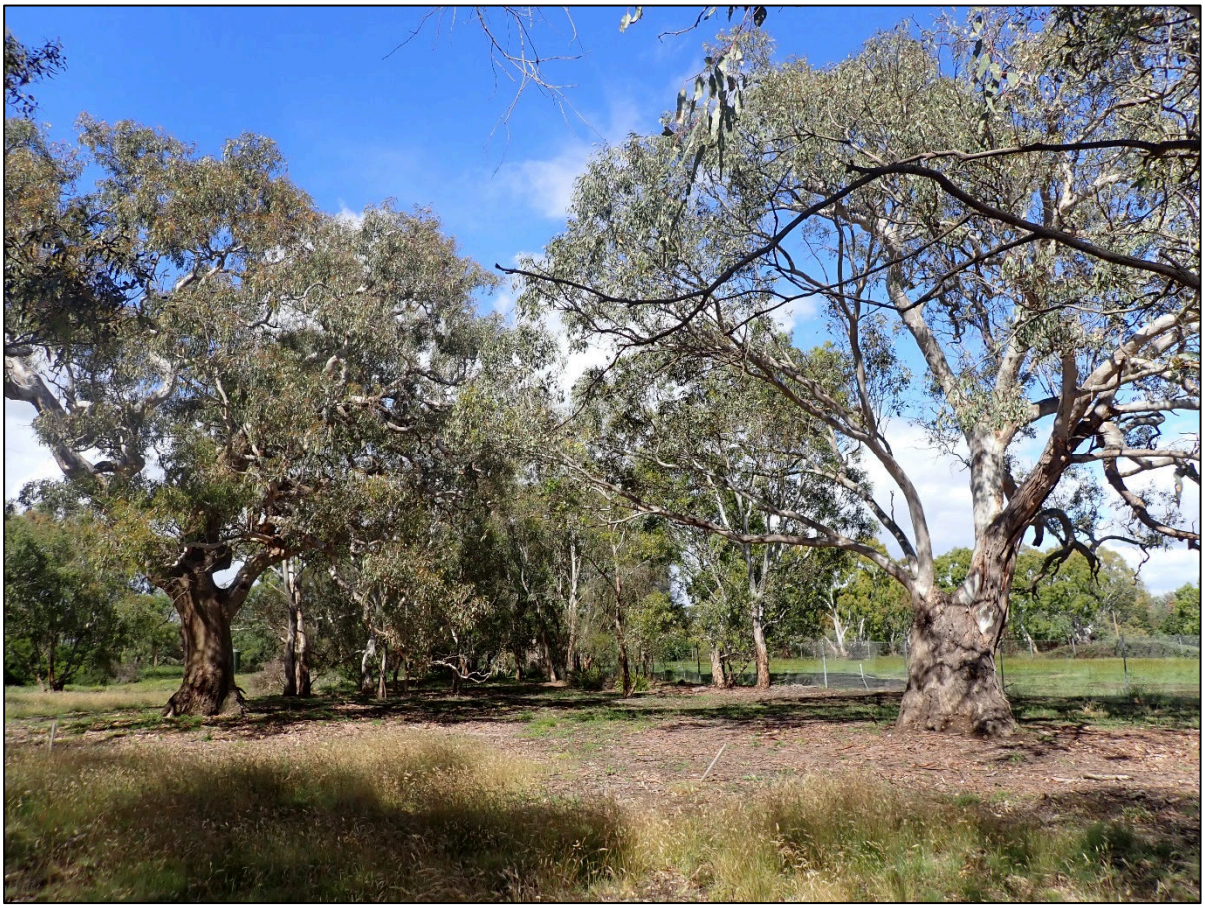
Native Vegetation Offset second year audit for 1775 Donnybrook Road Woodstock



Prepared for City of Whittlesea by Geordie Scott-Walker

January 2026

GSW

ECOLOGICAL CONSULTING

Native Vegetation Offset second year audit for 1775 Donnybrook Road Woodstock

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Cover photo: mature *Eucalyptus camaldulensis* (River Red Gum) with direct sown wallaby grasses (*Rytidosperma* species) in the foreground (1/12/2025).

Taxonomy and nomenclature

The species names cited in this report are based on the taxonomy of the Australian Plant Census (CANBR 2026), Victorian Biodiversity Atlas (DEECA 2026a) and VicFlora (2026). Threatened species listings are provided by DEECA (2026b) except where other sources are provided. Plants are listed by scientific name with the common name bracketed on first use; fauna species are listed firstly by common name.

Terminology

CaLP Act	*Catchment and Land Protection Act 1996*
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
FFG Act	*Flora and Fauna Guarantee Act 1988*
GEWVVP	Grassy Eucalypt Woodland of the Victorian Volcanic Plain
TEC	Threatened Ecological Community

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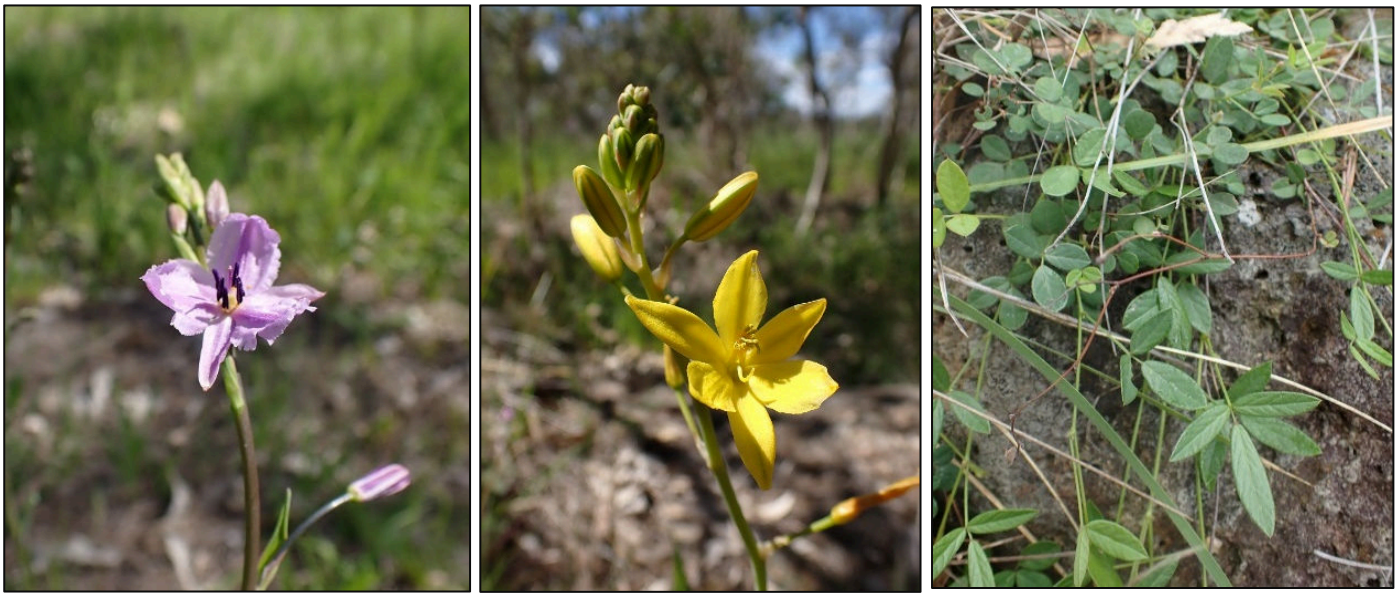


Photos left to right: *Arthropodium strictum* (Chocolate Lily), *Bulbine bulbosa* (Bulbine Lily) and *Desmodium varians* (Slender Tick-trefoil) from the offset site.

1. Introduction

The City of Whittlesea engaged Consultant Ecologist Geordie Scott-Walker to undertake an audit of the Commonwealth Grassy Eucalypt Woodland offset at 1775 Donnybrook Road, Woodstock. The primary aim of the audit is to assess the current vegetation condition and evaluate the likelihood of the plan achieving its objectives by the end of year ten, in accordance with the requirements of the endorsed Offset Management Plan (OMP) (Abzeco 2020). The offset commenced in November 2021.

Regulatory context

The roughly four hectare reserve at the study site was established to offset losses of the Threatened Ecological Community (TEC) *Grassy Eucalypt Woodland of the Victorian Volcanic Plain* (GEWVVP). The TEC is Nationally listed as Critically Endangered under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Protected native vegetation at this site compensates for losses to remnant vegetation associated with development of the Findon Road extension project in South Morang.

The OMP requires that an independent audit and review is undertaken in October of years two, five, eight and ten of the ten year management period by a qualified, experienced ecologist. The current assessment is being undertaken at the end of year three into the start of year four[1], and addresses the year two audit requirement for this project.

Further background information is available in the EPBC Act referral 2019/8505 for the development project.

Management context

The OMP provides detailed management advice to address threats, protect and enhance areas of GEWVVP within the site, and to restore areas of the land that did not qualify as GEWVVP in 2020. Key performance indicators for the project at the completion of the ten year offset period include the following:

Across the whole site, the cover of understorey life forms must be a minimum of 50% including perennial understorey life forms at 25% or greater.

Management commitments during the ten year management period include: registering the On Title Landowner Security Agreement (Section 69), control all high threats, undertake direct seeding/supplementary planting, undertake biomass control, maintain a firebreak on the western boundary, and undertake annual monitoring and reporting. Each of the above components is provided detailed specifications and performance criteria within the OMP.

Additional *ongoing* management commitments also apply to the land, in perpetuity, as detailed in the OMP.

[1] Year four of the offset runs from 30 November 2025 to 30 November 2026.

2. Assessment methods

The following monitoring methods from Section 7.1.3 of the OMP were required to be used for the audit:

- Flora survey of all vascular plant species and their covers;
- Assessment of total cover of native species and exotic species across the site;
- Map areas of vegetation that meet the eligibility criteria for GEWVVP as defined in the National Listing Advice for this TEC (TSSC 2009).
- Assess bare ground across the site using three 50 metre transects in each of the northern and southern 'treed area' of the offset, taking measures at one metre intervals.
- Identify new and emerging weed species or other threats.

The purpose of the data is to provide information relevant to:

- make an evaluation of the likelihood of meeting the management commitments at the end of the year ten of the delivery of the OMP; and
- recommend appropriate management to increase the likelihood of achieving the OMP commitments.

The auditor made the following variations/additions to the transect method to enhance monitoring outcomes:

- In addition to bare ground, the following features were recorded at each interval:
  - **Structural features:** leaf litter, rock.
  - **Compositional features:** native perennial species, native annual species, exotic perennial species, exotic annual.
  - **Photographs:** from each end of the transect horizontally centred along the transect with the horizon vertically centred in the photo frame.
- Start and end points were permanently marked with a square metal washer pinned to the ground to enable consistent assessment over time.
- Point intercepts were taken on the left side of the tape measure using a fifteen mm pin intercept.
- *Poa bulbosa* (Bulbous Meadow-grass) and *Anthoxanthum odoratum* (Sweet Vernal-grass) were recorded as perennial exotic grasses; biennial species were recorded as annuals.
- Transect locations were distributed at the discretion of the assessor and were stratified to include both the eligible and ineligible areas of the GEWVVP TEC (previously assessed by Abzeco, 2020), with greater emphasis on the ineligible areas where targeted restoration is required under the OMP. Map 1 shows the distribution of transects across the offset.

Mapping GEWVVP

The extent of GEWVVP was assessed using four areas/zones defined in the OMP (Abzeco 2020), each of which were assessed against the criteria for remnant patches of GEWVVP provided in the Commonwealth Listing Advice (TSSC 2009). Table 4 in Section 3 outlines each criterion.

Survey timing

The primary field survey was completed on 14 October 2025, at which time a flora inventory and transects were completed. A follow-up survey on 1 December 2025 enabled some additional species to be identified and provided an opportunity to further consider the current vegetation state and progress of the offset relative to the OMP.

Site layout

The OMP describes four main areas of the offset totalling 3.919 ha, as shown in Map 1. These areas are used in the current report for consistency, as follows:

Extent of GEWVVP in 2020:

- Habitat zone 1A (HZ1A) (0.457 ha)
- Habitat zone 1B (HZ1B) (0.079 ha)

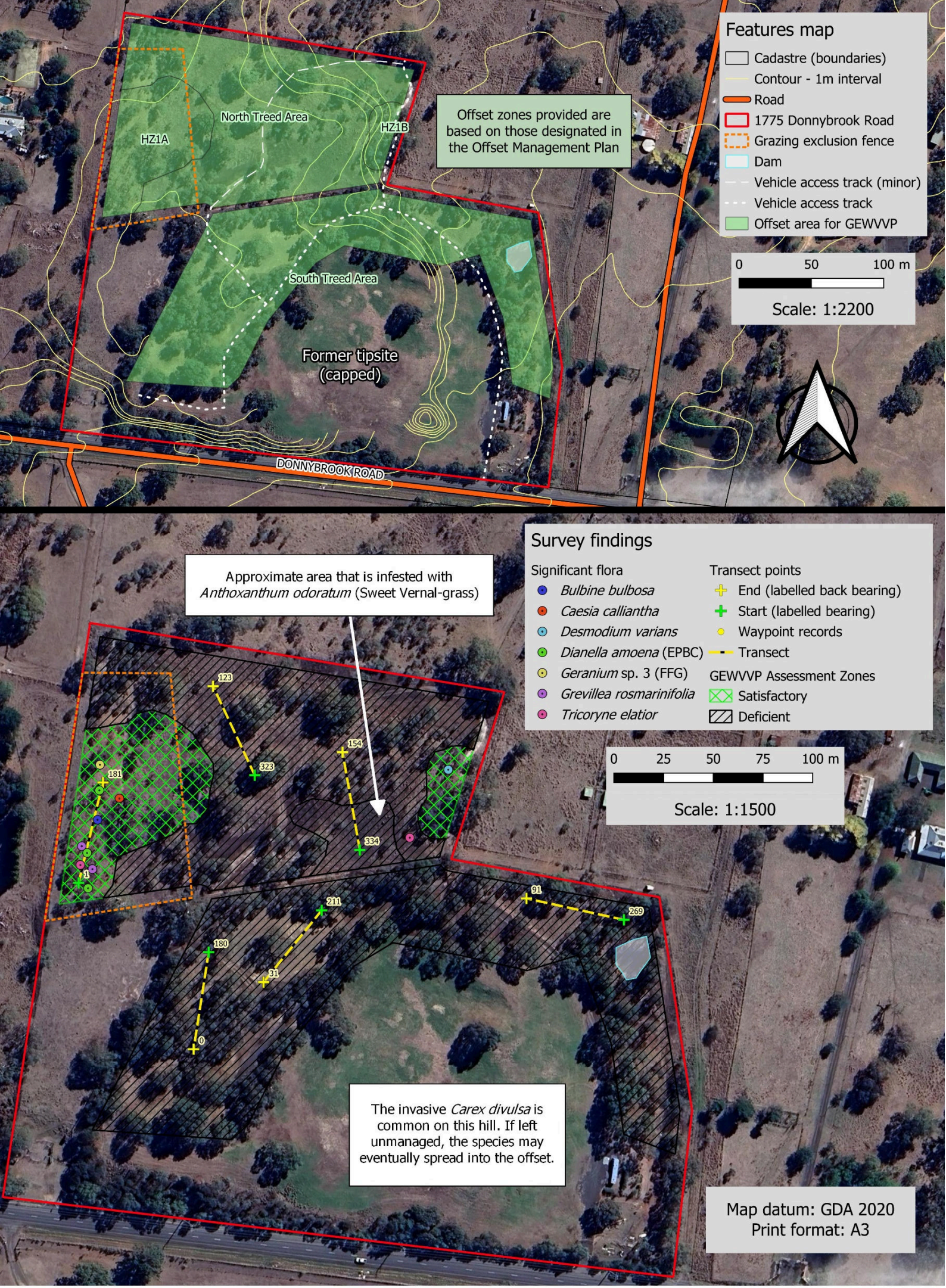
Non-GEWVVP areas (these did not qualify as the nationally listed TEC in 2020):

- South treed area (1.836 ha)
- North treed area (1.547 ha)

Assessment area

The study site comprises the offset area and any marginal/peripheral land that was incidentally sampled during field surveys while traversing the land. This includes, for example, the buffer that exists between the offset and fringing fencelines, as offsets must have a set back from property boundaries to account for planning scheme exemptions that allow managers to clear vegetation for fence maintenance. The extent of the offset site is shown in Map 1.

Map 1 also highlights several site features such as the internal vehicle/management tracks, an old farm dam that remains on site, and a permanent macropod/grazing exclusion fence that has been installed in the western part of the north treed zone, surrounding most of HZ1A.

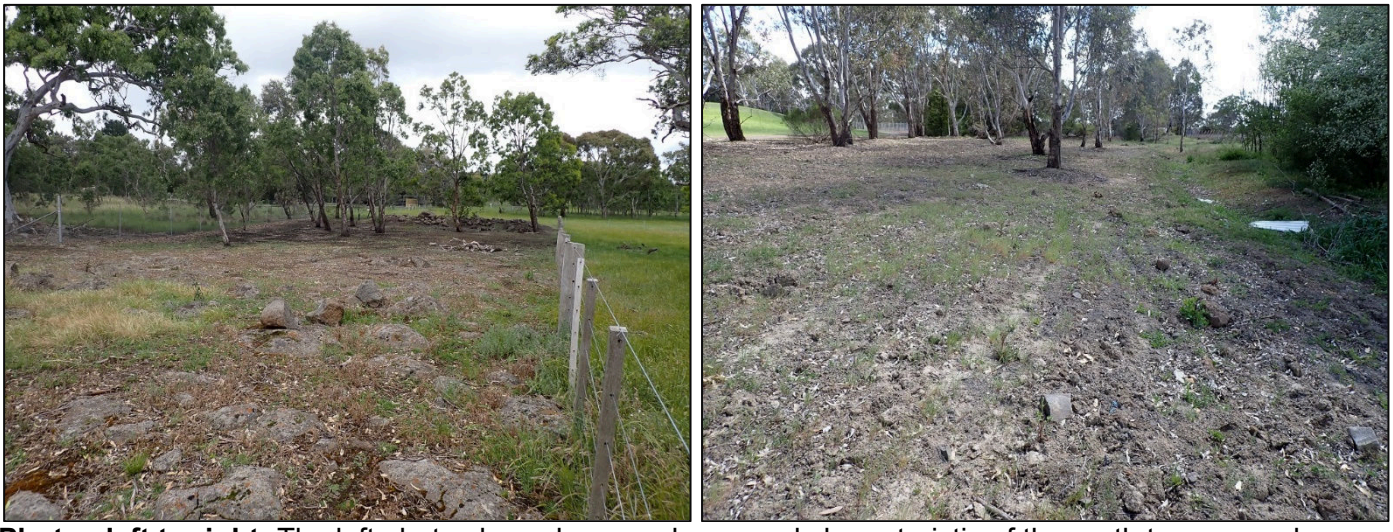


Map 1. Native vegetation offset site at 1775 Donnybrook Road, Woodstock (EPBC 2019/8505).

3. Field survey results

The survey identified strong evidence that the OMP is being implemented, with recent or current land management activities obvious, including active understorey restoration across many areas of the site that are consistent with expectations based on the OMP.

Examples of field works that are completed or underway included scalped topsoil, ripped topsoil (a preparatory technique for direct seeding, see photos below), seedling native grasses and established native grasses evidencing direct seeding activities (see, for example the report cover photo), the presence of functioning temporary as well as permanent grazing exclusion fences, tubestock plantings of indigenous species, debris from woody weed control, herbicide marking dye on recently treated *Nassella neesiana* (Chilean Needle-grass), open bare areas that had been previously sprayed out with herbicide, perimeter firebreaks, and baiting signage indicative of pest animal management works.



Photos left to right: The left photo shows bare, rocky ground characteristic of the north tree area where weeds have been sprayed out, contrasting the right side of the image that shows an undisturbed area of vegetation outside the offset; the right photo shows a portion of the south treed area where soil is ripped and weed control has been completed but direct sown native grasses have not yet established.

Flora species richness

The 2025 survey confirmed the presence of 180 vascular plant taxa from the offset. Approximately 40% are native, locally indigenous species, and the remaining species are exotic to Victoria, non-indigenous to the local area or of uncertain origin (Table 1). Eleven species are declared noxious weeds listed under the Victorian *Catchment and Land Protection Act 1996* (CaLP Act) (DEECA 2026c) (Table 2).

During the field survey four individuals of the EPBC-listed, nationally Endangered *Dianella amoena* (Matted Flax-lily) were recorded (shown by three point records on Map 1). A population of the Victorian FFG-listed Endangered *Geranium* sp. 3 (Pale-flower Crane's-bill) was also recorded with some individuals being suspected hybrids due to intermediate characteristics with *Geranium* sp. 5 (Naked Crane's-bill). Naked Crane's-bill was also recorded outside the study area on the former tip site capped (see Map 1, not included in the site species list). The above listed threatened taxa were restricted to HZ1A.

Appendix 1 lists all species recorded from the survey. Forty-eight of the observed native species are perennial ground flora, with ten annuals and fourteen shrubs and trees, plus the emergent macrophyte *Typha* spp. (Bulrush) present in the dam (see Map 1). Several of the newly recorded species are characteristic ground flora components of the GEWVVP TEC (TSSC 2009), including *Bulbine bulbosa* (Bulbine Lily), *Hypericum gramineum* (Small St John's-wort), *Carex breviculmis* (Common Grass-sedge) and *Oxalis exilis* (Shade Wood-sorrell).

Table 1. Species richness from the study site.

Origin	Count	Proportion (%)
Native and locally indigenous	70	38.9
Exotic taxa	105	58.3
Non-indigenous Victorian native species	2	1.1
Taxa of uncertain origin [a]	3	1.7
Total	180	100

[a] Based on VicFlora (2026)

New and emerging weeds

Numerous species were observed that had not previously been documented from the site in 2020, including many exotics, marking a significant increase to total species richness (from 105 taxa previously recorded). Despite the large increase to species richness, it is likely that many of the 'new' species are long established at the site but were overlooked in previous assessments due to survey conditions (timing and season). It is also likely that recent land management activities have promoted some species that were dormant in the soil seed bank, for example through soil disturbance. Some species may truly be new invaders that have spread through natural processes, including incidental introductions caused by people.

Few of the newly detected exotics within the offset are a major biodiversity threat because almost all of the species are small annuals or occur at very low density with marginal cover. These species and are not expected to attain a high cover at any stage given the land management commitments within the OMP. However, several species are CaLP Act-listed weeds (see Table 2), and one new woody weed was recorded, *Rosa canina* (Dog Rose)[2]. A small infestation of the perennial grass *Elymus repens* (English Couch) was recorded from a damp depression within the fenced western area surrounding HZ1A. Each of the above weeds qualify as high threat weeds.

Carex divulsa (Grey Sedge) occurs outside the offset from the elevated former tip site adjacent with the south treed area (see annotation on Map 1). Grey Sedge is a highly invasive sedge that is rapidly spreading through the municipality and is perhaps the most significant newly detected invasive species recorded during the survey.

[2] Observations of Dog Rose were limited to seedlings establishing on drying mud in the dam.

All CaLP Act listed species are present at very low density except for Chilean Needle-grass. The latter species is abundant within the fenced area of HZ1A (Map 1) and is also common outside the offset site on the old tip site[3]. Three CaLP Act listed species recorded in 2020 were not recorded during the current assessment: *Cynara cardunuculus* (Artichoke Thistle), *Nassella trichotoma* (Serrated Tussock) and *Silybum marianum* (Variegated Thistle).

Vascular plant cover

The cover estimates for each recorded species is provided in Appendix 1. The total native species cover was assessed as estimated at 28.13% and 4.93% for exotic species. The ratio of native and exotic vegetation, which excludes any non-vascular features such as litter, bare ground, bryophytes or lichen is approximately 85% and 15%, respectively.

Exotic species cover is primarily made up of herbaceous weeds, dominated by Chilean Needle-grass and *Briza maxima* (Large Quaking-grass) but with cumulative small contributions from the large number of herbaceous weeds scattered across the land. Native vegetation cover is made up predominantly by canopy trees, planted shrubs, and a high relative contribution from *Themeda triandra* (Kangaroo Grass) from HZ1A, noting there are numerous indigenous species with very low cover, some of which occur at high frequency. *Cassinia sifton* (Drooping Cassinia) was noted to be naturally recruiting within recently direct sown areas along with eucalypt saplings but has low cover currently. The species is anticipated to increase its density and cover over the next few years.

A high proportion of the offset is lacking vascular vegetation cover. Non-vegetated surfaces comprise bare ground, such as tracks and any sprayed areas being prepared for direct seeding, exposed basalt surface rock (common and widespread), open water and drying mud within the dam, leaf litter (widespread under mature canopy trees and dense stands of planted shrubs and sapling eucalypts), coarse woody debris, as well as non-vascular cover of bryophytes and lichens which are prominent on and near rocky areas. An assessment of the cover of these non-vegetated features was not a component of this audit.

[3] The OMP describes Chilean Needle-grass as one of dominant herbaceous weeds at the offset site, throughout all areas, suggesting that a significant seed bank could persist in all areas despite it being very low cover outside of HZ1A in this assessment.

Table 2. Declared CaLP Act listed noxious weeds recorded from the study site.

Species	PPWCMA status[a]	WNS[b]	Years recorded	Distribution within the offset
Allium triquetrum Angled Onion	Regionally restricted	-	2025	Recorded once among woody debris under a mature *Eucalyptus camaldulensis* in the northern part of the south treed area.
Carduus pycnocephalus Slender Thistle	Regionally controlled	-	2025	Recorded once near the northern edge of the north treed area, on disturbed ground near the fenceline.
Carthamus lanatus Saffron Thistle	Regionally controlled	-	2025	Recorded once from disturbed rocky areas in the eastern section of the north treed area (shortly west/north-west of HZ1B).
Cirsium vulgare Spear Thistle	Regionally controlled	-	2020 2025	Observed from a depression at the western end of the south treed area, growing with *Oxalis pes-caprae.*
Cynara cardunculus Artichoke Thistle	Regionally controlled	-	2020	Not observed in 2025.
Echium plantagineum Paterson's Curse	Regionally controlled	-	2020 2025	Scattered in low numbers on disturbed ground where direct seeding is being done.
Genista monspessulana Montpellier Broom	Regionally controlled	Listed	2025	Recorded outside the offset boundary on the western edge of the south treed area, some plants in an open grassy area with others shrouded by dense cover of *Acacia paradoxa.*
Marrubium vulgare Horehound	Regionally controlled	-	2020 2025	Young/first year plants observed on disturbed ground in the north treed area.
Nassella neesiana Chilean Needle-grass	Regionally restricted	Listed	2020 2025	Common and widespread, particularly abundant within HZ1A where the infestation is being managed, and outside the offset from the capped tip site where seasonal slashing runs the risk of spreading the species.
Nassella trichotoma Serrated Tussock	Regionally controlled	Listed	2020	Not observed in 2025.
Oxalis pes-caprae Soursob	Regionally restricted	-	2020 2025	One patch observed in a depression at the western end of the south treed area, growing with *Cirsium vulgare*.
Rubus anglocandicans Common Blackberry	Regionally controlled	Listed	2025	Abundant on the stone wall forming the western property boundary; frugivorous wildlife are likely to disperse seed into the site on an ongoing basis.
Silybum marianum Variegated Thistle	Regionally controlled	-	2020	Not observed in 2025.
Ulex europaeus Gorse	Regionally controlled	Listed	2025	One small seedling observed near the northern boundary of the offset near the fenceline.

[a] Listings for the Port Phillip and Westernport Catchment Management Area (DEECA 2026c)

[b] Weeds of National Significance (Weeds Australia 2026)

Transects

Transects are labelled as South T1 to T3 and North T1 to T3, as shown in Map 1. Table 3 provides the frequency of intercepts for each measured attribute and presents the ratio of bare ground to non-bare ground as well as native perennial to total perennial vegetation.

The mean ratio of bare ground to non-bare ground is 20%, with a range of 0 (North T3, where vegetation cover is very high) to 43% (North T1 where the site is disturbed as part of restoration). The three transects from the south treed area show high native perennial ground cover from successfully direct seeding native grasses, in contrast with two of the north treed area transects where native perennial cover is low.

Transect photopoints are provided in Appendix 2, which illustrate the site condition and structure along each transect in October 2025.

Table 3. Intercept frequency of ground layer attributes for six transects at the study site.

Feature	South T1	South T2	South T3	North T1	North T2	North T3
Bare ground	3	14	3	15	10	0
Bryophyte	0	0	0	0	0	1
Leaf litter	30	8	24	3	9	30
Rock	1	3	6	4	5	8
Native annual	0	0	0	10	24	0
Native perennial	15	24	15	1	0	6
Exotic annual	0	1	2	9	2	2
Exotic perennial	1	0	0	8	0	3
Total	50	50	50	50	50	50
Ratio of bare ground to non-bare ground	0.06	0.39	0.06	0.43	0.25	0.00
Ratio of native perennial to total perennial	0.94	1	1	0.11	0	0.67

Extent of GEWVVP

The extent of areas that qualify as GEWVVP in 2025 are shown on Map 1. This is limited to HZ1A and HZ1B, which were existing areas of GEWVVP in 2020 (Abzeco 2020). Table 4 details the qualification of each area of the offset with the assessment criteria for GEWVVP.

While each of the north and the south treed areas currently do not meet the criteria for GEWVVP, there are sections of these zones that have progressed toward the TEC, as reflected by transect data from these areas (Table 3). For example, within the south treed zone the native perennial ground cover is dominant as a percentage of total perennial ground cover for those areas that have been sown, noting there are areas outside the transects that with low native grass cover. In the north treed zone, there are large expanses of bare ground where weeds are below 70% cover, but native perennial ground cover is largely absent (noting one area shown on Map 1 where Sweet Vernal-grass cover is very high).

Table 4. Assessment of GEWVVP extent within the offset site.

Qualifying criteria for assessing the extent of the GEWVVP TEC (TSSC 2009)	**Site area**			
	1	**2**	**3**	**4**
A. Diagnostic characteristics for vegetation with a minimum patch size of 0.5 ha				
A1. Distribution within the VVP IBRA	✓	✓	✓	✓
A2. Occurrence on quaternary basalt soils on low elevation plains and stony rises on basal flows	✓	✓	✓	✓
A3. Tree canopy dominated by *Eucalyptus camaldulensis* (River Red Gum)	✓	✓	✓	✓
A4. One or more of the following native grass genera typically dominates the perennial ground layer: *Austrostipa, Microlaena, Poa, Rytidosperma, Themeda*	✓	✓	×	✓[c]
A5. One or more of the following native herb genera typically present[a]: *Acaena, Arthropodium, Calocephalus, Chrysocephalum, Dianella, Dichondra, Geranium, Leptorhynchos, Solenogyne*	✓	✓	×	×
B. Condition thresholds				
B1. Native perennial ground layer cover 50% or more (comprising the grass genera listed above)	✓	✓	×	✓[c]
If the above condition is not met, then:				
B2a. At least 50% of the ground layer vegetative cover is represented by dryland forbs during spring-summer **OR** 2b	×	×	×	×
B2b. Perennial weeds comprise <70% of the ground layer vegetative cover **OR** 2c	✓	✓	✓[d]	✓
B2c. In sites with >70% cover of weedy ground layer vegetative cover, then the patch must have >10 native perennial species per 100 m^2 AND a density of at least 3 trees ≥70 cm DBH[b] for Eucalypts and ≥40 cm DBH for non-eucalypt species	NA	NA	NA	NA

1 HZ1A; **2** HZ1B; **3** North Treed Area; **4** South Treed Area

[a] See Appendix 1 of TSSC (2009) for a selection of native herb species considered characteristic of the GEWVVP TEC.

[b] Diameter at Breast Height (1.3 m above ground level).

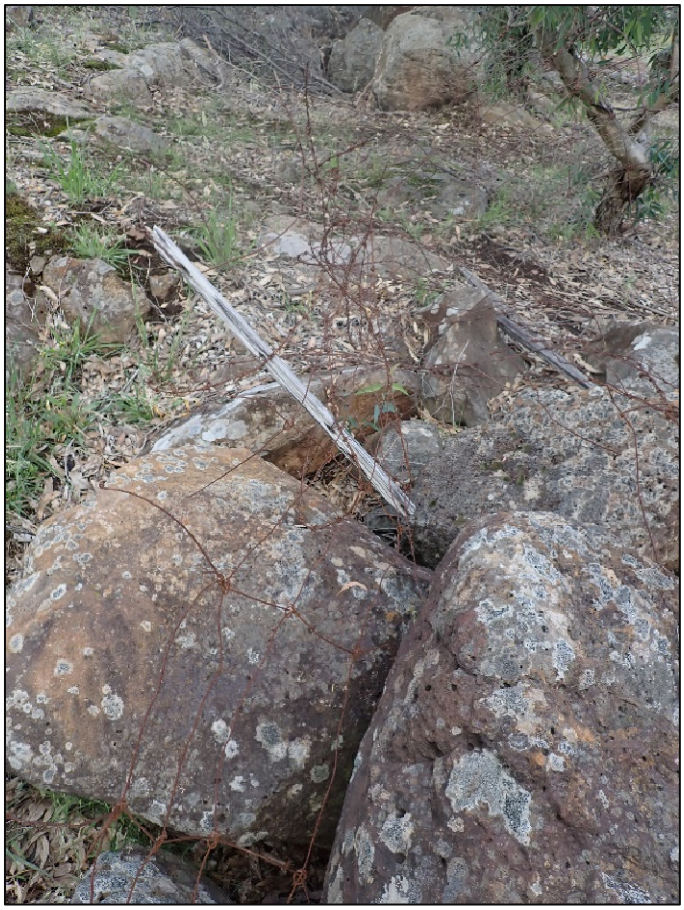
[c] Native perennial grasses are present over large parts of the zone as a result of direct seeding, but these are mostly in the early establishment phase.

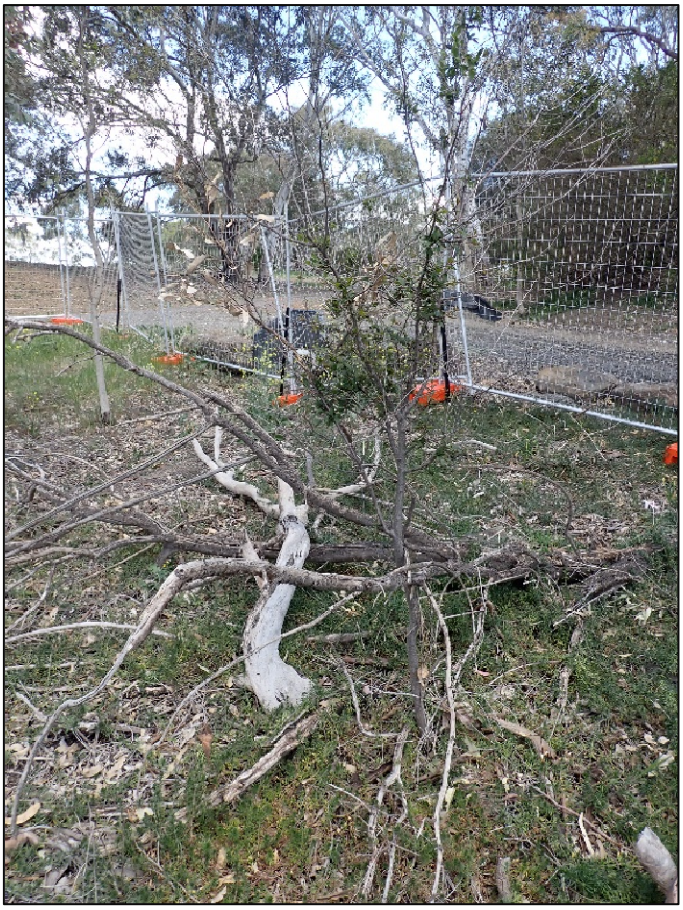
[d] There is currently low perennial weed cover as a result of weed control; one portion of the zone shown in Map 1 does not meet this sub-criterion due to high cover of *Anthoxanthum odoratum* (Sweet Vernal-grass).

Other observations

The following photos show a small pile of decrepit farm fencing (rubbish) noted from rocky parts of the north treed area and a reproductively mature *Prunus cerasifera* (Cherry Plum) from the south treed area. These minor occurrences require removal under the requirements of the OMP.

All fencing at the offset appears to be in working order without any clear breaches or defects noted during the field survey. Macropods are currently excluded from the site, while European Rabbit *Oryctolagus cuniculus* are likely to still move through the site, noting that no obvious evidence of rabbit activity was noted during the survey.





Photos left to right: farm fence debris among large basalt boulders; and reproductively mature *Prunus cerasifera* (Cherry Plum) – both observed within the offset.

4. Discussion

In accordance with the performance indicators provided in the OMP, the offset currently meets the minimum requirement of having >50% or more native vegetation cover (the relative cover is 85% at the current time), and native perennial understorey species diversity of at least 25 species (currently 48 species). The audit documented a large increase in species richness since the assessment of Abzeco (2020), including additional threatened plants and other species considered characteristic of the GEWVVP TEC (TSSC 2009).

The cover estimates for vascular plants suggest that a significant reduction to exotic vegetation cover has occurred. This is likely to be a direct result of broadacre weed spraying and other restoration treatments prescribed in the OMP that are designed to increase the extent of GEWVVP at the site. While short-term results are positive, the low exotic vegetation cover may be transient if disturbance-tolerant plant populations are allowed to recover.

In areas where native grasses have been direct sown, the native perennial ground cover has increased as demonstrated on transects South T1-T3, which were previously very weedy areas (Abzeco 2020). Where native grasses become the dominant ground layer component they should develop into stable communities over time, particularly where species diversity is high and both C_3 and C_4 photosynthetic grasses are present. In areas with lower diversity there is a higher risk that low stability could enable re-colonisation and dominance by weeds, particularly where biomass management favours disturbance tolerant species including many weedy annuals and highly invasive pasture grass weeds. Where native grasses have not been sown, or their establishment is unsuccessful, weedy vegetation is likely to re-establish, and this can be prevented by continuation of the direct seeding regime prescribed in the OMP.

Disturbed areas of the offset are therefore considered to be in a state of flux and comprise a variety of different ecological states under transition. Council will need to be judiciously manage these states to maintain and build on recent restoration success to ensure that areas of newly established native vegetation persist. The year five audit will provide a realistic assessment of the success or otherwise of the methods used to that point. The annual monitoring and adaptive management requirements of the OMP should provide a sufficient framework for Council to manage the site until the year five audit, with no major changes proposed as a result of the current audit.

Direct seeding and the extent of GEWVVP

The GEWVVP Listing Advice does not provide any targeted guidance to inform the decision as to whether a degraded site has been satisfactorily restored to qualify as the TEC. However, the diagnostic characteristics and condition thresholds used to assess remnant sites provides a reasonable framework for making such a determination, and this has been used in the current assessment (Table 4).

In this project, the north and south treed areas are deliberately being restored to the standard of the GEWVVP TEC. Both areas have been provided extensive site preparation and some direct seeding of native grasses. In the current assessment, both areas were deemed not to meet the eligibility criteria of the GEWVVP TEC, noting that significant progress has been made to this end at least in the south treed area from successful direct seeding of native grasses across large parts of the zone.

The south treed area could reach a satisfactory standard within several years if the weed cover remains low, sown native grasses persist at high densities, and that any early establishing or incomplete sowing areas successfully establish a dense cover of diverse native grasses. Recently sown currently areas appear in excellent condition, as evidenced by transect data (Table 3), photographs of transects (Appendix 2), the December 2025 observations of successful first-year flowering of grasses shown on the report cover photo and the photo below.

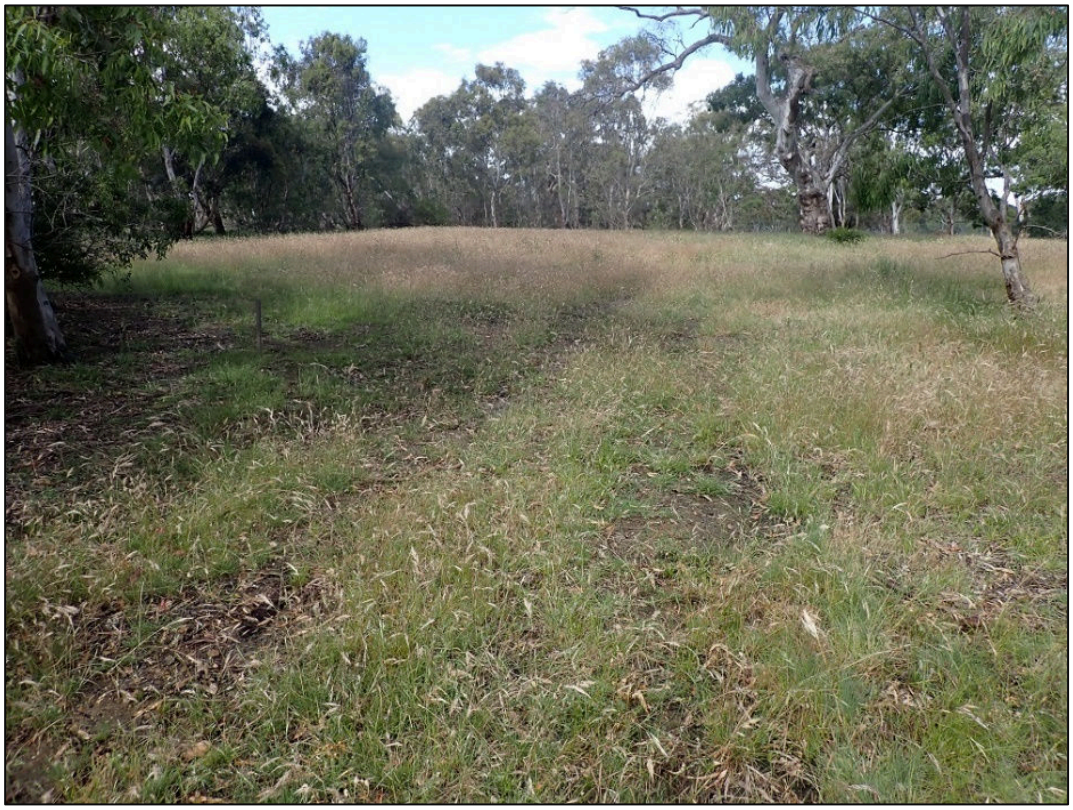


Photo above: Direct sown areas in the southern treed zone showing flowering of wallaby grasses (*Rytidosperma* species) in December 2025.

The north treed area requires further work before it reaches a standard that qualifies as GEWVVP. The main requirement is that a dominant cover of native perennial grass is established throughout the zone and that exotic perennial weeds have a low cover.

Both the south and north treed areas have the potential to reach very high quality examples of GEWVVP where species diversity and structural complexity are high. Exceptionally high quality examples of the TEC, which are now very rare, include sites that support high density populations of native herbs, and this should be an aim of land management at this offset. To ensure that restored areas are representative of good quality examples of GEWVVP, native herb species should at least be considered present if not abundant, irrespective of their cover.

Table 4 (adapted from the Commonwealth Listing Advice) highlights the key considerations when making a determination of whether a patch of vegetation meets is eligible as the GEWVVP TEC. During future audits the point intercept data collected from transects will provide a good indicator of whether those areas of the site have met or maintained the GEWVVP criteria.

The final determination of whether the standard has been met in year ten is set out in Table 3 of the OMP (Direct seeding and supplementary planting – species to be established and survival targets), with 35-40% cover of grasses and herbs per hectare for each of the north and south treed areas, with a total minimum of >50% cover across all life forms, made up of 25 or more species.

Evaluation of project success

Part of the current assessment is to evaluate the likelihood of the offset meeting the agreed management commitments at the end of year ten. Current site condition provides a strong indication that the site is being effectively managed by Council and their delegates. While the individual actions completed on the land have not been reviewed, it is clear from site inspections and data collection that the works delivered to date have made significant progress toward the OMP objectives and associated performance criteria. It is also clear that many of the prescribed site management works have been delivered to a high standard, as shown by quality of recent restoration outcomes on site.

If the site continues to be managed at a high level for the remaining years of the OMP, it is likely the project will have an overall positive environmental outcome and that site condition will have improved substantially since the project inception. It is also known that restoration sites are inherently fragile and lack the stability that diverse, undisturbed remnant vegetation exhibits. Council must diligently manage this offset to ensure it is compliant with the OMP management commitments, which means sustained financial resourcing for the duration of the project. It will be clear in the year five audit whether the short-term gains outlined in this assessment are maintained and whether any major changes to land management or the OMP are required.

5. Recommendations

The following recommendations build on the existing land management actions set out in the OMP.

Project management

- Schedule the five year offset audit for late 2027, ensuring that the appointed assessor is engaged early in the financial year to ensure that the October survey timing can be met. Include the following survey and assessment requirements in the project brief:
  - Conduct transect monitoring using the fixed start and end points that were installed in 2025, to ensure consistency between surveys (independent of who undertakes the assessment).
  - Ensure that all Matted Flax-lily and Pale-flower Crane's-bill plants recorded in 2025 are inspected and surrounding areas searched to assess population change.
  - Undertake detailed mapping across the site to identify areas that clearly do not qualify as GEWVVP, which should be used as the basis for informing the remaining five years of GEWVVP restoration under the OMP[4].
- Council should provide auditors with any existing spatial data relevant to the audit, including any new data collected by Council and their contractors during offset management.

Weed management

- Eliminate all occurrences of new high threat weed species including *Rosa canina, Elymus repens* and all newly detected CaLP Act listed species.
- Reproductively mature Cherry Plum present in the south treed area requires control. Any smaller/younger plants observed should also be removed, with attention to plants observed throughout HZ1B.
- Replace Sweet Vernal-grass in the northern treed area with perennial native ground layer species.
- Take precautionary measures to minimise the risk of *Carex divulsa* and *Nassella neesiana* from spreading into the offset from nearby surrounding areas, ideally by eliminating these infestations if feasible, or by increasing adherence to appropriate hygiene protocols including slashing management (see DoE 2021).

Revegetation

- Ensure that *Austrostipa* species are represented in direct seeding mixes and establish these within restoration areas. Utilise existing genetic diversity from the municipality which includes a large number of small reserves on the Victorian Volcanic Plain where large populations of relevant species occur. Key examples include *Austrostipa bigeniculata, A. blackiana, A. curticoma, A. nodosa, A. mollis, A. oligostachya, A. scabra* subsp. *falcata, A. semibarbata.*

[4] This requirement is to ensure compliance with the agreed management commitment to increase the extent of GEWVVP at the offset site

- Additional grasses and grass-like plants (graminoids) recommended for planting or seeding in restoration areas include *Bothriochloa macra* (dry rocky areas, track margins)*, Carex breviculmis, C. inversa* (damp areas)*, Chloris truncata* (open, disturbed areas, track margins), *Dichelachne crinita, Hemarthria uncinata* (damp depressions)*, Walwhalleya proluta* (seasonally damp depressions)*.*
- Within restoration areas of the offset, plant or direct seed the key herb species listed in Appendix 1 of the Listing Advice (TSSC 2009), noting the need to introduce high densities of individual species to increase the likelihood of creating viable populations.
  - Species that are small/single stemmed (unlikely to spread much laterally) should be introduced at high densities, key examples include *Acaena agnipila* or *A. echinata, Calocephalus citreus*, *Dianella longifolia* var. *grandis, Eryngium ovinum, Geranium* sp. 3 (rocky areas), *G. solanderi* (under eucalypt canopies)*, Gonocarpus tetragynus, Leptorhynchos squamata, Rumex dumosus, Solenogyne dominii, Senecio squarrosus, Vittadinia gracilis.*
  - Tuberous lilies can be planted at high densities, examples include *Arthropodium minus* or *strictum, Bulbine bulbosa, Burchardia umbellata, Caesia calliantha.*
  - Species known to spread widely (vegetatively) are highly recommended and may be planted at comparatively lower densities (to those above). Examples include *Asperula conferta, Calocephalus citreus* (wet depressions), *Chrysocephalum apiculatum* subsp. *apiculatum* or subsp. *congestum, Coronidium gunnianum* (wet depressions), *Dichondra repens* (under eucalypt canopies), *Eryngium vesiculosum* (seasonally wet depressions), *Haloragis heterophylla* or *H. aspera, Plantago varia* or *P. gaudichaudii, Veronica gracilis.*
  - Herbaceous peas that are be desirable to establish in rocky areas if grazing is effectively control: *Cullen tenax* (Tough Scurf-pea)*, C. parvum* (Small Scurf-pea)*, Cullen microcephalum* (Dusky Scurf-pea), *Glycine clandestina* (Twining Glycine)*, G. tabacina* (Variable Glycine)*, G. latrobeana* (Clover Glycine)*.*
  - Difficult to cultivate species that would be desirable to reintroduce include *Lomandra nana*, *Pimelea curviflora* subsp. *sericea* and *P. humilis.*

Other actions

- Delimit any Matted Flax-lily and Pale-flower Crane's-bill plants with appropriate field markers for efficient population monitoring, to communicate their locations to Council staff and contractors, and to reduce the risk of any damage from land management works.
- Monitor Drooping Cassinia and eucalyptus seedlings across the site, identifying whether plant densities may be causing declines to ground layer flora, and any requirement to manage recruiting populations. This is most critical in direct seeding areas where recruitment is highly likely to occur. Note that the control of these species may require statutory approval by regulatory authorities and/or a variation to the OMP.

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Weeds Australia (2026) Established: Weeds of National Significance. Available at: https://weeds.org.au/lists/established/ (accessed January 2026).

Appendix 1. Flora observed within the offset site at 1775 Donnybrook Road, Woodstock.

The plant names and taxon ID values in the table below come from the Victorian Biodiversity Atlas (DELWP 2026a). The list is ordered by scientific name, which comprises of a genus (first name) and specific epithet (second name). In cases where a record has been identified only to genus, the specific epithet is as 'spp.' (species, plural).

Threatened species status follows the listings of the Victorian *Flora and Fauna Guarantee Act 1988* (FFG Act) (DEECA 2026b) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (DCCEEW 2026). Noxious weed listings are given by DEECA (2026c) and Weeds of National Significance (WNS) by Weeds Australia (2026).

Key to origin, introduced sources and status:

*	Exotic to Victoria	**EN**	EPBC Act listed Endangered
#	Non-indigenous Victorian taxa	**cr**	FFG Act listed Critically Endangered
Ø	Uncertain origin based on VicFlora (2026)	**en**	FFG Act listed Endangered
Re	Present solely by reintroduction (revegetation works)	**RR**	Regionally restricted in the PPWCMA
†	Non-indigenous or cultivated threatened species (no conservation significance)	**RC**	Regionally restricted in the PPWCMA
		WNS	Regionally restricted in the PPWCMA

Origin	Scientific name	Common name	VBA taxon ID	Cover (%)	Source	Status
	Acacia acinacea s.s.	Gold-dust Wattle	504778	0.50	Re	
	Acacia implexa	Lightwood	500045	0.50		
	Acacia melanoxylon	Blackwood	500057	0.50		
	Acacia paradoxa	Hedge Wattle	500072	0.50		
	Acaena agnipila	Hairy Sheep's Burr	500104	0.01		
*	*Acetosella vulgaris*	Sheep Sorrel	502966	0.02		
*	*Agrostis capillaris*	Brown-top Bent	500153	0.02		
*	*Aira caryophyllea* subsp. *caryophyllea*	Silvery Hair-grass	500164	0.01		
*	*Aira elegantissima*	Delicate Hair-grass	500166	0.01		
*	*Allium triquetrum*	Angled Onion	500179	0.01		RR
	Allocasuarina verticillata	Drooping Sheoak	500685	0.50	Re	
	Anthosachne scabra s.s.	Common Wheat-grass	528409	0.02		
*	*Anthoxanthum odoratum*	Sweet Vernal-grass	500236	2.00		
*	*Aphanes arvensis*	Parsley Piert	500239	0.01		
*	*Arctotheca calendula*	Cape Weed	500255	0.02		
	Arthropodium strictum s.s.	Chocolate Lily	505126	0.02		
	Asperula conferta	Common Woodruff	500278	0.01		
	Austrostipa nodosa	Knotty Spear-grass	503285	0.01		
	Austrostipa rudis subsp. *rudis*	Veined Spear-grass	504942	0.02		
	Austrostipa scabra subsp. *scabra*	Rough Spear-grass	504943	0.02		
	Austrostipa semibarbata	Fibrous Spear-grass	503291	0.01		
*	*Avena barbata*	Bearded Oat	500340	0.10		
*	*Avena ludoviciana*	Winter Wild-oat	504226	0.02		
*	*Avena sterilis* s.s.	Sterile Oat	504242	0.02		
*	*Brassica fruticulosa*	Twiggy Turnip	500488	0.02		
*	*Brassica* spp.	Turnip	508148	0.01		
*	*Briza maxima*	Large Quaking-grass	500495	1.00		
*	*Briza minor*	Lesser Quaking-grass	500496	0.01		
*	*Bromus catharticus* var. *catharticus*	Prairie Grass	505582	0.01		
*	*Bromus diandrus*	Great Brome	500500	0.02		
*	*Bromus hordeaceus*	Soft Brome	500501	0.02		
	Bulbine bulbosa	Bulbine Lily	500510	0.01		
	Bursaria spinosa subsp. *spinosa*	Sweet Bursaria	500515	0.50		
	Caesia calliantha	Blue Grass-lily	500519	0.01		
*	*Carduus pycnocephalus*	Slender Thistle	500620	0.01		RC
	Carex appressa	Tall Sedge	500623	0.02		
	Carex breviculmis	Common Grass-sedge	500627	0.01		
	Carex inversa	Knob Sedge	500642	0.02		
*	*Carthamus lanatus*	Saffron Thistle	500660	0.02		RR
	Cassinia longifolia	Shiny Cassinia	500668	0.50		
⌀	*Cassinia sifton*	Drooping Cassinia	500667	0.10		
*	*Catapodium rigidum*	Fern Grass	500687	0.01		
*	*Cenchrus clandestinus*	Kikuyu	502451	0.01		
*	*Centaurium erythraea*	Common Centaury	500702	0.02		

Origin	Scientific name	Common name	VBA taxon ID	Cover (%)	Source	Status
*	*Cerastium glomeratum* s.s.	Sticky Mouse-ear Chickweed	505238	0.02		
*	*Chenopodium murale*	Sowbane	500746	0.02		
*	*Cirsium vulgare*	Spear Thistle	500782	0.01		RC
	Convolvulus angustissimus subsp. *angustissimus*	Blushing Bindweed	505885	0.01		
	Convolvulus angustissimus subsp. *omnigracilis*	Slender Bindweed	505549	0.01		
	Crassula decumbens var. *decumbens*	Spreading Crassula	500860	0.02		
	Crassula peduncularis	Purple Crassula	500865	0.01		
	Crassula sieberiana s.s.	Sieber Crassula	504378	0.01		
	Crassula tetramera	Australian Stonecrop	504337	0.01		
*	*Cynodon dactylon* var. *dactylon*	Couch	504554	0.02		
*	*Cynosurus echinatus*	Rough Dog's-tail	500912	0.02		
*	*Cyperus eragrostis*	Drain Flat-sedge	500918	0.02		
*	*Dactylis glomerata*	Cocksfoot	500948	0.05		
	Desmodium varians	Slender Tick-trefoil	504425	0.01		
	Dianella amoena	Matted Flax-lily	505084	0.01		cr, EN
	Dichondra repens	Kidney-weed	501036	0.02		
	Dodonaea viscosa	Sticky Hop-bush	501095	0.05		
	Drosera hookeri	Branched Sundew	528663	0.01		
	Dysphania pumilio	Clammy Goosefoot	500748	0.05		
*	*Echium plantagineum*	Paterson's Curse	501123	0.05		RC
*	*Ehrharta erecta*	Panic Veldt-grass	501128	0.05		
*	*Ehrharta longiflora*	Annual Veldt-grass	501129	0.05		
	Einadia nutans	Nodding Saltbush	501133	0.02		
	Eleocharis acuta	Common Spike-sedge	501139	0.01		
*	*Elymus repens*	English Couch	500145	0.01		
	Epilobium billardiereanum subsp. *cinereum*	Grey Willow-herb	504445	0.01		
	Epilobium hirtigerum	Hairy Willow-herb	501179	0.10		
*	*Erigeron bonariensis*	Flaxleaf Fleabane	500812	0.02		
	Eucalyptus camaldulensis subsp. *camaldulensis*	River Red-gum	505313	15.00		
	Euchiton japonicus s.s.	Creeping Cudweed	501466	0.01		
*	*Festuca arundinacea*	Tall Fescue	501356	0.05		
	Ficinia marginata	Little Club-sedge	501780	0.01		
*	*Fumaria bastardii*	Bastard's Fumitory	501379	0.01		
*	*Fumaria capreolata*	White Fumitory	501380	0.01		
*	*Galium aparine*	Cleavers	501402	0.01		
*	*Gamochaeta americana*	Spiked Cudweed	507025	0.01		
*	*Genista monspessulana*	Montpellier Broom	501422	0.01		RC WNS
*	*Geranium dissectum*	Cut-leaf Crane's-bill	501426	0.01		
	Geranium sp. 2	Variable Crane's-bill	505343	0.01		
	Geranium sp. 3	Pale-flower Crane's-bill	505344	0.01		en
	Geranium sp. 5 × sp. 3	Naked Crane's-bill Pale-flower Crane's-bill hybrid	505346	0.01		
	Goodenia ovata	Hop Goodenia	501507	0.01		
	Grevillea rosmarinifolia	Rosemary Grevillea	501550	0.01	Re	
*	*Hainardia cylindrica*	Common Barb-grass	502216	0.01		
*	*Helminthotheca echioides*	Ox-tongue	502511	0.01		
*	*Holcus lanatus*	Yorkshire Fog	501692	0.02		
*	*Hordeum glaucum*	Northern Barley-grass	501700	0.01		
*	*Hordeum leporinum*	Barley Grass	501701	0.01		
	Hypericum gramineum	Small St John's Wort	501741	0.01		
*	*Hypochaeris radicata*	Flatweed	501748	0.01		
*	*Isolepis levynsiana*	Tiny Flat-sedge	500936	0.01		
	Juncus amabilis	Hollow Rush	501803	0.01		
⌀	*Juncus bufonius*	Toad Rush	501810	0.01		
	Juncus subsecundus	Finger Rush	501843	0.01		
#	*Kunzea* sp. (Upright form)	Forest Burgan	507067	0.05	Re	
	Lachnagrostis filiformis s.s.	Common Blown-grass	504219	0.01		
*	*Lactuca serriola* f. *integrifolia*	Prickly Lettuce	528468	0.01		
*	*Lactuca serriola* f. *serriola*	Prickly Lettuce	528627	0.01		
	Laphangium luteoalbum	Jersey Cudweed	502762	0.01		
*	*Leontodon saxatilis* subsp. *saxatilis*	Hairy Hawkbit	501895	0.02		
*	*Lepidium africanum*	Common Peppercress	501896	0.01		
*	*Lolium perenne*	Perennial Rye-grass	502036	0.01		
*	*Lolium rigidum*	Wimmera Rye-grass	502037	0.01		
	Lomandra filiformis subsp. *coriacea*	Wattle Mat-rush	504709	0.01		
	Lomandra longifolia subsp. *longifolia*	Spiny-headed Mat-rush	504714	0.02		
*	*Lotus angustissimus*	Slender Bird's-foot Trefoil	502056	0.01		
*	*Lotus corniculatus*	Bird's-foot Trefoil	502058	0.02		

Origin	Scientific name	Common name	VBA taxon ID	Cover (%)	Source	Status
*	*Lysimachia arvensis* var. *arvensis*	Scarlet Pimpernel	505170	0.02		
⌀	*Lythrum hyssopifolia*	Small Loosestrife	502092	0.02		
*	*Malva parviflora*	Small-flower Mallow	502122	0.01		
*	*Marrubium vulgare*	Horehound	502123	0.01		RC
*	*Medicago polymorpha*	Burr Medic	502140	0.01		
*	*Medicago sativa* subsp. *sativa*	Lucerne	502141	0.01		
#	*Melaleuca armillaris* subsp. *armillaris*	Giant Honey-myrtle	502145	0.01		†
	Melaleuca ericifolia	Swamp Paperbark	502147	0.50	Re	
	Melicytus dentatus s.s.	Tree Violet	504933	0.10		
	Microlaena stipoides var. *stipoides*	Weeping Grass	502179	0.01		
*	*Modiola caroliniana*	Red-flower Mallow	502213	0.02		
*	*Moenchia erecta*	Erect Chickweed	502214	0.01		
*	*Nassella neesiana*	Chilean Needle-grass	503282	0.10		RR
*	*Oxalis corniculata* s.s.	Creeping Wood-sorrel	503906	0.01		
	Oxalis exilis	Shade Wood-sorrel	502381	0.01		
	Oxalis perennans	Grassland Wood-sorrel	502386	0.01		
*	*Oxalis pes-caprae*	Soursob	502387	0.01		RR
*	*Paspalum dilatatum*	Paspalum	502430	0.01		
	Pelargonium australe	Austral Stork's-bill	502442	0.01		
*	*Pentameris airoides* subsp. *airoides*	False Hair-grass	502457	0.01		
*	*Phalaris aquatica*	Toowoomba Canary-grass	502476	0.01		
*	*Phalaris minor*	Lesser Canary-grass	502479	0.01		
*	*Plantago coronopus*	Buck's-horn Plantain	502553	0.01		
*	*Plantago lanceolata*	Ribwort	502561	0.01		
*	*Poa bulbosa*	Bulbous Meadow-grass	502582	0.01		
*	*Poa infirma*	Early Meadow-grass	502599	0.01		
	Poa labillardierei var. *labillardierei*	Common Tussock-grass	504694	0.02		
	Poa rodwayi	Velvet Tussock-grass	502609	0.01		
*	*Polycarpon tetraphyllum*	Four-leaved Allseed	502622	0.01		
*	*Polygonum aviculare* s.s.	Hogweed	504000	0.02		
*	*Prunus cerasifera*	Cherry Plum	502758	0.01		
*	*Prunus cerasifera 'Atropurpurea'*	Purple-leaf Cherry-plum	505233	0.01		
*	*Ranunculus muricatus*	Sharp Buttercup	502897	0.01		
*	*Rapistrum rugosum*	Giant Mustard	502919	0.02		
*	*Romulea rosea* var. *australis* s.s.	Common Onion-grass	504113	0.01		
*	*Rosa canina*	Dog Rose	503970	0.01		
*	*Rubus anglocandicans*	Common Blackberry	502959	0.01		RC WNS
	Rumex brownii	Slender Dock	502968	0.01		
*	*Rumex crispus*	Curled Dock	502970	2.00		
	Rytidosperma caespitosum	Common Wallaby-grass	500961	0.01		
	Rytidosperma duttonianum	Brown-back Wallaby-grass	500963	0.02		
	Rytidosperma geniculatum	Kneed Wallaby-grass	500965	0.01		
	Rytidosperma laeve	Smooth Wallaby-grass	500967	1.00		
	Rytidosperma setaceum	Bristly Wallaby-grass	500980	0.01		
	Schoenus apogon	Common Bog-sedge	503039	0.01		
	Senecio quadridentatus	Cotton Fireweed	503124	0.01		
*	*Sisymbrium officinale*	Hedge Mustard	503161	0.02		
*	*Solanum nigrum* s.s.	Black Nightshade	505322	0.01		
*	*Sonchus asper* s.s.	Rough Sow-thistle	505712	0.03		
*	*Sonchus oleraceus*	Common Sow-thistle	503204	0.03		
*	*Stellaria media*	Chickweed	503251	0.01		
*	*Taraxacum officinale* spp. agg.	Garden Dandelion	503336	5.00		
	Themeda triandra	Kangaroo Grass	503387	0.01		
*	*Tribolium acutiflorum* s.s.	Crested Desmazeria	505581	0.01		
	Tricoryne elatior	Yellow Rush-lily	503421	0.01		
*	*Trifolium angustifolium* var. *angustifolium*	Narrow-leaf Clover	503423	0.01		
*	*Trifolium arvense* var. *arvense*	Hare's-foot Clover	503424	0.01		
*	*Trifolium campestre* var. *campestre*	Hop Clover	503425	0.01		
*	*Trifolium dubium*	Suckling Clover	503427	0.01		
*	*Trifolium fragiferum* var. *fragiferum*	Strawberry Clover	503428	0.01		
*	*Trifolium glomeratum*	Cluster Clover	503429	0.01		
*	*Trifolium repens* var. *repens*	White Clover	503435	0.01		
*	*Trifolium striatum*	Knotted Clover	503439	0.01		
*	*Trifolium subterraneum*	Subterranean Clover	503440	0.05		
	Typha spp.	Bulrush	509178	0.01		
*	*Ulex europaeus*	Gorse	503471	0.01		RC WNS
*	*Vicia disperma*	French Tiny Vetch	503515	0.01		
*	*Vicia sativa* subsp. *sativa*	Common Vetch	505054	0.10		
*	*Vulpia bromoides*	Squirrel-tail Fescue	503544	0.10		
*	*Vulpia myuros* f. *myuros*	Rat's-tail Fescue	504181	0.50		

Appendix 2. Photos of monitoring transects in October 2025.

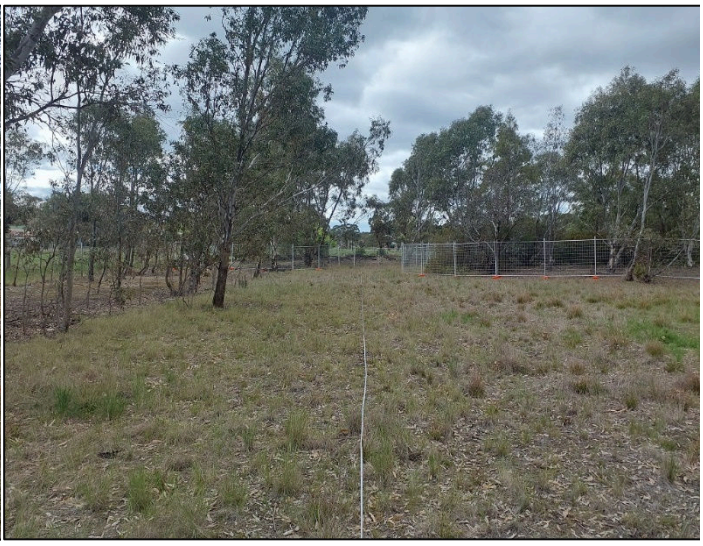
Photopoints include two photographs for each transect, aligned with the tape measure and taken from each end of the transect. Start points are provided with a transect bearing while end points include the back bearing. Map 1 shows the location of each transect.

Note the omission of the start photo for transect 2 within the north treed area.

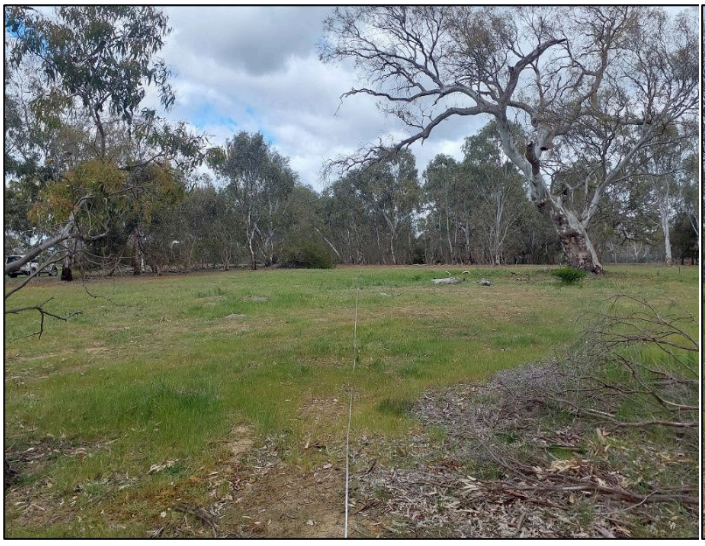
Photopoints for the south treed area

South Transect 1
Start – 269°

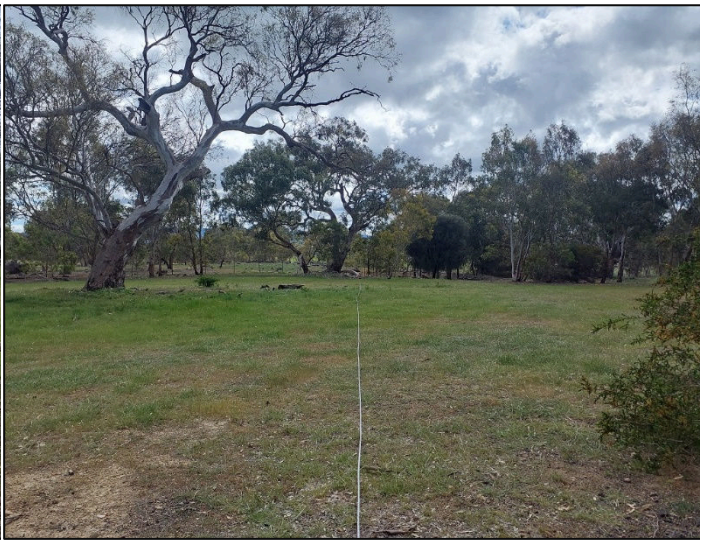
End – 91°



South Transect 2
Start – 211°

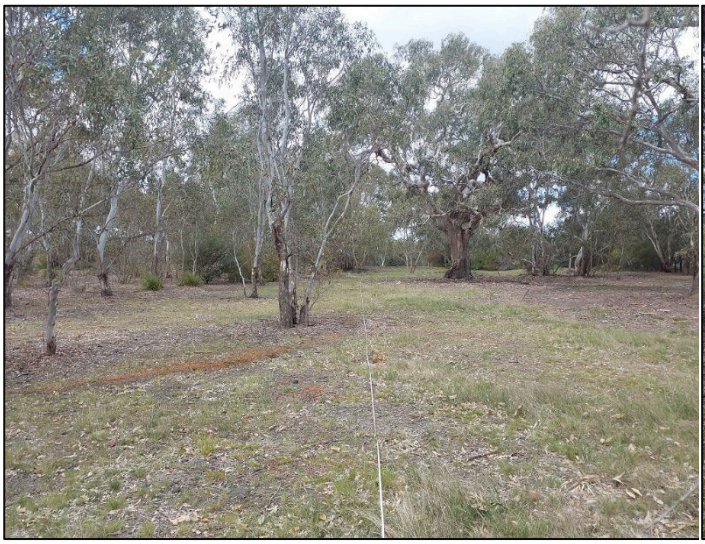


End – 31°

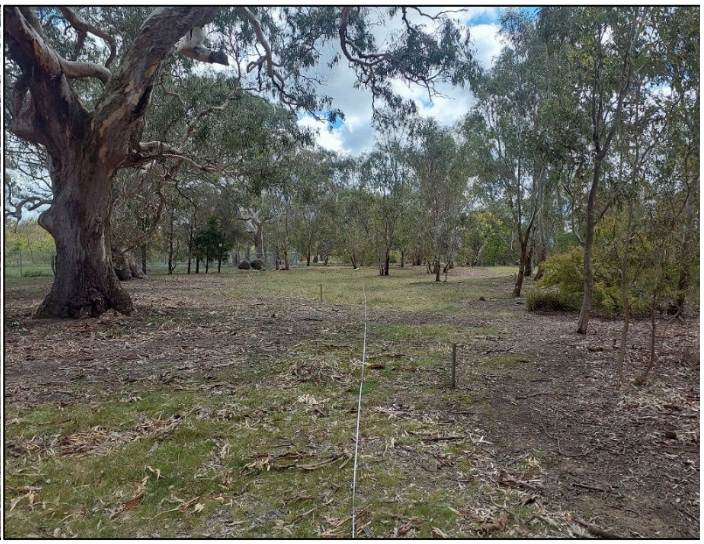


South Transect 3

Start – 180°



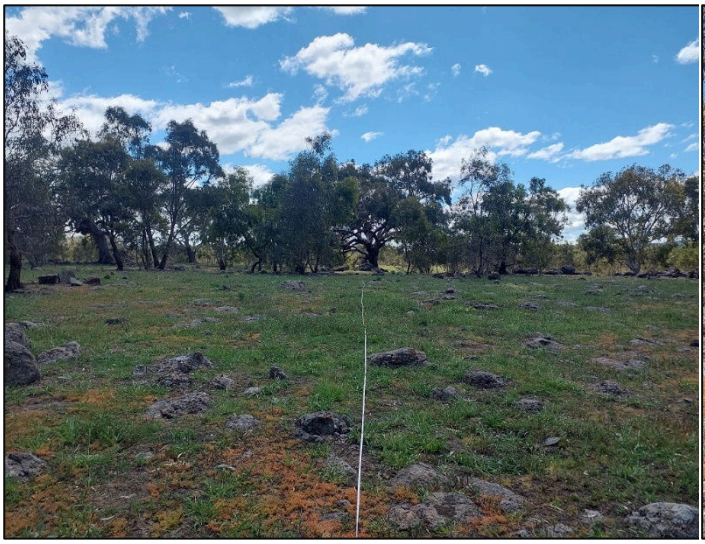
End – 0°



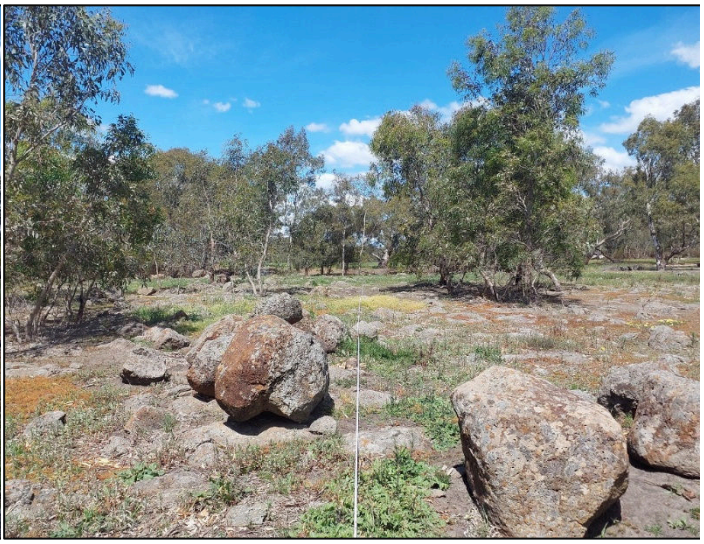
Photopoints for the north treed area

North Transect 1

Start – 334°



End – 154°



North Transect 2

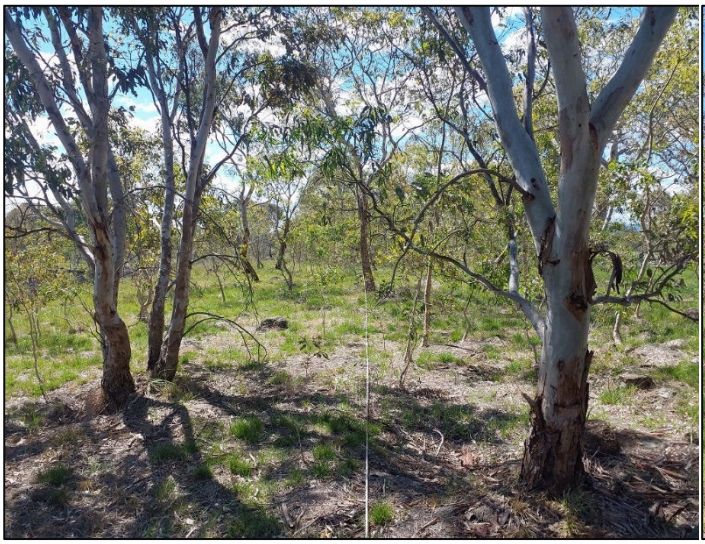
Start – 323°

NO PHOTO

End – 123°

North Transect 3

Start – 1°



End – 181°