

Regional Ecosystem Mapping Project Report

Fraser Coast, QLD
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1 Introduction

Redleaf Environmental was engaged by Fraser Coast Regional Council (FCRC) to undertake a Regional Ecosystem (RE) Vegetation Mapping Project to create an evidence base to inform several council projects including the Planning Scheme Review Project, Threatened Species Action Plan and Greening Fraser Coast. The components of the planning scheme review include Matters of Local Environmental Significance (MLES) for locally significant species habitat, ecological linkages/wildlife corridors, local wetlands and koala habitat.

1.1 Project objectives

While Council have some small patches of high-resolution vegetation mapping (1:10,000 or 1:25,000), the State's current adopted RE vegetation mapping is predominantly mapped at a broad and unrefined scale (most parts of Queensland were prepared at a scale of 1:100,000 or 1:50,000). This project will obtain refined mapping at a 1:25,000 scale.

1.2 Study areas

Council identified 11 priority study areas for the Regional Ecosystem mapping (Figure 1).

- Booral
- Burrum Heads 1
- Burrum Heads 2
- Burrum Heads 3
- Burrum Heads 4
- Toogoom
- Nikenbah/Dundowran
- Nikenbah/Kawungan
- Maryborough North
- St Helens
- Tinana



Legend

- | | | |
|----------------|--------------------|-------------------|
| Study area | Burrum Heads 3 | Nikenbah/Kawungan |
| Booral | Burrum Heads 4 | St Helens |
| Burrum Heads 1 | Maryborough North | Tinana |
| Burrum Heads 2 | Nikenbah/Dundowran | Toogoom |

CRS: GDA 1994 MGA Zone 56
Projection: Transverse Mercator

Scale 1:160000 (A4)

0 1 2 3 km



Figure 1: Study Area Locations

Regional Ecosystem Mapping Project
Fraser Coast Regional Council

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Map Number 1 of 1 | Job Number FCRC21002



2 Methods

2.1 Field surveys

Fraser Coast council area was broken up into eleven (11) study areas, Booral, Burrum Heads 1, Burrum Heads 2, Burrum Heads 3, Burrum Heads 4, Maryborough North, Nikenbah/Dundowran, Nikenbah/Kawungan, St Helens, Tinana and Toogoom (Figure 1). These study areas were surveyed in accordance with the Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Neldner et al. 2020).

Surveys were carried out during May and June 2021 by two teams of botanists and ecologists. The following is an outline of the processes used to ground-truth regional ecosystem vegetation mapping in the project study areas:

- Conduct preliminary RE verification over the project area via desktop assessment of satellite imagery.
- Conduct field-based assessment of RE's within the project study areas using Quaternary sites.
- Obtain and examine topological, geological and soil data to determine RE classification.
- Obtain and examine historical satellite imagery to determine vegetation status.
- Verify and accurately map the extent of RE's within the project study areas.

As per the Queensland Herbarium methodology, Quaternary sites are used primarily to verify regional ecosystem and vegetation mapping. Quaternary sites may be collected at regular intervals along a traverse, and/or made where RE's/vegetation communities change. In this case Quaternary sites were collected where RE's were thought to differ and to confirm existing mapping.

Land access was arranged by FCRC, and private properties were surveyed where access was granted. Where access was restricted, observations were taken from publicly accessible lands with information collected using binoculars where necessary.

Redleaf completed over 700 quaternary sites covering the priority study areas. Photos, site description and GPS coordinates were recorded at each survey site. From the targeted field assessments, the following attributes were ground-truthed:

- Pre-clear vegetation
- Remnant vegetation
- High-value regrowth
- Vegetation cover/height
- Non-remnant areas

Additional environmental values identified in the field were documented with photography, GPS coordinates, and note taking. This included capturing data on:

- Floristic values, including the presence of threatened species.
- Locally significant flora species;
- Koala sightings and presence of scat

2.2 Desktop study

A desktop study was carried out post field survey to clarify and confirm observations made in the field. Mapping linework was adjusted based on satellite imagery and aerial imagery for historical clearing, geological mapping and field survey results. The following databases and Geographic Information System (GIS) layers were searched/obtained.

- Department of Environment and Science (2020) Certified Regional Ecosystem Mapping Database (DES Regional Ecosystem Mapping & Preclear Vegetation Mapping).

2.2.1 Historical satellite imagery

Desktop analysis included reviewing historical satellite imagery, woody vegetation cover and other orthorectified digital aerial imagery. Interpretation using historical aerial photographs will also assist in determining the existing

vegetation status (remnant, non-remnant or high-value regrowth). And when comparing with on-ground assessments, can help to make a final determination for vegetation mapping units within the study areas.

As per Nelder et. al (2020), in order for vegetation to be classified as High-value regrowth (HVR) or Remnant (R) certain thresholds must be met. For example, HVR applies to vegetation not cleared in the last 15 years. Patches of vegetation in the study area that were considered during field assessment to be of, or close to HVR status were observed and compared to satellite imagery of the same patch back to 2006. If the vegetation had been cleared within this time, the patch did not meet the requirements of HVR classification.

Table 1 shows the satellite imagery obtained from Qimagery to verify if vegetation has been cleared in the last 15 years. This particular patch off Urangan Branch Railway (2RP35492) was surveyed as being of Remnant quality. The vegetation was shown to be cleared in historic satellite imagery from 1998, but hasn't been cleared since. This patch then meets the non-clearing requirements for HVR.

Table 1 Satellite imagery showing regrowth of vegetation (1998 – current)



2.2.2 Geological mapping

Part of the RE Mapping methodology involves the examination of geological maps to determine the land zone category, which is a determining factor for RE classification. Surface geology mapping, topography and soils mapping were searched/obtained from the Queensland Government Publications portal, and this information was used to clarify landzone queries from the field assessment.

3 Results

Redleaf recorded 708 quaternary sites across the study areas (Appendix A: Quaternary Sites and Regional Ecosystem Maps and Appendix B: Quaternary site data). The survey has revealed some changes in extent (hectares) based on the Vegetation Management Act status and RE types for the regional ecosystems and ground truthed RE (GTRE) mapping (Table 2 and Table 3).

Table 2: A comparison of the current Vegetation Management Act 1999 (VMA) Status and ground truthed RE layer (GTRE) in hectares (this study).

VMA Status	VMA	GTRE
High Value Regrowth – Endangered	172	182
High Value Regrowth – Least Concern	365	354
High Value Regrowth – Of Concern	625	268
Non Remnant	8337	8662
Remnant – Endangered	361	360
Remnant Least Concern	1802	2031
Remnant Of Concern	751	552
water	103	108
Total	12515	12515

Table 3: A comparison of the current VMA RE type and ground truthed RE layer in hectares (this study)

Regional Ecosystem	RE Description	VMA	GTRE
12.1.2	Saltpan vegetation including grassland, herbland and sedgeland on marine clay plains	5	4
12.1.3	Mangrove shrubland to low closed forest	5	2
12.2.11	<i>Corymbia tessellaris</i> +/- <i>Eucalyptus tereticornis</i> , <i>C. intermedia</i> and <i>Livistona decora</i> woodland on beach ridges in northern half of bioregion	81	136
12.2.12	Closed heath on seasonally waterlogged sand plains	16	-
12.2.13	Open or dry heath on dunes and beaches		15
12.2.15	<i>Gahnia sieberiana</i> , <i>Empodisma minus</i> , <i>Gleichenia spp.</i> closed sedgeland in coastal swamps	6	7
12.2.2	Microphyll/notophyll vine forest on beach ridges	-	3
12.2.7	<i>Melaleuca quinquenervia</i> or rarely <i>M. dealbata</i> open forest on sand plains	126	77
12.2.9	<i>Banksia aemula</i> low open woodland on dunes and sand plains. Usually deeply leached soils	145	159
12.3.11	<i>Eucalyptus tereticornis</i> +/- <i>Eucalyptus siderophloia</i> , <i>Corymbia intermedia</i> open forest on alluvial plains usually near coast	763	618
(12.3.11)	Mapping unit requiring resolution/discussion	-	107
12.3.11/12.3.5	<i>Eucalyptus tereticornis</i> +/- <i>Eucalyptus siderophloia</i> , <i>Corymbia intermedia</i> open forest on alluvial plains usually near coast	585	172

Regional Ecosystem	RE Description	VMA	GTR
	<i>Melaleuca quinquenervia</i> open forest on coastal alluvium		
12.3.11/12.3.6	<i>Eucalyptus tereticornis</i> +/- <i>Eucalyptus siderophloia</i> , <i>Corymbia intermedia</i> open forest on alluvial plains usually near coast	8	-
	<i>Melaleuca quinquenervia</i> +/- <i>Eucalyptus tereticornis</i> , <i>Lophostemon suaveolens</i> , <i>Corymbia intermedia</i> open forest on coastal alluvial plains		
12.3.16	Complex notophyll to microphyll vine forest on alluvial plains	5	-
12.3.20	<i>Melaleuca quinquenervia</i> , <i>Casuarina glauca</i> +/- <i>Eucalyptus tereticornis</i> , <i>E. siderophloia</i> open forest on low coastal alluvial plains	14	8
12.3.3/12.3.20	<i>Eucalyptus tereticornis</i> woodland on Quaternary alluvium	0	-
	<i>Melaleuca quinquenervia</i> , <i>Casuarina glauca</i> +/- <i>Eucalyptus tereticornis</i> , <i>E. siderophloia</i> open forest on low coastal alluvial plains		
12.3.5	<i>Melaleuca quinquenervia</i> open forest on coastal alluvium	48	187
12.3.5/12.3.6	<i>Melaleuca quinquenervia</i> open forest on coastal alluvium	61	-
	<i>Melaleuca quinquenervia</i> +/- <i>Eucalyptus tereticornis</i> , <i>Lophostemon suaveolens</i> , <i>Corymbia intermedia</i> open forest on coastal alluvial plains		
12.3.5/12.3.6/12.3.11	<i>Melaleuca quinquenervia</i> open forest on coastal alluvium	2	1
	<i>Melaleuca quinquenervia</i> +/- <i>Eucalyptus tereticornis</i> , <i>Lophostemon suaveolens</i> , <i>Corymbia intermedia</i> open forest on coastal alluvial plains		
	<i>Eucalyptus tereticornis</i> +/- <i>Eucalyptus siderophloia</i> , <i>Corymbia intermedia</i> open forest on alluvial plains usually near coast		
12.3.6	<i>Melaleuca quinquenervia</i> +/- <i>Eucalyptus tereticornis</i> , <i>Lophostemon suaveolens</i> , <i>Corymbia intermedia</i> open forest on coastal alluvial plains	12	10
12.3.7	<i>Eucalyptus tereticornis</i> , <i>Casuarina cunninghamiana</i> subsp. <i>cunninghamiana</i> +/- <i>Melaleuca</i> spp. fringing woodland	100	71
12.3.8	Swamps with <i>Cyperus</i> spp., <i>Schoenoplectus</i> spp. and <i>Eleocharis</i> spp.	1	
12.3.20	<i>Melaleuca quinquenervia</i> , <i>Casuarina glauca</i> +/- <i>Eucalyptus tereticornis</i> , <i>E. siderophloia</i> open forest on low coastal alluvial plains	-	37
12.5.13	Microphyll to notophyll vine forest +/- <i>Araucaria cunninghamii</i> on remnant Tertiary surfaces	75	25
12.5.13a	Microphyll to notophyll vine forest +/- <i>Araucaria cunninghamii</i>	-	60
12.5.2	<i>Corymbia intermedia</i> , <i>Eucalyptus tereticornis</i> open forest on remnant Tertiary surfaces, usually near coast	204	123
12.5.2a*	<i>Corymbia intermedia</i> tall open-forest with <i>L. confertus</i> and rainforest trees and vine understorey	-	41
12.5.2a	<i>Corymbia intermedia</i> , <i>Eucalyptus tereticornis</i> woodland	20	268
12.5.2a/12.5.2a*	<i>Corymbia intermedia</i> , <i>Eucalyptus tereticornis</i> woodland	-	20
	<i>Corymbia intermedia</i> tall open-forest with <i>L. confertus</i> and rainforest trees and vine understorey		

Regional Ecosystem	RE Description	VMA	GTR
12.5.4	<i>Eucalyptus latisinensis</i> +/- <i>Corymbia intermedia</i> , <i>C. trachyphloia</i> subsp. <i>trachyphloia</i> , <i>Angophora leiocarpa</i> , <i>Eucalyptus exserta</i> woodland	1128	1478
12.5.4a	Woodland of <i>Melaleuca quinquenervia</i> and/or <i>M. viridiflora</i> var. <i>viridiflora</i> +/- <i>Eucalyptus latisinensis</i> , <i>Corymbia intermedia</i> , <i>Angophora leiocarpa</i> , <i>E. exserta</i> , <i>Lophostemon suaveolens</i> and <i>M. nodosa</i> .	-	15
12.5.4/12.5.2	<i>Eucalyptus latisinensis</i> +/- <i>Corymbia intermedia</i> , <i>C. trachyphloia</i> subsp. <i>trachyphloia</i> , <i>Angophora leiocarpa</i> , <i>Eucalyptus exserta</i> woodland <i>Corymbia intermedia</i> , <i>Eucalyptus tereticornis</i> open forest on remnant Tertiary surfaces, usually near coast	214	-
12.5.4/12.5.7	<i>Eucalyptus latisinensis</i> +/- <i>Corymbia intermedia</i> , <i>C. trachyphloia</i> subsp. <i>trachyphloia</i> , <i>Angophora leiocarpa</i> , <i>Eucalyptus exserta</i> woodland <i>Corymbia citriodora</i> subsp. <i>variegata</i> +/- <i>Eucalyptus portuensis</i> or <i>E. acmenoides</i> , <i>E. fibrosa</i> subsp. <i>fibrosa</i> open forest	165	-
12.5.5	<i>Eucalyptus portuensis</i> , <i>Corymbia intermedia</i> open forest	1	-
12.5.7	<i>Corymbia citriodora</i> subsp. <i>variegata</i> +/- <i>Eucalyptus portuensis</i> or <i>E. acmenoides</i> , <i>E. fibrosa</i> subsp. <i>fibrosa</i> open forest	2	82
12.5.7/12.5.4	<i>Corymbia citriodora</i> subsp. <i>variegata</i> +/- <i>Eucalyptus portuensis</i> or <i>E. acmenoides</i> , <i>E. fibrosa</i> subsp. <i>fibrosa</i> open forest <i>Eucalyptus latisinensis</i> +/- <i>Corymbia intermedia</i> , <i>C. trachyphloia</i> subsp. <i>trachyphloia</i> , <i>Angophora leiocarpa</i> , <i>Eucalyptus exserta</i> woodland	276	-
12.9-10.16	Araucarian microphyll to notophyll vine forest	0	-
12.9-10.17	<i>Eucalyptus acmenoides</i> , <i>E. major</i> , <i>E. siderophloia</i> +/- <i>Corymbia citriodora</i> subsp. <i>variegata</i> open forest on sedimentary rocks	8	-
12.9-10.21	<i>Eucalyptus acmenoides</i> or <i>E. portuensis</i> woodland usually with <i>Corymbia trachyphloia</i> subsp. <i>trachyphloia</i>	-	28
estuary		0	0
non-rem		8337	8662
water		103	108
Grand Total		12515	12515

Several Matters of State Environmental Significance (MSES) and Matters of Local Environmental Significance (MLES) were observed during the survey effort and are recorded in Table 4.

Table 4: MSES, MNES and MLES found during surveys.

Feature	Species	Common name	Date located	Lat	long	Notes
MSES, MNES	<i>Phascolarctos cinereus</i>	Koala (scat)	19.05.21	-25.34274	152.86909	Found under a large Eucalyptus exserta tree. Site code NK25 for area.
	<i>Phascolarctos cinereus</i>	Koala (scat)	18.05.21	-25.33602	152.83821	Found under large Eucalyptus tereticornis that had lots of scratches on it. Indicating has been used multiple times.
	<i>Samadera bidwillii</i>	Quassia	20.05.21	-25.33500	152.85670	Area where this species is known to exist. Confirmed presence. Did not undertake a count but there were multiple plants.
MLES	<i>Agathis robusta</i>	Kauri pine	18.05.21	-25.33751	152.83793	Large, in private property with some cleared land.
	<i>Acacia bakeri</i>	Marblewood	21.05.21	-25.31338	152.81188	This was not on the list of MLES but this species is uncommon in the Hervey bay area. A count was not conducted but there were multiple individuals in the immediate vicinity of this GPS location.

Definitions: - MNES – Matter of national environmental significance, MSES – Matter of state environmental significance, MLES – Matter of local environmental significance

3.1 Site images

RE 12.2.13 - Burrum heads



Quaternary site no. TOBH39. Field verified as RE 12.2.13 Open or dry heath. Characteristic shrubs include stunted *Banksia aemula* and *Allocasuarina littoralis* as well as *Xanthorrhoea johnsonii*, *Leptospermum semibaccatum*, *Phebalium woombye*, *Dillwynia retorta* and *Caustis recurvata*. Usually occurs on Pleistocene dunes and beach ridges.

RE 12.3.11 - Nikenbah/Kawungun



Quaternary site code NK22. Ground-truthed as RE 12.3.11. This RE is described as *Eucalyptus tereticornis* +/- *E. siderophloia* and *Corymbia intermedia* open forest to woodland. *Corymbia tessellaris*, *Lophostemon suaveolens* and *Melaleuca quinquenervia* frequently occur and often form a low tree layer. This image shows the low tree layer dense with *Melaleuca quinquenervia*.

RE 12.5.3 - Nikenbah/Kawungun section



Quaternary site NK24. Field verified as Remnant 12.3.5. *Melaleuca quinquenervia* open forest to woodland. Understorey depends upon duration of water logging; sedges and ferns, especially *Blechnum indicum*, in wetter microhabitats and grasses and shrubs in drier microhabitats. Ground layer species include the

RE 12.5.2a - Nikenbah/Kawungun section



Quaternary site NK18. Field verified as HVR 12.5.2a. This RE is described as *Corymbia intermedia*, *Eucalyptus tereticornis* woodland. Other species can include *Lophostemon suaveolens*, *Angophora leiocarpa*, *Eucalyptus acmenoides* or *E. portuensis*, *E. siderophloia* or *E. crebra*, *Corymbia tessellaris* and *Melaleuca quinquenervia* (lower slopes). *Eucalyptus exserta* is usually present in northern parts of bioregion. Occurs

grasses *Leersia hexandra* and *Imperata cylindrica*, the sedges/rushes, *Machaerina rubiginosa*, *Gahnia sieberiana*, *Lepironia articulata*, *Schoenus brevifolius* and *Schoenus scabripes* and the fern *Lygodium microphyllum*. Other tree species that may be present as scattered individuals or clumps include *Lophostemon suaveolens*, *Eucalyptus robusta*, *E. tereticornis*, *E. bancroftii*, *E. latisinensis*, *Corymbia intermedia*, *Melaleuca salicina*, *Livistona australis*, *Casuarina glauca*, *Endiandra sieberi*. *Melastoma malabathricum subsp. malabathricum*, *Glochidion sumatranum* and *Melicope elleryana* are often in understorey. Occurs on Quaternary alluvium in coastal areas. (BVG1M: 22a)

on complex of remnant Tertiary surfaces +/- Cainozoic and Mesozoic sediments usually in coastal areas with deep red soils. (BVG1M: 9g)

RE 12.5.4 - Nikenbah/Kawungun section



Ground-truthed as RE 12.5.4. This RE is described as *Eucalyptus latisinensis* +/- *Corymbia intermedia*, *C. trachyphloia subsp. trachyphloia*, *Angophora leiocarpa*, *Eucalyptus exserta* woodland. Other characteristic species include *Eucalyptus siderophloia*, *Lophostemon suaveolens*, *Melaleuca viridiflora var. viridiflora*, *M. quinquenervia*, *M. cheelii* and *Grevillea banksii*. Patches of *Allocasuarina luehmannii* or *Banksia oblongifolia* present locally and *Xanthorrhoea johnsonii* common in ground layer.

RE 12.5.4 - Nikenbah/Dundowran section



Quaternary site code ND08. Ground-truthed as RE 12.5.4. *Eucalyptus latisinensis* +/- *Corymbia intermedia*, *C. trachyphloia subsp. trachyphloia*, *Angophora leiocarpa*, *Eucalyptus exserta* woodland on complex of remnant Tertiary surfaces and Cainozoic and Mesozoic sediments.

Non- rem. Nikenbah/Kawungun section



Quaternary site code NK21. Ground-truthed as Non-Rem. Vegetation here had been cleared recently and was noted as regrowth *Acacia leiocalyx*, *Melaleuca quinquenervia* and *Eucalyptus tereticornis*, with some large remaining remnant *Eucalyptus tereticornis* canopy trees

4 Discussion

4.1 Mapping units requiring resolution/discussion - Booral

“(12.3.11)”

(12.3.11) has been used as an interim label for vegetation found to occur widely/uniformly along a level to gently undulating landform (“plain”) adjacent to the coastline at Booral. The plain is 300 m – 1000 m wide and slightly elevated above the HAT. It is fringed in places on the seaward side by a narrow sandy beach ridge vegetated with small patches of RE 12.2.11. The geology comprises sedimentary sub-formations of the Maryborough Formation, with little to no evidence of Tertiary weathering. Rock is exposed along the shore below the plain. There appears to be an incipient drainage pattern – the hillshade option under Elevation in Qld Globe indicates small gullies rising on the hillslopes and becoming diffuse at the break of slope at the edge of the plain.

The aerial photo record shows the area was more or less entirely cleared and cropped in places. A parkland type tree cover (thinned, no understorey, mowed) is present in places (Image 1) and some localised remnants (older regrowth?) are present. The remnant patches have been mapped by the Herbarium as 12.3.11 along with some RE 12.5.2 and 12.5.4. The main retained canopy trees are *E. tereticornis* +/- *E. siderophloia* and *C. intermedia*. *Acacia* spp., and *Melaleuca* spp. are present in the understorey in less disturbed places. “(12.3.11)” merges into 12.5.4 or 12.5.2a at the base of hillslopes.

Based upon field observations it is suggested that land zone 3 is not the predominant land zone associated with this landform.

12.5.2a

RE 12.5.2a is described as *Corymbia intermedia*, *Eucalyptus tereticornis* woodland. Other species listed that may occur in the ecological community include *Lophostemon suaveolens*, *Angophora leiocarpa*, *Eucalyptus acmenoides*/*E. portuensis*, *E. siderophloia* or *E. crebra*, *Corymbia tessellaris* and *Melaleuca quinquenervia* (lower slopes). *Eucalyptus exserta* is usually present in northern parts of bioregion.

The above description is a good general fit for much of the vegetation on stony soils associated with several prominent ridges on beds of hardened siltstone south of Hervey Bay between Dundowran and River Heads, part of the Maryborough Formation (Willmott 2016). The following specific patterns were detected:

1. *Corymbia intermedia* – *E. tereticornis* tall open-forest/open-forest +/- rainforest understorey and/or patches of rainforest. Mostly cleared/regrowth. Regrowth contains *Acacia disparrima* which can form a mid-dense T1 15 – 22 m tall +/- occasional *E. tereticornis* and *C. intermedia*.
2. Tall open forest to open forest of *C. intermedia* with a T2 layer of *Lophostemon confertus* and scattered rainforest trees (Image 2). Rainforest trees, vines and shrubs form T3 and S layers and there are localised patches of rainforest. Appears to occur on unweathered sedimentary rocks on the seaward side of the ridge
3. *C. intermedia* – *E. exserta* woodland with a closed T2 layer of *Lophostemon confertus* and sparse shrub and ground layers (in places trends to low closed forest of *L. confertus* with emergent *Eucalyptus*). Fringes the 12.5.2a*.
4. *Eucalyptus acmenoides* dominant open-forest (Image 3). Note that *E. acmenoides*/*E. portuensis* are grouped together here as they are difficult to distinguish (see notes below).
5. A woodland to shrubby woodland with *E. latisinensis*, *E. exserta*, *E. siderophloia*, *Angophora leiocarpa*.

Much of the vegetation appears to be regrowth although some patches with large old trees were sampled. An occurrence of the *Corymbia intermedia* tall open forest had evidence of historical storm damage (windthrown trees).

The following interim units have been recognised:

- *Corymbia intermedia*, *E. tereticornis* (tall) open-forest has been mapped as 12.5.2.

- The *Corymbia intermedia* tall open-forest with *L. confertus* and rainforest trees and vine understorey has been mapped as 12.5.2a*.
- The *C. intermedia. E. exserta* woodland with the dense layer of *L. confertus* has been mapped as 12.5.4 although *E. latisinensis* is rare/absent.
- The woodland with *E. latisinensis* + other species fits RE 12.5.4.
- *The Eucalyptus acmenoides* dominant open-forest has been mapped as RE 12.9/10.21.
- Regrowth has been mapped and labelled “regrowth *A. disparrima*” +/- rainforest species.

It is worth noting that apart from some occurrences of 12.5.2 (Image 4), much of the vegetation appears to occur on unweathered sedimentary rocks (LZ 9/10). It is acknowledged, though, that the RE descriptions allow for occurrences on weathered land surfaces and associated sedimentary rocks.

12.5.4a

The RE comprises *Melaleuca quinquenervia*/*M. viridiflora*/*Lophostemon suaveolens* and 12.5.4 species.

Occurrences of vegetation consistent with 12.5.4a occurring on flat terrain (Tertiary surface remnant) south of the airport, for example in the vicinity of the aptly named Ti Tree Rd West, have been tentatively classified as 12.5.4a. The RE mapping identifies RE 12.3.6 as being present although no watercourses/alluvial deposits are apparent (Image 5) with the presence of *Melaleuca* reflecting impeded drainage or seasonal ground water conditions.

It also appears that isolated remnants of 12.5.4 in peri-urban areas can become invaded by *M. quinquenervia* in the absence of fire and/or through altered hydrology which subsequently changes structure and floristic composition.

Geology unit QC

QC comprises sand, muddy sand, minor mud and peat: coastal plain deposits (undifferentiated swamps, tidal flats, beach-ridges and dunes) SW corner of survey area (Curran St, Wheeley and Rowley Roads) This area is heavily fragmented/altered by peri-urban land use. The RE mapping has assigned areas associated with the QC in this locality as LZ 3 and this LZ decision has been adopted here (noting that QC can also be assigned LZ 2 depending upon the texture of the sediments).



Image 1. Retained/regrowth E. tereticornis on level/gently undulating terrain, Janine Road Booral

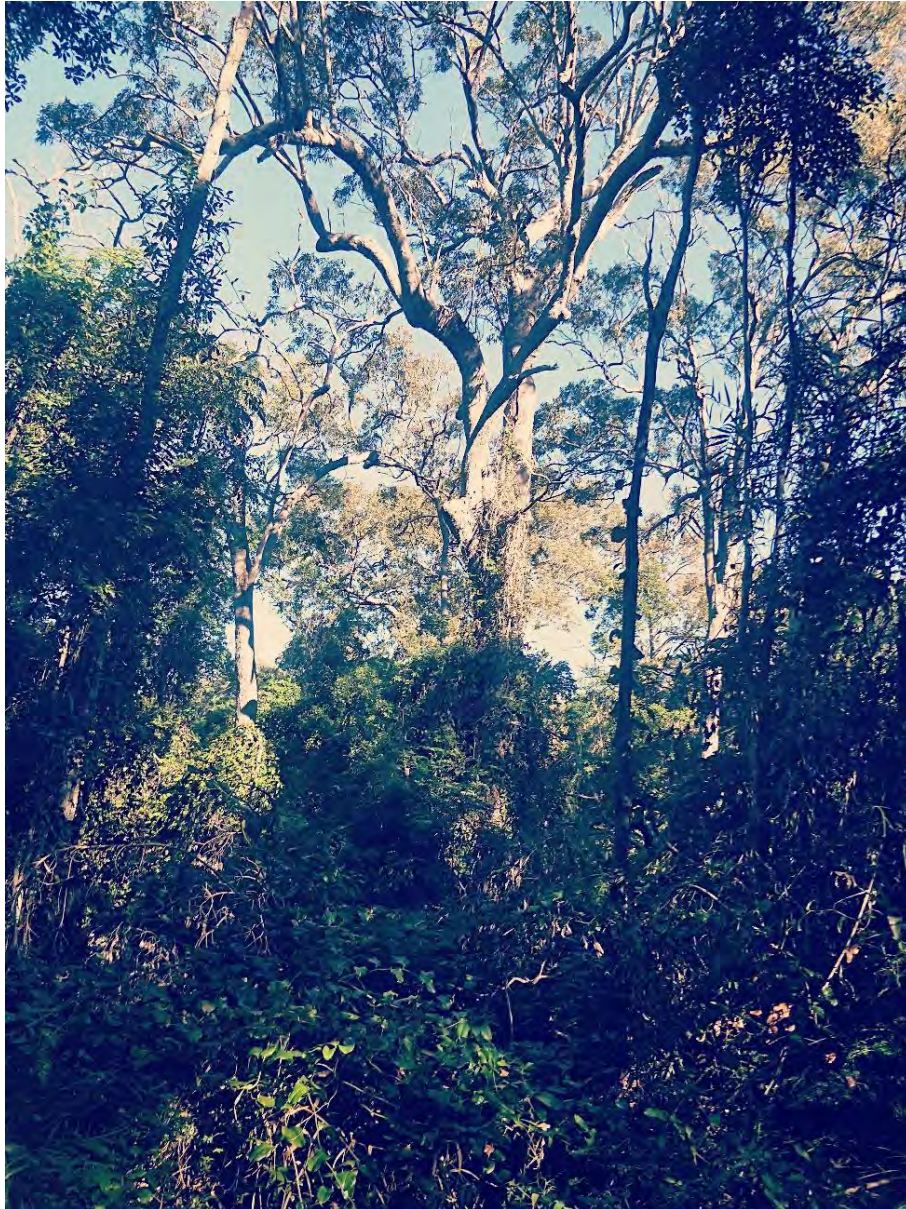


Image 2 Corymbia intermedia tall open forest ("12.5.2a").*



Image 3 *Eucalyptus acmenoides* open-forest



Image 4 Some of the 12.5.2 is confirmed as occurring on deeply weathered material (laterite/duricrust). The image shows an example adjacent to a road cutting exposing a deep weathering profile (see Willmott 2016 for a detailed description of deep weathering) where termites have brought red clay-loam soil to the surface.

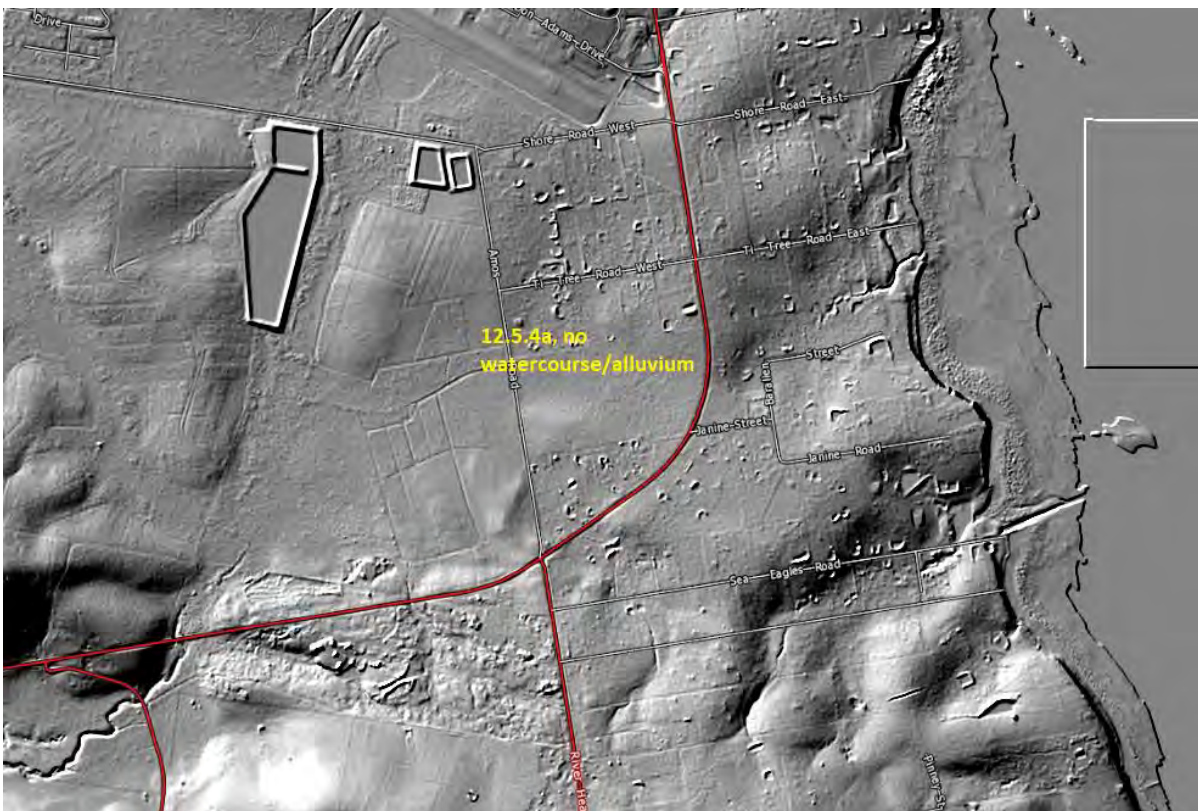


Image 5. Occurrence of 12.5.4a? (top) on level terrain with no evidence of watercourse/alluvial deposits south of the airport.

4.2 Notes on *E. acmenoides/portuensis* and *E. latisinensis*

Eucalyptus acmenoides and *E. portuensis* are difficult to distinguish and the latter is not formally recognised as a separate species within Eucalypts of Australia 4th Edition, accessed at: <https://apps.lucidcentral.org/euclid/text/intro/about.htm>.

Eucalyptus acmenoides is readily distinguished from *E. latisinensis* by leaf texture and colour – *E. latisinensis* has thick, leathery concolourous, mid to dark green leaves while *E. acmenoides* has thin-textured, mid-green coloured leaves that are somewhat discolourous (around Maryborough they do not appear to be as strongly discolourous as some other places).

4.3 Discussion points associated with REs, Maryborough

Heterogeneous polygons with 12.5.4 (*E. latisinensis*, *C. trachyphloia* etc woodland/open-forest/12.5.7 (*C. citriodora* etc open-forest).

Each polygon was visited and it has been possible to label areas with a single RE.

Heterogeneous polygons with 12.3.11 *Eucalyptus/Corymbia* spp., with *Melaleuca/L. suaveolens* T2 layer/12.3.5 (*M. quinquenervia* open-forest) or 12.3.6 *Eucalyptus- M. quinquenervia* – *L. suaveolens* open-forest

RE 12.3.11 was found to range from a woodland to (tall) open-forest with sparse to mid-dense T2 layer. The *Eucalyptus* are generally somewhat taller than the *Melaleuca/Lophostemon suaveolens*. However, there is a gradation and distinguishing 12.3.11 from 12.3.6 is not clear cut.

In the surveyed areas patches of 12.3.5 were generally confined to small areas where drainage has been altered (through increased waterlogging?) resulting in dense even-aged or “pole” regrowth of *M. quinquenervia*. Several small patches have been mapped.

Localised patches of the 12.3.11 surveyed have a relatively dense *M. quinquenervia* and *L. suaveolens* T2 layer (up to 65% cover) and may qualify for consideration as RE 12.3.6. However, these areas are small, and as noted above, the T1 layer is predominantly or exclusively *Eucalyptus/Corymbia* (mainly *E. tereticornis*, *E. exserta*, *C. intermedia*). Consequently, they were considered to fall within the rather broad definition of 12.3.11.

The channels of Deadman’s Gully (watercourse south of railway crossing on highway) and Saltwater Creek are incised. The vegetation within banks along Deadman’s Gully has been mapped as 12.3.5 while west of the highway Saltwater Creek has more mixed composition and has been mapped as 12.3.6. Saltwater Creek east of the highway has a narrow channel with brackish water influence reflected by presence of *Hibiscus tiliaceus*, *Casuarina glauca* and *Acrostichum speciosum* as well as *M. quinquenervia*. It has been mapped in the interim as a fringing community (12.3.11) but RE 12.3.20 may be a better fit.

4.4 Discussion points associated with REs, Burrum Heads - Toogoom

Quaternary coastal surface geology units - Land zones based upon Wilson and Taylor (2012)

Qhcs – mud, supratidal flat. All LZ 1

Qcw – mud, muddy sand, sand, peat/swamp deposits. **NB** Mainly LZ2, fine textured material = LZ3

Qhcb - fine to coarse sand of younger beach ridge/swales. All LZ 2

Qpbc/2 moderately old beach ridge/swale systems. All LZ 2

Qpbc – older degraded beach ridge/swale systems. All LZ 2

1. Some small patches of *E. moluccana* were noted and mapped at Burrum Heads and Toogoom on areas with surface geology mapped as sand-dominant (Qhcb and Qpbc/2). There is no close RE match within LZ 2 and the patches have not been assigned an RE at present. They may be growing on localised/unmapped occurrences of old estuarine material (e.g. Qcw = LZ3). Some of the 12.2.7 *M. quinquenervia* open-forest at Toogoom associated with, or close to mapped Qcw was found to have a

loam to clay loam surface soil. However, these areas have been retained as 12.2.7 in line with the current RE mapping.

2. An area sampled in the south-west corner of the Toogoom survey area (north of Oregon Creek Rd and west of Toogoom Rd) appears to be on LZ 2 as opposed to duricrust/ sedimentary rocks indicated by the surface geology mapping. Consequently, an area mapped as 12.5.4 has been re-mapped as 12.2.11 and other minor refinements made.
3. Polygons mapped as 12.2.12 Closed/wet heath were sampled at Burrum Heads and Toogoom. The vegetation was found to be more closely aligned to RE 12.2.13 Open or dry heath and most of the characteristic shrubs listed for the RE (*Banksia aemula*, *Allocasuarina littoralis*, *Xanthorrhoea johnsonii*, *Leptospermum semibaccatum*, *Phebalium woombye*, *Dillwynia retorta* and *Caustis recurvata*) were recorded.



Loamy surface soil (rather than sand/peaty sand) under an occurrence of RE 12.2.7 at Toogoom

5 References

- Eyre, T.J., Kelly, A.L, Neldner, V.J., Wilson, B.A., Ferguson, D.J., Laidlaw, M.J. and Franks, A.J. (2015). BioCondition: A Condition Assessment Framework for Terrestrial Biodiversity in Queensland. Assessment Manual. Version 2.2. Queensland Herbarium, Department of Science, Information Technology, Innovation and Arts, Brisbane.
- Eyre TJ, Kelly AL and Neldner VJ (2017). Method for the Establishment and Survey of Reference Sites for BioCondition. Version 3. Queensland Herbarium, Department of Science, Information Technology and Innovation, Brisbane.
- Neldner, V.J., Wilson, B.A., Dillewaard, H.A., Ryan, T.S., Butler, D.W., McDonald, W.J.F, Addicott, E.P. and Appelman, C.N. (2020) Methodology for survey and mapping of regional ecosystems and vegetation communities in Queensland. Version 5.1. Updated March 2020. Queensland Herbarium, Queensland Department of Environment and Science, Brisbane.
- Neldner, V.J., Niehus, R.E., Wilson, B.A., McDonald, W.J.F., Ford, A.J. and Accad, A. (2019). The Vegetation of Queensland. Descriptions of Broad Vegetation Groups. Version 4.0. Queensland Herbarium, Department of Environment and Science³⁴
- QGIS Development Team 2021. QGIS Geographic Information System. QGIS Association. <http://www.qgis.org>
- Willmott W (2016) Rocks and landscapes of Maryborough & Hervey Bay. Geological Society of Australia Queensland Division.
- Wilson, P.R. and Taylor, P.M. (2012) Land Zones of Queensland. Queensland Herbarium, Queensland Department of Science, Information Technology, Innovation and the Arts, Brisbane. 79 pp.

Appendix A: Quaternary Sites and Regional Ecosystem Maps

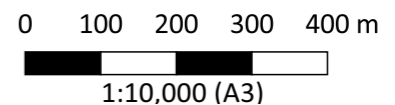
Regional Ecosystem Mapping

Legend

- Qsites
- Study area
- Burrum Heads 3
- Burrum Heads 4
- Regional Ecosystems
- 12.3.20
- non-rem



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



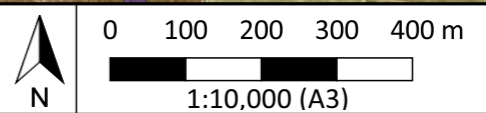
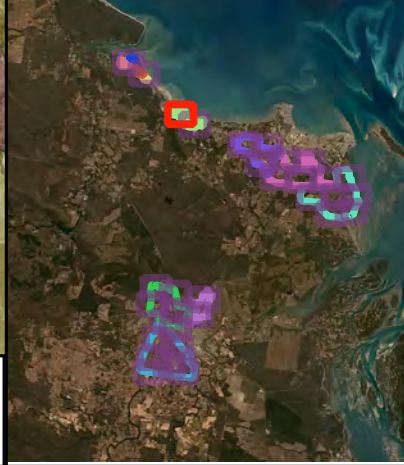
Regional Ecosystem Mapping

Legend

- Qsites
- Study area
- Toogoom
- 12.1.2
- 12.2.11
- 12.2.13
- 12.2.7
- 12.2.9
- non-rem



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



Regional Ecosystem Mapping

- Legend**
- Qsites
 - Study area
 - Toogoom
 - Regional Ecosystems
 - 12.2.11
 - 12.2.13
 - 12.2.2
 - 12.2.7
 - 12.2.9
 - non-rem



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Projection	Transverse Mercator
Units	Meters

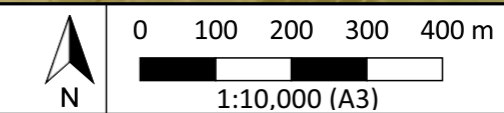
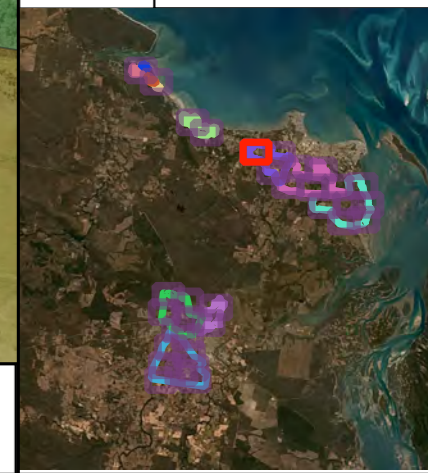


Regional Ecosystem Mapping

- Legend**
- Qsites
 - Study area
 - Nikenbah/Dundowran
 - 12.3.11
 - 12.5.13
 - 12.5.4
 - 12.5.7
 - non-rem



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



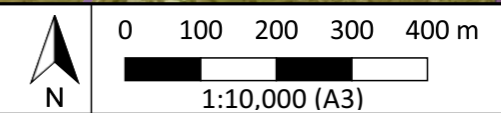
Regional Ecosystem Mapping

Legend

- Qsites
- Study area
- Nikenbah/Dundowran
- Nikenbah/Kawungan
- Regional Ecosystems
- 12.3.11
- 12.3.20
- 12.3.5
- 12.5.13
- 12.5.13a
- 12.5.2
- 12.5.4
- non-rem



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



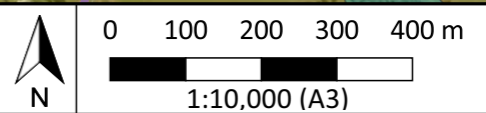
Regional Ecosystem Mapping

Legend

- Qsites
- Study area
- Nikenbah/Dundowran
- Nikenbah/Kawungan
- Regional Ecosystems**
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- 12.3.11/12.3.5
- 12.3.20
- 12.3.5/12.3.6/12.3.11
- 12.5.13
- 12.5.2
- 12.5.4
- non-rem



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



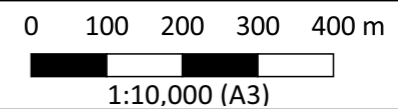
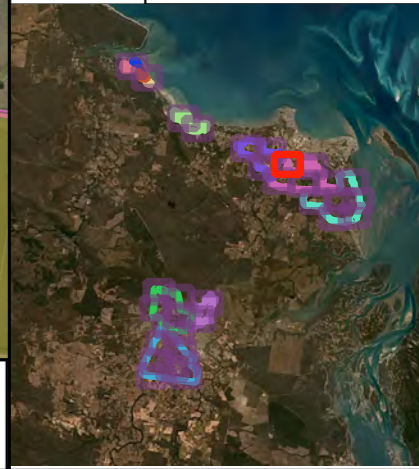
Regional Ecosystem Mapping

Legend

- Qsites
- Study area**
- Nikenbah/Dundowran
- Nikenbah/Kawungan
- Regional Ecosystems**
- 12.3.11
- 12.3.11/12.3.5
- 12.3.20
- 12.3.5
- 12.5.13
- 12.5.13a
- 12.5.2
- 12.5.4
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Projection	Transverse Mercator
Units	Meters



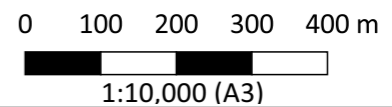
Regional Ecosystem Mapping

Legend

- Qsites
- Study area**
- Nikenbah/Dundowran
- Nikenbah/Kawungan
- Regional Ecosystems**
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- 12.3.11/12.3.5
- 12.3.5
- 12.5.2
- 12.5.4
- non-rem
- water



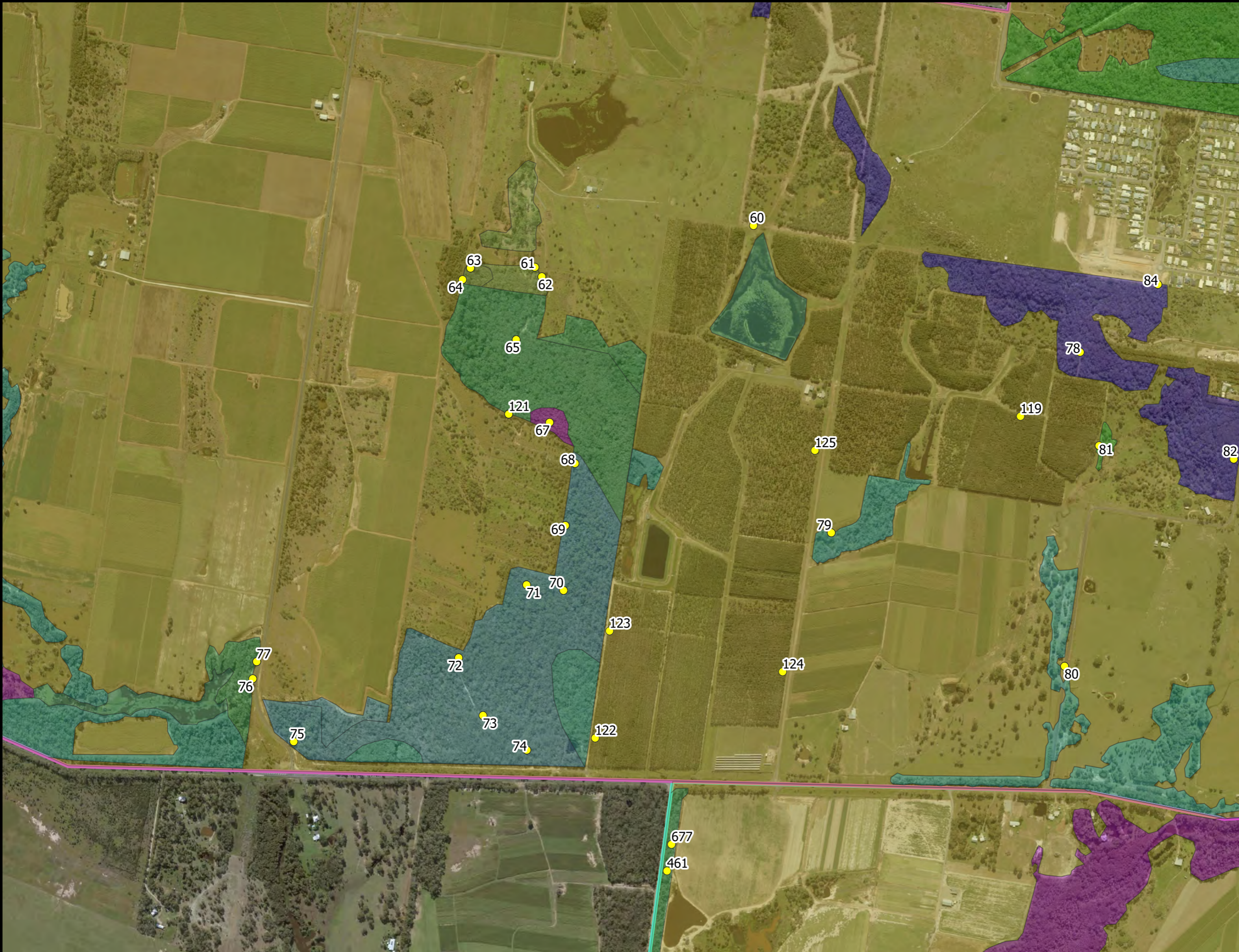
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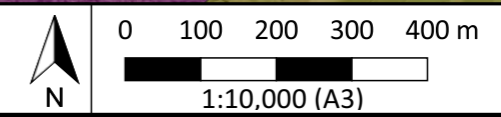
Regional Ecosystem Mapping

Legend

- Qsites
- Study area
- Booral
- Nikenbah/Kawungan
- Regional Ecosystems
- 12.3.11
- 12.3.11/12.3.5
- 12.3.5
- 12.5.13
- 12.5.2
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- 12.5.4
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- water



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters

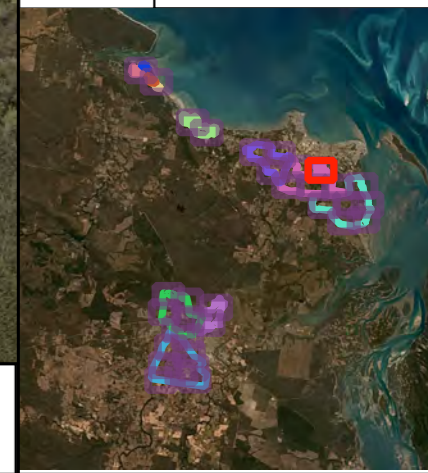


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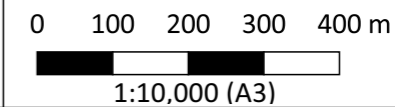
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 - Nikenbah/Kawungan
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CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



Date	03/08/2021
Version	1.0
Drawn by	Kaitlyn Cavanagh



Regional Ecosystem Mapping

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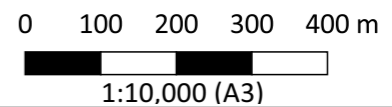
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- Study area
- Booral
- Nikenbah/Kawungan
- Regional Ecosystems
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- 12.3.5
- 12.5.2
- 12.5.4
- non-rem
- water



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



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Version	1.0
Drawn by	Kaitlyn Cavanagh

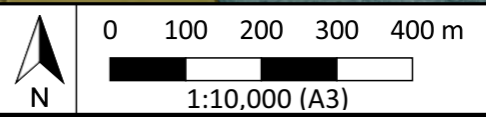


Regional Ecosystem Mapping

- Legend**
- Qsites
 - Study area
 - Booral
 - Nikenbah/Kawungan
 - Regional Ecosystems**
 - 12.3.11
 - 12.3.11/12.3.5
 - 12.3.5
 - 12.5.13
 - 12.5.2
 - 12.5.4
 - 12.5.4a
 - 12.9-10.21
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CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



Regional Ecosystem Mapping

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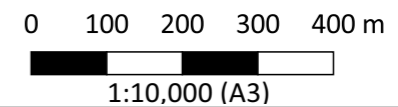
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- water



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Projection	Transverse Mercator
Units	Meters

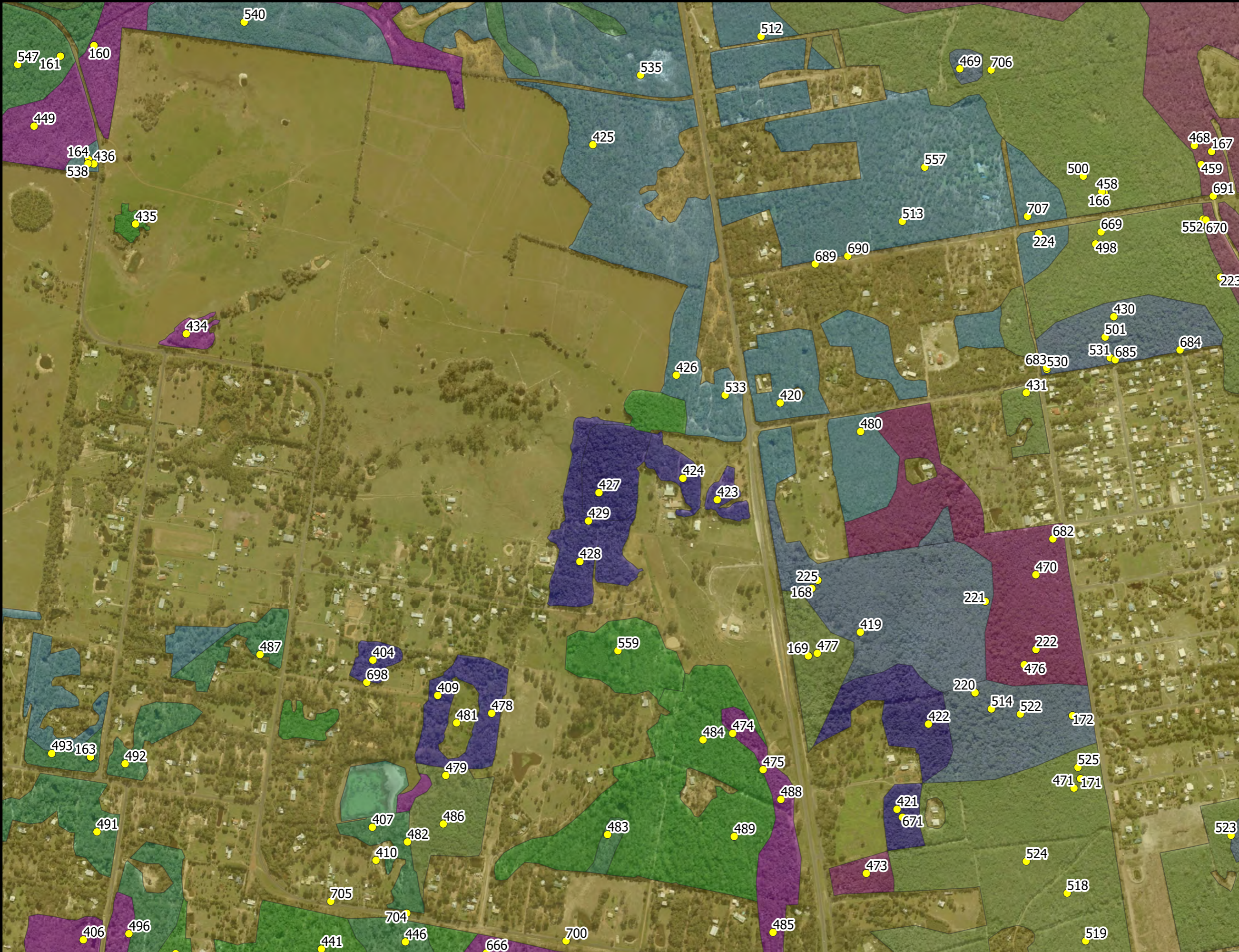


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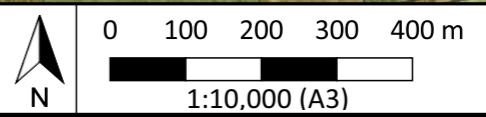


Regional Ecosystem Mapping

- Legend**
- Qsites
 - Study area
 - Booral
 - Regional Ecosystems**
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 - 12.3.11
 - 12.3.5
 - 12.5.13
 - 12.5.2
 - 12.5.2
 - 12.5.2a
 - 12.5.2a
 - 12.5.4
 - 12.9-10.21
 - non-rem
 - water



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



Regional Ecosystem Mapping

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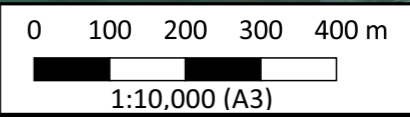
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- Regional Ecosystems
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- 12.5.2
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- 12.5.2a
- 12.5.4
- 12.5.4a
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CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



Date	03/08/2021
Version	1.0
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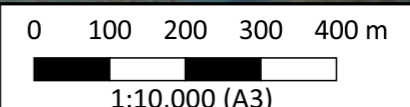
Regional Ecosystem Mapping

Legend

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- Booral
- Regional Ecosystems
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- 12.2.11
- 12.5.13
- 12.5.2
- 12.5.2a
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CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



Regional Ecosystem Mapping

Legend

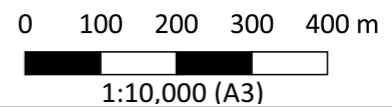
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- Maryborough North
- Regional Ecosystems
- 12.3.11
- 12.5.4
- non-rem



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



Date	03/08/2021
Version	1.0
Drawn by	Kaitlyn Cavanagh



Regional Ecosystem Mapping

Legend

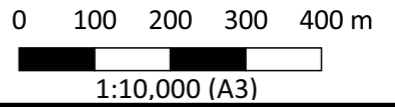
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- Maryborough North
- Regional Ecosystems
- 12.3.11
- 12.3.5
- 12.5.4
- non-rem



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



Date	03/08/2021
Version	1.0
Drawn by	Kaitlyn Cavanagh



Regional Ecosystem Mapping

Legend

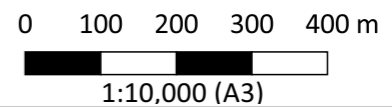
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- Study area
- Maryborough North
- Regional Ecosystems
- 12.3.11
- 12.3.5
- 12.5.4
- non-rem



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



Date	03/08/2021
Version	1.0
Drawn by	Kaitlyn Cavanagh

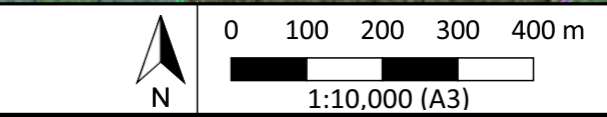


Regional Ecosystem Mapping

- Legend**
- Qsites
 - Study area
 - Maryborough North
 - St Helens
 - Regional Ecosystems**
 - 12.3.11
 - 12.3.5
 - 12.5.4
 - non-rem



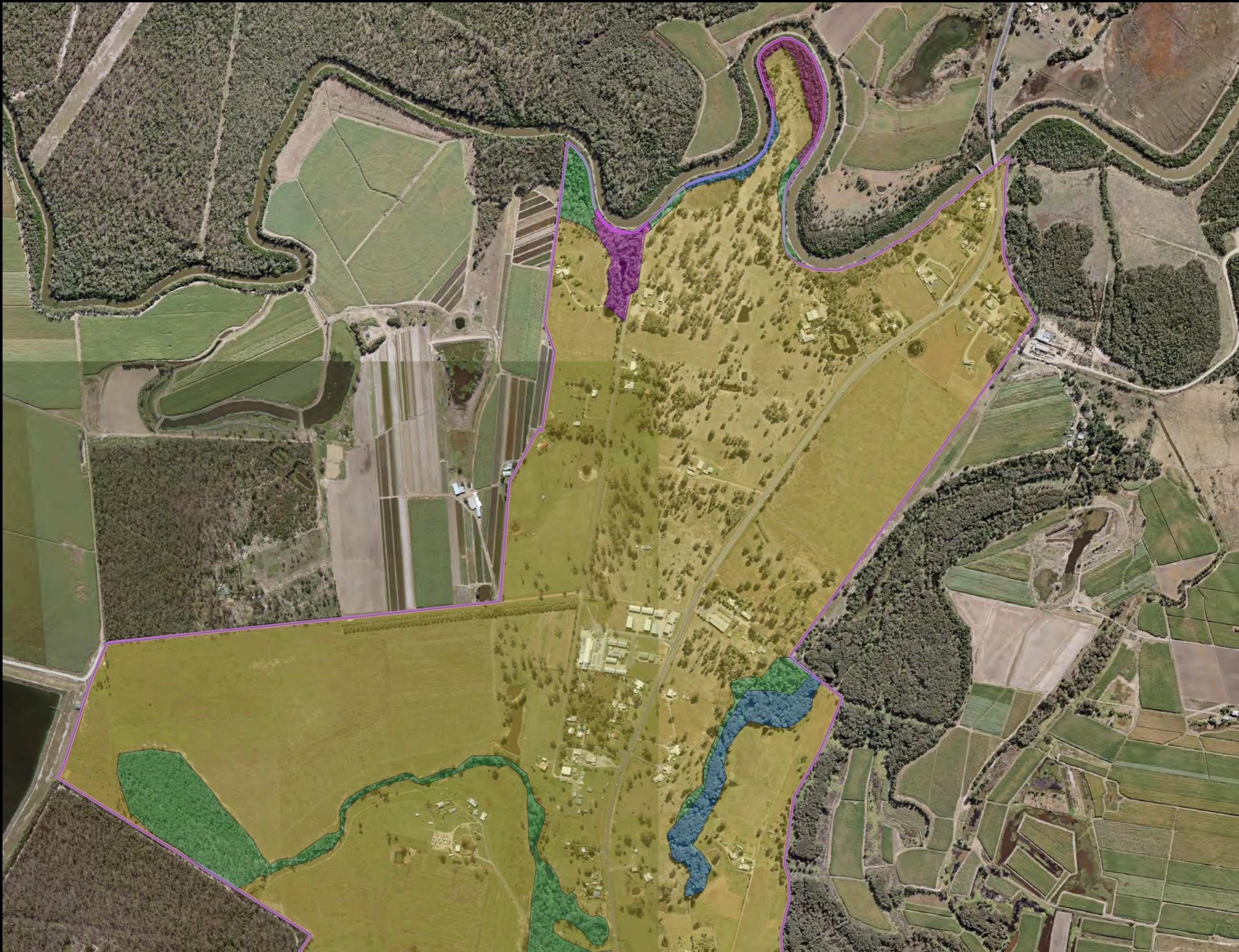
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Projection	Transverse Mercator
Units	Meters



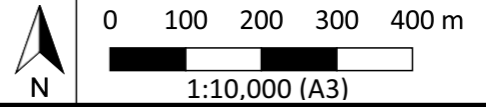
Regional Ecosystem Mapping

Legend

- Study area
- St Helens
- Regional Ecosystems
- 12.1.2
 - 12.3.11
 - 12.3.20
 - 12.3.5
 - non-rem



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters

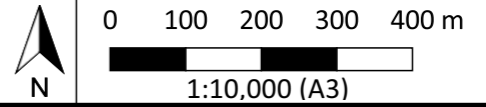


Regional Ecosystem Mapping

- Legend**
- Qsites
 - Study area**
 - Maryborough North
 - Tinana
 - Regional Ecosystems**
 - 12.3.11
 - 12.3.5
 - 12.5.4
 - non-rem
 - water



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



Regional Ecosystem Mapping

Legend

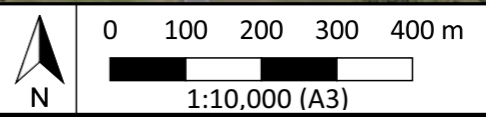
- Qsites
- Study area**
- Maryborough North
- St Helens
- Regional Ecosystems**
- 12.3.11
- 12.3.20
- 12.5.4
- 12.5.7
- non-rem



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



Date	03/08/2021
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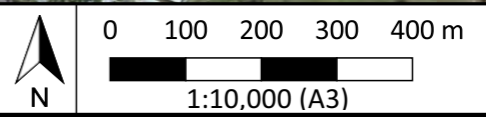
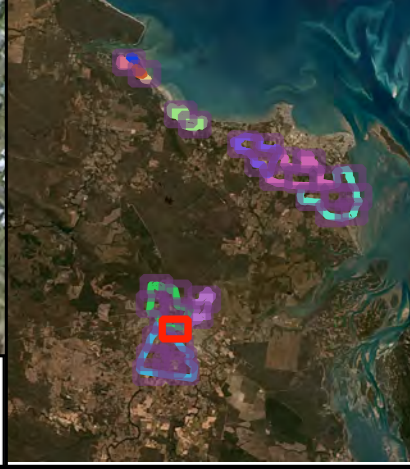


Regional Ecosystem Mapping

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 - 12.3.11
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CRS	GDA 2020 MGA Zone 56
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Regional Ecosystem Mapping

- Legend**
- Qsites
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 - Tinana
 - Regional Ecosystems**
 - 12.3.11
 - 12.5.4
 - non-rem
 - water

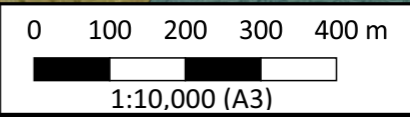


CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



	Date	03/08/2021
	Version	1.0
	Drawn by	Kaitlyn Cavanagh

Map Set - Regional Ecosystems & Quaternary sites- Map 27 of 33

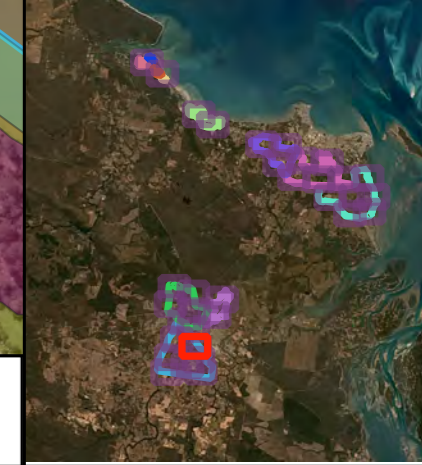


Regional Ecosystem Mapping

- Legend**
- Qsites
 - Study area
 - Tinana
 - 12.3.11
 - 12.5.4
 - non-rem
 - water



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters

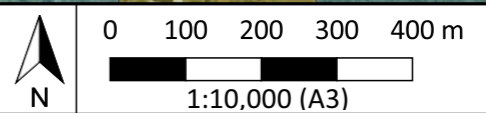


Regional Ecosystem Mapping

- Legend**
- Qsites
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 - Tinana
 - Regional Ecosystems**
 - 12.3.11
 - 12.5.2
 - 12.5.4
 - non-rem
 - water



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters

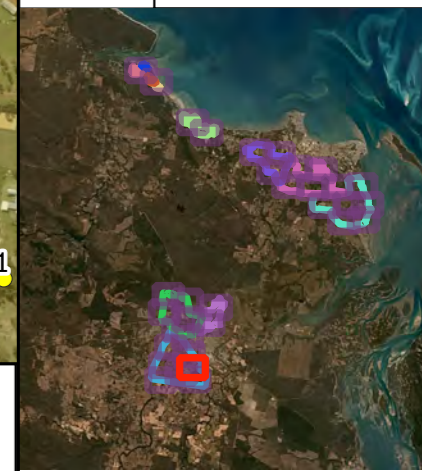


Regional Ecosystem Mapping

- Legend**
- Qsites
 - Study area
 - 12.3.11
 - 12.3.20
 - 12.5.4
 - 12.5.7
 - non-rem
 - water

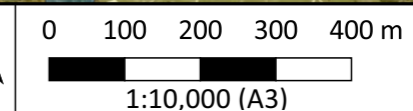


CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



	Date	03/08/2021
	Version	1.0
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Map Set - Regional Ecosystems & Quaternary sites- Map 30 of 33



Regional Ecosystem Mapping

Legend

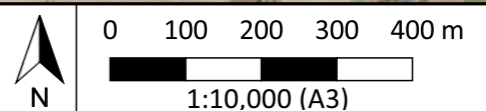
- Qsites
- Study area
- Tinana
- Regional Ecosystems**
- 12.3.11
- 12.5.13
- 12.5.2
- 12.5.4
- non-rem
- water



CRS	GDA 2020 MGA Zone 56
Projection	Transverse Mercator
Units	Meters



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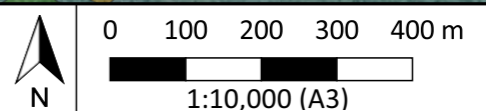
Regional Ecosystem Mapping

Legend

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- 12.5.7
- non-rem



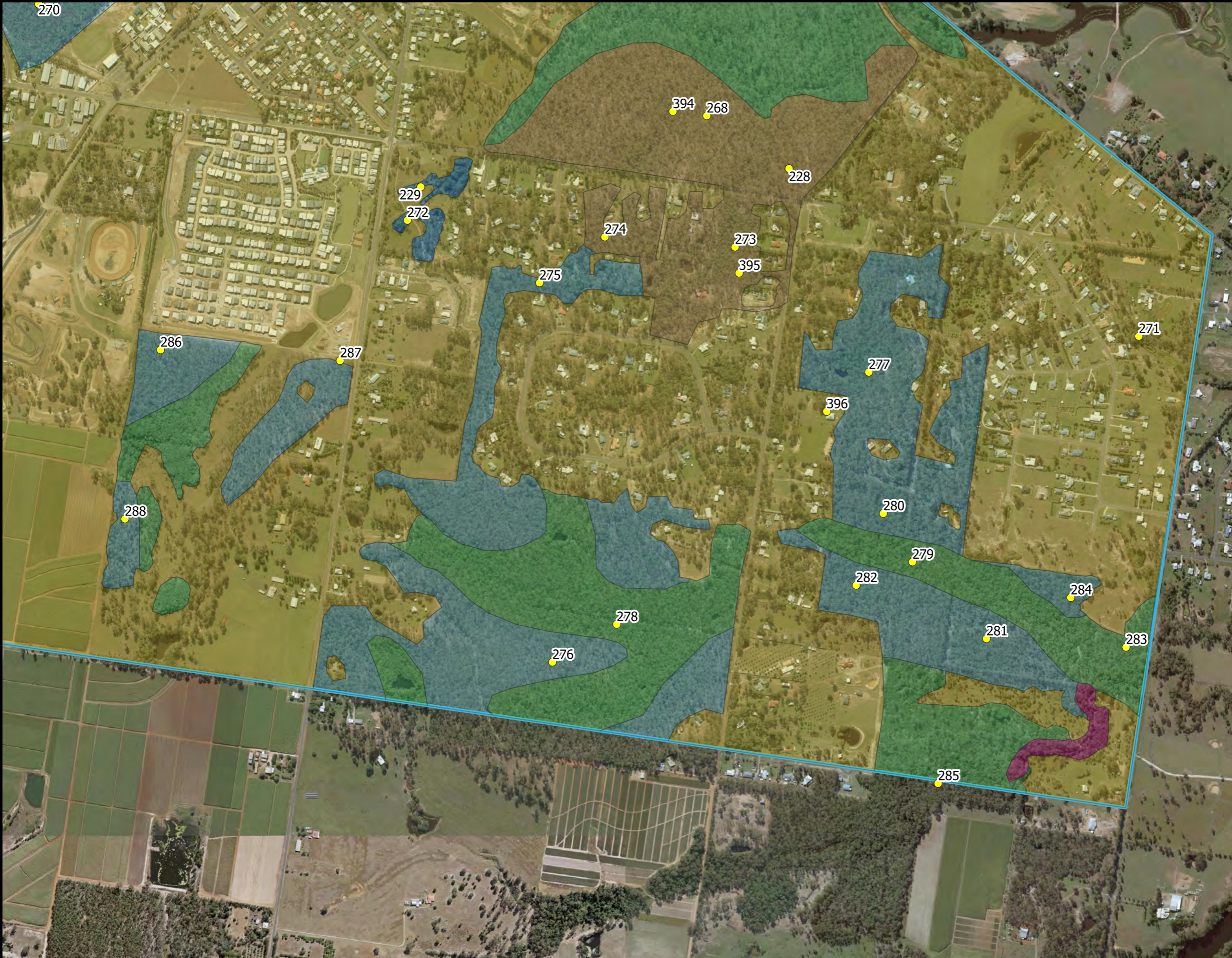
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Projection	Transverse Mercator
Units	Meters



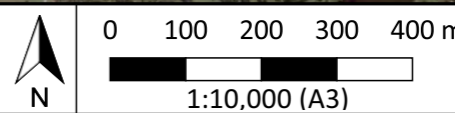
Regional Ecosystem Mapping

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- 12.5.4
- 12.5.7
- non-rem



CRS	GDA 2020 MGA Zone 56
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Units	Meters



Appendix B: Quaternary site data

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
1	-25.30599	152.79715	12.5.2a	12.5.2, 12.5.3	12.5.4	Mid dense understory, with emergent <i>E. tereticornis</i> . Cattle on property. Whole block uniform, with varying degrees of regrowth.
2	-25.30419	152.77214	12.5.4	12.5.4	12.5.4	Open forest dominated by bloodwood and stringybark. Open midstorey with regen. Great quality vegetation (on other side of road too).
3	-25.30799	152.77399	12.5.4	Non-rem	12.5.4	On road easement between private property and road. Big long patch of good remnant vegetation. Midstorey dominated by <i>G. banksii</i> and <i>B. oblongifolia</i> . Canopy dominated by bloodwoods (whole patch).
4	-25.30754	152.78777	12.3.11	12.5.3	12.3.11	Open <i>E. tereticornis</i> woodland. Huge <i>tereticornis</i> emergents. Shrubby rainforest understory
4	-25.30754	152.78777	12.3.11	12.5.3	12.3.11	Open <i>E. tereticornis</i> woodland. Huge <i>tereticornis</i> emergents. Shrubby rainforest understory
5	-25.30137	152.77075	12.5.4	12.5.4/12.5.7	12.5.4	Small patch of remnant vegetation only to just around the dam. Further isn't remnant or anything - no large trees.
6	-25.30029	152.76929	12.5.4	Non-rem	12.5.7	Small patch of rem open woodland dominated by <i>E. fibrosa</i> . Limited T2 layer. <i>E. Fibrosa</i> dominant.
7	-25.29614	152.7626	12.5.4	12.5.4	12.5.4	Open woodland with open midstorey. Sections of <i>M. quinquenervia</i> thickets. Horses in paddock. Great condition. Note: Private property, renter didn't know.
8	-25.29425	152.76094	12.5.4	12.5.4	12.5.4	Same as ND08. Slightly more dense than ND08, with <i>M. quinquenervia</i> midstorey. (near waterbody).
9	-25.30149	152.76248	12.5.4	12.5.4	12.5.4	Looked at from Green Acres Rd. Open woodland, with dense midstorey of <i>M. quinquenervia</i> . RE around dam and further into other block.
10	-25.28674	152.75949	12.5.13a	12.5.13a	Non-rem	Non Rem w/ tiny patch of remnant trees but not enough to be rem. <i>A. disparrima</i> dominant.
11	-25.28671	152.76765	12.3.11	12.3.11	12.3.11	A bit weedy. Cows in paddock. No Eucalypt canopy layer. Mid dense understory
12	-25.28652	152.78264	12.3.20	12.3.20, 12.3.11	Non-rem	Non Rem. No vegetation. Cleared farmland.
13	-25.28611	152.7785	12.3.11	12.3.11	12.3.11	Big remnant <i>E. tereticornis</i> , <i>Melaleuca</i> + <i>Acacia</i> understory. Good remnant patch on private property. Can't see ground cover.
14	-25.28587	152.77698	12.3.11	12.3.11, 12.5.13, NR	12.3.11	Not tall enough to be rem. Open woodland HVR. Dominated by <i>E. tereticornis</i> regrowth and <i>Acacia</i>
15	-25.29827	152.79031	12.3.5	Non-rem	Non-rem	Big emergent remnant Eucalypts in height and coverage but missing remnant understory. Off road in patch of private property. (Roadside stretch looks over remnant).

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
16	-25.30099	152.7886	12.3.5	12.3.11/12.3.5	12.3.11	Remnant patch of vegetation surrounded by HRV. Grassy understorey. Dense patches - Rem. Great quality. Notes: This one is within NK16. Throw in to patch of mapped vegetation.
17	-25.301132	152.78847	12.3.5	Non-rem	12.3.5	Remnant (smallish patch) with emergent E. tereticornis with M. quinquenervia dominated understorey. (Thicket).
18	-25.3294	152.7933	12.5.4	12.5.4	12.5.4	Open woodland sector with E. tereticornis, E. exserta and Corymbia emergents with open midstorey. Great quality. (Rail trail section).
19	-25.32714	152.79523	12.5.4	Non-rem	12.5.4	This patch should be mapped as Rem along rail line. Open eucalypt woodland with open understorey. Viewed from roadside.
20	-25.32693	152.79262	12.5.4	12.5.4	12.5.4	Same vegetation as rail trail, open woodland with emergent Eucalypts. Bit of pine in this section.
21	-25.32653	152.79024	12.5.4	12.5.4	12.5.4	This whole little patch in 12.5.4 HVR. Open eucalypt woodland with shrubby regrowth Eucalypts/Corymbia/Melaleuca. No emergent Eucalypts
22	-25.30827	152.80173	12.5.2a	Non-rem	Non-rem	Non Rem. Dominated by Acacias. Halfway in lots of exotic grasses and guava.
23	-25.30582	152.80653	12.5.13a	12.5.2a/12.5.13a	Non-rem	1184 WP *Non Rem*
24	-25.31097	152.80428	12.5.2a	Non-rem	Non-rem	Non Rem. Dense acacias with some eucalypt regen (very small). **Baptist church site section backing onto road.
25	-25.31297	152.80452	12.5.2a	12.5.2a	12.5.2a	Small remnant section between tip and the road. Going further up to the hill in turns into low qual Acacia section. (Just this little section is rem).
26	-25.31095	152.80136	12.5.2a	Non-rem	Non-rem	No large canopy trees. Non Rem. Dominated by Acacia with some M. quinquenervia.
27	-25.31102	152.80481	12.5.2a	12.5.2a	12.5.2a	Same as ND25 but HVR. Dense regrowth with some eucalypt but dominated by acacias. On highway.
28	-25.34131	152.88928	12.5.4	Non-rem	12.3.6	Section next to intersection. Open Rem woodland, open midstorey.
29	-25.34101	152.88959	12.3.6	Non-rem	12.3.6	Open woodland with mid dune understorey of M. quinquenervia and Acacia. Great oval, very old (PBH large) trees. Notes: Points in this patch are the edges of the RE's show the split between RE's.
30	-25.34024	152.89081	12.5.4	12.5.4	12.5.4	*Same as NB01. Great patch of Rem vegetation. Old trees. Open woodlands, with open midstorey.
31	-25.33996	152.89136	12.5.4	12.5.4	12.5.4	House section (cut out of mapping). Good oval remnant.

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
32	-25.33945	152.89166	12.5.4	Non-rem	12.5.4	Dominated by ironbark, <i>C. intermedia</i> , and <i>E. tereticornis</i> . Great oval remnant. Now understorey (cleared) in house block (cut out section). Note: This should be included in mapped RE.
33	-25.34012	152.89066	12.5.4	12.3.6	12.3.6	Start of RE 12.3.6 again. <i>E. tereticornis</i> dominated woodland, with <i>M. quinquenervia</i> midstorey (dense). Same as NB02.
34	-25.34106	152.88936	12.5.4	12.3.6	12.5.4	Small patch around + behind house. (The vegetation around and behind house in remnant.) <i>C. intermedia</i> + <i>E. tereticornis</i> dominant. Cleared understorey around house.
35	-25.33379	152.89529	12.5.4	12.5.4	12.5.4	Open woodlands patch. Dominated by bloodwoods and <i>a. lithoralis</i> . Open understorey. Good quality. This block all the same RE.
36	-25.33368	152.89554	12.5.4	12.5.4	12.5.4	Same as NB08 - across road. Whole patch along road is the same. Open woodland with open understorey. Notes: WP 1200 = nothing
37	-25.33063	152.89424	12.5.4	12.5.4	12.5.4	House block. Rem trees thinned understorey in patches.
38	-25.33076	152.89366	12.5.4	Non-rem	12.5.4	HVR, can only see HVR port - could be rem towards back of block where it's mapped. Missing large canopy trees. Good HVR patch in non-Rem section.
39	-25.33394	152.88748	12.5.4	Non-rem	12.3.6	Next to patch of Rem 12.3.6. Canopy trees left - cleared understorey but now native grasses. Open woodland. Private land.
39	-25.33394	152.88748	12.3.6	Non-rem	12.3.6	Next to patch of Rem 12.3.6. Canopy trees left - cleared understorey but now native grasses. Open woodland. Private land.
40	-25.32592	152.89195	12.5.4	Non-rem	12.5.4	This whole block falling (Share Rd West) is HVR. Eucalypts same size as rest of <i>Acacia</i> and <i>melaleucas</i> .
41	-25.3261	152.89082	12.5.4	Non-rem	Non-rem	Non Rem section (horse this block only). Planted trees.
42	-25.32866	152.89444	12.5.4	12.5.4	12.5.4	Whole big patch of vegetation. Shore Rd East and Ti Tree Rd East - Rem 12.5.4. Open woodland with mid dense understorey.
43	-25.32971	152.90111	12.5.4	Non-rem	12.3.11	This point is the edge of the RE 12.3.11. (Between here and ocean) see map. Remnant trees with open (cleared) midstorey/understorey).
44	-25.306	152.83996	12.5.13a	Non-rem	Non-rem	Rassmussens Rd, small patch off rd easement. Of Non Rem? exotic sp.
45	-25.30739	152.84126	12.5.13a	Non-rem	Non-rem	Northern roundabout section of HVR looking vegetation.
46	-25.31076	152.84386	12.5.13a	12.5.2	12.5.2	In property near second roundabout. Big patch of vegetation. Looks like developing potentially? *black head flying fox
47	-25.31266	152.84494	12.5.13a	12.5.2a	12.5.2	Small patch of Rem (mapped) off roundabout - south of road.

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
48	-25.31384	152.84593	12.5.13a	12.5.13	12.5.2	Shrubby Acacia regrowth with emergent E. tereticornis and emergent C. intermedia
49	-25.31542	152.8489	12.3.11	12.3.11	12.3.11	Acacia/Melaleuca quinquenervia understorey and regrowth with open emergent eucalypt and M. quinquenervia
50	-25.31422	152.84979	12.3.11	12.3.11	12.3.11	Section by roadside with large Corymbia and E. tereticornis. Open woodland.
51	-25.31389	152.8524	12.3.11	12.3.11	12.3.11	Section of remnant midslopes open forest with E. tereticornis, w shrub layer of A. littoralis, A. leiocalyx, M. quinquenervia, and open grassy ground layer.
52	-25.31503	152.85339	12.3.11	12.3.11	12.3.11	Mid dense / dense canopy of M. quinquenervia with small creek flowing through
53	-25.30849	152.85268	12.5.4	12.5.4	12.5.4	Mid dense M. quinquenervia with emergent E. exserta and E. tereticornis
54	-25.31059	152.85271	12.3.11	12.5.4	12.5.4	Remnant mid dense M. quinquenervia with emergent E. exserta and E. tereticornis. Notes: characteristics are nearly exactly the same as NK10
55	-25.31183	152.85175	12.3.11	Non-rem	12.3.11	HVR in separate block. M. quinquenervia, with emergent E. tereticornis and C. intermedia canopy.
56	-25.30573	152.85075	12.5.4	Non-rem	Non-rem	Open Non Rem with tall eucalypt and Corymbia. Good mature trees.
57	-25.3203	152.85168	12.3.11	Non-rem	12.3.11	Good quality HVR opposite oval. Emergent Eucalypts with dense M. quinquenervia understorey.
58	-25.32051	152.85435	12.3.11	12.3.11	12.3.11	Remnant mid dense with M. quinquenervia understorey. Eucalypt woodland. In good condition.
59	-25.32083	152.85429	12.3.11	12.3.11	12.3.11	Other side of road, same as above. Remnant good quality. Southern side.
60	-25.33	152.84312	12.5.2a	Non-rem	Non-rem	Open shrub non remnant. Exotic grasses and lantana. Immediately opposite detention pond. Surrounding areas are cleared - non rem also. This Q site is representative of the rest of this block (to the right) on map.
61	-25.33104	152.83708	12.3.11/12.3.5	Non-rem	12.5.2a	Open woodland with large E. tereticornis. Sparse shrubs. Same as NK19 but without thick understorey. High value regrowth. Block has more shrubs in certain sections.
62	-25.33128	152.83727	12.3.11/12.3.5	Non-rem	12.5.2a	Non mature HVR Dense midstorey / understorey with scattered big eucalypt
63	-25.33106	152.8353	12.3.11/12.3.5	Non-rem	12.5.2a	Remnant open woodland with large Eucalypts, E. tereticornis / E. sidrophloia. Midstorey of M. quinquenervia , Acacia. Good quality.
64	-25.33135	152.83508	12.3.11/12.3.5	12.3.11/12.3.5	12.5.2a	Regenerating block of acacias and eucalypt sp. With remnant eucalypt sp. Dense thicket of regrowth.

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
65	-25.33286	152.83656	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	(Good quality) mid dense with <i>M. quinquenervia</i> . With emergent <i>E. tereticornis</i> + <i>E. siderophloia</i> . Minimal exotics, very good quality (whole block). A palustrine wetland area.
66	-25.33473	152.83635	12.3.11/12.3.5	12.3.11/.12.3.5	12.3.11	Same as rest of block. Good quality rem.
67	-25.33494	152.83748	12.3.11/12.3.5	12.3.11/.12.3.5	12.3.5	Wet palustrine wetland. Thicket dominated by <i>M. quinquenervia</i> . Circle on map. One emergent eucalypt. Good quality. Note: GPS 1100 - koala scratches and poo
68	-25.33597	152.83818	12.5.4	12.3.11/12.3.5	12.3.11	Good quality rem, open woodland with some lantana. Diverse species. Lots of rainforest species present in understorey. Rainforestry area.
69	-25.33753	152.83791	12.5.4	12.5.4	12.5.4	Very rainforestry. Dense mid/understorey. Variety of species, microphyll or notophyll vine forest. Complex.
70	-25.33916	152.83786	12.5.4	12.5.4	12.5.4	Open woodland good condition, some weeds. <i>C. intermedia</i> dominant.
71	-25.33902	152.83684	12.5.4	12.5.4	12.5.4	Good quality open forest. Doesn't match 12.5.4 landzone 5.
72	-25.34085	152.83496	12.5.4	12.5.4	12.5.4	Open woodland, good quality. Some lantana. S2 dominated by <i>Philothea</i> . On side of track.
73	-25.3423	152.83563	12.5.4	12.5.4	12.5.4	Very good quality. Open Rem woodland. Burnt well (more freq.).
74	-25.34317	152.83684	12.5.4	12.5.4	12.5.4	*Same as NK30. Very good quality, open woodland. Burnt well.
75	-25.34295	152.8304	12.5.4	12.5.4	12.5.4	Just off intersection of Main St. On RHS driving in. Open woodland. Not amazing quality (still Rem).
76	-25.34137	152.82927	12.3.11/12.3.5	12.3.11/12.3.5	12.5.4	Tall patch 12.5.4. Good remnant patch dominated by large <i>E. fibrosa</i> . Some bare earth.
77	-25.34094	152.82938	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	High value (regrowth) in good oval. Open woodland. Not super large trees. Could be 12.3.11 of landzone 3?
78	-25.33319	152.85214	12.5.13a	12.5.13a	12.5.13a	Regrowth of poor quality. No tree layer. No Eucalypts. Dominated by wattles. *sandstone.
79	-25.33772	152.84526	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11/12.3.5	Small patch of HVR between grassy area on creekline. With small sector of non Rem in middle. Otherwise good HVR, all way to crest is same.
80	-25.34108	152.8517	12.5.2a	12.3.11/12.3.5, 12.5.2	12.3.11/12.3.5	Whole road sector. Only sparse trees with sparse midstorey. HVR. Map covering whole section as this RE. Some gaps. Not much ground cover. Creek line.
81	-25.33554	152.85266	12.5.2a	12.5.2a	12.5.2a	Skinny band of good oval HVR on higher side of creek line. OK quality for HVR.

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
82	-25.33588	152.85638	12.5.2a	12.5.2a	12.5.13a	Higher up on ridge. HVR. Rainforest species. No emergent eucalypts. Note: Unsure of landzone.
83	-25.33458	152.85674	12.5.2a	12.5.2	12.5.13a	*Landzone 11? Cracking sandstone (unsure). Open woodland with some rainforest species. Good quality. Good species diversity.
84	-25.33149	152.85429	12.5.13a	12.5.13a	12.5.13a	Section viewed from housing estate. Lots of Acacia (Dominated), some weeds. No canopy trees.
85	-25.34256	152.88161	12.5.4	12.5.4	12.5.4	Bit weedy. Open Eucalyptus woodlands near cleared areas. (Narrow section along edges). Changes to rocks ground area (next point NK43). Shrubby and weedier understorey.
86	-25.34297	152.88132	12.5.4	12.5.4	12.5.4	Great quality HVR. Rocky pebbly ground cover (pics). Previously disturbed (piles of soil).
87	-25.34356	152.87921	12.5.4	12.5.4	12.5.4	Open woodland with emergent Eucalyptus (C. intermedia). Very rocky/pebbly ground. Dense midstorey of Acacia regrowth.
88	-25.34267	152.86919	12.5.2a	12.5.2a	12.5.4	Open forest with brush box midstorey. Good quality Remnant. No bluegum. Not many weeds (no weeds). Note: K. poo (E. exserta). 1126 NK25, -25.34274, 152.86909
89	-25.34123	152.8721	12.5.4	12.5.4	12.5.4	No weeds. Great quality remnant open woodland with very dense l. confertus understorey
90	-25.34158	152.8748	12.5.4	12.3.11/12.3.5	12.3.5	M. quinquenervia understorey, with emergent E. tereticornis (green mapped area), E. siderophloia, C. intermedia. Great Rem quality.
91	-25.34228	152.82181	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	Small swamp area/palustrine wetland area off road. Open Eucalyptus woodland with emergent Eucalypts. M. quinquenervia dense in sections, and Casuarina glauca - (notes) port of Bunya creek - maybe 12.3.20/12.3.11 for creek section and along the road. Notes: large open
92	-25.32436	152.81615	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	Small area of Melaleuca? Thicket. some (2-3) E. tereticornis on creekline, Melaleuca swamp wetland. Remnant. Good quality.
93	-25.31977	152.8141	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	Looking into block of trees along creek. Remnant quality but not sure of size of patch. Lots of tereticornis (huge), regen understorey.
94	-25.31895	152.8022	12.5.2a	Non-rem	12.5.4	Both sides of road (Alborgs Rd) open eucalypt woodland. Great condition. Remnant status.
95	-25.32416	152.79956	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	Good quality remnant open woodland. Dense midstorey layer.
96	-25.32377	152.79997	12.5.2a	12.5.2a	12.5.2a	Open forest. Great quality. Dominated by C. intermedia, emergent eucalypt (E. tereticornis and C. tessellaris). Less dense midstorey.

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
97	-25.32525	152.79962	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	Looking into property. Creek running through. Great quality remnant vegetation. M. quinquenervia understorey thicket. Follows whole creekline.
98	-25.32685	152.79878	12.5.4	12.5.4	Non-rem	Landowner has done some slashing. Lots of M. quinquenervia. Small number of emergent eucalypt. Patch of Rem towards back and closer to Piggford lane. Non Rem here.
99	-25.33065	152.80743	12.5.2a	12.5.2	12.3.11/12.3.5	Dense paperbark understorey with emergent ironbarks and bloodwoods and stringy.
100	-25.33058	152.80661	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11/12.3.5	M. quinquenervia dominant, m. salicina co-dominated. Melaleuca swamp/wetland. Just on low section with great quality. Heads along cleared section creek. Note: road flooded here.
101	-25.33132	152.80672	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11/12.3.5	Clay/pebble landform. Dominated by M. quinquenervia midstorey. Eucalypt emergent canopy. Great quality remnant vegetation. Same along creek. *Same as other creekline section.
102	-25.32128	152.82507	12.3.11/12.3.5	Non-rem	Non-rem	Full of weeds. No canopy. Nothing through creek mapped section also.
103	-25.32027	152.81784	12.3.11/12.3.5	12.3.11/12.3.5	Non-rem	Non Rem. No trees at all.
104	-25.30904	152.8188	12.5.13a	Non-rem	Non-rem	Non Rem, Acacia and weeds. No canopy trees.
105	-25.30782	152.81313	12.5.13a	12.5.13a	Non-rem	Hickory wattle dominated weeds. No canopy.
106	-25.31353	152.81129	12.5.13a	Non-rem	12.5.13	(HVR Section - mapped). Remnant condition - dry-ish vine thicket. Rainforest species. Rainforest stops at creek (WP 1147). Very dense understorey.
107	-25.31324	152.81215	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	From rail trail point to more cleared section and to left away from start of open eucalypt forest with large eucalypt emergent.
108	-25.31346	152.81244	12.3.11/12.3.5	12.3.11/12.3.5	12.5.13	Regrowing rainforest/vine thickets as going back towards cleared area to the East. Same species as NK63, only in worse condition.
109	-25.31293	152.81221	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	Good quality remnant with emergent E. tereticornis and dense Melaleuca midstorey. Waterbody close with marshlands.
110	-25.30898	152.81161	12.5.13a	12.5.13a	12.5.13a	weedy and no canopy trees, Acacia dominant. Lantana understorey and Psidium. Could be rainforest regrowth? Note: Looked on edge of patch.
111	-25.30227	152.81442	12.5.13a	12.5.13a	12.5.13a	No canopy. Acacia dominant thicket. Could be rainforest regrowth
112	-25.31434	152.79964	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	Open eucalypt woodland with emergent Eucalypts. Dense M. quinquenervia understorey. Great quality. Rem.
113	-25.31429	152.79857	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11/12.3.5	Great quality eucalypt woodland with creek through it. Emergent Eucalypts.

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
114	-25.31653	152.79726	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11/12.3.5	Contiguous with NK70. Open woodland with emergent Eucalypts and M. quinquenervia dominant midstorey.
115	-25.31063	152.78287	12.3.11	12.3.11	12.3.11	Open eucalypt forest with emergent Eucalypts. and M. quinquenervia understorey.
116	-25.31061	152.78259	12.3.11	12.3.11	Non-rem	Non Rem. No trees. Very few acacias on creekline/drainage ditch.
117	-25.30998	152.77795	12.5.4	12.5.4	12.5.4	Open woodland with M. quinquenervia midstorey.
118	-25.31916	152.80093	12.5.2a	12.5.2a	12.5.2a	Open woodland with emergent Eucalypts (lots of Angophora leiocarpa bloodwoods) and large E. tereticornis. Midstorey dense with Eucalypts.
119	-25.3348	152.85049	12.5.2a	Non-rem	Non-rem	Plantation of E. dunnii and C. citriodora planted in rows by wide bay water.
120	-25.31994	152.81383	12.3.11/12.3.5	12.5.2a	Non-rem	No canopy trees. Some Acacia disparrima but only small. Opposite NK50
121	-25.33473	152.83635	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	Same as rest of block. Good quality remnant 12.3.11.
122	-25.34287	152.83873	12.3.11/12.3.5	Non-rem	Non-rem	Plantation of eucalypt. dunnii, and C. citriodora, planted in rows by wide bay water.
123	-25.34018	152.83913	12.5.4	Non-rem	Non-rem	Plantation of E. dunnii and C. citriodora, planted in rows by wide bay water.
124	-25.34121	152.84391	12.3.11/12.3.5	Non-rem	Non-rem	Plantation of E. dunnii and C. citriodora, planted in rows by wide bay water.
125	-25.33565	152.84481	12.5.2a	Non-rem	Non-rem	Plantation of E. dunnii and C. citriodora, planted in rows by wide bay water.
126	-25.252423	152.680378	12.2.11	12.2.11	12.2.11	Old regrowth? Beach ridge community. Corp rising E. tereticornis, C. tessellaris. Woodland with dense low tree layer of M. quinquenervia on loose white sand.
127	-25.256031	152.680239	12.2.7	12.2.7	12.2.11	Narrow beach ridge with semi-remnant E. tereticornis, a. leiocalyx woodland adjacent to M. quinquenervia - c. glauca wood. Notes: semi remnant has been disturbed.
128	-25.24943	152.668821	12.2.11	12.2.11	12.2.11	Beach ridge, woodland with C. tessellaris - a. leiocarpa, and mid-dense low tree layer on sand.
129	-25.253023	152.666338	12.2.11	12.2.11	12.2.11	E. tereticornis - E. exserta, open forest with dense/closed low tree layer of Melaleuca spp. In beach ridge - salt marsh. Ecotone. Notes: Occurs in ecotone with 12.1.2.
130	-25.256915	152.667141	12.5.4	12.5.4	12.2.7	E. tereticornis emergent. M. quinquenervia, open forest and E. tereticornis emergents - occurs on white sand. Drops to c. glauca. Notes: Roadside observation.
131	-25.256623	152.674127	12.2.7	12.2.7	12.2.7	M. quinquenervia open forest, and E. tereticornis emergents 12.3. Occurs on dark loamy sand. Notes: not exact fit with geol, more like Qcw.

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
132	-25.258094	152.674731	12.5.4	12.5.4	12.2.11	Beach ridge, open forest with Angophora leiocarpa on white sand adjacent to 12.2.7.
133	-25.258675	152.676776	12.2.7	12.2.7	12.2.11	Beach ridge community, with Eucalyptus robusta. Woodland with shrubby understorey, ecotonal/ecological community - close to margins of 12.2.9. On white sand.
134	-25.259482	152.678392	12.2.7	12.2.7	12.2.11	Beach and woodland/open forest. 12.2.11 and healthy understory, shrubby with Angophora leiocarpa on white sand (degraded beach nearby). Note: semi disturbed but otherwise in good condition. Important local variant of 12.2.11.
135	-25.262198	152.678381	12.2.7	12.2.7	12.2.9	Open forest. Emergent trees present. Banksia aemula shrub on degraded beach - white sand.
136	-25.262369	152.67954	12.2.7	12.2.7	12.2.7	Ecotone.
137	-25.261513	152.685489	12.2.7	Non-rem	Non-rem	Small patch extends over road, sparse understorey. Eucalyptus moluccana open forest, (on clay loam) (duller soil?), not mapped.
138	-25.263152	152.685235	12.2.7	12.2.7	12.2.7	M. quinquenervia forest adjacent to artificial drain. Low open forest (poles) with larger remnant emergent trees.
139	-25.264428	152.698044	12.2.7	12.2.7	12.2.7	Melaleuca quinquenervia forest along watercourse surrounded by 12.2.11.
140	-25.26625	152.697286	12.2.7	12.2.7	12.2.7	Melaleuca quinquenervia open forest in broad channel
141	-25.267407	152.697416	12.2.9	12.2.9	12.2.9	Shrubby open forest on degraded older sandy beach ridge deposits.
142	-25.265491	152.70212	12.2.7	12.2.7	12.2.7	Remnant of melaleuca quinquenervia open forest in watercourse.
143	-25.265517	152.684647	12.2.12	12.2.12	12.2.13	Open heath, no weeds. Sparse taller shrubs layer and low emergent trees. Geology white sand, older degraded dune system.
144	-25.272874	152.699681	12.2.9	12.2.9	12.2.9	Burnt banksia woodland/open forest. Recent hot fire. Shrubs burnt - no data.
145	-25.264869	152.700277	12.2.7	12.2.11	12.2.11	Closed forest emergent Corymbia tessellaris, Agathis robusta. Infor collected on boundary. Geology young sandy beach ridge system.
146	-25.266292	152.705714	12.2.7	12.2.7	12.2.7	Melaleuca quinquenervia open forest in board sandy watercourse. Casuarina glauca also present.
147	-25.196334	152.602895	12.2.15	12.2.15	12.2.15	Sedgeland in poor condition - dry. Plants sterile, desiccated
148	-25.196817	152.602366	12.2.9	12.2.9	12.2.9	Banksia aemula shrubby woodland on QPBC.
149	-25.193486	152.606707	12.2.12	12.2.12	12.2.13	Tall shrubland on Qpbc older degraded dune/beach ridge system.
150	-25.188172	152.612957	12.2.11	12.2.11	12.2.11	Eucalyptus tereticornis, C. intermedia tall open forest, reasonable condition older beach ridge system.

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
151	-25.187485	152.613385	12.2.11	12.2.11	Non-rem	E. moluccana, C. glauca. No RE match on LZ2. Would fit LZ3 RE? NON REM for now
152	-25.189245	152.617275	12.2.7	12.2.7	12.2.7	M. quinquenervia open forest with E. tereticornis emergents. Melaleucas small. Clay loam beach ridge system.
153	-25.191394	152.619797	12.2.11	12.2.11	12.2.11	Beach ridge with C. tessellaris woodland.
154	-25.192829	152.619873	12.2.11	12.2.11	Non-rem	No RE match on LZ 2. E. moluccana and E. tereticornis open forest with tree stratus of Melaleuca sp. Non-rem for now
155	-25.341711	152.870051	12.5.4	12.5.4	12.9-10.21	E. acmenoides open forest on hillside.
156	-25.344914	152.868854	12.5.2a	12.5.2	12.5.2	E. tereticornis tall open forest on lower hillslope.
157	-25.347819	152.87048	12.3.11/12.3.5	12.3.5	12.3.5	Water channel fringing community included with RE 12.3.11 on adjacent floodplain.
158	-25.347559	152.870583	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	tall shrubland on Qpbc older degraded dune/beach ridge system.
159	-25.345351	152.872056	12.5.2a	12.5.2	12.5.2	C. intermedia, E. tereticornis open forest on lower slope.
160	-25.346896	152.873278	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	M. quinquenervia open forest on alluvial plain.
161	-25.347163	152.87235	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	C. intermedia open forest on alluvial plain.
162	-25.370437	152.888509	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.4	Corymbia intermedia, E. siderophloia tall open forest on low rise on sedimentary rocks.
163	-25.364766	152.873165	12.3.11	12.3.11	12.3.11	Tall open forest/woodland on coastal plain sediments.
164	-25.349758	152.873122	12.3.11/12.3.5	12.3.11	12.5.4	C. intermedia and A. leiocarpa open forest on low rise. Drops quickly into RE 12.3.5 down slope.
165	-25.345351	152.872056	12.5.2a	12.5.4	12.5.4	C. intermedia and E. latisinensis woodland on shallow on shallow rocky soils.
165	-25.345351	152.872056	12.5.2a	12.5.4	12.5.4	C. intermedia and E. latisinensis woodland on shallow on shallow rocky soils.
166	-25.350617	152.901189	12.5.2a	12.5.2	12.5.4	C. intermedia, E. exserta woodland with T2 layer of L. confertus on gently undulating hill slope.
166	-25.350617	152.901189	12.5.2a	12.5.2	12.5.4	C. intermedia, E. exserta woodland with T2 layer of L. confertus on gently undulating hill slope.
167	-25.349581	152.904156	12.3.11	12.3.11	12.3.11	C. intermedia, E. siderophloia open forest on flat/gently sloping surface.
168	-25.360546	152.8931	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.13	E. tereticornis woodland with understorey of Acacia disparrima and rainforest trees and vines.
169	-25.362245	152.893001	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.2	C. intermedia, E. tereticornis tall open forest on upper to mid-slope.

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170	-25.373878	152.900724	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.4	Regrowth <i>E. exserta</i> / <i>C. intermedia</i> open forest on low hills.
171	-25.365333	152.900522	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.4	<i>C. intermedia</i> open forest with <i>L. confertus</i> T2 layer on low hillslope.
172	-25.363749	152.900301	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.4	<i>C. intermedia</i> , <i>L. confertus</i> tall open forest with mid-dense understorey of rainforest trees and vines on low coarse sedimentary rocks.
173	-25.354927	152.83896	12.3.20	12.3.20	12.3.5	<i>Melaleuca quinquenervia</i> closed forest with <i>E. tereticornis</i> emergents on alluvial plain watercourse.
174	-25.34984	152.868539	12.5.4	12.3.11/12.3.5	12.3.5	Mature <i>M. quinquenervia</i> open forest on alluvium rocks, very nice.
175	-25.34578	152.867336	12.5.2a	12.5.2	12.5.2	<i>C. intermedia</i> , <i>E. exserta</i> , <i>L. confertus</i> open forest bordering <i>M. quinquenervia</i> swamp.
176	-25.337084	152.888227	12.5.4	12.5.4	12.5.2	Tall open forest of <i>E. siderophloia</i> , <i>E. tereticornis</i> , <i>C. intermedia</i> , <i>E. exserta</i> on gently undulating to flat crest. No watercourse.
177	-25.327636	152.894563	12.5.4	12.5.4	12.5.4a	Low open forest of <i>M. quinquenervia</i> . Regrowth with sandy soil. Healthy vegetation.
178	-25.254731	152.682955	12.2.11	Non-rem	Non-rem	cleared with sparse remnant/regrowth <i>E. tereticornis</i> , <i>Melaleuca nodosa</i>
179	-25.252327	152.682666	12.2.11	Non-rem	Non-rem	cleared with sparse remnant/regrowth 12.2.11
180	-25.255367	152.678803	12.2.11	12.2.11	12.2.7	even-aged "pole" <i>M. quinquenervia</i> open forest 12 m tall near bund
181	-25.255627	152.679434	12.2.7	12.2.7	12.2.11	narrow disturbed beach ridge woodland with regrowth <i>Acacia</i> . though disturbed meets rem criteria
182	-25.256749	152.678002	12.2.11	12.2.11	12.2.11	beach ridge woodland <i>E. tereticornis</i> , <i>Angophora leiocarpa</i> , <i>Leptospermum neglectum</i> etc
183	-25.248978	152.66704	12.2.11	12.2.11	Non-rem	edge of low lying weedy area, formerly <i>M. quinquenervia</i> , <i>Casuarina glauca</i> ?
184	-25.25201	152.666409	12.2.11	12.2.11	12.2.11	to be checked
185	-25.254414	152.66742	12.1.2	12.1.2	12.1.2	saltpan with scattered <i>Casuarina glauca</i>
186	-25.25878	152.678952	12.2.7	12.2.7	12.2.11	regrowth dense pole type <i>M. quinquenervia</i> with <i>E. tereticornis</i> 10 - 12 m tall
187	-25.261715	152.679428	12.2.7	12.2.7	12.2.11	12.2.11 distinguished by large <i>Callitris col</i>
189	-25.262757	152.67959	12.2.7	12.2.7	12.2.11	semi-remnant shrubby woodland with <i>E. latisinensis</i> , <i>Callitris col</i>
190	-25.261503	152.68436	12.2.7	12.2.7	12.2.7	semi-remnant <i>M. quinquenervia</i> with scattered <i>E. tereticornis</i> and <i>Livistona</i>
191	-25.263363	152.685259	12.2.7	12.2.7	Non-rem	large deep drain with water, <i>Phragmites</i> , <i>Leersia</i> , regen <i>M. quinquenervia</i>

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
192	-25.260879	152.694655	12.2.11	12.2.11	Non-rem	fragmented/partly cleared E. tereticornis, M. quinquenervia, Cupaniopsis, Acacia, mapped as 12.2.11. semi-remnant 12.2.11? To check
193	-25.264796	152.697357	12.2.7	12.2.7	12.2.7	dense pole open forest of M. quinquenervia with scattered larger rem trees; geol Qcw
194	-25.264354	152.68546	12.2.7	12.2.7	12.2.9	12.2.9 B. aemula shrubby woodland near 12.2.9 proforma sites
195	-25.269584	152.701267	12.2.9	12.2.9	12.2.9	B. aemula woodland. Heavy band of Allocasuarina littoralis regrowth fringing road
196	-25.268937	152.700669	12.2.9	12.2.9	12.2.9	B. aemula woodland. Heavy band of Allocasuarina littoralis regrowth fringing road
197	-25.263908	152.708561	12.2.11	12.2.11	12.2.11	linear band of beach ridge open forest along edge of road
198	-25.265795	152.706305	12.2.7	Non-rem	12.2.11	Regrowth/semi-rem E. tereticornis + mid-dense M. quinquenervia 15 - 20 m tall
199	-25.254853	152.679202	12.2.11	12.2.11	12.2.11	patch of E. robusta - E. tereticornis hybrids - refer to info on EUCLID re E. robusta hybrids. Semi rem? of conservation interest
200	-25.195128	152.609152	12.2.9	12.2.9	12.2.9	Banksia aemula shrubby woodland
201	-25.193803	152.609043	12.2.9	12.2.9	12.2.9	Banksia aemula shrubby woodland
202	-25.194938	152.611659	12.2.11	Non-rem	12.2.11	narrow remnant strip 12.2.11 with C. intermedia prominent
203	-25.192765	152.608705	12.2.11	12.2.9	12.2.11	narrow remnant strip 12.2.11 with C. intermedia prominent
204	-25.188038	152.617278	12.2.7	12.2.7	12.2.11	Beach ridge open forest with C. intermedia, C tessellaris sim to TOBH45
205	-25.189463	152.616829	12.2.7	12.2.7	12.2.11	Beach ridge woodland confirmed
206	-25.18798	152.617685	12.2.7	12.2.7	12.2.11	Beach ridge woodland Eucalypt tereticornis, Banksia integrifolia, E. exserta, L. suaveolens confirmed
207	-25.19125	152.620276	12.2.11	12.2.11	12.2.11	Beach ridge woodland confirmed
208	-25.192298	152.620366	12.2.7	12.2.7	12.2.7	M. quinquenervia open forest confirmed
209	-25.191765	152.619809	12.2.11	12.2.11	12.2.11	to be checked
210	-25.201532	152.62045	12.3.3d/12.3.20	Non-rem	12.3.20	interpreted as regrowth, predominantly even-aged Casuarina glauca + M. quinquenervia, E. tereticornis. Geol QHCB = LZ 2?
211	-25.204176	152.619771	12.2.7	Non-rem	Non-rem	interpreted as regrowth, predominantly even-aged Casuarina glauca + M. quinquenervia, E. tereticornis. Geol QHCB = LZ 2?
212	-25.21444	152.632548	12.2.11	Non-rem	Non-rem	active development, recently cleared

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
213	-25.209604	152.629867	12.2.11	12.2.11	Non-rem	beach ridge with thinned <i>C. tessellaris</i> , <i>C. int</i> , <i>Callitris</i> understorey slashed
214	-25.335938	152.905813	12.5.4	12.5.4	12.2.11	Beach ridge woodland, semi-remnant narrow ridge along the strand.
215	-25.336128	152.905092	12.5.4	Non-rem	12.5.2	<i>E. tereticornis</i> open forest, semi remnant (thinned in past). <i>E. siderophloia</i> further to the west
216	-25.336468	152.895515	12.5.4	12.5.4	12.5.4	<i>Eucalyptus latisinensis</i> , <i>Corymbia intermedia</i> , <i>Angophora leiocarpa</i> open forest.
217	-25.326279	152.886032	12.5.4	12.5.4	12.5.4a	<i>E. latisinensis</i> , <i>C. intermedia</i> , <i>A. leiocarpa</i> open forest. Reference site for tea tree west road vegetation and vicinity before there is a lot of <i>M. quinquenervia</i> regrowth.
218	-25.33483	152.888013	12.3.6	12.3.6/12.5.4	12.5.2a	<i>Eucalyptus exserta</i> , <i>Corymbia intermedia</i> , <i>Melaleuca quinquenervia</i> open forest on broad flat crest. Flat terrain.
219	-25.345537	152.871088	12.3.11/12.3.5	12.5.2	12.9-10.21	<i>Eucalyptus acmenoides/portuensis</i> open forest on lower slope. Site has been disturbed by extraction.
220	-25.363174	152.897609	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.4	<i>Corymbia intermedia</i> tall open forest/woodland with T2 layer of rainforest species. The canopy has been altered by wind or storm damage creating gaps which have been colonised by dense vine thickets. There are logs/stems on the ground. This point is a use
221	-25.360878	152.897895	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.4	<i>Lophostemon confertus</i> low closed forest and emergent trees on erudite. Site near edge of patch dominated by <i>Acacia disparrima</i> .
222	-25.362087	152.899292	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.4	Low open forest of <i>Lophostemon confertus</i> on erudite hillside. The extensive pattern at Booral with <i>Lophostemon confertus</i> dominated tree is interpreted because of historical disturbance.
223	-25.352734	152.904396	12.5.2a	12.3.11	TBD	<i>Corymbia intermedia</i> , <i>Eucalyptus tereticornis</i> , <i>Eucalyptus siderophloia</i> open forest. Flat very gently undulating, loamy soil and stone. Parent material arenite/mudstone.
224	-25.351645	152.899379	12.5.4	12.5.4	12.5.4	<i>Corymbia intermedia latisinensis</i> open forest. No <i>Lophostemon confertus</i> present.
225	-25.360344	152.893265	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.2	<i>Acacia disparrima</i> open forest with occasional <i>C. intermedia</i> and <i>E. tereticornis</i> . Interpreted as HVR of <i>E. tereticornis</i> , <i>C. intermedia</i> open forest with some rainforest trees/vines in understorey after clearing for agriculture. Regrowth older than 40 years.
226	-25.549088	152.68843	12.3.7	12.3.7	12.3.7	Regrowth understorey mown so only trees and <i>E. tereticornis</i> where

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
227	-25.556111	152.686697	12.3.11	12.3.11	12.3.11	Police paddock. Flat terrain no drainage lines nearby. <i>E. tereticornis</i> tall open forest. Uniform from edge of Woon Rd.
228	-25.561456	152.68591	12.5.4/12.5.7	12.5.4	12.5.7	<i>Corymbia citriodora</i> , <i>Eucalyptus fibrosa</i> , <i>E. siderophloia</i> tall open forest. Gully mapped as 12.3.11 but only linear strip of M.9 on channel. (PM7 non rem. Urban new estate)
229	-25.561892	152.67578	12.3.11	12.3.11	12.3.20	<i>Melaleuca leucadendra</i> (some looks disturbed) non-rem regrowth open <i>E. tereticornis</i> open forest
230	-25.513885	152.679321	12.3.11	12.3.11	12.3.11	Tall woodland with mid-dense T2 layer of <i>Melaleuca quinquenervia</i> , <i>Lophostemon suaveolens</i> . Between patch and walker st is also 12.3.11 alluvial system.
231	-25.511361	152.679731	12.5.7/12.5.4	12.5.4	12.5.4	12.5.4 Open forest on LZ5- 9/10.
232	-25.49894	152.682259	12.5.4	12.5.4/12.5.7	12.5.4	<i>Corymbia</i> sp., <i>E. latisinensis</i> grassy woodland on LZ 5 - 9/10
233	-25.49511	152.680033	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	<i>E. tereticornis</i> , <i>E. exserta</i> woodland with <i>M. quinquenervia</i> and <i>L. suaveolens</i> .
234	-25.500974	152.673751	12.5.7/12.5.4	12.5.4	12.5.4	<i>Corymbia intermedia</i> , <i>E. latisinensis</i> , <i>E. exserta</i> open forest.
235	-25.509489	152.678823	12.5.7/12.5.4	12.5.4	12.5.4	12.5.4 Open forest on LZ5- 9/10. Broad crest but wet seasonally. <i>M. quinquenervia</i> but mostly cleared T2 layer.
236	-25.503636	152.656286	12.5.7/12.5.4	12.5.4	12.5.4	12.5.4 Open forest with <i>Corymbia trachyphloia</i> , <i>C. intermedia</i> , <i>E. siderophloia</i> , <i>E. latisinensis</i> on LZ 5-9/10
237	-25.5009	152.656936	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	Naple St. <i>C. intermedia</i> , <i>L. suaveolens</i> open forest. Semi-rem?
238	-25.545463	152.673215	12.5.4/12.5.7	12.3.11	12.3.11	<i>E. tereticornis</i> and <i>C. intermedia</i> woodland and <i>M. quinquenervia</i> , <i>Eucalyptus</i> sp and <i>L. suaveolens</i> in T2.
239	-25.557826	152.653233	12.5.4/12.5.7	12.5.4/12.5.7	12.5.2	12.5.2 open forest regrowth with some old trees.
240	-25.497049	152.660121	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	Flat terrain, <i>E. tereticornis</i> , <i>C. intermedia</i> , <i>E. exserta</i> emergent open forest.
241	-25.499229	152.651181	12.5.4	12.5.7/12.5.4	12.5.4	<i>E. siderophloia</i> open forest on LZ 5-9/10.
242	-25.502896	152.698953	12.5.7/12.5.4	12.5.4	12.5.7	<i>C. citriodora</i> , <i>E. acmenoides/portuensis</i> , <i>E. siderophloia</i> open forest on LZ 5-9/10
243	-25.481754	152.63964	12.5.4	12.5.4	12.5.4	Healthy shrubby woodland old regrowth. <i>Latisinensis</i> , <i>C. trachyphloia</i> on LZ 5-9/10
244	-25.478413	152.640536	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	<i>Eucalyptus</i> woodland with <i>M. quinquenervia</i>
245	-25.473512	152.657199	12.5.4	12.5.4	12.5.4	Semi remnant patch of <i>Angophora leiocarpa</i> , <i>E. siderophloia</i> open forest/woodland.

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
246	-25.473518	152.66549	12.5.4	12.3.11/12.3.5	12.3.7	Fringing forest with brackish H2O.
247	-25.473518	152.66549	12.5.4	12.5.4	12.5.4	Leggy, dieback, grazed in past. <i>E. siderophloia</i> , <i>E. latisinensis</i> open forest on LZ5-9/10
248	-25.48165	152.664285	12.3.11/12.3.5	12.3.11	12.5.3	Incised channel with linear <i>M. quinquenervia</i> along channel
249	-25.467247	152.656668	12.3.5	12.3.5	12.3.6	Saltwater Creek west of highway. Watercourse fringed by <i>M. quinquenervia</i> with <i>L. suaveolens</i> , <i>E. tereticornis</i> within banks away from channel.
250	-25.471379	152.660564	12.5.4	12.3.11/12.3.5	12.3.11	Broad low channel. Woodland of <i>E. tereticornis</i> , <i>E. exserta</i> with mid-dune T2 comprising <i>M. quinquenervia</i> and others.
251	-25.495368	152.663823	12.5.4	12.3.11/12.3.5	12.3.11/12.3.5	Composite site. Patches of dense, even-aged <i>M. quinquenervia</i> (RE 12.3.5) and <i>E. tereticornis</i> , <i>C. intermedia</i> woodland with <i>Lophostemon suaveolens</i> and patchy <i>M. quinquenervia</i> .
252	-25.49444	152.66427	12.5.4	Non-rem	12.5.4	reasonable condition meets rem status
253	-25.50499	152.6966	12.5.7/12.5.4	12.5.7/12.5.4	12.5.4	12.5.4 confirmed, no 12.5.7 located
254	-25.49733	152.68407	12.5.4	12.5.4	12.5.4	12.5.4 confirmed
255	-25.50541	152.67729	12.5.7/12.5.4	12.5.4/12.5.7	12.5.4	12.5.4 confirmed, no 12.5.7 located
256	-25.49152	152.68271	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	polygon all 12.3.11
257	-25.49253	152.67799	12.5.4	12.5.4	12.5.4	12.5.4 confirmed
258	-25.50443	152.67037	12.3.11/12.3.5	12.5.4/12.5.7	12.5.4	12.5.4 confirmed no 12.5.7 located
259	-25.4958	152.66629	12.3.11/12.3.5	12.3.11/12.3.5	Non-rem	recently cleared
260	-25.50241	152.65243	12.5.7/12.5.4	12.5.4/12.5.7	12.5.4	western section traversed <i>E. acmenoides</i> present. 12.5.7 unlikely
261	-25.49416	152.66119	12.5.4	12.5.4	12.5.4	12.5.4 confirmed
262	-25.49289	152.66176	12.5.4	12.5.4	12.5.4	has been disturbed but still meets rem status
263	-25.49723	152.65352	12.5.4	12.5.4	12.5.4	12.5.4 confirmed
264	-25.47274	152.66619	12.5.4	12.5.4	12.5.4	12.5.4 confirmed
265	-25.47648	152.6445	12.5.4	12.5.4	12.5.4	sighted through perimeter fence, 12.5.4 confirmed
266	-25.48219	152.64143	12.5.4	12.5.4	12.5.4	sighted through fence heathy 12.5.4 good condition
267	-25.55715	152.68476	12.3.11	12.3.11	12.3.11	12.3.11 confirmed good condition, low <i>M. quinquenervia</i> presence
268	-25.56013	152.68365	12.3.11	12.5.7	12.5.7	12.5.7, <i>C. citriodora</i> , some <i>E. fibrosa</i> on crest

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
269	-25.55499	152.68451	12.3.11	12.5.7	12.5.7	12.5.7 confirmed
270	-25.5573	152.66528	12.5.4/12.5.7	12.5.4	12.5.4	sighted from road best fit 12.5.4 no <i>C. citriodora</i> observed
271	-25.56566	152.69552	12.3.11	12.3.11	Non-rem	
272	-25.56272	152.67541	12.3.11	12.3.11	12.3.20	Casuarina glauca, <i>M. quinquenervia</i> , <i>E. tereticornis</i> , remnant trees and patchy regrowth
273	-25.56341	152.68442	12.5.4/12.5.7	12.5.4	12.5.7	12.5.7 with 12.3.11 and young <i>M. quinquenervia</i> in adjacent gully
274	-25.56315	152.68084	12.5.4/12.5.7	12.5.4	12.5.7	12.5.7 does not extend much further to south
275	-25.56429	152.67904	12.5.4/12.5.7	12.5.4	12.5.4	around boundary of 12.5.7 and 12.5.4
276	-25.57376	152.67937	12.5.4/12.5.7	12.5.4	12.5.4	12.5.4 sighted from streets
277	-25.56654	152.68809	12.5.4/12.5.7	12.5.4	12.5.4	12.5.4 confirmed
278	-25.57282	152.68114	12.3.11	12.3.11	12.3.11	Matches herbarium mapping
279	-25.57128	152.68928	12.3.11	12.3.11	12.3.11	polygon too wide
280	-25.57007	152.68848	12.3.11	12.5.4	12.5.4	Matches herbarium mapping
281	-25.5732	152.69131	12.5.4/12.5.7	12.5.4	Non-rem	young regrowth
282	-25.57186	152.68773	12.3.11	12.5.4	12.5.4	12.5.4 confirmed
283	-25.57342	152.69515	12.3.11	12.3.11	12.3.11	Matches herbarium mapping
284	-25.57218	152.69363	12.5.4/12.5.7	12.5.4	12.5.4	Matches herbarium mapping
285	-25.57681	152.68997	12.3.11	12.3.11	12.3.11	current herbarium polygon bit wide in places
286	-25.56594	152.66861	12.5.4/12.5.7	12.5.4	12.5.4	Matches herbarium mapping
287	-25.56622	152.67355	12.5.4/12.5.7	12.5.4	12.5.4	Matches herbarium mapping
288	-25.57016	152.66762	12.5.4/12.5.7	12.3.11	12.3.5	could not access, cleared area with patch of pole <i>M. quinquenervia</i>
289	-25.52395	152.65956	12.3.11	12.3.11	12.3.11	polygon can be extended to include additional area, disturbed but meet remnant status
290	-25.54701	152.67265	12.3.11	12.3.11	12.3.11	Matches herbarium mapping. some dense pole <i>M. quinquenervia</i> present
291	-25.54006	152.67396	12.3.11	Non-rem	12.3.11	regrowth relatively advanced
292	-25.54202	152.67513	12.3.11	Non-rem	Non-rem	young regrowth
293	-25.53072	152.66165	12.3.11	12.3.11	12.3.11	Matches herbarium mapping

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
294	-25.53164	152.66583	12.3.11	12.3.11	12.3.11	parts recently thinned, understorey removed
295	-25.5345	152.66975	12.3.11	12.3.11	12.3.11	Matches herbarium mapping
296	-25.54461	152.66497	12.5.4/12.5.7	12.5.4/12.5.7	12.5.4	no 12.5.7 noted
297	-25.5453	152.66344	12.3.11	12.3.11	12.3.11	12.3.11 confirmed
298	-25.54908	152.66297	12.5.4/12.5.7	12.5.4	12.5.4	Matches herbarium mapping
299	-25.55037	152.66308	12.3.11	12.3.11	12.3.11	Matches herbarium mapping
300	-25.55401	152.66349	12.5.4/12.5.7	12.5.4/12.5.7	12.5.4	no 12.5.7 noted
301	-25.55198	152.66852	12.5.4/12.5.7	Non-rem	Non-rem	scalded area with some young regrowth <i>Casuarina glauca</i>
302	-25.52977	152.64166	12.3.16	12.3.16	12.3.16	appears to be regrowth
303	-25.53642	152.64782	12.3.11	12.3.11	12.5.4	vegetation in polygon is 12.5.4
304	-25.53914	152.65498	12.5.4/12.5.7	12.5.4/7	12.5.4	confirmed as 12.5.4
305	-25.53991	152.65488	12.3.11	12.3.11	12.3.5	invasive dense <i>M. quinquenervia</i> due to dam, regrowth 12.3.5 better fit
306	-25.54256	152.65441	12.3.11	12.3.11	12.3.11	sliver of 12.3.11 OK, watercourse altered by drain
307	-25.54619	152.6548	12.3.11	12.5.4/12.5.7/12.3.11	12.5.4	drainage line incipient, narrow, polygon appears to be all 12.5.4
308	-25.5434	152.6648	12.5.4/12.5.7	12.5.4/12.5.7	12.5.4	No 12.5.7, dense regrowth <i>Lophostemon</i> present
309	-25.54292	152.66015	12.5.4/12.5.7	12.3.11	12.3.11	extent of 12.3.11 increased
310	-25.54349	152.65781	12.5.4/12.5.7	12.5.4/7	12.5.4	No 12.5.7 present
311	-25.54338	152.63853	12.3.7	12.3.11	12.3.11	matches herbarium mapping. narrow band of 12.3.7 confirmed
312	-25.54454	152.63592	12.3.7	12.3.11	12.3.11	matches herbarium mapping. narrow band of 12.3.7 confirmed
313	-25.55804	152.65824	12.3.11	12.3.11	12.3.11	12.3.11 polygon narrower than map and eastern end similar not regrowth
314	-25.5566	152.6543	12.5.4/12.5.7	12.5.4/12.5.7	12.5.2	vegetation surrounding 12.3.11 quite mesic <i>C. intermedia</i> dominated better fit for 12.5.2
315	-25.5572	152.65809	12.3.11	12.5.4/12.5.7	Non-rem	cleared area
316	-25.55629	152.63765	12.3.11	12.3.11	12.3.7	within banks vegetation 12.3.7 poor condition weedy
317	-25.55879	152.63954	12.3.11	12.3.11	12.3.11	mapped herbarium polygon enlarged, fairly disturbed
318	-25.55734	152.64211	12.3.11	12.3.11	12.3.11	mapped polygon includes non-rem

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
319	-25.55608	152.62707	12.3.7	12.3.7	12.3.7	Matches herbarium mapping
320	-25.56353	152.6348	12.3.11	12.3.11	12.3.11	Matches herbarium mapping
321	-25.56665	152.64168	12.9-10.17	12.9-10.17	12.5.4	only inspected from road no change in vegetation locally to suggest it may be 9/10.17, 12.5.4 would be more consistent, Tertiary weathering in area
322	-25.5649	152.64811	12.3.11	12.3.11	12.3.11	polygon altered slightly
323	-25.56561	152.64597	12.3.11	Non-rem	12.3.11	small polygon added, meets rem but average condition
324	-25.56257	152.65892	12.3.11	12.3.11	12.3.11	12.3.11 confirmed polygon altered
325	-25.57097	152.65181	12.5.4/12.5.7	12.5.4	12.5.2	E. tereticornis present, Tertiary weathering
326	-25.5689	152.65152	12.5.4/12.5.7	12.5.4/12.5.7	regrowth	regrowth Acacia disparrima and Rainforest trees,
327	-25.56931	152.64344	12.3.11	12.3.11	12.3.11	patch of regrowth 12.3.11 confirmed
328	-25.56802	152.63183	12.9-10.17	12.9-10.17	Non-rem	not 12.9/10.17, weedy vegetation around a dam
329	-25.55103	152.65488	12.5.4/12.5.7	12.5.4/12.5.7	12.5.4	12.5.4 confirmed, no 12.5.7
330	-25.55426	152.65468	12.5.4/12.5.7	12.5.4/5.7	12.5.2	herbarium query, to re-check
331	-25.57027	152.65817	12.3.11	12.5.4/12.5.7	12.5.4	Matches herbarium mapping
332	-25.56346	152.66184	12.3.11	12.5.4	12.5.4	Matches herbarium mapping
333	-25.5624	152.65759	12.5.4/12.5.7	12.5.4/12.5.7	12.5.4	Matches herbarium mapping
334	-25.56218	152.65207	12.5.4/12.5.7	12.5.4/12.5.7	12.5.4	12.5.4 surrounding 12.3.11 along watercourse.
335	-25.548	152.64774	12.5.4/12.5.7	12.5.4/12.5.7	12.5.4	matches 12.5.4
336	-25.54885	152.64964	12.5.4/12.5.7	12.5.4/12.5.7	12.5.4	matches 12.5.4
337	-25.54985	152.64536	12.5.4/12.5.7	12.5.4/12.5.7	12.5.4	12.5.4 confirmed, tree death from seepage from land fill?
338	-25.54886	152.64492	12.3.11	12.3.11	12.3.11	polygon reduced due to clearing
339	-25.55006	152.64416	12.5.4/12.5.7	12.5.4/12.5.7	12.5.4	confirmed as 12.5.4
340	-25.55147	152.64724	12.3.11	12.3.11	Non-rem	clearing /disturbance from landfill
341	-25.55852	152.6355	12.3.11	12.3.11	12.3.11	Matches herbarium polygon
342	-25.55915	152.6379	12.3.11	12.3.11	12.3.11	disturbed but meets rem
343	-25.5471	152.64393	12.3.11	12.3.11	12.3.11	matches polygon re-defined
344	-25.5439	152.64115	12.3.11	12.3.11	12.3.11	Matches herbarium mapping

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
345	-25.54661	152.6443	12.5.5	12.5.5	12.5.4	matches 12.5.4
346	-25.54699	152.64299	12.3.11	12.5.4	12.5.4	Matches herbarium mapping
347	-25.54711	152.64116	12.3.11	12.3.11	12.3.11	Matches herbarium mapping
348	-25.54357	152.64371	12.5.4/12.5.7	12.3.11	12.3.11	appears to be dense Acacia regrowth
349	-25.54324	152.63979	12.3.11	Non-rem		Non-rem
350	-25.49772	152.66159	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	Polygon all 12.3.11
351	-25.5002	152.66398	12.5.4	12.5.4	12.5.4	Matches herbarium mapping
352	-25.50059	152.65988	12.5.7/12.5.4	12.5.4	12.5.4	Matches herbarium mapping
353	-25.49538	152.6547	12.5.4	12.5.4	12.5.4	remnant
354	-25.50197	152.67057	12.5.4	12.3.11/12.3.5	12.3.11	confirmed as all 12.3.11
355	-25.50178	152.67275	12.5.7/12.5.4	12.5.4	12.5.4	Matches herbarium mapping
356	-25.49595	152.6377	12.3.11/12.3.5	12.3.11/12.3.5	12.3.6	extensive M. quinquenervia and Eucalypts
357	-25.4965	152.63903	12.5.2a	12.5.4	12.5.4	Matches herbarium mapping
358	-25.49408	152.64013	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	narrow band along watercourse
359	-25.49011	152.64384	12.5.4	12.5.4	12.5.4	Matches herbarium mapping
360	-25.49379	152.6417	12.5.2a	12.5.2	12.5.4	mainly regrowth/disturbed
361	-25.49611	152.6396	12.5.2a	12.5.2	12.5.4	polygon all 12.5.4, similar to vegetation at back of TAFE campus, quite mesic forest with some E. acmenoides/E. portuensis present along with usual 12.5.4 species
362	-25.49447	152.63793	12.5.7	12.5.4	12.5.4	Matches herbarium mapping
363	-25.5042	152.6988	12.3.11	12.3.11	12.5.7	traversed area, no 12.3.11 in top RHS polygon
364	-25.4954	152.64784	12.3.11/12.3.5	Non-rem	Non-rem	mappable patch on image but had been recently selectively cleared
365	-25.49759	152.64725	12.3.11/12.3.5	12.5.4/12.5.7	12.5.4	all 12.5.4, no 12.5.7, corner has been cleared
366	-25.5026	152.69564	12.5.7/12.5.4	12.5.7/12.5.4	12.5.4	12.5.4 patch defined
367	-25.50621	152.6938	12.5.7/12.5.4	12.5.7/12.5.4	12.5.4	12.5.4 patch defined
368	-25.50565	152.6925	12.3.11	12.3.11	12.3.11	Herbarium mapping confirmed, L suaveolens, M. quinquenervia in T2 layer
369	-25.5029	152.6975	12.5.7/12.5.4	12.5.7/12.5.4	12.5.7	polygon of 12.5.7 delineated

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
370	-25.47833	152.6613	12.5.4	12.5.4	12.5.4	Matches herbarium mapping
371	-25.48163	152.66415	12.3.11/12.3.5	12.5.4	12.5.4	Matches herbarium mapping
372	-25.46713	152.66462	12.3.5	12.3.5	12.3.20	within bank vegetation east highway has M. quinquenervia + Casuarina glauca and other salt tolerant species
373	-25.50064	152.69086	12.5.4	12.3.11	12.3.11	Matches herbarium mapping
374	-25.50599	152.68193	12.3.11	12.3.11	12.3.11	Matches herbarium mapping
375	-25.50621	152.67732	12.5.7/12.5.4	12.5.7/12.5.4	12.5.7	no 12.5.7 observed, all 12.5.4
376	-25.5019	152.66296	12.3.11/12.3.5	12.3.11/12.3.5	12.3.6	dense M. quinquenervia layer has developed under Eucalypts
377	-25.49927	152.66229	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	whole polygon fits 12.3.11
378	-25.50627	152.68129	12.3.11	12.3.11	12.3.11	Matches herbarium mapping
379	-25.49704	152.66343	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	changes drainage has resulted in dense pole M. quinquenervia, close to remnant status
380	-25.46538	152.64811	12.3.5	12.3.5	12.3.6	within bank vegetation west highway has M. quinquenervia + scattered E. tereticornis. line ball whether 3.5/3.6
381	-25.46224	152.63934	12.3.11/12.3.6	12.3.11/12.3.6	Non-rem	cleared with house
382	-25.46854	152.66199	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	above bank vegetation 12.3.11
383	-25.47495	152.65714	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	no mappable 12.3.5 noted
384	-25.48386	152.65751	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	within bank vegetation largely M. quinquenervia
385	-25.48386	152.65586	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	above bank vegetation 12.3.11
386	-25.48577	152.65664	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	above bank vegetation 12.3.11
387	-25.47971	152.64381	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	scattered M. quinquenervia low tree in places but OK for 12.3.11
388	-25.48187	152.6497	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	scattered M. quinquenervia low tree in places but OK for 12.3.11
389	-25.48184	152.65648	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	scattered M. quinquenervia low tree in places but OK for 12.3.11
390	-25.48479	152.65321	12.5.4	12.5.4	12.5.4	Matches herbarium mapping
391	-25.54602	152.67339	12.3.11	Non-rem	12.3.11	area can be mapped with the 12.3.11 as meets rem status
392	-25.54242	152.6662	12.3.11	12.5.4	12.3.11	12.3.11 revised as more extensive than mapped, remainder is all 12.5.4
393	-25.54119	152.66369	12.3.11	12.3.11	12.3.11	12.3.11 polygon enlarged
394	-25.56002	152.68272	12.5.4/12.5.7	12.5.4	12.5.7	whole area delineated is 12.5.7

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
395	-25.56406	152.68453	12.5.4/12.5.7	12.5.4	12.5.7	southern edge of local extent of 12.5.7 centred on the larger remnant in conservation park
396	-25.56752	152.68693	12.5.4/12.5.7	12.5.4	12.5.4	Matches herbarium mapping
397	-25.51892	152.66181	12.3.7	12.3.7	12.3.7	Matches herbarium mapping
398	-25.56794	152.65297	12.3.11	12.3.11	12.5.2	lower hillside disturbed but appears to meet remnant
399	-25.57088	152.65116	12.5.4/12.5.7	12.5.4	12.5.2	disturbed but appears to meet remnant
400	-25.57111	152.65375	12.3.11	Non-rem	12.3.11	patches of regrowth + older trees on LZ 3, rem status?
401	-25.48277	152.66069	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	within bank vegetation 12.3.5, above banks is 12.3.11
402	-25.48216	152.66544	12.3.11/12.3.5	12.3.11	12.3.5	within banks is 12.3.5
403	-25.48192	152.66602	12.3.11/12.3.5	12.3.11	12.3.11	Matches herbarium mapping
404	-25.36234	152.88097	12.5.4/12.5.2a	Non-rem	12.5.4	Non-rem
405	-25.37025	152.86638	12.3.11	12.3.11	12.3.5	
406	-25.36936	152.87296	12.3.11	12.3.11	12.3.5	
407	-25.36654	152.88095	12.3.11	12.3.11	12.3.11	
408	-25.3713	152.88161	12.3.11	12.3.11	12.3.5	
409	-25.36323	152.88276	12.5.4/12.5.2a	12.5.4/12.5.2/12.3.1 1	regrowth	Acacia disparrima some Rainforest trees, the gully in centre non-rem
410	-25.36737	152.88105	12.3.11	12.3.11	12.3.11	part of area above house non rem, part of area near is pole regen of M. quinquenervia and E. tereticornis
411	-25.37174	152.89273	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.4	
412	-25.36669	152.90549	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.13	
413	-25.37738	152.88846	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.2	
414	-25.37626	152.89199	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.2	
415	-25.37486	152.88605	12.5.4/12.5.2a	12.5.2	Non-rem	thinned trees and pasture understorey rather than regrowth, close to non rem
416	-25.3757	152.89195	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.2	pasture understorey, some thinning but meets rem status
417	-25.37105	152.90552	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.13	
418	-25.37484	152.88835	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.4	
419	-25.36165	152.89444	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.13	

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
420	-25.35589	152.89223	12.5.4	12.5.4	12.5.4	Matches herbarium mapping
421	-25.3661	152.89545	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.13	
422	-25.36396	152.89632	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.13	
423	-25.35832	152.89049	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.13	
424	-25.35778	152.88954	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.13	
425	-25.3494	152.88706	12.5.4	12.5.4	12.5.4	
426	-25.35519	152.88936	12.5.4	12.5.4	12.5.4	
427	-25.35814	152.88722	12.5.13a	12.5.13	12.5.13	Matches herbarium mapping
428	-25.35987	152.88669	12.5.4/12.5.2a	12.5.4/12.5.2	regrowth	regrowth containing rainforest trees
429	-25.35885	152.88693	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.13	
430	-25.35373	152.90145	12.5.2a	12.3.11	12.5.2*	part of fairly uniform level area with incipient drainage lines -very small gullies. Rainforest species in understorey and forming small patches in places
431	-25.35564	152.89903	12.5.4/12.5.2a	12.5.4/12.5.2		
432	-25.33644	152.89399	12.5.4	12.5.4	12.5.4a	mid dense M. quinquenervia low tree layer
433	-25.35375	152.90625	12.5.2a	12.5.2	(12.3.11)	gently undulating, E. tereticornis evident
434	-25.35414	152.87582	12.3.11	Non-rem	12.3.5	pole M. quinquenervia
435	-25.35138	152.87442	12.5.4/12.5.2a	Non-rem	12.5.2	hillside above appears to have been 12.5.2 and some rainforest
436	-25.34987	152.87327	12.3.11/12.3.5	12.3.11/12.3.5	12.5.4	small patch 12.5.4 on low rise
437	-25.36929	152.8654	12.5.4	12.5.4	12.5.4	Matches herbarium mapping
438	-25.36971	152.87551	12.5.4	12.3.11	12.3.11	Matches herbarium mapping
439	-25.3699	152.8768	12.5.4	12.5.4	12.5.2	
440	-25.37532	152.88997	12.3.5	12.3.5	12.3.5	Matches herbarium mapping
441	-25.3696	152.87954	12.5.4	12.5.4	12.5.2	intermediate between two 12.5.2 in adjacent areas
442	-25.34507	152.88864	12.5.4	12.5.4	12.5.4	
443	-25.37076	152.88791	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.4	
444	-25.37014	152.8848	12.5.4/12.5.2a	12.5.4/12.5.2a	12.3.5	
445	-25.35339	152.85731	12.5.4	12.5.4	12.5.4	Matches herbarium mapping

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
446	-25.36942	152.88186	12.3.11	12.3.11	12.5.11	
447	-25.37074	152.88156	12.5.4	12.5.4	12.3.5	
448	-25.34872	152.8423	12.3.5/12.3.6	12.3.5/12.3.6	Non-rem	
449	-25.34892	152.87162	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	
450	-25.35389	152.86128	12.5.4	12.5.4	12.5.4	Matches herbarium mapping
451	-25.35355	152.84652	12.3.5/12.3.6	12.3.5/12.3.6	12.3.5	
452	-25.33654	152.88981	12.5.4	12.5.4	12.5.2	flat terrain, no obvious drainage line
453	-25.33481	152.89015	12.3.6	12.3.6	12.5.4a	
454	-25.34636	152.86421	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	
455	-25.34706	152.86773	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	
456	-25.34299	152.87986	12.5.4	12.5.4	12.5.4	has had soil extracted loss of ecological function. Heavily disturbed, topsoil removed
457	-25.34365	152.87545	12.3.11/12.3.5	12.5.4	12.5.4	Matches herbarium mapping
458	-25.35059	152.90112	12.5.2a	12.5.2	12.5.2a	heavy Lophostemon confertus T2
459	-25.34991	152.90387	12.5.2a	12.3.11	(12.3.11)	lower colluvial slope?, very small gully nearby, not LZ 3
460	-25.35071	152.83997	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	
461	-25.34621	152.84071	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	
462	-25.3545	152.84835	12.5.4	12.5.4	12.3.11	
463	-25.356	152.84052	12.5.4	12.5.4	12.3.11	
464	-25.35856	152.84194	12.5.4	12.5.4	12.5.4	Matches herbarium mapping
465	-25.34806	152.86984	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	
466	-25.34278	152.90208	12.3.11	12.3.11	12.5.2	
467	-25.37343	152.90015	12.5.4/12.5.2a	Non-rem	12.5.4	
468	-25.34943	152.90368	12.3.11	12.3.11	12.5.2	
469	-25.3475	152.8972	12.5.13a	12.5.13	12.5.2*	very small patch within Eucalyptus and Rainforest understorey
470	-25.36021	152.89929	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.4	
471	-25.36557	152.90034	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.4	

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
472	-25.37376	152.89603	12.5.4/12.5.2a	Non-rem	12.5.4	
473	-25.36771	152.8946	12.5.4/12.5.2a	NU12.5.4/12.5.2aLL	12.5.2	
474	-25.36419	152.89091	12.3.5	12.3.5	12.5.4	
475	-25.3651	152.89175	12.3.5	12.3.5	12.3.5	Matches herbarium mapping
476	-25.36247	152.89897	12.5.4/12.5.2a	12.5.2/12.5.4	12.5.2*	
477	-25.36218	152.89325	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.2	
478	-25.36368	152.88425	12.5.4/12.5.2a	12.5.4/12.5.2	regrowth	Acacia disparrima dominant
479	-25.36524	152.88298	12.3.11	12.3.11	12.3.11	
480	-25.35661	152.89445	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.4	
481	-25.36392	152.88328	12.3.11	12.3.11	Non-rem	cleared
482	-25.36691	152.88192	12.3.11	12.3.11	12.3.5	
483	-25.36673	152.88745	12.3.11	12.3.11	12.3.11	
484	-25.36435	152.89009	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.4	
485	-25.36919	152.89202	12.5.4/12.5.2a	12.3.5/12.5.4/12.5.2	12.3.5	all polygon is 12.3.5, fairly young pole type M. quinquenervia
486	-25.36646	152.88291	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.4	
487	-25.3622	152.87785	12.3.11	12.3.11	12.3.11	includes small area mapped as 12.5.4
488	-25.36585	152.89224	12.3.5	12.3.5	12.3.5	Matches herbarium mapping
489	-25.36678	152.89095	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.4	
490	-25.37026	152.86689	12.3.11	12.3.11	12.3.5	M. quinquenervia dominant
491	-25.36665	152.87334	12.5.4	12.5.4	12.3.11	12.3.11 based on geology - Qc
492	-25.36494	152.87412	12.3.11	12.3.11/12.5.4	12.3.11	12.3.11 based on geology - Qc
493	-25.36468	152.87209	12.3.11	12.3.11	12.3.11	matches herbarium mapping, good reference site
494	-25.37764	152.87309	12.5.4	12.5.4	12.5.4	Matches herbarium mapping
495	-25.37915	152.87544	12.3.5	12.5.4	12.5.4	Matches herbarium mapping
496	-25.36921	152.87422	12.3.11	12.3.11	12.3.5	M. quinquenervia dominant
497	-25.37448	152.87343	12.5.4	12.5.4	12.5.4	Matches herbarium mapping

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
498	-25.3519	152.90095	12.5.2a	12.5.4/12.5.2a	12.5.4	
499	-25.34552	152.89482	12.5.4	12.5.4/12.5.2a	12.5.4	
500	-25.3502	152.90061	12.5.2a	12.5.2a	12.5.4	
501	-25.35424	152.90121	12.5.2a	12.5.2a	12.5.4	
502	-25.3423	152.89371	12.5.4	12.5.4	12.5.2a	
503	-25.3406	152.89113	12.5.4	12.5.4	12.5.2a	
504	-25.33936	152.87829	12.3.11/12.3.5	12.3.11/12.3.5	LZ 5	point of reference for area south of airport with extensive M. quinquenervia on considered to be on LZ 5 not 3
505	-25.33978	152.89831	12.5.4	12.5.4	12.5.2	
506	-25.33613	152.89579	12.5.4	12.5.4	12.5.4	Matches herbarium mapping
507	-25.33438	152.89455	12.5.4	12.5.4	12.5.4	
508	-25.34023	152.88982	12.3.6	12.3.6	12.5.2a	
509	-25.33662	152.88896	12.5.4	12.5.4	12.5.2	
510	-25.35277	152.9096	12.3.11	12.3.11	(12.3.11)	
511	-25.35254	152.90603	12.5.2a	12.3.11	12.5.2*	small gully with little to no change in vegetation in surrounds
512	-25.34668	152.89171	12.5.4	12.5.4	12.5.4	
513	-25.35133	152.89561	12.5.4	12.5.4	12.5.4	
514	-25.36358	152.89806	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.4	
515	-25.34956	152.90568	12.3.11	12.3.11	12.5.2	
516	-25.3525	152.90591	12.5.2a	12.5.2a	12.5.2a	E. tereticornis in cleared paddock to east
517	-25.34481	152.89962	12.5.4	12.5.4	(12.3.11)	
518	-25.36821	152.90015	12.5.4/12.5.2a	Non-rem	12.5.4	
519	-25.36941	152.90066	12.5.4/12.5.2a	12.5.2a	12.5.4	
520	-25.33956	152.90036	12.5.4	12.5.4	(12.3.11)	
521	-25.37079	152.9013	12.5.4/12.5.2a	12.5.4	12.5.4	
522	-25.36371	152.89886	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.2*	Has Lophostemon confertus and Rainforest trees and vines in understorey
523	-25.36676	152.90468	12.5.4/12.5.2a	12.5.13	12.5.13	surrounded by 12.5.2* with rainforest understorey

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
524	-25.36741	152.89902	12.5.4/12.5.2a	12.5.2a	12.5.4	
525	-25.36505	152.90045	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.2a	dense Lophostemon confertus T2
526	-25.3269	152.89553	12.5.4	12.5.4	12.5.4a	pole M. quinquenervia and heathy/sedge ground layer
527	-25.35344	152.90679	12.5.2a	12.5.2	(12.3.11)	
528	-25.35651	152.91184	12.3.11	12.3.11	(12.3.11)	
529	-25.33551	152.88849	12.5.4	12.5.4	12.5.4a	edge of 12.5.4a
530	-25.35505	152.8996	12.5.2a	12.5.2	12.5.2*	rainforest understorey
531	-25.35476	152.90135	12.3.11	12.3.11	12.5.2*	
532	-25.37324	152.90323	12.5.4/12.5.2a	12.5.4/12.5.2a	12.5.4	
533	-25.35569	152.89071	12.5.4	Non-rem	Non-rem	heavily disturbed by extraction
534	-25.35294	152.90816	12.3.11	12.5.2	(12.3.11)	
535	-25.34765	152.88838	12.5.4	Non-rem	Non-rem	heavily disturbed by extraction
536	-25.34383	152.88042	12.5.4	12.5.4	12.5.4	heavily disturbed by extraction
537	-25.35798	152.91267	12.3.11	Non-rem	Non-rem	remnant E. tereticornis typical of (12.3.11)
538	-25.34986	152.87311	12.3.11/12.3.5	12.3.11/12.3.5	12.5.4	
539	-25.34446	152.87898	12.5.4	12.5.4	12.5.4	
540	-25.34631	152.87743	12.5.4	12.5.4	12.5.4	
541	-25.34437	152.88115	12.5.4	12.5.4	12.5.4	
542	-25.34411	152.87853	12.5.4	12.5.4	Non-rem	
543	-25.34492	152.8775	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	
544	-25.34472	152.87673	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	
545	-25.34172	152.86972	12.5.4	12.5.4	12.9-10.21	
546	-25.34297	152.88293	12.5.4	Non-rem	12.5.4	
547	-25.34737	152.87117	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	12.3.5 polygons delineated as well
548	-25.34529	152.87168	12.5.2a	12.5.2	12.9-10.21	has quaternary sites as well
549	-25.34141	152.87018	12.5.4	12.5.2	12.9-10.21	has quaternary sites as well

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
550	-25.34544	152.87071	12.5.2a	12.5.2	12.9-10.21	has quaternary sites as well
551	-25.36789	152.90517	12.5.4/12.5.2a	12.5.2a	12.5.2*	edge of 12.5.2* Rainforest species in understorey
552	-25.35128	152.90392	12.3.11	12.3.11	(12.3.11)	incipient drainage, no pronounced alluvial features, no change in vegetation
553	-25.37251	152.89285	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.2	
554	-25.3716	152.90275	12.3.11	12.3.11	12.5.13	
555	-25.35762	152.9057	12.5.2a	12.5.2a	12.5.4	
556	-25.35622	152.91122	12.3.11	12.3.11	12.5.2	
557	-25.34997	152.89623	12.5.4	12.5.4	Non-rem	has been heavily thinned and all understorey removed
558	-25.35293	152.9094	12.3.11	12.3.11	12.5.2	
559	-25.36211	152.88774	12.5.4/12.5.2a	Non-rem	regrowth	Acacia disparrima + Eucalypts
560	-25.26423	152.69714	12.2.7	12.2.7	12.2.11	
561	-25.2663	152.70586	12.2.7	12.2.7	12.2.7	
562	-25.26206	152.67905	12.2.7	12.2.7	Non-rem	non rem, drain
563	-25.26693	152.69787	12.2.9	12.2.9	12.2.11	
564	-25.26768	152.70157	12.2.7	12.2.7	12.2.7	
565	-25.2655	152.70205	12.2.7	12.2.7	12.2.7	
566	-25.26559	152.70609	12.2.11	Non-rem	12.2.11	tall regrowth would meet remnant status
567	-25.2648	152.7061	12.2.11	12.2.11	12.2.2	12.2.2 with emergent Eucalypts and Agathis, not regrowth large rainforest trees could be seen
568	-25.26515	152.68634	12.2.7	12.2.7	12.2.9	mapped as 12.2.7, confirmed as 12.2.9
569	-25.26271	152.68587	12.2.7	12.2.7	12.2.7	
570	-25.26472	152.69844	12.2.7	12.2.7	12.2.7	
571	-25.26732	152.69088	12.2.7	12.2.7	12.2.7	
572	-25.25773	152.67423	12.5.4	12.5.4	12.2.11	
573	-25.25556	152.67207	12.2.7	12.2.7	12.2.7	
574	-25.26139	152.68426	12.2.7	12.2.7	12.2.7	

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
575	-25.26131	152.68605	12.2.7	Non-rem	no match	localised occurrence of <i>E. moluccana</i> around 80m x 40m on Qcw, several trees across road
576	-25.25459	152.66685	12.1.2	12.1.2	12.1.2	
577	-25.25317	152.66652	12.2.11	12.2.11	12.2.11	dense <i>Mel nodosa</i> around edge of patch in ecotone with brackish zone
578	-25.25551	152.6724	12.2.7	12.2.7	12.2.7	
579	-25.25723	152.66708	12.5.4	12.5.4	12.2.7	siliceous sand substrate
580	-25.24909	152.66869	12.2.11	12.2.11	12.2.11	
581	-25.24882	152.66633	12.1.2	12.2.11	Non-rem	cleared
582	-25.25276	152.66741	12.2.11	12.2.11	12.2.11	
583	-25.25685	152.66749	12.5.4	12.5.4	12.2.7	
584	-25.26629	152.69759	12.2.7	12.2.7	12.2.7	
585	-25.26536	152.68937	12.2.7	12.2.7	12.2.11	
586	-25.26306	152.68507	12.2.7	12.2.7	12.2.7	
587	-25.26723	152.70605	12.2.7	Non-rem	12.2.11	was 12.2.11 with tall <i>E. tereticornis</i>
588	-25.26489	152.6869	12.2.7	12.2.7	12.2.9	
589	-25.25872	152.67654	12.2.7	12.2.7	12.2.11	
590	-25.26756	152.6873	12.2.9	12.2.9	12.2.9	
591	-25.26644	152.68315	12.2.12	12.2.12	12.2.12	mapped 12.2.12 OK
592	-25.19029	152.61331	12.2.7	12.2.7	12.2.7	
593	-25.19539	152.61173	12.2.11	Non-rem	12.2.11	
594	-25.1886	152.61755	12.2.7	12.2.7	12.2.11	
595	-25.18967	152.61733	12.2.7	12.2.7	12.2.7	
596	-25.19335	152.60434	12.2.9	12.2.9	12.2.9	
597	-25.19233	152.60544	12.2.9	12.2.9	12.2.11	
598	-25.19717	152.59907	12.2.12	12.2.12	12.2.15	
599	-25.1956	152.60763	12.2.12	12.2.12	12.2.13	dry heath
600	-25.19405	152.60707	12.2.12	12.2.12	12.2.12	

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
601	-25.19692	152.6039	12.2.15	12.2.15	12.2.15	badly drought affected
602	-25.19632	152.60194	12.2.9	12.2.9	12.2.9	matches herbarium mapping
603	-25.19627	152.61019	12.2.12	12.2.12	12.2.13	dry heath
604	-25.26558	152.68995	12.2.7	12.2.7	12.2.11	beach ridge remnant
605	-25.26555	152.69214	12.2.7	12.2.7	12.2.7	matches herbarium mapping
606	-25.19278	152.60875	12.2.9	Non-rem	12.2.11	
607	-25.19091	152.61305	12.2.7	12.2.7	12.2.7	matches herbarium mapping
608	-25.26965	152.70684	12.2.9	Non-rem	12.2.9	
609	-25.26786	152.70158	12.2.9	12.2.9	12.2.11	
610	-25.26769	152.6977	12.2.9	12.2.9	12.2.9	matches herbarium mapping
611	-25.26565	152.7093	12.2.11	12.2.11	12.2.11	
612	-25.25689	152.67993	12.2.11	12.2.11	12.2.7	
613	-25.26779	152.70962	12.2.11	Non-rem	12.2.11	
614	-25.26669	152.70527	12.2.7	12.2.11	12.2.11	
615	-25.2506	152.66604	12.2.11	12.2.11	12.2.11	confirmed
616	-25.25315	152.66963	12.2.11	12.2.11	12.2.11	confirmed
617	-25.25781	152.67866	12.2.7	12.2.11	12.2.11	matches herbarium mapping; has been disturbed but still remnant large <i>Angophora leiocarpa</i>
618	-25.25616	152.67563	12.2.11	12.2.11	12.2.11	
619	-25.25879	152.68582	12.2.11	12.2.11	12.2.11	remnant
620	-25.25771	152.67671	12.2.7	12.2.11	Non-rem	abandoned cane field
621	-25.25757	152.67137	12.5.4	12.5.4	12.2.11	
622	-25.26858	152.69966	12.2.9	12.2.9	12.2.9	matches herbarium mapping
623	-25.25758	152.68228	12.2.7	12.2.7	12.2.11	
624	-25.25865	152.68173	12.2.7	12.2.7	12.2.11	
625	-25.25875	152.68362	12.2.7	Non-rem	Non-rem	regrowth polygon too large
626	-25.25629	152.68062	12.2.7	12.2.7	12.2.7	semi-rem 12.2.7

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
627	-25.2567	152.68087	12.2.7	12.2.7	12.2.11	
628	-25.25751	152.68146	12.2.7	12.2.7	12.2.11	
629	-25.25733	152.67953	12.2.11	12.2.11	12.2.11	
630	-25.25354	152.6801	12.2.11	12.2.11	12.2.11	
631	-25.26415	152.70882	12.2.11	Non-rem	12.2.11	
632	-25.25635	152.67972	12.2.11	12.2.11	12.2.11	
633	-25.25298	152.67649	12.2.11	12.2.11	12.2.7	
634	-25.25861	152.67963	12.2.7	12.2.7	12.2.11	
635	-25.26102	152.68521	12.2.7	Non-rem	12.2.7	regrowth 12.2.7 adjacent to E. moluccana patch
636	-25.26125	152.68267	12.2.7	Non-rem	12.2.11	
637	-25.26043	152.6828	12.2.7	12.2.7	12.2.11	
638	-25.18744	152.61386	12.2.11	12.2.11	12.3.20?	E. moluccana, Casuarina glauca + patches of M. styphelioides; no neat RE fit
639	-25.19317	152.6191	12.2.11	12.2.11		E. moluccana, Melaleuca spp.
640	-25.26068	152.68421	12.2.7	12.2.7	12.2.7	
641	-25.18905	152.61427	12.2.11	12.2.11	12.3.20?	thickets of M. styphelioides associated with the E. moluccana, Casuarina glauca
642	-25.20848	152.62271	12.3.3d/12.3.20	Non-rem	12.3.20	
643	-25.25524	152.67868	12.2.11	12.2.7	12.2.7	pole M. quinquenervia associated with bunding, has reached rem status
644	-25.20477	152.62119	12.3.3d/12.3.20	Non-rem	12.3.20	
645	-25.215	152.63243	12.2.11	Non-rem	12.1.1	regrowth 12.1.1
646	-25.21212	152.63037	12.2.11	Non-rem	Non-rem	regrowth. Casuarina glauca, M. quinquenervia has been cleared for development
647	-25.19129	152.61796	12.2.11	12.2.11	12.2.7	
648	-25.26271	152.6796	12.2.7	12.2.7	12.2.11	
649	-25.19031	152.61808	12.2.7	12.2.11	12.2.11	adjacent to drought stressed 12.2.7
650	-25.26257	152.67821	12.2.7	12.2.7	12.2.9	12.2.9
651	-25.20106	152.6203	12.3.3d/12.3.20	Non-rem	12.3.20	12..3.20
652	-25.26193	152.67889	12.2.7	12.2.7 in part	Non-rem	large drain colonised by M. quinquenervia

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
653	-25.19217	152.6192	12.2.11	12.2.11	12.2.11	12.2.11
654	-25.26158	152.67917	12.2.7	12.2.7	12.2.11	12.2.11 with large Callitris
655	-25.27448	152.68723	12.2.11	12.2.11	12.2.2	12.2.2 with Agathis
656	-25.25605	152.67331	12.2.7	12.2.7	12.2.7	matches herbarium mapping
657	-25.25597	152.67977	12.2.7	12.2.7	12.2.11	12.2.11
658	-25.25259	152.68021	12.2.11	12.2.11	12.2.11	matches herbarium mapping. some older canopy species remain
659	-25.2649	152.70644	12.2.11	12.2.11	12.2.2	12.2.2 + Eucalypt emergents
660	-25.2726	152.6998	12.2.9	12.2.9	12.2.9	recently burnt
661	-25.26947	152.7018	12.2.9	12.2.9	12.2.9	matches herbarium mapping
662	-25.341711	152.870051	12.5.4	12.5.2	12.5.2	E. tereticornis, C. intermedia
663	-25.3427	152.8695	12.5.2a	12.5.2/12.5.4	12.9-10.21	E. acmenoides
664	-25.3434	152.8709	12.5.2a	12.5.2/12.5.4	12.9-10.21	E. acmenoides
665	-25.3449	152.8688	12.5.2a	12.5.2	12.5.2	E. tereticornis - C. intermedia
666	-25.3697	152.8841	12.5.4/12.5.2a	12.3.5	12.3.5	M. quinquenervia, E. tereticornis
667	-25.3701	152.8801	12.5.4	12.5.4	12.5.2	similar to BO17
668	-25.3428	152.8806	12.5.4	12.5.4	12.5.4	heavily disturbed/regrowth with C. intermedia, E. exserta, E. latisinensis
669	-25.3516	152.9011	12.5.2a	12.5.2	12.5.2a	C. intermedia, E. exserta with closed L. confertus T2 layer on low hillslope on Km
670	-25.3513	152.904	12.3.11	12.3.11	12.5.2	C. intermedia, E. siderophloia, E. tereticornis, E. latisinensis, M. quinquenervia Open Forest on lower slope on Km
671	-25.3663	152.8956	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.13	Closed forest on crest/upper slope on Kb (sighted from road)
672	-25.3745	152.8954	12.5.4/12.5.2a	Non-rem	12.5.4a	regrowth E. exserta, C. intermedia, L. confertus
673	-25.3497	152.8409	12.3.5/12.3.6	12.3.5/12.3.6	Non-rem	mapped as 12.3.5/12.3.6 but non-rem with small clumps regrowth
674	-25.3515	152.8403	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	E. siderophloia, E. tereticornis, E. exserta, M. quinquenervia Open Forest on alluvium
675	-25.3517	152.8401	12.3.11/12.3.5	12.3.11/12.3.5	12.3.5	dense M. quinquenervia open forest + E. tereticornis emergents on alluvium
676	-25.353547	152.839652	12.3.5/12.3.6	12.3.5/12.3.6	12.3.5	dense M. quinquenervia open forest + E. tereticornis emergents on alluvium
677	-25.345543	152.840835	12.3.11/12.3.5	12.3.11/12.3.5	12.3.11	linear remnant along road with E. tereticornis, C. intermedia, E. siderophloia, M. quinquenervia

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
678	-25.342979	152.878649	12.5.4	12.5.4	12.5.4	heavily disturbed/regrowth with <i>C. intermedia</i> , <i>E. exserta</i> , <i>E. latisinensis</i>
679	-25.326584	152.88937	12.5.4	12.5.4	12.5.4.a	Urban area near airport, RE 12.5.4a confirmed, <i>M. quinquenervia</i> present
680	-25.357896	152.90628	12.5.2a	12.5.2	12.5.2a	<i>C. intermedia</i> , <i>E. exserta</i> , <i>L. confertus</i> shrubby type, <i>E. tereticornis</i> starts below at break of slope
681	-25.357094	152.911456	12.3.11	12.3.11	(12.3.11)	<i>E. tereticornis</i> , <i>E. siderophloia</i> , <i>C. intermedia</i> , <i>Melaleuca</i> , <i>Acacia</i> understorey, not considered alluvial
682	-25.359311	152.899762	12.5.2a	12.5.4/12.5.2	12.5.2a	<i>C. intermedia</i> , <i>E. exserta</i> , <i>L. confertus</i> shrubby
683	-25.355003	152.899593	12.5.2a	12.5.2	12.5.2*	<i>C. intermedia</i> , <i>L. confertus</i> , Rainforest understorey
684	-25.354566	152.903279	12.5.2a	12.5.2	12.5.2*	<i>L. confertus</i> , <i>C. intermedia</i> , Rainforest species can see heads of <i>Agathis robusta</i>
685	-25.354811	152.901488	12.3.11	12.3.11	12.5.2*	<i>L. confertus</i> , <i>C. intermedia</i> , Rainforest species can see heads of <i>Agathis robusta</i> , incipient gully nearby
686	-25.3739	152.9012	12.5.4/12.5.2a	Non-rem	12.5.2a	slight rise with dense regen <i>L. confertus</i> , some <i>C. intermedia</i>
687	-25.3718	152.8939	12.5.4/12.5.2a	12.5.4/12.5.2	12.5.2	<i>E. tereticornis</i> , <i>C. intermedia</i> , <i>E. siderophloia</i> , reddish soil prob LZ 5 lateritised profile cutting up road
688	-25.357	152.9097	12.5.2a	Non-rem	Non-rem	roadside trees <i>E. tereticornis</i> , flat but not alluvial would have been (12.3.11)
689	-25.3524	152.8932	12.5.4	12.5.4	12.5.4a	<i>C. intermedia</i> , dense <i>L. confertus</i> , <i>Melaleuca salicina</i> low rise
690	-25.3522	152.8941	12.5.4	12.5.4	12.5.4	little bit of <i>L. confertus</i> , but dense <i>L. confertus</i> nearby
691	-25.3507	152.9042	12.3.11	Non-rem	Non-rem	Confirmed <i>E. tereticornis</i> paddock trees to SE from point.
692	-25.3418	152.9002	12.5.4	12.3.11 nearby	(12.3.11)	semi rem patch with <i>E. tereticornis</i> , <i>C. intermedia</i> , south side road. Not alluvial
693	-25.3378	152.9007	12.5.4	Non-rem	ex (12.3.11)	parkland <i>E. tereticornis</i> trees retained, not alluvial
694	-25.334	152.899	12.3.11	12.5.4	12.5.4	semi remnant <i>E. exserta</i> , <i>E. latisinensis</i> , <i>C. intermedia</i> etc
695	-25.3338	152.9012	12.3.11	Non-rem	ex (12.3.11)	further east than BO139, past boundary with (12.3.11), <i>E. tereticornis</i> parkland trees
696	-25.3624	152.9103	12.5.4/12.5.2a	Non-rem	ex (12.3.11)	parkland <i>E. tereticornis</i> trees retained, not alluvial
697	-25.3608	152.9095	12.5.2a	Non-rem	ex (12.3.11)	parkland <i>E. tereticornis</i> trees retained, not alluvial
698	-25.3629	152.8808	12.5.4/12.5.2a	Non-rem	12.5.13	relatively poor regrowth <i>Acacia disparrima</i> , scattered Rainforest trees
699	-25.3702	152.8919	12.3.5	12.3.5/12.5.4/12.5.2	12.3.5	pole <i>M. quinquenervia</i> + <i>E. tereticornis</i> emergents
700	-25.3694	152.8863	12.3.11	12.5.4/12.5.2	12.3.5	pole <i>M. quinquenervia</i> + <i>E. tereticornis</i> emergents

No.	Latitude	Longitude	VMA Preclear RE	VMA RE	Ground-truthed RE	Notes
701	-25.36441	152.90823	12.5.4/12.5.2a	Non-rem	ex (12.3.11)	parkland E. tereticornis trees retained, small mapped watercourse, linear suggesting it was converted to a drain
702	-25.364738	152.906	12.3.11	Non-rem	ex (12.3.11)	parkland E. tereticornis trees retained
703	-25.3687	152.8819	12.3.11	12.2.11	12.3.11	north side rd. - old E. tereticornis, invasive M. quinquenervia
704	-25.3687	152.8819	12.3.11	12.3.11	12.3.11	south side rd. - old E. tereticornis, invasive M. quinquenervia
705	-25.3684	152.8798	12.5.4	12.5.4	12.5.2	intermediate between 12.5.4/5.2
706	-25.347529	152.898066	12.5.4	12.5.4	12.5.2*	C intermedia, L. confertus, Rainforest understorey in places
707	-25.351206	152.899067	12.5.4	12.5.4	12.5.4	12.5.4 good example, confirmed herbarium mapping
708	-25.25828	152.676892	12.2.7	Non-rem	Non-rem	abandoned cane field with cane which gives signature sim to Melaleuca quinquenervia regeneration non-rem but partly 12.2.7 in RE map



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