Bower Ecology
Survey | Planning | Strategy

Cumner Road Subdivision,

White Rock, Ripley Valley, Queensland

(EPBC 2014/7388)

Compliance report

Period: 03 December 2023 to 03 December 2024

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Executive Summary

Key points in this reporting period:

- The EPBC Act approved action management has commenced, with approximately 70% of the total urban development footprint cleared of vegetation.
- The Conservation Area Management Plan for the project is in year 5. Year 5 data has been collected and reported for the two key elements:
    - Native vegetation and weeds (managed under the Conservation Area Management Plan)
    - Pest Animals (managed under the Pest Management Plan)

  NB. Under the Koala Management Plan, koala population and health assessment surveys are required biennially over the offset area maintenance period. As this was conducted in 2023, it was not required in 2024 and therefore is not included in this compliance report.

- Year 5 surveys within the offset area established for the project demonstrate that:
    - The coverage of both species of lantana (*L. camara, L. montevidensis*) has declined significantly. The spatial distribution of *L. camara* has declined slightly in comparison to the baseline, with individuals recorded at 18 of the 20 assessment sites. Spatial distribution of *L. montevidensis* has increased, with individuals recorded at 9 sites in baseline surveys, and at 12 sites in 2024 monitoring.
    - In comparison to 2023 results, vegetation condition improved at one site, remained relatively stable at another, and declined one BioCondition score point at four sites. Native forb and grass diversity, and perennial grass cover, have shown varied patterns in comparison to 2023 monitoring.
    - 17 – 18 ha of the Conservation Area (6.8 – 7.2%) underwent fire management.
- The legal securing of Zone 1 and Zone 2 is overdue (due 16/2/2024, three years from the date of the varied approval); however, this will not prevent the continued management of the conservation area in a manner consistent with the CAMP.
    - The legal security process is in progress for Zone 1. At the time of writing, we are awaiting feedback from Ipswich City Council and Queensland Urban Utilities on registered interests over the land. This feedback is a prerequisite for establishing a Voluntary Declaration (VDec; via the *Qld Vegetation Management Act 1999*). The legal securing of Zone 1 will occur as soon as possible.
    - Zone 2 is overdue as the location of the proposed water infrastructure in this zone (the hammer-shaped area that has been excluded from the northern part of the CAMP area, see Figure 3) is currently being amended due to Queensland Urban Utilities design requirements. As the updated water infrastructure design may impact the offset area established for this action, a VDec cannot be prepared until the design is finalised. It is likely that the proponents will soon seek amendments to the offset area, with adequate compensation, to allow the water infrastructure to be built. Once this is complete, the required VDec can be established for Zone 2, and this zone can be legally secured.
- The project in compliance with the EPBC Act approval, with the exception of three issues. The exceptions are related to revegetation works, the increase in Wild Dog numbers detailed in Table 2, and the overdue legal securing of Zone 1 and 2 via VDEC.

1 Introduction

On December 3, 2019, the Cumner Road subdivision, White Rock, Ripley Valley, Queensland (EPBC 2014/7388) was approved under sections 130(1) and 133(1) of *the Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The approved action is the development of a mixed-use subdivision zone and associated infrastructure, and environmental protection on Cumner Road, White Rock, Queensland.

The action commenced on 03 December 2019. The following report details progress of the action for the period 03 December 2023 to 03 December 2024 (Year 5) and is provided to meet the annual compliance reporting requirement within condition 10 of the Approval Notice.

Condition 10 of the EPBC Act approval states:

"10. The approval holder must prepare a compliance report for each 12-month period following the date of commencement of the action, or as otherwise agreed to in writing by the Minister. The approval holder must:

a. publish each compliance report on the website within 60 business days following the relevant 12 month period;
b. notify the Department by email that a compliance report has been published on the website within five business days of the date of publication;
c. keep all compliance reports publicly available on the website until this approval expires;
d. exclude or redact sensitive ecological data from compliance reports published on the website;
and
e. where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the department within 5 business days of publication. "

This report provides a summary to meet Condition 10 above. It also provides a summary of actions and compliance pertaining to the EPBC2014/7388 approval for year 5.

2 Progress of the action (EPBC 2014/7388)

Progress is reported against the Approval Conditions and associated performance criteria within Table 1Table 2Table 3 below.

Due to the Coronavirus pandemic in 2020, delays occurred in works related to the Conservation Area Management Plan. In February 2021 a variation to the initial approval was approved. This approved variation allowed postponement of CAMP actions with an adjusted schedule provided within the approval.

Climatic conditions during 2024 put limits upon management works that could be undertaken. Periods of higher-than-average rainfall limited access to the more remote areas of the site, thus impacting the weed, revegetation and pest management works achievable. Planting planned for September 2024 in areas 5 and 10 was postponed due to site accessibility, site safety and non-conducive planting conditions, as detailed in Table 2. As a result, the planting was postponed until March/April 2025, when conditions were expected to be more conducive to successful planting works.

Table 1: Response to the condition in Attachment A of the EPBC Act approval for EPBC 2014/7388

Part A - Conditions specific to the action	
Condition	**Comments**
1. For the protection of the Koala and the Grey-headed Flying-fox, the approval holder must not clear Koala habitat and Grey-headed Flying-fox foraging habitat outside the area marked as the Development Footprint, enclosed by the red lines, as shown on the map at Attachment A.	Compliant.
2. To compensate for the clearing of 146.02 hectares of Koala habitat and Grey-headed Flying-fox foraging habitat, the approval holder must: a. Legally secure the Conservation Management Area. b. Provide the Department with evidence of the registration of legal security of the Zone 1 of the Conservation Management Area, within 3 years of the date of this approval. c. Provide the Department with evidence of the registration of legal security of Zone 2 of the Conservation Management Area within 5 years of the date of this approval. d. Commence implementation of the Conservation Area Management Plan, within 30 days of the date of this approval. e. The performance and completion criteria set out in Tables 1 and 2, at Attachment B (of the approval) must be achieved.	a) For Zone 1: The legal security process is in progress. At the time of writing, we are awaiting feedback from Ipswich City Council and Queensland Urban Utilities on registered interests over the land. This feedback is a prerequisite for establishing a Voluntary Declaration (VDec; via the Qld *Vegetation Management Act 1999*). The legal securing of Zone 1 will occur as soon as possible. For Zone 2: The location of the proposed water infrastructure in this zone (the hammer-shaped area that has been excluded from the northern part of the CAMP area) is currently being amended due to Queensland Urban Utilities design requirements. As the updated water infrastructure design may impact the geometry of the offset area established for this action, a VDec cannot be prepared until the design is finalised. It is likely that the proponents will soon seek amendments to the offset area, with adequate compensation, to allow the water infrastructure to be built. Once this is complete, and subject to approval of modifications to the EPBC Act offset area, the required VDec can be established for Zone 2, and this zone can be legally secured. Dependency b. and c. held until legal security obtained. d) As per the year 3 compliance report, this has been met e) In progress
3. The approval holder must not commence the action until the approval holder has commenced implementation of the Conservation Area Management Plan.	The CAMP was commenced in September of 2019 with the undertaking of baseline Koala surveys per the KMP. The approval holder commenced the action on 4/12/2019 with the initial works related to the road corridor for the Cumner Road extension. The

	department was notified of the commencement of the action on 11/12/2019 via email.
4. The approval holder must implement the Koala management plan.	Plan implemented. The KMP requires biennial surveys. As koala surveys were undertaken in 2023, none were required in 2024, thus no specific results are included in this report. The next monitoring will occur around September 2025.
Part B - Standard administrative conditions	
Notification of date of commencement of the action 5. The approval holder must notify the Department in writing of the date of commencement of the action and the date of commencement of construction within 10 business days after the date of commencement of the action or commencement of construction respectively.	Achieved. The approval holder commenced the action on 4/12/2019 with the clearing of the road corridor for the Cumner Road extension. The department was notified of the commencement of the action on 11/12/2019 via email.
6. If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister.	N/A. The action has commenced.
Compliance records 7. The approval holder must maintain accurate and complete compliance records.	Accurate and complete compliance records have been maintained.
8. If the Department makes a request in writing, the approval holder must provide electronic copies of compliance records to the Department within the timeframe specified in the request. Note: Compliance records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, and or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the Department's website or through the general media.	No request has been received.
Preparation and publication of plans 9. The approval holder must: a. submit plans electronically to the Department for approval by the Minister; b. publish each plan on the website within 20 business days of the date of this approval or the date that the plan is approved by the Minister or of the date a revised action management plan is submitted to the Minister or the Department, unless otherwise agreed to in writing by the Minister; c. exclude or redact sensitive ecological data from plans published on the website or provided to a member of the public; and d. keep plans published on the website until the end date of this approval	All approved plans can be found at: https://intrapac.com.au/ripley/ No sensitive ecological data is contained within the plans.
Annual compliance reporting 10. The approval holder must prepare a compliance report for each 12 month period following the date of commencement	See above This document is the compliance report for the fifth 12-month

of the action, or as otherwise agreed to in writing by the Minister. The approval holder must: a. publish each compliance report on the website within 60 business days following the relevant 12 month period; b. notify the Department by email that a compliance report has been published on the website within five business days of the date of publication; c. keep all compliance reports publicly available on the website until this approval expires; d. exclude or redact sensitive ecological data from compliance reports published on the website; and e. where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication. Note: Compliance reports may be published on the Department's website.	period (Year 5) period following the commencement of the action.
Reporting non-compliance 11.The approval holder must notify the Department in writing of any: incident; non-compliance with the conditions; or non-compliance with the commitments made in plans. The notification must be given as soon as practicable, and no later than two business days after becoming aware of the incident or non-compliance. The notification must specify: a. the condition which is or may be in breach; and b. a short description of the incident and/or non-compliance	Two non-compliances occurred in the 2024 reporting period. We have been made aware of these via the assessment undertaken in this report. Hence, this report functions to provide notification of the non-conformances. 1. In 2024, installation of tube stock was proposed for areas 5 and 10, as shown on Figure 2 (in the south of the CAMP area). These areas represent small areas of open paddock that need infill planting (a total of 1.5 ha). No planting occurred in 2024. As 20% of revegetation works are required to be completed by the end of each year (years 4 to 8), the shortfall of planting in the reporting year is considered a non-compliance. Further details are provided in Table 2. 2. Numbers of the pest species Wild Dog recorded in 2024 were higher than the baseline. Numbers were also higher in the Conservation Management Area than in the reference sites within the White Rock Conservation Estate. Reasons for this are unclear (see Table 2 and section 3.4). This increase in Wild Dog numbers is considered a non-compliance. Measures to mitigate this non-conformance is provided in Section 3.4.
12. The approval holder must provide to the Department the details of any incident or non-compliance with the conditions or commitments made in plans as soon as practicable and no later than 10 business days after becoming aware of the incident or non-compliance, specifying: a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future; b. the potential impacts of the incident or non-compliance; and c. the method and timing of any remedial action that will be undertaken by the approval holder.	As above.

Independent audit and independent Scientific Outcomes 13. The approval holder must ensure that independent audits of compliance with the conditions and/or Independent Scientific Verification of Outcomes are conducted as requested in writing by the Minister.	N/A. No independent audits were requested by the Minister within the reporting year.
14. For each independent audit, the approval holder must: a. provide the name and qualifications of the independent auditor and the draft audit criteria to the Department; b. b. only commence the independent audit once the audit criteria have been approved in writing by the Department; and c. c. submit an audit report to the Department within the timeframe specified in the approved audit criteria.	N/A. No independent audits were conducted within the reporting year.
15. For each Independent Scientific Verification of Outcomes the approval holder must: a. provide the name and qualifications of the independent suitably qualified field ecologist and the draft brief to the Department; b. only commence the independent Scientific Verification of Outcomes once the independent suitably qualified field ecologist and the brief have been approved in writing by the Department; and c. submit an independent suitably qualified field ecologist's report to the Department within the timeframe specified in the approved brief.	N/A. No independent scientific verification of outcomes occurred within the reporting year.
16. The approval holder must publish the audit report on the website within 10 business days of receiving the Department's approval of the audit report and keep the audit report published on the website until the end date of this approval.	N/A. No independent audits were conducted within the reporting year.
Completion of the action 17. Within 30 days after the completion of the action, the approval holder must notify the Department in writing and provide completion data	N/A. The action has not been completed.

Table 2: Compliance criteria (Attachment B Table 1 of EPBC approval)

Task	Establishment			Maintenance	Progress within Year 3 (03/12/2022 to 03/12/2023) * only progress toward preliminary management actions (highlighted green) are addressed within this compliance report as the reporting period (Year 3) is relevant to these only.
	Preliminary	Management			
	By end of year 3	Between end of year 3 and end of year 10	Year 11	Years 12-21	
Construction-related management actions					
Fencing / signage / (and maintenance) relating to Koala and GHFF management	Infrastructure installed.	No more than 5% of fencing compromised at any time			Fencing / signage / (and maintenance) relating to Koala and GHFF management has not yet commenced along the eastern edge of the mixed-use development area. Nonetheless, all Koala fencing has been completed along Sandstone Boulevard (the new road constructed as part of the action).
Sediment and erosion control (and maintenance)	Sediment / erosion works installed	Sediment and erosion control devices checked and repaired annually in Quarter 1			Sediment and erosion work required regarding the clearing of the Cumner Rd extension have been installed and maintained as part of the Construction Environmental Management Plan. Construction Contractor reporting on this is available upon request.
Bushland management actions					
Fire Management	Bush fire management plan (BFMP) completed. Fire management works undertaken as specified in the BFMP.	Fire management works undertaken as specified in the BFMP			Fire management burns were undertaken on 17 to 18 ha of the Conservation Area (6.8 – 7.2%) (Appendix C).

Task	Establishment			Maintenance	Progress within Year 3 (03/12/2022 to 03/12/2023) * only progress toward preliminary management actions (highlighted green) are addressed within this compliance report as the reporting period (Year 3) is relevant to these only.
	Preliminary	Management			
	By end of year 3	Between end of year 3 and end of year 10	Year 11	Years 12-21	
Pest fauna management	Two survey events completed to determine the baseline of dogs / cats / foxes within the Conservation Management Area and reference sites within the adjacent White Rock Conservation Estate Area. Development of a pest management plan that specifies how feral dogs, cats and foxes will be reduced in the conservation Management Area Development of a survey methodology that is sufficient to demonstrate any reduction of feral dogs, cats and foxes in the Conservation Management Area, relative to the baseline and reference sites within the adjacent White Rock conservation Estate Area.	Between end of year 3 and end of year 6, no increase in pests against baseline, or, in the event of evidence of an increase of pests in the general area as measured at reference sites within the White Rock Conservation Estate Area, then demonstrated reduction in pests relative to these reference sites, measured annually.	From beginning of year 7 to end of approval, maintain a reduction in pests relative to baseline, measured annually, or in the event of evidence of an increase of pests in the general area, as measured at reference sites within the White Rock Conservation Estate Area, then demonstrated reduction relative to these reference sites, measured annually.		Two survey events (Autumn and Spring 2024) were undertaken to track pest management progress against baseline reports. The 2024 Pest Management Report can be found in Appendix B. The abundance of three out of the four target pest species (Feral Cats, Foxes and Feral Pigs) was shown to have reduced in comparison to the baseline. 2024 records of Wild Dogs, however, were greater in both the Conservation Management Area (9 dogs recorded) and the White Rock Conservation Estate (5 dogs recorded) in comparison to the baseline. While reasons for this increase are unclear, it could be attributed to Ipswich City Council (ICC) pest management's shift in focus towards Feral Pigs in the White Rock Conservation Estate, reducing resources targeting Wild Dogs. A number of dead pigs observed by ICC in the White Rock Conservation Estate throughout 2024 could also have provided an increase in food resources to Wild Dogs (P. Smith, Natural Environment Manager at Ipswich City Council, pers. comm., 28/1/2025). Alternatively, changes in vegetation cover as land was cleared due to the development could have displaced Wild Dogs from cleared areas. Regardless, the increase in Wild Dog numbers relative to the baseline presents a non-compliance which will be addressed by increasing the management efforts to reduce Wild Dog populations in ongoing pest management.
Bushfire/recreation trails (and maintenance)	Fire access tracks established	At a minimum, bushfire management trails drivable at least one month prior to fire season as determined in BFMP. No more than 10% of designated multipurpose trails unwalkable at any time.			Existing fire access trails have been maintained as part of access requirements for the ongoing revegetation works.

Task	Establishment			Maintenance	Progress within Year 3 (03/12/2022 to 03/12/2023) * only progress toward preliminary management actions (highlighted green) are addressed within this compliance report as the reporting period (Year 3) is relevant to these only.
	Preliminary	Management			
	By end of year 3	Between end of year 3 and end of year 10	Year 11	Years 12-21	
Revegetation requirements assessed	Revegetation requirements assessed every year prior to planting season until Year 8			n/a	Planting planned for September 2024 in areas 5 and 10 was postponed due to the following: • Site accessibility - sections of the site were cut off due to construction activities such that traversing into primary planting areas was not possible. • Site safety – tracks (once re-opened) were difficult and generally not safe to traverse due to large levels of inundation and the contractor (Evolve) was not comfortable in accessing the area, due to the increased risk of being bogged and or potential damage to person or property. • Non-conducive planting conditions. The extreme heat and large volume of rainfall in the region provided extremely challenging growing conditions, that would have seen a high mortality rate. As a result, the planting was postponed until March/April 2025, when conditions were expected to be more conducive to successful planting works.

Table 3: Completion criteria (Attachment B, Table 2 of the EPBC Act approval)

Completion Criteria	Relevant to Year 11	Relevant to Year 21	Comments
1. Both Zones 1 and 2 of the conservation area have been legally secured, ensuring protection for conservation purposes, within 5 years of date of the approval.	✓	✓	Not complete. See notes in Table 2
2. With exception of minor initial works, bushland management actions commenced within 3 years of the date of the approval.	✓	✓	Commenced.
3. Documented increase in Koala and GHFF habitat value, as shown in an assessment against the management objectives of table 4 of the CAMP.	✓	✓	N/A for the Year 5 period.
4. All revegetation (planting works) completed by the end of year 11, with planted tree species comprising predominantly Koala food trees (including Forest Red Gum and Grey Gum) and winter foraging species for the GHFF (Broad-leaved Paperbark, Spotted Gum, Swamp Mahogany and Forest Red Gum).	✓	N/A	N/A for the Year 5 period.
5. Minimum 90% survival rate of revegetation or equivalent stem density (i.e. due to natural regeneration) by end of year 11.	✓	N/A	N/A for the Year 5 period.
6. All management zones contain primary Koala food trees and GHFF winter foraging trees in good health by end of year 11 and for the remaining duration of the approval.	✓	✓	N/A for the Year 5 period.
7. Across the planting area, tree canopy cover % within each management zone meets regional ecosystem benchmarks by end of year 11, 16 and 21, as defined by the Queensland Government's BioCondition Benchmarks for Regional Ecosystem Condition Assessment (2019).	✓	✓	N/A for the Year 5 period.
8. By end of year 11, a density of at least 20 overstory trees (comprising Koala food trees and winter foraging resource trees for GHFF) and 250 mid or understory trees and/or shrubs per hectare will be present and maintained for the duration of the approval.	✓	✓	N/A for the Year 5 period.
9. By end of year 11 rehabilitation and management results in vegetation communities that meet the descriptions of pre-existing and/or surrounding remnant regional ecosystem types and these are maintained for the duration of the approval.	✓	✓	N/A for the Year 5 period.

3 Summary of Management Actions

The Conservation Management Area Plan (CAMP) stipulates annual reporting on five key attributes:

- a summary of management actions,
- results of any vegetation monitoring,
- results of any koala monitoring (not relevant to this report, as the CAMP requires biennial koala monitoring, with the next scheduled monitoring event to occur in 2025),
- report on actions to support the bushfire management plan
- actions to support the pest management plan.

Attached to this document are detailed reports from relevant contractors within each action, and a summary of actions and results (Sections 3.1 to 3.4). Relevant reports are attached in the appendices (Appendix C, Appendix D, and Appendix E).

3.1. Management Action Report

Evolve Environmental Solutions were contracted to conduct weed treatment and pest management works. A total area of 33.25 ha of secondary weeding work in zones 1, 2 and 3 was completed in April to June; 10.6 ha of primary weeding and 41 ha of secondary weeding were completed in zones 1, 2 and 3 in July to September (Appendix E).

Treatment areas are mapped in Figure 1 and Figure 2. Various pest management works were employed by subcontractor Invasive Plant and Animal Services throughout the reporting year: trapping, shooting, 1080 and DK9 baiting, deployment of Canid Pest Ejectors, and deployment of remote cameras to monitor pest species Appendix D.

Fireland was contracted in 2023 to conduct bushfire management works. In the 2024 reporting year, 6.8 – 7.2% of the total CAMP area was burned with low-moderate intensity fires (Appendix C). Areas burnt are mapped in Figure 6Figure 7.

3.2. Vegetation Monitoring

The CAMP stipulates that vegetation will be improved in three unique zones, each with their own actions:

- MZ1: Riparian restoration over a total of 30 ha along drainage lines,
- MZ2: Assisted regeneration of 91 ha through control of Lantana camara and other invasive species
- MZ3: Regeneration of the remaining 128 ha through minor weed works

As detailed in the 2024 Vegetation Monitoring Report (Appendix A) BioCondition surveys were conducted within the CAMP Area in April 2024, at 6 established plots located across the site (Figure 3). The results from the BioCondition survey can be seen in Table 4. Of the assessment sites, only Site BC6 shows an improvement in condition in comparison to the previous monitoring event, with an increase in BioCondition class from 3 in 2023 to 2 in 2024. Site BC2 has remained relatively stable between 2023 and 2024 monitoring, with a BioCondition class of 2 recorded during both monitoring events. The BioCondition class at Sites BC1, BC4 and BC5 has declined one point from 2 in 2023 to 3 in 2024.

The changes in BioCondition class at these three sites are largely influenced by ecosystem traits that have a short response time, such as native forb and grass species richness and perennial grass cover;

fluctuation in these traits is expected, therefore the BioCondition classes are expected to fluctuate also until slower responding ecosystem attributes such as tree species richness and the number of large trees mature. Site BC3, the non-remnant vegetation site, also shows a decline in BioCondition class, dropping from 3 in 2023 to 4 in 2024; this lower result is the same as that recorded in 2021 and 2022. Site BC3 is in non-remnant vegetation, hence its poor condition.

Specific attributes with short response times, for example native forb and grass diversity, and perennial grass cover, have shown varied patterns in comparison to 2023 and the other previous monitoring events.

Cover (percent foliage cover) of both lantana species (*Lantana camara* and *Lantana montevidensis*), the key trait expected to respond in a two to three-year timeframe, was higher in 2024 than 2023, but significantly lower than that recorded during baseline surveys. Across 20 assessment sites, *Lantana camara* was recorded in baseline surveys to have a mean coverage of 41.8%. This reduced to 8.16% in 2023, and rose to 12.96% in 2024. Similarly, the highest mean coverage of *Lantana montevidensis* (12.3%) was recorded during baseline surveys. This reduced to 3.38% in 2023, and rose to 5.97% in 2024.

Spatial distribution of both lantana species shows a slight increasing trend over time. Nonetheless, since weed management works commenced, the coverage of both species of lantana has declined significantly. Spatial distribution of *L. camara* is slightly less than the baseline, with individuals recorded in 2024 at 18 out of the 20 assessment sites, in comparison to all 20 sites in baseline surveys. However, spatial distribution of *L. montevidensis* has increased, with individuals recorded at 9 sites in baseline surveys, and at 12 sites in 2024 monitoring.

The reduction in lantana cover can be attributed to weed management works, however the increased spatial distribution indicates a need for continued efforts to control these weed species. An example of Lantana coverage can be seen in Figure 4.

Table 4: Summary of BioCondition results for 2021 to 2024

Site ID	MZ	RE	Condition	Benchmark used	Overall BioCondition score 2021	Overall BioCondition score 2022	Overall BioCondition score 2023	Overall BioCondition score 2024	BioCondition class 2021	BioCondition class 2022	BioCondition class 2023	Biocondition class 2024
1	2	12.9-10.2	Remnant	12.9-10.2	0.61	0.61	0.63	0.59	2	2	2	3
2	3	12.9-10.2	Remnant	12.9-10.2	0.76	0.76	0.78	0.79	2	2	2	2
3	1	12.9-10.7 (pre-clear)	Non-remnant	12.9-10.7	0.33	0.33	0.40	0.26	4	4	3	4
4	2	12.8.17	Remnant	12.8.17	0.59	0.65	0.60	0.48	3	2	2	3
5	3	12.9-10.2	Remnant	12.9-10.2	0.67	0.67	0.69	0.54	2	2	2	3
6	1	12.9-10.2	Remnant	12.9-10.2	0.61	0.54	0.51	0.62	2	3	3	2

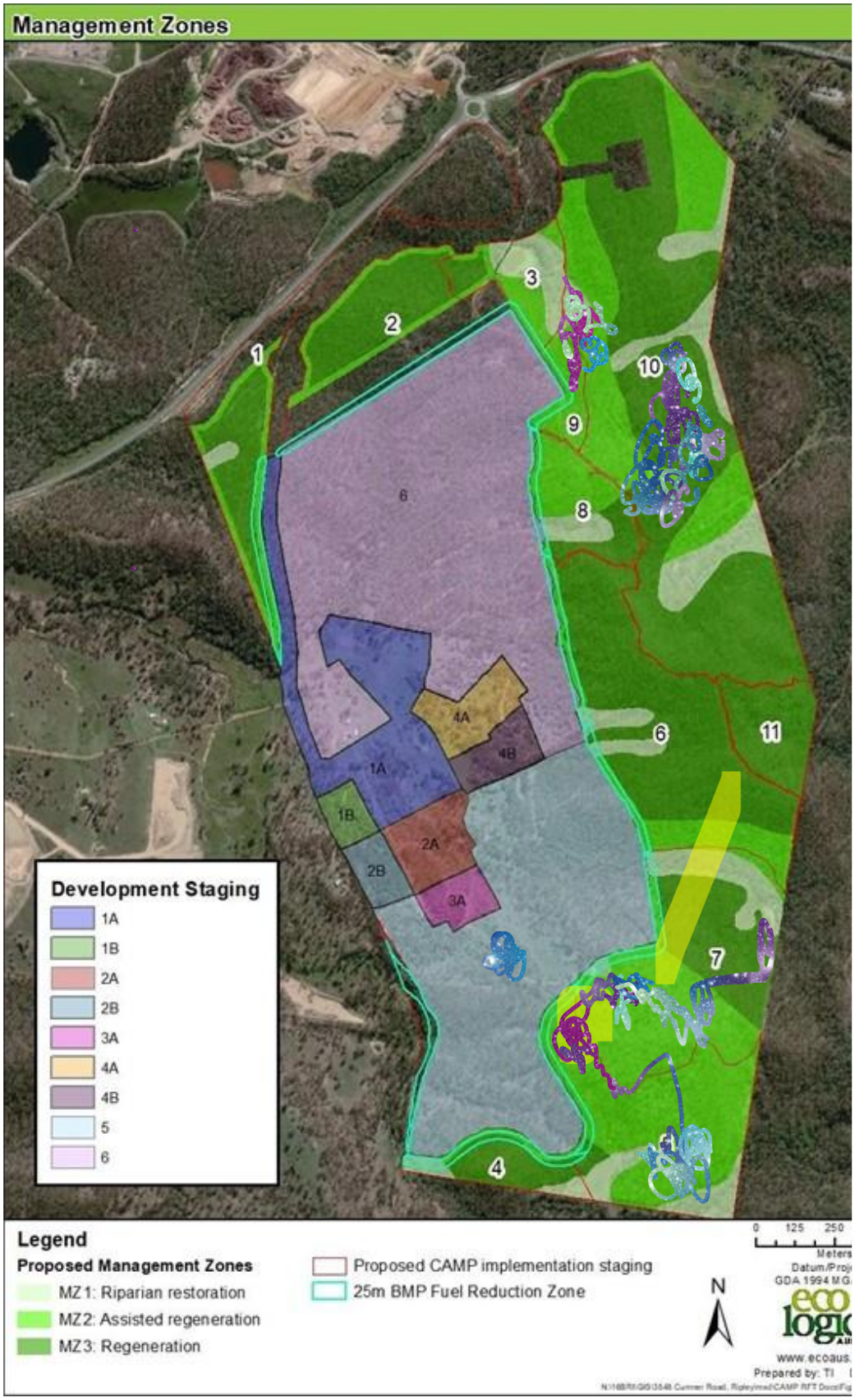

Figure 1: Areas where weed management works were undertaken between April and June 2024. Sketched mark-up indicates targeted areas (map from Evolve).

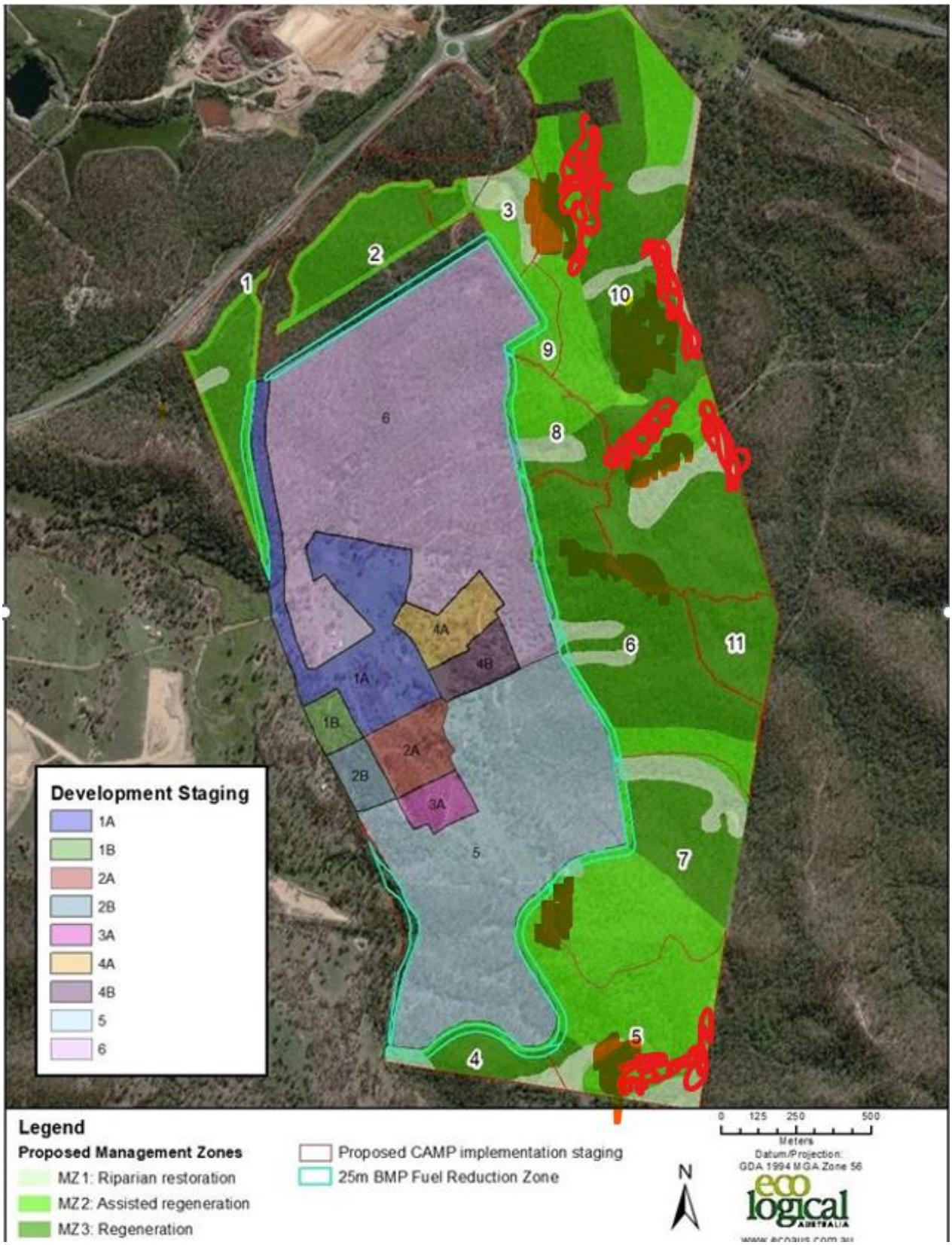

Figure 2: Areas where weed management works were undertaken between July and September 2024. Sketched mark-up indicates targeted areas (map from Evolve).

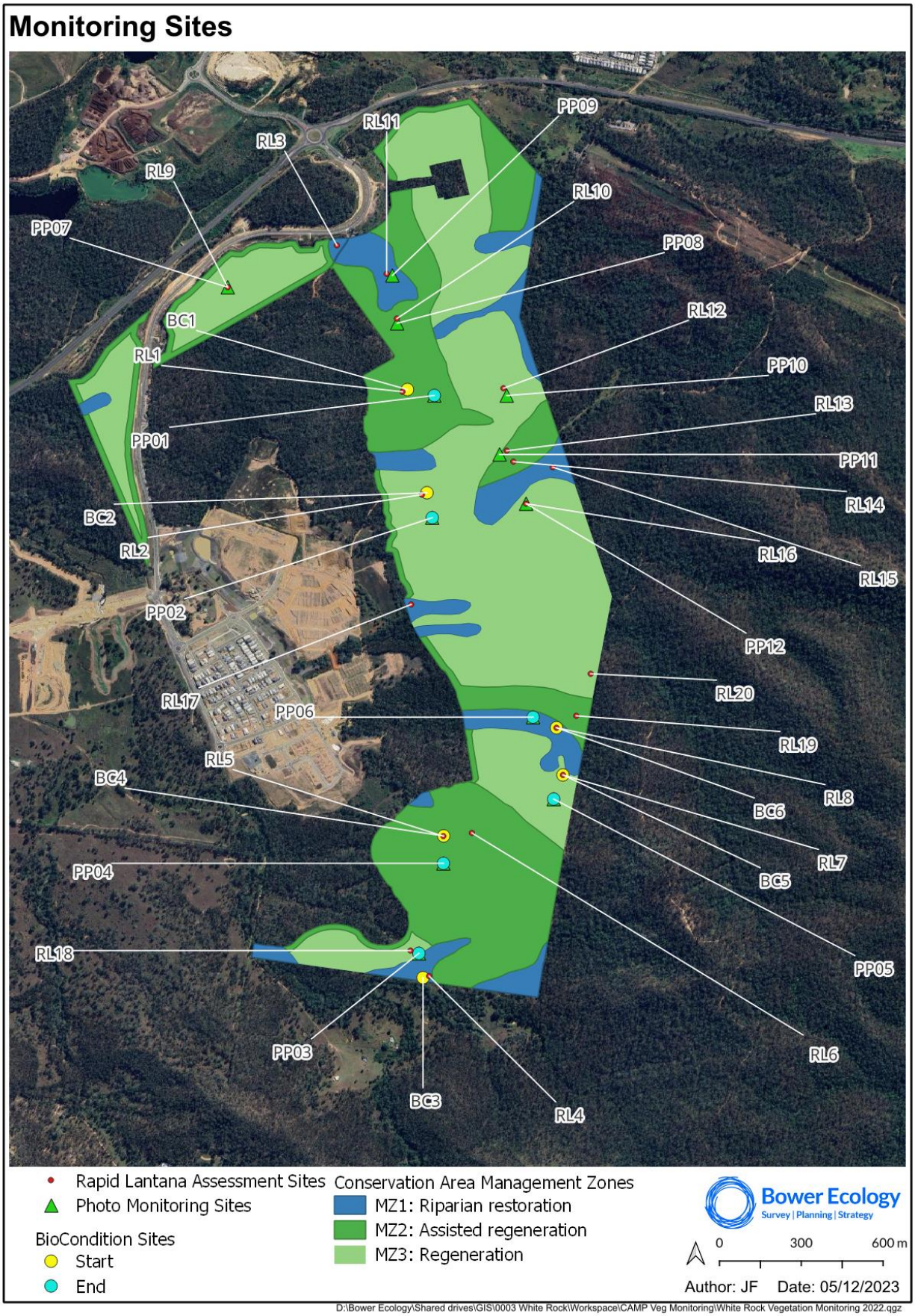

Figure 3: Location of the BioCondition (BC) plots, rapid Lantana camara *monitoring plots (RL) and photos monitoring plots (PP) within the CAMP Area and management zones.*

Figure 4: Example photos from BioCondition plots and photo monitoring plots, showing the range of Lantana camara coverage found in the CAMP Area. Photo monitoring site 6 (top, left and right), rapid Lantana monitoring plot 5 and 17 (centre left and right), and BioCondition 4 (bottom left and right).

3.3. Bushfire Management Report

The Conservation Management Area has three core fire management zones (Figure 5), each with their own strategy:

- Protection Zone
  - *Fine fuel layer not to exceed low to moderate risk or 5 tonnes/ha*
- Wildfire Mitigation Zone
  - *Maximum overall fuel hazard less than high or <8 tonnes/ha in ground and shrub layer,*
  - *Planned burns occur at lower end of recommended intervals, and area treated is 0-80% of the block (Table 5)*
  - *Fuel management by slashing, selective shrub clearing and trail construction*
- Conservation Zone
  - *Planned burns occur at lower end of recommended intervals, and area treated is 0-80% of the block (Table 5)*

Table 5: Recommended intervals for planned burns in wildfire mitigation and conservation zones

Regional Ecosystem	Recommended interval	Recommended season	% burnt in this reporting interval	% burnt in history of CAMP implementation
12.9-10.2	4-25y	Summer - Winter	≈ 27 – 30%	≈ 28.9 – 31.9%
12.9-10.7a	4-25y	Summer - Winter	0	0
12.8.24	4-25y	Summer - Winter	0	0
12.9-10.17	8-20y	Summer - Winter	0	≈1.9
12.8.17	3-6y	Summer - late Autumn	≈ 59%	≈ 59%
12.3.3	3-6y	Summer - late Autumn	0	0

Fireland was contracted in late 2023 to undertake the bushfire management in White Rock. Fire management was completed from 20th to 26th of June 2024 (see Appendix C). Approximately 70% of fire management area 02 and 50-55% of fire management area 15 was burned with low-moderate severity fires. This area equates to 6.8 – 7.2% of the total CAMP area. The management areas treated in 2024 are indicated in Figure 6 and Figure 7.

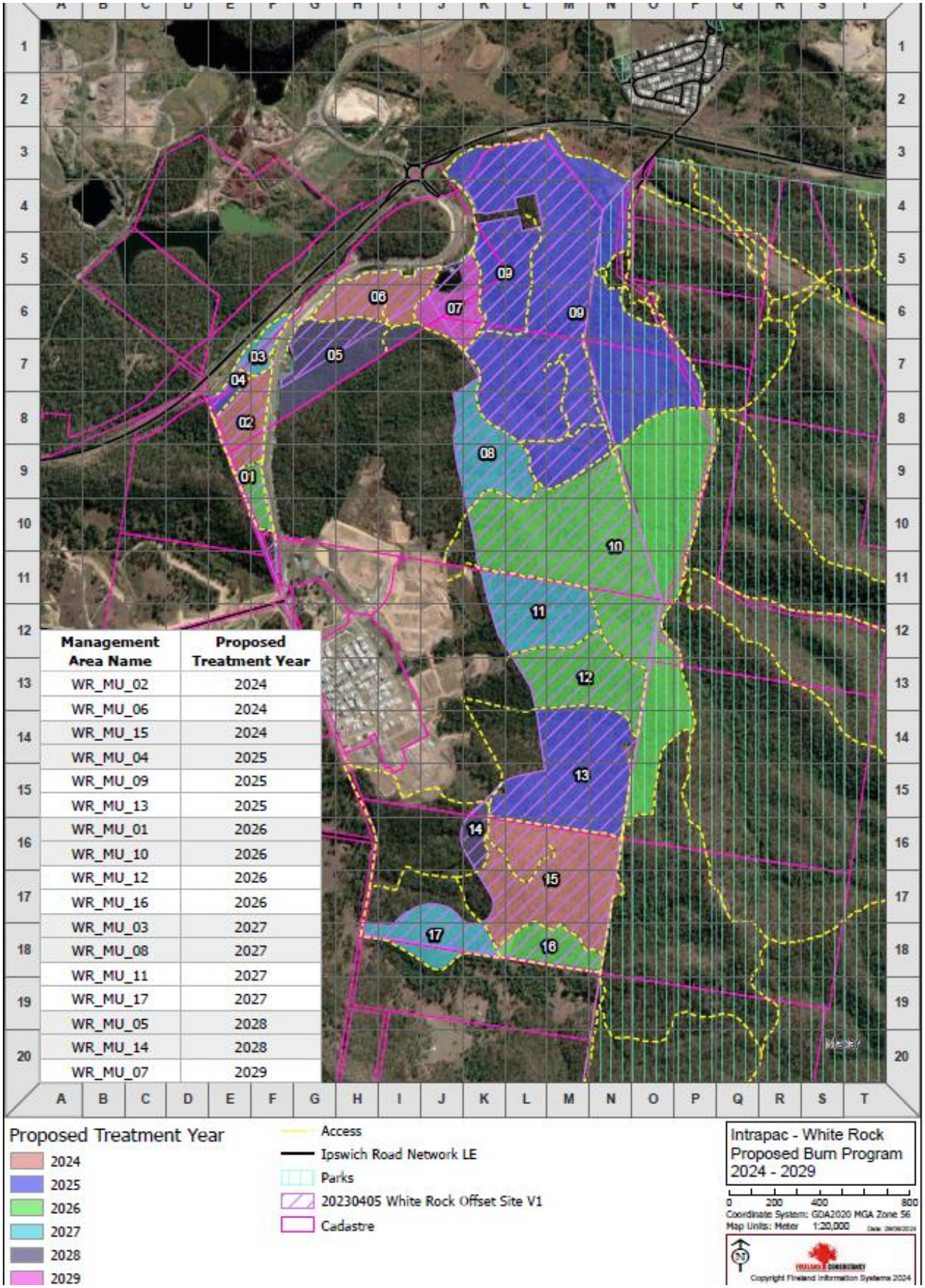

Figure 5: Fire Management Zones (mapping by Fireland Consultancy Pty Ltd)

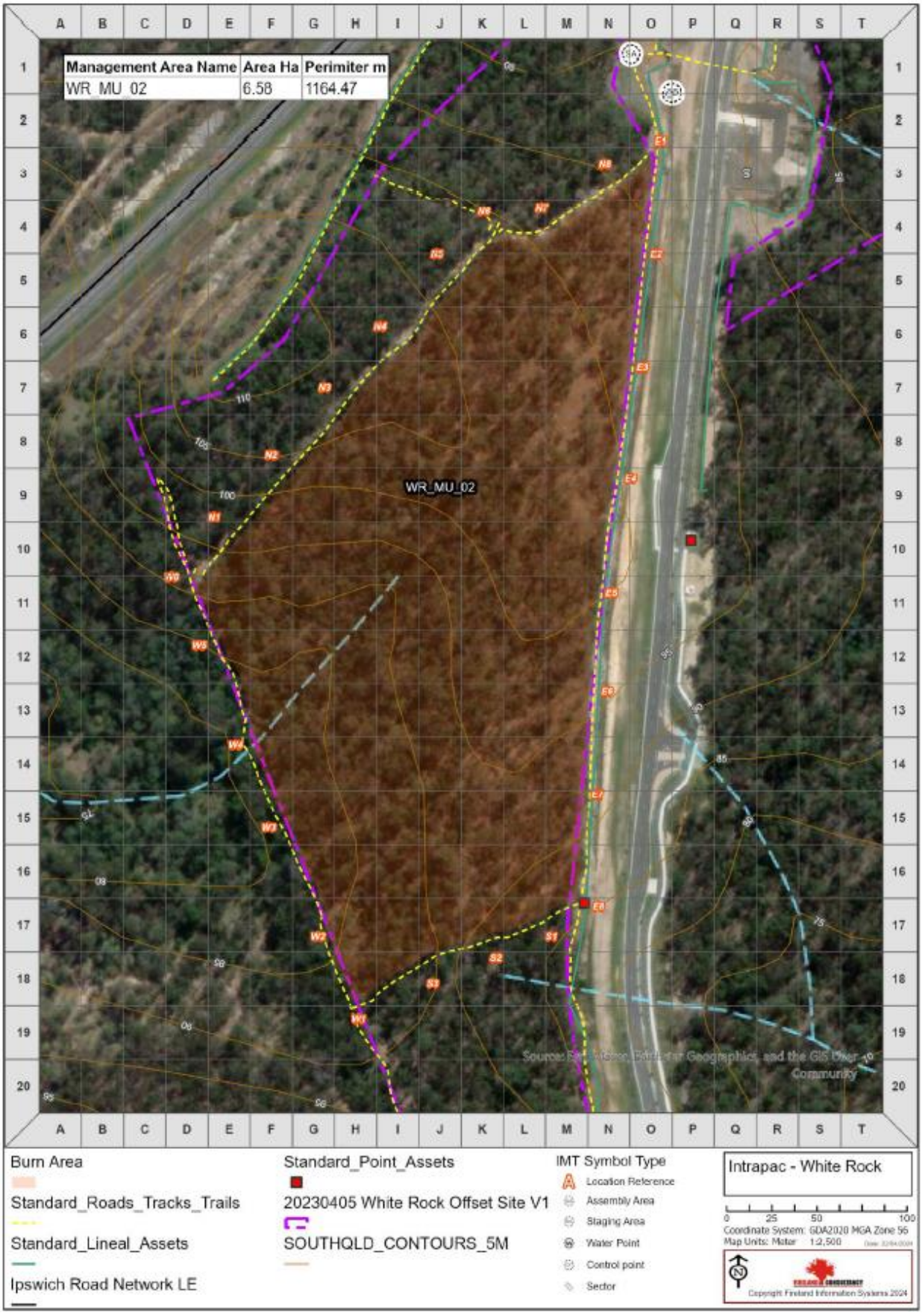

Figure 6: Bushfire management undertaken in Management Zone 02 in May – August 2024 by Fireland Consultancy Pty Ltd (mapping by Fireland Consultancy Pty Ltd)

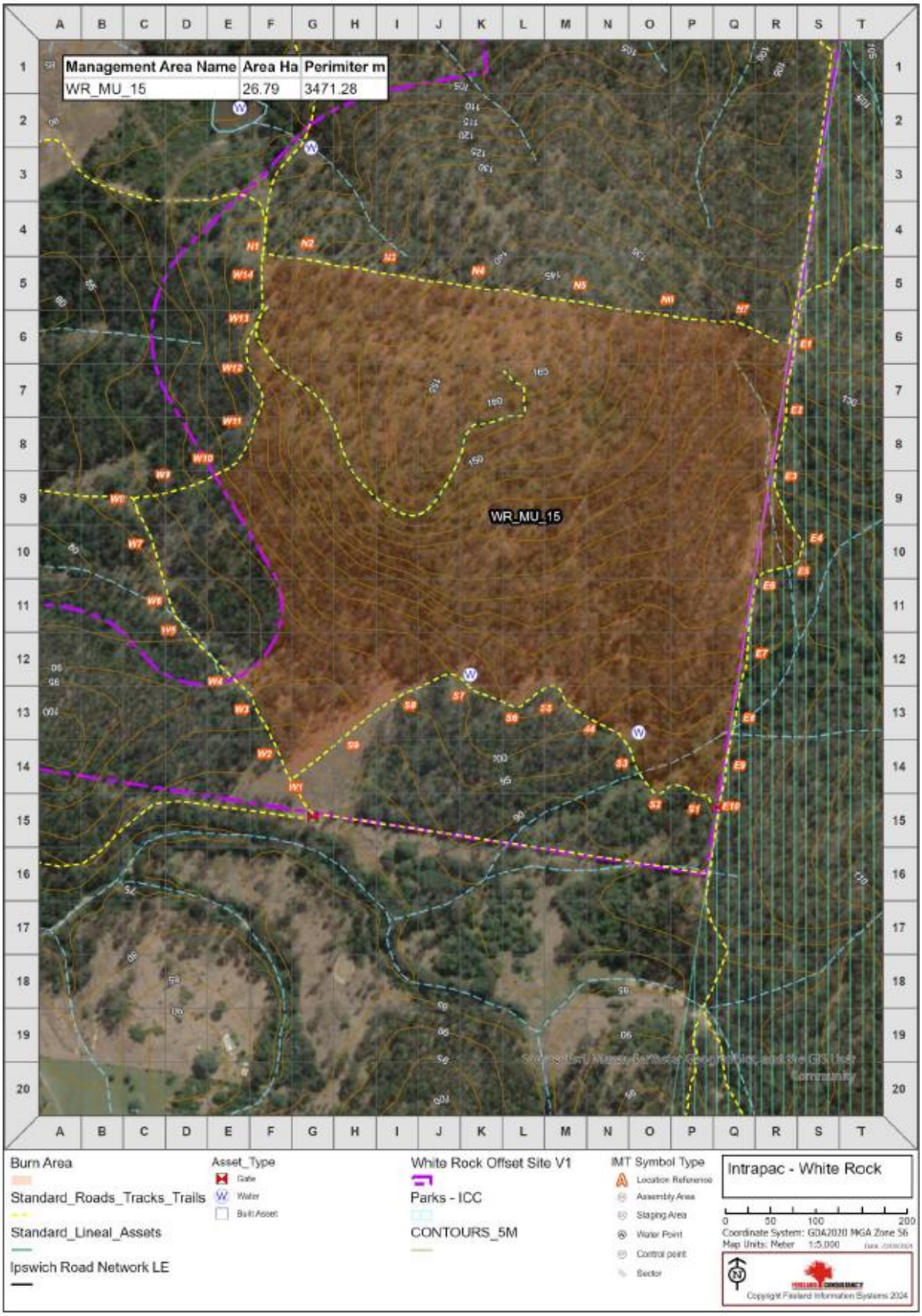

Figure 7: Bushfire management undertaken in Management Zone 15 in May – August 2024 by Fireland Consultancy Pty Ltd (mapping by Fireland Consultancy Pty Ltd)

3.4. Pest Management Report

Table 6 describes the pest management works undertaken in the Conservation Management Area in 2024 (see 2024 Pest Monitoring Report in Appendix B).

Table 6: Methods of pest management works undertaken in the Conservation Area in 2024 by Invasive Plant and Animal Services

Month/Season	Pest Management Conducted
Autumn	• Five days per month of on ground control. • Four remote cameras deployed. • 1080 and trap warning signs deployed. • Soft jaw (foxes and wild dogs) and cage (cats) traps deployed. • Six feral pigs and 1 wild dog shot. • 28 DK9 baits deployed (19 taken). • 24 1080 meat baits deployed (12 taken). • 8 Canid Pest Ejectors deployed (3 activated). • Pre-feeding corn program targeting feral pigs conducted.
August to December	• 14 DK9 1080 baits were deployed. • Three 1080 Warning and Pest Operation signs were replaced. • 16 wild dog traps were deployed. • 6 feral pigs have been culled to date. • 1 wild dog (shot) was culled. • 15 remote cameras deployed (different areas within 6 month period) • 2 foxes killed (shot) • Of the total 42 DK9 baits deployed, 23 were taken. • 24 fresh 1080 meat baits were deployed, 12 of which were taken. • 8 Canid Pest Ejectors (CPEs) were deployed, with 3 activated. • No feral cats have been observed, trapped, or recorded via cameras.

This reporting period saw the fourth year of monitoring events. Surveys occurred in Spring and Autumn as required. Within the Conservation Management Area, 13 individual pests were recorded in 2024 whilst within the White Rock Conservation Estate, 9 individual pests were observed (see Table 7 and Figure 8).

Distribution of pest species in 2024 was relatively consistent across the site (Figure 8), indicating the recorded species utilised the entire landscape, although Feral Pigs did appear to favour low lying wet areas. This differs somewhat from previous monitoring events, in which pest activity recorded was concentrated in the central and southern areas of the Conservation Management Area and White Rock Conservation Estate. A map of all remote camera locations and recorded targeted pest species can be seen in Figure 8.

Other key results for each target pest species include:

- No feral cats were detected in the Spring and Autumn surveys conducted.
- There was a marked increase in wild dogs recorded, particularly in the Conservation Management Area, in comparison to both the 2023 monitoring event and the baseline. Averaged over the two baseline years (2021 and 2022), records show a mean of 1.5 dogs per year across the Conservation Area and White Rock Conservation Estate. This increased to a total of 5 dogs recorded in 2023 (1 in the Conservation Management Area and 4 in the White Rock Conservation Estate), and further to a total of 14 dogs recorded in 2024 (9 in the

Conservation Management Area and 5 in the White Rock Conservation Estate). While reasons for this increase are unclear, it could be attributed to Ipswich City Council (ICC) pest management's shift in focus towards Feral Pigs in the White Rock Conservation Estate, reducing resources targeting Wild Dogs. A number of dead pigs observed by ICC in the White Rock Conservation Estate throughout 2024 could also have provided an increase in food resources to Wild Dogs (P. Smith, Natural Areas Manager at Ipswich City Council, pers. comm., 28/1/2025). Alternatively, changes in vegetation cover as land was cleared due to the development could have displaced Wild Dogs from cleared areas into the sheltered habitat.

- In comparison with the baseline, 2024 fox numbers were lower in the Conservation Management Area in comparison (no foxes were recorded in the Conservation Management Area in 2024), but slightly higher (and consistent with 2023 results) in the White Rock Conservation Estate Area.
- Feral pig counts show a decreasing trend since monitoring commenced.

Detailed analysis is provided in Appendix C. The report demonstrates that the pest fauna management performance criteria documented in the EPBC Act approval have not been met. That is, while there has been a demonstrated reduction in pest numbers for three of the target species, Wild Dog numbers have been shown to have increased in comparison to the baseline, and to be higher in the Conservation Management Area than in the White Rock Conservation Estate.

As the number of Wild Dogs recorded in 2024 represents non-compliance, corrective actions must be taken. Ongoing pest management will apply additional management effort to reduce the Wild Dog abundance.

Table 7: Number of individuals recorded across the two 2024 monitoring events

Survey Area	Number of individuals identified for each target pest species				
	Feral Cat	Wild Dog	Fox	Feral Pig	Total
Conservation Management Area	0	9	0	4	13
White Rock Conservation Estate Area	0	5	4	0	9
Total	0	14	4	0	22

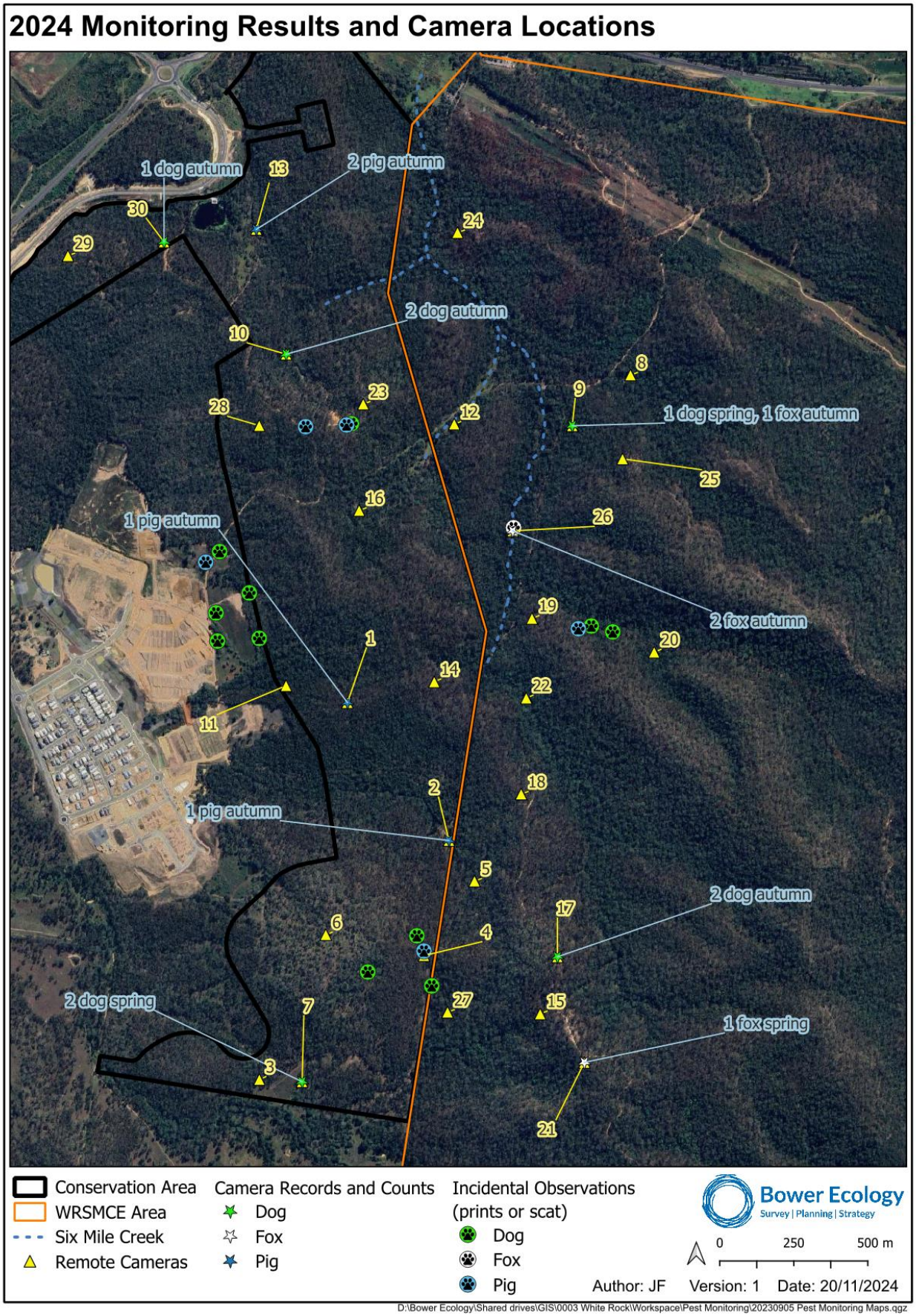

Figure 8: Pest monitoring results across the spring and autumn surveys conducted in 2024

4 Conclusion and Next Steps

Monitoring surveys and reporting for vegetation, weeds, bushfire management and pest animals have all been completed as required under the EPBC Act approval.

Upcoming management works comprise:

- Continuation of weed management works. Specifically, maintenance work in areas 2, 4, 5, 7 and 10, and spraying in areas 2 and 10.
- Increase in 1080 poisoned corn deployment for feral pigs scheduled for July/August 2025 following a strategic pre-feed program.
- Intensification of feral fox foot-hold trapping during breeding season.
- Enhanced monitoring and potential realignment of control tool deployment areas, in collaboration with remote camera data from Invasive Plant and Animal Services and Bower Ecology.
- Howling techniques deployed in Feb March to control Wild Dogs pre-emptive breeding season strategy.
- Scheduling and undertaking of bushfire management (track maintenance, establishment and ecological burns).

The project in compliance with the EPBC Act approval, with the exception of three issues. The exceptions are related to revegetation works, the increase in Wild Dog numbers detailed in Table 2, and the overdue legal securing of Zone 1 and 2 via VDec.

To address the non-compliance relating to revegetation works, corrective action will be conducted by Evolve and include planting the required areas and species in March/April 2025. This timing is considered suitable as the anticipated temperatures and rainfall will provide suitable growing conditions and will be more conducive to achieving establishment success.

To address the non-compliance relating to pest monitoring results, future pest management efforts will increase with a focus on reducing Wild Dog abundance.

The process towards legal securing of Zone 1 and 2 will continue to be undertaken, as detailed in Table 1. The timing of the legal securing of the land will not prevent the continued management of the conservation area in a manner consistent with the CAMP.

Legal securing of Zone 1 is imminent, pending feedback from ICC and Queensland Urban Utilities on registered interests over the land (a process required when undertaking a VDec).

Zone 2 is overdue as the location of the proposed water infrastructure in this zone is currently being amended due to Queensland Urban Utilities design requirements. As the updated water infrastructure design may impact the offset area established for this action, a VDec cannot be prepared until the design is finalised. It is likely that the proponents will soon seek amendments to the offset area, with adequate compensation, to allow the water infrastructure to be built. Once this is complete, the required VDec can be established for Zone 2, and this zone can be legally secured.

5 References

Bower Ecology 2024a. *White Rock Vegetation Monitoring Report (2024)*. Prepared for Intrapac Property Pty Ltd.

Bower Ecology 2024b. *White Rock Pest Monitoring Report – Report No. 3 (2024).* Prepared for Intrapac Property Pty Ltd.

Evolve 2024a. *CAMP Rehabilitation Projects, White Rock – Quarter 2 2024*. Prepared for Bower Ecology and Intrapac Property Pty Ltd.

Evolve 2024b. *CAMP Pest Fauna Monitoring Report – August to December 2024*. Prepared for Bower Ecology and Intrapac Property Pty Ltd.

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Evolve 2024d. *CAMP Rehabilitation Projects, White Rock – Quarter 3 2024.* Prepared for Bower Ecology and Intrapac Property Pty Ltd.

Fireland Consultancy 2024a. *Operational Post Burn Report – Burn Name WR_MU_02*.

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Appendix A: Vegetation Monitoring Report 2024

Bower Ecology
Survey | Planning | Strategy

White Rock Conservation Area Management Plan

Vegetation Monitoring Report 2024

Prepared for Intrapac White Rock Pty Ltd

14 February 2025

Document Tracking

Project Name	White Rock Vegetation Monitoring
Project Number	0003
Version	V1
Status	FINAL
Last saved on	14/02/2025

Citation: 'Bower Ecology Pty Ltd 2025. *White Rock Vegetation Monitoring Report 2024*. Version 1, Prepared for Intrapac White Rock Pty Ltd.'

Contents

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Executive Summary

This report represents the fifth year of Conservation Area Management Plan (CAMP) management for EPBC2014/7388. All methods employed were consistent with past monitoring and the approved Conservation Area Management Plan.

The overall condition of the six assessment sites was measured via the BioCondition methodology (Eyre et al., 2015). During previous monitoring events, the exact location of the start and finish positions of some assessment sites were unable to be located because permanent markers had not yet been installed (due to potential unexploded ordnances [UXO] preventing star picket installation). Consequently, it was difficult to ascertain whether changes in BioCondition scores were due to differences in vegetation cover or minor transect variances stemming from the inherent inaccuracies of relying on GPS coordinates in a forested area. To address this issue, prior to the 2024 field surveys, permanent survey pegs were installed at each BioCondition site with the aid of a qualified UXO surveyor. This measure aims to ensure precise site marking, fostering consistency in future surveys and enhancing result interpretation. It is our intention that these benchmarks will serve as an updated, more accurate, secondary baseline for comparing future monitoring outcomes. Trends in BioCondition scores, as a result of management works, are expected to become apparent at the next monitoring event.

The same permanent survey pegs were also installed at all Lantana transects, which have already undergone two rounds of monitoring since the new pegs were installed. The results of these surveys corroborated previous findings suggesting weed management practices are resulting in continued reduction in the overall cover of Lantana species.

The programme of rehabilitation works met the first five years of the CAMP strategy for bushland management relevant to this report – primary weed treatment has occurred in target areas and has been successful. Completion of primary weed treatment is required across the site, as is continued maintenance work to successfully reduce the abundance of Lantana species.

1 Introduction

1.1. Project Background

In December 2019, approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was received by Intrapac Property QLD Pty Ltd (Intrapac) for the development of a mixed-use sub-division and associated infrastructure (the development) at White Rock in the Ripley Valley (EPBC 2014/7388). The development encompasses 473 ha (project area), including a 249 ha Conservation Area (Figure 2).

There are multiple environmental outcomes intended for the development's Conservation Area. These outcomes include in-situ biodiversity offsets aimed to reduce the impacts of the project. Specifically, the Conservation Area comprises dedicated offset areas to protect Koala and Grey-headed Flying Fox habitat values, as defined within the EPBC Act.

An approved Conservation Area Management Plan (CAMP) prescribes the monitoring and management of the Conservation Area. This document intends to ensure the offset area in the Conservation Area achieves the habitat targets for Koala and Grey-headed Flying Fox.

Disruptions caused by the Coronavirus pandemic resulted in scheduling delays in 2020. This included delays to all works related to the Conservation Area Management Plan. In February 2021 a variation to the initial approval was approved. This approved variation allowed postponement of CAMP actions, with an adjusted schedule also provided within the varied approval.

Annual monitoring reports are required under the conditions of the approval and under the CAMP, and these will inform the Annual EPBC Act Compliance Report. An adaptive management approach has been employed in the CAMP to ensure management practices in will be guided by monitoring results. Annual management, monitoring and reporting requirements are detailed in the CAMP for the following:

- Vegetation rehabilitation and management
- Koala population monitoring
- Bushfire management
- Pest monitoring and management

Implementation of the CAMP began in 2019. CAMP implementation will continue for the duration of the on-maintenance period of the project (the first 11 years), after which handover to the Ipswich City Council and integration into the adjacent White Rock – Spring Mountain Conservation Estate (WRSMCE) is planned. Baseline vegetation monitoring occurred in 2021 and this report addresses the results of the third round of annual vegetation monitoring for the on-maintenance period of the project. Vegetation monitoring informs the following areas of the CAMP performance criteria (Table 9):

- Revegetation management requirements
- Weed control
- Bushfire management
- Native tree management

The general intention for the Conservation Area is to allow an improvement in habitat value for species listed as MNES – the Koala and the Grey-headed Flying Fox; as well as to meet the performance and completion criteria listed in the EPBC Act approval. Three distinct management zones (MZs) are defined within the Conservation Area under the CAMP. The categorisation of these

zones details the type and degree of effort necessary to reach specific rehabilitation objectives. The zones are as follows (Figure 2):

- **MZ1: Riparian Restoration** - the portion of the Conservation Area adjacent to drainage lines and the property boundary, with a total area of approximately 30 ha. This zone includes areas of exotic pasture with no canopy present, and is characterised by higher amounts of water, nutrients, and disturbance, and as such, exotic species are present in higher densities than in the other zones.
- **MZ2: Assisted Regeneration** - the portion of the Conservation Area that has currently low resilience or is likely to have low resilience in the future, with a total area of approximately 91 ha. This zone includes areas of dense lantana towards the south of the site and a 20 m buffer on all development edges which will be subject to greater impacts in the future.
- **MZ3: Regeneration** - the remainder of the Conservation Area with a total area of approximately 128 ha. This zone is in good condition with low weed density throughout.

1.2. Objectives and scope of work

The objective of this report is to provide the results of the third round of vegetation monitoring, to report on any changes in comparison to baseline surveys conducted in 2021 and monitoring undertaken in 2022 and 2023. This addresses the CAMP performance criteria which requires annual monitoring and reporting (Table 9 in Appendix E).

1.2.1. Monitoring requirements

This vegetation monitoring requires BioCondition assessments (Eyre *et al.,* 2015), a rapid assessment *Lantana camara* survey, and an assessment of the results of both these surveys against the objectives of the CAMP and the conditions of the EPBC Act approval.

The third round of monitoring surveyed established sites within the three management zones (MZ1, MZ2, MZ3) to assess any changes in the three years since baseline monitoring was conducted. Parts of the Conservation Area were heavily impacted by lantana species when the CAMP was developed; *Lantana camara* (bush lantana) and *L. montevidensis* (creeping lantana) were the dominant weed species across the site. To monitor improvement following weed removal works, a rapid lantana assessment is required to be undertaken as part of each monitoring event.

1.2.2. Management years

This report represents monitoring undertaken in year 5 of CAMP works program, as scheduled in the EPBC Act approval (EPBC 2014/7388). For reference, the management years are measured against the approval of the action on 3/12/2019). That is:

Year 1 means the period until 12 months from the date of the approval of the action
Year 2 means the period until 24 months from the date of the approval of the action
Year 3 means the period until 36 months from the date of the approval of the action
Year 4 means the period until 48 months from the date of the approval of the action
Year 5 means the period until 60 months from the date of the approval of the action
Year 6 means the period until 72 months from the date of the approval of the action
Year 7 means the period until 84 months from the date of the approval of the action
Year 8 means the period until 96 months from the date of the approval of the action
Year 9 means the period until 108 months from the date of the approval of the action
Year 10 means the period until 120 months from the date of the approval of the action
Year 11 means the period until 136 months from the date of the approval of the action
Year 12 means the period until 148 months from the date of the approval of the action
Year 16 means the period until 192 months from the date of the approval of the action
Year 21 means the period until 252 months from the date of the approval of the action

The next monitoring event (year 6) will occur in 2025. Ongoing monitoring by Intrapac will then occur on an annual basis for the first 11 years (on-maintenance period) of the CAMP program.

1.3. Study site description

The development is located in the Ripley Valley, 8 km east of the Ripley urban core, 8 km west of the Springfield Town Centre, 15 km from the Ipswich CBD, and 35 km from the Brisbane CBD (Figure 1).

Positioned just south of the Centenary Highway, the northern boundary of the development is delimited by the highway. To the west of the development is an area cleared in lowland sections for agricultural purposes that is expected to transition into urban development in the future as part of the Ripley Valley Priority Development Area (PDA). Within the Conservation Area is a matrix of mature / maturing vegetation (Figure 3). This vegetation extends to the east of the development boundary into the WRSMCE, forming part of an extensive area of vegetation associated with the Flinders Karawatha Corridor (DEHP 2014).

1.3.1. Vegetation Communities

Within the Conservation Area, eight broad vegetation communities were identified during initial ecological surveys (ELA 2017). These communities, and their areas, are listed in Table 1 and shown in Figure 3.

Table 1: Vegetation communities within the Conservation Area (ELA 2017)

Community	Area (ha)
Acacia +/- scattered Eucalypts (i.e. *Eucalyptus tereticornus, Eucalyptus crebra)*	3.8
Dam	1.1
Exotic Grassland +/- sparse Acacia and Eucalypts (i.e *E. tereticornus, E. crebra)*	5.5
E. tereticornis (Forest Red Gum) on alluvium	0.8
E. tereticornis, *Lophostemon suaveolens* (Swamp Box) and *E. crebra* (Narrow-leaved Ironbark).	8.1
E. crebra, *E. tereticornis*, *E. melanophloia* (Silver Leaved Ironbark)	15.6
Corymbia citriodora (Spotted gum)	9.8
C. citriodora, *E. crebra, E. melanophloia*, and other Eucalypts	183.1
E. acmenoides (White Mahogany), *E. major* (Grey Gum), *C. citriodora*	21.6
Total	**249.4**

The central part of the Conservation Area is dominated by *Corymbia citriodora* (spotted gum) forest and woodland on sandstone slopes.

The northern section of the Conservation Area is dominated by *Eucalyptus acmenoides* (White Mahogany), *Eucalyptus major* (Grey Gum) and Spotted Gum Forest. The lower elevations of the Conservation Area, particularly in the south, are dominated by *Eucalyptus tereticornis* (Forest Red Gum), *Lophostemon suaveolens* (Swamp Box) and *Eucalyptus crebra* (Narrow-leaved Ironbark).

A basalt hill in the south of the Conservation Area contains Narrow-leaved Ironbark, Forest Red Gum and *Eucalyptus melanophloia* (Silver Leaved Ironbark).

White Rock–Spring Mountain Conservation Estate to the east of the Conservation Area consists of over 2500 ha of mostly intact and generally remnant vegetation.

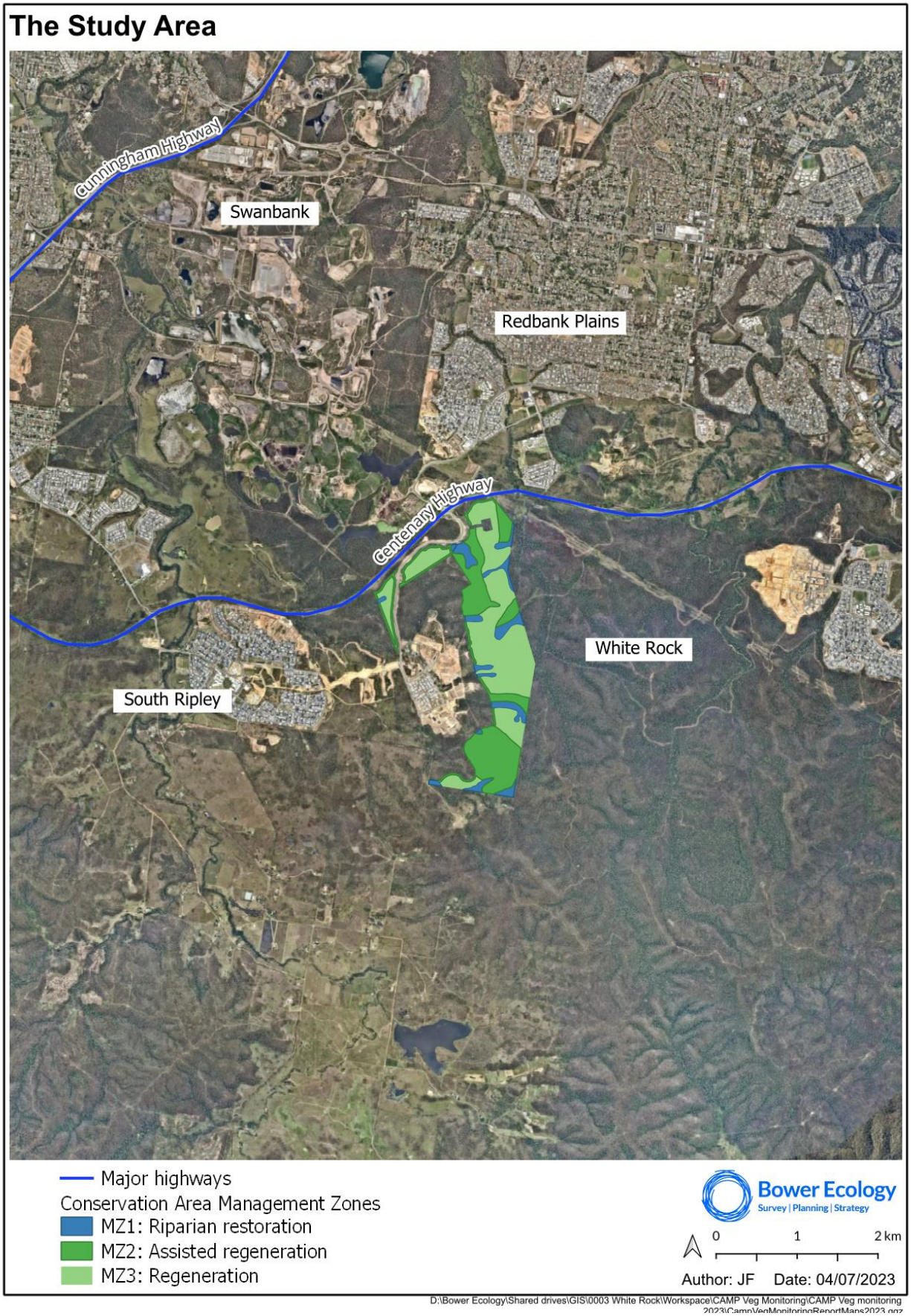

Figure 1: Local context

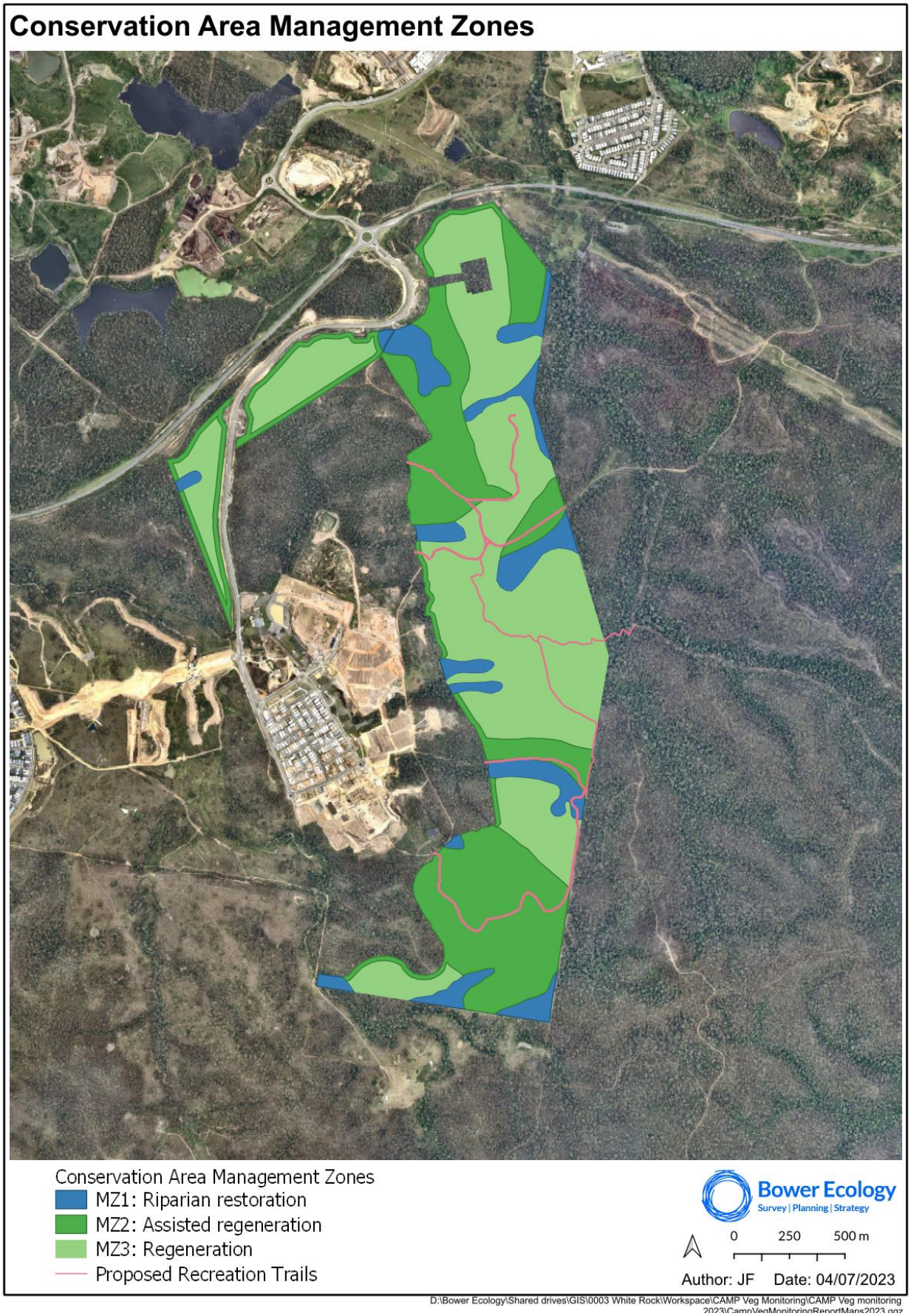

Figure 2: White Rock conservation area management zones

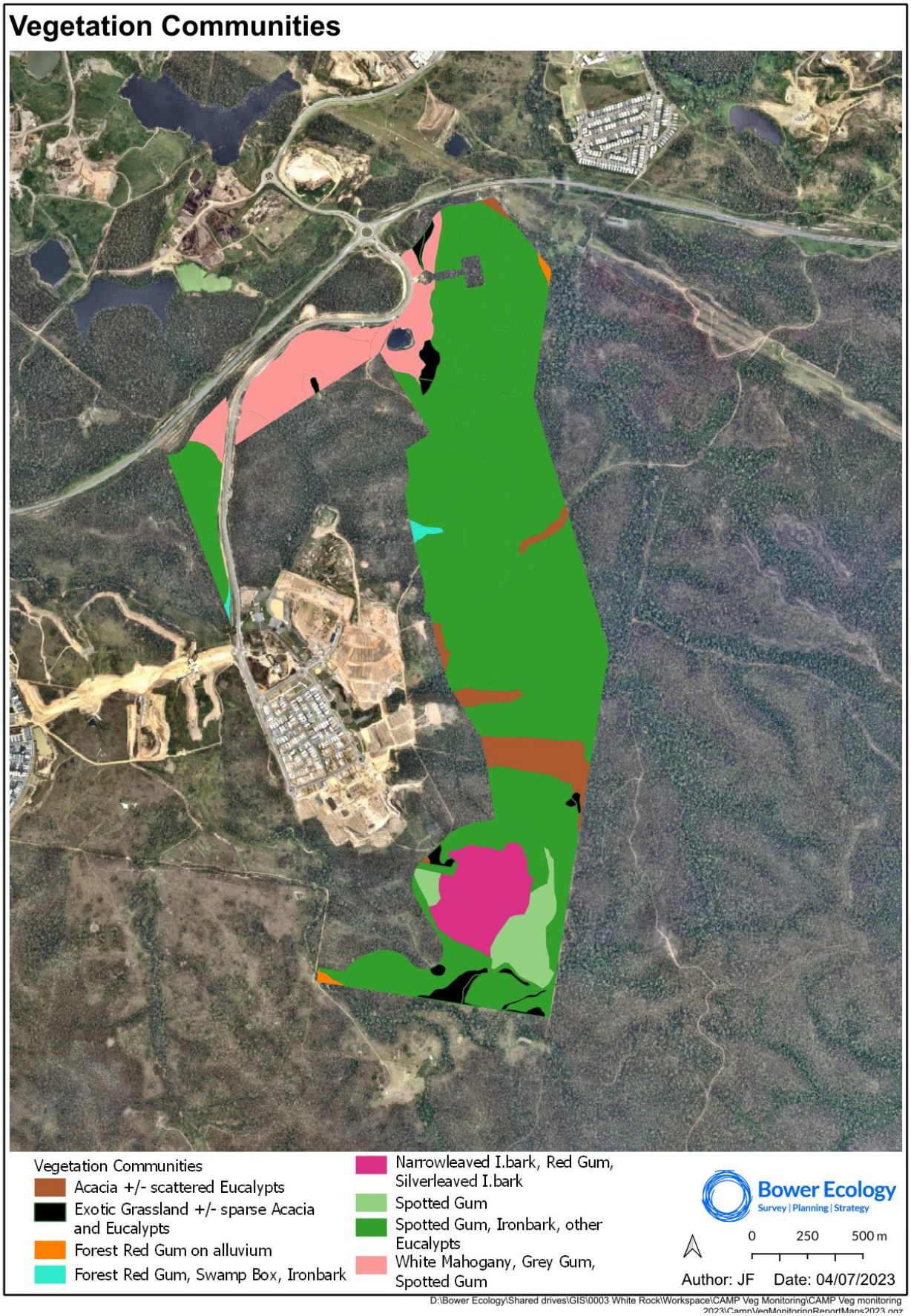

Figure 3: Vegetation communities within the CAMP area

2 Methodology

2.1. Ecological Monitoring Methodology

Field surveys were conducted as per the requirements of the CAMP (ELA 2020), as detailed in the 2021 baseline report (ELA 2021). Two suitably qualified ecologists completed the monitoring from 22/04/2024 to 24/04/2024. Field surveys undertaken were BioCondition assessments, rapid lantana assessments, and the monitoring of 12 established photo monitoring points (Figure 4). Methods are detailed below.

2.1.1. BioCondition Assessments

Six established BioCondition sites (Figure 5) were assessed in accordance with the BioCondition Manual (Eyre *et al.,* 2015). At each site, assessment of the following site-based attributes was undertaken within a 100 m x 50 m (0.5 ha) nested sampling plot:

- Recruitment of woody perennial shrubs
- Native species richness (tree, shrub, forb and grass)
- Tree canopy height
- Tree canopy cover
- Shrub canopy cover
- Native perennial grass cover
- Organic litter cover
- Number of large trees
- Coarse woody debris abundance
- Non-native plant cover

At each BioCondition site, photographs were taken from the start and end points of the 100 m transect facing towards the centre.

Previous monitoring events found the established BioCondition sites difficult to locate. Therefore, prior to this monitoring event, each BioCondition site was marked with a permanent peg to make it easier to locate. In some instances, these may be in a slightly different location to the sites previously surveyed which may influence variations in data. It is expected that the results of subsequent monitoring events will more accurately reflect changes in vegetation condition now the BioCondition sites are clearly marked with permanent pegs. All future BioCondition surveys will be undertaken at the pegged sites; 2024 BioCondition results will form a new de facto baseline with which all future monitoring results will be compared (alongside the original survey results).

2.1.2. Photo Monitoring

Photo monitoring points were established during baseline surveys to be utilised as permanent reference points. These photo monitoring points provide a visual indication of changes to vegetation within the Project Area. Each point was originally demarcated with a unique tree tag or pin to be used as a centre point from which to take photographs. Tree tags and pins were used instead of more permanent ground pegs as the potential risk of unexploded ordinances in the area rendered the installation of ground pegs too dangerous. However, due to the temporary nature of tree tags and pins, not all the original photo monitoring points could be found during 2022 monitoring, and some photos were therefore taken in slightly different locations. Prior to the 2024 monitoring event, permanent ground pegs (star pickets) were installed at photo monitoring locations with the assistance of OPEC Systems staff utilising a ground penetrating radar to identify potential UXOs and therefore safe locations to install clearly labelled ground pegs. 2024 photos were taken (and all future monitoring photos will be taken) from these pegged locations. This strategy will provide more

consistent data and allow more meaningful comparisons between monitoring events, in effect these photos can function as the new baseline with which all future monitoring photos will be compared.

Photographs were taken at 12 photo monitoring sites (four sites per MZ) (Figure 6). From the marked centre point, four photographs were taken – each at right angles from one another, with one photograph taken in each of the cardinal directions: north, south, east and west. A 20 m tape and a compass were used to determine a straight line between opposite compass points, and a GPS location was recorded for each photograph.

2.1.3. Rapid Assessment of Lantana Infestations

A Rapid Lantana Assessment (RLA) was conducted at 20 established sites (Figure 7). At each site, a 20 m by 10 m survey plot was delineated. Percentage cover (projective foliage cover) of *Lantana camara* and *Lantana montevidensis* was estimated within each survey plot. For increased accuracy and repeatability, cover was estimated at 2 m intervals along the 20 m length of each survey plot; summed estimates produced a cover estimate for the entire plot. A photograph was taken from the start of each survey plot looking toward the centre, to provide a visual indication of changes to lantana cover over time.

2.2. Data Analysis

Site and landscape attribute data were analysed as per the BioCondition Assessment Manual Version 2.2 (Eyre *et. al* 2015).

2.2.1. Site-based Attributes

Data for each site-based attribute data was scored relative to the Queensland Herbarium Benchmarks. The BioCondition score for each site was calculated by dividing the sum of the site-based attribute scores by the maximum possible score for that site's specific ecosystem type.

2.2.2. Landscape-Scale Attributes

The influence of the surrounding landscape on the vegetation quality within the Project Area was quantified via assessment of the following attributes:

- Patch size
- Context
- Connectivity

As per the BioCondition Assessment Manual (Eyre *et al.,* 2015), a score was determined for each attribute, and an overall landscape-attribute numerical score out of 20 was generated for each BioCondition assessment site.

2.3. Survey Limitations

The same limitations continue to apply regarding the detection success for flora.

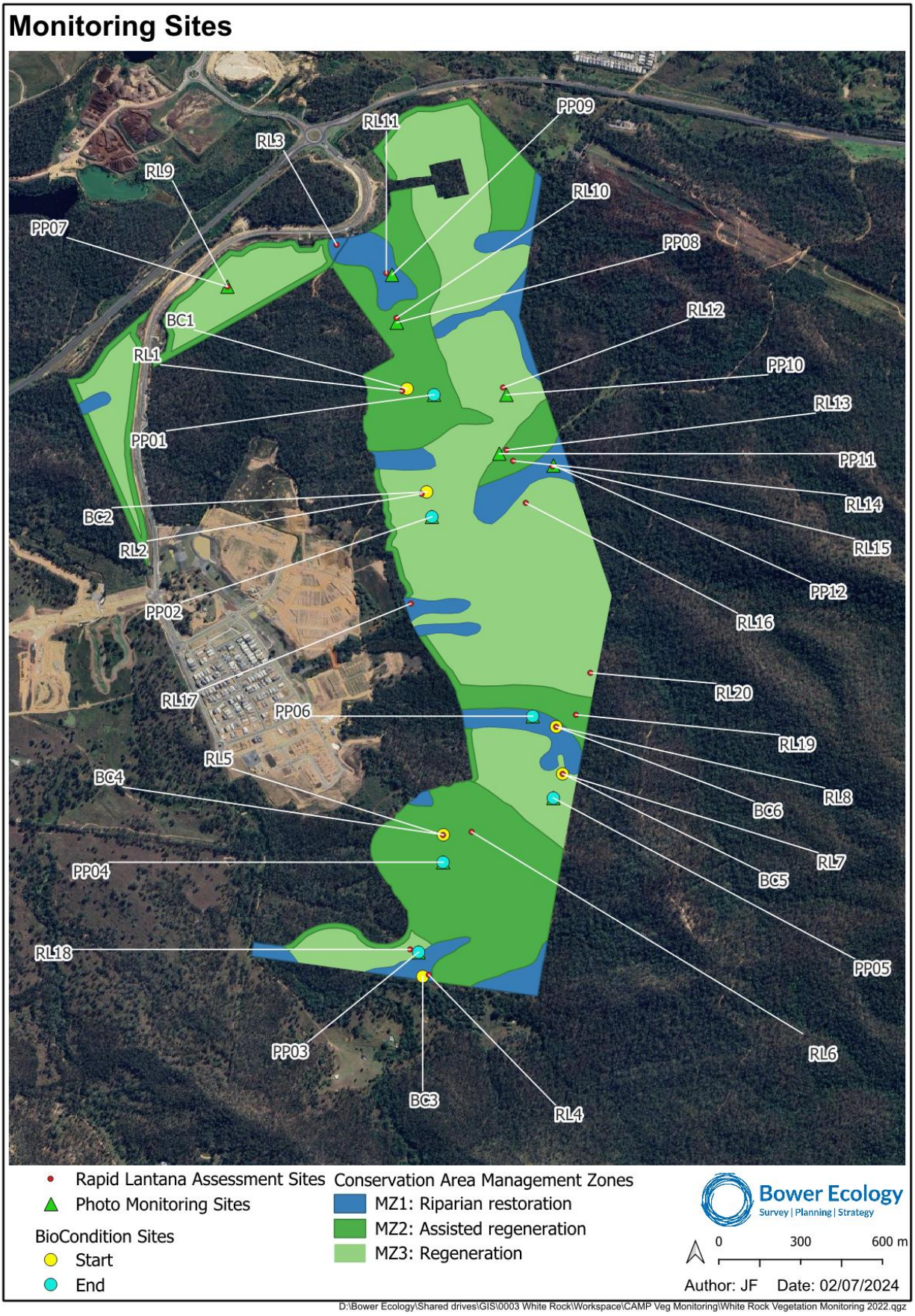

Figure 4: White Rock vegetation monitoring sites

3 Results

3.1. Survey timing and conditions

This year represents the fourth vegetation monitoring event on this site. All BioCondition, weed and photopoints were completed between 22 and 24 of April 2024.

Weather conditions for the six months preceding the 2024 monitoring event are presented in Table 3. Climate data was obtained from recordings taken at the Greenbank (Defence) weather station, approximately 14 km east of the development site (BOM 2023). Total rainfall over the three months leading up to the 2024 surveys (February – April) was higher than that over the same months in the previous year (2023); similar to the rainfall leading up to baseline surveys (2019); and lower than rainfall received in the same months in 2020, 2021 and 2022. This is likely to have affected vegetation growth, and therefore survey results.

Table 2: February to April rainfall (mm) for 2019 to 2024 (BOM 2024).

Date	2019	2020	2021	2022	2023	2024
February	40.4	320	150	792.2	51.2	89.2
March	131.6	82.2	248.8	171	79.6	102
April	75.6	3	88.8	45	49.6	97.6
Total Rainfall (mm)	**247.6**	**405.2**	**487.6**	**1008.2**	**180.4**	**288.8**

Table 3: Weather conditions for the six months preceding the April 2024 monitoring event (BOM 2024).

Date	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024
Mean Minimum Temperature (°C)	16.3	19.1	21.1	20.4	18.5	15.4
Mean Maximum Temperature (°C)	28.6	33	31.1	31.6	28.6	27.6
Total Rainfall (mm)	165.6	125	346.6	89.2	102	97.6

3.2. BioCondition assessments

As per the requirements of the CAMP, six permanent BioCondition assessment sites were established in representative sites of vegetation communities and MZs (Figure 5). Two sites were established in each of the MZs (MZ1, MZ2, and MZ3) and occurred in two regional ecosystems in remnant condition and one non-remnant area. Assessment sites are detailed in Table 4 and Table 6.

During previous monitoring events, the exact location of the start and finish positions of some sites were unable to be located because permanent markers had not yet been installed (due to unexploded ordnances preventing star picket installation). As part of the 2024 field surveys, permanent pegs were installed to clearly mark the location of each BioCondition site. This will enable greater consistency in future surveys; future results will therefore be most directly comparable with those of 2024 monitoring, however they will still be assessed against baseline values. In all cases, the BioCondition site pegs were installed within 30 m of the original plot location. See Figure 5 for current plot locations.

The average BioCondition class for MZ1 was 3; the average class for both MZ2 and MZ3 was 2.5. The majority of sites (1, 4 and 5) scored a class of 3, representing vegetation approaching dysfunctional biodiversity condition. Sites 2 and 6 received a higher score of class 2, representing vegetation approaching functional biodiversity condition. Site 3 is in non-remnant condition, and consequently scored the lowest BioCondition class of 4.

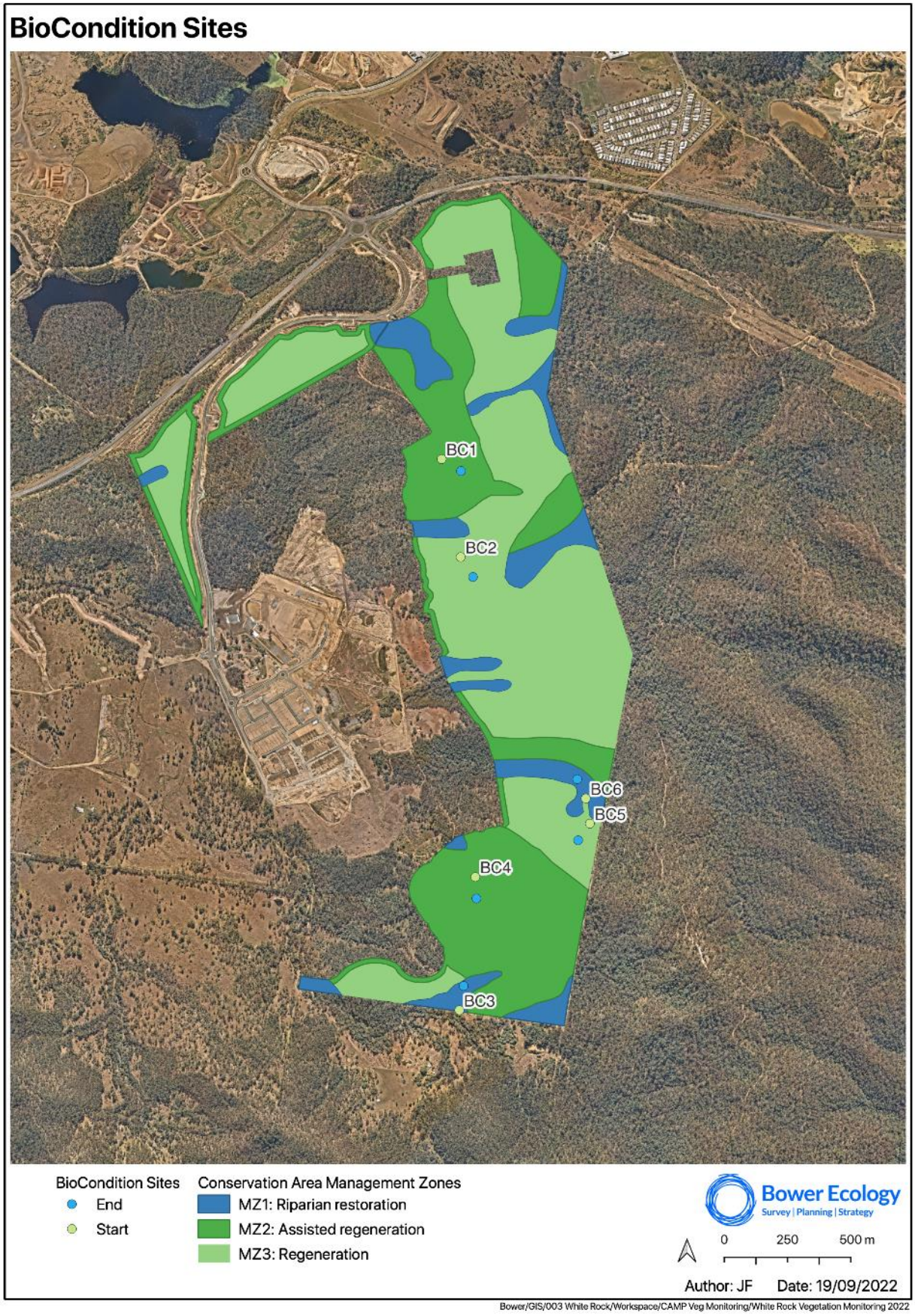

Figure 5: White Rock BioCondition assessment site

Table 4: Summary of BioCondition results for 2021 to 2024

Site ID	MZ	RE	Condition	Benchmark used	Overall BioCondition score 2021	Overall BioCondition score 2022	Overall BioCondition score 2023	Overall BioCondition score 2024	BioCondition class 2021	BioCondition class 2022	BioCondition class 2023	BioCondition class 2024
1	2	12.9-10.2	Remnant	12.9-10.2	0.61	0.61	0.63	0.59	2	2	2	3
2	3	12.9-10.2	Remnant	12.9-10.2	0.76	0.76	0.78	0.79	2	2	2	2
3	1	12.9-10.7 (pre-clear)	Non-remnant	12.9-10.7	0.33	0.33	0.40	0.26	4	4	3	4
4	2	12.8.17	Remnant	12.8.17	0.59	0.65	0.60	0.48	3	2	2	3
5	3	12.9-10.2	Remnant	12.9-10.2	0.67	0.67	0.69	0.54	2	2	2	3
6	1	12.9-10.2	Remnant	12.9-10.2	0.61	0.54	0.51	0.62	2	3	3	2

3.3. Photo Monitoring

A total of 12 photo monitoring sites were established across the three different MZ, four in each zone in the Conservation Area (Figure 6), six of which are co-located with the six BioCondition survey sites (Figure 5). Photo monitoring sites are designed to deliver comparative results over the course of the CAMP program. Due to the slight variations in location between the 2021 and 2022 monitoring point photographs, only general conclusions can be drawn when comparing results from these year. Photos taken during 2023 and 2024 monitoring will provide more meaningful insights when future monitoring photos are compared. Digital photos taken at each site during both 2023 and 2024 monitoring are available in Appendix C. Prior site photos are also included for reference where available. Most sites show improvement in conditions in comparison the previous monitoring event. Some, however, show increased growth of Lantana (sites 4, 5, 6, 8, 11 and 12).

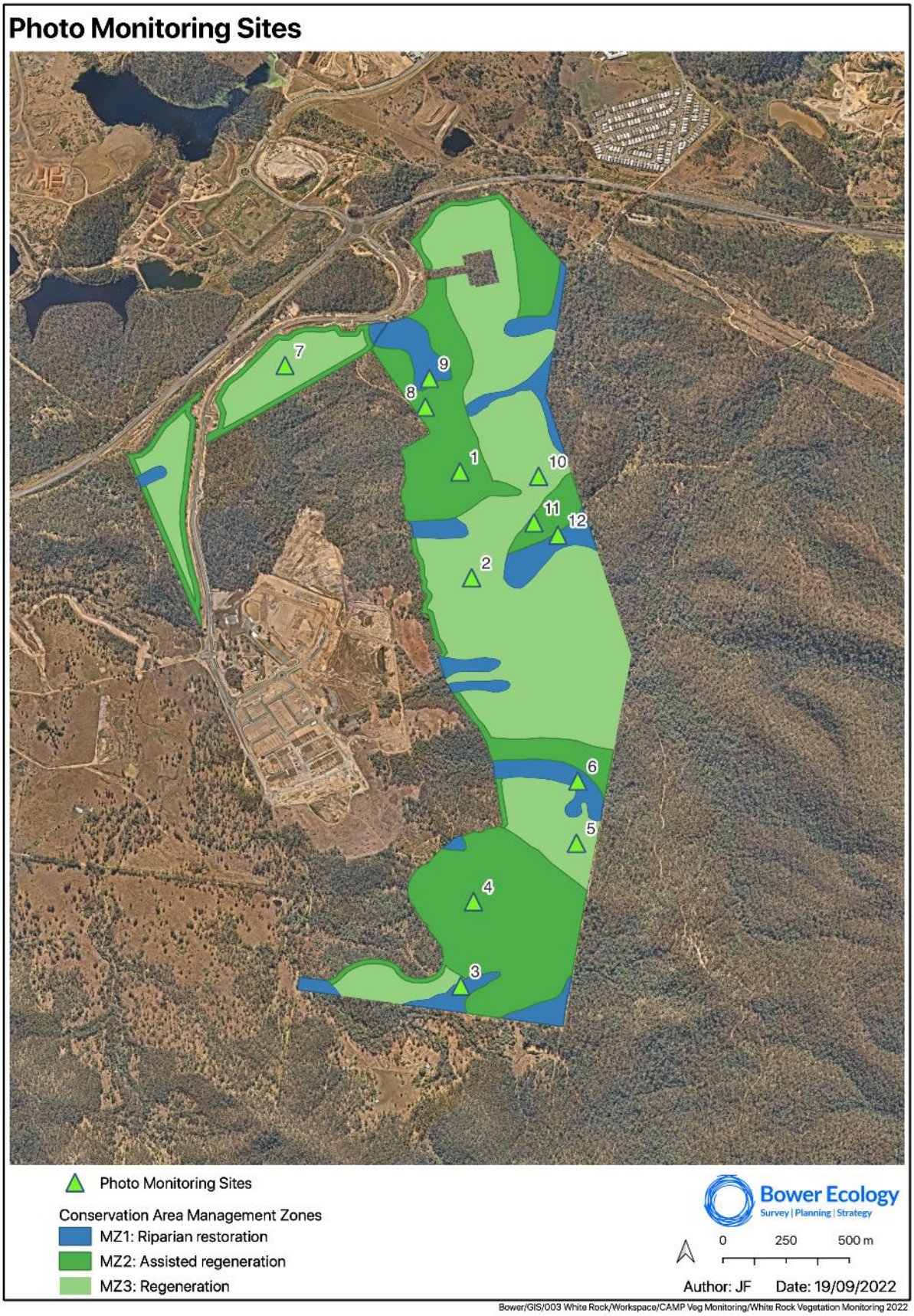

Figure 6: White Rock photo monitoring sites

3.4. Rapid Assessments of Lantana Infestations

A total of 20 rapid lantana assessment sites were monitored across the Project Area: six sites in MZ1, seven sites in MZ2, and seven sites in MZ3 (Figure 7). *Lantana camara* (Lantana Shrub) was recorded at 18 out of 20 sites; this is slightly less than the number of sites at which this species was recorded in both the previous monitoring event and baseline surveys. *Lantana montevidensis* (Creeping Lantana) was recorded at 12 sites; this is one site less than the number of sites at which this species was recorded in the previous monitoring event, but more than in all other previous monitoring events. The percentage cover of both lantana species, averaged across all sites, was more than that recorded in the previous monitoring event, but significantly lower than the baseline (Table 5). Photographs in Table 8 illustrate the declining lantana cover indicated by the survey results.

Both lantana species demonstrate a decrease in percentage cover (percent foliage cover) in comparison to the baseline. For *Lantana camara*, spatial distribution is slightly reduced in comparison to the baseline; percentage cover averaged across all sites is greater than recorded in the previous two monitoring events, but 69% less than the 2021 baseline. At 15 sites, *L. camara* cover has reduced in comparison to baseline results. Spatial distribution of *Lantana montevidensis* is slightly reduced in comparison to the previous monitoring event, however, it shows a general increasing trend over time. Percentage cover of *L. montevidensis* shows an increasing trend over time since 2022 monitoring, however, is still less than half than recorded in baseline monitoring. Most sites at which *L. montevidensis* was recorded show low coverage, however, 4 sites (RL7, RL10, RL12 and RL15) were found to have significantly higher coverage in comparison to the baseline.

Management contractor Evolve Environmental Solutions undertook manual and chemical (Glyphosate) weed management across parts of the Project Area in 2023. Figure 10, Figure 9 and Figure 10 illustrate approximate areas in which weed management was undertaken in April to December 2023.

Table 5: Lantana Rapid Assessment results

Site ID	MZ	% cover *L. camara* 2021	% cover *L. camara* 2022	% cover *L. camara* 2023	% cover *L. camara 2024*	% cover *L. montevidensis* 2021	% cover *L. montevidensis* 2022	% cover *L. montevidensis* 2023	% cover *L. montevidensis 2024*
RL1	2	35	26	1	**3.25**	0	0	0	**0.4**
RL2	3	10	0	1	**0**	10	0	0	**0.25**
RL3	1	80	5	3	**0.75**	0	0	0	**0**
RL4	1	10	0	10	**22**	0	0	0.1	**0**
RL5	2	35	0	6.5	**12**	50	0	0.25	**0**
RL6	2	30	5	4	**4**	30	0	1	**0.7**
RL7	3	5	24	4.5	**6.5**	0	0	8	**16.25**
RL8	1	80	0	4	**9.8**	0	0	0	**0**
RL9	3	35	0	1	**2.7**	0	0	0.1	**1**
RL10	2	50	6	1.5	**6**	0	0	1	**7**
RL11	1	30	15	2	**7.25**	5	0	0	**0**
RL12	3	35	0	0.25	**0**	35	20	35	**75**
RL13	2	40	20	43	**55**	5	15	5	**5**
RL14	2	80	11	9	**20**	15	11	0.5	**1.4**
RL15	1	80	0	4	**11**	0	0	12	**6.45**
RL16	3	1	0	18	**16**	55	0	3.5	**1.25**
RL17	1	55	100	40	**69**	40	0	0	**0**
RL18	3	70	0	2.5	**2**	0	0	0	**0**
RL19	2	65	20	6	**9**	0	3	1	**1.6**
RL20	3	10	0	2	**3**	0	0	0.1	**0**
Site Mean		41.8	11.6	8.16	**12.96**	12.3	2.45	3.38	**5.97**

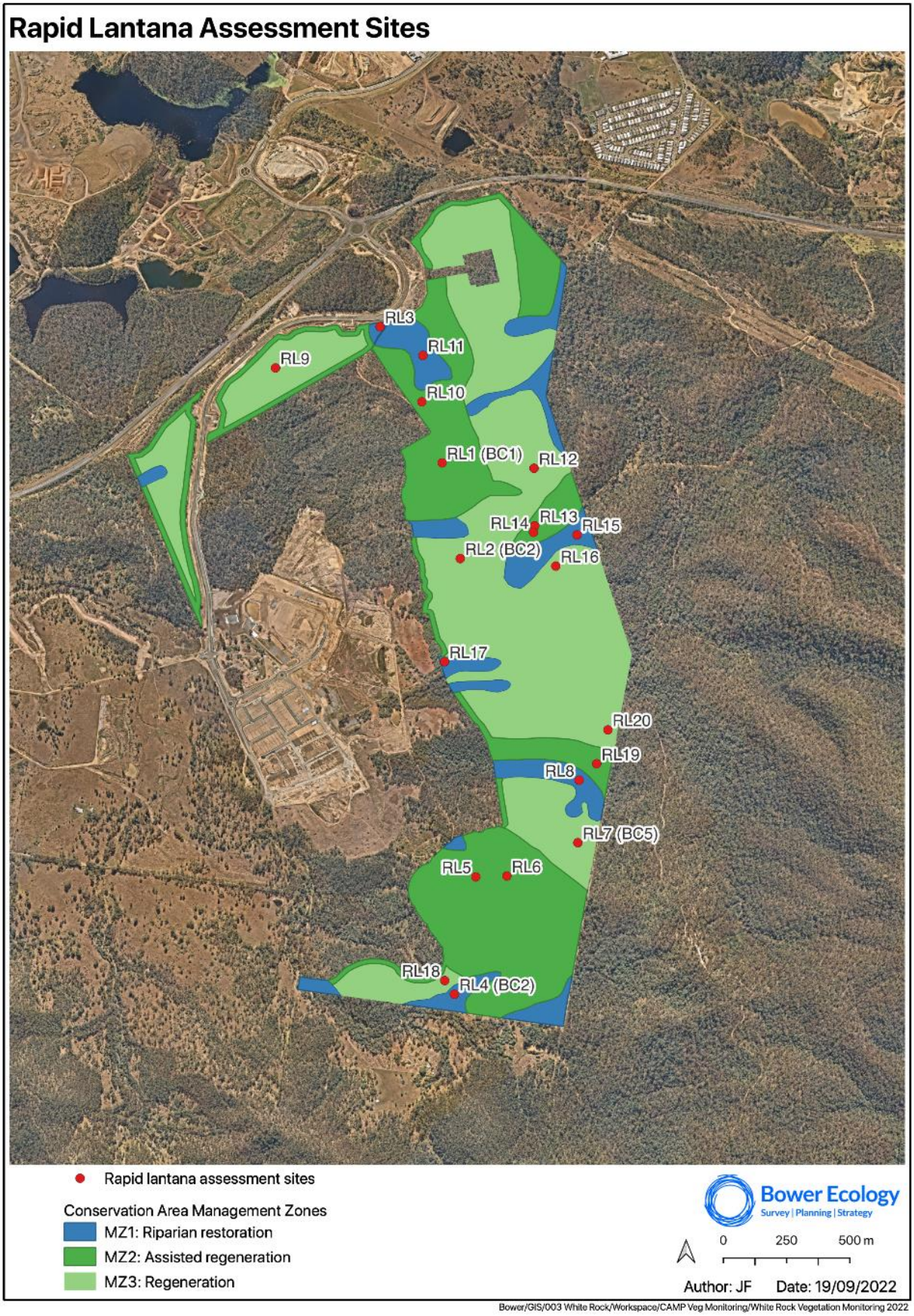

Figure 7: White Rock rapid lantana assessment sites

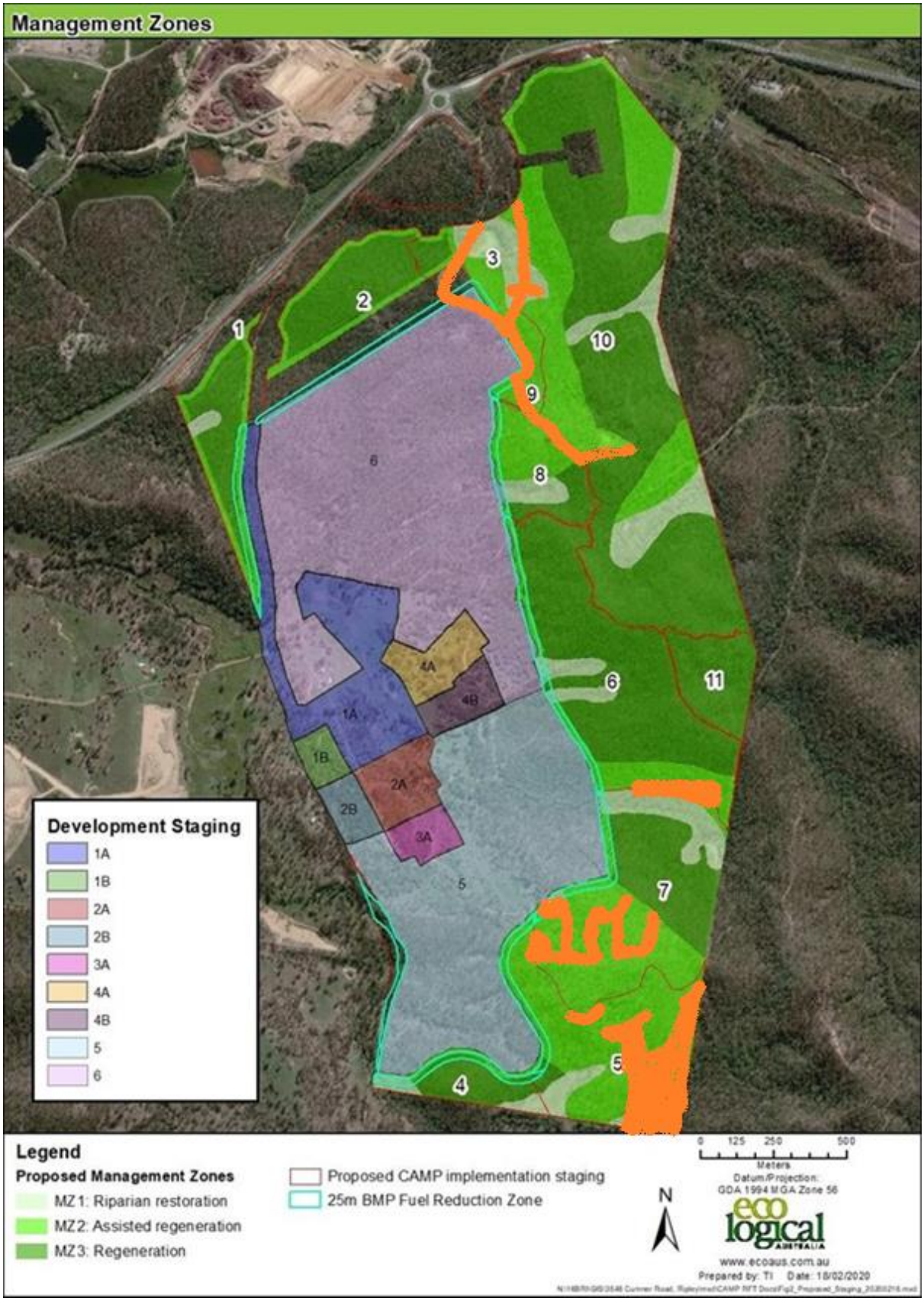

Figure 8: Weed treatment works undertaken by Evolve Environmental Solutions in April to June 2023. Coloured areas indicate where weed treatment was undertaken (Mapping from Evolve).

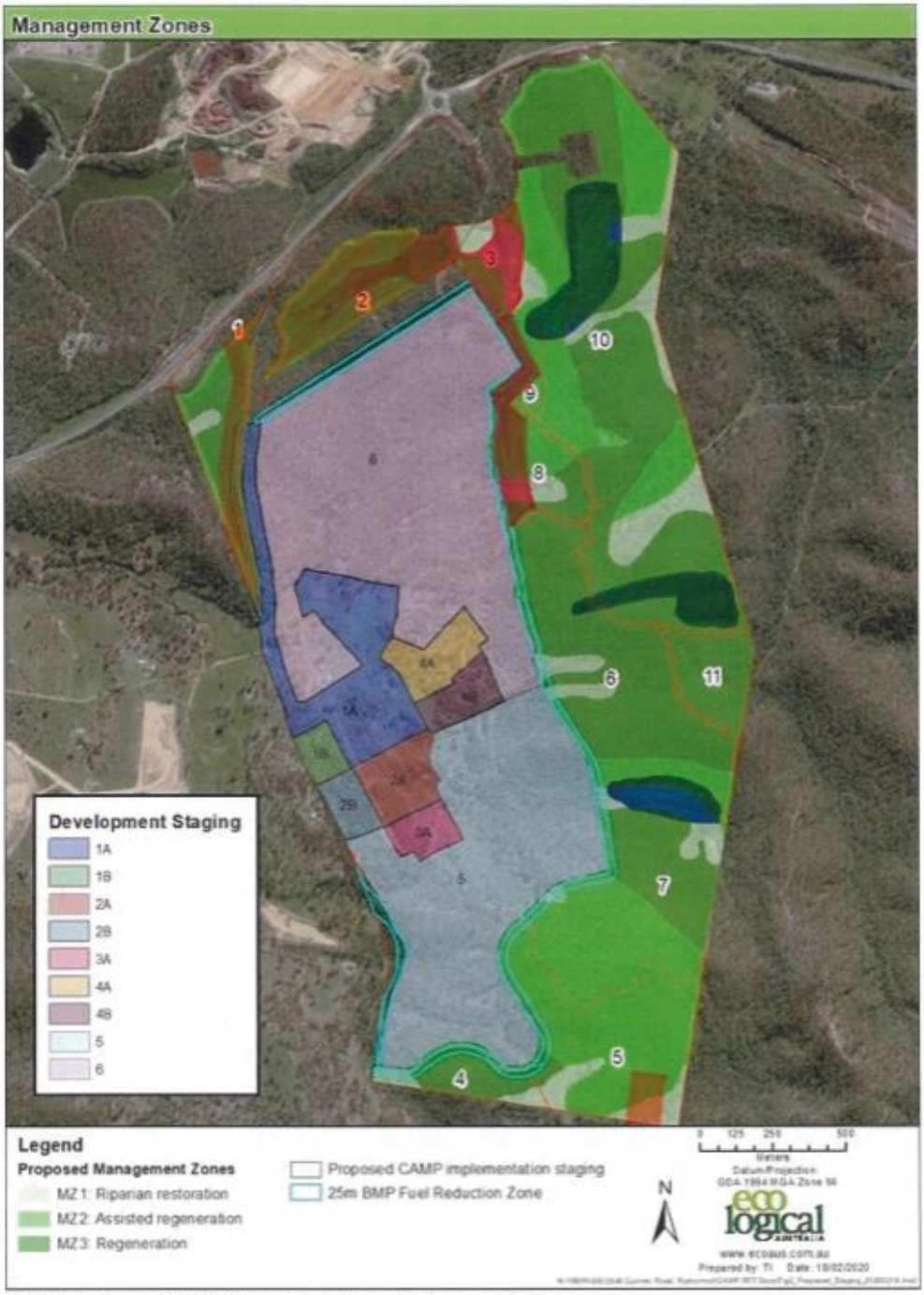

Figure 1: Proposed CAMP Implementation Staging from RFT

Figure 9: Weed treatment works undertaken by Evolve Environmental Solutions in July to September 2023. Coloured areas indicate weed treatment was undertaken (Mapping from Evolve).

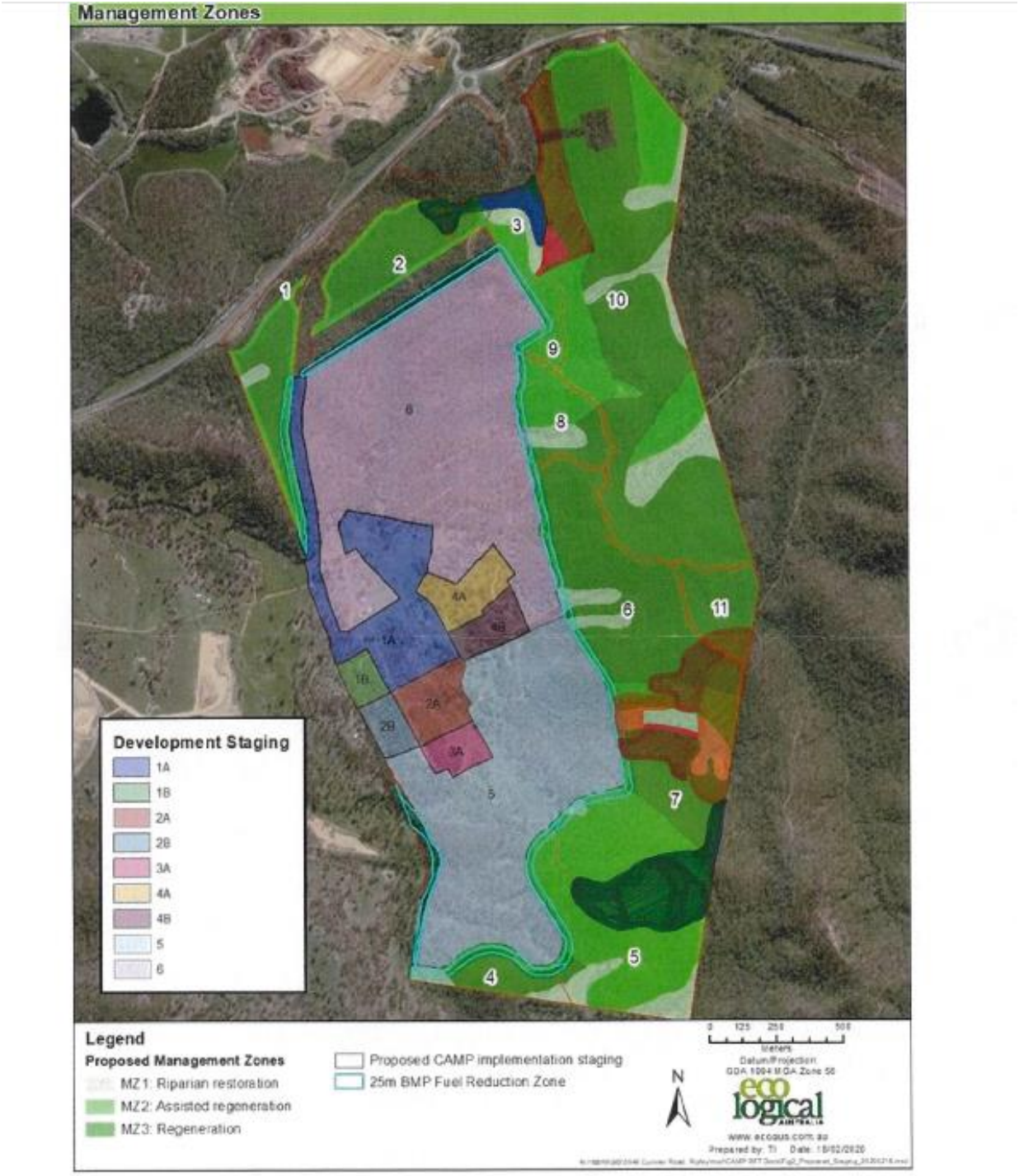

Figure 1: Proposed CAMP Implementation Staging from RFT

Figure 10: Weed treatment works undertaken by Evolve Environmental Solutions in October to December 2023. Coloured areas indicate where herbicide spray (Glyphosate) has been utilised, and/or manual weeding has been undertaken (Mapping from Evolve).

4 Discussion

Overall, lantana cover (the key trait expected to respond to management) shows a decreasing trend since baseline surveys were conducted in 2021, while spatial distribution of lantana shows an increasing trend. Since weed management works commenced, the coverage of both species of lantana has declined significantly.

Spatial distribution of *Lantana camara* has reduced slightly in comparison with the baseline (baseline surveys recorded this species at all 20 assessment sites, while 2024 monitoring recorded individuals at 18 out of the 20 sites). Spatial distribution of *Lantana montevidensis* has increased, with individuals recorded at nine sites in baseline surveys, and at 12 sites in 2024 monitoring. The reduction in lantana cover can be attributed to weed management works, however, the increased spatial distribution indicates a need for continued efforts to control these weed species.

During previous monitoring events, the exact location of the start and finish positions of some sites were unable to be located because permanent markers had not yet been installed (due to unexploded ordnances preventing star picket installation). Prior to the commencement of the 2024 surveys, permanent pegs were installed to clearly mark the location of each BioCondition site. In all cases, the BioCondition site pegs were installed within 30 m of the original plot location. In future, any variation in results will be attributable to changes in vegetation condition with considerably more confidence. Hence, comparisons against BioCondition results from 2024 monitoring are likely to be more informative than comparisons against previous years. As such future results will be compared with not only those of the initial survey, but also those of 2024 monitoring, which will act as a secondary de facto baseline.

The average BioCondition class for management zone (MZ) 1 was 3; the average class for both management zones 2 and 3 was 2.5. BioCondition site 2, in MZ3, recorded the highest score (79) and a class of 2, representing vegetation approaching functional biodiversity condition. The high number of large trees, high cover of native perennial grasses, and low weed cover at this site were the key ecosystem traits resulting in the high BioCondition score and class. The lowest score (26) and class (4) was recorded at BioCondition site 3, in MZ1; this site is in non-remnant condition, hence its poor condition. The low BioCondition score and class at site 3 are a result of low shrub and forb species richness, low cover of native perennial grasses, low cover of both litter and coarse woody debris, high weed cover, and a lack of large trees.

Some ecosystem traits have short response times, and are expected to show changes in response to management within a short period of time. This includes native forb and grass species richness, and perennial grass cover; changes in these traits are expected to be apparent at the next monitoring event. Other attributes take longer to mature. Trends in traits such as canopy cover, tree species richness and the number of large trees will take longer to emerge than the 12-month period between 2024 and 2025 monitoring; it is expected that trends in these attributes will begin to become apparent in future years.

Recommendations for management for the next annual cycle emerging from this report are:

- Ensure continued maintenance weed management to control the cover of lantana species. Once lantana (particularly bush lantana, *L. camara*) is removed, it can open new niches for other invasive species to proliferate. The condition of control sites will be continued to be monitored and, if other weeds of concern emerge, they will be added to the weed monitoring schedule.

- As management begins to focus on other methods of restoration such as ecological burns, works may consider undertaking burns in areas where creeping lantana is worst; although it is acknowledged that several factors are considered when determining the location of burns.

5 References

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Department of Environment and Heritage Protection [DEHP] 2014. Flinders Karawatha Corridor Management Strategy 2014-2019. Queensland Government. Accessed online at: https://environment.des.qld.gov.au/ data/assets/pdf_file/0022/90643/flinders-karawatha-management-strategy.pdf

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Eco Logical Australia [ELA] 2020. White Rock Conservation Area Management Plan. Prepared for Intrapac Property Pty Ltd.

Eco Logical Australia 2021. White Rock Vegetation Monitoring Report - Baseline. Prepared for Intrapac Property Pty Ltd

Appendix A: BioCondition Scores

Table 6: BioCondition analysis and scoring for Year 3 2024 monitoring

Management zone	2		3		1		2		3		1	
Site ID / RE	BC1 / RE12.9-10.2		BC2 / RE12.9-10.2		BC3 / RE12.9-10.7		BC4 / RE12.8.17		BC5 / RE12.9-10.2		BC6 / RE12.9-10.2	
Value Type	**Field value**	**Score**	**Field value**	**Score**	**Field value**	**Score**	**Field value**	**Score**	**Field value**	**Score**	**Field value**	**Score**
Field based attributes												
Recruitment	75	3	44	3	66	3	62.5	3	5	0	2	0
Native tree sp. richness	8	5	9	5	3	5	21.7	5	10	5	6	5
Native shrub sp. richness	6	3	7	5	0	0	3	3	6	3	2	3
Native grass sp. richness	7	5	6	3	6	3	3	3	6	3	2	3
Native forb sp. richness	9	3	8	3	5	0	11	3	12	5	6	3
Tree canopy height	21.4		19		18		20		19		19	
Sub canopy height	12		9.4		4.5		10.2		10		10	
Average canopy height score		5		5		4		5		5		5
Tree canopy cover	29.3		40.5		2		33		84.1		49.7	
Sub canopy cover	59.2		25.3		6.7		21.7		45.5		86.7	
Average canopy cover score		3		5		3		5		4		4
Shrub canopy cover	1.9	3	4.9	5	0.7	3	2.2	3	1.3	3	1.2	3
Native perennial grass cover	2.2	1	93	5	14	1	22	3	17	3	0.4	0
Organic litter cover	57.9	5	7	3	0	0	0	0	66.6	5	37	5
Large trees	2	5	20	10	0	0	4	5	0	0	10	5
Coarse woody debris	65.2	5	250	2	0	0	40	2	465	5	320	5
Weed cover	45	3	0	10	85	0	85	0	25	3	0	10
Total Field based attributes		**48**		**63**		**21**		**38.5**		**43**		**50**
GIS based attributes												
Fragmented - Patch size		10		10		5		10		10		10
Fragmented - Connectivity		5		5		4		5		5		5
Fragmented - Context		5		5		4		5		5		5
Total GIS attributes		**20**		**20**		**13**		**20**		**20**		**20**
Total BioCondition Score		**59**		**79**		**26**		**48**		**54**		**62**
Weighted Ecosystem Score		**0.59**		**0.79**		**0.26**		**0.48**		**0.54**		**0.62**
Final Classification		**3**		**2**		**4**		**3**		**3**		**2**

Appendix B: BioCondition site photos

BC01	2021	2022	2023	2024
Start				
End				

BC02	2021	2022	2023	2024
Start				
End				

BC03	2021	2022	2023	2024
Start				
End				

BC04	2021	2022	2023	2024
Start				
End				

BC05	2021	2022	2023	2024
Start		Photo not available		
End				

BC06	2021	2022	2023	2024
Start				
End				

Appendix C: Photo monitoring sites

Table 7: Photo monitoring digital images

PP01	2021	2022	2023	2024
North				
East				
South				

West				 2024 at 1:21:45 pm 310, NW White Rock QLD 4306 Australia PP 01 W

PP02	2021	2022	2023	2024
North				
East				
South				

West				

PP03	2021	2022	2023	2024
North				
East				
South				

West				

PP04	2021	2022	2023	2024
North				
East				
South				

West				

PP05	2021	2022	2023	2024
North				
East				
South				

West				

PP06	2021	2022	2023	2024
North				
East				
South				

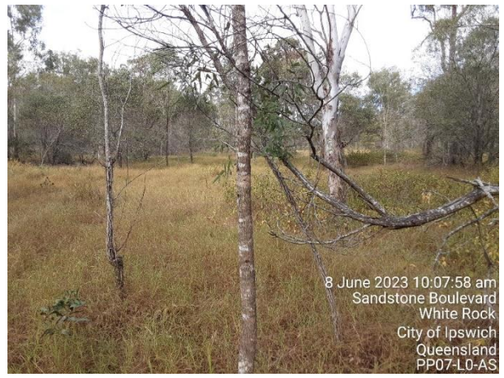
West				

PP07	2021	2022	2023	2024
North				
East		Photo not available		
South		Photo not available		

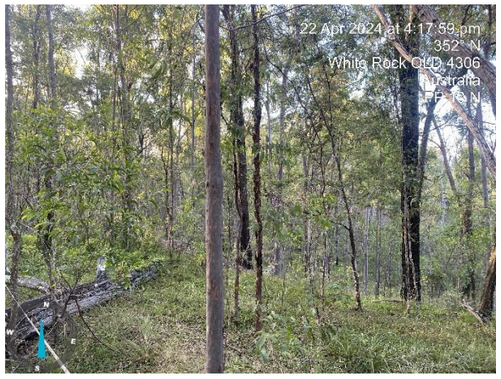
West		Photo not available		

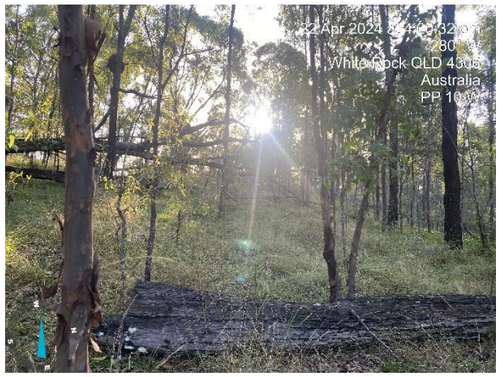
PP08	2021	2022	2023	2024
North				
East		Photo not available		
South		Photo not available		

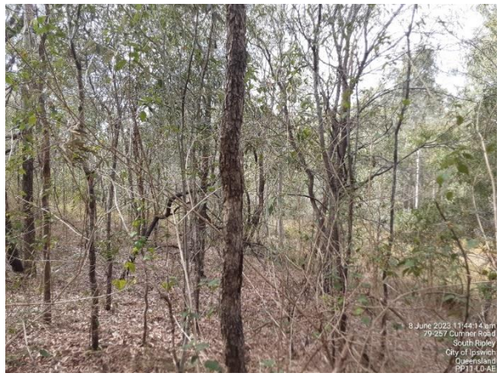
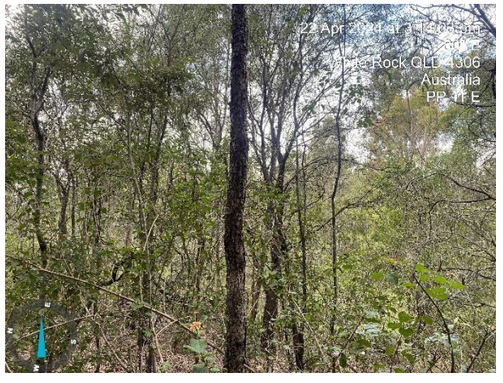
West		Photo not available		

PP09	2021	2022	2023	2024
North		Photo not available		
East		Photo not available		
South		Photo not available		

West			 8 June 2023 10:07:08 am Sandstone Boulevard White Rock City of Ipswich Queensland PP07-LN-AW	 PP09-AW

PP10	2021	2022	2023	2024
North				
East		Photo not available		
South		Photo not available		

West		Photo not available		

PP11	2021	2022	2023	2024
North				
East		Photo not available		

South		Photo not available		
West		Photo not available		

PP12	2021	2022	2023	2024
North		Photo not available		
East		Photo not available		
South				

West		Photo not available		

Appendix D: Lantana rapid assessment photos

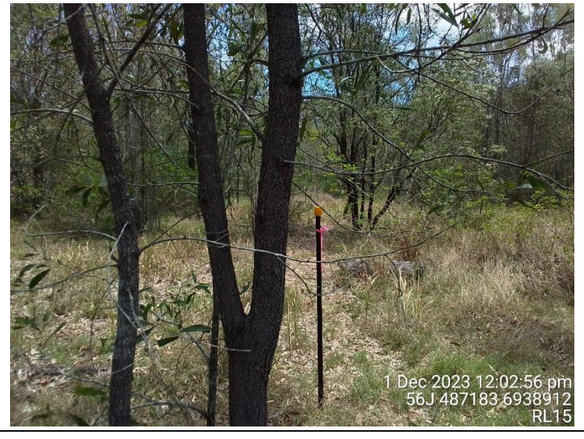
Table 8: Rapid lantana assessment digital images

Plot	2021	2022	2023	2024
1		Photo not available		
2				
3				

4		Photo not available		
5				
6				

7		Photo not available		
8				
9				

10			 1 Dec 2023 10:09:26 am 56J 484469 6937880 RL10	 22 Apr 2024 at 10:19:11 am 14° N White Rock QLD 4306 Australia RL 10
11			 1 Dec 2023 9:54:35 am 56J 484456 6938097 RL11	 22 Apr 2024 at 10:04:37 am 269° W White Rock QLD 4306 Australia RL 11
12			 1 Dec 2023 10:49:56 am 56J 486567 6938907 RL12	 24 Apr 2024 1:22:33 pm 306° NW

13				
14		Photo not available		
15				

16			 1 Dec 2023 12:16:52 pm 56J 484950 6937180 RL 16	 22 Apr 2024 at 2:10:21 pm 195° S White Rock QLD 4306 Australia RL 16
17			 1 Dec 2023 1:23:46 pm 56J 484506 6936721 45° NE RL17	 24 Apr 2024 1:04:38 pm 354°
18			 1 Dec 2023 3:40:43 pm 56J 484529 6935321 323° NW RL18	 23 Apr 2024 at 1:49:41 pm 319° NW White Rock QLD 4306 Australia RL 18

19			 1 Dec 2023 2:57:36 pm 56J 485124 6936272 305° NW RL19	 23 Apr 2024 3:31:46 pm
20			 1 Dec 2023 2:38:07 pm 56J 485159 6936434 120° SE RL20	 23 Apr 2024 3:18:20 pm

Appendix E: CAMP Performance Criteria

The performance criteria required for the site have been identified in Table 9 and are consistent with the EPBC Act approval. Performance criteria specifically related to the current monitoring event are highlighted orange in Table 9 below. Performance criteria are considered as interim targets, which will guide works towards the completion criteria stated in the CAMP. If monitoring indicates that the management actions are not resulting in achievement of the performance criteria, the program may require revision in consultation with ICC and all other relevant authorities.

Table 9: CAMP performance criteria

Task	Establishment			Maintenance
	Preliminary	Management		
	By end of year 3*	Between end of year 3 and end of year 10*	Year 11*	Years 12-21*
Construction-related management actions				
Translocation of habitat / logs	Translocation undertaken, minimal damage to CA vegetation.	N/A		
Fencing / signage / (and maintenance)	Infrastructure installed.	No more than 5% of fencing compromised at any time		
Sediment and erosion control (and maintenance)	Sediment / erosion works installed	Sediment and erosion control devices checked and repaired annually in Quarter 1		
Waste	Initial waste removal undertaken, ongoing waste removed quarterly / as required	Waste removed Quarterly and as required		
Bushland management actions				
Fire management	Bush fire management plan (BFMP) completed. Fire management works undertaken as specified in the BFMP.	Fire management works undertaken as specified in the BFMP.		
Significant flora management	Undertaken as per specifications in Section 7.3. After works are complete, monitoring of planted / seeded individuals must be undertaken			N/A

Pest fauna management	Two survey events completed to determine baseline of dogs/cats/foxes within the Conservation Management Area and reference sites within the adjacent White Rock Conservation Estate Area. Development of a pest management plan that specifies how feral dogs, cats and foxes will be reduced in the Conservation Management Area. Development of a survey methodology that is sufficient to demonstrate any reduction of feral dogs, cats and foxes in the Conservation Management Area, relative to the baseline and reference sites within the adjacent White Rock Conservation Estate Area.	Between end of year 3 and the end of year 6, no increase in pests against baseline, or in the event of evidence of an increase in pests in the general area as measured at reference sites within the White Rock Conservation Estate Area, then demonstrated reduction in pests relative to the reference sites, measured annually.	From the beginning of year 7 to end of approval, maintain a reduction in pests relative to baseline, measured annually, or in the event of evidence of an increase of pests in the general area, measured at reference sites within the White Rock Conservation Estate Area, then demonstrated reduction relative to these reference sites, measured annually.
Bushfire/recreation trails (and maintenance)	Fire access tracks established	At a minimum, bushfire management trails drivable at least one month prior to fire season as determined in BFMP. No more than 10% of designated multipurpose trails unwalkable at any time.	
Revegetation requirements assessed	Revegetation requirements assessed every year prior to planting season until Year 8		N/A
Revegetation works	N/A	Revegetation is undertaken to planting specifications and consistent with the Regional Ecosystem type. All revegetation to be completed by the end of Year 8 (at least 20% of works will be completed by the end of each year [years 4 to 8]). Minimum 90% survival rate of revegetation or equivalent stem density (i.e. through natural regen) at the end of each year and by the end of Year 11.	N/A
Weed control	Targeted primary treatment over approximately 10% of area.	Primary and secondary works undertaken in all areas by the end of Year 8 (at least 20% of	A minimum of three years of maintenance undertaken in all areas
	Targeted primary treatment within all mosaic burn areas (post burn), estimated to be 10% pending preparation of BFMP	works will be completed by the end of each year [years 4 to 8]). Targeted primary treatment within all mosaic burn areas (post burn).	<5% coverage of mature woody weeds in any zone <25% exotic groundcover in Management Zone 1 and Management Zone 2 <10% exotic groundcover in each zone in Management Zone 3 Targeted primary treatment within all mosaic burn areas (post burn).

Native tree management	Identification of tree thinning areas	All thinning activities undertaken as specified in Section 7.7 by the end of Year 8	All management zones and portions thereof have koala food trees present consistent with the associated Regional Ecosystem type.
Monitoring and reporting			
Monitoring and annual reporting	Monitoring points installed / baseline established prior to works	Annual and final monitoring undertaken in as specified in **Section 9** of the CAMP	
CAMP Review, aiming to minimise threatening processes to koalas and GHFF	N/A	CAMP reviewed and updated at Year 6, 11, 16 and 21	

* Year 1 means the period until 12 months from the date of the approval of the action

Year 2 means the period until 24 months from the date of the approval of the action

Year 3 means the period until 36 months from the date of the approval of the action

Year 4 means the period until 48 months from the date of the approval of the action

Year 5 means the period until 60 months from the date of the approval of the action

Year 6 means the period until 72 months from the date of the approval of the action

Year 7 means the period until 84 months from the date of the approval of the action

Year 8 means the period until 96 months from the date of the approval of the action

Year 9 means the period until 108 months from the date of the approval of the action

Year 10 means the period until 120 months from the date of the approval of the action

Year 11 means the period until 136 months from the date of the approval of the action

Year 12 means the period until 148 months from the date of the approval of the action

Year 16 means the period until 192 months from the date of the approval of the action

Year 21 means the period until 252 months from the date of the approval of the action

Appendix B: Pest Monitoring Report 2024

Bower Ecology
Survey | Planning | Strategy

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White Rock Pest Monitoring Report

Report No. 3 (2024)

Prepared for Intrapac White Rock Pty Ltd.

14 February 2025

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Executive Summary

Approval under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) was obtained for the development of a mixed-use subdivision and associated infrastructure (the development) at White Rock in Ripley Valley (EPBC Act referral 2014/738, December 2019).

The EPBC Act approval requires pest management and monitoring to occur, as per the White Rock Pest Management Plan (PMP) (ELA, 2020). This report summarises the findings of the second annual pest survey (post baseline monitoring) for the development of White Rock. Subsequent sections highlight the methodology and results obtained as well as recommendations on how to manage targeted pest species. This report covers two monitoring events (autumn and spring 2024) and has been designed to provide direct comparison against the 2023 monitoring results and the two-year long baseline surveys and reporting conducted at White Rock prior to this monitoring event.

Targeted pest species were the Feral Cat, Fox, Wild Dog and Feral Pigs. These species have been identified as high risk to the Conservation Area with further management required for all targeted species. The activity of these pest species was recorded through remote camera traps and visualised into descriptive maps. Overall, there was a significant decrease in activity among all species except Wild Dogs in comparison to both the 2023 monitoring events and the baseline surveys. The reduction can be attributed to the targeted pest management undertaken in the Conservation Area between the baseline surveys and fifth year reporting surveys. Further management is required throughout, particularly targeting Wild Dogs.

The report demonstrates that the pest fauna management performance criteria documented in the EPBC Act approval have been met. That is, there has been a demonstrated reduction in overall pest numbers.

1 Introduction

The objective of this report is to communicate the outcomes of the seasonal pest monitoring surveys undertaken as part of the White Rock project. Further information on project background and scope of this report are provided below.

1.1. Project Background

Approval under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) was obtained for the development of a mixed-use subdivision and associated infrastructure (the development) at White Rock in Ripley Valley (EPBC Act referral 2014/738, December 2019).

As required under the approval, the Conservation Area Management Plan (CAMP; Eco Logical Australia, 2020a) allocates 249 ha of land east of the proposed White Rock development as Conservation Area and EPBC Act offset area. The Conservation Area is also adjacent to the White Rock - Spring Mountain Conservation Estate (WRSMCE) (**Error! Reference source not found.**), which is managed by Ipswich City Council (ICC).

The Conservation Area meets the requirements outlined under Queensland's *Environmental Offsets Act 2014* and the EPBC Act for impacts to Koala (*Phascolarctos cinereus*) and Grey-Headed Flying Fox (*Pteropus poliocephalus*) (GHFF) habitat, as defined by the EPBC Act. The CAMP requires improvement of Koala and GHFF habitat and overall health of bushland.

The CAMP is also supported by a Pest Management Plan (PMP; Eco Logical Australia 2020b) for the area, which outlines targeted pest management requirements for the Conservation Area. One of the primary objectives of the PMP and CAMP is to manage pest fauna within the Conservation Area, particularly those posing a threat to Koalas, with the eventual integration into the White Rock - Spring Mountain Conservation Estate (WRSMCE).

The European Red Fox (*Vulpes vulpes*) and Feral Cat (*Felis Catus*) have been identified as severe threats to native wildlife and threats to vital ecosystem processes (Department of the Environment and Energy, 2014). The *Nature Conservation (Koala) Conservation Plan 2017* (NCKCP) identifies the Wild Dog (*Canis lupus/Canis lupus dingo*) as a direct threat to Koala populations that requires strategic management. The PMP and CAMP recognises these pest species as a threat to local Koala populations and other native wildlife and subsequent potential impacts resulting in ecosystem fragmentation and introduction of additional pest species.

Upon the completion of the CAMP's on-maintenance period, assuming all PMP and CAMP requirements and targets have been achieved, the Conservation Area is intended to be handed over to the ICC for administrative and management purposes.

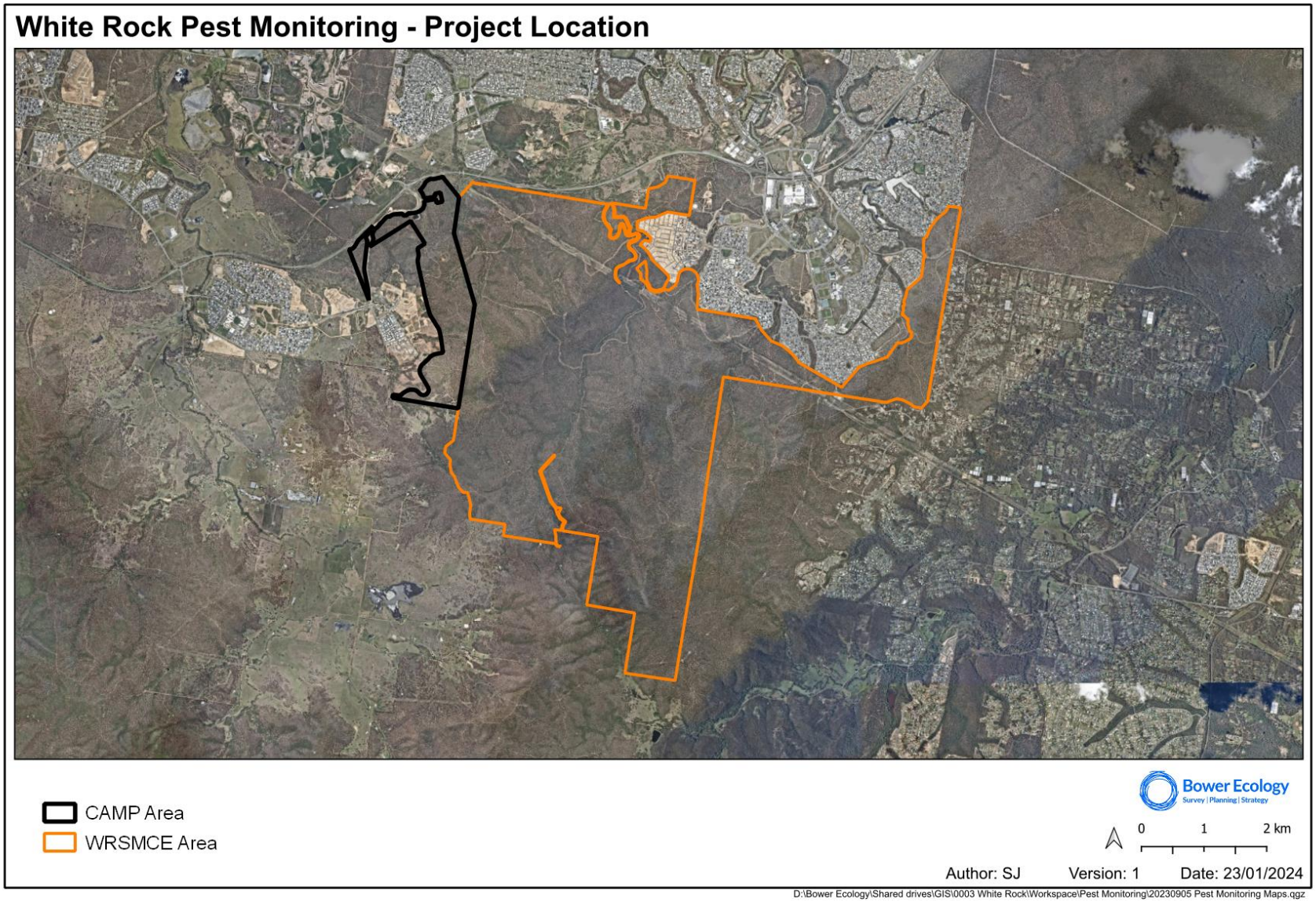

Figure 1: WRSMCE and CAMP area

1.2. Scope

The objective of this report is to provide comprehensive insights into the size and distribution of the designated species across the study area. This includes Foxes, Feral Pigs, Feral Cats, and Wild Dogs.

The PMP stipulates the necessity of two targeted surveys, one in Autumn and one in Spring, conducted within both the Conservation Area and the White Rock - Spring Mountain Conservation Estate (WRSMCE).

The specific tasks in this undertaking are as follows:

- Utilise remote cameras to monitor and identify variations in populations of feral animals
- Conduct targeted baseline surveys for pest fauna, employing methods such as incidental observations, area searches, and remote cameras. The identified pest species include Foxes, Feral Cats, Wild Dogs, and Feral Pigs (Section 2.1);
- Identify any additional feral or pest species to enhance the adaptive management strategies outlined in the PMP;
- Compile a report, represented by this document, outlining the baseline discoveries in alignment with the PMP;
- Articulate the actions for managing pest fauna, guided by the Conservation Area Management Plan (CAMP), to meet the criteria outlined in Table 1.

Table 1: Bushland management actions relating to pest fauna management

Task	Establishment	Management	Maintenance
	By end of year 3	**End of year 3 to end of year 6 (the current period)**	**Beginning of year 7 to end of approval (end of year 12)**
Pest Fauna Management	Two survey events completed to determine baseline of Wild Dogs/Feral Cats/foxes within the Conservation Management Area and reference sites within the adjacent White Rock - Spring Mountain Conservation Estate Development of a pest management plan that specifies how feral Wild Dogs, Feral Cats and foxes will be reduced in the Conservation Management Area.	Between end of year 3 and end of year 6, no increase in pests against baseline, or, in the event of evidence on an increase of pests in the general area as measured at the reference sites within the White Rock - Spring Mountain Conservation Estate, then demonstrated reduction in pests relative to these reference sites, measured annually.	From beginning of year 6 to end of approval, maintain a reduction in pests relative to baseline, measured annually, or in the event of evidence of an increase of pests in the general area, as measured at reference sites within the White Rock - Spring Mountain Conservation Estate, then demonstrated reduction relative to these reference sites, measured annually.

1.3. Study Area Description

The Conservation Area (**Error! Reference source not found.**), delimited to the north by the Centenary Highway, spans approximately 250 hectares. To the west of the study area, land has been cleared for agricultural purposes in lowland areas, with plans for future urban development as part of the Ripley Valley Priority Development Area (PDA). The Conservation Area comprises a mix of maturing and mature vegetation, extending eastward into the White Rock - Spring Mountain Conservation Estate (WRSMCE) over approximately 2,500 hectares. This larger area is part of the extensive vegetation associated with the Flinders Karawatha Corridor, as per the Department of Environment and Heritage Protection (2014). It's important to note that the portion of the WRSMCE used in this study is proportionate to the size and vegetation community composition of the Conservation Area but does not represent the entirety of the WRSMCE.

The vegetation communities within the Conservation Area have been identified through initial ecological surveys conducted by Eco Logical Australia in 2017, revealing eight broad vegetation communities. These communities are summarized in Table 2.

Table 2: Vegetation Communities in the Conservation Area and WRSMCE

Vegetation Community	Area (ha)
Acacia +/- scattered Eucalypts (i.e., *Eucalyptus tereticornus, Eucalyptus crebra*)	3.8
Dam	1.1
Exotic Grassland +/- sparse Acacia and Eucalypts (i.e., *E. tereticornus, E. crebra*)	5.5
E. tereticornis (Forest Red Gum) on alluvium	0.8
E. tereticornis, Lophostemon suaveolens (Swamp Box) and *E. crebra* (Narrow-leaved Ironbark).	8.1
E. crebra, E. tereticornis, E. melanophloia (Silver Leaved Ironbark)	15.6
Corymbia citriodora (Spotted gum)	9.8
C. citriodora, E. crebra, E. melanophloia, and other Eucalypts	183.1
E. acmenoides (White Mahogany), *E. major* (Grey Gum), *C. citriodora*	21.6
Total	**249.4**

2 Methods

2.1. Field Survey

In autumn and spring of 2024, two survey events were conducted in the Conservation Area and WRSMCE by a team of two ecologists. The autumn survey was conducted between 27 March 2024 and 11 April 2024 and the spring survey between 14 October 2024 and 28 October 2024 (Table 3). A total of 29 days of remote data was collected to complete the survey, however only the first 14 days recorded at each monitoring event are used in the results in accordance with the PMP. Monitoring was undertaken in a manner consistent with the baseline surveys. The primary objective of these field surveys was to monitor the activity of targeted pest species in the Conservation Area and WRSMCE. Detailed descriptions of each field method are provided in the subsequent sections.

Table 3: Details of the pest surveys conducted in 2024

Survey Round	Start Date	End Date	Survey Effort (Days)	Survey Effort (days) used in the analysis
Autumn 2024	27 March	11 April	15	14
Spring 2024	14 Oct	28 Oct	14	14

2.1.1. Remote Camera

A total of 30 remote infrared motion-sensitive cameras were deployed, each for a minimum of 14 days (Table 3), during both the autumn and spring surveys in 2024. Although cameras were left longer than the required 14-day period during autumn surveys, only data from the first fortnight was used in the results to allow direct comparison with baseline data and previous years. The remote monitoring specifically targeted 15 locations within the Conservation Area and an additional 15 reference sites within the White Rock - Spring Mountain Conservation Estate (WRSMCE) (see Table 4 and Figure 3). To ensure an even distribution of survey sites, preliminary camera site locations were planned at a desktop level using a 250 m x 250 m grid over the Conservation Area and WRSMCE before the commencement of 2021 baseline surveys.

To maintain accuracy, GPS was used to record the coordinates, along with descriptions (including camera height, angle, and orientation), and photographs of each location. This information was captured during the baseline surveys in 2021 to establish consistent monitoring locations for the Pest Management Plan (PMP) (Figure 3 and Table 4**Error! Reference source not found.**).

Bait stations were set opposite the cameras to lure the target species (Figure 2). Following the PMP, the bait type and volume remained consistent throughout the study. A golf ball sized bait ball designed to attract Foxes, Feral Pigs, Feral Cats and Wild Dogs was placed in each station. The bait consisted of wet cat food mixed with dry oats, peanut butter, and honey.

Figure 2: Camera set up in riparian zone facing down towards bait station

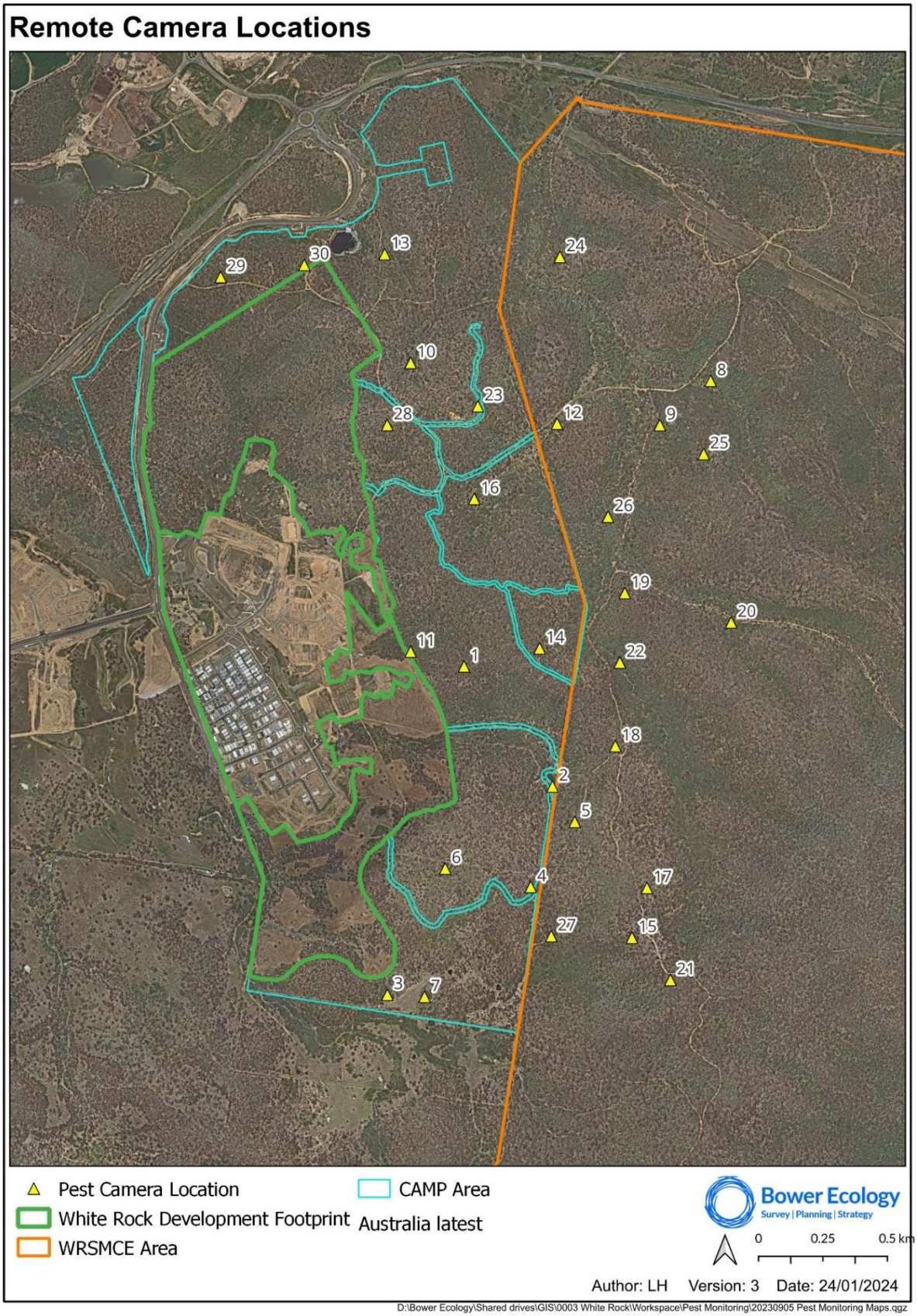

Figure 3: Remote camera locations in the Conservation Area and WRSMCE

Table 4: Locations of the remote camera in the CAMP and WRSMCE

Camera ID	Habitat Type	Latitude	Longitude
Conservation Area			
1	Open Woodlands	-27.695324	152.845646
2	Ephemeral Lake	-27.699531	152.849118
3	Riparian	-27.706814	152.842612
4	Open Woodlands	-27.703044	152.848258
6	Open Woodlands	-27.702399	152.844895
7	Fringing Woodlands	-27.706884	152.844075
10	Open Woodlands	-27.684696	152.84356
11	Open Woodlands	-27.694804	152.843544
13	Fringing Woodlands	-27.680888	152.842545
14	Open Woodlands	-27.694694	152.848621
16	Open Woodlands	-27.689462	152.846056
23	Open Woodlands	-27.686219	152.846201
28	Open Woodlands	-27.686871	152.842637
29	Open Woodlands	-27.681684	152.836091
30	Open Woodlands	-27.681265	152.839382
White Rock- Spring Mountain Conservation Estate			
5	Riparian	-27.700771	152.849993
8	Ephemeral Lake	-27.685341	152.855358
9	Open Woodlands	-27.686888	152.85336
12	Riparian	-27.686831	152.849316
15	Open Woodlands	-27.704824	152.852238
17	Open Woodlands	-27.703084	152.85283
18	Open Woodlands	-27.698117	152.851595
19	Open Woodlands	-27.692763	152.851973
20	Riparian	-27.693796	152.856158
21	Open Woodlands	-27.706305	152.853749
22	Open Woodlands	-27.695192	152.851773
24	Open Woodlands	-27.680993	152.849438
25	Open Woodlands	-27.6879	152.855082
26	Riparian	-27.690093	152.851318
27	Riparian	-27.704739	152.848695

2.1.2. Incidental Finds

All incidental finds were recorded over the course of the two survey events. Incidental finds included breeding places, vegetation disturbance, digging/foraging sites, scat counts, sightings, tracks (paw and hoof prints), and wallowing holes.

2.1.3. Additional Pest Species

The PMP lists Feral Cats, Foxes, and Wild Dogs as the primary target for the pest monitoring surveys. Feral Pigs were identified in the autumn 2021 baseline survey within the Conservation Area and are therefore considered an additional species to monitor. Feral Pigs are a restricted species under the *Queensland Biosecurity Act 2014*. Remote camera records of Feral Pigs have been included within this document in line with the baseline surveys.

2.2. Data Analysis

Limited data analysis was conducted comparing the baseline survey to the autumn and spring surveys completed in 2024 due to inconsistencies in data collection and data fidelity. During baseline monitoring, simple data analysis was conducted including averages, differences, and similarities. This has been highlighted in the survey limitations below.

2.3. Survey Limitations

The baseline surveys were conducted over a 73-day period with varying lengths of surveys for each survey period. This has led to an overabundance of data with inconsistent results, preventing data analysis of the differences between the baseline survey and the 2024 surveys. Moving forward the study will be conducted over strict two-week period in compliance with the requirements for the PMP. Any extra data observed outside the allocated time period was removed from the data set.

Additionally due to previous flooding events remote camera locations were altered slightly in 2023. To account for this, a new location was selected within 50 m of the original sight, and this location was used again in 2024. The change of location is not likely to influence results given the mobility of pest species.

3 Results

3.1. Survey Conditions

Climate data for the Conservation Area was taken from the Greenbank (Defence) weather station (140009), located approximately 14km east of the survey area (BOM, 2024).

Month	2021 Mean Min. – Max. Temp. (°C)	2022 Mean Min. – Max. Temp. (°C)	2023 Mean Min. – Max. Temp. (°C)	2024 Mean Min. – Max. Temp. (°C)	2021 Total Rainfall (mm)	2022 Total Rainfall (mm)	2023 Total Rainfall (mm)	2024 Total Rainfall (mm)
Jan	18.6 – 30.4	20 – 29.6	17.9 – 31.5	21.1 – 31.1	64.6	129.6	101.8	346.6
Feb	18.9 – 30.5	18.2 – 29.5	18.1 – 31.7	20.4 – 31.6	150	762.2	51.2	89.2
Mar	18.4 – 28.8	17.9 – 29.4	18.7 – 31.9	18.5 – 28.6	248.8	171	79.6	102
Apr	12.5 – 26.2	15.3 – 27	13.1 – 27.2	15.4 – 27.2	88.8	45	49.6	97.6
May	9.7 – 23.9	15.5 – 23.3	6 – 24	11.6 – 23.9	121.8	327.4	85	30.2
Jun	6.6 – 21.6	5.7 – 21.2	5.7 – 23.2	6.2 – 22.1	18	14	7.8	8.4
Jul	6.4 – 21.3	6.8 – 19.7	5.8 – 22.4	7 – 21	61.8	89.6	51.4	30.6
Aug	6.9 – 24.1	6.5 – 22.5	7.5 – 25.3	9.8 – 25.6	18.6	22	28.8	52.4
Sep	8.8 – 26.1	10.4 – 24.3	9.9 – 27.2	10.2 – 27.1	15.2	113.6	37.8	61.4
Oct	14.1 – 29	14.2 – 26.2	12.4 – 29.3	14.6 – 28.1	176.2	122.4	31.8	106.2

and Figure 4 Figure 5 illustrate the total rainfall and the mean maximum and minimum temperatures per month in 2024. Autumn and spring climatology demonstrate higher mean temperatures when compared with the two baseline years (2021 and 2022) (Appendix A). Rainfall in autumn 2024 was lower than both autumn 2021 and autumn 2022; rainfall in spring 2024 was higher than spring 2021 but lower than spring 2022. Overall, from January to October, the conservation area received a similar level of rainfall in 2024 and 2021, but approximately half that received in 2022 (Appendix A).

Table 5: Climate data for the months preceding and during Autumn and Spring monitoring events for the baseline year (2021), 2022, 2023 and 2024

Month	2021 Mean Min. – Max. Temp. (°C)	2022 Mean Min. – Max. Temp. (°C)	2023 Mean Min. – Max. Temp. (°C)	2024 Mean Min. – Max. Temp. (°C)	2021 Total Rainfall (mm)	2022 Total Rainfall (mm)	2023 Total Rainfall (mm)	2024 Total Rainfall (mm)
Jan	18.6 – 30.4	20 – 29.6	17.9 – 31.5	21.1 – 31.1	64.6	129.6	101.8	346.6
Feb	18.9 – 30.5	18.2 – 29.5	18.1 – 31.7	20.4 – 31.6	150	762.2	51.2	89.2
Mar	18.4 – 28.8	17.9 – 29.4	18.7 – 31.9	18.5 – 28.6	248.8	171	79.6	102
Apr	12.5 – 26.2	15.3 – 27	13.1 – 27.2	15.4 – 27.2	88.8	45	49.6	97.6
May	9.7 – 23.9	15.5 – 23.3	6 – 24	11.6 – 23.9	121.8	327.4	85	30.2
Jun	6.6 – 21.6	5.7 – 21.2	5.7 – 23.2	6.2 – 22.1	18	14	7.8	8.4
Jul	6.4 – 21.3	6.8 – 19.7	5.8 – 22.4	7 – 21	61.8	89.6	51.4	30.6
Aug	6.9 – 24.1	6.5 – 22.5	7.5 – 25.3	9.8 – 25.6	18.6	22	28.8	52.4
Sep	8.8 – 26.1	10.4 – 24.3	9.9 – 27.2	10.2 – 27.1	15.2	113.6	37.8	61.4
Oct	14.1 – 29	14.2 – 26.2	12.4 – 29.3	14.6 – 28.1	176.2	122.4	31.8	106.2

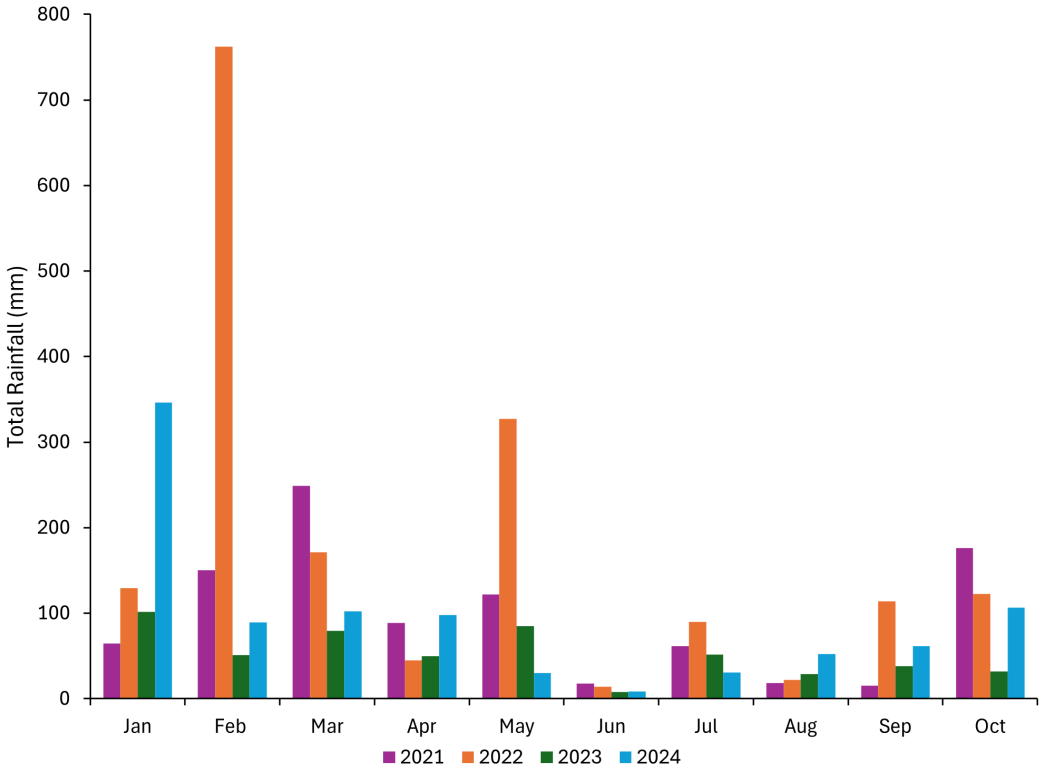

Figure 4: Monthly rainfall totals for the months preceding and during Autumn and Spring monitoring events for the baseline year (2021), 2022, 2023 and 2024.

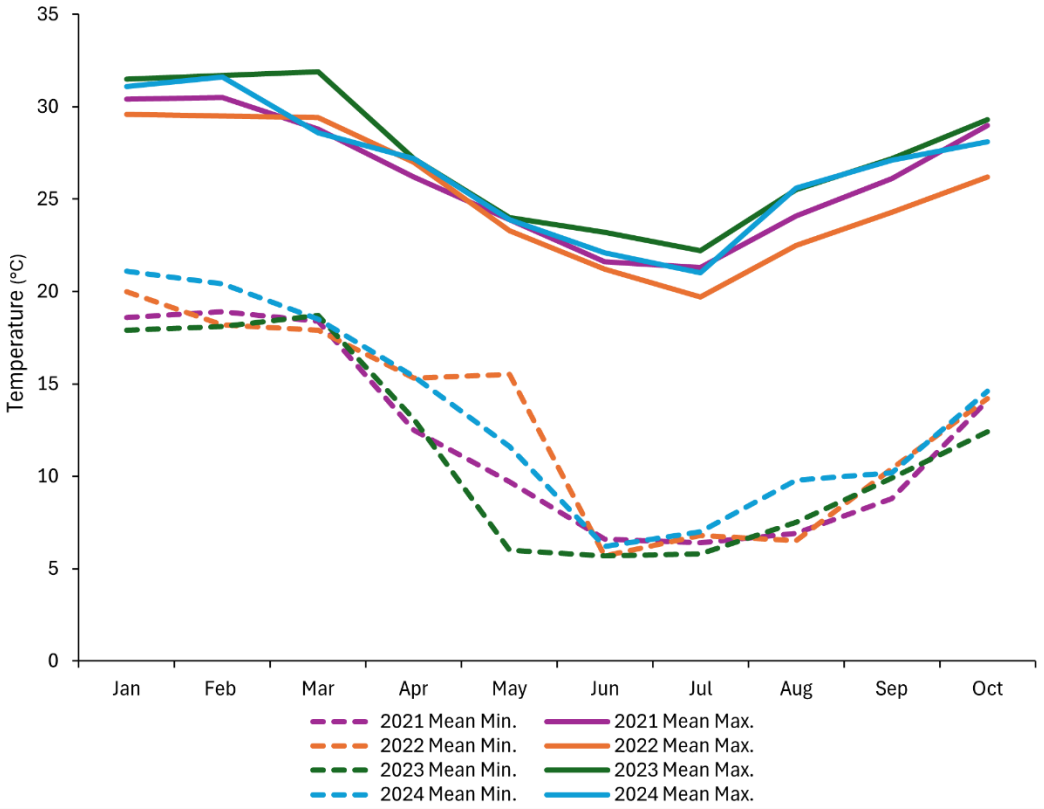

Figure 5: Monthly mean temperatures for the months preceding and during Autumn and Spring monitoring events for the baseline year (2021), 2022, 2023 and 2024

3.2. Remote Camera Observations

Twenty-two individuals from 3 target pest species were identified from 30 remote cameras over the two monitoring events in 2024, as detailed in Table 6. Autumn surveys captured 15 individuals of the targeted pest species across both CAMP and WRSMCE areas whilst 7 individuals were recorded in the spring survey.

Within the Conservation Area, 13 individual pests were recorded in 2024 whilst within the WRSMCE, 9 individual pests were observed (Table 6 and 7).

A map of all remote camera locations, recorded pest species, and incidental finds can be seen in Figure 6.

Other key results (per Table 6 and 7) for each target pest species include:

- No feral cats were detected in the 2024 autumn or spring surveys; this is consistent with 2023 monitoring, and less than the baseline.
- There was a marked increase in wild dogs recorded, particularly in the Conservation Area, in comparison to both the 2023 monitoring event and the baseline.
- Total fox numbers recorded were slightly lower than both the 2023 monitoring event and the baseline; however, while the Conservation Area recorded no foxes in 2024 (the lowest count recorded since monitoring commenced), the WRSMCE recorded more foxes in 2024 than the baseline, and the same number as recorded in 2023.
- Feral pig counts show a decreasing trend since monitoring commenced.

Appendix B lists the native fauna species recorded on each camera.

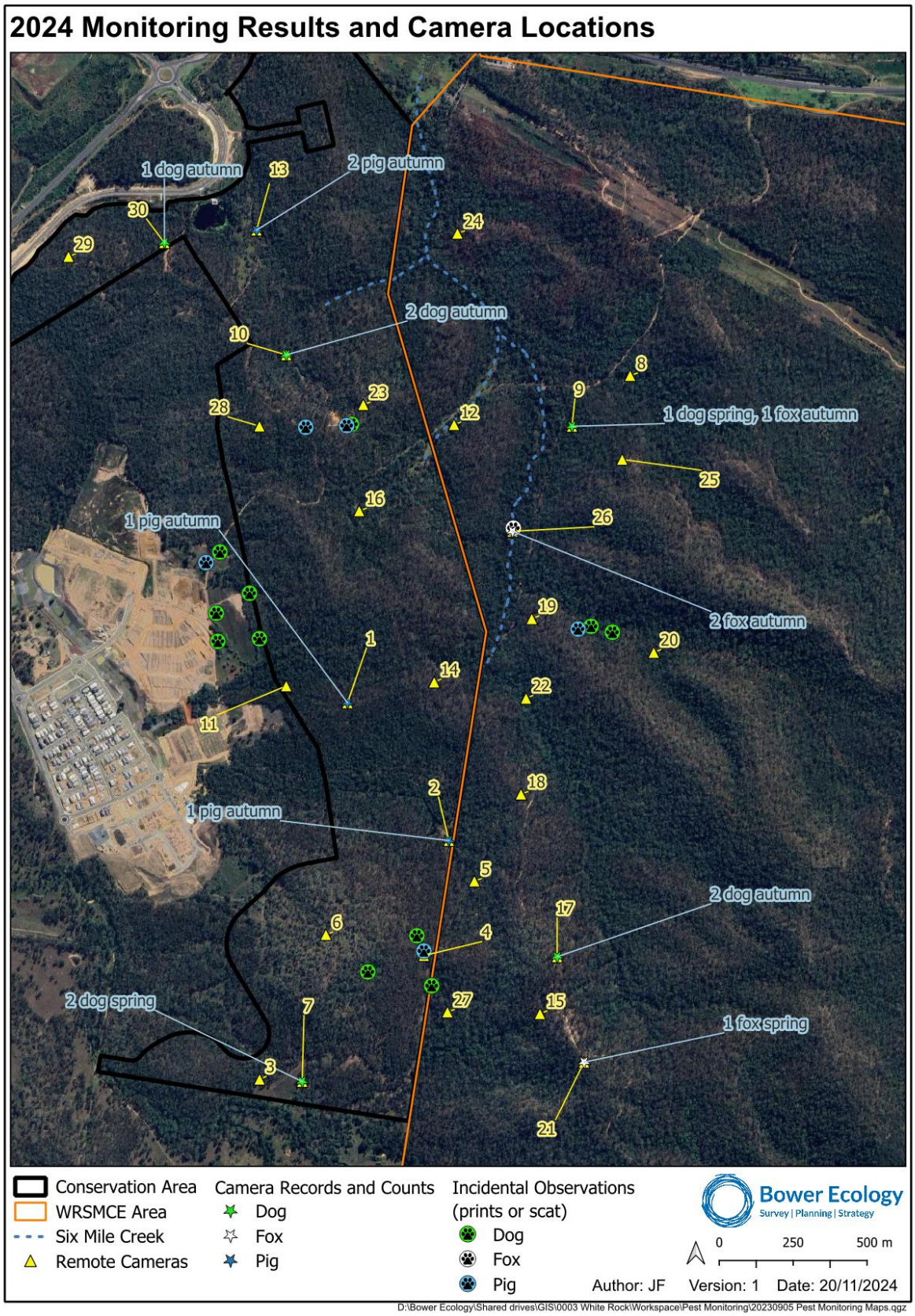

Figure 6: Remote camera locations and the results of 2024 monitoring

Table 6: Sum of results from all years of monitoring

	Feral Cat								Wild Dog								Fox								Feral Pig							
	2021		2022		2023		**2024**		2021		2022		2023		**2024**		2021		2022		2023		**2024**		2021		2022		2023		**2024**	
Season:	Au	Sp	Au	Sp	Au	Sp	**Au**	**Sp**	Au	Sp	Au	Sp	Au	Sp	**Au**	**Sp**	Au	Sp	Au	Sp	Au	Sp	**Au**	**Sp**	Au	Sp	Au	Sp	Au	Sp	**Au**	**Sp**
Duration (days)	14	14	14	16	14	14	14	14	14	14	14	16	14	14	14	14	14	14	14	16	14	14	14	14	14	14	14	16	14	14	14	14
Conservation Area	1	1	0	1	0	0	**0**	**0**	0	0	0	1	1	0	**6**	**3**	2	1	2	0	2	0	**0**	**0**	17	9	33	3	1	1	**4**	**0**
WRSMCE Area	0	0	0	0	0	0	**0**	**0**	1	0	0	1	3	1	**2**	**3**	2	0	0	3	3	1	**3**	**1**	0	5	3	2	5	3	**0**	**0**
Total Individuals	1	1	0	1	0	0	**0**	**0**	1	0	0	2	4	1	**8**	**6**	4	1	2	3	5	1	**3**	**1**	17	14	36	5	6	4	**4**	**0**

Table 7: Pest species detected in 2024 by survey event and remote camera ID within each survey area including number of individuals recorded.

		Conservation Area															WRSMCE Area														
Pest Species	**Survey period**	**Cam 1**	**Cam 2**	**Cam 3**	**Cam 4**	**Cam 6**	**Cam 7**	**Cam 10**	**Cam 11**	**Cam 13**	**Cam 14**	**Cam 16**	**Cam 23**	**Cam 28**	**Cam 29**	**Cam 30**	**Cam 5**	**Cam 8**	**Cam 9**	**Cam 12**	**Cam 15**	**Cam 17**	**Cam 18**	**Cam 19**	**Cam 20**	**Cam 21**	**Cam 22**	**Cam 24**	**Cam 25**	**Cam 26**	**Cam 27**
Feral cat	Autumn																														
	Spring																														
Feral pig	Autumn	1	1							2																					
	Spring																														
Red fox	Autumn																		1											2	
	Spring																									1					
Wild dog	Autumn	2						3								1						2									
	Spring						3												1							1				1	

4 Discussion

4.1. Management of the Conservation Area

Between the baseline surveys in 2021 and 2022 and the first annual survey in 2023, a series pest management was conducted by Evolve Environmental Solutions (Evolve, 2023). Invasive Plant and Animal Services were engaged in September 2023 to continue pest fauna management. The recorded decrease in pest activity (number of individuals) of Feral Pigs over time can likely be attributed to these pest management works. Their scope of the pest management work is outlined in Table 8.

Table 8: Pest Management conducted in the Conservation Area in 2024

Month	Pest Management Conducted
September 2023	• Initial reconnaissance assessment; • Additional cameras in evident zones of pest activity; • Pre-bait material was laid in areas of high activity.
October 2023	• Candid Pest Ejectors (CPEs) were laid; • 1080 baits were set up; • In five days of work six Feral Pigs and one Wild Dog were shot and removed from the Conservation Area.
Jan – June 2024	• Five days per month of on ground control. • Four remote cameras deployed. • 1080 and trap warning signs deployed. • Soft jaw (foxes and wild dogs) and cage (cats) traps deployed. • Six feral pigs and 1 wild dog shot. • 28 DK9 baits deployed (19 taken). • 24 1080 meat baits deployed (12 taken). • 8 Canid Pest Ejectors deployed (3 activated). • Pre-feeding corn program targeting feral pigs conducted.
August 2024	• Corn program changed to 1080 poisoned corn, targeting Feral Pigs.
August – Dec 2024	• 14 DK9 1080 baits were deployed. • Three 1080 Warning and Pest Operation signs were replaced. • 16 wild dog traps were deployed. • 6 feral pigs have been culled to date. • 1 wild dog (shot) was culled. • 15 remote cameras deployed (different areas within 6 month period) • 2 foxes killed (shot) • Of the total 42 DK9 baits deployed, 23 were taken. • 24 fresh 1080 meat baits were deployed, 12 of which were taken. • 8 Canid Pest Ejectors (CPEs) were deployed, with 3 activated. • No feral cats have been observed, trapped, or recorded via cameras.

Ipswich City Council (ICC) was contacted to obtain information on any targeted pest management they may have conducted throughout the WRSMCE in 2024. A new pest management officer was employed by ICC in 2024. Trapping and shooting of the targeted pest species was conducted by ICC throughout 2024, with a particular focus on Feral Pigs in response to the increase in reported numbers in 2023. Weather conditions, however, limited access to the more remote areas of the WRSMCE, thus pest management was not as comprehensive as planned (P. Smith, Natural Areas Manager at Ipswich City Council, pers. comm., 28/1/2025).

4.2. Discussion of Results

The 2024 surveys recorded a total of 22 pest fauna individuals, of which 13 were inside the Conservation Area and 9 inside the WRSMCE. The remote camera records demonstrated that distribution of pest species was relatively consistent across the site (Figure 6), indicating the recorded species utilised the entire landscape, although Feral Pigs did appear to favour low lying wet areas.

Although at this stage the dataset does not lend itself to rigorous statistical analysis[1] the apparent general reduction in pest numbers over time, of all species except Wild Dogs, may be explained by a combination of factors:

- Pest management undertaken in 2023 and 2024 (see section **Error! Reference source not found.**).
- On average monthly temperatures were higher and there was less rainfall when compared to the

• Month	2021 Mean Min. – Max. Temp. (°C)	2022 Mean Min. – Max. Temp. (°C)	2023 Mean Min. – Max. Temp. (°C)	2024 Mean Min. – Max. Temp. (°C)	2021 Total Rainfall (mm)	2022 Total Rainfall (mm)	2023 Total Rainfall (mm)	2024 Total Rainfall (mm)
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Feb	18.9 – 30.5	18.2 – 29.5	18.1 – 31.7	20.4 – 31.6	150	762.2	51.2	89.2
Mar	18.4 – 28.8	17.9 – 29.4	18.7 – 31.9	18.5 – 28.6	248.8	171	79.6	102
Apr	12.5 – 26.2	15.3 – 27	13.1 – 27.2	15.4 – 27.2	88.8	45	49.6	97.6
May	9.7 – 23.9	15.5 – 23.3	6 – 24	11.6 – 23.9	121.8	327.4	85	30.2
Jun	6.6 – 21.6	5.7 – 21.2	5.7 – 23.2	6.2 – 22.1	18	14	7.8	8.4
Jul	6.4 – 21.3	6.8 – 19.7	5.8 – 22.4	7 – 21	61.8	89.6	51.4	30.6
Aug	6.9 – 24.1	6.5 – 22.5	7.5 – 25.3	9.8 – 25.6	18.6	22	28.8	52.4
Sep	8.8 – 26.1	10.4 – 24.3	9.9 – 27.2	10.2 – 27.1	15.2	113.6	37.8	61.4
Oct	14.1 – 29	14.2 – 26.2	12.4 – 29.3	14.6 – 28.1	176.2	122.4	31.8	106.2

  baseline survey conditions (Appendix A,
- , and **Error! Reference source not found.** andFigure 5). It is probable that these factors decreased the availability of resources and habitat for the pest species and could have partially contributed to the reduced numbers recorded in 2024 in comparison to 2023 results and the baseline surveys.

4.3. Observations and Recommendations

Targeted pest control was initially focused on the southern Conservation Area with emphasis on the riparian area and man-made lakes due to the high concentration of activity for all pest species (as reported in Eco Logical Australia 2022). The surveys conducted in 2024, however, recorded pest fauna across the site. Moving forward, pest management should concentrate on the northern and central parts of the Conservation Area in addition to continual management of the southern Conservation Area.

[1] Due to the limited number of observations across each season, and across the years. Also due to the variables not being a quantitative metrics (i.e., pest management effort, other variables).

Feral Pigs

Individual Feral Pigs were detected 4 times in the Conservation Area and not at all in the WRSMCE. Similarly to previous monitoring events, observations of Feral Pigs were more frequent throughout the autumn survey than the spring survey, coinciding with higher rainfall and average temperatures (**Error! Reference source not found.** andFigure 5, and

Month	2021 Mean Min. – Max. Temp. (°C)	2022 Mean Min. – Max. Temp. (°C)	2023 Mean Min. – Max. Temp. (°C)	2024 Mean Min. – Max. Temp. (°C)	2021 Total Rainfall (mm)	2022 Total Rainfall (mm)	2023 Total Rainfall (mm)	2024 Total Rainfall (mm)
Jan	18.6 – 30.4	20 – 29.6	17.9 – 31.5	21.1 – 31.1	64.6	129.6	101.8	346.6
Feb	18.9 – 30.5	18.2 – 29.5	18.1 – 31.7	20.4 – 31.6	150	762.2	51.2	89.2
Mar	18.4 – 28.8	17.9 – 29.4	18.7 – 31.9	18.5 – 28.6	248.8	171	79.6	102
Apr	12.5 – 26.2	15.3 – 27	13.1 – 27.2	15.4 – 27.2	88.8	45	49.6	97.6
May	9.7 – 23.9	15.5 – 23.3	6 – 24	11.6 – 23.9	121.8	327.4	85	30.2
Jun	6.6 – 21.6	5.7 – 21.2	5.7 – 23.2	6.2 – 22.1	18	14	7.8	8.4
Jul	6.4 – 21.3	6.8 – 19.7	5.8 – 22.4	7 – 21	61.8	89.6	51.4	30.6
Aug	6.9 – 24.1	6.5 – 22.5	7.5 – 25.3	9.8 – 25.6	18.6	22	28.8	52.4
Sep	8.8 – 26.1	10.4 – 24.3	9.9 – 27.2	10.2 – 27.1	15.2	113.6	37.8	61.4
Oct	14.1 – 29	14.2 – 26.2	12.4 – 29.3	14.6 – 28.1	176.2	122.4	31.8	106.2

). This is likely due to increased availability of resources and habitat. Detection of the pest occurred from north to south within the Conservation Area, clustering in valleys and waterways as seen in Figure 6. Observations near waterways and constructed lakes suggest Feral Pigs are likely aiding further degradation of the landscape and the dispersal of weeds throughout these areas.

To optimise results the management of Feral Pigs should be concentrated close or next to permanent water sources or gullies. As the pest species was previously dispersed throughout both the Conservation Area and WRSMCE, any Feral Pig management should be continue to be actioned by both the ICC and Intrapac concurrently to ensure full coverage. The Feral Pig control program should be scheduled after the wet season to reflect the higher activity of the species. The populations will likely concentrate in areas of permanent water in the dry season.

Foxes and Wild Dogs

Foxes were observed 4 times throughout the study, only in the WRSMCE. One Fox was recorded preying upon a Brush-tailed Possum (Figure 7). Total numbers of Foxes have remained relatively consistent since monitoring commenced; however, 2024 Fox counts were the lowest yet recorded.

Wild Dog sightings were recorded 14 times throughout the survey period: 9 times in the Conservation Area and 5 times in the WRSMCE. These Wild Dog numbers are almost three times greater than those recorded in 2023, and also higher than baseline results, indicating an increasing trend in the occurrence of this species despite targeted pest management works (see Table 8). While reasons for this increase are unclear, it could be attributed to ICC pest management's shift in focus towards Feral Pigs in the WRSCME, reducing resources targeting Wild Dogs. A number of dead pigs observed by ICC in the WRSCME throughout 2024 could also have provided an increase in food resources to Wild Dogs

(P. Smith, Natural Areas Manager at Ipswich City Council, pers. comm., 28/1/2025). Alternatively, changes in vegetation cover as land was cleared could have displaced Wild Dogs from cleared areas into the sheltered habitat.

Both Foxes and Wild Dogs utilised the entire landscape, as evident in Figure 6. Foxes and Wild Dogs were observed to have similar areas of interest, overlapping in habitat. This may be due to similar habits in diet, resource requirements and shelter (Glenn and Dickman, 2014). The shared space creates competition between the species, limiting their carrying capacity due to resource scarcity. The slight reduction in Foxes over time could be attributed to the increase in Wild Dog numbers and the subsequent increased competition for resources.

The regulated poison 1080 is a standard method for fox baiting programs. Fox baiting will also manage Wild Dog populations. The Wild Dog and Fox baiting program should be in conjunction with the Department of Agriculture, Water and Environment of Australia and PestSmart (Sharp, 2012).

The poison 1080 has been shown to impact native carnivorous species including the Lace Monitor (*Varanus varius*) and threatened mammals including the Spotted-tail Quoll (*Dasyurus maculatus*) and Brush-tail Phascogale (*Phascogale tapoatafa*). The Spotted-tail Quoll has a low likelihood of occurrence within both management areas, so impacts to this species are unlikely. Impacts to Lace Monitors and Brush-tail Phascogales can be mitigated by correct dosage and baiting outside of the winter breeding period when young are dependent on females.

Figure 7: Image recorded by camera 21 during spring 2024 surveys of a Fox killing and Brush-tailed Possum (see yellow circle).

Feral Cats

No observations of Feral Cats were recorded in the surveys conducted in autumn and spring of 2024; this is consistent with 2023 results. Feral Cats were the least observed species in the baseline survey and have since seen a reduction in evidence of their presence (Table 6). This may be due to the changing habitat that is potentially no longer suitable for the species, or the increase in Wild Dog numbers and the subsequent increased competition for resources. Alternatively, Feral Cats may still be present but due to low density populations over a large range no observations were recorded in

the 2023 or 2024 surveys (DCCEEW, 2023). In prior years the species was observed in Northern areas of the Conservation Area however no such sightings or evidence have surfaced recently.

Minimal management is required for Feral Cats as no activity was captured in this annual survey. However, continual monitoring is required. Invasive Plant and Animal Services deployed cage traps targeting cats over 20 nights between September 2023 and July 2024. If any cat activity is evident in the future, further pest management should be put into place. Refer to Eco Logical baseline report for management solutions (Eco Logical, 2022).

5 Conclusion

Whilst limitations applied to comparison of 2024 pest data to baseline data, it appears that, with the exception of Wild Dogs, pest fauna numbers have reduced across both the Conservation Area and the WRSMCE. This is expected to be due to both management works and climatic conditions unfavourable to the pest species. It is recommended that pest control be continued, with particular focus on Wild Dogs, and in riparian areas and areas around the man-made lake in the south of the Conservation Area. The next rounds of monitoring will take place in autumn and spring 2025.

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Appendix A: List of all species observed in the Conservation Area and WRSMMCE during 2024 Pest Monitoring

Common Name	Scientific Name	Remote Camera ID																												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Australian Brush turkey	*Alectura lathami*	Y										Y	Y	Y	Y		Y											Y	Y	Y	Y
Australian Owlet nightjar	*Aegotheles cristatus*																Y														
Bearded dragon	*Pogona barbata*																														Y
Black rat*	*Rattus rattus**		Y									Y					Y								Y						
Black-striped wallaby	*Macropus dorsalis*					Y	Y			Y		Y						Y									Y			Y	
Brown Honeyeater	*Lichmera indistincta*			Y																											
Brush-tailed phascogale	*Phascogale tapoatafa*	Y	Y	Y		Y	Y	Y		Y	Y		Y				Y	Y	Y	Y	Y			Y							
Brush-tailed possum	*Trichosurus vulpecula*	Y	Y		Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y			Y					Y	Y
Cane toad*	*Rhinella marina**	Y					Y							Y	Y							Y									
Common Dunnart	*Sminthopsis murina*				Y																										
Eastern grey kangaroo	*Macropus giganteus*				Y	Y	Y							Y					Y					Y				Y		Y
Eastern whip bird	*Psophodes olivaceus*									Y													Y								
Eastern water dragon	*Intellagama lesueurii*						Y																								
Eastern yellow robin	*Eopsaltria australis*			Y								Y	Y																		
European hare*	*Lepus europaeus**						Y																		Y						
Grey butcher bird	*Cracticus torquatus*																				Y										
Grey shrikethrush	*Colluricincla harmonica*																						Y								
Lace monitor	*Varanus varius*									Y										Y							Y	Y			
Laughing kookaburra	*Dacelo novaeguineae*	Y			Y	Y					Y			Y		Y			Y		Y		Y	Y				Y		Y	
Long-nosed Bandicoot	*Perameles nasuta*					Y																									
Noisy Miner	*Manorina melanocephala*					Y												Y													
Northern brown bandicoot	*Isoodon macrourus*	Y		Y		Y	Y						Y			Y	Y					Y	Y		Y		Y	Y			
Peaceful Dove	*Geopelia placida*						Y																								
Pied Currawong	*Strepera graculina*										Y					Y															
Red Fox*	*Vulpes vulpes**									Y													Y				Y				
Red-necked wallaby	*Notamacropus rufogriseus*	Y	Y	Y		Y	Y	Y		Y	Y	Y	Y	Y	Y		Y	Y	Y	Y				Y	Y	Y			Y		Y
Rufous Fantail	*Rhipidura rufifrons*																						Y								
Short-beaked echidna	*Tachyglossus aculeatus*									Y				Y											Y						
Spangled Drongo	*Dicrurus bracteatus*	Y																								Y					
Spotted quail-thrush	*Cinclosoma punctatum*																					Y									
Swamp wallaby	*Wallabia bicolor*					Y				Y								Y													
Torresian crow	*Corvus orru*		Y		Y	Y						Y			Y	Y	Y					Y	Y				Y				
Unknown rodent	*N/A*	Y				Y																									
Water Dragon	*Intellagama lesuerii*		Y									Y																			
Wild Dog*	*Canis lupus**	Y						Y		Y	Y							Y									Y				Y
Wild Pig*	*Sus scrofa**	Y	Y											Y																	
Willy Wagtail	*Rhipidura leucophrys*			Y																											
White-throated nightjar	*Eurostopodus mystacalis*																		Y												
Wonga Pigeon	*Leucosarcia melanoleuca*																						Y								
Yellow-footed antechinus	*Antechinus flavipes*		Y	Y					Y		Y	Y													Y			Y		Y	

Appendix C: Bushfire Management Post-Burn Reports

S28 – A OPERATIONAL POST BURN REPORT

BURN NAME	WR_MU_02	**Lot/Plan/s No.** (all approvals obtained) ☒ Yes	1892/SP313517 2/SP339186
Burn No.	WR_MU_02		
Location	White Rock	**Road Segment No.**	NA
LGA	Ipswich	**Proposed Timing**	May - August
Date burn started	20/06/2024	**Time**	10:00
Date burn deemed out	21/06/2024	**Time**	16:30

Incident Controller	Joshua Bull	Fireland Consultancy
	Name	Position

SITUATION - OUTCOMES

Area to be treated	6.5 Ha	Percentage aim	50-70%	Last Fire	unknown
Actual treated area	4 Ha	Percentage	70 %	Severity	Low-Moderate

MISSION – OUTCOMES

Aim & Objectives (Outline the general intent of the proposed burn and the specific objectives. Consider fuel load, fuel structure & mosaic effect)	Reduce fuel hazard by 50-70% across burn area. No engagement of public or private assets. Burn any lantana where possible Minimal impact on community
Outcomes (Outline if the objectives were met, if not why not)	Met. Approximately 70% of the area treated. 1 – 4 M of Scorch in areas treated with reasonable duff left in most places. Unburnt portions remain near W5 – W3 Damper site conditions. No smoke impact on residents or roads
List recommendations (For burn area, may include fire trail works, etc)	Treat weed areas of lantana

EXECUTION – DETAILS

Weather Stats

Date/Time 20/06/2024	Temperature (Degrees C)	Relative Humidity (%)	Wind Speed (km/hr)	Direction	Other
10:00	12	76	5	WNW	
11:00	14	67	5	W	
12:30	16	54	5	W	
13:00	17	54	2	W	
14:30	18	57	4	WNW	
15:00	16	62	5	WSW	
16:00	15	68	6	WSW	
17:00	13	70	7	WSW	

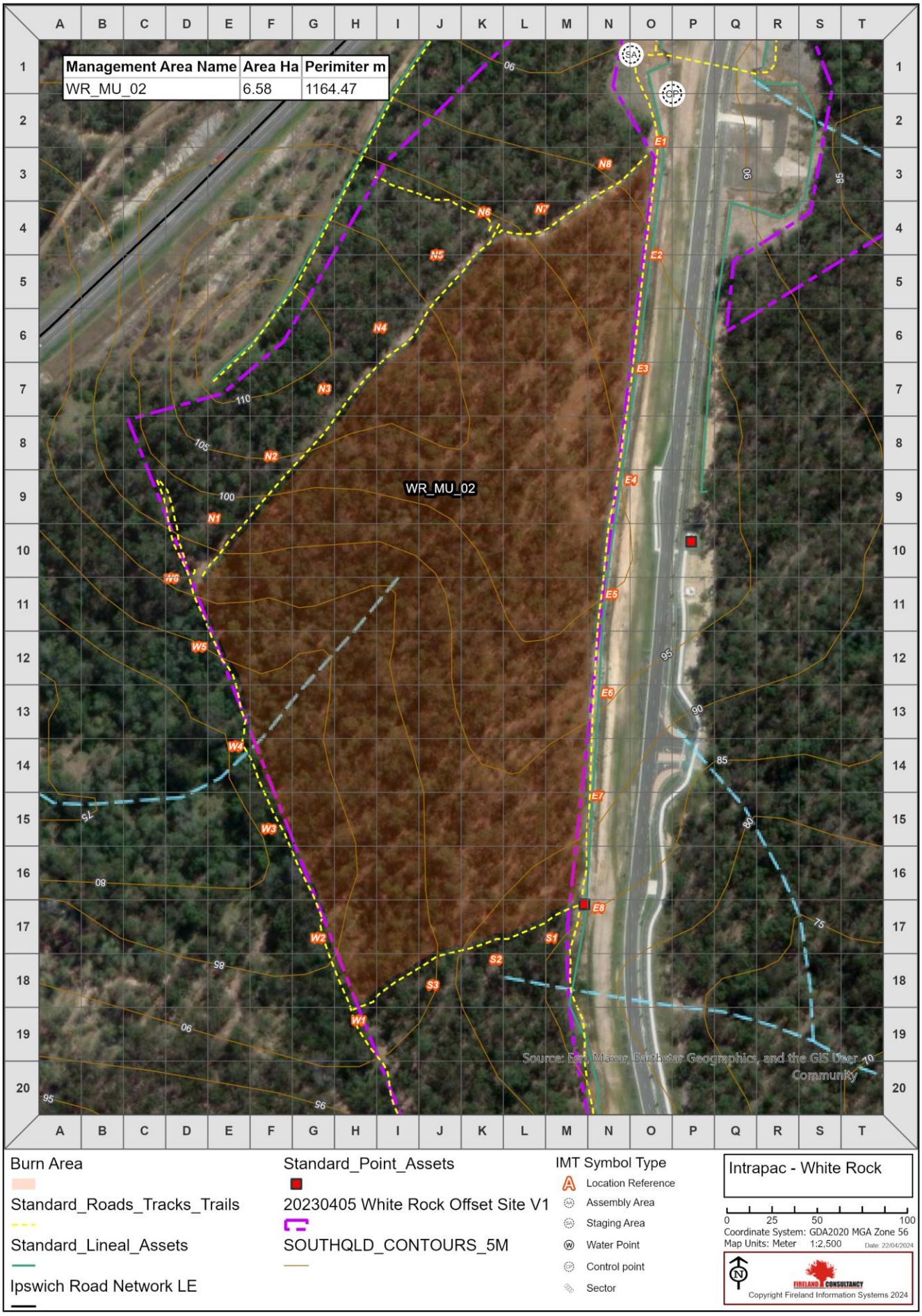
Comments (List any weather conditions that significantly impacted operations)	Significant soil moisture on the southern slopes.			
	Fire danger index	Moderate FBI - <5	Actual KBDI	~82
Ignition used (Describe the ignition)	☒ On ground ignition ☐ Aerial Ignition Various line and spot ignitions to vary intensity, coverage and for containment.			
Implementation Comments	Ignitions started at E8 and then proceeded either direction down to E1 and around to W1. Once back edge was secured then internal ignitions commenced along the eastern side. Ignitions occurred from N8 around to N1 and then onto W1. More internal ignitions occurred once perimeter was secured, Very fine mosaic across the site.			

ADMINISTRATION

Complaints ☒ **No Issues**	Nil.
Infrastructure damage ☒ **No Issues**	Nil.
Impact on road network ☒ **No Issues**	Nil.
Impact on community ☒ **No Issues**	Nil.
Impact on direct residents or stakeholders ☒ **No Issues**	Nil

Other (Include any other comments)	Nil.
SAFETY	
Any incidents	Nil.

Photos


Management Area Name | Area Ha | Perimiter m
WR_MU_02 | 6.58 | 1164.47
WR_MU_02
SA
CP
E1
E2
E3
E4
E5
E6
E7
E8
N1
N2
N3
N4
N5
N6
N7
N8
W1
W2
W3
W4
W5
W6
S1
S2
S3
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Burn Area
Standard_Roads_Tracks_Trails
Standard_Lineal_Assets
Ipswich Road Network LE
Standard_Point_Assets
20230405 White Rock Offset Site V1
SOUTHQLD_CONTOURS_5M
IMT Symbol Type
Location Reference
Assembly Area
Staging Area
Water Point
Control point
Sector
Intrapac - White Rock
0 25 50 100
Coordinate System: GDA2020 MGA Zone 56
Map Units: Meter 1:2,500
Date: 22/04/2024
FIRELAND CONSULTANCY
Copyright Fireland Information Systems 2024

S28 – A OPERATIONAL POST BURN REPORT

BURN NAME	WR_MU_15	**Lot/Plan/s No.** (all approvals obtained) ☒ Yes	174/S31238
Burn No.	WR_MU_15		
Location	White Rock	**Road Segment No.**	NA
LGA	Ipswich	**Proposed Timing**	May - August
Date burn started	25/06/2024	**Time**	11:30
Date burn deemed out	26/06/2024	**Time**	16:00

Incident Controller	Joshua Bull	Fireland Consultancy
	Name	Position

SITUATION - OUTCOMES

Area to be treated	26 Ha	Percentage aim	50-70%	Last Fire	unknown
Actual treated area	13-14 Ha	Percentage	50-55 %	Severity	Low-Moderate

MISSION – OUTCOMES

Aim & Objectives (Outline the general intent of the proposed burn and the specific objectives. Consider fuel load, fuel structure & mosaic effect)	Reduce fuel hazard by 50-70% across burn area. No engagement of public or private assets. Burn any lantana where possible Minimal impact on community
Outcomes (Outline if the objectives were met, if not why not)	Met. Approximately 50-55% of the area treated. 1 – 4 M of Scorch in areas treated with reasonable duff left in most places. Unburnt portions remain within gullies and areas of low fuel continuity e.g weedy areas in particular on the SE side of High point No smoke impact on residents or Roads
List recommendations (For burn area, may include fire trail works, etc)	Treat weed areas of lantana

EXECUTION – DETAILS

Weather Stats

Date/Time 25/06/2024	Temperature (Degrees C)	Relative Humidity (%)	Wind Speed (km/hr)	Direction	Other
10:00	17	71	5	SSE	
11:00	19	62	10	SSE	
12:30	21	58	10	S	
13:00	22	53	10	S	
14:30	23	48	10	SW	
15:00	23	50	12	SW	
16:00	21	53	14	SW	
17:00	18	60	10	SW	
18:30	16	78	5	SW	

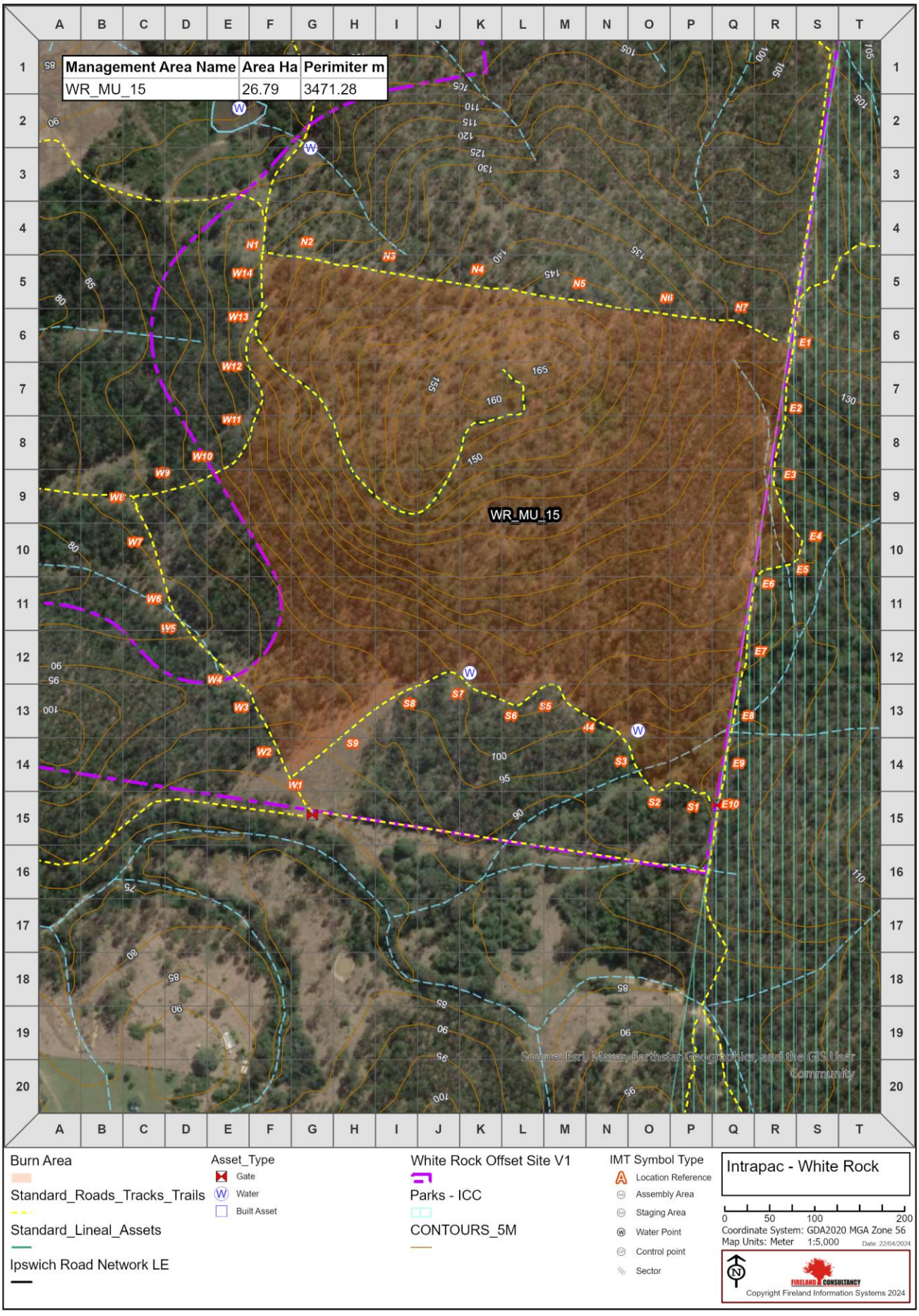
Comments (List any weather conditions that significantly impacted operations)	Significant soil moisture on the southern slopes.			
	Fire danger index	Moderate FBI - <10	Actual KBDI	~85
Ignition used (Describe the ignition)	☒ On ground ignition ☐ Aerial Ignition Various line and spot ignitions to vary intensity, coverage and for containment.			
Implementation Comments	Ignitions started at E1 and then proceeded either direction down to N1 and around to E4. Once back edge was secured then internal ignitions commenced around the high point. Ignitions occurred from N1 around to W8 and then onto W1. More internal ignitions occurred once perimeter was secured, Southerly aspect slopes burn more patchy but anything on a northerly aspect burnt low to moderate intensity. Very fine Mosaic on southern slopes unable to map accurately.			

ADMINISTRATION

Complaints ☒ **No Issues**	Nil.
Infrastructure damage ☒ **No Issues**	Nil.
Impact on road network ☒ **No Issues**	Nil.
Impact on community ☒ **No Issues**	Nil.
Impact on direct residents or stakeholders	Nil

☒ **No Issues**	
Other (Include any other comments)	Nil.
SAFETY	
Any incidents	Nil.

Photos


Management Area Name | Area Ha | Perimiter m
WR_MU_15 | 26.79 | 3471.28
WR_MU_15
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Burn Area
Standard_Roads_Tracks_Trails
Standard_Lineal_Assets
Ipswich Road Network LE
Asset_Type
Gate
Water
Built Asset
White Rock Offset Site V1
Parks - ICC
CONTOURS_5M
IMT Symbol Type
Location Reference
Assembly Area
Staging Area
Water Point
Control point
Sector
Intrapac - White Rock
0 50 100 200
Coordinate System: GDA2020 MGA Zone 56
Map Units: Meter 1:5,000
Date: 22/04/2024
Copyright Fireland Information Systems 2024

Appendix D: Pest Management Progress Report

INVASIVE PLANT & ANIMAL SERVICES

Address: Stanthorpe QLD 4380
Phone (Mob): Clynton Spencer 0411 412 800
Email pestservices@y7mail.com
ABN: 4079 9187 498

Progress Report

CAMP Rehabilitation Projects

White Rock

July 2024

(Aerial drone shot CAMP Feb 2024)

1. Introduction

Invasive Plant and Animal Services (INVPAS) commenced mid September 2023 for on ground monitoring and control operations of the White Rock CAMP Rehabilitation Project.

This progress report provides a summary of Pest Management activities carried out up to the month of June 2024.

Start Date:
3rd Week September 2023

Range of Operations
5 days a month on ground control undertaken since September 2023
Total days ex June 2024 of 40.

- 9 remote cameras at peak active, static now at 4 cameras
- 32 soft jaw trap nights (Foxes/Wild Dogs)
- 20 cage trap nights (Feral cats)
- 28 DK9 manufactured Wild Dog 1080 baits deployed
- 24 Fresh 1080 meat baits deployed (Wild Dogs / Foxes)
- 30 nights prefeed for feral pigs (corn), 3 sites initially, now 1 site only
- 5 x 1080 warning signs / trapping signs deployed
- 8 x CPE (Canid Pest Ejectors deployed)

2. Scope

As per Ecological Australia's White Rock Conservation Area Pest Management Plan version 2, dated 25 January 2021: Section 4.

Aligning with the EPBC Act conditions of approval, the aim of fox, feral cat and wild dog management in the Conservation Area is to demonstrate:

- no increase in these species against baseline within the first five years, or in the event of evidence of an increase in pests in the general area, as measured at reference sites within the White Rock - Spring Mountain Conservation Estate, reduction in pests relative to these reference sites, measured annually; and
- maintenance of a reduction in pests relative to baseline after the fifth year and until the end of the 21st year. Or in the event of evidence of an increase in pests in the general area, a reduction in pest numbers relative to reference sites. Reference sites are to be located within the White Rock - Spring Mountain Conservation Estate, and changes in pest numbers are to be measured annually.

These aims support the overall purpose of managing the Conservation Area: improving the koala and GHFF habitat value and overall bushland health.

Autumn 2021 Baseline Report:

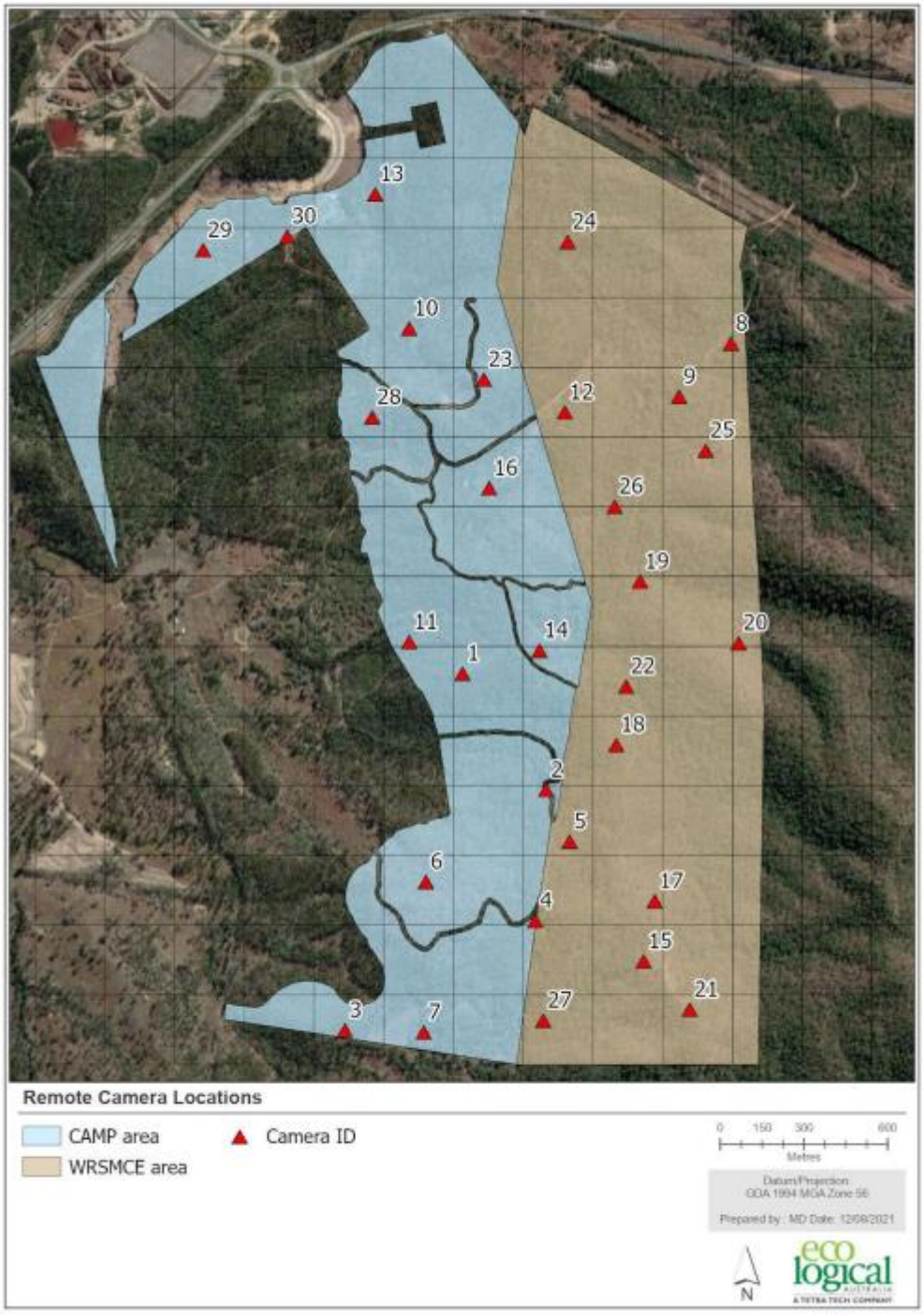


Figure 1. Camera locations

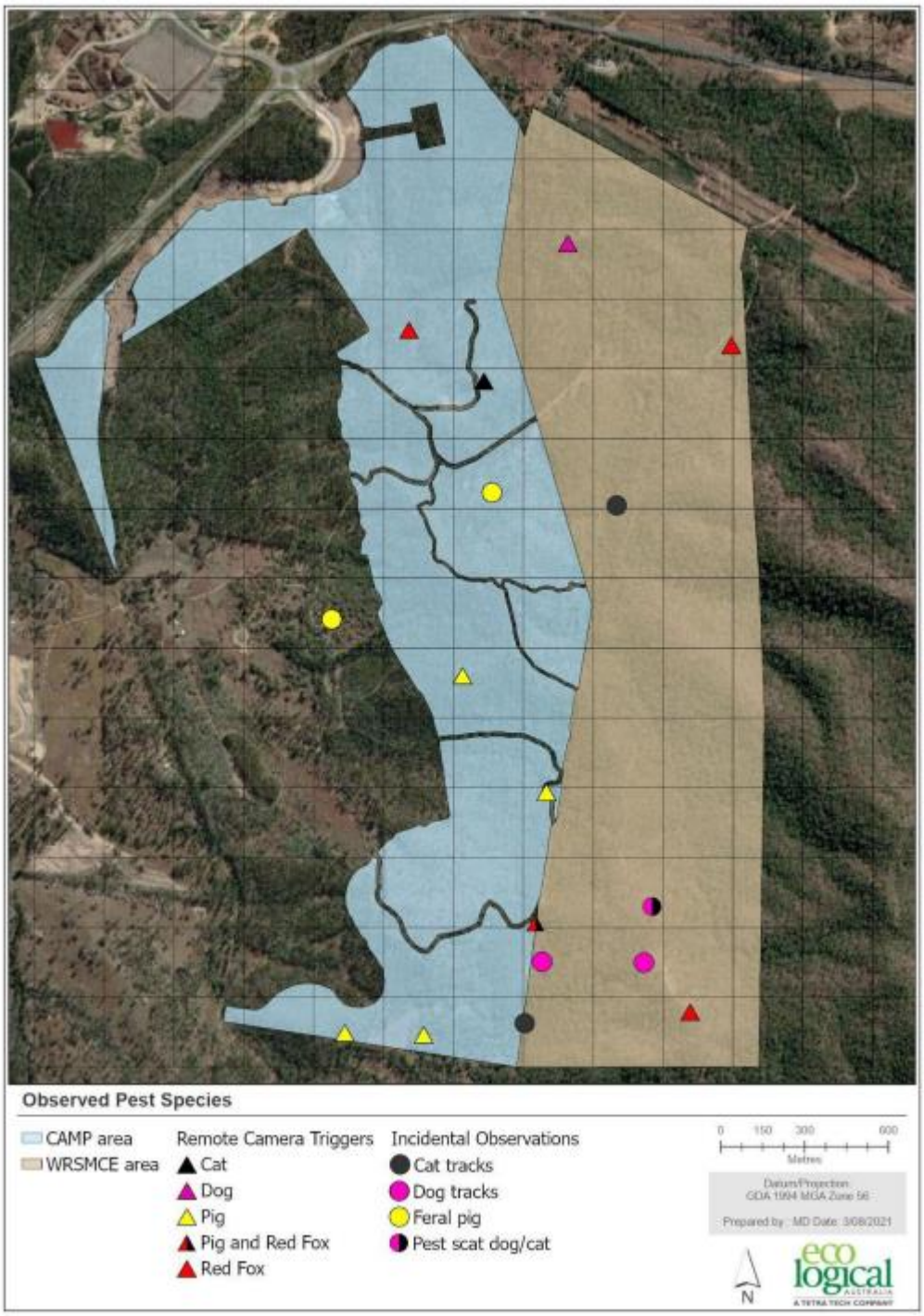


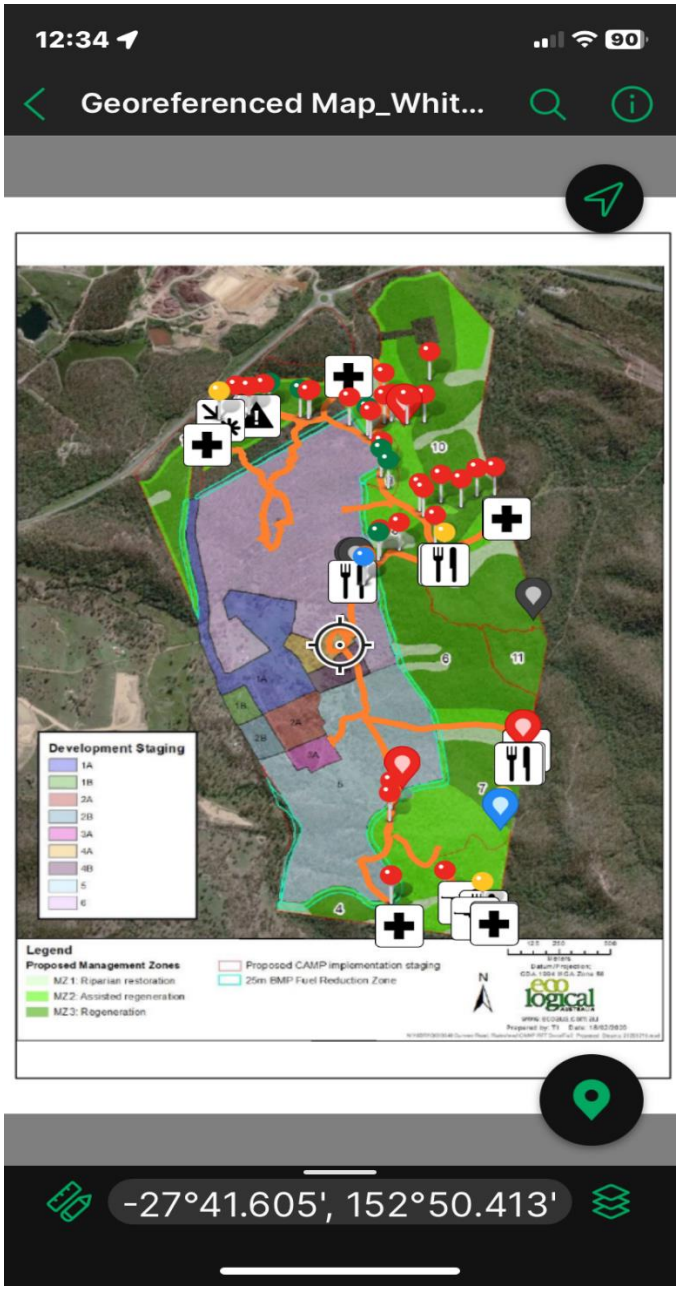
Figure 2. Observed pest species and incidental observations

3. Geo spatial Information

Collation of control tool GPS points have been collated by Avenza maps.

KMZ file attached separately in a file extension.

Note: Data symbology is not represented by any predetermined data set, only what is deemed operational efficient by INVPAS on site for recording purposes.



4. Pest Management to Date

Given the extremities of seasonal variances (OCT-NOV) very dry, increased success with manufactured 1080 bait uptake, and success via thermal firearm watch over on dams as water sources dried up and man made (dams) where visited by feral pigs at nighttime.

Seasonal switch early 2024, increased food sources (rain), assumption that animals dispersed into other more food abundant areas therefore limited/ scattered activity on remote cameras and soil plots, but a definite increase in solo boar activity at pre - feeding sites x 2 in this period and still is continuing to date.

Data capture as far:

6 feral pigs shot
1 Wild Dog shot
28 x DK9 baits deployed – 19 taken
24 x 1080 Meat baits deployed – 12 taken
8 x CPE's deployed, 3 activated
No cats seen, trapped, recorded on camera or shot.

Note: Extensive pre-feeding corn program and remote camera program has occurred on feral pigs on two sites.
July/August will switch to 1080 poisoned corn to reduce pig populations through very targeted program.

Below, a collage of photos scattered across the site. These photos are GPS referenced on the Avenza file extension.


DANGER
CONSTRUCTION
DO NOT ENTER


14 C 30 inHg
INVASIVE01
04/25/2024 06:51AM


22 C 30 inHg
INVASIVE03
10/30/2023 06:53PM


23 C 29.57 inHg
INVASIVE07
01/15/2024 06:38PM


02/21/2024 08:53PM

5. Non-compliance incidents

In the adoption phase of implementing the PMP, INVPAS implemented the normal 5 day working week seemed an operational advantage to be onsite, to avoid the trespassers / potential interactions issues on weekends.

But, regardless of the day or season, there has been and continues too be unauthorised access even though areas that are well sign posted and warning of firearms and poisons in use.

This unfortunately is becoming a norm across the many sites/ contracts that INVPAS undertakes, and does induce heightened parameters of risk, especially when dealing with 1080 poison and management of foot hold traps. With this being the case these control tools (1080 baits and traps) are strategically deployed in areas of pest animal activity but also trying to reduce non target (both animal and human) interaction. Many motorbikes randomly are on site at any one time with every visit so far.


24 C 30 inHg
INVASIVE02
30/01/2023 09:06AM


28 C 29.45 inHg
INVASIVE24
12/20/2023 05:40PM

6. Delivery Issues

Both budget, timeframes and operational on ground outcomes are on track. Notably, the Wild Dog nomadic patterns are typical of Wild dogs traversing and surviving in peri urban environments.

With this being said the unison of data capture of remote cameras by both INVPAS and Bower ecology might reveal secrets where Wild Dogs and Foxes may / may not be utilising the landscape.

This could inform more strategic actions (possible change of areas) where controls tools (baits and traps) could be deployed.

7. Upcoming Work

Scheduled increase in 1080 poison deployment for feral pigs will be initiated in July /Aug after strategic pre feed programs, and also Feral fox foot hold trapping program as foxes traverse the landscape using vocalisation and scent post marking as their breeding season is active.

Pest Fauna Monitoring Report – Aug – Dec 2024

1. Introduction Invasive Plant and Animal Services (INVPAS) has continued on-ground monitoring and control operations for the White Rock CAMP Rehabilitation Project. This report summarizes pest management activities undertaken up to Aug -Dec 2024

2. General Updates

- Wild dog activity remains high on the Northern Boundary, as evidenced by photographic records.
- Fox prints were observed near the Southern Dam, particularly around the Southern Kill Pit Oct and Dec 2024)
- An unidentified rubbing mark was found on a tree (Oct 2024) While feral deer are present in low numbers in the area, no associated wallow was identified.
- Deployed 14 DK9 1080 baits across both monitoring periods.
- Replaced 3 stolen or removed 1080 Warning and Pest Operation signs.
- Deployed 4 wild dog traps (Dec and Oct visit 2024)
- Initial feral pig activity was noted at pre-feed sites, but recent high rainfall and abundant food sources may have led to temporary relocation.
- Signs of lantana poisoning were observed in cattle within the yards. The property owner was consulted regarding deceased cattle locations.
- Assistance was sought from Tim (Intrapac) regarding unburied deceased carcasses. Dog prints were identified in mud near carcasses, close to the Intrapac office. Suspected domestic dogs, but without remote cameras, confirmation is difficult.
- Giant Rats Tail grass levels were notably high along tracks, and care was taken to avoid spreading weed seeds.

3. Control Efforts & Monitoring Results (Totals Aug – Dec 2024)

- 14 DK9 1080 baits were deployed.
- 3 1080 Warning and Pest Operation signs were replaced.
- 16 wild dog traps were deployed.
- 6 feral pigs have been culled to date.
- 1 wild dog (shot) was culled.
- 15 remote cameras deployed (different areas within 6 months)
- 2 feral foxes (Shot)
- Of the total 42 DK9 baits deployed, 23 were taken.
- 24 fresh 1080 meat baits were deployed, 12 of which were taken.
- 8 Canid Pest Ejectors (CPEs) were deployed, with 3 activated.
- No feral cats have been observed, trapped, or recorded via cameras.

4. Challenges & Observations

- Seasonal changes, particularly increased rainfall, have impacted pest movements and bait uptake.
- Increased feral pig dispersal due to improved natural food sources.
- Unauthorized access remains an issue despite clear signage, with ongoing concerns over trespassing motorbikes.

5. Upcoming Actions

- Increase in 1080 poisoned corn deployment for feral pigs scheduled for July/August following a strategic pre-feed program.
- Intensification of feral fox foot-hold trapping during breeding season.
- Enhanced monitoring and potential realignment of control tool deployment areas, in collaboration with remote camera data from INVPAS and Bower Ecology.
- Howling techniques deployed in Feb March to control Wild Dogs pre-emptive breeding season strategy.

Conclusion Pest management efforts remain on track, with notable reductions in targeted species. However, seasonal variations and unauthorized site access continue to pose challenges. Further adjustments to control measures will be informed by ongoing monitoring and data collection.


17 C 29.69 inHg
INVASIVE24
10/08/2024 05:31AM

Appendix E: Vegetation Management Progress Report

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Progress Report

CAMP Rehabilitation Projects

White Rock

Quarter 2 - 2024

1 Introduction

In February 2021, Evolve Environmental Solutions (Evolve) was engaged to undertake maintenance of the White Rock CAMP Rehabilitation Project.

On-ground works commenced in July 2021. A total area of 2,490,000m2 is required to be maintained. This is split into 3 zones, as per Image 1 - Proposed CAMP Implementation Staging from RFT.

MZ1: Riparian restoration
MZ2: Assisted regeneration
MZ3: Regeneration

This progress report provides a summary of Rehabilitation activities carried out during the months of Quarter 2, 2024: April, May, June

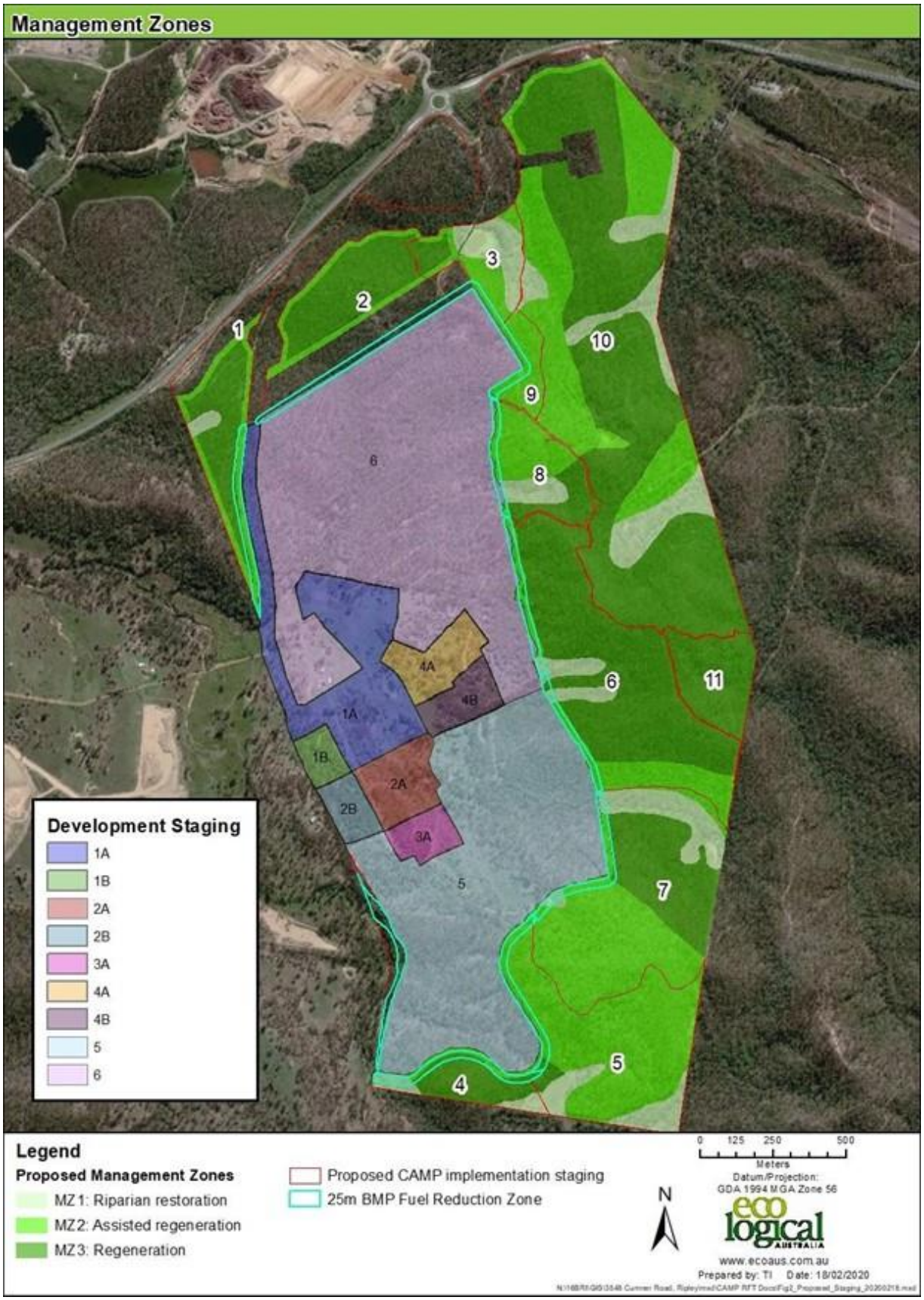

Figure 1: Proposed CAMP Implementation Staging from RFT

A total area of 332,500m2 of Secondary weeding work in Zones 1, 2 and 3 were completed over this quarter (April, May and June).

Primary Maintenance Conducted	April	May	June
Zone 1	-	Not claimed	-
Zone 2	-	Not claimed	-
Zone 3	-	Not claimed	-

Secondary/Follow up Maintenance Conducted	April	May	June
Zone 1	2,500m2	Not claimed	5,000m2
Zone 2	10,000m2	Not claimed	55,000m2
Zone 3	15,000m2	Not claimed	245,000m2

Daily Record sheets and claim summaries of the works carried out have been filed and submitted.

Below is a map of extracted data from these work reports during the months of April, May and June.

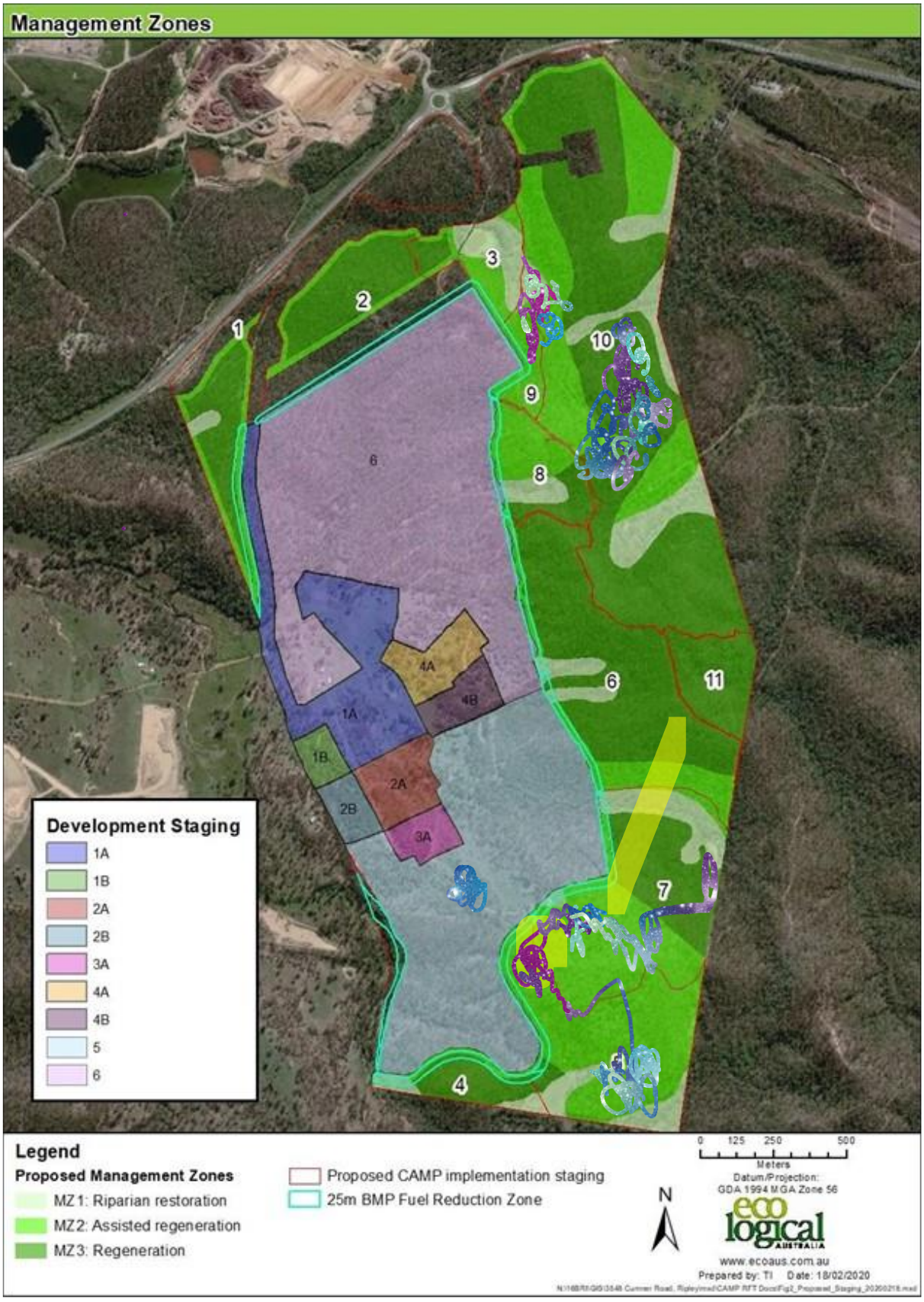

Figure 2: Works carried out this quarter as per submitted Inspection Evidence reports and transposing data onto the Proposed CAMP Implementation Staging from RFT

2 Scope of works progress

As per Evolve's 2024 Proposed Works Report:

Month	Proposed Works	% Completed	Unfinished work to be completed in (Month)
April	Maintenance works to areas 5, 6 and 7	-	2024
May	Maintenance works to areas 5 and 7 and 10	-	2024
June	Maintenance works to areas 3 and 10	-	2024

Evolve also continued Pest Management works in the Quarter, which weren't noted in the original 2023 Works Forecast (first noted in Variation Works section of August Quarter report, 2023). As per attached report from Invasive Plant & Animal services.

Notes: On the 7/5/54 Whilst driving we went past two people in high vis, they stopped us to ask where we had sprayed because they were conducting a protected plant species survey. This happened on the corner of areas 7 and 5 (near the old wooden fence line with the 2 large wooden posts)

No further burn works have been carried out.

3 Non-compliance incidents

Proposed planting works to parts of areas 5 and 10 did not take place due to both the extreme heat, and concerns about the proposed locations' suitability for Melaleuca *irbyana* success.

4 Delivery Issues

No delivery issues to report within Inspection Evidence reports submitted.

5 Upcoming Work

As per Evolve's 2024 Proposed Works Report:

TBC.

6 Table 1 Budget Tracking

Evolve Environmental Solutions Pty - CAMP Scope - Progress Claim as at 13/04/20223

Item	Claims									Total of all claims to date	AGREED BUDGET Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Percent completion (1st year budget)	TOTAL ORIGINAL CONTRACT BUDGET Agreed contract amount	Percent completion
Contracted items	EVO 000131 31/12/21	EVO 0522127 31/5/22	EVO 0922127 30/9/22	31/01/2023	8/03/2023	30/03/2023	2/05/2023	5/06/2023	13/07/2023														
1. Preliminaries	$ 3,397.50	$ 2,038.50	$ -			$ 679.50	$ 679.50			$ 6,795.00	$ 6,795.00										50%	$ 6,795.00	100%
2. Translocation of Habitat	$ -									$ -	$ 10,850.00	$ 5,425.00									0%	$ 16,275.00	0%
3. Temporary Bunting Fencing	$ -									$ -	$ 62,424.00										0%	$ 62,424.00	0%
4. Signage	$ -									$ -	$ 17,946.90										0%	$ 17,946.90	0%
5. Access Infrastructure Construction	$ -									$ -	$ 1,500.00										0%	$ 1,500.00	0%
6. Weed Management Zone 1	$ 25,200.00	$ 21,000.00	$ 7,000.00		$ 2,800.00	$ 5,600.00	$ 8,400.00	$ 4,200.00	$ 4,200.00	$ 78,400.00	$ 84,000.00										30%	$ 84,000.00	93%
7. Weed Management Zone 2	$ 4,500.00	$ 4,500.00	$ 500.00	$ 19,000.00	$ 6,500.00	$ 5,000.00	$ 5,000.00	$ 5,000.00		$ 50,000.00	$ 91,000.00										5%	$ 91,000.00	55%
8. Weed Management Zone 3	$ -						$ 2,000.00	$ 2,000.00		$ 4,000.00	$ 51,200.00										0%	$ 51,200.00	8%
9. Vegetation Thinning	$ -									$ -	$ 7,050.00										0%	$ 7,050.00	0%
10. Landscape Maintenance Zone 1	$ -									$ -	$ -	$ 80,360.00	$ 60,360.00	$ 50,460.00	$ 31,800.00	$ 19,270.00	$ 11,786.00	$ 11,786.00	$ 6,190.00	$ 6,375.70	0%	$ 278,387.70	0%
11. Landscape Maintennce Zone 2	$ -									$ -	$ -	$ 80,208.00	$ 60,204.00	$ 40,320.00	$ 20,432.00	$ 19,125.00	$ 15,384.00	$ 11,640.00	$ 6,050.00	$ 6,231.50	0%	$ 259,594.50	0%
12. Landscape Maintenance Zone 3	$ -									$ -	$ -	$ 50,172.00	$ 37,656.00	$ 37,656.00	$ 18,980.00	$ 9,640.00	$ 9,640.00	$ 9,929.20	$ 10,227.08	$ 10,533.89	0%	$ 194,434.17	0%
13. Bushfire Track Maintenance - Drott	$ -									$ -	$ 11,880.00										0%	$ 11,880.00	0%
14. Bushfire Track Maintenance - Bobcat	$ -									$ -	$ -	$ 8,785.00			$ 8,785.00			$ 9,048.55			0%	$ 26,618.55	0%
15. Supply/instal Native Plants	$ -									$ -												$ -	
16. Seed Collection	$ -									$ -												$ -	
17. Purchase Reveg. Seed Mix	$ -									$ -												$ -	
18. Supply/Spread Forest Mulch	$ -									$ -												$ -	
19. Erosion Control Matting	$ -									$ -												$ -	
20. Supply/Lay Gravel Mulch	$ -									$ -												$ -	
21. Gravel Drainage Swale	$ -									$ -												$ -	
22. Install and GPS Mark Photographic Monitoring Points	$ -									$ -												$ -	
23. Install Vegetation Survey Transects	$ -									$ -												$ -	
TOTAL	$ 33,097.50	$ 27,538.50	$ 7,500.00	$ 19,000.00	$ 9,300.00	$ 11,279.50	$ 16,079.50	$ 11,200.00	$ 4,200.00	$ 139,195.00	$ 344,645.90	$ 224,950.00	$ 158,220.00	$ 128,436.00	$ 79,997.00	$ 48,035.00	$ 36,810.00	$ 42,403.75	$ 22,467.08	$ 23,141.09	40%	$ 1,109,105.82	13%

Variation Items										Total of all variation claims to date													
24. Bushfire Block 10 - Track works as requested	$ -	$ -	$ 7,665.00							$ 7,665.00	$ -	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	0%	$ 91,980.00	8%
25. Bushfire Block 11 - Track works	$ -	$ -	$ 3,913.00							$ 3,913.00	$ -	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	0%	$ 70,434.00	6%
26. Bushfire Block 11 - Pre-burn requirements	$ -	$ -								$ -	$ -	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	0%	$ 40,432.50	0%
27. Bushfire Block 11 - Conducting Prescribed Burn	$ -	$ -								$ -	$ -	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	0%	$ 186,921.00	0%
28. Bushfire Block 11 - Post Burn Assessment	$ -	$ -								$ -	$ -	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	0%	$ 15,525.00	0%
29. Bushfire Block 12 - Track works	$ -	$ -	$ 2,157.75							$ 2,157.75	$ -	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	0%	$ 77,679.00	3%
30. Bushfire Block 12 - Pre-burn requirements	$ -	$ -								$ -	$ -	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	0%	$ 36,378.00	0%
31. Bushfire Block 12 - Conducting Prescribed Burn	$ -	$ -								$ -	$ -	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	0%	$ 199,392.75	0%
32. Bushfire Block 12 - Post Burn Assessment	$ -	$ -								$ -	$ -	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	0%	$ 15,525.00	0%
33. Bushfire Block 14 - Track works	$ -	$ -	$ 12,752.70							$ 12,752.70	$ -	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	0%	$ 121,680.00	10%
34. Bushfire Block 14 - Pre-burn requirements	$ -	$ -								$ -	$ -	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	0%	$ 57,307.50	0%
35. Bushfire Block 14 - Conducting Prescribed Burn	$ -	$ -								$ -	$ -	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	0%	$ 253,885.50	0%
36. Bushfire Block 14 - Post Burn Assessment	$ -	$ -								$ -	$ -	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	0%	$ 24,840.00	0%
	$ -	$ -								$ -	$ -	$ -									0%	$ -	#DIV/0!
	$ -	$ -								$ -	$ -	$ -									0%	$ -	#DIV/0!
TOTAL VARIATION AMOUNT	$ -	$ -	$ 26,488.45	$ -	$ -	$ -	$ -	$ -	$ -	$ 26,488.45	$ -	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ -	$ 1,191,980.25	2%

Retention										Total retention of all claims	YEAR 1 TOTAL RETENTION Year 1 total retention amount	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Percent of total first year retention	TOTAL CONTRACT RETENTION Agreed total contract retention amount	Percent of total contract retention
1. Retention Held (5% of contract sum, with 10% in any one claim)	$ 3,309.75	$ 2,753.85	$ 3,398.85	$ 1,900.00	$ 930.00	$ 1,127.95	$ 1,607.95	$ 1,120.00	$ 420.00	$ 16,568.35	$ 18,556.72										18%	$ 115,054.30	2.88%
2. Retention Released (upon inspection and acceptance from superintendent at each milestone)	$ -									$ -													
TOTAL Retention Held	$ 3,309.75	$ 2,753.85	$ 3,398.85	$ 1,900.00	$ 930.00	$ 1,127.95	$ 1,607.95	$ 1,120.00	$ 420.00	$ 16,568.35	$ 18,556.72	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	18%	$ 115,054.30	2.88%

Total Claim										Total of all claims	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Percent completion (1st year budget)	Agreed contract amount	Percent completion
CLAIM TOTALS (EX GST)	$ 29,787.75	$ 24,784.65	$ 30,589.61	$ 17,100.00	$ 8,370.00	$ 10,151.55	$ 14,471.55	$ 10,080.00	$ 3,780.00	$ 149,115.11	$ 371,134.35										40%	$ 2,301,086.07	6%
GST (10%)	$ 2,978.78	$ 2,478.47	$ 3,058.96	$ 1,710.00	$ 837.00	$ 1,015.16	$ 1,447.16	$ 1,008.00	$ 378.00	$ 14,911.51	$ 37,113.44										40%	$ 230,108.61	6%
CLAIM TOTALS PAYABLE (INC. GST)	$ 32,766.53	$ 27,263.12	$ 33,648.57	$ 18,810.00	$ 9,207.00	$ 11,166.71	$ 15,918.71	$ 11,088.00	$ 4,158.00	$ 164,026.62	$ 408,247.79	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	40%	$ 2,531,194.68	6%

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Progress Report

CAMP Rehabilitation Projects

White Rock

Quarter 3 - 2024

1 Introduction

In February 2021, Evolve Environmental Solutions (Evolve) was engaged to undertake maintenance of the White Rock CAMP Rehabilitation Project.

On-ground works commenced in July 2021. A total area of 2,490,000m2 is required to be maintained. This is split into 3 zones, as per Image 1 - Proposed CAMP Implementation Staging from RFT.

MZ1: Riparian restoration
MZ2: Assisted regeneration
MZ3: Regeneration

This progress report provides a summary of Rehabilitation activities carried out during the months of Quarter 3, 2024: July, August, September

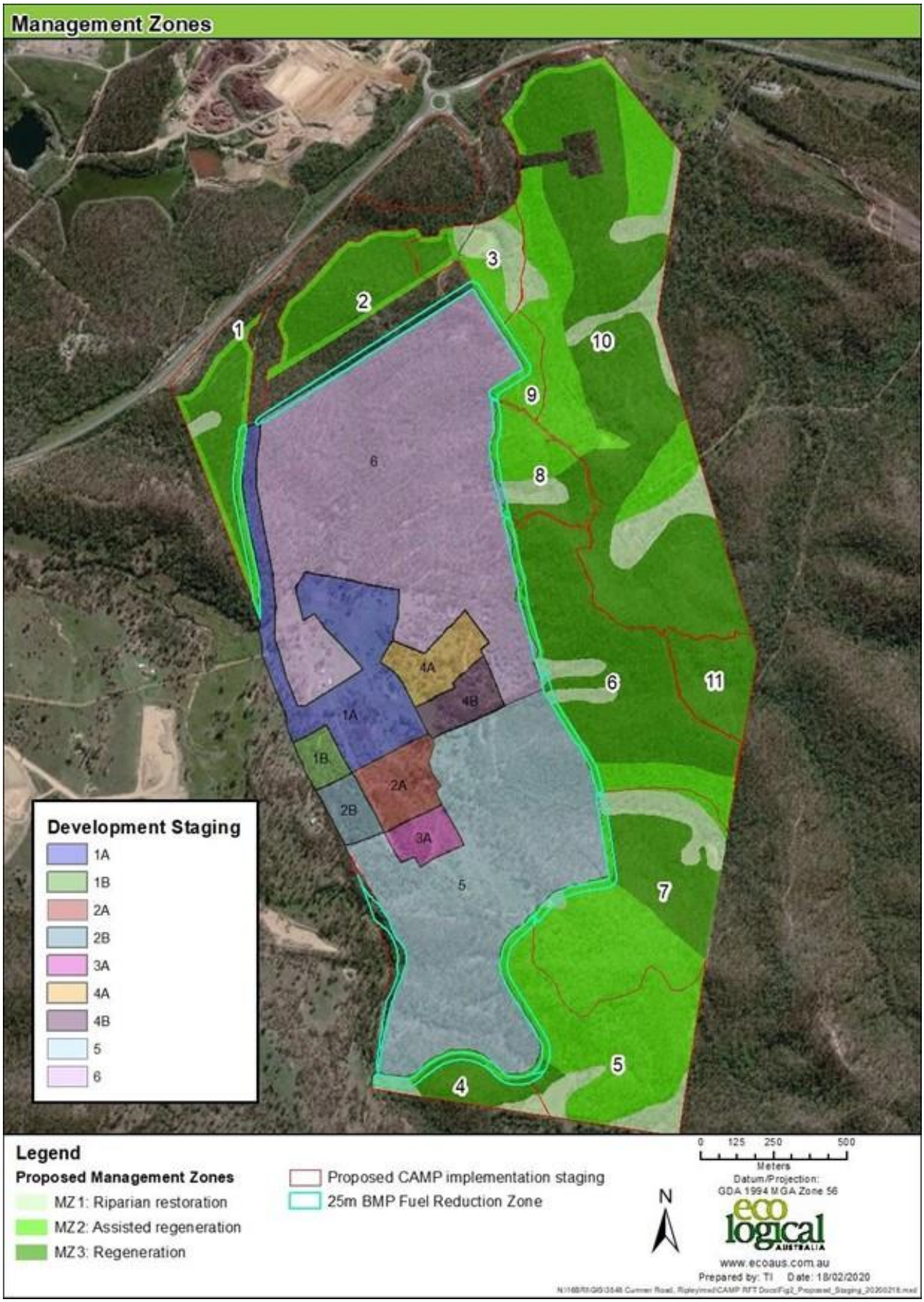

Figure 1: Proposed CAMP Implementation Staging from RFT

A total area of 106,000m2 of Primary and a total area of 410,000m2 of Secondary weeding work in Zones 1, 2 and 3 were completed over this quarter (July, August, September).

Primary Maintenance Conducted	July	Aug	Sep
Zone 1	1000m2	-	-
Zone 2	5000m2	-	-
Zone 3	50,000m2	50,000m2	-

Secondary/Follow up Maintenance Conducted	July	Aug	Sep
Zone 1	10,000m2	-	-
Zone 2	65,000m2	25,000m2	-
Zone 3	260,000m2	5,000m2	45,000m2

Daily Record sheets and claim summaries of the works carried out have been filed and submitted.

Below is a map of extracted data from these work reports during the months of July, August, September.

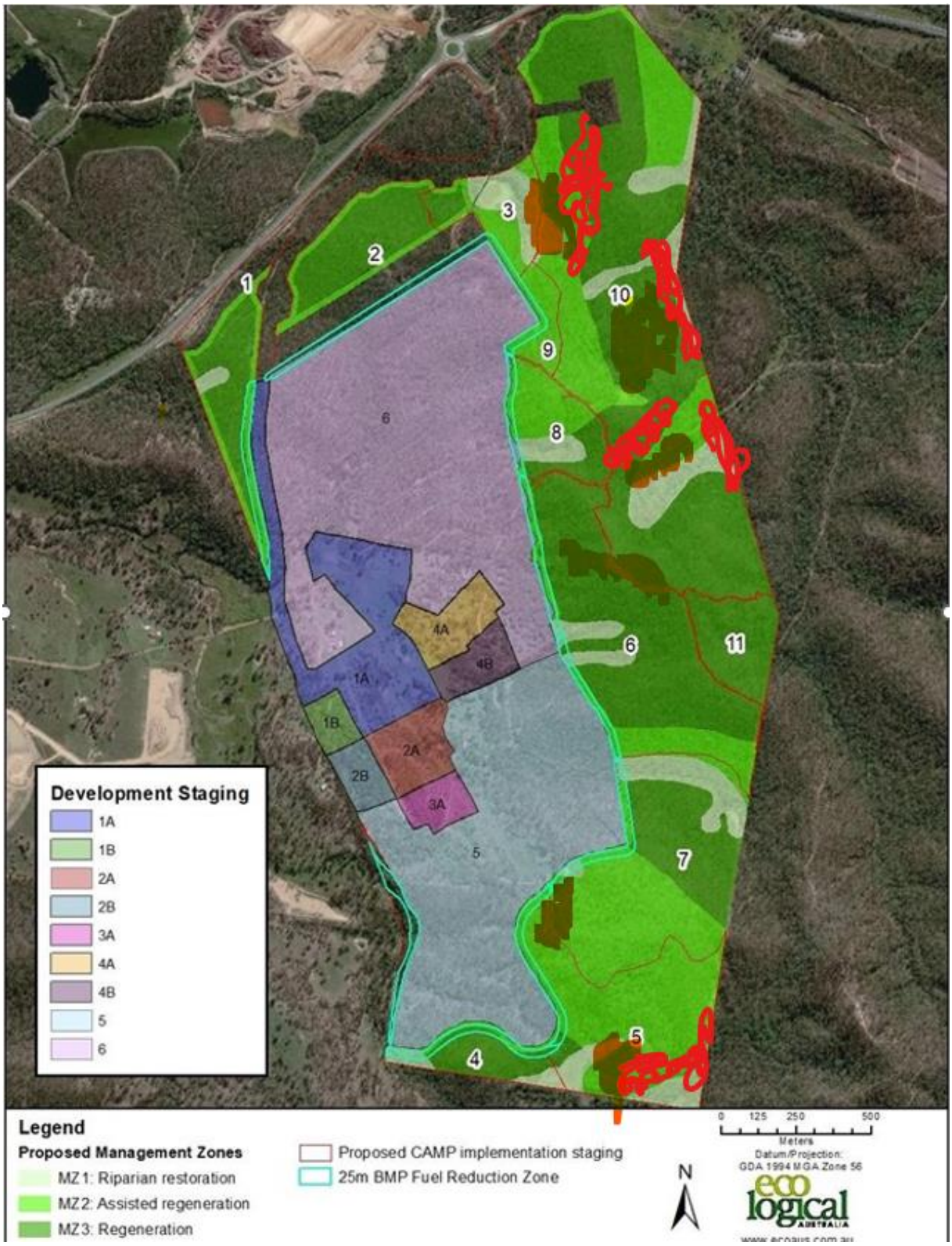

Figure 2: Works carried out this quarter as per submitted Inspection Evidence reports and transposing data onto the Proposed CAMP Implementation Staging from RFT

2 Scope of works progress

As per Evolve's 2024 Proposed Works Report:

Month	Proposed Works	% Completed	Unfinished work to be completed in (Month)
July	Maintenance works to areas 9,10 and 11	-	2024
	Pest management		
August	Maintenance works to areas 5 and 10	-	2024
	Pest management		
September	Maintenance works to areas 3 and 10	-	2024
	Planting Melaleuca irbyana area		

No further burn works have been carried out.

3 Non-compliance incidents

Proposed planting works to parts of areas 5 and 10 did not take place due to concerns about the proposed locations' suitability for Melaleuca *irbyana* success.

4 Delivery Issues

No delivery issues to report within Inspection Evidence reports submitted.

5 Upcoming Work

As per Evolve's 2024 Proposed Works Report:

TBC.

6 Table 1 Budget Tracking

Evolve Environmental Solutions Pty - CAMP Scope - Progress Claim as at 13/04/20223

Item	Claims									Total of all claims to date	AGREED BUDGET Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Percent completion (1st year budget)	TOTAL ORIGINAL CONTRACT BUDGET Agreed contract amount	Percent completion
Contracted items	EVO 000131 31/12/21	EVO 0522127 31/5/22	EVO 0922127 30/9/22	31/01/2023	8/03/2023	30/03/2023	2/05/2023	5/06/2023	13/07/2023														
1. Preliminaries	$ 3,397.50	$ 2,038.50	$ -			$ 679.50	$ 679.50			$ 6,795.00	$ 6,795.00										50%	$ 6,795.00	100%
2. Translocation of Habitat	$ -									$ -	$ 10,850.00	$ 5,425.00									0%	$ 16,275.00	0%
3. Temporary Bunting Fencing	$ -									$ -	$ 62,424.00										0%	$ 62,424.00	0%
4. Signage	$ -									$ -	$ 17,946.90										0%	$ 17,946.90	0%
5. Access Infrastructure Construction	$ -									$ -	$ 1,500.00										0%	$ 1,500.00	0%
6. Weed Management Zone 1	$ 25,200.00	$ 21,000.00	$ 7,000.00		$ 2,800.00	$ 5,600.00	$ 8,400.00	$ 4,200.00	$ 4,200.00	$ 78,400.00	$ 84,000.00										30%	$ 84,000.00	93%
7. Weed Management Zone 2	$ 4,500.00	$ 4,500.00	$ 500.00	$ 19,000.00	$ 6,500.00	$ 5,000.00	$ 5,000.00	$ 5,000.00		$ 50,000.00	$ 91,000.00										5%	$ 91,000.00	55%
8. Weed Management Zone 3	$ -						$ 2,000.00	$ 2,000.00		$ 4,000.00	$ 51,200.00										0%	$ 51,200.00	8%
9. Vegetation Thinning	$ -									$ -	$ 7,050.00										0%	$ 7,050.00	0%
10. Landscape Maintenance Zone 1	$ -									$ -	$ -	$ 80,360.00	$ 60,360.00	$ 50,460.00	$ 31,800.00	$ 19,270.00	$ 11,786.00	$ 11,786.00	$ 6,190.00	$ 6,375.70	0%	$ 278,387.70	0%
11. Landscape Maintennce Zone 2	$ -									$ -	$ -	$ 80,208.00	$ 60,204.00	$ 40,320.00	$ 20,432.00	$ 19,125.00	$ 15,384.00	$ 11,640.00	$ 6,050.00	$ 6,231.50	0%	$ 259,594.50	0%
12. Landscape Maintenance Zone 3	$ -									$ -	$ -	$ 50,172.00	$ 37,656.00	$ 37,656.00	$ 18,980.00	$ 9,640.00	$ 9,640.00	$ 9,929.20	$ 10,227.08	$ 10,533.89	0%	$ 194,434.17	0%
13. Bushfire Track Maintenance - Drott	$ -									$ -	$ 11,880.00										0%	$ 11,880.00	0%
14. Bushfire Track Maintenance - Bobcat	$ -									$ -	$ -	$ 8,785.00			$ 8,785.00			$ 9,048.55			0%	$ 26,618.55	0%
15. Supply/instal Native Plants	$ -									$ -												$ -	
16. Seed Collection	$ -									$ -												$ -	
17. Purchase Reveg. Seed Mix	$ -									$ -												$ -	
18. Supply/Spread Forest Mulch	$ -									$ -												$ -	
19. Erosion Control Matting	$ -									$ -												$ -	
20. Supply/Lay Gravel Mulch	$ -									$ -												$ -	
21. Gravel Drainage Swale	$ -									$ -												$ -	
22. Install and GPS Mark Photographic Monitoring Points	$ -									$ -												$ -	
23. Install Vegetation Survey Transects	$ -									$ -												$ -	
TOTAL	$ 33,097.50	$ 27,538.50	$ 7,500.00	$ 19,000.00	$ 9,300.00	$ 11,279.50	$ 16,079.50	$ 11,200.00	$ 4,200.00	$ 139,195.00	$ 344,645.90	$ 224,950.00	$ 158,220.00	$ 128,436.00	$ 79,997.00	$ 48,035.00	$ 36,810.00	$ 42,403.75	$ 22,467.08	$ 23,141.09	40%	$ 1,109,105.82	13%

Variation Items										Total of all variation claims to date													
24. Bushfire Block 10 - Track works as requested	$ -	$ -	$ 7,665.00							$ 7,665.00	$ -	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	0%	$ 91,980.00	8%
25. Bushfire Block 11 - Track works	$ -	$ -	$ 3,913.00							$ 3,913.00	$ -	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	0%	$ 70,434.00	6%
26. Bushfire Block 11 - Pre-burn requirements	$ -	$ -								$ -	$ -	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	0%	$ 40,432.50	0%
27. Bushfire Block 11 - Conducting Prescribed Burn	$ -	$ -								$ -	$ -	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	0%	$ 186,921.00	0%
28. Bushfire Block 11 - Post Burn Assessment	$ -	$ -								$ -	$ -	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	0%	$ 15,525.00	0%
29. Bushfire Block 12 - Track works	$ -	$ -	$ 2,157.75							$ 2,157.75	$ -	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	0%	$ 77,679.00	3%
30. Bushfire Block 12 - Pre-burn requirements	$ -	$ -								$ -	$ -	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	0%	$ 36,378.00	0%
31. Bushfire Block 12 - Conducting Prescribed Burn	$ -	$ -								$ -	$ -	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	0%	$ 199,392.75	0%
32. Bushfire Block 12 - Post Burn Assessment	$ -	$ -								$ -	$ -	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	0%	$ 15,525.00	0%
33. Bushfire Block 14 - Track works	$ -	$ -	$ 12,752.70							$ 12,752.70	$ -	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	0%	$ 121,680.00	10%
34. Bushfire Block 14 - Pre-burn requirements	$ -	$ -								$ -	$ -	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	0%	$ 57,307.50	0%
35. Bushfire Block 14 - Conducting Prescribed Burn	$ -	$ -								$ -	$ -	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	0%	$ 253,885.50	0%
36. Bushfire Block 14 - Post Burn Assessment	$ -	$ -								$ -	$ -	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	0%	$ 24,840.00	0%
	$ -	$ -								$ -	$ -	$ -									0%	$ -	#DIV/0!
	$ -	$ -								$ -	$ -	$ -									0%	$ -	#DIV/0!
TOTAL VARIATION AMOUNT	$ -	$ -	$ 26,488.45	$ -	$ -	$ -	$ -	$ -	$ -	$ 26,488.45	$ -	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ -	$ 1,191,980.25	2%

Retention										Total retention of all claims	YEAR 1 TOTAL RETENTION Year 1 total retention amount	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Percent of total first year retention	TOTAL CONTRACT RETENTION Agreed total contract retention amount	Percent of total contract retention
1. Retention Held (5% of contract sum, with 10% in any one claim)	$ 3,309.75	$ 2,753.85	$ 3,398.85	$ 1,900.00	$ 930.00	$ 1,127.95	$ 1,607.95	$ 1,120.00	$ 420.00	$ 16,568.35	$ 18,556.72										18%	$ 115,054.30	2.88%
2. Retention Released (upon inspection and acceptance from superintendent at each milestone)	$ -									$ -													
TOTAL Retention Held	$ 3,309.75	$ 2,753.85	$ 3,398.85	$ 1,900.00	$ 930.00	$ 1,127.95	$ 1,607.95	$ 1,120.00	$ 420.00	$ 16,568.35	$ 18,556.72	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	18%	$ 115,054.30	2.88%

Total Claim										Total of all claims	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Percent completion (1st year budget)	Agreed contract amount	Percent completion
CLAIM TOTALS (EX GST)	$ 29,787.75	$ 24,784.65	$ 30,589.61	$ 17,100.00	$ 8,370.00	$ 10,151.55	$ 14,471.55	$ 10,080.00	$ 3,780.00	$ 149,115.11	$ 371,134.35										40%	$ 2,301,086.07	6%
GST (10%)	$ 2,978.78	$ 2,478.47	$ 3,058.96	$ 1,710.00	$ 837.00	$ 1,015.16	$ 1,447.16	$ 1,008.00	$ 378.00	$ 14,911.51	$ 37,113.44										40%	$ 230,108.61	6%
CLAIM TOTALS PAYABLE (INC. GST)	$ 32,766.53	$ 27,263.12	$ 33,648.57	$ 18,810.00	$ 9,207.00	$ 11,166.71	$ 15,918.71	$ 11,088.00	$ 4,158.00	$ 164,026.62	$ 408,247.79	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	40%	$ 2,531,194.68	6%

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Progress Report

CAMP Rehabilitation Projects

White Rock

Quarter 4 - 2024

1 Introduction

In February 2021, Evolve Environmental Solutions (Evolve) was engaged to undertake maintenance of the White Rock CAMP Rehabilitation Project.

On-ground works commenced in July 2021. A total area of 2,490,000m2 is required to be maintained. This is split into 3 zones, as per Image 1 - Proposed CAMP Implementation Staging from RFT.

MZ1: Riparian restoration
MZ2: Assisted regeneration
MZ3: Regeneration

This progress report provides a summary of Rehabilitation activities carried out during the months of Quarter 4, 2024: October, November, December

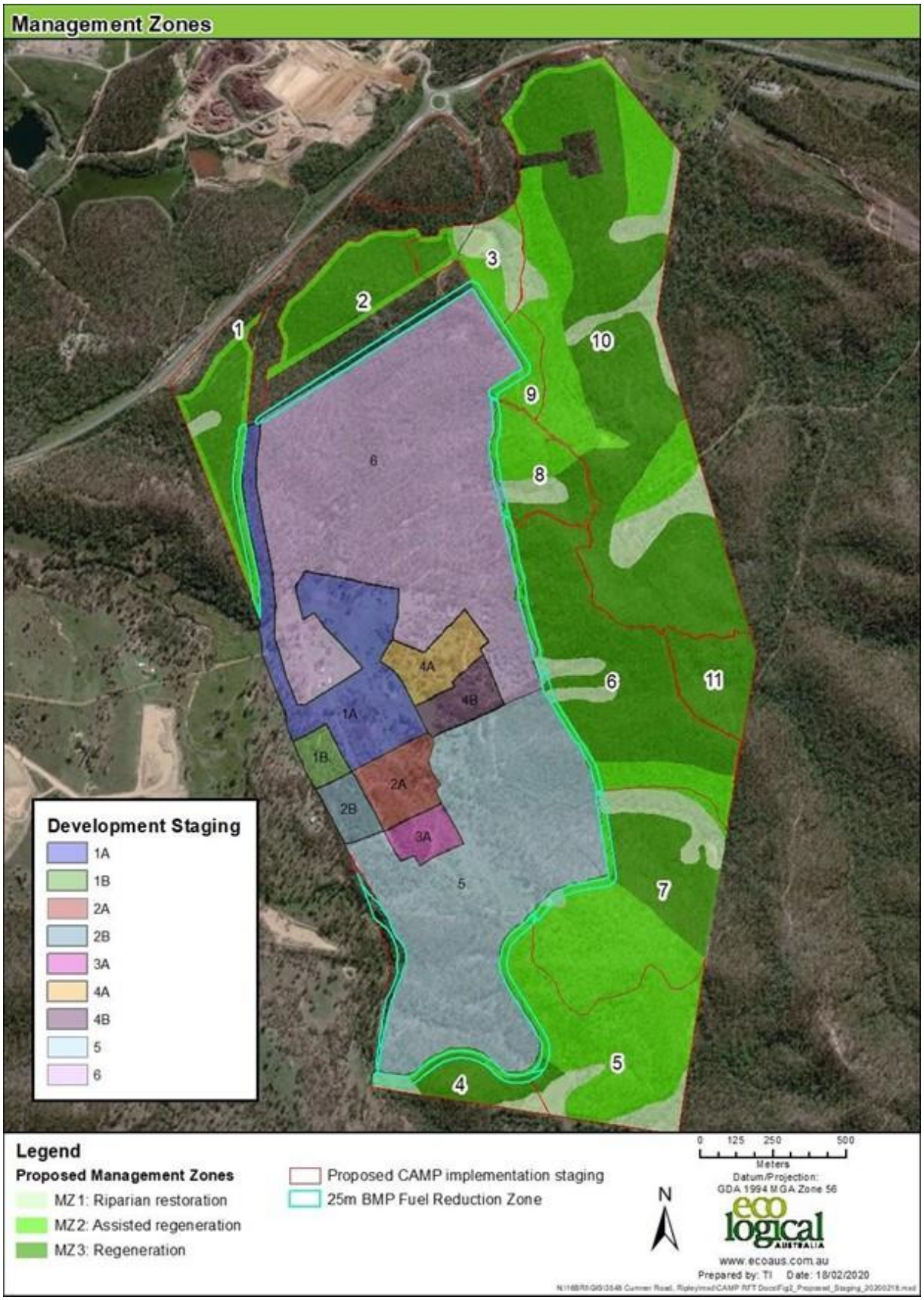

Figure 1: Proposed CAMP Implementation Staging from RFT

No areas of Secondary weeding work in Zones 1, 2 and 3 were completed over this quarter (Oct, Nov, Dec).

Primary Maintenance Conducted	Oct	Nov	Dec
Zone 1	-	-	-
Zone 2	-	-	-
Zone 3	-	-	-

Secondary/Follow up Maintenance Conducted	Oct	Nov	Dec
Zone 1	-	-	-
Zone 2	-	-	-
Zone 3	-	-	-

Daily Record sheets and claim summaries of the works carried out have been filed and submitted.

Below is a map of extracted data from these work reports during the months of Oct, Nov, Dec.

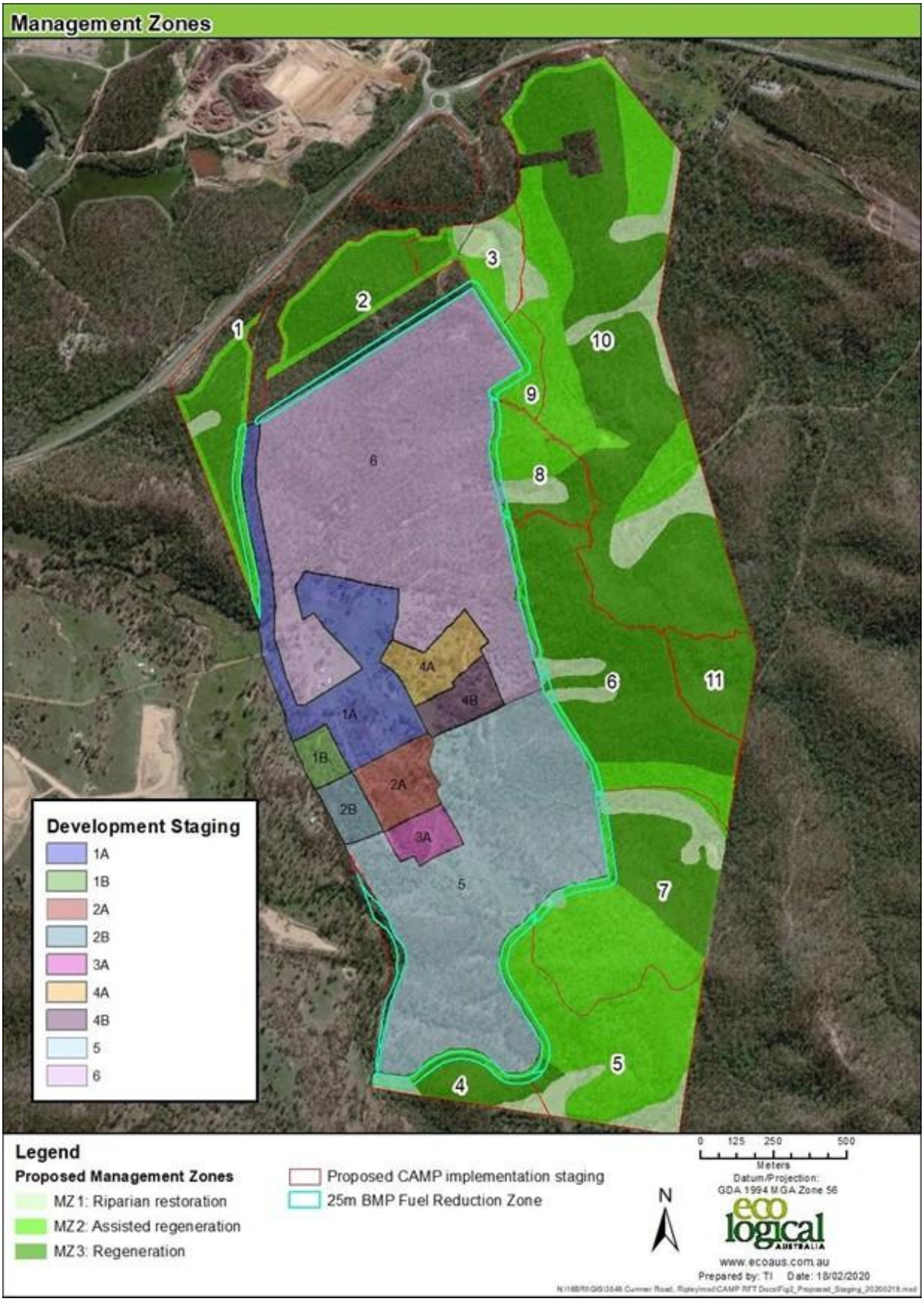

Figure 2: Works carried out this quarter as per submitted Inspection Evidence reports and transposing data onto the Proposed CAMP Implementation Staging from RFT

2 Scope of works progress

As per Evolve's 2024 Proposed Works Report:

Month	Proposed Works	% Completed	Unfinished work to be completed in (Month)
October	Maintenance to areas 5 and 10	- 0	2025
	Pest Management	100	
November	Spray to areas 2 and 10	- 0	2025
December	Maintenance works to 2, 4, 5, 7 and 10	- 0	2025
	Pest management		

No further burn works have been carried out. Temporarily ceased.

3 Non-compliance incidents

N/A

4 Delivery Issues

Due to wetter than usual November and December tracks and access to areas of interest were to wet to transverse, resulting in no work being completed in the White Rock Region, Albeit Pest Management have been operating as usual with baiting and culling.

5 Upcoming Work

As per Evolve's 2025 Proposed Works Report:

6 Table 1 Budget Tracking

Evolve Environmental Solutions Pty - CAMP Scope - Progress Claim as at 13/04/20223

Item	Claims									Total of all claims to date	AGREED BUDGET Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Percent completion (1st year budget)	TOTAL ORIGINAL CONTRACT BUDGET Agreed contract amount	Percent completion
Contracted items	EVO 000131 31/12/21	EVO 0522127 31/5/22	EVO 0922127 30/9/22	31/01/2023	8/03/2023	30/03/2023	2/05/2023	5/06/2023	13/07/2023														
1. Preliminaries	$ 3,397.50	$ 2,038.50	$ -			$ 679.50	$ 679.50			$ 6,795.00	$ 6,795.00										50%	$ 6,795.00	100%
2. Translocation of Habitat	$ -									$ -	$ 10,850.00	$ 5,425.00									0%	$ 16,275.00	0%
3. Temporary Bunting Fencing	$ -									$ -	$ 62,424.00										0%	$ 62,424.00	0%
4. Signage	$ -									$ -	$ 17,946.90										0%	$ 17,946.90	0%
5. Access Infrastructure Construction	$ -									$ -	$ 1,500.00										0%	$ 1,500.00	0%
6. Weed Management Zone 1	$ 25,200.00	$ 21,000.00	$ 7,000.00		$ 2,800.00	$ 5,600.00	$ 8,400.00	$ 4,200.00	$ 4,200.00	$ 78,400.00	$ 84,000.00										30%	$ 84,000.00	93%
7. Weed Management Zone 2	$ 4,500.00	$ 4,500.00	$ 500.00	$ 19,000.00	$ 6,500.00	$ 5,000.00	$ 5,000.00	$ 5,000.00		$ 50,000.00	$ 91,000.00										5%	$ 91,000.00	55%
8. Weed Management Zone 3	$ -						$ 2,000.00	$ 2,000.00		$ 4,000.00	$ 51,200.00										0%	$ 51,200.00	8%
9. Vegetation Thinning	$ -									$ -	$ 7,050.00										0%	$ 7,050.00	0%
10. Landscape Maintenance Zone 1	$ -									$ -	$ -	$ 80,360.00	$ 60,360.00	$ 50,460.00	$ 31,800.00	$ 19,270.00	$ 11,786.00	$ 11,786.00	$ 6,190.00	$ 6,375.70	0%	$ 278,387.70	0%
11. Landscape Maintennce Zone 2	$ -									$ -	$ -	$ 80,208.00	$ 60,204.00	$ 40,320.00	$ 20,432.00	$ 19,125.00	$ 15,384.00	$ 11,640.00	$ 6,050.00	$ 6,231.50	0%	$ 259,594.50	0%
12. Landscape Maintenance Zone 3	$ -									$ -	$ -	$ 50,172.00	$ 37,656.00	$ 37,656.00	$ 18,980.00	$ 9,640.00	$ 9,640.00	$ 9,929.20	$ 10,227.08	$ 10,533.89	0%	$ 194,434.17	0%
13. Bushfire Track Maintenance - Drott	$ -									$ -	$ 11,880.00										0%	$ 11,880.00	0%
14. Bushfire Track Maintenance - Bobcat	$ -									$ -	$ -	$ 8,785.00			$ 8,785.00			$ 9,048.55			0%	$ 26,618.55	0%
15. Supply/instal Native Plants	$ -									$ -												$ -	
16. Seed Collection	$ -									$ -												$ -	
17. Purchase Reveg. Seed Mix	$ -									$ -												$ -	
18. Supply/Spread Forest Mulch	$ -									$ -												$ -	
19. Erosion Control Matting	$ -									$ -												$ -	
20. Supply/Lay Gravel Mulch	$ -									$ -												$ -	
21. Gravel Drainage Swale	$ -									$ -												$ -	
22. Install and GPS Mark Photographic Monitoring Points	$ -									$ -												$ -	
23. Install Vegetation Survey Transects	$ -									$ -												$ -	
TOTAL	$ 33,097.50	$ 27,538.50	$ 7,500.00	$ 19,000.00	$ 9,300.00	$ 11,279.50	$ 16,079.50	$ 11,200.00	$ 4,200.00	$ 139,195.00	$ 344,645.90	$ 224,950.00	$ 158,220.00	$ 128,436.00	$ 79,997.00	$ 48,035.00	$ 36,810.00	$ 42,403.75	$ 22,467.08	$ 23,141.09	40%	$ 1,109,105.82	13%

Variation Items										Total of all variation claims to date													
24. Bushfire Block 10 - Track works as requested	$ -	$ -	$ 7,665.00							$ 7,665.00	$ -	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	$ 10,220.00	0%	$ 91,980.00	8%
25. Bushfire Block 11 - Track works	$ -	$ -	$ 3,913.00							$ 3,913.00	$ -	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	$ 7,826.00	0%	$ 70,434.00	6%
26. Bushfire Block 11 - Pre-burn requirements	$ -	$ -								$ -	$ -	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	$ 4,492.50	0%	$ 40,432.50	0%
27. Bushfire Block 11 - Conducting Prescribed Burn	$ -	$ -								$ -	$ -	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	$ 20,769.00	0%	$ 186,921.00	0%
28. Bushfire Block 11 - Post Burn Assessment	$ -	$ -								$ -	$ -	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	0%	$ 15,525.00	0%
29. Bushfire Block 12 - Track works	$ -	$ -	$ 2,157.75							$ 2,157.75	$ -	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	$ 8,631.00	0%	$ 77,679.00	3%
30. Bushfire Block 12 - Pre-burn requirements	$ -	$ -								$ -	$ -	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	$ 4,042.00	0%	$ 36,378.00	0%
31. Bushfire Block 12 - Conducting Prescribed Burn	$ -	$ -								$ -	$ -	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	$ 22,154.75	0%	$ 199,392.75	0%
32. Bushfire Block 12 - Post Burn Assessment	$ -	$ -								$ -	$ -	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	$ 1,725.00	0%	$ 15,525.00	0%
33. Bushfire Block 14 - Track works	$ -	$ -	$ 12,752.70							$ 12,752.70	$ -	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	$ 13,520.00	0%	$ 121,680.00	10%
34. Bushfire Block 14 - Pre-burn requirements	$ -	$ -								$ -	$ -	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	$ 6,367.50	0%	$ 57,307.50	0%
35. Bushfire Block 14 - Conducting Prescribed Burn	$ -	$ -								$ -	$ -	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	$ 28,209.50	0%	$ 253,885.50	0%
36. Bushfire Block 14 - Post Burn Assessment	$ -	$ -								$ -	$ -	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	$ 2,760.00	0%	$ 24,840.00	0%
	$ -	$ -								$ -	$ -	$ -									0%	$ -	#DIV/0!
	$ -	$ -								$ -	$ -	$ -									0%	$ -	#DIV/0!
TOTAL VARIATION AMOUNT	$ -	$ -	$ 26,488.45	$ -	$ -	$ -	$ -	$ -	$ -	$ 26,488.45	$ -	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ 132,442.25	$ -	$ 1,191,980.25	2%

Retention										Total retention of all claims	YEAR 1 TOTAL RETENTION Year 1 total retention amount	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Percent of total first year retention	TOTAL CONTRACT RETENTION Agreed total contract retention amount	Percent of total contract retention
1. Retention Held (5% of contract sum, with 10% in any one claim)	$ 3,309.75	$ 2,753.85	$ 3,398.85	$ 1,900.00	$ 930.00	$ 1,127.95	$ 1,607.95	$ 1,120.00	$ 420.00	$ 16,568.35	$ 18,556.72										18%	$ 115,054.30	2.88%
2. Retention Released (upon inspection and acceptance from superintendent at each milestone)	$ -									$ -													
TOTAL Retention Held	$ 3,309.75	$ 2,753.85	$ 3,398.85	$ 1,900.00	$ 930.00	$ 1,127.95	$ 1,607.95	$ 1,120.00	$ 420.00	$ 16,568.35	$ 18,556.72	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	18%	$ 115,054.30	2.88%

Total Claim										Total of all claims	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Percent completion (1st year budget)	Agreed contract amount	Percent completion
CLAIM TOTALS (EX GST)	$ 29,787.75	$ 24,784.65	$ 30,589.61	$ 17,100.00	$ 8,370.00	$ 10,151.55	$ 14,471.55	$ 10,080.00	$ 3,780.00	$ 149,115.11	$ 371,134.35										40%	$ 2,301,086.07	6%
GST (10%)	$ 2,978.78	$ 2,478.47	$ 3,058.96	$ 1,710.00	$ 837.00	$ 1,015.16	$ 1,447.16	$ 1,008.00	$ 378.00	$ 14,911.51	$ 37,113.44										40%	$ 230,108.61	6%
CLAIM TOTALS PAYABLE (INC. GST)	$ 32,766.53	$ 27,263.12	$ 33,648.57	$ 18,810.00	$ 9,207.00	$ 11,166.71	$ 15,918.71	$ 11,088.00	$ 4,158.00	$ 164,026.62	$ 408,247.79	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	40%	$ 2,531,194.68	6%