range of birds. Images captured include kangaroos, wallabies, echidna, lace monitors and possums. There has been no evidence or wild dogs or pigs presence across the site.

**Progress to June 2021**

Fencing has been inspected regularly and repaired as required, mainly due to limbs falling across the fence.

Wildlife cameras have been deployed and are regularly monitored. Due to the drought and lack of water on site, a small water station was deployed to attract wildlife to the camera. The water station was popular with a range of birds. Images captured include kangaroos, wallabies, echidna, lace monitors and possums. There has been no evidence or wild dogs or pigs presence across the site. The water station was removed in January 2021 due to improved conditions.

**Progress to June 2022**

There continues to be no evidence of wild dogs or pigs presence across the site.

## 3.7. Habitat Improvement Monitoring

In accordance with Condition 3 of the approval, to compensate for the impacts to koala habitat, detailed outcomes and milestone must be achieved. Success will be measured by comparing baseline values for koala habitat quality and extent to future data.

**Progress to May 2019**

A comprehensive site condition assessment was carried out in July and August of 2018, to benchmark current vegetation condition and thus provide a point of reference for future verification of management intervention.

Regional ecosystem vegetation was mapped and reference plots established.

**Progress to June 2020**

Five Photo Reference Points were established using the condition assessment transects as a base for ongoing monitoring. A map of the reference sites and the geo-referenced photo points is contained in Appendix C .

**Progress to June 2021**

Five Photo Reference Points continued to be monitored.

**Progress to June 2022**

Five Photo Reference Points continued to be monitored.

# 4. Conclusion

As outlined, the activities are consistent with the management objectives and the annual management plan.

Wetter weather conditions prevailed for most of the year with flooding events in February and May 2022 resulting in a flush of ground cover and improved leaf cover. There has been good growth in the infill planting. However this has also caused a re-emergence of some weed species that will require treatment

Slashing of tracks and firebreaks will be completed during July 2022.

There have been no outstanding events or issues and the site continues to be on track to meet the offset objectives.

# 5. Appendices

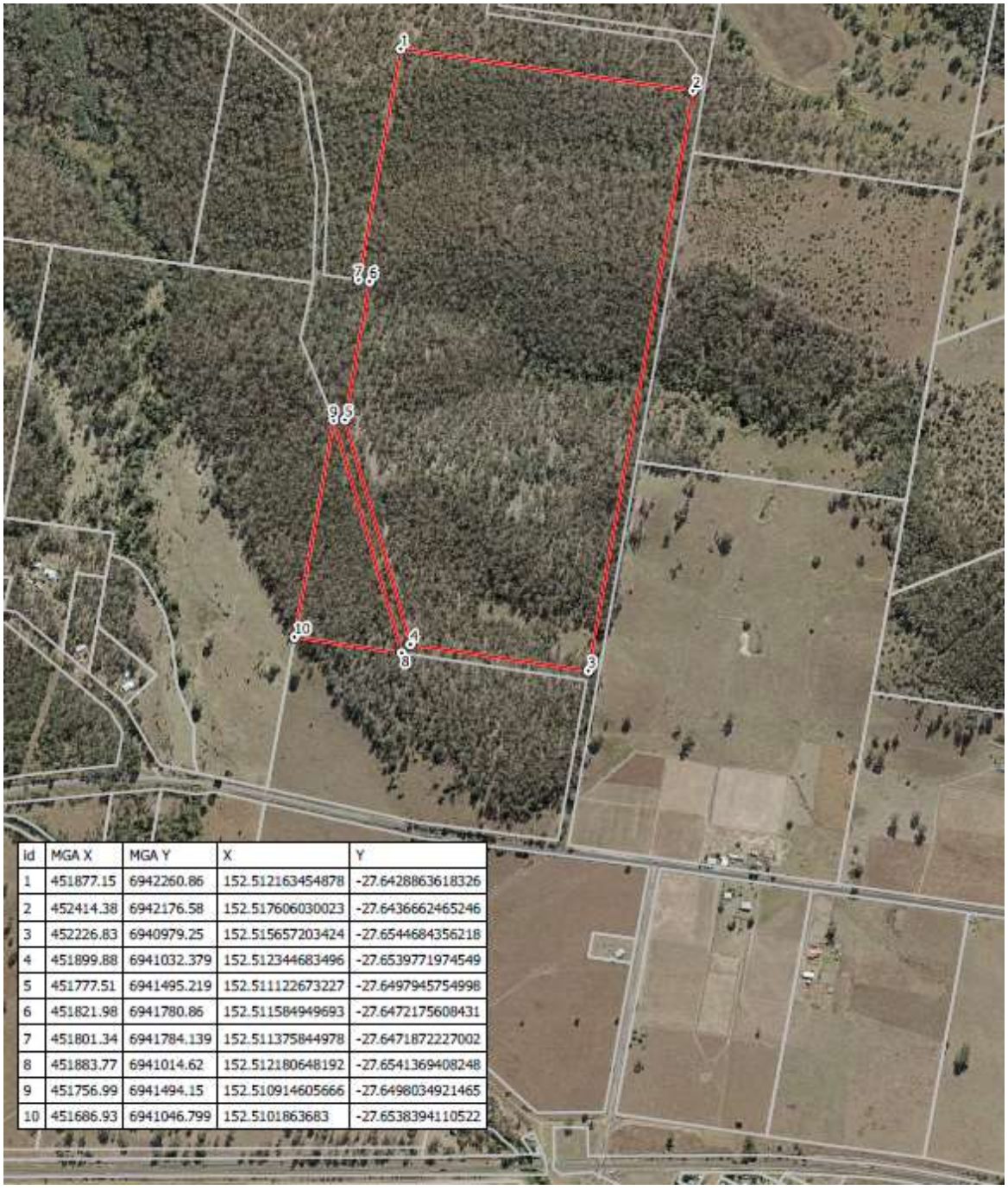
**Appendix A: Site Map**

**Appendix B: Wildlife**

**Appendix C: Photo Reference Site Monitoring Photos**

## 5.1 Appendix A: Site Map

**Figure 1: Bounding coordinates for offset area**




| id | MGA X | MGA Y | X | Y |
|---|---|---|---|---|
| 1 | 451877.15 | 6942260.86 | 152.512163454878 | -27.6428863618326 |
| 2 | 452414.38 | 6942176.58 | 152.517606030023 | -27.6436662465246 |
| 3 | 452226.83 | 6940979.25 | 152.515657203424 | -27.6544684356218 |
| 4 | 451899.88 | 6941032.379 | 152.512344683496 | -27.6539771974549 |
| 5 | 451777.51 | 6941495.219 | 152.511122673227 | -27.6497945754998 |
| 6 | 451821.98 | 6941780.86 | 152.511584949693 | -27.6472175608431 |
| 7 | 451801.34 | 6941784.139 | 152.511375844978 | -27.6471872227002 |
| 8 | 451883.77 | 6941014.62 | 152.512180648192 | -27.6541369408248 |
| 9 | 451756.99 | 6941494.15 | 152.510914605666 | -27.6498034921465 |
| 10 | 451686.93 | 6941046.799 | 152.5101863683 | -27.6538394110522 |

## 5.2 Appendix B: Wildlife photos

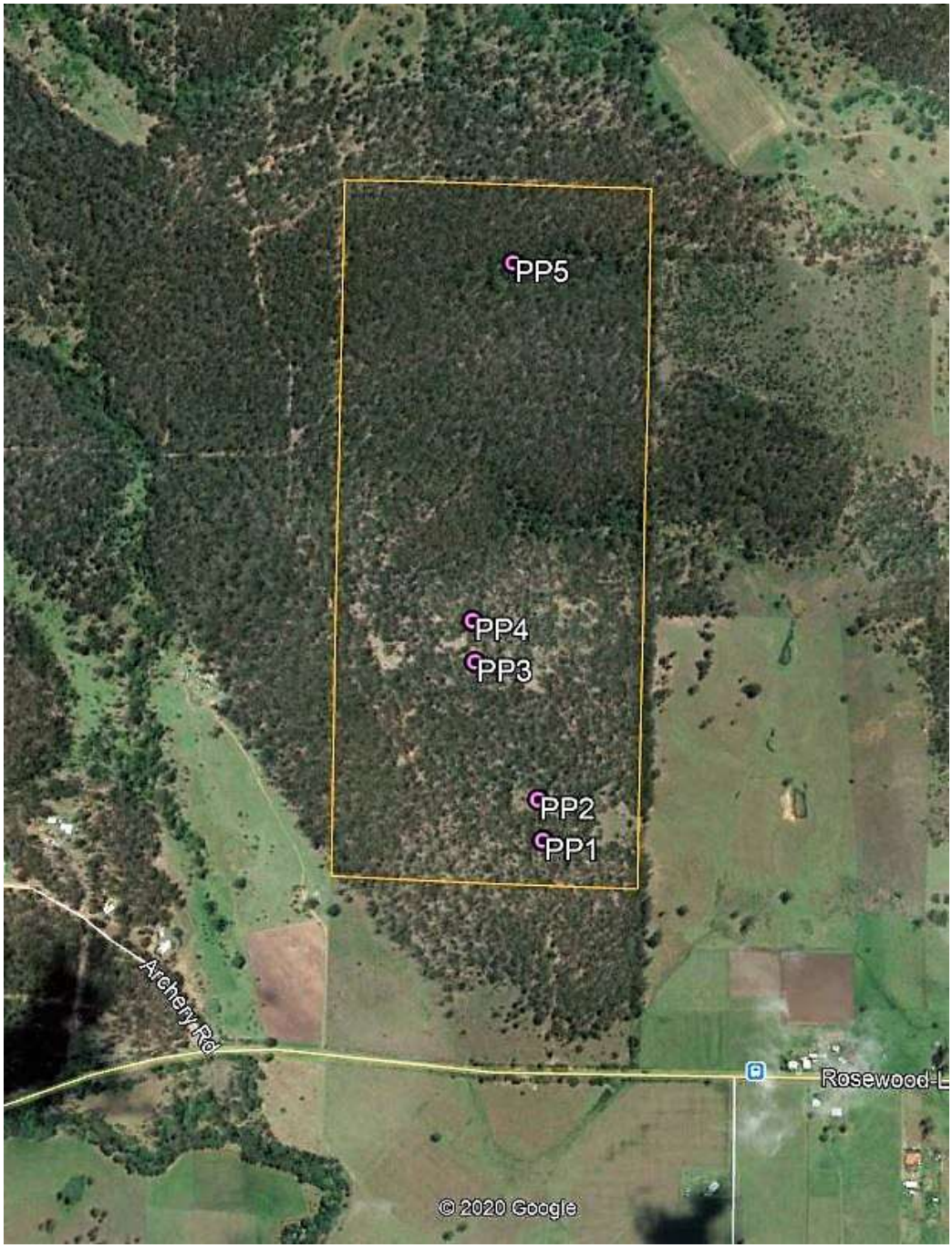
**Photo 1: Bandicoot**


**Photo 2: Possum**

**Photo 3: Scrub turkey**

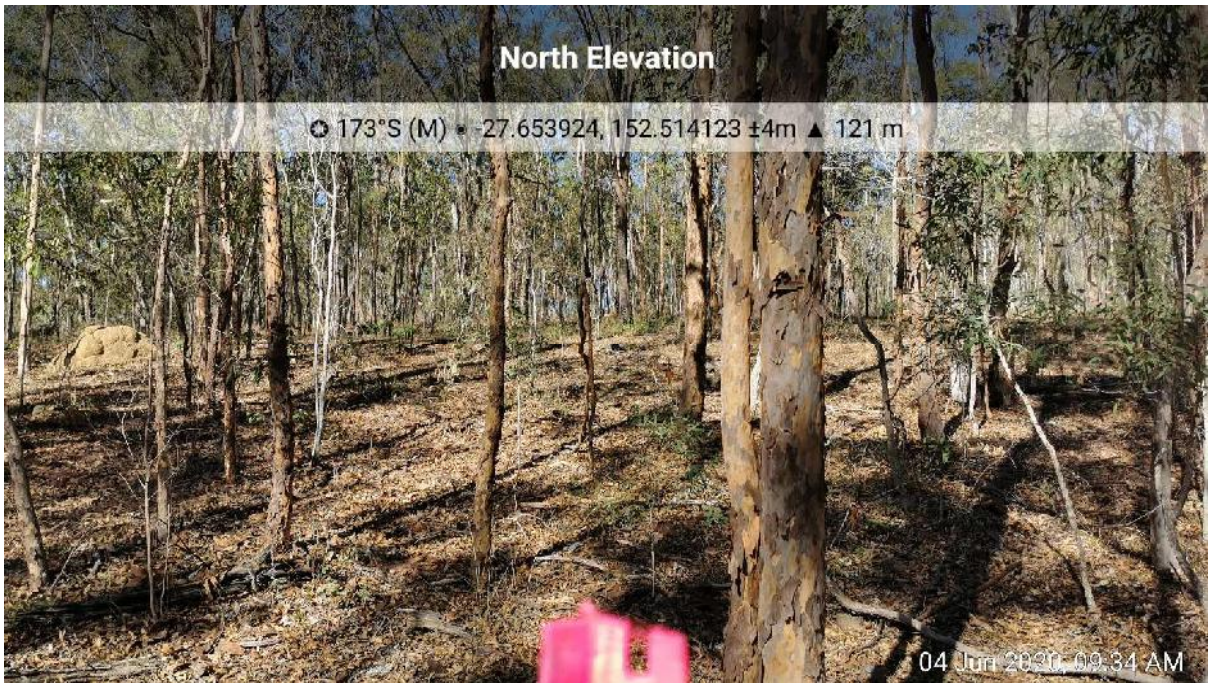
## 5.3 Appendix C: Photo Points

### 1. Photo Points Locations



## 2. Photo Point 1 Comparison

**4 June 2020**




RE 12.9-10.2 Remnant
Dry conditions, weed free.

**29 May 2021**

Increase in leaf cover

**30 June 2022**

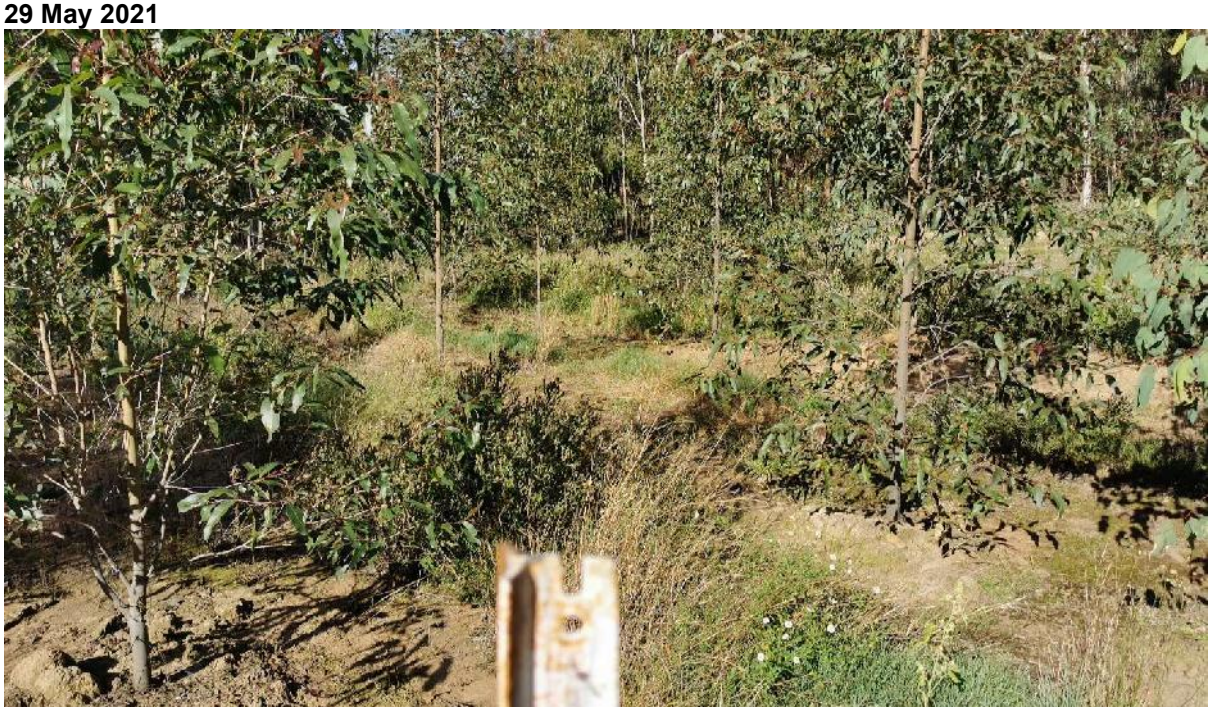
Increase in grass cover.  Weed Free

### 3. Photo Point 2 Comparison

**4 June 2020**


RE 12.9-10.2 Regrowth.
Infill area. Dry conditions.

**29 May 2021**



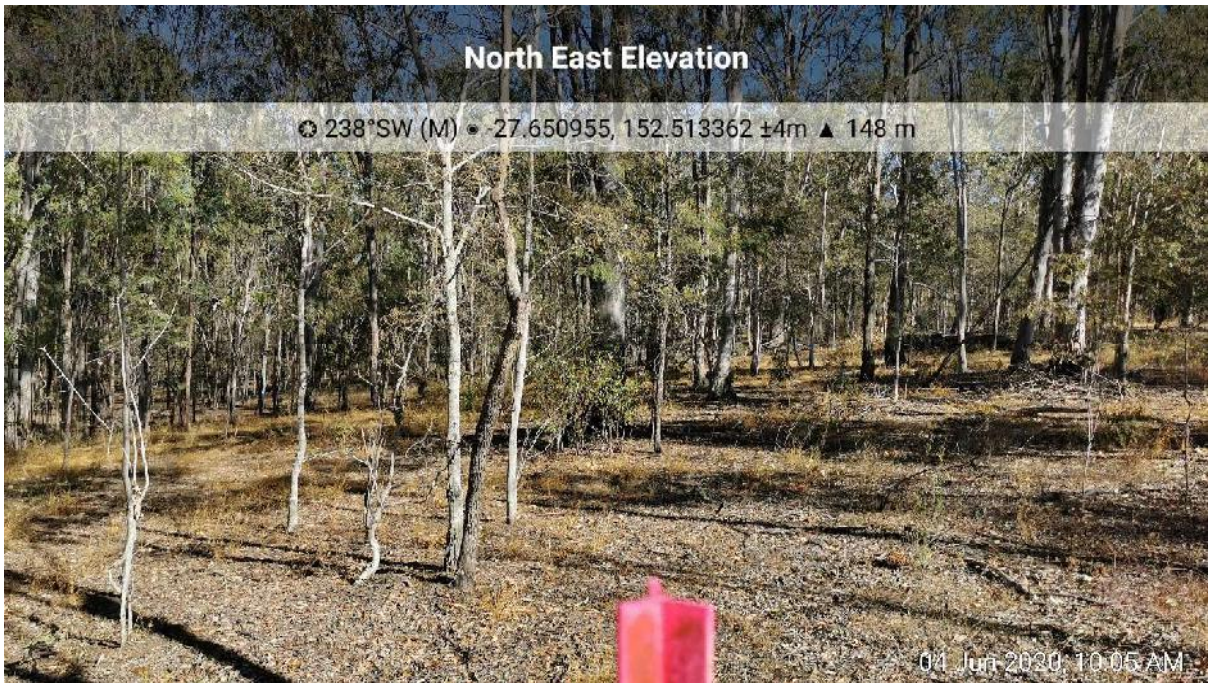
Increase in tree growth and ground cover

**30 June 2022**

Steady increase in tree growth

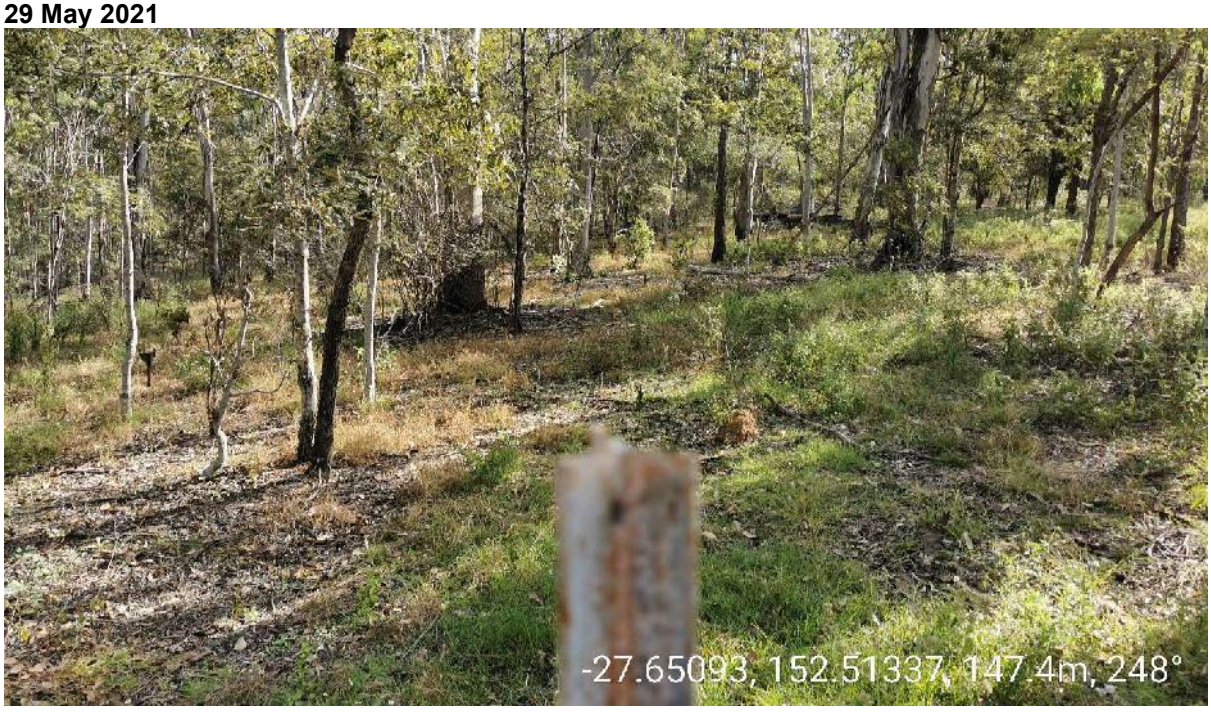
4. **Photo Point 3 Comparison**

**4 June 2020**




**RE** 12.9-10.7 Regrowth
Dry conditions, weed free.

**29 May 2021**




Increase in leaf and ground cover

**30 June 2022**

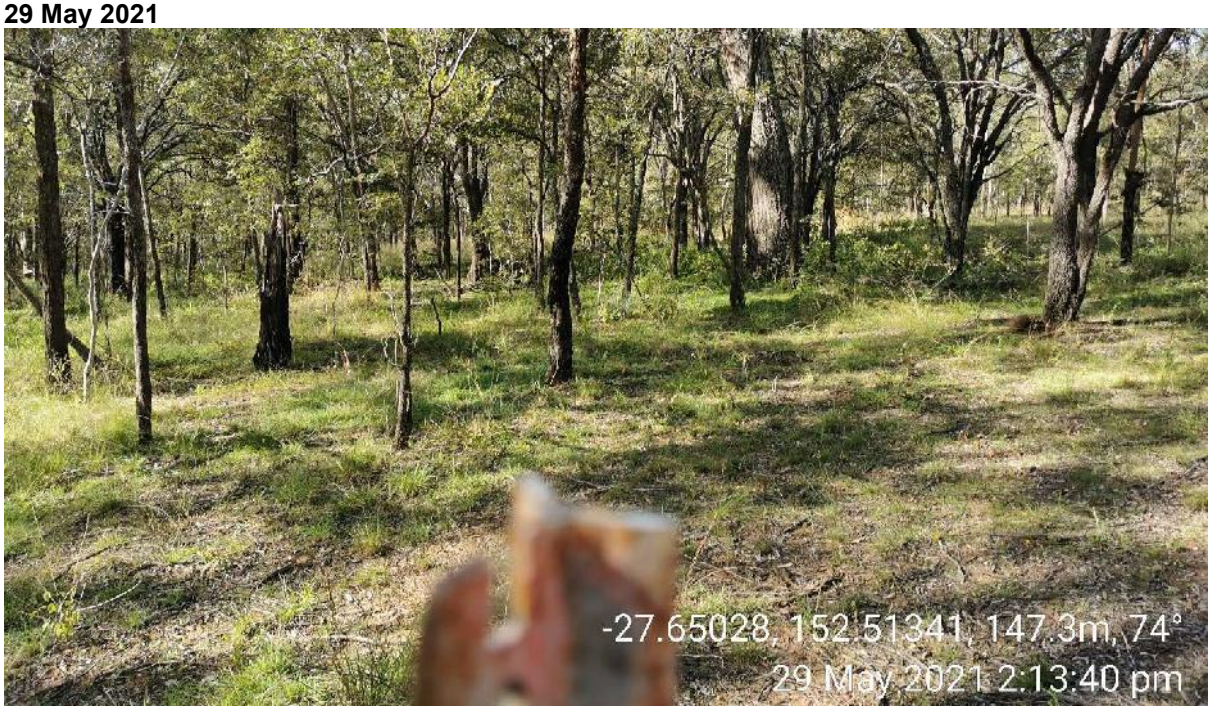
Increase in leaf and ground cover

5. **Photo Point 4 Comparison**

**4 June 2020**


RE 12.9-10.7 Regrowth
Dry conditions, weed free.

**29 May 2021**



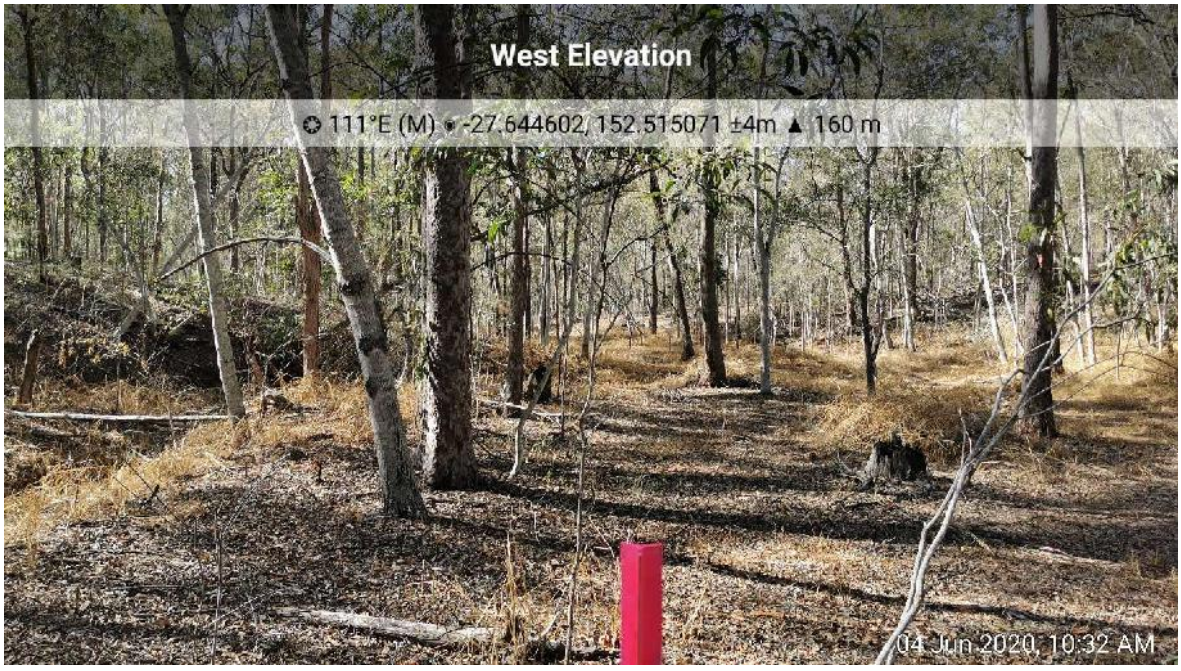

Increase in ground cover

**30 June 2022**

Increase on ground cover.  Emergent fire weed due to wet weather

**6. Photo Point 5**

**4 June 2020**



RE 12.9-10.7 Remnant
Dry conditions, weed free.

**29 May 2021**

Increase in leaf and ground cover.

**30 June 2022**

Reemergence of Lantana due to wet weather. Further weed treatment required.