

Roy Hill Mine

Desktop Review of Vegetation Mapping

Prepared for:
Roy Hill Holdings

Prepared by: Stantec Australia Pty Ltd

September 15, 2017



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Executive Summary

Roy Hill Holdings commissioned Stantec Australia Pty Ltd to complete a desktop review of the original baseline flora and vegetation survey completed in 2009. The specific objectives of the desktop review were to review the vascular flora list presented within the baseline reports (ecologia Environment 2009a, 2009b) and to update the nomenclature and conservation listings. Furthermore, a review and update of the vegetation unit descriptions from the 2009 baseline reports (ecologia Environment 2009a, 2009b) was also required to ensure the naming and structure convention meets the current Technical Guidance for flora and vegetation surveys published by the Environmental Protection Authority (EPA 2016). The final objective was to identify if the information presented within the 2009 baseline reports was compliant with the current Technical Guidance for flora and vegetation surveys (EPA 2016).

The desktop review identified a total of 522 vascular flora species from 53 families and 179 genera within the Roy Hill mining leases M46/519 and M46/518. In addition, up to nine Priority listed flora species (*Acacia glaucocaesia*, *Aristida jerichoensis* subsp. *subspinulifera*, *Eremophila pilosa*, *Eremophila youngii* subsp. *lepidota*, *Goodenia nuda*, *Polymeria distigma*, *Rhagodia* sp. Hamersley (M. Trudgen 17794), *Rostellularia adscendens* var. *latifolia* and *Triodia* sp. Roy Hill) have been recorded within the Roy Hill mine area. However, the previous identification of *Eremophila pilosa* may have been erroneous and the priority listing of the new *Triodia* sp. Roy Hill is currently under review.

The vegetation sub-association descriptions presented by ecologia Environment (2009a) have been updated to reflect any changes in nomenclature for the 522 vascular flora species. Discrepancies between the report and the vegetation mapping shapefile were identified, which resulted in the addition of four vegetation types. As a result, the number of vegetation types present within the Roy Hill mine area now totals 22, which was an increase of four from the 18 presented by ecologia Environment (2009a).

The 22 vegetation types mapped within the Roy Hill mine area have been adequately sampled to ensure compliance with the Environmental Protection Authorities technical guidance (EPA 2016). While three of the vegetation types (1G, 2F and 4A) have been sampled by less than the required three quadrats per vegetation type, this was not considered an issue due to the small areas these vegetation types cover within the Roy Hill mine and their similarity to other vegetation types.

Due to the ongoing taxonomic review and nomenclature changes to the flora of Western Australia, 'spot checks' were completed across the Roy Hill mine area. The 'spot-checks' were completed to verify and confirm the taxa within the dominant strata for the *Triodia* spp. Hummock Grassland Steppes and the *Acacia aneura* Low Woodlands and Tall Shrublands broad floristic formations. The dominant Mulga was deemed to be *Acacia aptaneura*. Some ambiguity exists in the dominant *Triodia* species across the Hummock Grassland Steppes, extending from the difficulty in accessing many of these communities within the Roy Hill mine area. As a result, several vegetation types were considered to be dominated by two or more *Triodia* species.

1. Introduction and Objectives

The Roy Hill Iron Ore mine is located approximately 115 km north of Newman, at the eastern end of the Chichester Range in Western Australia. The pre-mining land use of the area was pastoralism and mining commenced at the site in April 2014.

Roy Hill are in the process of submitting a Section 38 Referral to the Environmental Protection Authority (EPA) to increase the vegetation clearing allowance required for the mine. As the original baseline flora and vegetation survey was completed in 2009, following surveys in 2005, 2006 and 2008, the vegetation unit descriptions were considered to be outdated and in need of updating. Additionally, the vascular flora list presented within the 2009 report was also considered in need of review.

Stantec (formerly MWH) has performed a desktop review of the Roy Hill mine vegetation mapping, as requested and outlined in the approved proposal (Stantec Ref: ROYH-RR-17001). The original Roy Hill baseline vegetation survey was performed in 2009 and this review provides updates relevant to the following documents provided to Stantec by Roy Hill:

- ecologia Environment (2009a) Roy Hill 1 Vegetation and Flora assessment (RH-001-10-EN-REP-0100); and
- ecologia Environment (2009b) Roy Hill 1 Infrastructure Flora Assessment (RH1-001-10-EN-REP-0103).

The first Roy Hill mine baseline vegetation survey was undertaken to cover an area of approximately 4,160 hectares (ha) to the north-east of the Fortescue Marsh (ecologia Environment 2009a). A second survey was undertaken, following a refinement of the proposed disturbance footprints, and was referred to as an 'infrastructure flora assessment' (ecologia Environment 2009b). As described in ecologia Environment 2009b, the second survey covered some areas already assessed in the baseline vegetation and flora assessment but provided a more intensive survey of areas proposed to be cleared for infrastructure. In addition, areas that had not been previously mapped, located in the corridor of the proposed Marble Bar Road realignment and the accommodation village, were assessed. Both surveys reported on by ecologia Environment (2009a and b) were undertaken within mining leases M46/519 and M46/518.

This specific objectives of the desktop review were to:

- Identify if the information within ecologia Environment (2009a, 2009b) reports is consistent with the current Technical Guidance for flora and vegetation surveys (EPA 2016);
- Review the vascular flora list presented within ecologia Environment (2009a, 2009b) reports to update the nomenclature and conservation listing;
- Review and update the vegetation unit descriptions presented within ecologia Environment (2009a), and to update the naming and structure convention to ensure consistency with the National Vegetation Inventory System (NVIS) (ESCAVI 2003); and
- complete 'spot checks' across the Roy Hill mine area to confirm and validate the presence of the dominant Mulga (*Acacia aneura* and close relatives) and hummock grasses (*Triodia* species).

The desktop review was not used to change boundaries of the vegetation mapping undertaken by ecologia Environment (2009a).

2. Methods

2.1 Vascular flora species review

The vascular flora species lists presented within ecologia Environment (2009a, 2009b) reports were reviewed using the current Pilbara Species List, which is compiled and released by Steve Dillon (Senior Technical Officer at the Western Australian Herbarium) on a half-yearly basis. The current Pilbara species list was released 3 July 2017. Current nomenclature, conservation status and naturalised status was also checked against FloraBase 2.9.22 (WAH 2017) to ensure validity and currency.

In addition, a Roy Hill commissioned study (Barrett *et al.* 2016) has identified changes in the identities of several *Triodia* species previously surveyed and mapped in the Roy Hill mine area. The findings and recommendations of this report, as detailed below, were also used for the vascular flora species and vegetation description updates.

The findings in the Barrett *et al.* (2016) report relevant to this desktop review were:

- *Triodia basedowii*, *Triodia lanigera*, *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) identified in pre-mining flora and vegetation surveys (ecologia Environment 2009a) were misidentified and should be renamed *Triodia* sp. Warrawagine (A.L. Payne PRP 1859) in the Roy Hill Mining Lease areas M46/518, M46/519, L47/346 and L46/104;
- All records of *Triodia pungens* within the Roy Hill tenement are incorrect; all should be renamed *Triodia epactia*;
- A previously undescribed species of *Triodia* was found at three locations near Roy Hill (two within the mine tenement, and one adjacent to the Roy Hill rail), and is referred to as *Triodia* sp. Roy Hill. This species was found to occur at the analogue transect RHM_AT7 (MWH 2016).

Barrett *et al.* (2017) indicated that the Pilbara *Triodia* species are currently being revised with phrase named *Triodia* species to be formally named with the addition of several new *Triodia* species. The taxonomic revision of the Pilbara *Triodia* species will be presented in the Western Australian Herbarium journal *Nuytsia* this year (article not yet released). The taxonomic revision and nomenclature changes have not been transferred from SPIKEY (Barrett *et al.* 2017) across to this desktop review, as the names have not been formally published. The expected date for the release of the *Nuytsia* article is not currently known, although it is anticipated that it will be formally published in 2017.

The Roy Hill mine area also supports a significant number of Mulga (*Acacia aneura* and close relatives) species and Mulga woodlands. In 2012, Maslin and Reid (2012) completed a taxonomic revision of *Acacia aneura* and their close relatives. The resulting taxonomic revision and updates to *Acacia aneura* and its varieties were reviewed to ensure currency and validity of the *Acacia aneura* species detailed within ecologia Environment (2009a, 2009b).

2.2 Vegetation spot checks

Given the findings of Barrett *et al.* (2016) in regards to the Pilbara *Triodia* species and the Maslin and Reid (2012) revision of the *Acacia aneura* complex, it was deemed necessary to confirm the identity of the dominant *Acaica* and *Triodia* species found within each vegetation sub-association in the field, to ensure that the revised vegetation types reflected the correct species nomenclature.

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Thirty-four non-permanent sampling sites or relevés were assessed across the *Triodia* sp. Hummock Grassland Steppes and the *Acacia aneura* Low Woodlands and Tall Shrublands vegetation associations mapping units within the Roy Hill mine area. The field spot checks were assessed between 5 and 11 July 2017 (**Table 2-1, Figure 2-1**). Of these relevés, 27 were co-located with quadrats previously sampled during the baseline vegetation studies (ecologia Environment 2009a, b) with the pre-existing quadrat data available during the field spot checks. The remaining seven relevés were located some distance away from quadrats previously sampled by ecologia Environment, and therefore no vegetation data was available.

Thirteen vegetation associations, seven from *Triodia* sp. Hummock Grassland and six from *Acacia aneura* Low Woodlands and Tall Shrublands, were targeted for sampling with field spot checks. Three relevés within each vegetation sub-association were assessed where possible, however the size and accessibility of some vegetation sub-associations meant that only two quadrats were assessed for five of the 13 vegetation sub-associations assessed (**Table 2-1**). Three relevés were chosen to comply with the EPA Technical Guidance update (EPA 2016), and to allow adequate coverage across the Roy Hill mine area while maintaining efficiencies in the field.

Where pre-existing vegetation data were available (ecologia Environment 2009a, b), the listed dominant flora species were checked by field observation. Where no previous species data was available, a vegetation assessment including a structural description and a list of the dominant flora species observed within a 50 m x 50 m unbounded relevé was recorded. Where a flora species could not be identified in the field, a sample was collected, pressed and assigned a unique feature identifier before being adequately dried and submitted to the Western Australian Herbarium for the mandatory quarantine process. The flora specimens collected from the field were formally identified by taxonomist Sharnya Thomson at the Western Australian Herbarium.

Table 2-1 Vegetation associations spot-checked in 2017

Vegetation Association	Sub-association number	Quadrat Code	Pre-existing ecologia Environmental quadrat?	Location (GDA94)
<i>Triodia</i> sp. Hummock Grassland	1A	1A_1	N	51K 192309 7508452
	1A	1A_2	N	50K 808329 7509378
	1B	1B_2	N	50K 807649 7508818
	1B	1B_3	Y	50K 807948 7505997
	1C	1C_1	Y	51K 191705 7515418
	1C	1C_2	Y	51K 192007 7515152
	1C	1C_3	Y	51K 192007 7502219
	1D	1D_1	Y	50K 818769 7496228
	1D	1D_2	Y	51K 192667 7502693
	1D	1D_3	Y	50K 807759 7506558
	1E	1E_1	Y	50K 808714 7507502

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Vegetation Association	Sub-association number	Quadrat Code	Pre-existing ecologia Environmental quadrat?	Location (GDA94)
	1E	1E_2	N	50K 807547 7508678
	1F	1F_1	N	50K 808398 7517028
	1F	1F_2	Y	51K 192396 7512535
	1F	1F_3	Y	51K 193405 7508828
	1G	1G_1	Y	51K 193345 7506421
	1G	1G_2	Y	51K 193390 7505554
<i>Acacia aneura</i> Low Woodlands and Tall Shrublands	3A	3A_1	Y	50K 802690 7508002
	3A	3A_2	Y	50K 804023 7507044
	3A	3A_3	Y	50K 802927 7511158
	3B	3B_1	Y	50K 797626 7509169
	3B	3B_2	Y	50K 806335 7503152
	3B	3B_3	Y	50K 806199 7503523
	3C	3C_1	Y	50K 795146 7511035
	3C	3C_2	Y	50K 802934 7507472
	3C	3C_3	Y	50K 807185 7500733
	3D	3D_1	Y	50K 807042 7496997
	3D	3D_2	N	51K 201660 7496625
	3D	3D_3	Y	50K 806523 7505189
	3E	3E_1	Y	51K 201559 7495879
	3E	3E_2	Y	50K 805428 7496210
	3F	3F_1	Y	51K 194967 7501027
	3F	3F_2	Y	51K 199376 7500272
	3F	3F_3	N	50K 805834 7506886

2. Methods

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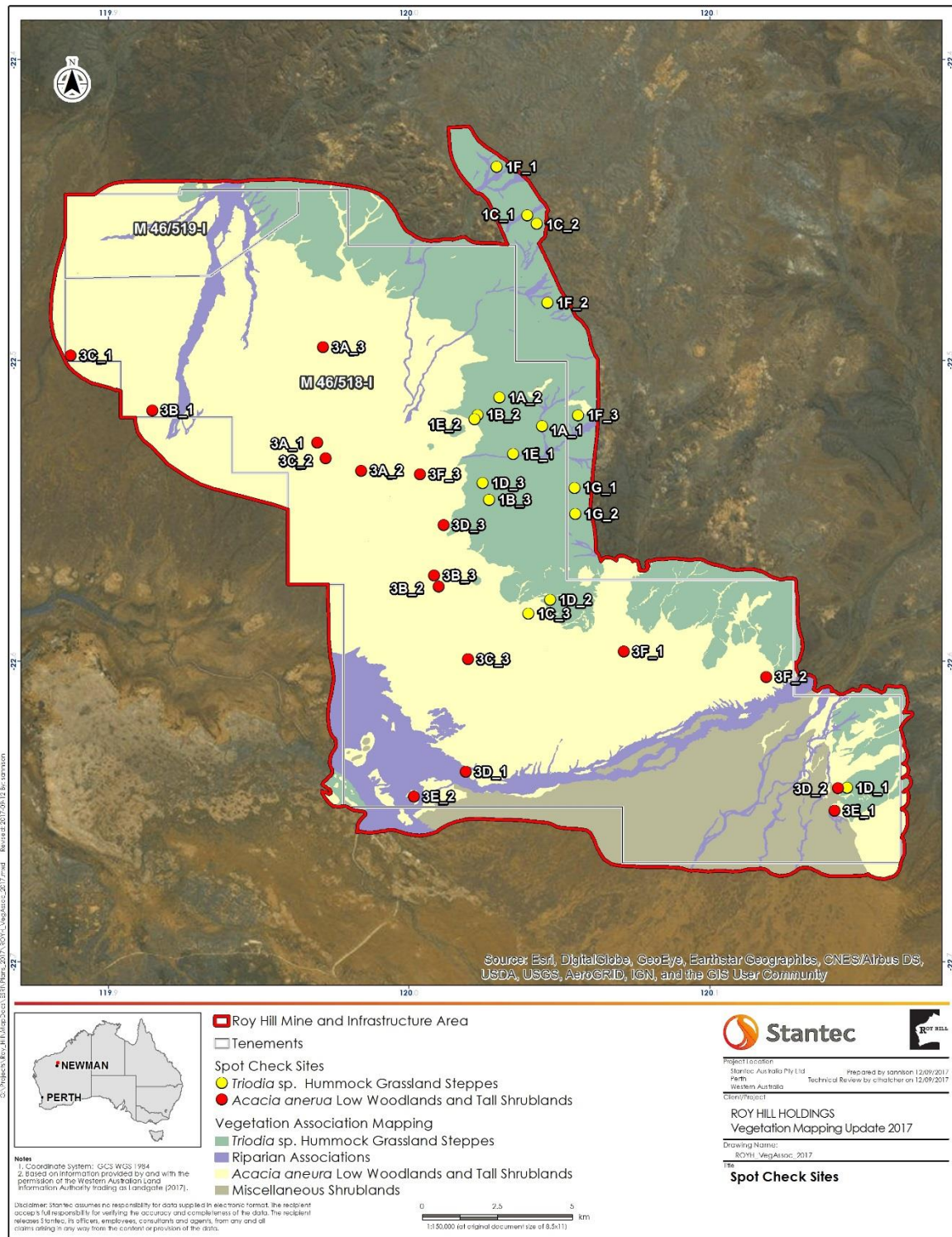


Figure 2-1 Location of vegetation spot check sites assessed in 2017

2. Methods

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2.3 Vegetation unit description review

Following the review and update of the vascular flora species list, and the vegetation spot checks, the vegetation unit descriptions of ecologia Environment (2009a) were reviewed and updated where necessary. Updates to the vegetation unit descriptions were made to ensure the validity and currency of the dominant flora species. The review and updates were also focussed on the structural definition to ensure it aligned with the NVIS structural definition (ESCAVI 2003). The NVIS structural definition is the nationally adopted classification system and should be used for vegetation descriptions (EPA 2016).

In 2016, the Environmental Protection Authority released updated guidance on flora and vegetation surveys. The new Technical Guidance (EPA 2016) details the minimum expectation required for flora and vegetation surveys that will be subjected to Environmental Impact Assessment. A key change was the requirement for a minimum of three quadrats per vegetation type to be assessed to ensure adequate sampling intensity.

The sampling effort for each vegetation unit mapped by ecologia Environment (2009a, 2009b) was assessed based on the updated Technical Guidance for flora and vegetation surveys in Western Australia (EPA 2016). The number of quadrats per vegetation unit mapped was assessed to determine if they were consistent with the technical guidelines.

3. Results and Discussion

Findings of the desktop review of the vascular flora species list and the 2009 vegetation mapping of the Roy Hill mine are detailed below.

3.1 Flora species list

3.1.1 Baseline (2009) vascular flora list

During the original surveys, a total of 547 vascular flora species were recorded within within mining leases M46/519 and M46/518 (ecologia Environment 2009a, b). This included 477 species from 53 families and 170 genera from the original Roy Hill vegetation and flora assessment (ecologia Environment 2009a) and 264 species from 41 families and 115 genera from the infrastructure flora assessment (ecologia Environment 2009b).

A total of six Priority listed flora were recorded from the Roy Hill surveyed areas (ecologia Environment 2009a, b), as detailed further below. No threatened flora listed under the State *Wildlife Conservation Act 1950* or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* were recorded from the Roy Hill mine. A total of 20 introduced flora were identified by ecologia Environment (2009a, 2009b).

3.1.2 Updated vascular flora list

The nomenclature review of the vascular flora species recorded from Roy Hill identified that 522 vascular flora species occur within the Roy Hill mining leases M46/519 and M46/518. The 522 vascular flora species were from 53 families and 179 genera. Revisions made to the vascular flora list from the two ecologia Environment reports are summarised in **Table 3-1**, in terms of the number of species, while the changes, including notes, are detailed within **Appendix A**.

In 2010, the Western Australian Herbarium rearranged its vascular plant collections. The new systematic sequence is largely based on the phylogeny of the Angiosperm Phylogeny Group (APGIII) (WAH 2017). The change to the APGIII system involved changes at the family level, for example Papilionaceae (peas, *Gompholobium* etc.), Mimosaceae (Acacia's) and Caesalpiniaceae (Senna's) were merged into Fabaceae (WAH 2017). In addition, further taxonomic work on the Pilbara flora has resulted in the better understanding of vascular flora. This has meant that some species have been reduced to synonyms, been excluded, or have been upgraded from subspecies or varieties to species in their own right. For example, *Acacia aneura* and its close relatives were subjected to an extensive taxonomic revision resulting in the upgrade of the *Acacia aneura* varieties into their own species entities (i.e. *Acacia aneura* var. *conifera* is now known as *Acacia pteraneura*) resulting in seven new species (Maslin and Reid 2012). This is further evidenced by the ongoing work of Matt Barrett on the *Triodia* spp. of the Pilbara (Barrett *et al.* 2016, Barrett *et al.* 2017).

Table 3-1 Breakdown of vascular flora species

Project	ecologia Environment (2009a, 2009b)			Updated by Stantec (2017)		
	Total	Families	Genera	Total	Families	Genera
Roy Hill vegetation and flora assessment (ecologia Environment 2009a)	473	53	170	462	49	167
Roy Hill Infrastructure flora assessment (ecologia Environment 2009b)	264	41	115	227	37	105
Total	547	78	181	522	53	179

3.1.3 Updated conservation significant flora

A total of six priority flora species were previously known to occur at the Roy Hill mine and infrastructure areas. Following the revision of the vascular flora list, up to nine priority listed flora were considered to occur within the Roy Hill mine (**Table 3-2**). The location of known populations of the Priority listed flora is shown in **Figure 3-1**.

Polymeria sp. Hamersley (M.E. Trudgen 11353) is more recently known as *Polymeria longifolia* which is not considered to warrant Priority listing. Additional populations of *Goodenia nuda* have been recorded from the Pilbara, warranting a downgrade in the priority listing from Priority 3 to Priority 4. This is also the case for *Rhagodia* sp. Hamersley (M. Trudgen 17794), which is now listed as Priority 3.

Aristida jerichoensis subsp. *subspinulifera*, *Eremophila pilosa* and *Polymeria distigma* were previously recorded from the Roy Hill mine by ecologia Environment (2009a, 2009b), however, they were not identified as Priority listed flora. Priority listing undergo regular review by the Department of Biodiversity, Conservation and Attractions (formerly Department of Parks and Wildlife or former entities) as new information is made available. The three Priority listed flora may have had changes to their conservation status since the original ecologia Environment flora assessments.

The presence of *Eremophila pilosa* within the Roy Hill mine area was potentially an erroneous record within the report prepared by ecologia Environment (2009b). This taxon was listed in Appendix C (a list of all recorded taxa) within the ecologia Environment (2009b) report. *Eremophila pilosa* was listed as a Priority 1 taxon at the time the report was completed (and is still a Priority 1 taxon), however, no further information on its location within the mine area or discussion on the potential impacts was included in the report. This suggests that the identification of *Eremophila pilosa* (P1) within the vascular flora list (ecologia Environment 2009b) may have been incorrect and actually represents a more common *Eremophila* or another species entirely. In addition, *Eremophila pilosa* is not known to occur within the immediate area surrounding the Roy Hill mine area. The nearest record is known to occur approximately 20 km to the south of the Roy Hill mine area.

Aristida jerichoensis subsp. *subspinulifera* and *Polymeria distigma* were discussed by ecologia Environment (2009b) with no mention of the Priority listing, suggesting they were not yet listed at the time.

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Priority flora ranking list changes are not readily available from subsequent years, so it is difficult to determine when the priority taxa were added to the list.

Barrett *et al.* (2017) has developed a new interactive identification key for the *Triodia* species in the Pilbara. In addition to the new interactive key, Barrett *et al.* (2017) have indicated that many of the Pilbara *Triodia* phrase names have been formalised, along with several new species, including *Triodia* sp. Roy Hill (to become *Triodia veniciae*). *Triodia* sp. Roy Hill may be recommended for Priority listing, but this is under review and a publication relating to this species is currently in preparation for the Western Australian Herbariums *Nuytsia* Journal.

Table 3-2 Priority listed flora populations and their conservation ratings within the Roy Hill mine area

Species		Conservation Rating		Number of Populations
2009 nomenclature	Updated nomenclature	2009	2017	
<i>Acacia glaucocaesia</i>	<i>Acacia glaucocaesia</i>	Priority 3	Priority 3	1
<i>Eremophila youngii</i> subsp. <i>lepidota</i>	<i>Eremophila youngii</i> subsp. <i>lepidota</i>	Priority 4	Priority 4	7
<i>Goodenia nuda</i>	<i>Goodenia nuda</i>	Priority 3	Priority 4	12
<i>Polymeria</i> sp. Hamersley (M.E. Trudgen 11353)	<i>Polymeria longifolia</i>	Priority 3	No longer listed	1
<i>Rhagodia</i> sp. Hamersley (M. Trudgen 17794)	<i>Rhagodia</i> sp. Hamersley (M. Trudgen 17794)	Priority 1	Priority 3	29
<i>Rostellularia adscendens</i> subsp. <i>latifolia</i>	<i>Rostellularia adscendens</i> var. <i>latifolia</i>	Priority 3	Priority 3	1
-	<i>Polymeria distigma</i>	-	Priority 3	Unknown
-	<i>Aristida jerichoensis</i> subsp. <i>subspinulifera</i>	-	Priority 3	Unknown
-	<i>Eremophila pilosa</i> *	-	Priority 1	Unknown
-	<i>Triodia</i> sp. Roy Hill**	-	Under review	Unknown

*Potentially an erroneous record within the ecologia Environment (2009b) report.

***Triodia* sp. Roy Hill will be formally recognised as *Triodia veniciae* and is currently in press awaiting formal acceptance (Barrett *et al.* 2017).

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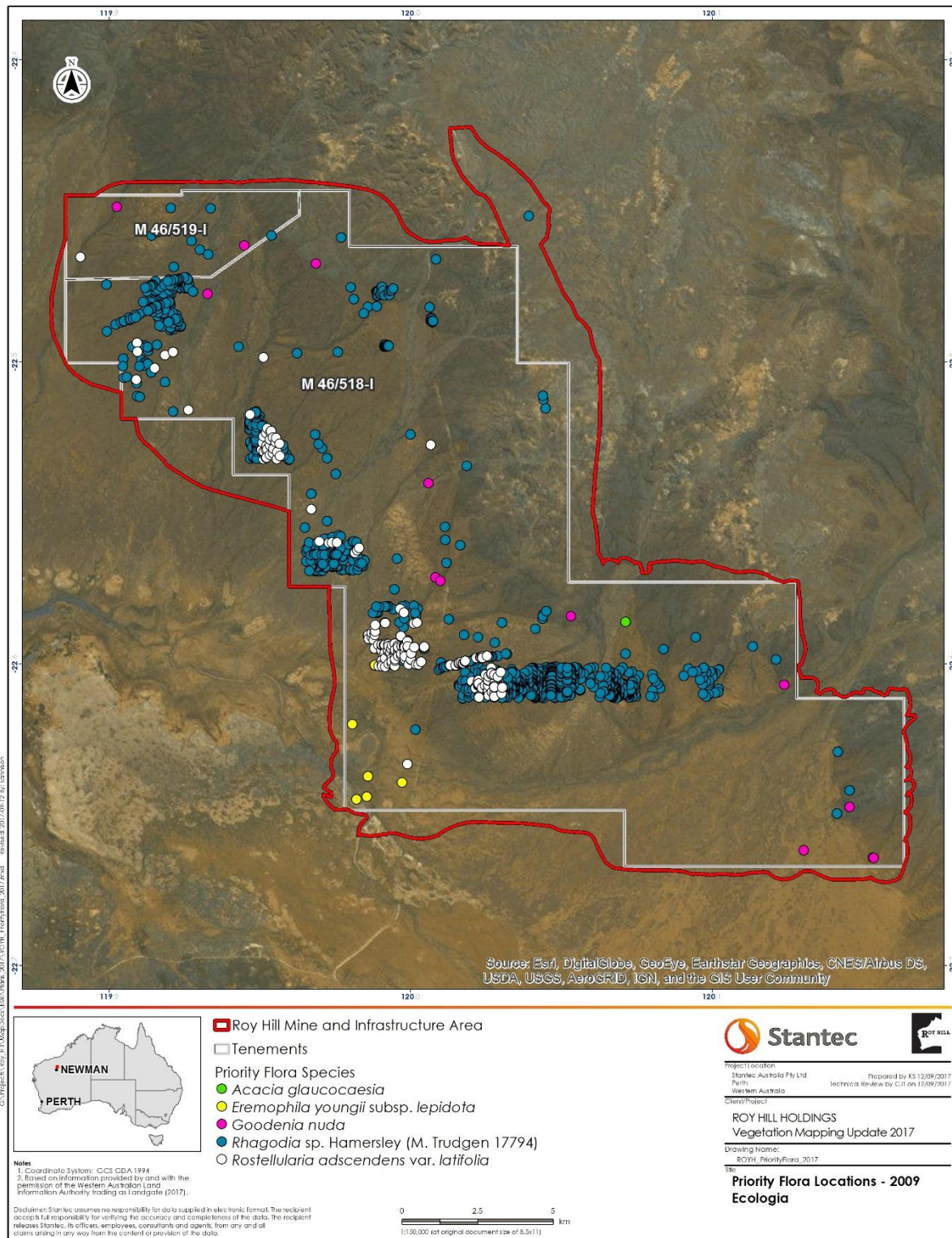


Figure 3-1 Location of known populations of priority listed flora from 2009 baseline surveys

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3.1.4 Updated introduced flora

The desktop review of the vascular flora list identified 18 species as introduced in the Pilbara. Of the 18 introduced species, one is considered to be a Weed of National Significance, **Parkinsonia aculeata*. The remaining 17 introduced species are weeds previously recorded from the Pilbara.

A total of 20 introduced flora were identified by ecologia Environment (2009a, 2009b). Of the 20 introduced flora identified, *Cucumis melo* (identified as *Cucumis melo* subsp. *agrestis*) and *Portulaca oleracea* are no longer considered to be weeds of the Pilbara, while *Cymbalaria muralis* is not known to occur in the Pilbara according to the Pilbara species list. *Flaveria trinervia* (identified as *Flaveria australasica*) is now considered to be a weed of the Pilbara.

3.2 Vegetation spot checks

A total of 163 vascular flora species were recorded across the 34 relevés assessed in 2017 (**Appendix B**). Within the *Triodia* sp. Hummock Grassland Steppe association, five species of *Triodia* were recorded. *Triodia angusta* was the most commonly recorded, observed at nine of the 17 relevés, followed by *Triodia brizoides* and *Triodia* sp. Warrawagine (A.L. Payne PRP 1859), both observed at six of the 17 relevés (**Appendix B**). The dominant species observed within the *Acacia aneura* Low Woodlands and Tall Shrublands association was *Acacia aptaneura*, recorded at 15 of the 17 relevés (**Appendix B**).

3.3 Review of vegetation mapping

3.3.1 Baseline (2009) vegetation association mapping units

The original 2009 vegetation mapping undertaken by ecologia Environment (2009a) consisted of four major vegetation associations, which were further classified into 18 sub-associations (**Table 3-3**). The vegetation associations were described and mapped at a scale of 1:20,000 from 258 quadrats sampled over three phases:

- Phase 1: 26 October to 4 November 2005 – 100 quadrats established;
- Phase 2: 29 May to 5 June 2006 – 47 quadrats established; and
- Phase 3: 6 to 18 March 2008 – 111 quadrats established.

Multivariate analysis of the Phase 3 quadrats on a site by species matrix (presence and abundance score) was completed (utilising the SYSTAT software package) to assist in the vegetation association determination (ecologia Environment 2009a). Only the Phase 3 sites were included in the analysis due to the poor quality (incomplete identifications and low diversity) of the data collected during the Phase 1 survey. The exclusion of the Phase 1 floristic data from the multivariate analysis was reasonable due to the poor seasonal conditions preceding the survey. The compromised floristic data collected from the Phase 1 survey would have skewed the outputs based on the low confidence of identified specimens (i.e. sterile and dead grasses and perennial shrubs) and the low diversity of flora.

Reasons for not using the Phase 2 floristic data within the multivariate analysis were not given, and it is unclear why it was not included. It is possible the Phase 2 floristic data was not used due to seasonal conditions at the time of the survey or due to the lower number of quadrats (47 opposed to 111) sampled. Based on the timing of the survey, the inclusion of the 47 Phase 2 quadrats seems valid, and ecologia Environment (2009a) indicated that the Phase 2 data was included in a subsequent analysis, but the outputs were not presented. Potentially, inclusion of the 47 quadrats from the Phase 2 survey in the multivariate analysis did not add significant value to the analysis of the Phase 3 dataset. Without re-analysis, it is difficult to determine why the Phase 2 quadrats were excluded and what implications, if any, it may have had on the vegetation type mapping.

Table 3-3 Vegetation associations and sub-associations recorded within the Roy Hill mine (ecologia Environment 2009a)

Major association code	Major association description	Sub-association code	Sub-association description
1	<i>Triodia</i> sp. Hummock Grassland Steppe	A	Isolated to open low trees and shrubs over <i>Triodia brizoides</i> hummock grasslands on slopes and crests
		B	Isolated to open low trees and mixed shrubs over <i>Triodia</i> sp. Shovelanna Hill hummock grasslands on slopes and plains
		C	Isolated low trees and isolated to sparse mixed shrubs over <i>Triodia longiceps</i> hummock grasslands on colluvial deposits
		D	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia basedowii</i> hummock grasslands
		E	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia epactia</i> hummock grasslands
2	Riparian Association	A	Open low forest to woodland of <i>Eucalyptus camaldulensis</i> and/or <i>E. victrix</i> / <i>Corymbia hamersleyana</i> over open high <i>Atalaya hemiglauca</i> / <i>Acacia pyrifolia</i> over open low shrubs over dense * <i>Cenchrus ciliaris</i>
		B	Scattered <i>Eucalyptus victrix</i> over a low woodland of <i>Acacia aneura</i> / <i>A. coriacea</i> subsp. <i>pendens</i> / <i>Atalaya hemiglauca</i> over open shrubs over dense * <i>Cenchrus ciliaris</i> grassland
		C	Tall <i>Acacia</i> spp. and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> shrubland over low shrubland over mixed tussock grassland
		D	Floodplains adjacent to major creek lines: open forest to woodland of <i>Eucalyptus victrix</i> over open mid-height shrubland dominated by <i>Acacia tetragonophylla</i> , <i>A. sclerosperma</i> , * <i>Vachellia farnesiana</i> over sparse mixed tussock grasses and herbs
		E	Floodplains: isolated trees to open woodland of <i>Eucalyptus victrix</i> over open <i>Acacia synchronicia</i> over mixed low shrubs over open to closed mixed tussock grasses
3	<i>Acacia aneura</i> Low Woodlands and Tall Shrublands	A	<i>Acacia aneura</i> , <i>A. rhodophloia</i> open forest and woodland over sparse low shrubs and closed tussock grassland and herbland ± <i>Triodia longiceps</i>

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Major association code	Major association description	Sub-association code	Sub-association description
		B	Open woodland of <i>Acacia pruinocarpa</i> , <i>A. aneura</i> over open mixed shrubland over open grasses
		C	Moderately dense to open tall <i>Acacia aneura</i> shrubland over sparse to open <i>A. tetragonophylla</i> , <i>Senna artemisioides</i> subsp. <i>helmsii</i> shrubs over moderately dense to open grassland dominated by <i>Aristida contorta</i>
		D	Groves of <i>Acacia aneura</i> , <i>A. rhodophloia</i> woodland over sparse shrubland of <i>Eremophila forrestii</i> subsp. <i>forrestii</i> , <i>Senna artemisioides</i> subsp. <i>helmsii</i> , <i>Eremophila latrobei</i> subsp. <i>filliformis</i> over open to sparse grasses
		E	Isolated trees or shrubs of <i>Acacia aneura</i> over open shrubland of <i>Senna glutinosa</i> subsp. <i>luerssenii</i> and <i>Eremophila cuneifolia</i> over sparse grasses
		F	Isolated clumps of tall <i>Acacia aneura</i> shrubs over open low shrubs of <i>Ptilotus schwartzii</i>
4	Miscellaneous Shrublands	A	Rocky crests of hills: <i>Acacia rhodophloia</i> shrubland over sparse mixed shrubs and isolated herbs, and grasses.
		B	Isolated shrubs of <i>Acacia synchronicia</i> over open and diverse herbs and grasses

Source: ecologia Environment (2009a); * refers to introduced species

3.3.2 Updated vegetation type mapping units

Following the review of the vascular flora species list recorded from the Roy Hill mine and infrastructure areas, and the results of the vegetation quadrat spot checks, the revised nomenclature was carried over to the existing vegetation association mapping units. In addition to the revised nomenclature, the accepted format for describing the vegetation association mapping units was updated to better match the vegetation structural classifications described in NVIS (ESCAVI 2003). It is recommended that the term association is not used as it is commonly used at the regional scale in Western Australia (EPA 2016). Vegetation type is the preferred term for local scale vegetation units, while the term broad floristic formation is preferred for vegetation unit descriptions at a scale beyond local (EPA 2016).

Changes to the vegetation sub-association descriptions have only included the changes to the flora species and the structure descriptions if appropriate. The revision has maintained the existing four major vegetation associations, although these are now termed 'broad floristic formations', to align with the NVIS definitions (ESCAVI 2003) and preference detailed by the EPA (2016). No changes to structural definitions to the broad floristic formations or the vegetation sub-associations (now termed 'vegetation types' to align with the NVIS definitions, ESCAVI 2003) were made in 2017.

The 18 vegetation types have been updated to reflect the changes in the species nomenclature and the NVIS definitions (**Table 3-4**). Four additional vegetation types were included within the shapefile data attributes (**Table 3-4**) that were not discussed within the ecologia Environment (2009a) report. The four additional vegetation types were described and delineated by ecologia Environment (2009b) during the infrastructure assessment. An additional two vegetation types do not match the vegetation types (referred to as sub-associations) within the ecologia Environment (2009a) report (**Table 3-4**). One of the three units, code Tw, is also considered to be a new unit not previously described within the ecologia Environment (2009a) report (**Table 3-4**).

Sixteen vegetation types have been updated to reflect the changes in vascular species nomenclature and the identity of the dominant species found within each vegetation type based on the results of the field spot checks (**Table 3-4**). Two vegetation types described in the vegetation mapping unit shapefile attributes (held by Stantec and previously supplied by Roy Hill) did not match the corresponding vegetation sub-association descriptions in the ecologia Environment (2009a) report as they were described in the flora infrastructure assessment report (ecologia Environment 2009b). The two additional vegetation types have been updated to reflect the updated vascular flora species list and the results of the field spot checks (**Table 3-4**). All the vegetation units included within the shapefile attributes have been included in the revision of the vegetation mapping, with a total of 22 vegetation types now described for the Roy Hill area (**Table 3-4; Figure 3-2**).

The 22 vegetation types mapped within the Roy Hill mine area were adequately sampled to ensure consistency with the Environmental Protection Authorities technical guidance (EPA 2016). The sampling intensity, or the number of sample sites (i.e. quadrats) within each vegetation type ranged from one to 124. The sampling intensity for the majority of the vegetation types was sufficient and these vegetation types were not considered to be at variance to the technical guidance (EPA 2016). Vegetation types 1G (two quadrats), 2F (one quadrat) and 4A (one quadrat) were sampled by less than the required three quadrats per vegetation type. This was not considered an issue due to the small area the vegetation types cover within the Roy Hill mine area and their similarity to other vegetation types described and delineated.

Table 3-4 Summary of changes to ecologia Environment (2009a and b) vegetation association descriptions

ecologia Environment (2009a) vegetation association descriptions*				Stantec (2017) vegetation type descriptions			
Major vegetation association		Vegetation sub-association		Broad floristic formation		Vegetation type	
Code	Description	Code	Description	Code	Description	Code	Description
1	<i>Triodia</i> sp. Hummock Grassland Steppes	A	Isolated to open low trees and shrubs over <i>Triodia brizoides</i> hummock grasslands on slopes and crests	HG	<i>Triodia</i> sp. Hummock Grassland Steppes	Tb	Isolated to open low trees and shrubs over <i>Triodia brizoides</i> hummock grasslands on slopes and crests
1	<i>Triodia</i> sp. Hummock Grassland Steppes	B	Isolated to open low trees and mixed shrubs over <i>Triodia</i> sp. Shovelanna Hill hummock grasslands on slopes and plains	HG	<i>Triodia</i> sp. Hummock Grassland Steppes	TbTa	Isolated to open low trees and shrubs over <i>Triodia brizoides</i> and <i>T. angusta</i> hummock grasslands on slopes and plains
1	<i>Triodia</i> sp. Hummock Grassland Steppes	C	Isolated low trees and isolated to sparse mixed shrubs over <i>Triodia longiceps</i> hummock grasslands on colluvial deposits	HG	<i>Triodia</i> sp. Hummock Grassland Steppes	TwTspW	Isolated low trees and isolated to sparse shrubs over <i>Triodia wiseana</i> and <i>T. sp.</i> Warrawagine (A.L. Payne PRP 1859) hummock grasslands on colluvial deposits
1	<i>Triodia</i> sp. Hummock Grassland Steppes	D	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia basedowii</i> hummock grasslands	HG	<i>Triodia</i> sp. Hummock Grassland Steppes	TspW	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia</i> sp. Warrawagine (A.L. Payne PRP 1859) hummock grasslands
1	<i>Triodia</i> sp. Hummock Grassland Steppes	E	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia epactia</i> hummock grasslands	HG	<i>Triodia</i> sp. Hummock Grassland Steppes	Te	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia epactia</i> hummock grasslands
1	<i>Triodia</i> sp. Hummock Grassland Steppes	F	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia wiseana</i> hummock grasslands	HG	<i>Triodia</i> sp. Hummock Grassland Steppes	Tw1	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia wiseana</i> hummock grasslands
1	<i>Triodia</i> sp. Hummock Grassland Steppes	G	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia lanigera</i> hummock grasslands	HG	<i>Triodia</i> sp. Hummock Grassland Steppes	T1a	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia</i> sp. Warrawagine (A.L. Payne PRP 1859) hummock grasslands (\pm <i>Triodia brizoides</i> and <i>Triodia angusta</i> in minor flowlines).
2	Riparian Associations	B	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia wiseana</i> hummock grasslands	HG	<i>Triodia</i> sp. Hummock Grassland Steppes	Tw2	Isolated low trees over sparse to open mid to low shrubland over <i>Triodia wiseana</i> hummock grasslands
2	Riparian Associations	A	Open low forest to woodland of <i>Eucalyptus camaldulensis</i> and/or <i>E. victrix</i> / <i>Corymbia hamersleyana</i> over open high <i>Atalaya hemiglauca</i> / <i>Acacia pyrifolia</i> over open low shrubs over dense * <i>Cenchrus ciliaris</i>	RA	Riparian Associations	EcEvCh	<i>Eucalyptus camaldulensis</i> subsp. <i>obtusata</i> and/or <i>E. victrix</i> / <i>Corymbia hamersleyana</i> open low forest to woodland over <i>Atalaya hemiglauca</i> / <i>Acacia pyrifolia</i> tall open shrubland over low open shrubs over * <i>Cenchrus ciliaris</i> tussock grassland
2	Riparian Associations	B	Scattered <i>Eucalyptus victrix</i> over a low woodland of <i>Acacia aneura</i> / <i>A. coriacea</i> subsp. <i>pendens</i> / <i>Atalaya hemiglauca</i> over open shrubs over dense * <i>Cenchrus ciliaris</i> grassland	RA	Riparian Associations	EvAaAcpAh	<i>Eucalyptus victrix</i> scattered mid trees over <i>Acacia aneura</i> and allied genera/ <i>A. coriacea</i> subsp. <i>pendens</i> / <i>Atalaya hemiglauca</i> low woodland over open shrubs over * <i>Cenchrus ciliaris</i> tussock grassland
2	Riparian Associations	C	Tall <i>Acacia</i> spp. and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> shrubland over low shrubland over mixed tussock grassland	RA	Riparian Associations	AsppGwh	<i>Acacia</i> spp. and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> tall shrubland over low shrubland over mixed tussock grassland

ecologia Environment (2009a) vegetation association descriptions*				Stantec (2017) vegetation type descriptions			
Major vegetation association		Vegetation sub-association		Broad floristic formation		Vegetation type	
Code	Description	Code	Description	Code	Description	Code	Description
2	Riparian Associations	D	Floodplains adjacent to major creek lines: open forest to woodland of <i>Eucalyptus victrix</i> over open mid-height shrubland dominated by <i>Acacia tetragonophylla</i> , <i>A. sclerosperma</i> , * <i>Vachellia farnesiana</i> over sparse mixed tussock grasses and herbs	RA	Riparian Associations	EvAtAsVf	<i>Eucalyptus victrix</i> open forest to woodland over <i>Acacia tetragonophylla</i> , <i>A. sclerosperma</i> subsp. <i>sclerosperma</i> and * <i>Vachellia farnesiana</i> mid open shrubland over sparse mixed tussock grasses and herbs
2	Riparian Associations	E	Floodplains: isolated trees to open woodland of <i>Eucalyptus victrix</i> over open <i>Acacia synchronicia</i> over mixed low shrubs over open to closed mixed tussock grasses	RA	Riparian Associations	EvAs	<i>Eucalyptus victrix</i> isolated mid trees to mid open woodland over <i>Acacia synchronicia</i> mid sparse shrubland over mixed low shrubs over open to closed mixed tussock grasses
2	Riparian Associations	F	Open woodland of <i>Acacia pruinocarpa</i> , <i>A. aneura</i> var. <i>intermedia</i> over dense mid-stratum of <i>Petalostylis labicheoides</i> over sparse low shrubs over sparse tussock grasses and <i>Triodia epactia</i>	RA	Riparian Associations	ApAaPI	Open woodland of <i>Acacia pruinocarpa</i> , <i>A. aneura</i> and allied genera over dense mid-stratum of <i>Petalostylis labicheoides</i> over sparse low shrubs over sparse tussock grasses and <i>Triodia epactia</i>
3	<i>Acacia aneura</i> Low Woodlands and Tall Shrublands	A	<i>Acacia aneura</i> , <i>A. rhodophloia</i> open forest and woodland over sparse low shrubs and closed tussock grassland and herbland ± <i>Triodia longiceps</i>	LWTS	<i>Acacia aptaneura</i> Low Woodlands and Tall Shrublands	AaArTI	<i>Acacia aptaneura</i> , <i>A. rhodophloia</i> open forest and woodland over sparse low shrubs and closed tussock grassland and herbland ± <i>Triodia longiceps</i> isolated clumps of hummock grassland
3	<i>Acacia aneura</i> Low Woodlands and Tall Shrublands	B	Open woodland of <i>Acacia pruinocarpa</i> , <i>A. aneura</i> over open mixed shrubland over open grasses	LWTS	<i>Acacia aptaneura</i> Low Woodlands and Tall Shrublands	ApAa	<i>Acacia pruinocarpa</i> and <i>A. aptaneura</i> open woodland over open mixed shrubland over open grasses
3	<i>Acacia aneura</i> Low Woodlands and Tall Shrublands	C	Moderately dense to open tall <i>Acacia aneura</i> shrubland over sparse to open <i>A. tetragonophylla</i> , <i>Senna artemisioides</i> subsp. <i>helmsii</i> shrubs over moderately dense to open grassland dominated by <i>Aristida contorta</i>	LWTS	<i>Acacia aptaneura</i> Low Woodlands and Tall Shrublands	AaAtSahAc	<i>Acacia aptaneura</i> tall open shrubland over <i>A. tetragonophylla</i> and <i>Senna artemisioides</i> subsp. <i>helmsii</i> sparse to open shrubs over <i>Aristida contorta</i> open grassland
3	<i>Acacia aneura</i> Low Woodlands and Tall Shrublands	D	Groves of <i>Acacia aneura</i> , <i>A. rhodophloia</i> woodland over sparse shrubland of <i>Eremophila forrestii</i> subsp. <i>forrestii</i> , <i>Senna artemisioides</i> subsp. <i>helmsii</i> , <i>Eremophila latrobei</i> subsp. <i>filiformis</i> over open to sparse grasses	LWTS	<i>Acacia aptaneura</i> Low Woodlands and Tall Shrublands	AaArEffSahElf	Groves of <i>Acacia aptaneura</i> and <i>A. rhodophloia</i> woodland over <i>Eremophila forrestii</i> subsp. <i>forrestii</i> , <i>Senna artemisioides</i> subsp. <i>helmsii</i> and <i>Eremophila latrobei</i> subsp. <i>filiformis</i> mid sparse shrubland over open to sparse grasses
3	<i>Acacia aneura</i> Low Woodlands and Tall Shrublands	E	Isolated trees or shrubs of <i>Acacia aneura</i> over open shrubland of <i>Senna glutinosa</i> subsp. <i>luerssenii</i> and <i>Eremophila cuneifolia</i> over sparse grasses	LWTS	<i>Acacia aptaneura</i> Low Woodlands and Tall Shrublands	AaSglEc	<i>Acacia aptaneura</i> isolated low trees or shrubs over <i>Senna glutinosa</i> subsp. <i>luerssenii</i> and <i>Eremophila cuneifolia</i> open shrubland over sparse grasses
3	<i>Acacia aneura</i> Low Woodlands and Tall Shrublands	F	Isolated clumps of tall <i>Acacia aneura</i> shrubs over open low shrubs of <i>Ptilotus schwartzii</i>	LWTS	<i>Acacia aptaneura</i> Low Woodlands and Tall Shrublands	AaPs	<i>Acacia aptaneura</i> isolated clumps of tall shrubs over <i>Ptilotus schwartzii</i> open low shrubs
4	Miscellaneous Shrublands	A	Rocky crests of hills: <i>Acacia rhodophloia</i> shrubland over sparse mixed shrubs and isolated herbs, and grasses	MS	Miscellaneous Shrublands	Ar	<i>Acacia rhodophloia</i> shrubland over sparse mixed shrubs and isolated herbs, and grasses

ecologia Environment (2009a) vegetation association descriptions*				Stantec (2017) vegetation type descriptions			
Major vegetation association		Vegetation sub-association		Broad floristic formation		Vegetation type	
Code	Description	Code	Description	Code	Description	Code	Description
4	Miscellaneous Shrublands	B	Isolated shrubs of <i>Acacia synchronicia</i> over open and diverse herbs and grasses	MS	Miscellaneous Shrublands	As	<i>Acacia synchronicia</i> isolated mid shrubs over open and diverse herbs and grasses

*Note that several vegetation unit descriptions from ecologia Environment (2009a) did not match the descriptions in supplied shapefiles:

Green shading – Shapefile description matched ecologia Environment (2009a)

Yellow shading – Shapefile description did NOT match ecologia Environment (2009a) description

Red shading – Shapefile description was NOT in ecologia Environment (2009a); either described in ecologia Environment (2009b) or not at all.

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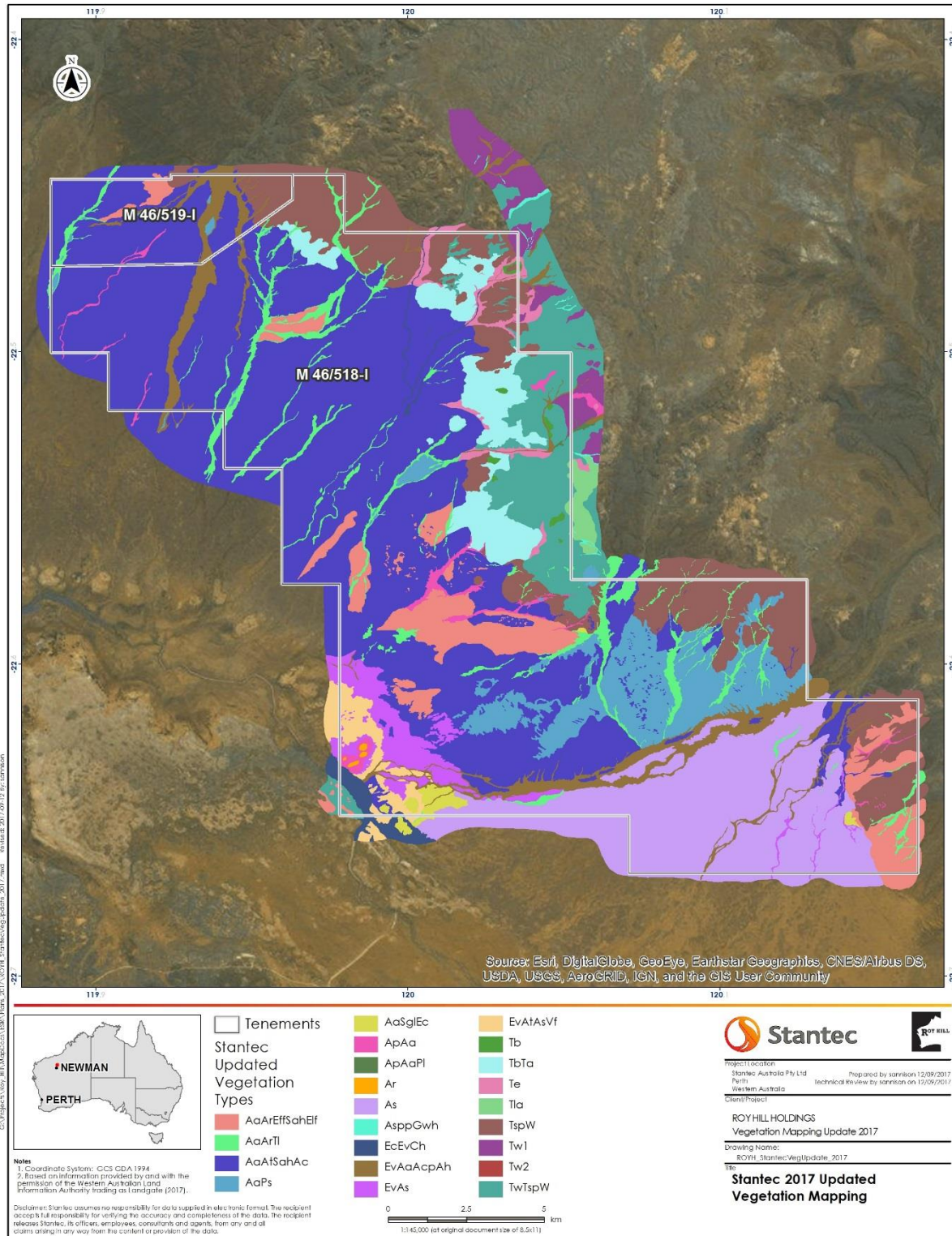


Figure 3-2 Map of Roy Hill vegetation distributions with updated vegetation type codes. Descriptions associated with each vegetation type are given in Table 3-4.

4. Limitations

A desktop review of the Roy Hill mine vegetation mapping was undertaken in 2017 utilising the information provided by Roy Hill.

The baseline vegetation survey reports (ecologia Environment 2009a, 2009b) utilised for the desktop review did not provide a breakdown of the quadrats within each vegetation sub-association. As such, it was not possible to go through the vascular flora list within each quadrat to better define the revised vegetation types. This was pertinent for the Mulga (*Acacia aneura* and allied genera) vegetation types which may potentially represent up to ten species (12 species are included in the *Acacia aneura* and allied genera (Maslin and Reid 2012)). To address this limitation, field spot checks were completed within the Mulga vegetation types.

The inability to access the quadrat dataset within the vegetation sub-associations also compromised the ability to accurately define the dominant *Triodia* species within the Hummock Grassland vegetation sub-associations. Barrett *et al.* (2016) indicated that the *Triodia* identifications and vegetation sub-association descriptions were, for the most part, incorrect and require amendment. Barrett *et al.* (2016) visited numerous sites within the Roy Hill mine area, however, as they were unable to traverse the entire mine area, there may be other areas within the Roy Hill mine area that need amendments to the *Triodia* vegetation type mapping and descriptions. This limitation was also addressed through the completion of field spot checks within the *Triodia* vegetation types.

The field spot checks were completed to assist in the vegetation type descriptions and to better understand the dominant hummock grasses (*Triodia* species) and Mulga species. All *Triodia* and Mulga vegetation types (*Triodia* sp. Hummock Grassland Steppes and *Acacia aptaneura* Low Woodlands and Tall Shrublands), with the exception vegetation type Tw2 which was not able to be accessed, were spot checked. As these were spot checks, there may be some areas of the Roy Hill mine that do not match the vegetation type descriptions, or the flora dominance may not reflect the mapping unit. This was considered a low level limitation, not requiring any further assessment.

5. Conclusions

A revision of the vascular flora list and the vegetation mapping prepared by ecologia Environment (2009a) and ecologia Environment (2009b) was undertaken following a review of Barrett *et al.* (2016) and WAH (2017). Additionally, several other resources (Barrett *et al.* 2017, EPA 2016, ESCAVI 2003, Maslin and Reid 2012) were accessed to assist in the revision.

This 2017 desktop review identified a total of 522 vascular flora species from 53 families and 179 genera that are known to occur within the Roy Hill mine area. This is a consolidation from the 547 vascular flora species from 78 families and 181 genera identified from the Roy Hill mine area (ecologia Environment 2009a, b). In addition, up to nine Priority listed flora species (*Acacia glaucocaesia*, *Aristida jerichoensis* subsp. *subspinulifera*, *Eremophila pilosa*, *Eremophila youngii* subsp. *lepidota*, *Goodenia nuda*, *Polymeria distigma*, *Rhagodia* sp. Hamersley (M. Trudgen 17794), *Rostellularia adscendens* var. *latifolia* and *Triodia* sp. Roy Hill) have been recorded within the Roy Hill mine area. However, as identified in this report the identification of *Eremophila pilosa* may be erroneous and the priority listing of *Triodia* sp. Roy Hill is currently under review.

The vegetation sub-association descriptions presented by ecologia Environment (2009a) have been updated to reflect the changes in nomenclature for the 522 vascular flora species, and the results of the vegetation field spot checks. Discrepancies in the ecologia Environment (2009a) report and the vegetation mapping shapefile were identified, with four additional vegetation types included. As a result, the number of vegetation types present within the Roy Hill mine area now totals 22.

6. References

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6. References

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APPENDICES



Appendix A Summary of changes to the vascular flora list

Appendix A Summary of changes to the vascular flora list

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ecologia Environment (2009a) vascular flora list			Stantec (2017) update to vascular flora list			
Family	Species	Conservation rating / introduced	Family	Species	Conservation rating / introduced	Comment
Acanthaceae	<i>Dicladantha forrestii</i>		Acanthaceae	<i>Dicladantha forrestii</i>		
Acanthaceae	<i>Rostellularia adscendens</i> var. <i>latifolia</i>	Priority 3	Acanthaceae	<i>Rostellularia adscendens</i> var. <i>latifolia</i>	Priority 3	
Adiantaceae	<i>Cheilanthes austrotenuifolia</i>		Pteridaceae	<i>Cheilanthes austrotenuifolia</i>		
Adiantaceae	<i>Cheilanthes brownii</i>		Pteridaceae	<i>Cheilanthes brownii</i>		
Adiantaceae	<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>		Pteridaceae	<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>		
Aizoaceae	<i>Trianthema glossostigma</i>		Aizoaceae	<i>Trianthema glossostigmum</i>		
Aizoaceae	<i>Trianthema oxycalyptra</i> var. <i>oxycalyptra</i>		Aizoaceae	<i>Trianthema oxycalyptum</i> var. <i>oxycalyptum</i>		
Aizoaceae	<i>Trianthema pilosa</i>		Aizoaceae	<i>Trianthema pilosum</i>		
Aizoaceae	<i>Trianthema portulacastrum</i>	Introduced	Aizoaceae	<i>Trianthema portulacastrum</i>	Introduced	
Aizoaceae	<i>Trianthema triquetra</i>		Aizoaceae	<i>Trianthema triquetrum</i>		
Amaranthaceae	<i>Achyranthes aspera</i>		Amaranthaceae	<i>Achyranthes aspera</i>		
Amaranthaceae	<i>Aerva javanica</i>	Introduced	Amaranthaceae	<i>Aerva javanica</i>	Introduced	
Amaranthaceae	<i>Alternanthera angustifolia</i>		Amaranthaceae	<i>Alternanthera angustifolia</i>		

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Amaranthaceae	<i>Alternanthera denticulata</i>		Amaranthaceae	<i>Alternanthera denticulata</i>		
Amaranthaceae	<i>Alternanthera nodiflora</i>		Amaranthaceae	<i>Alternanthera nodiflora</i>		
Amaranthaceae	<i>Amaranthus interruptus</i>		Amaranthaceae	<i>Amaranthus interruptus</i>		
Amaranthaceae	<i>Amaranthus mitchellii</i>		Amaranthaceae	<i>Amaranthus mitchellii</i>		
Amaranthaceae	<i>Amaranthus undulatus</i>		Amaranthaceae	<i>Amaranthus undulatus</i>		
Amaranthaceae	<i>Gomphrena affinis</i> subsp. <i>pilbarensis</i>		Amaranthaceae	<i>Gomphrena affinis</i> subsp. <i>pilbarensis</i>		
Amaranthaceae	<i>Gomphrena canescens</i> subsp. <i>canescens</i>		Amaranthaceae	<i>Gomphrena canescens</i> subsp. <i>canescens</i>		
Amaranthaceae	<i>Gomphrena cunninghamii</i>		Amaranthaceae	<i>Gomphrena cunninghamii</i>		
Amaranthaceae	<i>Gomphrena kanisii</i>		Amaranthaceae	<i>Gomphrena kanisii</i>		
Amaranthaceae	<i>Ptilotus aevoides</i>		Amaranthaceae	<i>Ptilotus aevoides</i>		
Amaranthaceae	<i>Ptilotus astrolasius</i> var. <i>astrolasius</i>		Amaranthaceae	<i>Ptilotus astrolasius</i>		
Amaranthaceae	<i>Ptilotus auriculifolius</i>		Amaranthaceae	<i>Ptilotus auriculifolius</i>		
Amaranthaceae	<i>Ptilotus calostachyus</i> var. <i>calostachyus</i>		Amaranthaceae	<i>Ptilotus calostachyus</i>		

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Amaranthaceae	<i>Ptilotus carinatus</i>		Amaranthaceae	<i>Ptilotus carinatus</i>		
Amaranthaceae	<i>Ptilotus clementii</i>		Amaranthaceae	<i>Ptilotus clementii</i>		
Amaranthaceae	<i>Ptilotus drummondii</i>		Amaranthaceae	<i>Ptilotus drummondii</i>		
Amaranthaceae	<i>Ptilotus exaltatus</i> var. <i>exaltatus</i>		Amaranthaceae	<i>Ptilotus nobilis</i> subsp. <i>nobilis</i>		
Amaranthaceae	<i>Ptilotus fusiformis</i> var. <i>fusiformis</i>		Amaranthaceae	<i>Ptilotus fusiformis</i>		
Amaranthaceae	<i>Ptilotus gaudichaudii</i> var. <i>gaudichaudii</i>		Amaranthaceae	<i>Ptilotus gaudichaudii</i> subsp. <i>gaudichaudii</i>		
Amaranthaceae	<i>Ptilotus gomphrenoides</i> var. <i>gomphrenoides</i>		Amaranthaceae	<i>Ptilotus gomphrenoides</i>		
Amaranthaceae	<i>Ptilotus helipteroides</i> var. <i>helipteroides</i>		Amaranthaceae	<i>Ptilotus helipteroides</i>		
Amaranthaceae	<i>Ptilotus incanus</i> var. <i>incanus</i>		Amaranthaceae	<i>Ptilotus incanus</i>		
Amaranthaceae	<i>Ptilotus macrocephalus</i>		Amaranthaceae	<i>Ptilotus macrocephalus</i>		
Amaranthaceae	<i>Ptilotus obovatus</i>		Amaranthaceae	<i>Ptilotus obovatus</i>		
Amaranthaceae	<i>Ptilotus obovatus</i> var. <i>obovatus</i>		Amaranthaceae	<i>Ptilotus obovatus</i> var. <i>obovatus</i>		
Amaranthaceae	<i>Ptilotus polystachyus</i> var. <i>polystachyus</i>		Amaranthaceae	<i>Ptilotus polystachyus</i>		

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Amaranthaceae	<i>Ptilotus roei</i>		Amaranthaceae	<i>Ptilotus roei</i>		
Amaranthaceae	<i>Ptilotus rotundifolius</i>		Amaranthaceae	<i>Ptilotus rotundifolius</i>		
Amaranthaceae	<i>Ptilotus schwartzii</i> var. <i>schwartzii</i>		Amaranthaceae	<i>Ptilotus schwartzii</i> var. <i>schwartzii</i>		
Apiaceae	<i>Trachymene oleracea</i> subsp. <i>oleracea</i>		Araliaceae	<i>Trachymene oleracea</i> subsp. <i>oleracea</i>		
Asclepiadaceae	<i>Cynanchum floribundum</i>		Apocynaceae	<i>Cynanchum floribundum</i>		
Asclepiadaceae	<i>Marsdenia australis</i>		Apocynaceae	<i>Marsdenia australis</i>		
Asclepiadaceae	<i>Rhyncharrhena linearis</i>		Apocynaceae	<i>Rhyncharrhena linearis</i>		
Asteraceae	<i>Bidens bipinnata</i>	Introduced	Asteraceae	<i>Bidens bipinnata</i>	Introduced	
Asteraceae	<i>Blumea tenella</i>		Asteraceae	<i>Blumea tenella</i>		
Asteraceae	<i>Calocephalus francisii</i>		Asteraceae	<i>Calocephalus francisii</i>		
Asteraceae	<i>Calocephalus knappii</i>		Asteraceae	<i>Calocephalus knappii</i>		
Asteraceae	<i>Calocephalus</i> sp. Pilbara-Desert (M.E. Trudgen 11454)		Asteraceae	<i>Calocephalus beardii</i>		
Asteraceae	<i>Calocephalus</i> sp. Wittenoom (A.S. George 1082)		Asteraceae	<i>Calocephalus pilbarensis</i>		
Asteraceae	<i>Calotis plumulifera</i>		Asteraceae	<i>Calotis plumulifera</i>		

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Asteraceae	<i>Calotis porphyroglossa</i>		Asteraceae	<i>Calotis porphyroglossa</i>		
Asteraceae	<i>Centipeda minima</i> subsp. <i>macrocephala</i>		Asteraceae	<i>Centipeda minima</i> subsp. <i>macrocephala</i>		
Asteraceae	<i>Centipeda thespidioides</i>		Asteraceae	<i>Centipeda thespidioides</i>		
Asteraceae	<i>Chrysocephalum apiculatum</i>		Asteraceae	<i>Chrysocephalum apiculatum</i>		
Asteraceae	<i>Chrysocephalum eremaeum</i>		Asteraceae	<i>Chrysocephalum eremaeum</i>		
Asteraceae	<i>Chrysocephalum gilesii</i>		Asteraceae	<i>Chrysocephalum gilesii</i>		
Asteraceae	<i>Flaveria australasica</i>		Asteraceae	<i>Flaveria trinervia</i>	Introduced	
Asteraceae	<i>Minuria integerrima</i>		Asteraceae	<i>Minuria integerrima</i>		
Asteraceae	<i>Peripleura virgata</i>		Asteraceae	<i>Peripleura virgata</i>		
Asteraceae	<i>Pluchea dentex</i>		Asteraceae	<i>Pluchea dentex</i>		
Asteraceae	<i>Pluchea dunlopilii</i>		Asteraceae	<i>Pluchea dunlopilii</i>		
Asteraceae	<i>Pluchea ferdinandi-muelleri</i>		Asteraceae	<i>Pluchea ferdinandi-muelleri</i>		
Asteraceae	<i>Pluchea rubelliflora</i>		Asteraceae	<i>Pluchea rubelliflora</i>		
Asteraceae	<i>Pluchea tetranthera</i>		Asteraceae	<i>Pluchea tetranthera</i>		

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Asteraceae	<i>Pterocaulon serrulatum</i>		Asteraceae	<i>Pterocaulon serrulatum</i>		
Asteraceae	<i>Pterocaulon sphacelatum</i>		Asteraceae	<i>Pterocaulon sphacelatum</i>		
Asteraceae	<i>Pterocaulon sphaeranthoides</i>		Asteraceae	<i>Pterocaulon sphaeranthoides</i>		
Asteraceae	<i>Rhodanthe floribunda</i>		Asteraceae	<i>Rhodanthe floribunda</i>		
Asteraceae	<i>Rhodanthe margarethae</i>		Asteraceae	<i>Rhodanthe margarethae</i>		
Asteraceae	<i>Rutidosis helichrysoides</i> subsp. <i>helichrysoides</i>		Asteraceae	<i>Rutidosis helichrysoides</i> subsp. <i>helichrysoides</i>		
Asteraceae	<i>Sonchus oleraceus</i>	Introduced	Asteraceae	<i>Sonchus oleraceus</i>	Introduced	
Asteraceae	<i>Stenopetalum velutinum</i>		Brassicaceae	<i>Stenopetalum velutinum</i>		
Asteraceae	<i>Streptoglossa ?bubakii</i>		Asteraceae	<i>Streptoglossa ?bubakii</i>		Tentative identification
Asteraceae	<i>Streptoglossa bubakii</i>		Asteraceae	<i>Streptoglossa bubakii</i>		
Asteraceae	<i>Streptoglossa cylindriceps</i>		Asteraceae	<i>Streptoglossa cylindriceps</i>		
Asteraceae	<i>Streptoglossa decurrens</i>		Asteraceae	<i>Streptoglossa decurrens</i>		
Asteraceae	<i>Streptoglossa liatroides</i>		Asteraceae	<i>Streptoglossa liatroides</i>		

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Asteraceae	<i>Streptoglossa odora</i>		Asteraceae	<i>Streptoglossa odora</i>		
Boraginaceae	<i>Ehretia saligna</i> var. <i>saligna</i>		Boraginaceae	<i>Ehretia saligna</i> var. <i>saligna</i>		
Boraginaceae	<i>Heliotropium chrysocarpum</i>		Boraginaceae	<i>Heliotropium chrysocarpum</i>		
Boraginaceae	<i>Heliotropium cunninghamii</i>		Boraginaceae	<i>Heliotropium cunninghamii</i>		
Boraginaceae	<i>Heliotropium europaeum</i>	Introduced	Boraginaceae	<i>Heliotropium europaeum</i>	Introduced	
Boraginaceae	<i>Heliotropium heteranthum</i>		Boraginaceae	<i>Heliotropium heteranthum</i>		
Boraginaceae	<i>Heliotropium inexplicitum</i>		Boraginaceae	<i>Heliotropium inexplicitum</i>		
Boraginaceae	<i>Heliotropium pachyphyllum</i>		Boraginaceae	<i>Heliotropium pachyphyllum</i>		
Boraginaceae	<i>Heliotropium tanythrix</i>		Boraginaceae	<i>Heliotropium tanythrix</i>		
Boraginaceae	<i>Heliotropium tenuifolium</i>		Boraginaceae	<i>Heliotropium tenuifolium</i>		
Boraginaceae	<i>Trichodesma zeylanicum</i> var. <i>zeylanicum</i>		Boraginaceae	<i>Trichodesma zeylanicum</i> var. <i>zeylanicum</i>		

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Brassicaceae	<i>Arabidella nasturtium</i>		Brassicaceae	-		Not recorded from the Pilbara
Brassicaceae	<i>Lepidium echinatum</i>		Brassicaceae	<i>Lepidium echinatum</i>		
Brassicaceae	<i>Lepidium pedicellosum</i>		Brassicaceae	<i>Lepidium pedicellosum</i>		
Brassicaceae	<i>Lepidium phlebopetalum</i>		Brassicaceae	<i>Lepidium phlebopetalum</i>		
Brassicaceae	<i>Lepidium pholidogynum</i>		Brassicaceae	<i>Lepidium pholidogynum</i>		
Brassicaceae	<i>Stenopetalum anfractum</i>		Brassicaceae	<i>Stenopetalum anfractum</i>		
Brassicaceae	<i>Stenopetalum decipiens</i>		Brassicaceae	<i>Stenopetalum decipiens</i>		
Brassicaceae	<i>Stenopetalum nutans</i>		Brassicaceae	<i>Stenopetalum nutans</i>		
Caesalpiaceae	<i>Parkinsonia aculeata</i>	Introduced	Fabaceae	<i>Parkinsonia aculeata</i>	Introduced	Weed of National Significance
Caesalpiaceae	<i>Petalostylis labicheoides</i>		Fabaceae	<i>Petalostylis labicheoides</i>		
Caesalpiaceae	<i>Senna artemisioides</i> subsp. <i>filifolia</i>		Fabaceae	<i>Senna artemisioides</i> subsp. <i>filifolia</i>		
Caesalpiaceae	<i>Senna artemisioides</i> subsp. <i>helmsii</i>		Fabaceae	<i>Senna artemisioides</i> subsp. <i>helmsii</i>		

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Caesalpinaceae	<i>Senna artemisioides</i> subsp. <i>helmsii</i> x <i>oligophylla</i>		Fabaceae	<i>Senna artemisioides</i> subsp. <i>helmsii</i> x <i>oligophylla</i>		Not formally recognised nomenclature
Caesalpinaceae	<i>Senna artemisioides</i> subsp. <i>oligophylla</i>		Fabaceae	<i>Senna artemisioides</i> subsp. <i>oligophylla</i>		
Caesalpinaceae	<i>Senna artemisioides</i> subsp. <i>oligophylla</i> x <i>helmsii</i>		Fabaceae	<i>Senna artemisioides</i> subsp. <i>oligophylla</i> x <i>helmsii</i>		Not formally recognised nomenclature
Caesalpinaceae	<i>Senna artemisioides</i> subsp. <i>oligophylla</i> x <i>Senna sericea</i>		Fabaceae	<i>Senna artemisioides</i> subsp. <i>oligophylla</i> x <i>Senna sericea</i>		Not formally recognised nomenclature
Caesalpinaceae	<i>Senna artemisioides</i> subsp. x <i>artemisioides</i>		Fabaceae	<i>Senna artemisioides</i> subsp. x <i>artemisioides</i>		
Caesalpinaceae	<i>Senna artemisioides</i> subsp. x <i>sturtii</i>		Fabaceae	<i>Senna artemisioides</i> subsp. x <i>sturtii</i>		
Caesalpinaceae	<i>Senna ferraria</i>		Fabaceae	<i>Senna ferraria</i>		
Caesalpinaceae	<i>Senna glaucifolia</i>		Fabaceae	<i>Senna glaucifolia</i>		
Caesalpinaceae	<i>Senna glutinosa</i> subsp. <i>chatelainiana</i>		Fabaceae	<i>Senna glutinosa</i> subsp. <i>chatelainiana</i>		
Caesalpinaceae	<i>Senna glutinosa</i> subsp. <i>glutinosa</i>		Fabaceae	<i>Senna glutinosa</i> subsp. <i>glutinosa</i>		
Caesalpinaceae	<i>Senna glutinosa</i> subsp. <i>luerssenii</i>		Fabaceae	<i>Senna glutinosa</i> subsp. x <i>luerssenii</i>		

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Caesalpinaceae	<i>Senna glutinosa</i> subsp. <i>pruinosa</i>		Fabaceae	<i>Senna glutinosa</i> subsp. <i>pruinosa</i>		
Caesalpinaceae	<i>Senna glutinosa</i> subsp. x <i>luerssenii</i>		Fabaceae	<i>Senna glutinosa</i> subsp. x <i>luerssenii</i>		
Caesalpinaceae	<i>Senna hamersleyensis</i>		Fabaceae	<i>Senna hamersleyensis</i>		
Caesalpinaceae	<i>Senna notabilis</i>		Fabaceae	<i>Senna notabilis</i>		
Caesalpinaceae	<i>Senna sericea</i>		Fabaceae	<i>Senna sericea</i>		
Caesalpinaceae	<i>Senna stricta</i>		Fabaceae	<i>Senna stricta</i>		
Caesalpinaceae	<i>Senna symonii</i>		Fabaceae	<i>Senna symonii</i>		
Caesalpinaceae	<i>Senna venusta</i>		Fabaceae	<i>Senna venusta</i>		
Campanulaceae	<i>Wahlenbergia tumidifructa</i>		Campanulaceae	<i>Wahlenbergia tumidifructa</i>		
Capparaceae	<i>Capparis lasiantha</i>		Capparaceae	<i>Capparis lasiantha</i>		
Capparaceae	<i>Capparis spinosa</i> var. <i>nummularia</i>		Capparaceae	<i>Capparis spinosa</i> subsp. <i>nummularia</i>		
Capparaceae	<i>Capparis umbonata</i>		Capparaceae	<i>Capparis umbonata</i>		
Capparaceae	<i>Cleome oxalidea</i>		Cleomaceae	<i>Cleome oxalidea</i>		
Capparaceae	<i>Cleome viscosa</i>		Cleomaceae	<i>Cleome viscosa</i>		

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Caryophyllaceae	<i>Polycarpaea corymbosa</i> var. <i>corymbosa</i>		Caryophyllaceae	<i>Polycarpaea corymbosa</i> var. <i>corymbosa</i>		
Caryophyllaceae	<i>Polycarpaea holtzei</i>		Caryophyllaceae	<i>Polycarpaea holtzei</i>		
Caryophyllaceae	<i>Polycarpaea longiflora</i>		Caryophyllaceae	<i>Polycarpaea longiflora</i>		
Chenopodiaceae	<i>Atriplex bunburyana</i>		Chenopodiaceae	<i>Atriplex bunburyana</i>		
Chenopodiaceae	<i>Dissocarpus paradoxus</i>		Chenopodiaceae	<i>Dissocarpus paradoxus</i>		
Chenopodiaceae	<i>Dysphania kalpari</i>		Chenopodiaceae	<i>Dysphania kalpari</i>		
Chenopodiaceae	<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>		Chenopodiaceae	<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>		
Chenopodiaceae	<i>Enchylaena tomentosa</i>		Chenopodiaceae	<i>Enchylaena tomentosa</i>		
Chenopodiaceae	<i>Maireana carnosae</i>		Chenopodiaceae	<i>Maireana carnosae</i>		
Chenopodiaceae	<i>Maireana georgei</i>		Chenopodiaceae	<i>Maireana georgei</i>		
Chenopodiaceae	<i>Maireana luehmannii</i>		Chenopodiaceae	<i>Maireana luehmannii</i>		
Chenopodiaceae	<i>Maireana planifolia</i>		Chenopodiaceae	<i>Maireana planifolia</i>		
Chenopodiaceae	<i>Maireana pyramidata</i>		Chenopodiaceae	<i>Maireana pyramidata</i>		
Chenopodiaceae	<i>Maireana tomentosa</i> subsp. <i>tomentosa</i>		Chenopodiaceae	<i>Maireana tomentosa</i> subsp. <i>tomentosa</i>		

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Chenopodiaceae	<i>Maireana villosa</i>		Chenopodiaceae	<i>Maireana villosa</i>		
Chenopodiaceae	<i>Rhagodia eremaea</i>		Chenopodiaceae	<i>Rhagodia eremaea</i>		
Chenopodiaceae	<i>Rhagodia</i> sp. Hamersley (M. Trudgen 17794)	Priority 3	Chenopodiaceae	<i>Rhagodia</i> sp. Hamersley (M. Trudgen 17794)	Priority 3	
Chenopodiaceae	<i>Salsola australis</i>		Chenopodiaceae	<i>Salsola australis</i>		
Chenopodiaceae	<i>Salsola tragus</i> subsp. <i>tragus</i>		Chenopodiaceae	<i>Salsola australis</i>		
Chenopodiaceae	<i>Sclerolaena bicornis</i>		Chenopodiaceae	<i>Sclerolaena bicornis</i>		
Chenopodiaceae	<i>Sclerolaena convexula</i>		Chenopodiaceae	<i>Sclerolaena convexula</i>		
Chenopodiaceae	<i>Sclerolaena cornishiana</i>		Chenopodiaceae	<i>Sclerolaena cornishiana</i>		
Chenopodiaceae	<i>Sclerolaena costata</i>		Chenopodiaceae	<i>Sclerolaena costata</i>		
Chenopodiaceae	<i>Sclerolaena cuneata</i>		Chenopodiaceae	<i>Sclerolaena cuneata</i>		
Chenopodiaceae	<i>Sclerolaena densiflora</i>		Chenopodiaceae	<i>Sclerolaena densiflora</i>		
Chenopodiaceae	<i>Sclerolaena deserticola</i>		Chenopodiaceae	<i>Sclerolaena deserticola</i>		
Chenopodiaceae	<i>Sclerolaena eriacantha</i>		Chenopodiaceae	<i>Sclerolaena eriacantha</i>		
Chenopodiaceae	<i>Sclerolaena tetragona</i>		Chenopodiaceae	<i>Sclerolaena tetragona</i>		

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Commelinaceae	<i>Commelina ciliata</i>		Commelinaceae	-		Not recorded from the Pilbara
Commelinaceae	<i>Commelina ensifolia</i>		Commelinaceae	<i>Commelina ensifolia</i>		
Convolvulaceae	<i>Bonamia media</i> var. <i>media</i>		Convolvulaceae	-		Not formally recognised nomenclature
Convolvulaceae	<i>Bonamia media</i> var. <i>villosa</i>		Convolvulaceae	<i>Bonamia media</i>		
Convolvulaceae	<i>Bonamia pannosa</i>		Convolvulaceae	<i>Bonamia pannosa</i>		
Convolvulaceae	<i>Convolvulus angustissimus</i> subsp. <i>angustissimus</i>		Convolvulaceae	-		Not recorded from the Pilbara
Convolvulaceae	<i>Duperreya commixta</i>		Convolvulaceae	<i>Duperreya commixta</i>		
Convolvulaceae	<i>Evolvulus alsinoides</i> var. <i>villosicalyx</i>		Convolvulaceae	<i>Evolvulus alsinoides</i> var. <i>villosicalyx</i>		
Convolvulaceae	<i>Ipomoea coptica</i>		Convolvulaceae	<i>Ipomoea coptica</i>		
Convolvulaceae	<i>Ipomoea diamantinensis</i>		Convolvulaceae	<i>Ipomoea diamantinensis</i>		
Convolvulaceae	<i>Ipomoea lonchophylla</i>		Convolvulaceae	<i>Ipomoea lonchophylla</i>		
Convolvulaceae	<i>Ipomoea muelleri</i>		Convolvulaceae	<i>Ipomoea muelleri</i>		
Convolvulaceae	<i>Ipomoea plebeia</i>		Convolvulaceae	<i>Ipomoea plebeia</i>		

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Convolvulaceae	<i>Ipomoea polymorpha</i>		Convolvulaceae	<i>Ipomoea polymorpha</i>		
Convolvulaceae	<i>Operculina aequisepala</i>		Convolvulaceae	<i>Operculina aequisepala</i>		
Convolvulaceae	<i>Polymeria</i> aff. <i>ambigua</i> (CGC-25)		Convolvulaceae	<i>Polymeria</i> aff. <i>ambigua</i> (CGC-25)		Not formally recognised nomenclature
Convolvulaceae	<i>Polymeria calycina</i>		Convolvulaceae	<i>Polymeria calycina</i>		
Convolvulaceae	<i>Polymeria distigma</i>		Convolvulaceae	<i>Polymeria distigma</i>	Priority 3	
Convolvulaceae	<i>Polymeria</i> sp. Hamersley (M.E. Trudgen 11353)	Priority 4	Convolvulaceae	<i>Polymeria longifolia</i>		
Cucurbitaceae	<i>Austrobryonia pilbarensis</i>		Cucurbitaceae	<i>Austrobryonia pilbarensis</i>		
Cucurbitaceae	<i>Citrullus colocynthis</i>	Introduced	Cucurbitaceae	<i>Citrullus colocynthis</i>	Introduced	
Cucurbitaceae	<i>Citrullus lanatus</i>	Introduced	Cucurbitaceae	<i>Citrullus lanatus</i>	Introduced	
Cucurbitaceae	<i>Cucumis maderaspatanus</i>		Cucurbitaceae	<i>Cucumis variabilis</i>		
Cucurbitaceae	<i>Cucumis melo</i> subsp. <i>agrestis</i>	Introduced	Cucurbitaceae	<i>Cucumis melo</i>		
Cyperaceae	<i>Bulbostylis barbata</i>		Cyperaceae	<i>Bulbostylis barbata</i>		
Cyperaceae	<i>Cyperus bifax</i>		Cyperaceae	<i>Cyperus bifax</i>		
Cyperaceae	<i>Cyperus iria</i>		Cyperaceae	<i>Cyperus iria</i>		

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Cyperaceae	<i>Cyperus ixiocarpus</i>		Cyperaceae	<i>Cyperus ixiocarpus</i>		
Cyperaceae	<i>Cyperus vaginatus</i>		Cyperaceae	<i>Cyperus vaginatus</i>		
Cyperaceae	<i>Fimbristylis dichotoma</i>		Cyperaceae	<i>Fimbristylis dichotoma</i>		
Cyperaceae	<i>Fimbristylis microcarya</i>		Cyperaceae	<i>Fimbristylis microcarya</i>		
Cyperaceae	<i>Fimbristylis simulans</i>		Cyperaceae	<i>Fimbristylis simulans</i>		
Elatinaceae	<i>Bergia perennis</i> subsp. <i>obtusifolia</i>		Elatinaceae	<i>Bergia perennis</i> subsp. <i>obtusifolia</i>		
Euphorbiaceae	<i>Adriana urticoides</i> var. <i>urticoides</i>		Euphorbiaceae	<i>Adriana tomentosa</i> var. <i>tomentosa</i>		
Euphorbiaceae	<i>Euphorbia australis</i>		Euphorbiaceae	<i>Euphorbia australis</i>		
Euphorbiaceae	<i>Euphorbia biconvexa</i>		Euphorbiaceae	<i>Euphorbia biconvexa</i>		
Euphorbiaceae	<i>Euphorbia boophthona</i>		Euphorbiaceae	<i>Euphorbia boophthona</i>		
Euphorbiaceae	<i>Euphorbia coghlanii</i>		Euphorbiaceae	<i>Euphorbia coghlanii</i>		
Euphorbiaceae	<i>Euphorbia drummondii</i>		Euphorbiaceae	<i>Euphorbia drummondii</i>		
Euphorbiaceae	<i>Euphorbia schultzei</i>		Euphorbiaceae	-		Not recorded from the Pilbara
Euphorbiaceae	<i>Euphorbia tannensis</i> subsp. <i>eremophila</i>		Euphorbiaceae	<i>Euphorbia tannensis</i> subsp. <i>eremophila</i>		

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Family	Species	Conservation rating / introduced	Family	Species	Conservation rating / introduced	Comment
Euphorbiaceae	<i>Leptopus decaisnei</i>		Phyllanthaceae	<i>Notoleptopus decaisnei</i>		
Euphorbiaceae	<i>Leptopus decaisnei</i> var. <i>orbicularis</i>		Phyllanthaceae	<i>Notoleptopus decaisnei</i> var. <i>orbicularis</i> (A.B. Craig 428)		
Euphorbiaceae	<i>Phyllanthus erwinii</i>		Phyllanthaceae	<i>Phyllanthus erwinii</i>		
Euphorbiaceae	<i>Phyllanthus maderaspatensis</i>		Phyllanthaceae	<i>Phyllanthus maderaspatensis</i>		
Goodeniaceae	<i>Dampiera candicans</i>		Goodeniaceae	<i>Dampiera candicans</i>		
Goodeniaceae	<i>Goodenia cusackiana</i>		Goodeniaceae	<i>Goodenia cusackiana</i>		
Goodeniaceae	<i>Goodenia forrestii</i>		Goodeniaceae	<i>Goodenia forrestii</i>		
Goodeniaceae	<i>Goodenia lamprosperma</i>		Goodeniaceae	<i>Goodenia lamprosperma</i>		
Goodeniaceae	<i>Goodenia microptera</i>		Goodeniaceae	<i>Goodenia microptera</i>		
Goodeniaceae	<i>Goodenia muelleriana</i>		Goodeniaceae	<i>Goodenia muelleriana</i>		
Goodeniaceae	<i>Goodenia nuda</i>	Priority 4	Goodeniaceae	<i>Goodenia nuda</i>	Priority 4	
Goodeniaceae	<i>Goodenia pascua</i>	Priority 3	Goodeniaceae	<i>Goodenia pascua</i>		
Goodeniaceae	<i>Goodenia pinnatifida</i>		Goodeniaceae	<i>Goodenia pinnatifida</i>		Not recorded from the Pilbara
Goodeniaceae	<i>Goodenia prostrata</i>		Goodeniaceae	<i>Goodenia prostrata</i>		

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Goodeniaceae	<i>Goodenia stobbsiana</i>		Goodeniaceae	<i>Goodenia stobbsiana</i>		
Goodeniaceae	<i>Goodenia triodiophila</i>		Goodeniaceae	<i>Goodenia triodiophila</i>		
Goodeniaceae	<i>Goodenia vilmoriniae</i>		Goodeniaceae	<i>Goodenia vilmoriniae</i>		
Goodeniaceae	<i>Scaevola acacioides</i>		Goodeniaceae	<i>Scaevola acacioides</i>		
Goodeniaceae	<i>Scaevola spinescens</i>		Goodeniaceae	<i>Scaevola spinescens</i>		
Gyrostemonaceae	<i>Codonocarpus cotinifolius</i>		Gyrostemonaceae	<i>Codonocarpus cotinifolius</i>		
Lamiaceae	<i>Basilicum polystachyon</i>		Lamiaceae	<i>Basilicum polystachyon</i>		
Lamiaceae	<i>Newcastelia</i> sp. Hamersley Range (S. van Leeuwen 4264)		Lamiaceae	<i>Newcastelia</i> sp. Hamersley Range (S. van Leeuwen 4264)		
Lamiaceae	<i>Teucrium racemosum</i>		Lamiaceae	<i>Teucrium racemosum</i>		
Lauraceae	<i>Cassytha capillaries</i>		Lauraceae	<i>Cassytha capillaris</i>		
Loranthaceae	<i>Amyema aff. bifurcata</i>		Loranthaceae	<i>Amyema aff. bifurcata</i>		Not formally recognised nomenclature
Loranthaceae	<i>Amyema fitzgeraldii</i>		Loranthaceae	<i>Amyema fitzgeraldii</i>		
Loranthaceae	<i>Amyema gibberula</i> var. <i>gibberula</i>		Loranthaceae	<i>Amyema gibberula</i> var. <i>gibberula</i>		
Loranthaceae	<i>Amyema miquelii</i>		Loranthaceae	<i>Amyema miquelii</i>		

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Family	Species	Conservation rating / introduced	Family	Species	Conservation rating / introduced	Comment
Loranthaceae	<i>Lysiana casuarinae</i>		Loranthaceae	<i>Lysiana casuarinae</i>		
Lythraceae	<i>Ammannia auriculata</i>		Lythraceae	<i>Ammannia auriculata</i>		
Lythraceae	<i>Ammannia baccifera</i>		Lythraceae	<i>Ammannia baccifera</i>		
Malvaceae	<i>Abutilon</i> ? <i>dioicum</i> R.M. Barker ms.		Malvaceae	<i>Abutilon</i> ?sp. <i>Dioicum</i> (A.A. Mitchell PRP 1618)		Tentative identification
Malvaceae	<i>Abutilon amplum</i>		Malvaceae	<i>Abutilon amplum</i>		
Malvaceae	<i>Abutilon cryptopetalum</i>		Malvaceae	<i>Abutilon cryptopetalum</i>		
Malvaceae	<i>Abutilon cunninghamii</i>		Malvaceae	<i>Abutilon cunninghamii</i>		
Malvaceae	<i>Abutilon fraseri</i>		Malvaceae	<i>Abutilon fraseri</i>		
Malvaceae	<i>Abutilon lepidum</i>		Malvaceae	<i>Abutilon lepidum</i>		
Malvaceae	<i>Abutilon leucopetalum</i>		Malvaceae	<i>Abutilon leucopetalum</i>		
Malvaceae	<i>Abutilon macrum</i>		Malvaceae	<i>Abutilon macrum</i>		
Malvaceae	<i>Abutilon malvifolium</i>		Malvaceae	<i>Abutilon malvifolium</i>		
Malvaceae	<i>Abutilon otocarpum</i>		Malvaceae	<i>Abutilon otocarpum</i>		
Malvaceae	<i>Abutilon oxycarpum</i> subsp. <i>prostratum</i> R.M. Barker ms		Malvaceae	<i>Abutilon oxycarpum</i> subsp. <i>Prostrate</i> (A.A. Mitchell PRP 1266)		
Malvaceae	<i>Gossypium australe</i>		Malvaceae	<i>Gossypium australe</i>		

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Malvaceae	<i>Gossypium robinsonii</i>		Malvaceae	<i>Gossypium robinsonii</i>		
Malvaceae	<i>Hibiscus burtonii</i>		Malvaceae	<i>Hibiscus burtonii</i>		
Malvaceae	<i>Hibiscus coatesii</i>		Malvaceae	<i>Hibiscus coatesii</i>		
Malvaceae	<i>Hibiscus gardneri</i>		Malvaceae	<i>Hibiscus</i> sp. Gardneri (A.L. Payne PRP 1435)		
Malvaceae	<i>Hibiscus haynaldii</i>		Malvaceae	<i>Hibiscus haynaldii</i>		
Malvaceae	<i>Hibiscus leptocladus</i>		Malvaceae	<i>Hibiscus leptocladus</i>		
Malvaceae	<i>Hibiscus sturtii</i> var. <i>aff. grandiflorus</i>		Malvaceae	<i>Hibiscus sturtii</i> var. <i>aff. grandiflorus</i>		Not formally recognised nomenclature
Malvaceae	<i>Hibiscus sturtii</i> var. <i>campylochlamys</i>		Malvaceae	<i>Hibiscus sturtii</i> var. <i>campylochlamys</i>		
Malvaceae	<i>Hibiscus sturtii</i> var. <i>grandiflorus</i>		Malvaceae	<i>Hibiscus sturtii</i> var. <i>grandiflorus</i>		
Malvaceae	<i>Hibiscus sturtii</i> var. <i>platyklamys</i>		Malvaceae	<i>Hibiscus sturtii</i> var. <i>platyklamys</i>		
Malvaceae	<i>Hibiscus sturtii</i> var. <i>truncatus</i>		Malvaceae	<i>Hibiscus sturtii</i> var. <i>truncatus</i>		
Malvaceae	<i>Hibiscus trionum</i> var. <i>vesicarius</i>		Malvaceae	<i>Hibiscus verdcourtii</i>		
Malvaceae	<i>Malvastrum americanum</i>	Introduced	Malvaceae	<i>Malvastrum americanum</i>	Introduced	

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Family	Species	Conservation rating / introduced	Family	Species	Conservation rating / introduced	Comment
Malvaceae	<i>Sida arenicola</i>		Malvaceae	<i>Sida arenicola</i>		
Malvaceae	<i>Sida arsiniata</i>		Malvaceae	<i>Sida arsiniata</i>		
Malvaceae	<i>Sida calyxhymenia</i>		Malvaceae	<i>Sida calyxhymenia</i>		
Malvaceae	<i>Sida cardiophylla</i>		Malvaceae	<i>Sida cardiophylla</i>		
Malvaceae	<i>Sida echinocarpa</i>		Malvaceae	<i>Sida echinocarpa</i>		
Malvaceae	<i>Sida ectogama</i>		Malvaceae	<i>Sida ectogama</i>		
Malvaceae	<i>Sida fibulifera</i>		Malvaceae	<i>Sida fibulifera</i>		
Malvaceae	<i>Sida pilbarensis</i> R.M. Barker ms		Malvaceae	<i>Sida</i> sp. Pilbara (A.A. Mitchell PRP 1543)		
Malvaceae	<i>Sida platycalyx</i>		Malvaceae	<i>Sida platycalyx</i>		
Malvaceae	<i>Sida rohlenae</i> subsp. <i>rohlenae</i>		Malvaceae	<i>Sida rohlenae</i> subsp. <i>rohlenae</i>		
Malvaceae	<i>Sida</i> sp. dark green fruits (S. van Leeuwen 2260)		Malvaceae	<i>Sida</i> sp. Dark green fruits (S. van Leeuwen 2260)		
Malvaceae	<i>Sida</i> sp. Excedentifolia (J.L. Egan 1925)		Malvaceae	<i>Sida</i> sp. Excedentifolia (J.L. Egan 1925)		
Malvaceae	<i>Sida</i> sp. spiciform panicles (E. Leyland s.n. 14/8/90)		Malvaceae	<i>Sida</i> sp. spiciform panicles (E. Leyland s.n. 14/8/90)		

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Malvaceae	<i>Sida</i> sp. Supplejack Station (T.S. Henshall 2345)		Malvaceae	<i>Sida</i> sp. Supplejack Station (T.S. Henshall 2345)		
Malvaceae	<i>Sida</i> sp. verrucose glands (F. H Mollemans 2423)		Malvaceae	<i>Sida</i> sp. verrucose glands (F.H. Mollemans 2423)		
Malvaceae	<i>Sida spinosa</i>		Malvaceae	<i>Sida spinosa</i>		
Marsileaceae	<i>Marsilea exarata</i>		Marsileaceae	<i>Marsilea exarata</i>		
Marsileaceae	<i>Marsilea hirsuta</i>		Marsileaceae	<i>Marsilea hirsuta</i>		
Mimosaceae	<i>Acacia ?sericophylla</i>		Fabaceae	<i>Acacia ?sericophylla</i>		Tentative identification
Mimosaceae	<i>Acacia acradenia</i>		Fabaceae	<i>Acacia acradenia</i>		
Mimosaceae	<i>Acacia adsurgens</i>		Fabaceae	<i>Acacia adsurgens</i>		
Mimosaceae	<i>Acacia ampliceps</i>		Fabaceae	<i>Acacia ampliceps</i>		
Mimosaceae	<i>Acacia ancistrocarpa</i>		Fabaceae	<i>Acacia ancistrocarpa</i>		
Mimosaceae	<i>Acacia aneura</i> var. <i>aneura</i>		Fabaceae	<i>Acacia aneura</i>		
Mimosaceae	<i>Acacia aneura</i> var. <i>conifera</i>		Fabaceae	<i>Acacia pteraneura</i>		
Mimosaceae	<i>Acacia aneura</i> var. <i>intermedia</i>		Fabaceae	-		An excluded name, does not occur in Western Australia

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Mimosaceae	<i>Acacia aneura</i> var. <i>macrocarpa</i>		Fabaceae	<i>Acacia macraneura</i>		
Mimosaceae	<i>Acacia aneura</i> var. <i>major</i>		Fabaceae	-		An excluded name, does not occur in Western Australia
Mimosaceae	<i>Acacia aneura</i> var. <i>pilbarana</i>		Fabaceae	<i>Acacia aptaneura</i>		
Mimosaceae	<i>Acacia aneura</i> var. <i>tenuis</i>		Fabaceae	<i>Acacia aptaneura</i>		
Mimosaceae	<i>Acacia arida</i>		Fabaceae	<i>Acacia arida</i>		
Mimosaceae	<i>Acacia atkinsiana</i>		Fabaceae	<i>Acacia atkinsiana</i>		
Mimosaceae	<i>Acacia ayersiana</i>		Fabaceae	<i>Acacia ayersiana</i>		
Mimosaceae	<i>Acacia bivenosa</i>		Fabaceae	<i>Acacia bivenosa</i>		
Mimosaceae	<i>Acacia catenulata</i> subsp. <i>occidentalis</i> Maslin ms		Fabaceae	<i>Acacia catenulata</i> subsp. <i>occidentalis</i>		
Mimosaceae	<i>Acacia coriacea</i> subsp. <i>pendens</i>		Fabaceae	<i>Acacia coriacea</i> subsp. <i>pendens</i>		
Mimosaceae	<i>Acacia dictyophleba</i>		Fabaceae	<i>Acacia dictyophleba</i>		
Mimosaceae	<i>Acacia distans</i>		Fabaceae	<i>Acacia distans</i>		
Mimosaceae	<i>Acacia glaucocaesia</i>	Priority 3	Fabaceae	<i>Acacia glaucocaesia</i>	Priority 3	

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Mimosaceae	<i>Acacia hamersleyensis</i>		Fabaceae	<i>Acacia hamersleyensis</i>		
Mimosaceae	<i>Acacia inaequilatera</i>		Fabaceae	<i>Acacia inaequilatera</i>		
Mimosaceae	<i>Acacia kempeana</i>		Fabaceae	<i>Acacia kempeana</i>		
Mimosaceae	<i>Acacia maitlandii</i>		Fabaceae	<i>Acacia maitlandii</i>		
Mimosaceae	<i>Acacia marramamba</i>		Fabaceae	<i>Acacia marramamba</i>		
Mimosaceae	<i>Acacia monticola</i>		Fabaceae	<i>Acacia monticola</i>		
Mimosaceae	<i>Acacia oswaldii</i>		Fabaceae	<i>Acacia oswaldii</i>		
Mimosaceae	<i>Acacia paraneura</i>		Fabaceae	<i>Acacia paraneura</i>		
Mimosaceae	<i>Acacia pruinocarpa</i>		Fabaceae	<i>Acacia pruinocarpa</i>		
Mimosaceae	<i>Acacia pyrifolia</i>		Fabaceae	<i>Acacia pyrifolia</i>		
Mimosaceae	<i>Acacia rhodophloia</i>		Fabaceae	<i>Acacia rhodophloia</i>		
Mimosaceae	<i>Acacia robeorum</i>		Fabaceae	<i>Acacia robeorum</i>		
Mimosaceae	<i>Acacia sabulosa</i>		Fabaceae	<i>Acacia sabulosa</i>		
Mimosaceae	<i>Acacia sclerosperma</i> subsp. <i>sclerosperma</i>		Fabaceae	<i>Acacia sclerosperma</i> subsp. <i>sclerosperma</i>		
Mimosaceae	<i>Acacia sibirica</i>		Fabaceae	<i>Acacia sibirica</i>		
Mimosaceae	<i>Acacia synchronicia</i>		Fabaceae	<i>Acacia synchronicia</i>		
Mimosaceae	<i>Acacia tetragonophylla</i>		Fabaceae	<i>Acacia tetragonophylla</i>		

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Mimosaceae	<i>Acacia trachycarpa</i>		Fabaceae	<i>Acacia trachycarpa</i>		
Mimosaceae	<i>Acacia trudgeniana</i>		Fabaceae	<i>Acacia trudgeniana</i>		
Mimosaceae	<i>Acacia tumida</i> var. <i>pilbarensis</i>		Fabaceae	<i>Acacia tumida</i> var. <i>pilbarensis</i>		
Mimosaceae	<i>Acacia victoriae</i>		Fabaceae	<i>Acacia victoriae</i>		
Mimosaceae	<i>Acacia xiphophylla</i>		Fabaceae	<i>Acacia xiphophylla</i>		
Mimosaceae	<i>Neptunia dimorphantha</i>		Fabaceae	<i>Neptunia dimorphantha</i>		
Mimosaceae	<i>Vachellia farnesiana</i>	Introduced	Fabaceae	<i>Vachellia farnesiana</i>	Introduced	
Molluginaceae	<i>Glinus lotoides</i>		Molluginaceae	<i>Glinus lotoides</i>		
Molluginaceae	<i>Mollugo molluginea</i>		Molluginaceae	<i>Trigastrotheca molluginea</i>		
Moraceae	<i>Ficus brachypoda</i>		Moraceae	<i>Ficus brachypoda</i>		
Myoporaceae	<i>Eremophila cuneifolia</i>		Scrophulariaceae	<i>Eremophila cuneifolia</i>		
Myoporaceae	<i>Eremophila enata</i>		Scrophulariaceae			Not recorded from the Pilbara
Myoporaceae	<i>Eremophila exilifolia</i>		Scrophulariaceae	<i>Eremophila exilifolia</i>		
Myoporaceae	<i>Eremophila forrestii</i> subsp. <i>forrestii</i>		Scrophulariaceae	<i>Eremophila forrestii</i> subsp. <i>forrestii</i>		
Myoporaceae	<i>Eremophila lanceolata</i>		Scrophulariaceae	<i>Eremophila lanceolata</i>		

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Myoporaceae	<i>Eremophila latrobei</i> subsp. <i>filiformis</i>		Scrophulariaceae	<i>Eremophila latrobei</i> subsp. <i>filiformis</i>		
Myoporaceae	<i>Eremophila latrobei</i> subsp. <i>glabra</i>		Scrophulariaceae	<i>Eremophila latrobei</i> subsp. <i>glabra</i>		
Myoporaceae	<i>Eremophila latrobei</i> subsp. <i>latrobei</i>		Scrophulariaceae	<i>Eremophila latrobei</i> subsp. <i>latrobei</i>		
Myoporaceae	<i>Eremophila longifolia</i>		Scrophulariaceae	<i>Eremophila longifolia</i>		
Myoporaceae	<i>Eremophila margarethae</i>		Scrophulariaceae	<i>Eremophila margarethae</i>		
Myoporaceae	<i>Eremophila pilosa</i>		Scrophulariaceae	<i>Eremophila pilosa</i>	Priority 1	
Myoporaceae	<i>Eremophila platycalyx</i>		Scrophulariaceae	-		Only subspecies are in the Pilbara
Myoporaceae	<i>Eremophila youngii</i> subsp. <i>lepidota</i>	Priority 4	Scrophulariaceae	<i>Eremophila youngii</i> subsp. <i>lepidota</i>	Priority 4	
Myrtaceae	<i>Calytrix carinata</i>		Myrtaceae	<i>Calytrix carinata</i>		
Myrtaceae	<i>Corymbia aspera</i>		Myrtaceae	<i>Corymbia aspera</i>		
Myrtaceae	<i>Corymbia candida</i> subsp. <i>candida</i>		Myrtaceae	<i>Corymbia candida</i> subsp. <i>candida</i>		
Myrtaceae	<i>Corymbia candida</i> subsp. <i>dipsodes</i>		Myrtaceae	<i>Corymbia candida</i> subsp. <i>dipsodes</i>		
Myrtaceae	<i>Corymbia deserticola</i>		Myrtaceae	<i>Corymbia deserticola</i>		

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Myrtaceae	<i>Corymbia ferritcola</i>		Myrtaceae	<i>Corymbia ferritcola</i>		
Myrtaceae	<i>Corymbia hamersleyana</i>		Myrtaceae	<i>Corymbia hamersleyana</i>		
Myrtaceae	<i>Eucalyptus camaldulensis</i> var. <i>obtus</i>		Myrtaceae	<i>Eucalyptus camaldulensis</i> subsp. <i>obtus</i>		
Myrtaceae	<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>		Myrtaceae	<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>		
Myrtaceae	<i>Eucalyptus lucasii</i>		Myrtaceae	<i>Eucalyptus lucasii</i>		
Myrtaceae	<i>Eucalyptus pilbarensis</i>		Myrtaceae	<i>Eucalyptus pilbarensis</i>		
Myrtaceae	<i>Eucalyptus socialis</i>		Myrtaceae	<i>Eucalyptus socialis</i>		
Myrtaceae	<i>Eucalyptus victrix</i>		Myrtaceae	<i>Eucalyptus victrix</i>		
Myrtaceae	<i>Melaleuca glomerata</i>		Myrtaceae	<i>Melaleuca glomerata</i>		
Myrtaceae	<i>Melaleuca linophylla</i>		Myrtaceae	<i>Melaleuca linophylla</i>		
Nyctaginaceae	<i>Boerhavia burbridgeana</i>		Nyctaginaceae	<i>Boerhavia burbridgeana</i>		
Nyctaginaceae	<i>Boerhavia coccinea</i>		Nyctaginaceae	<i>Boerhavia coccinea</i>		
Nyctaginaceae	<i>Boerhavia gardneri</i>		Nyctaginaceae	<i>Boerhavia gardneri</i>		
Nyctaginaceae	<i>Boerhavia paludosa</i>		Nyctaginaceae	<i>Boerhavia paludosa</i>		

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Nyctaginaceae	<i>Boerhavia repleta</i>		Nyctaginaceae	<i>Boerhavia repleta</i>		
Nyctaginaceae	<i>Boerhavia schomburgkiana</i>		Nyctaginaceae	<i>Boerhavia schomburgkiana</i>		
Oleaceae	<i>Jasminum didymum</i> subsp. <i>lineare</i>		Oleaceae	<i>Jasminum didymum</i> subsp. <i>lineare</i>		
Papaveraceae	<i>Argemone ochroleuca</i> subsp. <i>ochroleuca</i>	Introduced	Papaveraceae	<i>Argemone ochroleuca</i> subsp. <i>ochroleuca</i>	Introduced	
Papilionaceae	<i>Aeschynomene indica</i>		Fabaceae	<i>Aeschynomene indica</i>		
Papilionaceae	<i>Alysicarpus muelleri</i>		Fabaceae	<i>Alysicarpus muelleri</i>		
Papilionaceae	<i>Crotalaria dissitiflora</i> subsp. <i>benthamiana</i>		Fabaceae	<i>Crotalaria dissitiflora</i> subsp. <i>benthamiana</i>		
Papilionaceae	<i>Crotalaria medicaginea</i> var. <i>neglecta</i>		Fabaceae	<i>Crotalaria medicaginea</i> var. <i>neglecta</i>		
Papilionaceae	<i>Cullen</i> aff. <i>lachnostachys</i> (MET 15,154)		Fabaceae	<i>Cullen</i> aff. <i>lachnostachys</i> (MET 15,154)		Not formally recognised nomenclature
Papilionaceae	<i>Cullen cinereum</i>		Fabaceae	<i>Cullen cinereum</i>		
Papilionaceae	<i>Cullen graveolens</i>		Fabaceae	<i>Cullen graveolens</i>		
Papilionaceae	<i>Cullen leucochaites</i>		Fabaceae	<i>Cullen leucochaites</i>		
Papilionaceae	<i>Cullen pogonocarpum</i>		Fabaceae	<i>Cullen pogonocarpum</i>		

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Papilionaceae	<i>Desmodium campylocaulon</i>		Fabaceae	<i>Desmodium campylocaulon</i>		
Papilionaceae	<i>Desmodium filiforme</i>		Fabaceae	<i>Desmodium filiforme</i>		
Papilionaceae	<i>Erythrina vespertilio</i>		Fabaceae	<i>Erythrina vespertilio</i>		
Papilionaceae	<i>Glycine canescens</i>		Fabaceae	<i>Glycine canescens</i>		
Papilionaceae	<i>Gompholobium karijini</i>		Fabaceae	<i>Gompholobium oreophilum</i>		
Papilionaceae	<i>Indigofera colutea</i>		Fabaceae	<i>Indigofera colutea</i>		
Papilionaceae	<i>Indigofera georgei</i>		Fabaceae	<i>Indigofera georgei</i>		
Papilionaceae	<i>Indigofera linifolia</i>		Fabaceae	<i>Indigofera linifolia</i>		
Papilionaceae	<i>Indigofera linnaei</i>		Fabaceae	<i>Indigofera linnaei</i>		
Papilionaceae	<i>Indigofera monophylla</i>		Fabaceae	<i>Indigofera monophylla</i>		
Papilionaceae	<i>Isotropis forrestii</i>		Fabaceae	<i>Isotropis forrestii</i>		
Papilionaceae	<i>Lotus cruentus</i>		Fabaceae	<i>Lotus cruentus</i>		
Papilionaceae	<i>Rhynchosia minima</i>		Fabaceae	<i>Rhynchosia minima</i>		
Papilionaceae	<i>Sesbania cannabina</i>		Fabaceae	<i>Sesbania cannabina</i>		
Papilionaceae	<i>Swainsona canescens</i>		Fabaceae	<i>Swainsona canescens</i>		
Papilionaceae	<i>Swainsona kingii</i>		Fabaceae	<i>Swainsona kingii</i>		

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Papilionaceae	<i>Tephrosia</i> aff. <i>supina</i>		Fabaceae	<i>Tephrosia</i> aff. <i>supina</i>		Not formally recognised nomenclature
Papilionaceae	<i>Tephrosia clementii</i>		Fabaceae	<i>Tephrosia clementii</i>		
Papilionaceae	<i>Tephrosia rosea</i> var. <i>clementii</i>		Fabaceae	<i>Tephrosia rosea</i> var. <i>clementii</i>		
Papilionaceae	<i>Tephrosia rosea</i> var. <i>glabrior</i>		Fabaceae	<i>Tephrosia rosea</i> var. Fortescue creeks (M.I.H. Brooker 2186)		
Papilionaceae	<i>Tephrosia rosea</i> var. <i>glabrior</i> Pedley ms		Fabaceae	<i>Tephrosia rosea</i> var. Fortescue creeks (M.I.H. Brooker 2186)		
Papilionaceae	<i>Vigna lanceolata</i> var. <i>lanceolata</i>		Fabaceae	<i>Vigna lanceolata</i> var. <i>lanceolata</i>		
Pedaliaceae	<i>Josephinia eugeniae</i>		Pedaliaceae	<i>Josephinia eugeniae</i>		
Poaceae	<i>Amphipogon sericeus</i>		Poaceae	<i>Amphipogon sericeus</i>		
Poaceae	<i>Aristida contorta</i>		Poaceae	<i>Aristida contorta</i>		
Poaceae	<i>Aristida holathera</i> var. <i>latifolia</i>		Poaceae	-		only <i>Aristida holathera</i> var. <i>holathera</i> in the Pilbara
Poaceae	<i>Aristida inaequiglumis</i>		Poaceae	<i>Aristida inaequiglumis</i>		

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Poaceae	<i>Aristida ingrata</i>		Poaceae	<i>Aristida ingrata</i>		
Poaceae	<i>Aristida jerichoensis</i> var. <i>subspinulifera</i>		Poaceae	<i>Aristida jerichoensis</i> var. <i>subspinulifera</i>	Priority 3	
Poaceae	<i>Aristida latifolia</i>		Poaceae	<i>Aristida latifolia</i>		
Poaceae	<i>Bothriochloa bladhii</i>		Poaceae	<i>Bothriochloa bladhii</i>		
Poaceae	<i>Bothriochloa ewartiana</i>		Poaceae	<i>Bothriochloa ewartiana</i>		
Poaceae	<i>Brachyachne prostrata</i>		Poaceae	<i>Cynodon prostratus</i>		
Poaceae	<i>Cenchrus ciliaris</i>	Introduced	Poaceae	<i>Cenchrus ciliaris</i>	Introduced	
Poaceae	<i>Chloris pectinata</i>		Poaceae	<i>Chloris pectinata</i>		
Poaceae	<i>Chloris pumilio</i>		Poaceae	<i>Chloris pumilio</i>		
Poaceae	<i>Chloris virgata</i>	Introduced	Poaceae	<i>Chloris virgata</i>	Introduced	
Poaceae	<i>Chrysopogon fallax</i>		Poaceae	<i>Chrysopogon fallax</i>		
Poaceae	<i>Cymbopogon ambiguus</i>		Poaceae	<i>Cymbopogon ambiguus</i>		
Poaceae	<i>Cymbopogon bombycinus</i>		Poaceae	<i>Cymbopogon bombycinus</i>		
Poaceae	<i>Cymbopogon obtectus</i>		Poaceae	<i>Cymbopogon obtectus</i>		

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Poaceae	<i>Cymbopogon procerus</i>		Poaceae	-		Not recorded from the Pilbara
Poaceae	<i>Dactyloctenium radulans</i>		Poaceae	<i>Dactyloctenium radulans</i>		
Poaceae	<i>Dichanthium fecundum</i>		Poaceae	<i>Dichanthium fecundum</i>		
Poaceae	<i>Dichanthium sericeum</i> subsp. <i>humilius</i>		Poaceae	<i>Dichanthium sericeum</i> subsp. <i>humilius</i>		
Poaceae	<i>Digitaria brownii</i>		Poaceae	<i>Digitaria brownii</i>		
Poaceae	<i>Digitaria ctenantha</i>		Poaceae	<i>Digitaria ctenantha</i>		
Poaceae	<i>Echinochloa colona</i>	Introduced	Poaceae	<i>Echinochloa colona</i>	Introduced	
Poaceae	<i>Elytrophorus spicatus</i>		Poaceae	<i>Elytrophorus spicatus</i>		
Poaceae	<i>Enneapogon avenaceus</i>		Poaceae	<i>Enneapogon avenaceus</i>		
Poaceae	<i>Enneapogon caerulescens</i>		Poaceae	<i>Enneapogon caerulescens</i>		
Poaceae	<i>Enneapogon cylindricus</i>		Poaceae	<i>Enneapogon cylindricus</i>		
Poaceae	<i>Enneapogon intermedius</i>		Poaceae	-		Not recorded from the Pilbara
Poaceae	<i>Enneapogon lindleyanus</i>		Poaceae	<i>Enneapogon lindleyanus</i>		

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Poaceae	<i>Enneapogon polyphyllus</i>		Poaceae	<i>Enneapogon polyphyllus</i>		
Poaceae	<i>Enteropogon ramosus</i>		Poaceae	<i>Enteropogon ramosus</i>		
Poaceae	<i>Eragrostis cilianensis</i>	Introduced	Poaceae	<i>Eragrostis cilianensis</i>	Introduced	
Poaceae	<i>Eragrostis cumingii</i>		Poaceae	<i>Eragrostis cumingii</i>		
Poaceae	<i>Eragrostis desertorum</i>		Poaceae	<i>Eragrostis desertorum</i>		
Poaceae	<i>Eragrostis dielsii</i>		Poaceae	<i>Eragrostis dielsii</i>		
Poaceae	<i>Eragrostis eriopoda</i>		Poaceae	<i>Eragrostis eriopoda</i>		
Poaceae	<i>Eragrostis falcata</i>		Poaceae	<i>Eragrostis falcata</i>		
Poaceae	<i>Eragrostis leptocarpa</i>		Poaceae	<i>Eragrostis leptocarpa</i>		
Poaceae	<i>Eragrostis pergracilis</i>		Poaceae	<i>Eragrostis pergracilis</i>		
Poaceae	<i>Eragrostis setifolia</i>		Poaceae	<i>Eragrostis setifolia</i>		
Poaceae	<i>Eragrostis tenellula</i>		Poaceae	<i>Eragrostis tenellula</i>		
Poaceae	<i>Eragrostis xerophila</i>		Poaceae	<i>Eragrostis xerophila</i>		
Poaceae	<i>Eriachne aristidea</i>		Poaceae	<i>Eriachne aristidea</i>		
Poaceae	<i>Eriachne benthamii</i>		Poaceae	<i>Eriachne benthamii</i>		
Poaceae	<i>Eriachne ciliata</i>		Poaceae	<i>Eriachne ciliata</i>		
Poaceae	<i>Eriachne flaccida</i>		Poaceae	<i>Eriachne flaccida</i>		

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Poaceae	<i>Eriachne helmsii</i>		Poaceae	<i>Eriachne helmsii</i>		
Poaceae	<i>Eriachne lanata</i>		Poaceae	<i>Eriachne lanata</i>		
Poaceae	<i>Eriachne mucronata</i>		Poaceae	<i>Eriachne mucronata</i>		
Poaceae	<i>Eriachne pulchella</i> subsp. <i>dominii</i>		Poaceae	<i>Eriachne pulchella</i> subsp. <i>dominii</i>		
Poaceae	<i>Eriachne pulchella</i> subsp. <i>pulchella</i>		Poaceae	<i>Eriachne pulchella</i> subsp. <i>pulchella</i>		
Poaceae	<i>Eriachne semiciliata</i>		Poaceae	-		Not recorded from the Pilbara
Poaceae	<i>Eriachne tenuiculmis</i>		Poaceae	<i>Eriachne tenuiculmis</i>		
Poaceae	<i>Eriochloa pseudoacrotricha</i>		Poaceae	<i>Eriochloa pseudoacrotricha</i>		
Poaceae	<i>Eulalia aurea</i>		Poaceae	<i>Eulalia aurea</i>		
Poaceae	<i>Heteropogon contortus</i>		Poaceae	<i>Heteropogon contortus</i>		
Poaceae	<i>Iseilema dolichotrichum</i>		Poaceae	<i>Iseilema dolichotrichum</i>		
Poaceae	<i>Iseilema eremaeum</i>		Poaceae	<i>Iseilema eremaeum</i>		
Poaceae	<i>Iseilema macratherum</i>		Poaceae	<i>Iseilema macratherum</i>		
Poaceae	<i>Iseilema membranaceum</i>		Poaceae	<i>Iseilema membranaceum</i>		

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Poaceae	<i>Iseilema vaginiflorum</i>		Poaceae	<i>Iseilema vaginiflorum</i>		
Poaceae	<i>Leptochloa digitata</i>		Poaceae	<i>Leptochloa digitata</i>		
Poaceae	<i>Panicum decompositum</i>		Poaceae	<i>Panicum decompositum</i>		
Poaceae	<i>Panicum effusum</i>		Poaceae	<i>Panicum effusum</i>		
Poaceae	<i>Panicum laevinode</i>		Poaceae	<i>Panicum laevinode</i>		
Poaceae	<i>Paraneurachne muelleri</i>		Poaceae	<i>Paraneurachne muelleri</i>		
Poaceae	<i>Paspalidium basicladum</i>		Poaceae	<i>Paspalidium basicladum</i>		
Poaceae	<i>Paspalidium clementii</i>		Poaceae	<i>Paspalidium clementii</i>		
Poaceae	<i>Paspalidium constrictum</i>		Poaceae	<i>Paspalidium constrictum</i>		
Poaceae	<i>Paspalidium rarum</i>		Poaceae	<i>Paspalidium rarum</i>		
Poaceae	<i>Perotis rara</i>		Poaceae	<i>Perotis rara</i>		
Poaceae	<i>Setaria dielsii</i>		Poaceae	<i>Setaria dielsii</i>		
Poaceae	<i>Setaria verticillata</i>	Introduced	Poaceae	<i>Setaria verticillata</i>	Introduced	
Poaceae	<i>Sporobolus australasicus</i>		Poaceae	<i>Sporobolus australasicus</i>		
Poaceae	<i>Sporobolus mitchellii</i>		Poaceae	<i>Sporobolus mitchellii</i>		

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Poaceae	<i>Themeda triandra</i>		Poaceae	<i>Themeda triandra</i>		
Poaceae	<i>Tragus australianus</i>		Poaceae	<i>Tragus australianus</i>		
Poaceae	<i>Triodia angusta</i>		Poaceae	<i>Triodia angusta</i>		
Poaceae	<i>Triodia basedowii</i>		Poaceae	<i>Triodia</i> sp. Warrawagine (A.L. Payne PRP 1859)		
Poaceae	<i>Triodia brizoides</i>		Poaceae	<i>Triodia brizoides</i>		
Poaceae	<i>Triodia epactia</i>		Poaceae	<i>Triodia epactia</i>		
Poaceae	<i>Triodia lanigera</i>		Poaceae	<i>Triodia lanigera</i>		
Poaceae	<i>Triodia longiceps</i>		Poaceae	<i>Triodia longiceps</i>		
Poaceae	<i>Triodia melvillei</i>		Poaceae	<i>Triodia melvillei</i>		
Poaceae	<i>Triodia pungens</i>		Poaceae	<i>Triodia epactia</i>		
Poaceae	<i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835)		Poaceae	<i>Triodia</i> sp. Warrawagine (A.L. Payne PRP 1859)		
Poaceae	<i>Triodia wiseana</i>		Poaceae	<i>Triodia wiseana</i>		
Poaceae	<i>Urochloa occidentalis</i> var. <i>ciliata</i> (C.A. Gardner & C.E. Hubb.) B.K. Simon ms		Poaceae	<i>Urochloa occidentalis</i> var. <i>ciliata</i>		

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Poaceae	<i>Urochloa occidentalis</i> var. <i>occidentalis</i> ms (C.A. Gardner & C.E. Hubb B.K. Simon)		Poaceae	<i>Urochloa occidentalis</i> var. <i>occidentalis</i>		
Poaceae	<i>Urochloa pubigera</i>		Poaceae	<i>Urochloa pubigera</i>		
Poaceae	<i>Whiteochloa ?airoides</i>		Poaceae	<i>Whiteochloa ?airoides</i>		Tentative identification
Polygalaceae	<i>Polygala isingii</i>		Polygalaceae	<i>Polygala isingii</i>		
Polygonaceae	<i>Muehlenbeckia florulenta</i>		Polygonaceae	<i>Duma florulenta</i>		
Portulacaceae	<i>Calandrinia polyandra</i>		Portulacaceae	<i>Calandrinia polyandra</i>		
Portulacaceae	<i>Calandrinia ptychosperma</i>		Portulacaceae	<i>Calandrinia ptychosperma</i>		
Portulacaceae	<i>Portulaca conspicua</i>		Portulacaceae	<i>Portulaca conspicua</i>		
Portulacaceae	<i>Portulaca intraterranea</i>		Portulacaceae	<i>Portulaca intraterranea</i>		
Portulacaceae	<i>Portulaca oleracea</i>	Introduced	Portulacaceae	<i>Portulaca oleracea</i>		
Portulacaceae	<i>Portulaca pilosa</i>	Introduced	Portulacaceae	<i>Portulaca pilosa</i>	Introduced	
Proteaceae	<i>Grevillea berryana</i>		Proteaceae	<i>Grevillea berryana</i>		
Proteaceae	<i>Grevillea striata</i>		Proteaceae	<i>Grevillea striata</i>		

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Proteaceae	<i>Grevillea wickhamii</i> subsp. <i>hispidula</i>		Proteaceae	<i>Grevillea wickhamii</i> subsp. <i>hispidula</i>		
Proteaceae	<i>Hakea chordophylla</i>		Proteaceae	<i>Hakea chordophylla</i>		
Proteaceae	<i>Hakea lorea</i> subsp. <i>lorea</i>		Proteaceae	<i>Hakea lorea</i> subsp. <i>lorea</i>		
Rhamnaceae	<i>Ventilago viminalis</i>		Rhamnaceae	<i>Ventilago viminalis</i>		
Rubiaceae	<i>Oldenlandia crouchiana</i>		Rubiaceae	<i>Oldenlandia crouchiana</i>		
Rubiaceae	<i>Psydrax latifolia</i>		Rubiaceae	<i>Psydrax latifolia</i>		
Rubiaceae	<i>Psydrax suaveolens</i>		Rubiaceae	<i>Psydrax suaveolens</i>		
Rubiaceae	<i>Spermacoce brachystema</i>		Rubiaceae	<i>Spermacoce brachystema</i>		
Rubiaceae	<i>Synaptantha tillaeacea</i> var. <i>tillaeacea</i>		Rubiaceae	<i>Synaptantha tillaeacea</i> var. <i>tillaeacea</i>		
Santalaceae	<i>Anthobolus leptomerioides</i>		Santalaceae	<i>Anthobolus leptomerioides</i>		
Santalaceae	<i>Santalum lanceolatum</i>		Santalaceae	<i>Santalum lanceolatum</i>		
Sapindaceae	<i>Atalaya hemiglauca</i>		Sapindaceae	<i>Atalaya hemiglauca</i>		
Sapindaceae	<i>Dodonaea coriacea</i>		Sapindaceae	<i>Dodonaea coriacea</i>		
Sapindaceae	<i>Dodonaea petiolaris</i>		Sapindaceae	<i>Dodonaea petiolaris</i>		

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ecologia Environment (2009a) vascular flora list			Stantec (2017) update to vascular flora list			
Family	Species	Conservation rating / introduced	Family	Species	Conservation rating / introduced	Comment
Scrophulariaceae	<i>Cymbalaria muralis</i>	Introduced	Plantaginaceae	-	Introduced	Not recorded from the Pilbara
Scrophulariaceae	<i>Stemodia grossa</i>		Plantaginaceae	<i>Stemodia grossa</i>		
Scrophulariaceae	<i>Stemodia viscosa</i>		Plantaginaceae	<i>Stemodia viscosa</i>		
Scrophulariaceae	<i>Striga curviflora</i>		Plantaginaceae	<i>Striga curviflora</i>		
Solanaceae	<i>Nicotiana benthamiana</i>		Solanaceae	<i>Nicotiana benthamiana</i>		
Solanaceae	<i>Nicotiana occidentalis</i>		Solanaceae	<i>Nicotiana occidentalis</i>		
Solanaceae	<i>Solanum centrale</i>		Solanaceae	<i>Solanum centrale</i>		
Solanaceae	<i>Solanum dioicum</i>		Solanaceae	<i>Solanum dioicum</i>		
Solanaceae	<i>Solanum ellipticum</i>		Solanaceae	-		An excluded name, does not occur in Western Australia
Solanaceae	<i>Solanum ferocissimum</i>		Solanaceae	<i>Solanum ferocissimum</i>		
Solanaceae	<i>Solanum horridum</i>		Solanaceae	<i>Solanum horridum</i>		
Solanaceae	<i>Solanum lasiophyllum</i>		Solanaceae	<i>Solanum lasiophyllum</i>		
Solanaceae	<i>Solanum phlomoides</i>		Solanaceae	<i>Solanum phlomoides</i>		
Solanaceae	<i>Solanum sturtianum</i>		Solanaceae	<i>Solanum sturtianum</i>		
Sterculiaceae	<i>Keraudrenia nephrosperma</i>		Malvaceae	<i>Seringia nephrosperma</i>		

Appendix A Summary of changes to the vascular flora list

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ecologia Environment (2009a) vascular flora list			Stantec (2017) update to vascular flora list			
Family	Species	Conservation rating / introduced	Family	Species	Conservation rating / introduced	Comment
Sterculiaceae	<i>Keraudrenia velutina</i> subsp. <i>elliptica</i>		Malvaceae	<i>Seringia elliptica</i>		
Sterculiaceae	<i>Melhania oblongifolia</i>		Malvaceae	<i>Melhania oblongifolia</i>		
Sterculiaceae	<i>Rulingia loxophylla</i>		Malvaceae	<i>Androcalva loxophylla</i>		
Sterculiaceae	<i>Rulingia luteiflora</i>		Malvaceae	<i>Androcalva luteiflora</i>		
Sterculiaceae	<i>Waltheria indica</i>		Malvaceae	<i>Waltheria indica</i>		
Tiliaceae	<i>Corchorus incanus</i> subsp. <i>incanus</i>		Malvaceae	<i>Corchorus incanus</i> subsp. <i>incanus</i>		
Tiliaceae	<i>Corchorus laniflorus</i>		Malvaceae	<i>Corchorus laniflorus</i>		
Tiliaceae	<i>Corchorus lasiocarpus</i> subsp. <i>lasiocarpus</i>		Malvaceae	<i>Corchorus lasiocarpus</i> subsp. <i>lasiocarpus</i>		
Tiliaceae	<i>Corchorus lasiocarpus</i> subsp. <i>parvus</i>		Malvaceae	<i>Corchorus lasiocarpus</i> subsp. <i>parvus</i>		
Tiliaceae	<i>Corchorus parviflorus</i>		Malvaceae	<i>Corchorus parviflorus</i>		
Tiliaceae	<i>Corchorus tridens</i>		Malvaceae	<i>Corchorus tridens</i>		
Tiliaceae	<i>Triumfetta</i> aff. <i>chaetocarpa</i>		Malvaceae	<i>Triumfetta</i> aff. <i>chaetocarpa</i>		Not formally recognised nomenclature
Tiliaceae	<i>Triumfetta maconochieana</i>		Malvaceae	<i>Triumfetta maconochieana</i>		
Typhaceae	<i>Typha domingensis</i>		Typhaceae	<i>Typha domingensis</i>		

Appendix A Summary of changes to the vascular flora list

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ecologia Environment (2009a) vascular flora list			Stantec (2017) update to vascular flora list			
Family	Species	Conservation rating / introduced	Family	Species	Conservation rating / introduced	Comment
Verbenaceae	<i>Clerodendrum floribundum</i> var. <i>angustifolium</i>		Lamiaceae	<i>Clerodendrum floribundum</i> var. <i>angustifolium</i>		
Verbenaceae	<i>Clerodendrum floribundum</i> var. <i>floribundum</i>		Lamiaceae	<i>Clerodendrum floribundum</i> var. <i>floribundum</i>		
Verbenaceae	<i>Clerodendrum floribundum</i> var. <i>ovatum</i>		Lamiaceae	<i>Clerodendrum floribundum</i> var. <i>ovatum</i>		
Violaceae	<i>Hybanthus aurantiacus</i>		Violaceae	<i>Hybanthus aurantiacus</i>		
Zygophyllaceae	<i>Tribulus astrocarpus</i>		Zygophyllaceae	<i>Tribulus astrocarpus</i>		
Zygophyllaceae	<i>Tribulus cistoides</i>		Zygophyllaceae	<i>Tribulus cistoides</i>		
Zygophyllaceae	<i>Tribulus hirsutus</i>		Zygophyllaceae	<i>Tribulus hirsutus</i>		
Zygophyllaceae	<i>Tribulus occidentalis</i>		Zygophyllaceae	<i>Tribulus occidentalis</i>		
Zygophyllaceae	<i>Tribulus suberosus</i>		Zygophyllaceae	<i>Tribulus suberosus</i>		
Zygophyllaceae	<i>Zygophyllum iodocarpum</i>		Zygophyllaceae	<i>Zygophyllum iodocarpum</i>		

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Species	1A_1	1A_2	1B_2	1B_3	1C_1	1C_2	1C_3	1D_1	1D_2	1D_3	1E_1	1E_2	1F_1	1F_2	1F_3	1G_1	1G_2	3A_1	3A_2	3A_3	3B_1	3B_2	3B_3	3C_1	3C_2	3C_3	3D_1	3D_2	3D_3	3E_1	3E_2	3F_1	3F_2	3F_3		
<i>Abutilon crytopetalum</i>																							X													
<i>Abutilon cunninghamii</i>																X																				
<i>Abutilon lepidum</i>																					X															
<i>Abutilon otocarpum</i>									X									X										X				X				
<i>Acacia ?aptaneura</i>				X																																
<i>Acacia ?tumida</i> var. <i>pilbaraensis</i> x																																			X	
<i>Acacia acradenia</i>						X				X																										
<i>Acacia ancistrocarpa</i>							X	X				X																								
<i>Acacia aptaneura</i> #								X	X						X			X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	
<i>Acacia atkinsiana</i>																X																				
<i>Acacia ayersiana</i>																														X						
<i>Acacia ayersiana</i> hybrid															X																					
<i>Acacia bivenosa</i>		X			X												X																			
<i>Acacia catenulata</i> subsp. <i>occidentalis</i>																																			X	
<i>Acacia coriacea</i>																			X																	
<i>Acacia inaequilatera</i>					X									X																						
<i>Acacia maitlandii</i>			X																																	
<i>Acacia marramamba</i>				X						X	X																									
<i>Acacia monticola</i>				X												X																				
<i>Acacia paraneura</i>																																			X	
<i>Acacia pruinocarpa</i>			X	X	X			X	X	X						X	X	X	X	X											X		X		X	
<i>Acacia pyrifolia</i> var. <i>morrisonii</i>																				X																
<i>Acacia rhodophloia</i>									X											X									X				X			

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Species	1A_1	1A_2	1B_2	1B_3	1C_1	1C_2	1C_3	1D_1	1D_2	1D_3	1E_1	1E_2	1F_1	1F_2	1F_3	1G_1	1G_2	3A_1	3A_2	3A_3	3B_1	3B_2	3B_3	3C_1	3C_2	3C_3	3D_1	3D_2	3D_3	3E_1	3E_2	3F_1	3F_2	3F_3	
<i>Acacia synchronicia</i>																								X											
<i>Acacia tetragonophylla</i>							X											X	X	X		X				X	X	X			X	X	X	X	
<i>Acacia tumida</i> var. <i>pilbarensis</i>				X																															
* <i>Aerva javanica</i>																			X	X															
<i>Alysicarpus muelleri</i>																						X		X											
<i>Aristida contorta</i>				X					X									X	X						X	X		X	X	X					X
<i>Aristida holathera</i>																													X						
<i>Aristida inaequiglumis</i> #																		X							X				X				X		
<i>Aristida latifolia</i>																					X														
<i>Atalaya hemiglauca</i>																			X																
* <i>Bidens bipinnata</i>																		X			X	X	X							X					
<i>Bulbostylis barbata</i>													X																						
<i>Capparis spinosa</i> subsp. <i>nummularia</i>																																	X		
<i>Capparis umbonata</i>																			X																
* <i>Cenchrus ciliaris</i>																			X			X									X				
* <i>Cenchrus setiger</i>																							X												
<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>																																	X		
<i>Chrysopogon fallax</i>																					X	X	X												
<i>Cleome viscosa</i>							X											X		X						X			X						X
<i>Corchorus ?lasiocarpus</i>																					X														
<i>Corchorus lasiocarpus</i> subsp. <i>lasiocarpus</i>				X			X																												
<i>Corchorus lasiocarpus</i> subsp. <i>parvus</i>								X	X							X				X															
<i>Corchorus parviflorus</i>																		X																	

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Species	1A_1	1A_2	1B_2	1B_3	1C_1	1C_2	1C_3	1D_1	1D_2	1D_3	1E_1	1E_2	1F_1	1F_2	1F_3	1G_1	1G_2	3A_1	3A_2	3A_3	3B_1	3B_2	3B_3	3C_1	3C_2	3C_3	3D_1	3D_2	3D_3	3E_1	3E_2	3F_1	3F_2	3F_3			
<i>Corymbia hamersleyana</i>					X	X																															
<i>Corymbia</i> sp.																							X														
<i>Cucumis</i> sp.																		X	X	X		X	X								X						
<i>Cymbopogon ambiguus</i>				X											X					X																	
<i>Dampiera candidans</i>							X																														
<i>Dichanthium sericeum</i> subsp. <i>humilius</i> #																					X	X		X													
<i>Dicladantha forrestii</i>																							X														
<i>Dodonaea petiolaris</i>				X				X	X									X		X		X			X			X	X		X	X		X			
<i>Dupperreya commixta</i>																				X									X								
<i>Dysphania kalpari</i>																								X	X	X	X							X			
<i>Dysphania</i> <i>rhadinostachya</i>				X											X	X																X		X			
<i>Enchylaena tomentosa</i>																			X																		
<i>Enneapogon polyphyllus</i>									X									X	X	X	X	X	X		X	X	X		X		X						
<i>Enneapogon</i> sp.																X																					
<i>Eragrostis leptocarpa</i>																							X														
<i>Eragrostis tenellula</i>																					X																
<i>Eremophila cunefolia</i>																			X										X	X							
<i>Eremophila forrestii</i> subsp. <i>forrestii</i>								X																				X				X	X				
<i>Eremophila lanceolata</i> #																								X	X							X	X				
<i>Eremophila latrobei</i>																										X		X									
<i>Eremophila latrobei</i> subsp. <i>filiformis</i>																		X	X			X							X		X	X			X		
<i>Eremophila latrobei</i> subsp. <i>glabra</i>								X																													
<i>Eremophila longifolia</i>														X																							

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Species	1A_1	1A_2	1B_2	1B_3	1C_1	1C_2	1C_3	1D_1	1D_2	1D_3	1E_1	1E_2	1F_1	1F_2	1F_3	1G_1	1G_2	3A_1	3A_2	3A_3	3B_1	3B_2	3B_3	3C_1	3C_2	3C_3	3D_1	3D_2	3D_3	3E_1	3E_2	3F_1	3F_2	3F_3		
<i>Eriachne ?mucronata</i>																												X								
<i>Eriachne helmsii</i>																														X					X	
<i>Eriachne mucronata</i>															X	X		X																		X
<i>Eriachne pulchella</i> subsp. <i>pulchella</i>																X																				
<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>	X	X				X				X		X			X	X	X																			
<i>Eulalia aurea</i>																									X											
<i>Euphorbia biconvexa</i>																							X													
<i>Euphorbia boophthona</i>																															X					
<i>Evolvulus alsinoides</i> var. <i>villosicalyx</i>																		X				X			X		X					X	X			
<i>Fimbristylis simulans</i>						X					X																									
<i>Glycine canescens</i>																		X																		
<i>Gomphrena affinis</i> subsp. <i>pilbarensis</i>																					X	X														
<i>Gomphrena canescens</i>				X					X									X	X						X			X								X
<i>Gomphrena kanisii</i>							X														X						X			X						
<i>Gomphrena</i> sp.										X																										
<i>Goodenia affinis</i> subsp. <i>pilbarensis</i>																						X														
<i>Goodenia muelleriana</i> #																								X												
<i>Goodenia prostata</i>																		X	X		X	X				X			X				X			X
<i>Grevillea berryana</i>															X																			X		
<i>Grevillea striata</i>																																		X		
<i>Grevillea wickhamii</i> subsp. <i>hispidula</i>		X	X			X	X		X	X		X	X			X																				
<i>Hakea lorea</i>						X																														

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Species	1A_1	1A_2	1B_2	1B_3	1C_1	1C_2	1C_3	1D_1	1D_2	1D_3	1E_1	1E_2	1F_1	1F_2	1F_3	1G_1	1G_2	3A_1	3A_2	3A_3	3B_1	3B_2	3B_3	3C_1	3C_2	3C_3	3D_1	3D_2	3D_3	3E_1	3E_2	3F_1	3F_2	3F_3	
<i>Hakea lorea</i> subsp. <i>lorea</i>					X		X												X											X	X				
<i>Heliotropium chrysocaprum</i>														X																					
<i>Heliotropium cunninghamii</i>														X																					
<i>Hibiscus leptocladus</i>																											X								
<i>Hibiscus sturtii</i> var. <i>platyklamys</i>									X																										
<i>Hybanthus aurantiacus</i>									X																										
<i>Indigofera monophylla</i>					X							X		X					X																
<i>Ipomoea muelleri</i>																		X			X														
<i>Isotropis forrestii</i>																							X												
<i>Maireana platycarpa</i>																																			
<i>Maireana villosa</i>																						X			X		X				X	X	X		
* <i>Malvastrum americanum</i>																		X	X	X	X	X	X		X										
<i>Neptunia dimorphantha</i>																					X														
<i>Oldenlandia crouchiana</i>														X																					
<i>Paraneurachne muelleri</i>																											X			X					
<i>Peripleura virgata</i>															X																				
<i>Petalostylis labicheoides</i>																X				X															
<i>Polycarpaea ?holtzei</i>												X	X																		X				
<i>Polycarpaea longiflora</i>		X							X											X											X				
<i>Portulaca oleracea</i>																											X								
<i>Psydrax latifolia</i>								X																											
<i>Pterocaulon sphacelatum</i>										X						X	X	X	X	X	X	X		X											

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Species	1A_1	1A_2	1B_2	1B_3	1C_1	1C_2	1C_3	1D_1	1D_2	1D_3	1E_1	1E_2	1F_1	1F_2	1F_3	1G_1	1G_2	3A_1	3A_2	3A_3	3B_1	3B_2	3B_3	3C_1	3C_2	3C_3	3D_1	3D_2	3D_3	3E_1	3E_2	3F_1	3F_2	3F_3			
<i>Pterocaulon sphaeranthoides</i>				X											X																						
<i>Ptilotus aevoides</i>								X														X		X	X	X				X							
<i>Ptilotus calostachyus</i> subsp. <i>calostachyus</i>			X		X		X			X	X	X				X	X																				
<i>Ptilotus gomphrenoides</i> var. <i>gomphrenoides</i>																						X		X		X											
<i>Ptilotus macrocephalus</i>																												X									
<i>Ptilotus nobilis</i>								X	X	X			X		X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	
<i>Ptilotus obovatus</i>																		X	X				X														
<i>Ptilotus schwartzii</i>									X						X													X	X			X	X	X			
<i>Rhagodia</i> sp. Hamersley (P3)					X									X								X					X		X								
<i>Rhyncharrhena lineraris</i>																													X								
<i>Rhynchosia minima</i>																				X	X																
<i>Rostellularia adscendens</i> var. <i>clementii</i>																							X														
<i>Salsola australis</i>																			X			X		X	X	X				X							
<i>Sclerolaena cornishiana</i>																		X	X							X	X		X								
<i>Sclerolaena costata</i>																													X					X			
<i>Sclerolaena</i> sp.																						X														X	
<i>Senna ?glutinosa</i>																																	X				
<i>Senna artemisioides</i> subsp. <i>helmsii</i>														X				X				X		X			X	X				X					
<i>Senna artemisioides</i> subsp. <i>oligophylla</i>														X									X														
<i>Senna artemisioides</i> subsp. <i>oligophylla</i> x <i>helmsii</i>																					X	X															
<i>Senna glutinosa</i> subsp. <i>glutinosa</i>		X	X		X	X	X		X	X	X	X	X			X																				X	

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Species	1A_1	1A_2	1B_2	1B_3	1C_1	1C_2	1C_3	1D_1	1D_2	1D_3	1E_1	1E_2	1F_1	1F_2	1F_3	1G_1	1G_2	3A_1	3A_2	3A_3	3B_1	3B_2	3B_3	3C_1	3C_2	3C_3	3D_1	3D_2	3D_3	3E_1	3E_2	3F_1	3F_2	3F_3		
<i>Senna glutinosa</i> subsp. <i>pruinosa</i>						X																														
<i>Senna glutinosa</i> subsp. <i>X luerssenii</i>				X		X		X	X	X		X	X	X					X										X		X				X	
<i>Senna notabilis</i>									X																			X								
<i>Senna sericea</i>																	X																			
<i>Senna symonii</i> #													X																							
<i>Setaria verticillata</i>																				X																
<i>Sida ectogama</i>																																	X			
<i>Sida fibulifera</i>																																			X	
<i>Sida</i> sp.																																			X	
<i>Sida</i> sp. Verrucose glands																													X			X				
<i>Solanum ellipticum</i>										X						X																				
<i>Solanum horridum</i>												X																								
<i>Solanum lasiophyllum</i>											X		X						X			X		X	X				X	X	X	X	X		X	
<i>Solanum phlomoides</i>																X																				
<i>Solanum sturtianum</i>								X								X																				
<i>Sporobolus australasicus</i> #									X				X					X			X	X		X	X	X	X				X					
<i>Streptoglossa bubakii</i>																								X	X											
<i>Tephrosia supina</i>														X										X												
<i>Themeda triandra</i>																				X																
<i>Trachymene oleracea</i>							X	X			X				X																					
<i>Tribulus suberosus</i>				X		X			X				X																X							
<i>Trichodesma zeylanicum</i>							X	X							X				X											X					X	
<i>Trigastrotheca molluginea</i> α							X							X																						

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Species	1A_1	1A_2	1B_2	1B_3	1C_1	1C_2	1C_3	1D_1	1D_2	1D_3	1E_1	1E_2	1F_1	1F_2	1F_3	1G_1	1G_2	3A_1	3A_2	3A_3	3B_1	3B_2	3B_3	3C_1	3C_2	3C_3	3D_1	3D_2	3D_3	3E_1	3E_2	3F_1	3F_2	3F_3	
<i>Triodia angusta</i> #	X	X		X	X						X		X		X	X	X																		
<i>Triodia brizoides</i> #	X	X		X									X			X	X																		
<i>Triodia epactia</i>											X	X			X																				
<i>Triodia scintillans</i>			X				X		X	X		X			X																				
<i>Triodia wiseana</i> #						X								X																					
* <i>Vachellia farnesiana</i>																							X												

indicates species were formally identified at the Western Australian Herbarium

* indicates an introduced species

Appendix B Vegetation Quadrat Species List
September 15, 2017