Ministers North to Yandi Corridor
Flora and Vegetation Survey

Prepared for BHP Western Australia Iron Ore
13 December 2018

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EXECUTIVE SUMMARY

BHP Western Australia Iron Ore (BHP WAIO) commissioned Onshore Environmental Consultants Pty Ltd (Onshore Environmental) to undertake a single season detailed flora and vegetation survey and follow-up targeted flora survey, covering the Ministers North to Yandi Corridor (hereafter referred to as the study area). The study area lies between the southern boundary of BHP WAIO's Yandi mining operations and the northern boundary of BHP WAIO's Ministers North project area, and covers an area of approximately 2,031 ha (Figure 1).

The single season detailed flora and vegetation survey was conducted between the 9th and 13th of October 2017, with a follow-up targeted flora survey completed between the 21st and 27th of May 2018. A total of 256 plant taxa (including varieties and subspecies) from 45 families and 130 genera were recorded from the study area. Species representation was greatest among the Fabaceae, Poaceae, Malvaceae, Asteraceae and Amaranthaceae families. The most speciose genera were *Acacia* (20 taxa), *Sida* (11 taxa), *Senna* (9 taxa) and *Ptilotus* (8 taxa).

There were no plant taxa gazetted as Threatened Flora pursuant to subsection (2) of section 23F of the *Wildlife Conservation Act 1950* (WC Act), or listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), recorded from the study area. Three Priority flora taxa were recorded; *Rostellularia adscendens* var. *latifolia* (Priority 3), *Sida* sp. Barlee Range (S. van Leeuwen 1642) (Priority 3) and *Goodenia nuda* (Priority 4).

There were ten introduced flora species recorded from the study area. None of these taxa were listed as a Declared Pest under the *Biosecurity and Agriculture Management Act 2007* (BAM Act).

A total of 12 vegetation associations classified as seven broad floristic formations were described and mapped from the study area. None of the vegetation associations were aligned with Federal or State listed Threatened Ecological Communities (TECs) or State listed Priority Ecological Communities (PECs), and all are well represented regionally.

Vegetation condition was rated as *excellent* across the majority of the study area, with small areas along the larger drainage channels classified as *very good* in response to grazing by cattle, introduction of weeds, old access tracks and fire.

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1.0 INTRODUCTION

1.1 Preamble

Onshore Environmental completed a single season detailed flora and vegetation survey and follow-up targeted flora survey of the Ministers North to Yandi Corridor in October 2017 and May 2018 respectively. The study area is situated approximately 90 km north-west of Newman, in the Pilbara region of Western Australia. The proposed corridor links BHP WAIO's existing Yandi mining operations and the Ministers North project area (Figure 1).

1.2 Previous Surveys

At least 16 baseline flora and vegetation surveys have been completed at BHP WAIO tenements within a 25 km radius of the study area (Appendix 1), including four surveys that partially overlap the northern sector of the study area:

- Onshore Environmental (2014) Area C West to Yandi Level 2 Flora and Vegetation Survey;
- Biota (2002) Mining Area C Rail Corridor - Rare Flora Survey;
- Ecologia (2001) Mining Area C to Yandi Rail Line Baseline Weed Survey, and
- HGM (1999) Marillana Creek Western Access Corridor- Biological Assessment.

1.3 Climate

The Pilbara region has an arid to tropical climate with two distinct seasons; a hot summer from October to April, and a mild winter from May to September. The majority of annual rainfall is received during the hot summer months, which is typically associated with cyclonic activity and thunderstorms, with falls being of higher intensity and shorter duration contributing to an erratic annual range (Sudmeyer 2016).

Annual rainfall for Newman ranges from 36 mm to over 619 mm, with a long-term average of 332 mm occurring over 30 rain days (BOM 2018). Most of the annual precipitation occurs during the four summer months from December to March. The average maximum summer temperature ranges between 38ºC and 40ºC, while winter maximum temperatures range from 28ºC to 30.5ºC (BOM 2018).

The single season detailed flora and vegetation survey and follow-up targeted flora survey were undertaken in October 2017 and May 2018 respectively. Seasonal conditions for both surveys were rated as 'poor'. Although total annual rainfall for 2017 was above average at 519 mm, the majority of this rainfall fell during the summer period with exceptionally low monthly totals received from May to December. January and February 2018 received above average monthly rainfall, with low rainfall experienced for the period from March to May 2018 (Figure 2, BOM 2018).

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Figure 1

Study Area Location

Legend

- Study Area
- BHP Tenure

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Kilometers
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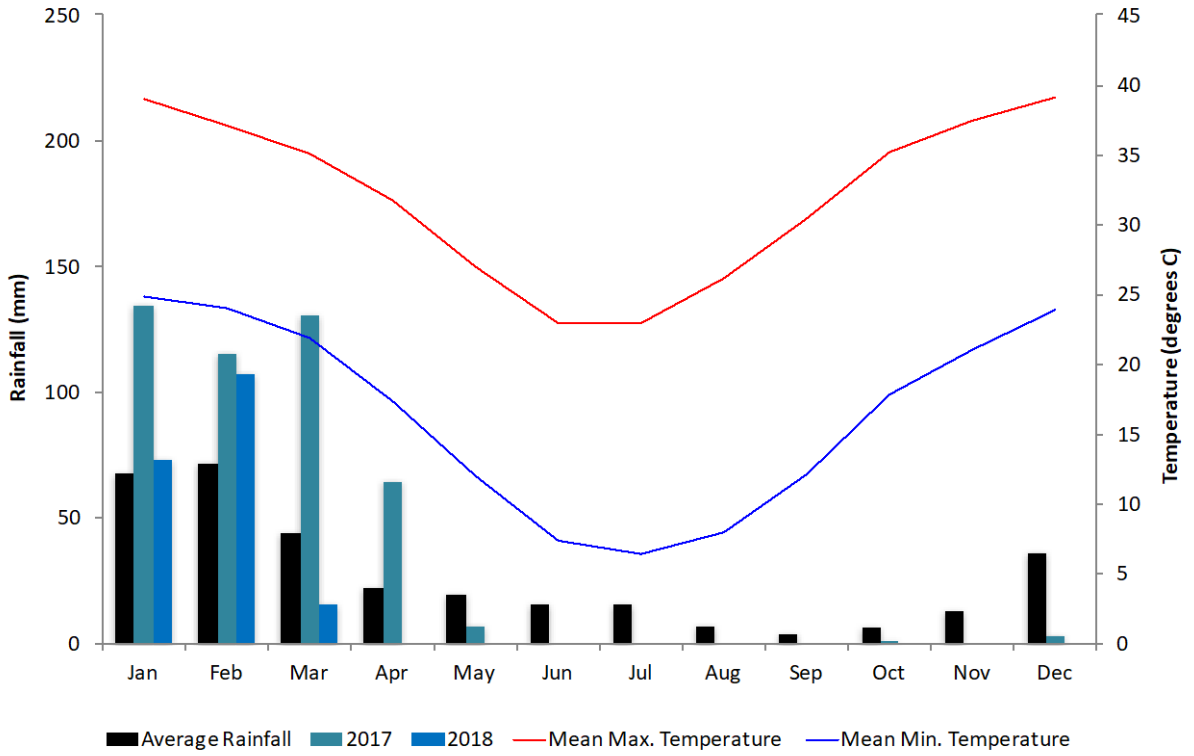

Figure 2 Climatic data recorded from Newman Airport, with long term monthly rainfall compared against monthly rainfall for 2017 and January-April 2018 (BoM 2018).

1.4 Biogeographic Regions

The Interim Biogeographic Regionalisation for Australia (IBRA) divides Australia into 89 bioregions and 419 sub-regions based on climate, geology, landform, native vegetation and species information (Department of Environment 2013). The study area lies within the Pilbara Bioregion which consists of four sub-regions: Chichester, Fortescue, Hamersley and Roebourne. The study area is located within the Hamersley sub-region (PIL2).

The Hamersley sub-region is described as a "mountainous area of Proterozoic sedimentary ranges and plateaux, dissected by gorges (basalt, shale and dolerite) (Kendrick 2003). It contains Mulga low woodland over bunch grasses on fine textured soils in valley floors, and *Eucalyptus leucophloia* over *Triodia brizoides* on skeletal soils of the ranges. The climate is semi-desert tropical, averages 300 mm annual rainfall, usually in summer cyclonic or thunderstorm events. Winter rain is not uncommon. Drainage is into either the Fortescue River (to the north), the Ashburton River to the south, or the Robe River to the west."

1.5 Existing Land Use

Land tenure in the Pilbara consists of Aboriginal and leasehold reserves, national parks and reserves and Crown land which fall under a range of pastoral and mining leases. The current use of lands surrounding the study area is predominantly for mineral exploration, iron ore mining and dry land agriculture, specifically pastoralism, cattle grazing and rangelands. The study area is located within the Shire of East Pilbara, partly on Marillana and Juna Downs stations, and approximately 4 km south of BHP WAIO's existing Yandi mining operations.

Conservation lands amount to less than ten percent of the total area of the Pilbara bioregion, with the major reserves being Karijini and Millstream-Chichester National Parks. These parks

are supplemented by lesser conservation estates such as Cane River and Meentheena Conservation Parks. Wetlands of National significance include the permanent pools of Millstream and Karijini National Parks and the Fortescue Marsh to the north of the study area. The study area is not within or adjacent to any gazetted conservation reserves. Karijini National Park is located approximately 50 km west of the study area.

1.6 Landforms

The Hamersley Plateau is characterised by long strike ridges rising 300 m or more above valley floors and flats. Other characteristic landforms of the general area include stony plains and some alluvial plains and sandplains (Tille 2006).

The study area is dominated by dolerite hills dissected by three large drainage lines in the northwest, central and southeast. The surface water flows are in an easterly direction into Yandicoogina Creek, then Marillana Creek and Weeli Wolli Creek, and eventually northwards into the Fortescue Marsh. Ironstone mesa crests fringe the major drainage lines in the northern and central parts of the study area, with distinctive cliff lines present in central and southern parts. Floodplains and stony plains are prominent features in central and southern sectors of the study area, with isolated gorges restricted to southern parts.

1.7 Soils

Tille (2006) classified the most recent and detailed mapping of Western Australia's Rangelands and Arid Interior into a hierarchy of soil-landscape mapping units. The study area is located within the following soil unit:

- 285 Hamersley Plateaux Zone, located in the Fortescue Province and described as: 'Hills and dissected plateaux (with some stony plains and hardpan wash plains) on sedimentary and volcanic rocks of the Hamersley Basin (Ophthalmia Fold Belt). Stony soils with red shallow loams and some red/brown non-cracking clays and red loamy earths.'

The Australian Soil Resource Information System (CSIRO 2006) described a single soil type as occurring within the study area and surrounds:

- Fa13: Ranges of banded jaspilite and chert along with shales, dolomites, and iron ore formations; some areas of ferruginous duricrust as well as occasional narrow winding valley plains and steeply dissected pediments. This unit is largely associated with the Hamersley and Ophthalmia Ranges. The soils are frequently stony and shallow and there are extensive areas without soil cover: chief soils are shallow stony earthy loams (Um5.51) along with some (Uc5.11) soils on the steeper slopes. Associated are (Dr2.33, Dr2.32) soils on the limited areas of dissected pediments, while (Um5.52) and (Uf6.71) soils occur on the valley plains

1.8 Geology

The ancient continental Western Shield dominates the geology of Western Australia. The Pilbara region makes up a portion of the Western Shield and consists of pre-Cambrian, Proterozoic and Archaean rocks. Important mineral reserves, including iron ore, are associated with these rock formations.

The study area is situated on the southern edge of the Pilbara Craton in close proximity to the sedimentary basins that separate the Yilgarn and Pilbara Cratons. These consist of the sandstone and shales of the Collier and Bresnahan Basins and granites of the Sylvania Inlier (Tille 2006). The Pilbara Craton lies beneath the Proterozoic rocks of the Hamersley and

Bangemall Basins. The Hamersley Basin covers the majority of the southern part of the Pilbara Craton and is separated into three stratigraphic groups; the Fortescue, Hamersley and Turee Creek rock groups.

The Fortescue Group consists mainly of basalt with beds of siltstone, mudstone, shale, dolomite and jaspilite. These rocks form the Chichester Plateau, which lies beneath the Hamersley Plateau. The Turee Creek Group consists of interbedded mudstone, siltstone, sandstone, conglomerate and carbonate. These rocks are the youngest of the three groups and are exposed mainly in the Ashburton Valley.

The Hamersley Group is the most relevant to the study area as it contains both the Brockman Iron Formation and the Marra Mamba Iron Formation, which together provide most of the major iron ore deposits in the Pilbara (O'Brien and Associates 1992). The Ministers North deposit is a Brockman Iron deposit centred on the Wirribi Anticline. The Dales Gorge Member outcrops as an inlier surrounded by largely unenriched Joffre Member of the main Wirriba range (Kneeshaw 2008).

The surface geology of the study area is dominated by the following geological formations (Thorne and Tyler 1997):

- Phj: Weeli Wolli Formation: banded iron-formation (commonly jaspilitic), pelite, and numerous metadolerite sills;
- Qa: Alluvium unconsolidated silt, sand, and gravel; in drainage channels and on adjacent floodplains;
- Czp: Robe Pisolite: pisolitic limonite deposits developed along river channels;
- Czr: Hematite-goethite deposits on banded iron-formation and adjacent scree deposits; and
- Czc: Colluvium- partly consolidated quartz and rock fragments in silt and sand matrix; old valley-fill deposits.

1.9 Flora and Vegetation

The study area is located on the northern boundary of the Hamersley Botanical District (fringing the Fortescue Botanical District), which is part of the Eremaean Province (Beard 1975). It is dominated by tree and shrub steppe communities consisting mainly of *Eucalyptus* and *Acacia* species; *Triodia pungens* and *Triodia wiseana* and some Mulga (*Acacia aptaneura*) occur within valley areas and short grass plains occur on alluvia.

Vegetation within the study area (Figure 3) is classified as the following vegetation associations, as mapped by Beard (1975) and later refined by Shepherd *et al.* (2002):

- 82: Hummock grasslands, low tree steppe; Snappy gum over *Triodia wiseana*; and
- 18: Low woodland; mulga (*Acacia aneura*).

While the Pre-European extent for each vegetation association is approximately 100 percent, less than nine percent of each association occurs within formal or informal reserves (Table 1).

Table 1 Pre-European extent of vegetation associations occurring within the study area (Shepherd *et al.* 2002).

Vegetation Association	Description	Pre-Euro. Extent Remaining (ha)	Pre-European Extent in IUCN I-IV Reserves (ha)
Hamersley - 82	Hummock grasslands, low tree steppe; Snappy gum over *Triodia wiseana*	2,157,852 (99.4%)	262,983 (12.1%)
Hamersley - 18	Low woodland; mulga (*Acacia aneura*)	576,432 (99.3%)	113,416 (19.5%)

1.10 Land Systems

The Department of Agriculture (now the Department of Primary Industries and Regional Development) conducted inventory and condition surveys of the Pilbara (Van Vreeswyk *et al.* 2004) using an integrated survey method involving the land system approach to rangeland description evaluation. The primary objective of the surveys was to provide comprehensive descriptions and mapping of the biophysical resources of the region, as well as an evaluation on the condition of soils and vegetation.

A total of 102 land systems were defined in the Pilbara at a scale of 1: 250,000 (Van Vreeswyk *et al.* 2004), four of which occur within the study area (Table 2, Figure 4). The northern and southern halves of the study area are primarily comprised of ranges associated with the McKay and Newman land systems respectively. A localised area within the central sector of the study area supports mesas characteristic of the Robe land system, with stony plains of the Boolgeeda land system represented in the south-east corner of the study area (Figure 4).

Table 2 Land systems occurring within the study area (descriptions from Van Vreeswyk *et al.* 2004).

Land System	Representation in the Pilbara	Description
Boolgeeda	7,748 km^2 or 4.3%	Stony plains with hard Spinifex grasslands or Mulga shrublands. The geology is quaternary colluvium.
McKay	4,202 km^2 or 2.3%	Hills, ridges, plateaux remnants and breakaways of meta sedimentary and sedimentary rocks supporting hard spinifex grasslands.
Newman	14,580 km^2 or 8.0%	Rugged jaspilite plateaux, ridges and mountains supporting hard spinifex grasslands.
Robe	865 km^2 or 0.5%	Low limonite mesas and buttes supporting soft spinifex (and occasionally hard spinifex) grasslands.

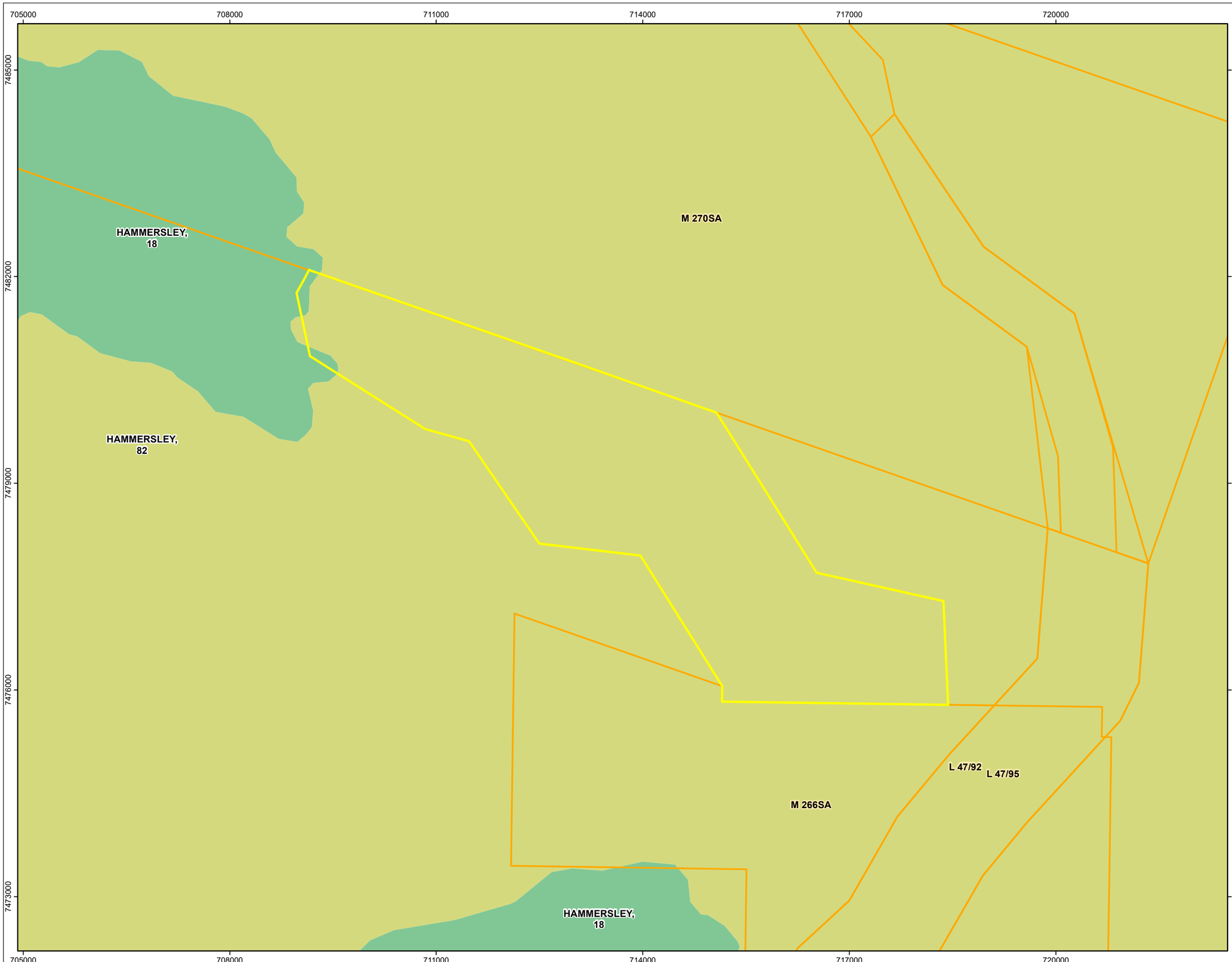

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Figure 3

Beard (1975) vegetation complexes within the study area

Legend

- Study
- BHP Tenements

Pre-European Vegetation (Beard 1975)

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- HAMMERSLEY,

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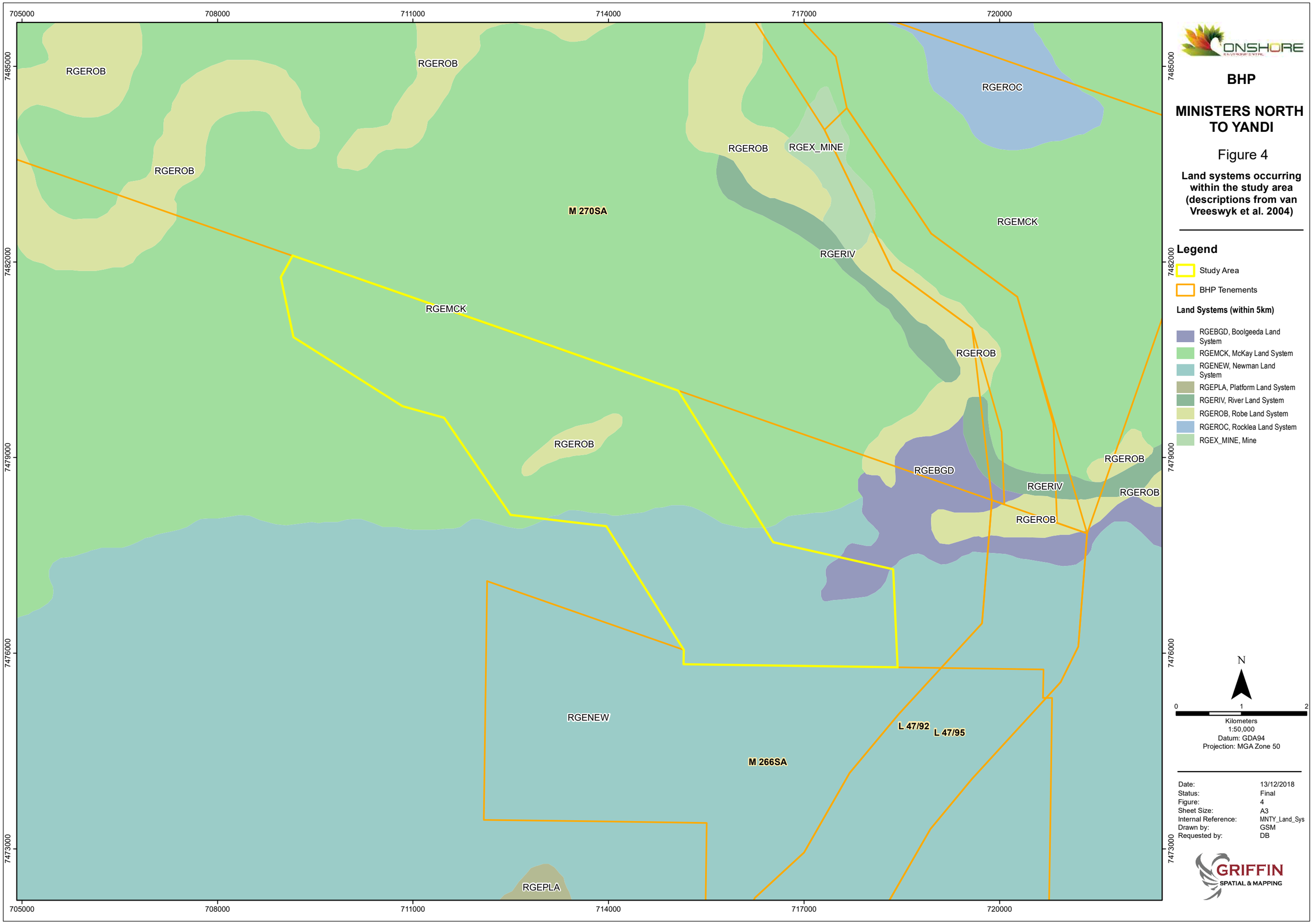

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Figure 4

Land systems occurring within the study area (descriptions from van Vreeswyk et al. 2004)

Legend

- Study Area
- BHP Tenements

Land Systems (within 5km)

- RGEBGD, Boolgeeda Land System
- RGEMCK, McKay Land System
- RGENEW, Newman Land System
- RGEPLA, Platform Land System
- RGERIV, River Land System
- RGEROB, Robe Land System
- RGEROC, Rocklea Land System
- RGEX_MINE, Mine

Date:	13/12/2018
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2.0 METHODOLOGY

2.1 Legislation and Guidance Statements

The flora and vegetation survey was carried out in a manner that was compliant with Environmental Protection Authority (EPA) requirements for the environmental surveying and reporting of flora and vegetation in Western Australia:

- Statement of Environmental Principles, Factors and Objectives (EPA 2016a);
- Technical Guidance Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016b); and
- Environmental Factor Guideline Flora and Vegetation (EPA 2016c).

The survey was also conducted in accordance with BHP WAIO's Vegetation and Flora Survey Procedure (BHP WAIO 2018).

2.2 Desktop Assessment

The desktop assessment was undertaken to identify flora and vegetation values of significance known from the study area and surrounds. This review considered regional information, previous biological surveys in the locality, and the results of various database searches, as discussed in the following sections.

2.2.1 Literature Review

Several regional-scale reports were reviewed, along with bioregional data (Kendrick 2003), land systems mapping (Van Vreeswyk et al. 2004), and vegetation descriptions and mapping by Beard (1975).

A comprehensive literature review of published and unpublished reports relevant to the study area was completed. At least 16 flora and vegetation or biological surveys have been completed at BHP WAIO tenements within a 25 km radius of the study area, including four surveys that partially overlap the study area.

2.2.2 Database Searches

Database searches included databases relating to significant flora, TECs and PECs previously collected or described within, or in close proximity to, the study area. For this report the search was extended beyond the study area to place flora values into a local and regional context. The following databases were searched:

- NatureMap1 (DBCA 2017a): This database is the most comprehensive source of information on the distribution of Western Australia's flora and fauna, comprising records from the Fauna Survey Returns Database, the WA Threatened and Priority Flora Database, and the Western Australian Herbarium (WAH) Specimen Database. These databases are maintained by the Department of Biodiversity, Conservation and Attractions (DBCA), the WA Museum Specimen Database, and BirdLife Australia's Atlas of Australian Birds (40 km radial search, accessed 7th October 2017);
- DBCA's Threatened and Priority flora database was searched to confirm the NatureMap results (50 km radial search, accessed 23rd October 2017) (DBCA 2017b);
- DBCA's TEC, PEC and Environmentally Sensitive Areas (ESAs) database was searched to identify significant communities (50 km radial search, accessed 13th December 2017) (DBCA 2017c);

- BHP Billiton Iron Ore's Threatened and Priority flora database was searched to identify records of significant flora known to be in close proximity of the study area (50 km radial search, accessed 6th October 2017);
- The Commonwealth EPBC Act Protected Matters Search Tool was used to identify flora species listed as Threatened at Commonwealth level and other relevant Matters of National Environmental Significance that may occur in the locality (50 km radial search, accessed 7th October 2017) (DoEE 2017);
- International Union for Conservation of Nature (IUCN) database (accessed 7th October 2017) (IUCN 2017); and
- The Western Australian Organisms List (WAOL) was searched to provide the status of introduced species, either known to occur in, or are in close proximity to, the study area, which have been categorised under the BAM Act.

2.2.3 Assessment of Likelihood of Occurrence in the Study Area

In order to determine conservation significant flora that had the potential to occur in the study area, results from the literature review and database searches were tabulated and reviewed on the basis of known habitat preferences for each taxon identified. Habitats were defined according to surface geology and landform mapping, land unit interpretation (using land systems), combined with interpretation of high resolution aerial imagery.

The likelihood of each taxon occurring within the study area was assessed using a set of rankings and criteria (as described in Table 3). The criteria are based on presence of suitable habitat and distance to known records.

Table 3 Ranking system used to assign the likelihood that a species would occur in the study area.

Rank	Criteria
Recorded	The species has previously been recorded in the study area.
Likely to occur	There are previous records within a 20 km radius of the study area, and habitat that it is known to occur or has been identified in the study area.
Possible to occur	There are previous records within a 40 km radius of the study area, and habitat that it is known to occur or has been identified in the study area; or Suitable habitat is present, however there are no existing records of the species from the locality, likely due to low sampling intensity in the locality.
Unlikely to occur	The species is linked to a specific habitat, which is absent from the study area; or Suitable habitat is present, however there are no existing records of the species from the locality despite reasonable previous sampling intensity in the locality.
Would not occur	The species is strongly linked to a specific habitat, which is absent from the study area; and/or The species' range is very restricted and would not include the study area.

2.3 Baseline Survey Methodology

2.3.1 Timing and Personnel

The single season detailed flora and vegetation survey was completed by Principal Botanist Dr Jerome Bull and Senior Botanist Ms Jessica Waters working over a five-day period between the 9th and 13th of October 2017. A follow-up targeted flora survey was completed by the same two botanists between the 21st and 27th of May 2018.

Seasonal conditions at the time of the October 2017 and May 2018 field surveys was rated as *poor*, resulting from relatively low rainfall during the months preceding field work.

The Principal Botanist working on the survey has over 15 years Pilbara experience, and the accompanying Senior Botanist has in excess of seven years Pilbara experience. Together the survey team has completed numerous surveys in close proximity to the study area over recent years.

2.3.2 Sampling of Study Sites

The single season detailed flora and vegetation survey involved systematic sampling using quadrats (referred to as study sites). Relevé vegetation descriptions were also made to increase the accuracy of vegetation mapping and targeted searches were completed in habitats where it was anticipated that significant flora might occur. A total of 32 study sites (50 m x 50 m) were assessed during the October 2017 field survey (Figure 5).

The study sites were assessed to provide a list of the total flora occurring within the study area and a description of the vegetation structure. Data collected covered a range of environmental parameters including:

- Landform and habitat;
- Aspect;
- Soil colour and soil type;
- Rock type;
- Slope (angle);
- Percentage of bare ground, logs, twigs and leaves;
- Vegetation condition;
- Disturbance (caused by fire, clearing, grazing etc.);
- Age since fire;
- Broad floristic formation;
- Vegetation association description; and
- Height and percentage ground cover provided by individual plant taxa.

Other parameters recorded for each study site were:

- Study site number and date of assessment;
- Names of the botanists undertaking the assessment;
- Location description a waypoint - GPS coordinate (GDA94) using a handheld GPS; and
- Photograph number.

Vegetation condition for each of the study sites was determined using a recognised rating scale (adapted from Keighery 1994 and Trudgen 2002, see Appendix 2).

2.3.3 Targeted Surveys for Conservation Significant Flora and Introduced Species

Targeted searches for conservation significant flora and introduced species were conducted during the extensive foot traverses between sampling sites, to validate vegetation mapping, and during the targeted survey. Ground truthing provided an opportunity to record opportunistic locations for Threatened and Priority listed flora, and undertake closer examination of specific habitats where significant flora may be expected to occur. The habitats searched in the follow-up targeted survey included gorges, cliff lines, floodplains, and major drainage lines. Opportunistic weed collections were also made while moving around the study area, with targeted searches completed in high moisture habitats of the main drainage channels and adjacent floodplains.

The locations of significance flora and introduced species were recorded using a hand-held GPS. For each record, the numbers of individuals, ground cover, plant height and photograph were recorded, along with a description of the habitat and associated vegetation.

2.3.4 Vegetation Association Mapping

The vegetation mapping utilised high-resolution aerial photography of the entire study area at a scale of 1:15,000, with definition of vegetation polygons based on contrasting shading patterns. Ground-truthing of the study area was completed during both surveys with vegetation descriptions made within selected vegetation polygons to confirm dominant structural layers and associated plant taxa.

The location of the study sites and additional relevé plots were overlaid on the aerial photography, and associated flora and vegetation data was used to provide vegetation association descriptions for individual polygons defined. Description of vegetation structure follows the height, life form and density classes of Specht (1970) as modified by Aplin (1979) and Trudgen (2002) (see Appendix 3). This is largely a structural classification suitable for broader scale mapping, but taking all ecologically significant strata into account.

2.3.5 Vegetation Association Coding

A vegetation association code was applied to each vegetation association. This code is comprised of the dominate landform on which the vegetation association occurs and the dominant plant taxa in each vegetation stratum.

2.3.6 Species Identification, Nomenclature and Data Entry

Flora specimen identification was completed in the field by the Principal Botanist where the species was common and well known. Where the collection was unknown or difficult to determine without microscopic examination, belonged to a recognised species complex, was poorly collected or otherwise unusual, a voucher specimen was collected. Each voucher specimen was assigned a unique job specific code to facilitate tracking of data. Specimens were pressed and dried in the field, then freighted to Perth for further investigation.

Specimens were identified using flora keys, consulting appropriate publications, checking voucher reference collections, and comparing the specimens to the collections held at the WAH. Taxonomy was completed by Principal Botanist Dr Jerome Bull. Nomenclature and conservation significance rankings used in this report are in accordance with the current listing of WA flora recognised by the WAH, as listed on FloraBase (WAH 2018).

All raw survey data collected during the field survey is entered in Microsoft Excel format to comply with BHP WAIO's Biological Survey Spatial Data Requirements (SPR-IEN-EMS-015) (BHP Billiton Iron Ore 2016). This database is updated following completion of taxonomy.

All GIS data is associated with metadata in ESRI ISO format (*.xml format) recorded in the Geocentric Datum of Australia 1994 (GDA94) in decimal degrees (Longitude, Latitude) with an accuracy to five decimal points. The following tags have information entered into them where available:

- date the data was created;
- capture scale (GPS accuracy, or digitised scale, i.e. GPS5m or 25k, 250k, etc.);
- method of capture (e.g. GPS track, digitised mapping, digital field mapping);
- abstract;
- metadata author - data creator;
- point of contact 1 - Person and his/her details who is supplying the data;
- point of contact 2 - delivery contact name and department at BHP WAIO;
- dataset history - how the data has been created or captured (i.e. manually digitised, imported .xls file, uploaded GPS waypoints, etc.;
- data themes or categories – select relevant themes or categories;
- key words - enter key words associated with the dataset, e.g. flora; and
- title - clear title describing the dataset.

Raw data has been entered into six feature classes:

- study area;
- vegetation (sample) sites;
- flora observations;
- vegetation mapping;
- vegetation condition; and
- flora area.

Voucher specimens are lodged with the WA Herbarium for selected taxa representing flora of conservation significance, range extensions, undescribed or poorly collected taxa, provided these were not already vouchered from the locality and collection material is of adequate condition. This is in keeping with the WA Herbarium's specimen acquisition policy. Threatened and Priority Flora Report Forms will be submitted to DBCA for the Priority flora species recorded from the study area.

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717000
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MNY-15

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YANDI HAUL RD (P)

BHP

MINISTERS NORTH TO YANDI

Figure 5

Sample Locations

Legend

- Study Area
- BHP Tenements
- Sample Locations

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Kilometers
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2.3.7 Field Survey Constraints

The EPA Technical Guidance (EPA 2016b) list seven potential limitations that field surveys may encounter. These constraints are addressed in Table 4.

Table 4 Relevance of limitations, as identified by EPA (2016b), to the flora and vegetation survey.

Constraint	Relevance
Availability of contextual information at a regional and local scale	The Ministers North to Yandi locality has been relatively well surveyed historically. A total of 16 previous flora and vegetation surveys have been completed within a 25 km radius of the study area, including four surveys which partially overlap the northern sector. This provides an extensive local database which is confirmed by the intensity of records for the local area on FloraBase. Publicly available databases for rare flora and significant vegetation communities were also available for review. Regional and local level information was therefore not considered to be a limiting factor for this study.
Proportion of flora recorded and/or collected, any identification issues	The single season detailed flora and vegetation survey and follow-up targeted survey was aimed at describing and mapping vegetation associations, and recording flora of conservation significance and introduced flora. Seasonal conditions at the time of the October 2017 and May 2018 field surveys was rated as *poor*, resulting in a likely under-estimation of the ephemeral flora component. A total of 256 plant taxa (including varieties and subspecies) from 45 families and 130 genera were recorded from the 2,031 ha study area; this is representative of species capture levels from similar sized study areas in the locality. Fungi and non-vascular flora (algae, mosses and liverworts) were not sampled, which is consistent with the accepted level of effort for a survey of this type and scale.
Survey timing, rainfall, season of survey	Seasonal conditions at the time of the October 2017 and May 2018 field surveys was rated as *poor*, resulting from relatively low rainfall during the months preceding field work.
Disturbance that may have affected the results of survey such as fire, flood or clearing	Disturbance within the study area was related to grazing of vegetation along major drainage lines by domestic stock (cattle), presence of introduced species, and fire (mosaic of burn ages recorded). There were also a few access tracks in the southeastern corner of the study area. None of the disturbances were a constraint to completing the survey.
Was the appropriate area fully surveyed (effort and extent)	A total of 32 study sites (quadrats) and numerous relevé plots were assessed in October 2017, representing a high intensity field survey. The follow-up targeted flora survey in May 2018 extensively covered habitats likely to contain significant flora and introduced species. All allocated tasks detailed in the scope of works were achieved during the flora and vegetation surveys, noting additional survey work under good seasonal conditions would benefit.
Access restrictions within the survey area	The study area was accessed by helicopter during the single season detailed flora and vegetation survey. Overall, access was not determined to be a constraint to completing the survey.
Competency/experience of the team carrying out the survey, including experience in the bioregion surveyed	The Principal Botanist working on the survey has over 15 years Pilbara experience, and the accompanying Senior Botanist has in excess of seven years Pilbara experience. Together the survey team has completed numerous surveys in close proximity to the study area over recent years.

2.3.8 Assessment of Conservation Significance

The conservation significance of flora and ecological communities are classified at a Commonwealth, State and Local level on the basis of various Acts and Agreements, including:

Commonwealth Level:

- EPBC Act: The DoEE lists Threatened flora and ecological communities, which are determined by the Threatened Species Scientific Committee according to criteria set out in the Act. The Act lists flora that are considered to be of conservation significance under one of six categories (Appendix 4).

State Level:

- WC Act: At a State level, native flora species are protected under the *WC Act – Wildlife Conservation Notice*. A number of species are assigned an additional level of conservation significance based on a limited number of known populations and the perceived threats to these locations.
- DBCA Priority list: DBCA produces a list of Priority species and ecological communities that have not been assigned statutory protection under the WC Act. Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added under Priorities 1, 2 or 3. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been removed from the threatened species list for other taxonomic reasons, are placed in Priority 4. These species require regular monitoring (see Appendix 5). The list of PECs identifies those that need further investigation before nomination for TEC status at a State level.

Local Level:

- Species may be considered of local conservation significance because of their patterns of distribution and abundance. Although not formally protected by legislation, such species are acknowledged to be in decline as a result of threatening processes, primarily habitat loss through land clearing.

3.0 RESULTS

3.1 Desktop Review

3.1.1 Previous Flora and Vegetation Surveys

The flora and vegetation of the Pilbara has been assessed at a broad scale by Burbidge (1959) and Beard (1975). More recently, the Department of Agriculture (now the Department of Primary Industries and Regional Development) completed an inventory and condition survey of the Pilbara based on land system mapping (Van Vreeswyk *et al.* 2004). More specific data has been collected as part of DBCA's Pilbara Region Biological Survey 2002-2013. This dataset has recently been published and will provide a regional context that will benefit impact assessment for future development proposals within the Pilbara.

In addition to the larger broadscale biological surveys, an increasing number of smaller intensive flora and vegetation surveys have been completed in recent years associated with resource development projects. These surveys have resulted in the collection of a significant amount of site-specific biological survey data, most of which has been undertaken for formal environmental impact assessment. There are at least 16 relevant flora and vegetation surveys that have been undertaken within a 25 km radius of the study area, with four of these occurring partly overlapping the study area (Appendix 1).

3.1.2 Threatened Flora listed under the EPBC Act

Two Threatened flora species are currently listed for the Pilbara bioregion under Commonwealth legislation: *Thryptomene wittweri* and *Lepidium catapycnon. Thryptomene wittweri* is listed as a Threatened species under both the Western Australia WC Act 1950 and the Commonwealth EPBC Act. *Lepidium catapycnon* was recently reassigned to Priority 4 status in Western Australia, however this species remains designated as a Threatened species under the EPBC Act.

A search of the EPBC Act Protected Matters database was undertaken for a 50 km buffer around the study area (DoEE 2017). The database search listed one Threatened Flora or their habitat as likely to occur within search radius; *Lepidium catapycnon* (Hamersley Lepidium). As noted above, DBCA has recently downgraded *Lepidium catapycnon* from Threatened (Declared Rare) Flora to Priority 4 status.

3.1.3 Threatened Flora listed under the IUCN Red List

A search of the International Union for Conservation of Nature (IUCN) database (IUCN 2017) determined that no Threatened Flora taxon was likely to occur within the study area.

3.1.4 Threatened Flora listed under the WA Wildlife Conservation (Rare Flora) Notice

Three Threatened flora species are currently listed for the Pilbara bioregion under State legislation: *Aluta quadrata, Pityrodia* sp. Marble Bar (G. Woodman & D. Coultas GWDC Opp 4) and *Thryptomene wittweri.*

The DBCA rare flora database search (DBCA 2017b) did not identify any plant taxon gazetted as Threatened Flora (T) pursuant to subsection (2) of Section 23F of the WC Act from a 50 km radius around the study area.

3.1.5 Priority Flora recognised by the DBCA

The DBCA rare flora database search (DBCA 2017b) identified 31 Priority flora taxa as potentially occurring within a 50 km radius of the study area (Table 5). None of these Priority flora species had previously been recorded within the study area.

Based on the known distributions and habitat preferences of Priority flora species identified during the literature review and database searches, and comparison with the habitats that appeared to be present in the study area, seven Priority flora taxa were determined as being "likely to occur" within the study area (Table 5). For a further 14 Priority flora taxa it was determined "possible" for them to occur in the study area (Table 5). These 21 species were considered the key target species during the targeted field survey.

Table 5 Significant flora previously recorded from a 50 km search radius of the study area (DBCA 2017b). SCC - State Conservation Code (WC Act) FCC - Federal Conservation Code (EPBC Act).

Taxon	Cons. Code	Life Form	Habitat Preference	Suitable Habitat Present	Likelihood in the Study Area
Acacia bromilowiana	4	Perennial	Rocky hills, breakaways, scree slopes, gorges, creek beds.	Yes	Possible
Acacia effusa	3	Perennial	Scree slopes of low ranges	Yes	Possible
Acacia subtiliformis	3	Perennial	Rocky calcrete plateau.	No	Unlikely
Amaranthus centralis	3	Perennial	River beds	Yes	Likely
Aristida lazaridis	2	Perennial	Drainage areas	Yes	Likely
Calotis squamigera	1	Annual	Mulga plains	No	Unlikely
Dampiera metallorum	3	Perennial	Skeletal red-brown gravelly soil over banded ironstone. Steep slopes, summits of hills.	No	Unlikely
Eremophila magnifica subsp. *magnifica*	4	Perennial	Skeletal soils over ironstone. Rocky screes.	Yes	Possible
Eremophila sp. Hamersley Range (K. Walker KW 136)	1	Perennial	Unknown	Unknown	Likely
Eremophila spongiocarpa	1	Perennial	Weakly saline alluvial plain on margins of marsh.	No	Unlikely
Euphorbia australis var. *glabra*	2	Annual	Unknown	Unknown	Possible
Fimbristylis sieberiana	3	Perennial	Mud, skeletal soil pockets. Pool edges, sandstone cliffs.	No	Unlikely
Gompholobium karijini	2	Perennial	Unknown	Unknown	Possible
Goodenia nuda	4	Annual	Floodplains	Yes	Likely
Goodenia sp. East Pilbara (A.A. Mitchell PRP 727)	3	Annual	Low undulating calcrete plain, swampy plains	No	Unlikely
Grevillea saxicola	3	Perennial	Scree slopes with mulga	No	Unlikely

Taxon	Cons. Code	Life Form	Habitat Preference	Suitable Habitat Present	Likelihood in the Study Area
Gymnanthera cunninghamii	3	Perennial	River beds	Yes	Possible
Hibiscus sp. Gurinbiddy Range (M.E. Trudgen MET 15708)	2	Perennial	Unknown	Unknown	Possible
Ipomoea racemigera	2	Annual	River beds	Yes	Likely
Isotropis parviflora	2	Annual	Valley slope of ironstone plateau	Yes	Possible
Lepidium catapycnon	4	Perennial	Skeletal soils. Hillsides	Yes	Likely
Polymeria distigma	3	Annual	Sandy soils.	Yes	Possible
Rhagodia sp. Hamersley (M. Trudgen 17794)	3	Perennial	Plains with mulga	No	Unlikely
Rhynchosia bungarensis	4	Perennial	Banks of flow line in the mouth of a gully in a valley wall.	Yes	Possible
Rostellularia adscendens var. *latifolia*	3	Annual /Perennial	Ironstone soils. Near creeks, rocky hills	Yes	Possible
Sida sp. Barlee Range (S. van Leeuwen 1642)	3	Perennial	Cliff walls	Yes	Likely
Stylidium weeliwolli	3	Annual	Edge of watercourses.	No	Unlikely
Synostemon hamersleyensis	1	Perennial	Gullies, cliffs and breakaways	Yes	Possible
Themeda sp. Hamersley Station (M.E. Trudgen 11431)	3	Perennial	Clay pan, grass plain.	No	Unlikely
Triodia sp. Mt Ella (M.E. Trudgen 12739)	3	Perennial	Amongst rocks & outcrops, gully slopes	Yes	Possible
Vittadinia sp. Coondewanna Flats (S. van Leeuwen 4684)	1	Perennial	Plains	Yes	Possible

3.1.6 TECs listed under State and Federal Legislation

TECs listed by the DBCA are significant at State level and are protected as Environmentally Sensitive Areas (ESA's) under the *Environmental Protection Act 1986*. Two TECs are listed for the Pilbara bioregion: 'Themeda grasslands on cracking clays (Hamersley Station, Pilbara)' and 'Ethel Gorge aquifer stygobiont community' (DBCA 2018). The Ethel Gorge stygobiont TEC is located approximately 89 km southeast of the study area, while the nearest known occurrence for the Themeda grasslands TEC is approximately 139 km to the northwest. Neither TEC is therefore relevant to the study area, with no suitable habitat expected to occur. Furthermore, a search of the DBCA ecological community database (DBCA 2017c) confirmed there were no current listed TEC records for the immediate study area.

Twenty-three of the 69 TECs listed for Western Australia are also federally recognised and listed under the Commonwealth EPBC Act. These do not include either of the two State level

TECs listed for the Pilbara bioregion. A search of the EPBC Act Protected Matters database (DoEE 2017) confirmed there were no Federal listed TECs previously recorded within, or adjacent to, the study area.

3.1.7 PECs recognised by DBCA

PECs include potential TECs that do not meet survey criteria or are not adequately defined. A total of 42 PECs were listed for the Pilbara bioregion at 30 June 2017 (DBCA 2017d).

A search of the State database (DBCA 2017c) confirmed there were no PECs known from within the study area. The following seven PECs occur within a 50 km radius of the study area (Figure 6):

- Weeli Wolli Spring Community (Priority 1);
- Fortescue Valley Sand Dunes (Priority 3iii);
- Fortescue Marsh (Priority 1);
- Brockman Iron cracking clay communities (Priority 1);
- Coolibah-Lignum Flats (2 sub types; Priority 1, Priority 3iii);
- West Angelas Cracking Clays (Priority 1); and
- Freshwater Claypans of the Fortescue Valley (Priority 1).

3.1.8 ESAs known from the Locality

Environmentally Sensitive Areas (ESAs) are defined in the Environmental Protection (Environmentally Sensitive Areas) Notice 2005 under section 51B of the WA *Environmental Protection Act 1986.* ESA's include World Heritage sites; areas included on the Register of the National Estate; defined wetlands; vegetation containing Threatened flora; Threatened Ecological Communities; and Bush Forever sites.

The PECs listed in Section 3.1.7 are the only ESA's known to occur within a 50 km radius of the study area, and none occur in the study area.

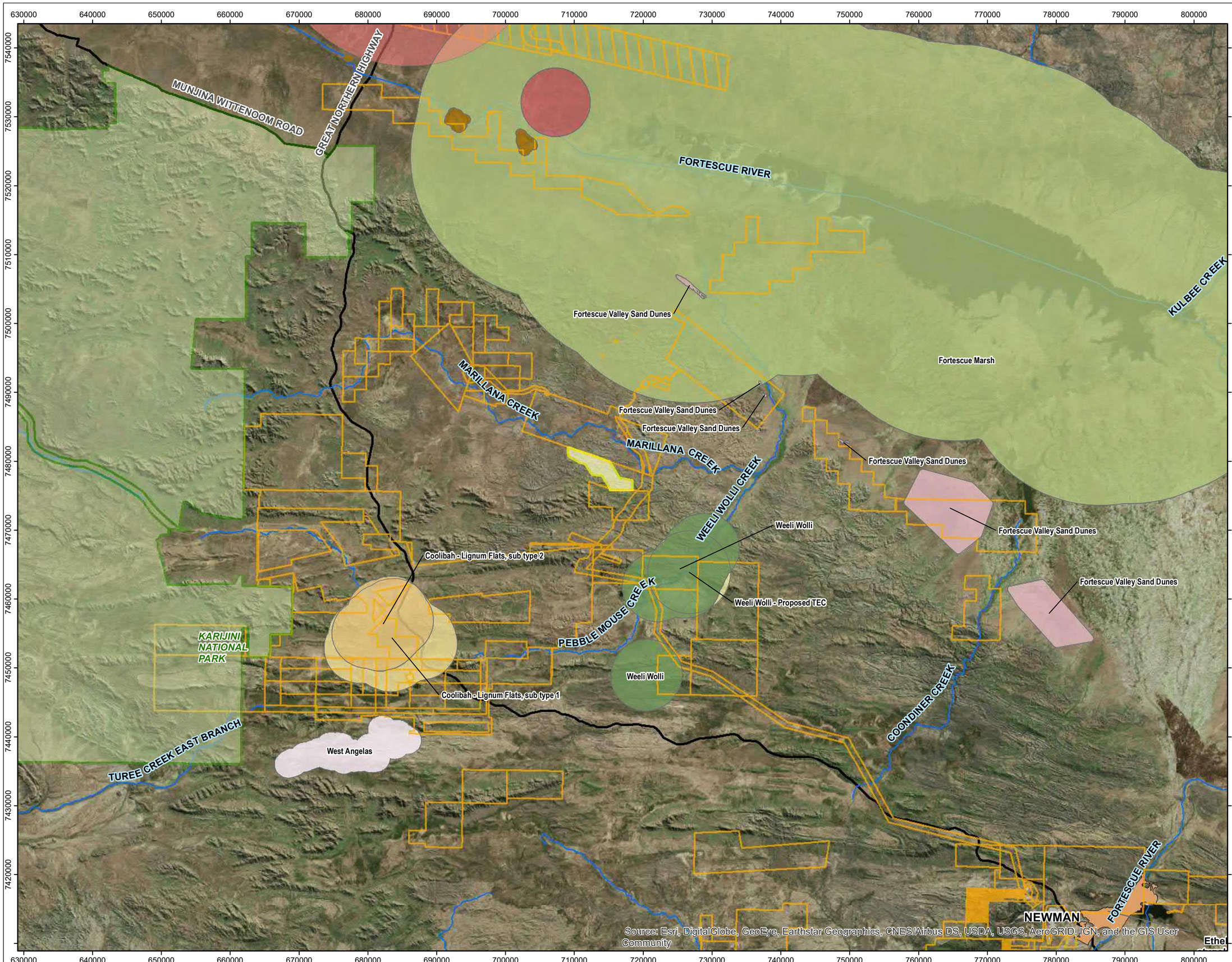

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Figure 6

Location of the TECs and PECs within a 50 km radius of the Study Area

Legend

- Study
- BHP Tenements

PEC Locations

- Brockman Iron cracking clay communities
- Coolibah - Lignum Flats, sub type 1
- Coolibah - Lignum Flats, sub type 2
- Fortescue Marsh
- Fortescue Valley Sand Dunes
- Freshwater claypans of the Fortescue Valley
- Weeli Wolli
- Weeli Wolli - Proposed TEC
- West

TEC Location

- Ethel Gorge
- Four plant assemblages of the Wona Land System

N

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Kilometers
1:500,000
Datum: GDA94
Projection: MGA Zone 50

Date:	13/12/2018
Status:	Final
Figure:	6
Sheet Size:	A3
Internal Reference:	MNTY TEC_PEC
Drawn by:	GSM
Requested by:	DB

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3.2 Flora Species

A total number of 256 plant taxa (including varieties and subspecies) from 45 families and 130 genera were recorded from the study area (Table 6, Appendix 6). Species representation was greatest among the Fabaceae (51 taxa), Poaceae (43 taxa), Malvaceae (34 taxa), Asteraceae (15 taxa) and Amaranthaceae (13 taxa) families, with *Acacia* (20 taxa), *Sida* (11 taxa), *Senna* (9 taxa) and *Ptilotus* (8 taxa) the most speciose genera.

Table 6 Statistics for total flora recorded from the study area.

Overview	No. Taxa
Families	45
Genera	130
Taxa (species, subspecies, varieties)	256
Native Taxa	246
Introduced Taxa	10
Threatened Flora	0
Priority Flora	3
Range Extension	0
Speciose Families	**No. Taxa**
Fabaceae	51
Poaceae	43
Malvaceae	34
Asteraceae	15
Amaranthaceae	13
Speciose Genera	**No. Taxa**
Acacia (Fabaceae)	20
Sida (Malvaceae)	11
Senna (Fabaceae)	9
Ptilotus (Amaranthaceae)	8

3.3 Significant Flora

3.3.1 Threatened Flora listed under the WC Act and EPBC Act

No plant taxon gazetted as Threatened Flora (T) pursuant to subsection (2) of Section 23F of the WC Act or listed under the EPBC Act was recorded from the study area.

3.3.2 Significant Flora

Three Priority flora taxa, as defined by DBCA, were recorded from the study area; *Sida* sp. Barlee Range (S. van Leeuwen 1642) (Priority 3), *Rostellularia adscendens* var. *latifolia* (Priority 3) and *Goodenia nuda* (Priority 4) (Figure 7, Table 7, Appendix 7).

3.3.3 Range Extensions

None of the plant taxa recorded from the study area are considered to be range extensions.

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L 47/95
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G.n
S.b

BHP

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Figure 7

Significant Flora Observations

Legend

- Study
- BHP Tenements

Significant Flora

- Goodenia nuda (G.n)
- Rostellularia adscendens var. latifolia (R.a)
- Sida sp. Barlee Range (S. van Leeuwen 1642) (S.b)

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Datum: GDA94
Projection: MGA Zone 50

Date:	13/12/2018
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Internal Reference:	MNTY_Sig_Flr
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Requested by:	DB

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Table 7 Significant flora species recorded from the study area.

Taxon	Photograph	Description	Occurrence in Study Area
Sida sp. Barlee Range (S. van Leeuwen 1642) (Priority 3)		*Sida* sp. Barlee Range (S. van Leeuwen 1642) is a spreading shrub to 0.5 m in height found in skeletal red soil pockets on steep hill slopes and at the base of cliffs. It has a known distribution extending east to west over 420 km from Newman to Barlee Range Nature Reserve, and extending up to 50 km north of Tom Price. The DBCA rare flora database search showed 42 confirmed records within Western Australia, including two records from within Karijini National Park and three records from within Barlee Range Nature Reserve.	Recorded from 74 locations in the southern sector of the study area. It was recorded from the rocky faces and ledges of gorges. Approximately 1,027 plants were recorded typically as scattered individuals.
Rostellularia adscendens var. *latifolia* (Priority 3)		A low shrub to 0.3 m in height, flowering in April and May. It grows in ironstone soils with habitat ranging from creeks to rocky hills. *Rostellularia adscendens* var. *latifolia* has a known distribution extending approximately 50 km northwest of Newman to midway between Pannawonica and Tom Price, with additional records extending up to 300 km northeast to midway between Telfer and Marble Bar. The DBCA rare flora database search showed 34 confirmed records within Western Australia, including six records from within Karijini National Park.	Recorded from 19 locations within or fringing major drainage lines in the northwestern, central and southeastern sectors of the study area. An estimated 280 plants were recorded in total, with the number of plants at each location ranging from one to 70 individuals. Ground cover at each location was less than 1% (scattered).

Taxon	Photograph	Description	Occurrence in Study Area
Goodenia nuda (Priority 4)		*Goodenia nuda* occurs on drainage levees, flood plains and sand plains as an erect annual or biennial herb to 0.5 m in height. It is widespread throughout the Pilbara, with records also from the northern Carnarvon and eastern Gascoyne bioregions. This species is typically recorded from relatively mesic habitats, such as floodplains and drainage areas. *Goodenia nuda* has been recorded from approximately 555 locations throughout the Pilbara, including Karijini National Park, 200 km south east of Newman, Port Hedland and south of Onslow. An isolated record occurs to the east of the Karlamilyi (Rudall River) National Park. It has been recorded from the majority of BHP WAIO tenements in the southeast Pilbara, with large population known at Caramulla Creek and surrounds.	Recorded from 48 point locations associated with drainage zones and floodplains through the central sector of the study area, with two locations recorded on a similar landform in the southeast. A total of 404 plants were estimated, with ground coverage of less than 1% (scattered plants).

3.4 Introduced Flora

There were ten introduced flora species recorded from the study area, none of which were listed as a Declared Pest under the BAM Act (Tables 8 and 9, Figure 8, Appendix 8).

Table 8 Introduced species recorded in the study area, along with their ranking according to the BAM Act.

Species	BAM Act Listing	
	Legal Status	Control Category for Pilbara Region
**Aerva javanica* (Kapok Bush)	Permitted – s11	Not assigned
**Bidens bipinnata* (Beggars Ticks)	Permitted – s11	Not assigned
**Cenchrus ciliaris* (Buffel Grass)	Permitted – s11	Not assigned
**Conyza bonariensis* (Flaxleaf Fleabane)	Permitted – s11	Not assigned
**Flaveria trinervia* (Speedy Weed)	Not listed	Not listed
**Malvastrum americanum* (Spiked Malvastrum)	Permitted – s11	Not assigned
**Rumex vesicarius* (Ruby Dock)	Permitted – s11	Not assigned
**Setaria verticillata* (Whorled Pigeon Grass)	Permitted – s11	Not assigned
**Sonchus asper* (Rough Sowthistle)	Permitted – s11	Not assigned
**Vachellia farnesiana* (Mimosa Bush)	Permitted – s11	Not assigned

711000
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7482000
7479000
7476000

L 47/95
L 47/92
M 270SA
M 266SA
L 47/92
L 47/95

S.v M.a C.c F.t S.v S.v C.c S.v V.f B.b C.c M.a S.v A.j B.b C.c F.t S.v C.c M.a C.c M.a S.v S.a A.j F.t S.v C.c M.a C.b
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Kilometers
1:30,000
Datum: GDA94
Projection: MGA Zone 50

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MINISTERS NORTH TO YANDI

Figure 8

Introduced Flora Observations

Legend

- Study
- BHP Tenements

Introduced Flora

- Aerva javanica (A.j)
- Bidens bipinnata (B.b)
- Cenchrus ciliaris (C.c)
- Conyza bonariensis (C.b)
- Flaveria trinervia (F.t)
- Malvastrum americanum (M.a)
- Rumex vesicarius (R.v)
- Setaria verticillata (S.v)
- Sonchus asper (S.a)
- Vachellia farnesiana (V.f)

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Requested by:	DB

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Table 9 Introduced species recorded from the study area.

Taxon (Common Name)	Photograph	Description	Occurrence in study area
**Aerva javanica* (Kapok Bush)		An erect branched perennial herb that grows to between 0.4 m and 1.6 m in height, flowering (white) between January and October. This species prefers sandy soils and is commonly found along drainage lines. Kapok Bush is native to northern Africa and south-west Asia but is found across northern Western Australia, Queensland, South Australia and the Northern Territory (Hussey *et al.* 1997).	Recorded as three plants from two locations within a major drainage line in the northwestern sector of the study area. Ground cover at each location was less than 1%.
**Bidens bipinnata* (Bipinnate Beggers Tick)		An erect branched perennial herb that grows to between 0.4 m and 1.6 m in height, flowering (white) between January and October. This species prefers sandy soils and is commonly found along drainage lines.	Recorded from 17 locations within or fringing major drainage lines in the northwestern, central and southeastern sectors of the study area. Over 1,100 plants were recorded from major and medium drainage lines, floodplains, stony plains and gorges. Ground cover at each location was less than 1%.

Taxon (Common Name)	Photograph	Description	Occurrence in study area
**Cenchrus ciliaris* (Buffel Grass)		Tufted perennial grass originating from the Middle East as a fodder species by pastoralists. It grows in dense tussocks up to 1 m tall and typically occurs in monospecific stands on loamy plains and creekline levee banks. It is an aggressive colonising species that has become well established throughout the Pilbara, Gascoyne and Murchison regions of Western Australia, and is continuing to spread in the south-west (Hussey *et al.* 1997).	Recorded from 29 point locations in the northwestern, central and southeastern sectors of the study area. It was primarily associated with the major drainage zones and floodplains with one additional location recorded from a gully. A total of 3,870 plants were estimated with ground coverage ranging from a few scattered plants up to 15% cover.
**Conyza bonariensis* (Flaxleaf Fleabane)		An erect annual herb that grows up to 1.5 m in height and occurs in a variety of soils typically in cultivated areas, waste areas and roadsides. It requires disturbance to establish and is usually unsuccessful in areas of high plant density. It flowers (white) from January to December and is found across Western Australia extending from Broome and further north down to Perth, Esperance and Albany.	Recorded from two close location points within a major drainage line in the northwestern sector of the study area. A total of 25 plants were recorded with ground coverage of <1%.

Taxon (Common Name)	Photograph	Description	Occurrence in study area
**Flaveria trinervia* (Speedy Weed)		An erect glabrous annual herb to 0.8 m in height, producing yellow flowers; older stems are terete and often a distinctive red or purple colour. It occurs on clay or loam soils most often near watercourses and is distributed from Kununurra and Isdell River southwards throughout the Pilbara and along the coast to Carnarvon. It also occurs in the Northern Territory, Queensland, South Australia and New South Wales (Hussey *et al.* 1997).	Recorded from nine locations along major and medium drainage lines and surrounding floodplains in the central and northwestern sectors of the study area. Approximately 160 plants were recorded with ground coverage of <1% at all locations.
**Malvastrum americanum* (Spiked Malvastrum)		Erect perennial herb or shrub, ranging from 0.5 m to 1.3 m in height. It grows in a variety of soil types on stony ridges and hill sides, floodplains and along drainage lines.	Recorded from 14 locations within the central and northwestern sectors of the study area. Approximately 159 plants were recorded from major and medium drainage lines and adjacent floodplains. Coverage was <1% at all locations.

Taxon (Common Name)	Photograph	Description	Occurrence in study area
**Rumex vesicarius* (Ruby Dock)		An erect, stout, fleshy, hollow-stemmed annual herb growing between 0.2 m and 1 m in height and flowering (pink to red) from July to September. Ruby Dock is found on sandy alluvial soils, or gravelly ironstone soils along roadsides or in disturbed areas. It is a common and widespread weed of the arid zone and is found in a variety of disturbed situations from the Pilbara to the Nullarbor. It is native to North Africa, the Middle East and India (Hussey *et al*. 1997). It is a highly aggressive and prolific coloniser, particularly of disturbed areas, and should be included in all weed management programmes within the Pilbara.	Recorded from a single point location in the southeastern sector of the study area. Approximately 75 plants were estimated to occur from a very steep BIF cliff. Ground coverage was 2%.
**Setaria verticillata* (Whorled Pigeon Grass)		A loosely tufted annual grass-like herb, growing between 0.1 m and 1.3 m in height and flowering from December to June. It grows in a variety of soils including sand, clay and loam and has spread over much of Western Australia.	Recorded from 20 point locations within or fringing major and medium drainage lines in the northwestern, central and southeastern sectors of the study area. Approximately 404 plants were estimated with ground coverage at <2%.

Taxon (Common Name)	Photograph	Description	Occurrence in study area
**Sonchus asper* (Rough Sowthistle)		An erect robust, spiny annual or biennial herb that grows up to 1.8 m in height and flowers (yellow/purple) from October to January. It grows on white to grey sand, brown clayey loam, black sandy loam and black clayey peat. This species favours dunes, valleys, seasonally wet areas, watercourses, lakes, wetlands and disturbed sites. Originating from Europe and tropical and temperate Asia, it is found throughout the southwest of Western Australia and extends into the northern regions.	Recorded from one location at the major drainage line in the northwestern sector of the study area. Five plants were recorded with a ground coverage of less than 1%.
**Vachellia farnesiana* (Mimosa Bush)		An erect spreading thicket forming thorny tree or shrub. It grows up to 4 m in height and produces yellow flowers from June to August. Mimosa Bush grows on stony, sandy, clay or loam soils and is common in low lying areas such as creeks and river banks as well as in disturbed areas. It is widespread from the Kimberley and extends south to near Perth (Hussey *et al.* 1997).	Recorded as a single plant to 2 m in height from one location at the major drainage line in the northwestern sector of the study area.

3.5 Threatened Ecological Communities

The field survey confirmed that no TECs occur within the study area.

3.6 Priority Ecological Communities

None of the vegetation associations described and mapped from the study area were found to be aligned with any of the PECs documented from the Pilbara.

3.7 Vegetation

A total of 12 vegetation associations classified into seven broad floristic formations were described and mapped from the study area (Table 10, Figure 9). None of the vegetation associations were aligned with Federal or State listed TECs, or State listed PECs, and all were well represented regionally.

One vegetation association occurring along major drainage lines in the northwestern and central sectors of the study area has elevated local significance, as it supports groundwater dependent species; MA EcEv Cyv SoplTtEua - Open Forest of *Eucalyptus camaldulensis* and *Eucalyptus victrix* over Sedges of *Cyperus vaginatus* and Open Tussock Grassland of *Sorghum plumosum, Themeda triandra* and *Eulalia aurea* on brown sand on major drainage lines.

Table 10 Vegetation descriptions for 12 vegetation associations mapped within the study area.

Code	Broad Floristic Formation	Letter Code	Vegetation Association	Condition
1	*Eucalyptus* Open Forest	MA EcEv Cyv SoplTtEua	Open Forest of *Eucalyptus camaldulensis* and *Eucalyptus victrix* over Sedges of *Cyperus vaginatus* and Open Tussock Grassland of *Sorghum plumosum, Themeda triandra* and *Eulalia aurea* on brown sand on major drainage lines	Very Good
2	*Corymbia* Low Woodland	GG CfEll AtpAnl TtErmuCya	Low Woodland of *Corymbia ferriticola* and *Eucalyptus leucophloia* subsp. *leucophloia* over High Open Shrubland of *Acacia tumida* var. *pilbarensis* and *Androcalva luteiflora* over Open Tussock Grassland of *Themeda triandra, Eriachne mucronata* and *Cymbopogon ambiguus* on brown silty loam in gorges	Excellent
3	*Eucalyptus* Low Woodland	MA Ev TefcCocrApy TtSoplCya	Low Woodland of *Eucalyptus victrix* over Low Shrubland of *Tephrosia rosea* var. Fortescue creeks (M.I.H. Brooker 2186), *Corchorus crozophorifolius* and *Acacia pyrifolia* over Open Tussock Grassland of *Themeda triandra, Sorghum plumosum* and *Cymbopogon ambiguus* on brown sand on major drainage lines	Very Good
4	*Acacia* Open Scrub	MI AmAmaGoro TtCyaPamu ChEll	Open Scrub of *Acacia monticola, Acacia maitlandii* and *Gossypium robinsonii* with Open Tussock Grassland of *Themeda triandra, Cymbopogon ambiguus* and *Paraneurachne muelleri* with Low Open Woodland of *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* on brown sandy loam on minor drainage lines	Very Good
5a	*Triodia* Hummock Grassland	HC Tw Ell AbAanc	Hummock Grassland of *Triodia wiseana* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* with Scattered Tall Shrubs of *Acacia bivenosa* and *Acacia ancistrocarpa* on brown sandy loam on ironstone mesa crests	Excellent
5b	*Triodia* Hummock Grassland	HS TwTbr Ai Inr	Hummock Grassland of *Triodia wiseana* and *Triodia brizoides* with High Open Shrubland of *Acacia inaequilatera* and Low Open Shrubland of *Indigofera rugosa* on brown sandy loam on dolerite hillslopes	Excellent
5c	*Triodia* Hummock Grassland	FP Tp ChHallEv TefcApy	Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Corymbia hamersleyana*, *Hakea lorea* subsp. *lorea* and *Eucalyptus victrix* over Low Open Shrubland of *Tephrosia rosea* var. Fortescue creeks (M.I.H. Brooker 2186) and *Acacia pyrifolia* on brown sandy loam on floodplains and drainage lines	Excellent
5d	*Triodia* Hummock Grassland	HC TsTw Ell Grwh	Hummock Grassland of *Triodia vanleeuwenii* and *Triodia wiseana* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and High Open Shrubland of *Grevillea wickhamii* subsp. *hispidula* on brown sandy loam on hillcrests and upper slopes	Excellent
5e	*Triodia* Hummock Grassland	HC Tp AprEll ErllGrwh	Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Acacia pruinocarpa* and *Eucalyptus leucophloia* subsp. *leucophloia* with Scattered Shrubs of *Eremophila latrobei* subsp. *latrobei* and *Grevillea wickhamii* subsp. *hispidula* on brown sandy loam on mesa crests	Excellent
5f	*Triodia* Hummock Grassland	SP Tw AiAtenAads Ch	Hummock Grassland of *Triodia wiseana* with High Open Shrubland of *Acacia inaequilatera, Acacia tenuissima* and *Acacia adsurgens* with Low Open Woodland of *Corymbia hamersleyana* on brown sandy loam on stony plains	Excellent

Code	Broad Floristic Formation	Letter Code	Vegetation Association	Condition
6	*Eriachne* Open Tussock Grassland	HC ErmuCyaTt CfEll Tw	Open Tussock Grassland of *Eriachne mucronata*, *Cymbopogon ambiguus* and *Themeda triandra* with Low Open Woodland of *Corymbia ferriticola* and *Eucalyptus leucophloia* subsp. *leucophloia* and Very Open Hummock Grassland of *Triodia wiseana* on brown sandy loam on clifflines	Excellent
7	*Themeda* Open Tussock Grassland	ME TtCyaEnl Cyv AcpEvCh	Open Tussock Grassland of *Themeda triandra*, *Cymbopogon ambiguus* and *Enneapogon lindleyanus* with Open Sedges of *Cyperus vaginatus* with Low Open Woodland of *Acacia coriacea* subsp. *pendens*, *Eucalyptus victrix* and *Corymbia hamersleyana* on brown silty loam on medium drainage lines	Excellent

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714000
717000
7482000
7479000
7476000

L 47/95
L 47/92
M 270SA
M 266SA
L 47/92
L 47/95

BHP

MINISTERS NORTH TO YANDI

Figure 9

Vegetation Types

Legend

- Study
- BHP

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Date:	13/12/2017
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GRIFFIN SPATIAL & MAPPING

Legend

Study Area

Vegetation Types

Hill Crest

HC ErmuCyaTt CfEll Tw (6)	*Open Tussock Grassland of Eriachne mucronata, Cymbopogon ambiguus and Themeda triandra with Low Open Woodland of Corymbia ferriticola and Eucalyptus leucophloia subsp. leucophloia and Very Open Hummock Grassland of Triodia wiseana on brown sandy loam on cliffllines*
HC Tp AprEll ErllGrwh (5e)	*Hummock Grassland of Triodia pungens with Low Open Woodland of Acacia pruinocarpa and Eucalyptus leucophloia subsp. leucophloia with Scattered Shrubs of Eremophila latrobei subsp. latrobei and Grevillea wickhamii subsp. hispidula on brown sandy loam on mesa crests*
HC TsTw Ell Grwh (5d)	*Hummock Grassland of Triodia sp. Shovelanna Hill (S. van Leeuwen 3835) and Triodia wiseana with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia and High Open Shrubland of Grevillea wickhamii subsp. hispidula on brown sandy loam on hillcrests and upper slopes*
HC Tw Ell AbAanc (5a)	*Hummock Grassland of Triodia wiseana with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia with Scattered Tall Shrubs of Acacia bivenosa and Acacia ancistrocarpa on brown sandy loam on ironstone mesa crests*

Hill Slope

HS TwTbr Ai Inr (5b)	*Hummock Grassland of Triodia wiseana and Triodia brizoides with High Open Shrubland of Acacia inaequilatera and Low Open Shrubland of Indigofera rugosa on brown sandy loam on dolerite*

Stony Plain

SP Tw AiAtenAads Ch (5f)	*Hummock Grassland of Triodia wiseana with High Open Shrubland of Acacia inaequilatera, Acacia tenuissima and Acacia adsurgens with Low Open Woodland of Corymbia hamersleyana on brown sandy loam on stony plains*

Flood Plain

FP Tp ChHallEv TefcApy (5c)	*Open Hummock Grassland of Triodia pungens with Low Open Woodland of Coyrmbia hamersleyana, Hakea lorea subsp. lorea and Eucalyptus victrix over Low Open Shrubland of Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186) and Acacia pyrifolia on brown sandy loam on floodplains and drainage lines*

Gorges / Gully

GG CfEll AtpAnl TtErmuCya (2)	*Low Woodland of Corymbia ferriticola and Eucalyptus leucophloia subsp. leucophloia over High Open Shrubland of Acacia tumida var. pilbarensis and Androcalva luteiflora over Open Tussock Grassland of Themeda triandra, Eriachne mucronata and Cymbopogon ambiguus on brown silty loam in gorges*

Major Drainage Line

MA EcEv Cyv SoplTtEua (1)	*Open Forest of Eucalyptus camaldulensis and Eucalyptus victrix over Sedges of Cyperus vaginatus and Open Tussock Grassland of Sorghum plumosum, Themeda triandra and Eulalia aurea on brown sand on major drainage lines*
MA Ev TefcCocrApy TtSoplCya (3)	*Low Woodland of Eucalyptus victrix over Low Shrubland of Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186), Corchorus crozophorifolius and Acacia pyrifolia over Open Tussock Grassland of Themeda trianadra, Sorghum plumosum and Cymbopogon ambiguus on brown sand on major drainage lines*

Medium Drainage Line

ME TtCyaEnl Cyv AcpEvCh (7)	*Open Tussock Grassland of Themeda triandra, Cymbopogon ambiguus and Enneapogon lindleyanus with Open Sedges of Cyperus vaginatus with Low Open Woodland of Acacia coriacea subsp. pendens, Eucalyptus victrix and Corymbia hamersleyana on brown silty loam on medium drainage lines*

Minor Drainage Line

MI AmAmaGoro TtCyaPamu ChEll (4)	*Open Scrub of Acacia monticola, Acacia maitlandii and Gossypium robinsonii with Open Tussock Grassland of Themeda triandra, Cymbopogon ambiguus and Paraneurachne muelleri with Low Open Woodland of Corymbia hamersleyana and Eucalyptus leucophloia subsp. leucophloia on brown sandy loam on minor drainage lines*

Other

Track

ONSHORE ENVIRONMENTAL

BHP

MINISTERS NORTH TO YANDI

Figure 9

Vegetation Types Legend

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Figure:	9
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GRIFFIN SPATIAL & MAPPING

Broad Floristic Formation	*Eucalyptus* Open Forest
Vegetation Association	1. MA EcEv Cyv SoplTtEua - Open Forest of *Eucalyptus camaldulensis* and *Eucalyptus victrix* over Sedges of *Cyperus vaginatus* and Open Tussock Grassland of *Sorghum plumosum, Themeda triandra* and *Eulalia aurea* on brown sand on major drainage lines

Area Mapped	1.47 ha
Quadrats Sampled	MNY01, 2MNY113, POI018, POI019
Soils and Geology	Brown sand
Land Form	Major drainage line
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	**Conyza bonariensis*, **Cenchrus ciliaris, Setaria verticillata*
Vegetation Condition	Very Good
Disturbances	Cattle, weeds
Average Fire Age	Old (6+ years)
Vegetation Structure & Floristics	
Trees >10m	*Eucalyptus camaldulensis, Eucalyptus victrix*
Shrubs >2m	*Gossypium robinsonii, Acacia pyrifolia, Melaleuca glomerata*
Tussock Grasses	*Sorghum plumosum, Themeda triandra, Eulalia aurea, Cymbopogon ambiguous, Bothriochloa ewartiana*
Sedges	*Cyperus vaginatus, Typha domingensis*

Broad Floristic Formation	*Corymbia* Low Woodland
Vegetation Association	2. GG CfEll AtpAnl TtErmuCya - Low Woodland of *Corymbia ferriticola* and *Eucalyptus leucophloia* subsp. *leucophloia* over High Open Shrubland of *Acacia tumida* var. *pilbarensis* and *Androcalva luteiflora* over Open Tussock Grassland of *Themeda triandra, Eriachne mucronata* and *Cymbopogon ambiguus* on brown silty loam in gorges

Area Mapped	14.63 ha
Quadrats Sampled	MNY11, MNY15, MNY26,
Soils and Geology	Brown silty loam
Land Form	Gorges
Priority Ecological Community	No
Conservation Significant Flora	*Rostellularia adscendens* var. *latifolia* (P3), *Sida* sp. Barlee Range (S. van Leeuwen 1642) (P3)
Introduced (Weed) Species	**Cenchrus ciliaris, *Bidens bipinnata*
Vegetation Condition	Excellent
Disturbances	Weeds, fire
Average Fire Age	Moderate (2-5 years)
Vegetation Structure & Floristics	
Trees < 10m	*Corymbia ferriticola, Eucalyptus leucophloia* subsp. *leucophloia, Ficus brachypoda, Corymbia hamersleyana*
Shrubs >2m	*Acacia tumida* var. *pilbarensis, Androcalva luteiflora, Abutilon* sp. Dioicum (A.A. Mitchell PRP 1618), *Acacia hamersleyensis, Grevillea wickhamii* subsp. *hispidula*
Tussock Grasses	*Themeda triandra, Eriachne mucronata, Cymbopogon ambiguus*
Hummock Grasses	*Triodia pungens, Triodia wiseana*

Broad Floristic Formation	*Eucalyptus* Low Woodland
Vegetation Association	3. MA Ev TefcCocrApy TtSoplCya - Low Woodland of *Eucalyptus victrix* over Low Shrubland of *Tephrosia rosea* var. Fortescue creeks (M.I.H. Brooker 2186), *Corchorus crozophorifolius* and *Acacia pyrifolia* over Open Tussock Grassland of *Themeda triandra, Sorghum plumosum* and *Cymbopogon ambiguus* on brown sand on major drainage lines

Area Mapped	42.77 ha
Quadrats Sampled	MNY03, MNY07, MNY27
Soils and Geology	Brown sand
Land Form	Major drainage lines
Priority Ecological Community	No
Conservation Significant Flora	*Rostellularia adscendens* var. *latifolia* (P3)
Introduced (Weed) Species	**Cenchrus ciliaris, *Malvastrum americanum, *Bidens bipinnata, *Flaveria trinervia, *Setaria verticillata*
Vegetation Condition	Very Good
Disturbances	Weeds
Average Fire Age	Old (5-10 years)
Vegetation Structure & Floristics	
Trees < 10m	*Eucalyptus victrix*
Shrubs >2m	*Melaleuca glomerata, Atalaya hemiglauca, Gossypium robinsonii, Acacia tumida* var. *pilbarensis*
Shrubs < 1m	*Tephrosia rosea* var. Fortescue creeks (M.I.H. Brooker 2186), *Corchorus crozophorifolius*, *Acacia pyrifolia*
Tussock Grasses	*Themeda triandra, Sorghum plumosum*, *Cymbopogon ambiguus, Enneapogon polyphyllus, Enneapogon lindleyanus, Eulalia aurea*
Sedges	*Cyperus vaginatus*

Broad Floristic Formation	*Acacia* Open Scrub
Vegetation Association	4. MI AmAmaGoro TtCyaPamu ChEll - Open Scrub of *Acacia monticola, Acacia maitlandii* and *Gossypium robinsonii* with Open Tussock Grassland of *Themeda triandra, Cymbopogon ambiguus* and *Paraneurachne muelleri* with Low Open Woodland of *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* on brown sandy loam on minor drainage lines

Area Mapped	7.91 ha
Quadrats Sampled	MNY22, MNY32
Soils and Geology	Brown sandy loam
Land Form	Minor drainage lines
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Very Good
Disturbances	Mining exploration
Average Fire Age	Moderate (3-5 years)
Vegetation Structure & Floristics	
Trees < 10m	*Corymbia hamersleyana, Eucalyptus leucophloia* subsp. *leucophloia*
Shrubs >2m	*Acacia monticola, Acacia maitlandii, Acacia dictyophleba, Gossypium robinsonii*
Tussock Grasses	*Themeda triandra, Cymbopogon obtectus, Paraneurachne muelleri, Cymbopogon ambiguus*
Hummock Grasses	*Triodia wiseana*

Broad Floristic Formation	*Triodia* Hummock Grassland
Vegetation Association	5a. HC Tw Ell AbAanc - Hummock Grassland of *Triodia wiseana* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* with Scattered Tall Shrubs of *Acacia bivenosa* and *Acacia ancistrocarpa* on brown sandy loam on ironstone mesa crests

Area Mapped	88.52 ha
Quadrats Sampled	MNY02, MNY04, MNY31
Soils and Geology	Brown sandy loam
Land Form	Ironstone mesa crests
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	None
Average Fire Age	Moderate (3-5 years)
Vegetation Structure & Floristics	
Trees < 10m	*Eucalyptus leucophloia* subsp. *leucophloia*
Shrubs >2m	*Acacia bivenosa, Acacia ancistrocarpa*
Shrubs 1-2m	*Senna glutinosa* subsp. *glutinosa, Senna glutinosa* subsp. *pruinosa*
Hummock Grasses	*Triodia wiseana, Triodia brizoides*

Broad Floristic Formation	*Triodia* Hummock Grassland
Vegetation Association	5b. HS TwTbr Ai Inr - Hummock Grassland of *Triodia wiseana* and *Triodia brizoides* with High Open Shrubland of *Acacia inaequilatera* and Low Open Shrubland of *Indigofera rugosa* on brown sandy loam on dolerite hillslopes

Area Mapped	1,042.11 ha
Quadrats Sampled	MNY05, MNY17, MNY24
Soils and Geology	Brown sandy loam
Land Form	Dolerite hillslopes
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	Fire
Average Fire Age	Moderate (3- 5 years)
Vegetation Structure & Floristics	
Trees < 10m	*Corymbia hamersleyana*
Shrubs >2m	*Acacia inaequilatera, Grevillea wickhamii* subsp. *hispidula*
Shrubs 1-2m	*Senna glutinosa* subsp. *glutinosa, Gossypium australe*
Shrubs <1m	*Indigofera rugosa*
Hummock Grasses	*Triodia wiseana, Triodia brizoides*

Broad Floristic Formation	*Triodia* Hummock Grassland
Vegetation Association	5c. FP Tp ChHallEv TefcApy - Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Corymbia hamersleyana*, *Hakea lorea* subsp. *lorea* and *Eucalyptus victrix* over Low Open Shrubland of *Tephrosia rosea* var. Fortescue creeks (M.I.H. Brooker 2186) and *Acacia pyrifolia* on brown sandy loam on floodplains and drainage lines

Area Mapped	238.77 ha
Quadrats Sampled	MNY06, MNY08, MNY14, MNY13
Soils and Geology	Brown sandy loam
Land Form	Floodplains and drainage lines
Priority Ecological Community	No
Conservation Significant Flora	*Goodenia nuda* (P4), *Rostellularia adscendens* var. *latifolia* (P3)
Introduced (Weed) Species	**Cenchrus ciliaris, *Bidens bipinnata, *Malvastrum americanum, *Setaria verticillata*
Vegetation Condition	Excellent
Disturbances	Weeds, fire
Average Fire Age	Moderate (3-5 years)
Vegetation Structure & Floristics	
Trees < 10m	*Corymbia hamersleyana, Hakea lorea* subsp. *lorea, Eucalyptus victrix*
Shrubs 1-2m	*Androcalva luteiflora, Petalostylis labicheoides, Santalum lanceolatum*
Shrubs <1m	*Tephrosia rosea* var. Fortescue Creeks (M.I.H Brooker 2186), *Acacia pyrifolia, Sida* sp. Shovelanna Hill (S. van Leeuwen 2846), *Ptilotus astrolasius*
Tussock Grasses	*Themeda triandra, Enneapogon lindleyanus, Aristida contorta*
Hummock Grasses	*Triodia pungens*

Broad Floristic Formation	*Triodia* Hummock Grassland
Vegetation Association	5d. HC TsTw Ell Grwh - Hummock Grassland of *Triodia vanleeuwenii* and *Triodia wiseana* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and High Open Shrubland of *Grevillea wickhamii* subsp. *hispidula* on brown sandy loam on hillcrests and upper slopes

Area Mapped	467.87 ha
Quadrats Sampled	MNY09, MNY12, MNY16
Soils and Geology	Brown sandy loam
Land Form	Hillcrests and upper slopes
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	Fire, mining exploration
Average Fire Age	Moderate (3-5 years)
Vegetation Structure & Floristics	
Trees < 10m	*Eucalyptus leucophloia* subsp. *leucophloia, Corymbia hamersleyana*
Shrubs >2m	*Grevillea wickhamii* subsp. *hispidula*
Shrubs <1m	*Acacia hilliana, Acacia spondylophylla*
Herbs	*Goodenia stobbsiana*
Hummock Grasses	*Triodia vanleeuwenii, Triodia wiseana*

Broad Floristic Formation	*Triodia* Hummock Grassland
Vegetation Association	5e. HC Tp AprEll ErllGrwh - Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Acacia pruinocarpa* and *Eucalyptus leucophloia* subsp. *leucophloia* with Scattered Shrubs of *Eremophila latrobei* subsp. *latrobei* and *Grevillea wickhamii* subsp. *hispidula* on brown sandy loam on mesa crests

Area Mapped	14.34 ha
Quadrats Sampled	MNY20, MNY21, MNY23
Soils and Geology	Brown sandy loam
Land Form	Mesa crests
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	None Discernible
Average Fire Age	Old (6+ years)
Vegetation Structure & Floristics	
Trees < 10m	*Eucalyptus leucophloia* subsp. *leucophloia, Acacia pruinocarpa, Hakea lorea* subsp. *lorea*
Shrubs 1-2m	*Eremophila latrobei* subsp. *latrobei, Grevillea wickhamii* subsp. *hispidula*
Hummock Grasses	*Triodia pungens, Triodia wiseana*

Broad Floristic Formation	*Triodia* Hummock Grassland
Vegetation Association	5f. SP Tw AiAtenAads Ch - Hummock Grassland of *Triodia wiseana* with High Open Shrubland of *Acacia inaequilatera, Acacia tenuissima* and *Acacia adsurgens* with Low Open Woodland of *Corymbia hamersleyana* on brown sandy loam on stony plains

Area Mapped	60.49 ha
Quadrats Sampled	MNY28, 2MNY183, POI012
Soils and Geology	Brown sandy loam
Land Form	Stony plains
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	None
Average Fire Age	Old (6+ years)
Vegetation Structure & Floristics	
Trees < 10m	*Corymbia hamersleyana*
Shrubs >2m	*Acacia inaequilatera, Acacia tenuissima, Acacia adsurgens*
Hummock Grasses	*Triodia wiseana*

Broad Floristic Formation	*Eriachne* Open Tussock Grassland
Vegetation Association	6. HC ErmuCyaTt CfEll Tw - Open Tussock Grassland of *Eriachne mucronata*, *Cymbopogon ambiguus* and *Themeda triandra* with Low Open Woodland of *Corymbia ferriticola* and *Eucalyptus leucophloia* subsp. *leucophloia* and Very Open Hummock Grassland of *Triodia wiseana* on brown sandy loam on clifflines

Area Mapped	20.63 ha
Quadrats Sampled	MNY10, MNY19, MNY29
Soils and Geology	Brown sandy loam
Land Form	Clifflines
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	None
Average Fire Age	Moderate (3-5 years)
Vegetation Structure & Floristics	
Trees < 10m	*Corymbia ferriticola, Eucalyptus leucophloia* subsp. *leucophloia, Acacia pruinocarpa*
Shrubs 1-2m	*Dodonaea pachyneura, Senna glutinosa* subsp. *glutinosa, Eremophila latrobei* subsp. *latrobei*
Tussock Grasses	*Eriachne mucronata, Cymbopogon ambiguus, Themeda triandra, Cymbopogon obtectus*
Hummock Grasses	*Triodia wiseana*

Broad Floristic Formation	*Themeda* Open Tussock Grassland
Vegetation Association	7. ME TtCyaEnl Cyv AcpEvCh - Open Tussock Grassland of *Themeda triandra*, *Cymbopogon ambiguus* and *Enneapogon lindleyanus* with Open Sedges of *Cyperus vaginatus* with Low Open Woodland of *Acacia coriacea* subsp. *pendens*, *Eucalyptus victrix* and *Corymbia hamersleyana* on brown silty loam on medium drainage lines

Area Mapped	25.18 ha
Quadrats Sampled	MNY18, MNY25, MNY30
Soils and Geology	Brown silty loam
Land Form	Medium drainage lines
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	**Bidens bipinnata, *Flaveria trinervia, *Malvastrum americanum*
Vegetation Condition	Excellent
Disturbances	Weeds
Average Fire Age	Old (6+ years)
Vegetation Structure & Floristics	
Trees < 10m	*Acacia coriacea* subsp. *pendens, Eucalyptus victrix, Corymbia hamersleyana, Acacia aptaneura*
Shrubs >2m	*Melaleuca glomerata, Acacia maitlandii*
Tussock Grasses	*Themeda triandra, Cymbopogon ambiguus, Enneapogon lindleyanus, Eriachne tenuiculmis, Bothriochloa ewartiana*
Sedges	*Cyperus vaginatus*

3.8 Vegetation Condition

Vegetation condition was rated as *excellent* across the 97 percent of the study area (1,970 ha), with a smaller area (52 ha) along the major drainage lines rated as *very good* and exploration access tracks in the southeast corner (2 ha) rated as *completely degraded* (Figure 10). The minor disturbances noted during the field surveys were primarily related to grazing by cattle, introduction of weeds, old access tracks and fire.

711000
714000
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7476000
L 47/95
L 47/92
M 270SA
M 266SA
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ONSHORE ENVIRONMENTAL

BHP

MINISTERS NORTH TO YANDI

Figure 10

Vegetation Condition

Legend

- Study
- BHP Tenements

Vegetation Condition

- Very Good
- Excellent
- Completely Degraded

N

0 0.5 1

Kilometers
1:30,000
Datum: GDA94
Projection: MGA Zone 50

Date:	13/12/2018
Status:	Final
Figure:	10
Sheet Size:	A3
Internal Reference:	MNTY_Veg_Cond
Drawn by:	GSM
Requested by:	DB

GRIFFIN SPATIAL & MAPPING

4.0 SUMMARY

A single season detailed flora and vegetation survey of the Ministers North to Yandi Corridor was completed between the 9th and 13th of October 2017, with a follow-up targeted flora survey completed between the 21st and 27th of May 2018. A total of 256 plant taxa (including varieties and subspecies) from 45 families and 130 genera were recorded from the study area. Species representation was greatest among the Fabaceae, Poaceae, Malvaceae, Asteraceae, and Amaranthaceae families. The most speciose genera were *Acacia* (20 taxa), *Sida* (11 taxa), *Senna* (9 taxa) and *Ptilotus* (8 taxa).

There were no plant taxa gazetted as Threatened Flora pursuant to subsection (2) of section 23F of the WC Act, or listed under the EPBC Act recorded from the study area. Three Priority flora taxa were recorded from the study area; *Rostellularia adscendens* var. *latifolia* (P3), *Sida* sp. Barlee Range (S. van Leeuwen 1642) (P3) and *Goodenia nuda* (P4). There were ten introduced flora species recorded from the study area. None of these taxa were listed as a Declared Pest under the BAM Act.

A total of 12 vegetation associations classified as seven broad floristic formations were described and mapped from the study area. None of the vegetation associations were aligned with Federal or State listed TECs or State listed PECs, and all were well represented regionally. One vegetation association occurring along major drainage lines in the northwestern and central sectors of the study area has elevated local significance, as it supports groundwater dependent species; MA EcEv Cyv SoplTtEua - Open Forest of *Eucalyptus camaldulensis* and *Eucalyptus victrix* over Sedges of *Cyperus vaginatus* and Open Tussock Grassland of *Sorghum plumosum, Themeda triandra* and *Eulalia aurea* on brown sand on major drainage lines.

Vegetation condition was rated as *excellent* across the majority of the study area, with smaller areas along the major drainage lines rated as *very good*. Minor disturbances were primarily related to grazing by cattle grazing, introduction of weeds, old access tracks and fire.

5.0 STUDY TEAM

The single season detailed flora and vegetation survey and follow-up targeted flora survey was planned, co-ordinated and executed by the following personnel:

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Mr Todd Griffin		GIS Specialist

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APPENDIX 1

Results from previous flora and vegetation surveys completed in the vicinity of the study area

Project	Survey Timing	Season	Survey Type	Area (ha)	No. Sites	No. Taxa	Significant Flora	Introduced Flora
Surveys partially overlapping the study area								
Onshore Environmental (2014) Area C West to Yandi Level 2 Flora and Vegetation Survey	21 May-3 June 2011, 19 July-1 August 2012, 20-29 August 2013	Good	Two season detailed survey	23,517	170 quadrats	428 taxa, 174 genera, 58 families	No Threatened Flora *Synostemon hamersleyensis* (P1), *Isotropis parviflora* (P2), *Sida* sp. Barlee Range (S. van Leeuwen 1642) (P3)	**Rumex vesicarius, *Bidens bipinnata, *Cenchrus ciliaris, *Cenchrus setiger, *Conyza bonariensis, *Cynodon dactylon, *Sonchus oleraceus, *Solanum nigrum, *Setaria verticillata*
Biota (2002) Mining Area C Rail Corridor - Rare Flora Survey	12-18 November 2001, 21-31 March 2002	Poor (2001), Good (2002)	Targeted survey	40 km rail corridor	None	426 taxa, 172 genera, 60 families	No Threatened or Priority Flora *Triodia biflora*, *Eriachne tenuiculmis*, *Triumfetta leptacantha*, *Themeda* sp. Mt Barricade (M.E. Trudgen 2471), *Goodenia stellata* – note that all taxa now removed from Priority flora listing	Not recorded
Ecologia (2001) Mining Area C to Yandi Rail Line Baseline Weed Survey	16-17 October 2001	Fair	Targeted weed survey	38 km rail corridor	None	2 weeds	None recorded	**Rumex vesicarius*, **Argemone ochroleuca*
HGM (1999) Marillana Creek Western Access Corridor- Biological Assessment	23-30 April 1999	Good	Single season detailed survey	37,715	22 quadrats (100x100m)	195 taxa, 98 genera, 40 families	No Threatened or Priority Flora *Goodenia stellata* – note this taxon now removed from Priority flora listing	**Bidens bipinnata, *Malvastrum americanum*

Project	Survey Timing	Season	Survey Type	Area (ha)	No. Sites	No. Taxa	Significant Flora	Introduced Flora
Surveys completed within a 25 km radius of the study area								
Biota (2017) Ministers North Detailed Flora and Vegetation Survey	20-29 September 2016, 8-10 May and 10-14 July 2017	Good	Two season detailed survey	3,029	22 quadrats	361 taxa, 142 genera, 53 families	No Threatened Flora *Fimbristylis sieberiana* (P3), *Sida* sp. Barlee Range (S. van Leeuwen 1642) (P3), *Acacia bromilowiana* (P4)	**Aerva javanica, *Argemone ochroleuca, *Bidens bipinnata, *Cenchrus ciliaris, *Cenchrus setiger, *Chloris virgata, *Flaveria trinervia, *Malvastrum americanum, *Melinis repens, *Rumex vesicarius, *Setaria verticillata, *Sigesbeckia orientalis, *Solanum nigrum, *Sonchus oleraceus, *Tridax procumbens, *Vachellia farnesiana*
Onshore Environmental (2016) Targeted Flora Survey Marillana Tenements	4-16 November 2015	Fair	Targeted survey	10,800	None	Not recorded	No Threatened Flora *Synostemon hamersleyensis* (P1), *Eremophila magnifica* subsp. *magnifica* (P4)	**Bidens bipinnata, *Cenchrus ciliaris, *Setaria verticillata*
Onshore Environmental (2013) Flora and Vegetation Survey Marillana ML70/270	27-30 April, 28 September-6 October 2011	Good	Two season detailed survey	10,800	194 quadrats	268 taxa, 117 genera, 44 families	No Threatened Flora *Synostemon hamersleyensis* (P1) - note this taxon was not described at time of survey	**Aerva javanica, *Argemone ochroleuca, *Bidens bipinnata, *Cenchrus ciliaris, *Cenchrus setiger, *Rumex vesicarius, *Sisymbrium orientale*

Project	Survey Timing	Season	Survey Type	Area (ha)	No. Sites	No. Taxa	Significant Flora	Introduced Flora
Onshore Environmental (2012a) Flora and Vegetation Review Jinidi Iron Ore Project	September 2005, January and May 2011	Good	Two season detailed survey	18,300	549 quadrats	495 taxa, 180 genera, 54 families	No Threatened Flora *Grevillea saxicola (P3)*[1], *Isotropis parviflora (P2), Acacia subtiliformis (P3), Goodenia* sp. East Pilbara (A.A. Mitchell PRP 727) *(P3), Indigofera gilesii* (P3) *Rhagodia* sp. Hamersley (M. Trudgen 17794) (P3), *Rostellularia adscendens* var. *latifolia (P3), Triodia* sp. Mt. Ella (ME Trudgen 12739) (P3), *Goodenia nuda* (P4), *Brunonia* sp. Long hairs (D.E. Symon 2440) – note no longer on Priority flora listing	**Bidens bipinnata, *Cenchrus ciliaris, *Cucumis melo* subsp. *agrestis, *Flaveria trinervia, *Malvastrum americanum, *Setaria verticillata *Vachellia farnesiana*[2]*.*
Onshore Environmental (2012b) Flora and Vegetation Survey Jinidi to Mainline Study area	21-27 February 2011, 24 March-6 April 2011, 1-14 September 2011	Good	Two season detailed survey	36,838	395 quadrats	471 taxa, 178 genera, 59 families	No Threatened Flora *Goodenia nuda* (P4), *Rostellularia adscendens* var. *latifolia* (P3), *Sida* sp. Barlee Range (S. van Leeuwen 1642) (P3), *Fimbristylis sieberiana* (P3), *Stylidium weeliwolli* (P2)	**Aerva javanica, *Argemone ochroleuca* subsp. *ochroleuca, *Bidens bipinnata, *Cenchrus ciliaris, *Cenchrus setiger, *Citrullus colocynthis, *Cucumis melo* subsp. *agrestis, *Cucumis myriocarpus, *Cynodon dactylon, *Datura leichhardtii, *Echinochloa colona, *Flaveria trinervia *Lactuca serriola, *Malvastrum americanum, *Phoenix dactylifera, *Setaria verticillata, *Sonchus oleraceus, *Tribulus terrestris, *Vachellia farnesiana*

[1] Recorded as *Grevillea* sp. Turee (J. Bull & G. Hopkinson ONS JJ 01.01) (P1) at the time of survey
[2] **Portulaca oleracea* was also recorded as a weed at the time of survey but is now considered naturalised

Project	Survey Timing	Season	Survey Type	Area (ha)	No. Sites	No. Taxa	Significant Flora	Introduced Flora
Onshore Environmental (2011) Yandi Flora and Vegetation Review	9-16 December 2010	Fair	Desktop review and field investigation	13,200	210 quadrats	452 taxa, 178 genera, 56 families	No Threatened Flora *Acacia subtiliformis* (P3), *Rostellularia adscendens* var. *latifolia* (P3), *Goodenia nuda* (P4)	**Aerva javanica, *Argemone ochroleuca* subsp. *ochroleuca, *Bidens bipinnata, *Cenchrus ciliaris, *Centaurea melitensis, *Chloris virgata, *Citrullus lanatus, *Conyza bonariensis, *Cucumis melo* subsp. *agrestis, *Cynodon dactylon, *Lactuca serriola* forma *serriola, *Malvastrum americanum, *Polypogon monspeliensis, *Rostraria cristata, *Setaria verticillata, *Sisymbrium orientale, *Solanum nigrum, *Sonchus oleraceus, *Vachellia farnesiana*
Astron (2010) Area C to Yandi Flora and Vegetation Survey	6-11 September 2010	Poor	Single season detailed survey	2,181	50 quadrats	91 taxa, 43 genera, 20 families	No Threatened Flora *Acacia bromilowiana* (P4)	None recorded
ENV Australia (2009a) Ministers North Exploration Lease Flora and Vegetation Assessment	13-19 September 2007	Poor	Single season detailed survey	4,500	65 quadrats	215 taxa, 96 genera, 44 families	No Threatened Flora *Sida* sp. Barlee Range (S. van Leeuwen 1642) (P3), *Triumfetta leptacantha* - note this taxon now removed from Priority flora listing	**Sonchus oleraceus, *Chloris virgata, *Cenchrus setiger*
ENV (2009b) Newman to Yandi Transmission Line - Flora and Vegetation Assessment	5-15 May 2009	Excellent	Single season detailed survey	2,300 (115 km corridor)	151 quadrats	515 taxa, 172 genera, 58 families	No Threatened Flora *Goodenia nuda* (P4), *Lepidium catapycnon* (P4) (revised from Threatened to Priority 4 since the survey)	None recorded
Ecologia Environment (2006) Ministers North Biological Survey	10-14 May 2006	Excellent	Single season detailed survey	10,950	23 drill pads and 2 access tracks	125 taxa, 72 genera, 37 families	No Threatened or Priority Flora *Triumfetta leptacantha* - note this taxon now removed from Priority flora listing	None recorded

Project	Survey Timing	Season	Survey Type	Area (ha)	No. Sites	No. Taxa	Significant Flora	Introduced Flora
Maunsell (2004) Flora and Vegetation Survey Lease M47/292 and E4 Drill Lines	15-16 December 2003	Poor	Targeted survey	Not recorded	None	Not recorded	No Threatened or Priority Flora *Olearia fluvialis* - note this taxon now removed from Priority flora listing	Not recorded
Maunsell (2003) Yandi Life of Mine Flora and Fauna	23-28 September 2003	Poor	Desktop Review and targeted survey	Not recorded	None	Not recorded	No Threatened or Priority Flora *Goodenia stellata* - note this taxon now removed from Priority flora listing	**Rumex vesicarius, *Argemone ochroleuca, *Bidens bipinnata, *Cenchrus ciliaris, *Sisymbrium orientale*

APPENDIX 2

Vegetation condition scale
(adapted from Keighery 1994 and Trudgen 2002)

Condition	Code	Description
Excellent	1	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very Good	2	Some relatively slight signs of damage caused by human activities since European settlement. For example, some sings of damage to tree trunks cause by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	3	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	4	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Degraded	5	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely Degraded	6	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or ‘parkland cleared’ with their flora comprising weed or crop species with isolated native trees or shrubs.

APPENDIX 3

Vegetation Classifications for the Pilbara based on Specht (1970), as modified by Aplin (1979) and Trudgen (2002)

Height Class	Canopy Cover				
	100 - 70%	70 - 30%	30 - 10%	10 - 2%	< 2%
Trees > 30 m	High Closed Forest	High Open Forest	High Woodland	High Open Woodland	Scattered Tall Trees
Trees 10-30m	Closed Forest	Open Forest	Woodland	Open Woodland	Scattered Trees
Trees < 10 m	Low Closed Woodland	Low Open Forest	Low Woodland	Low Open Woodland	Scattered Low Trees
Mallee	Closed Mallee	Mallee	Open Mallee	Very Open Mallee	Scattered Mallees
Shrubs > 2 m	Closed Scrub	Open Scrub	High Shrubland	High Open Shrubland	Scattered Tall Shrubs
Shrubs 1-2 m	Closed Heath	Open Heath	Shrubland	Open Shrubland	Scattered Shrubs
Shrubs < 1 m	Low Closed Heath	Low Open Heath	Low Shrubland	Low Open Shrubland	Low Scattered Shrubs
Hummock Grass	Closed Hummock Grassland	Hummock Grassland	Open Hummock Grassland	Very Open Hummock Grassland	Scattered Hummock Grass
Tussock Grass	Closed Tussock Grassland	Tussock Grassland	Open Tussock Grassland	Very Open Tussock Grassland	Scattered Tussock Grass
Bunch Grass	Closed Bunch Grassland	Bunch Grassland	Open Bunch Grassland	Very Open Bunch Grassland	Scattered Bunch Grass
Sedges	Closed Sedges	Sedges	Open Sedges	Very Open Sedges	Scattered Sedges
Herbs	Closed Herbs	Herbs	Open Herbs	Very Open Herbs	Scattered Herbs

Source: S. Van Leeuwen (DBCA)

APPENDIX 4

Conservation categories for flora described under the EPBC Act.

Category	Description
Extinct	A species is extinct if there is no reasonable doubt that the last member of the species has died.
Extinct in the Wild	A species is categorised as extinct in the wild if it is only known to survive in cultivations, in captivity, or as a naturalised population well outside its past range; or if it has not been recorded in its known/expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
Critically Endangered	The species is facing an extremely high risk of extinction in the wild and in the immediate future.
Endangered	The species is likely to become extinct unless the circumstances and factors threatening its abundance, survival, or evolutionary development cease to operate; or its numbers have been reduced to such a critical level, or its habitats have been so drastically reduced, that it is in immediate danger of extinction.
Vulnerable	Within the next 25 years, the species is likely to become endangered unless the circumstances and factors threatening its abundance, survival or evolutionary development cease to operate.
Conservation Dependent	The species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

APPENDIX 5

Conservation Codes for Western Australian Flora

T: Threatened (Declared Rare) Flora - Extant Taxa

Taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such.

1: Priority One - Poorly Known Taxa

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

2: Priority Two - Poorly Known Taxa

Species that are known from one or a few collections (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

3: Priority Three - Poorly Known Taxa

Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

4: Priority Four - Rare, Near Threatened and other taxa in need of monitoring

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These taxa are usually represented on conservation lands.
(b) Near Threatened. Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

APPENDIX 6

Total flora list from the study area

FAMILY	GENUS	SPECIES	INF_RANK	INF_NAME	SIGNIFCNT	INTRO_NATIVE
Malvaceae	*Abutilon*	*fraseri*			No	Native
Malvaceae	*Abutilon*	*lepidum*			No	Native
Malvaceae	*Abutilon*	*otocarpum*			No	Native
Malvaceae	*Abutilon*		sp.	Dioicum (A.A. Mitchell PRP 1618)	No	Native
Malvaceae	*Abutilon*		sp.	indet	No	Native
Fabaceae	*Acacia*	*adoxa*	var.	*adoxa*	No	Native
Fabaceae	*Acacia*	*adsurgens*			No	Native
Fabaceae	*Acacia*	*ancistrocarpa*			No	Native
Fabaceae	*Acacia*	*aptaneura*			No	Native
Fabaceae	*Acacia*	*bivenosa*			No	Native
Fabaceae	*Acacia*	*coriacea*	subsp.	*pendens*	No	Native
Fabaceae	*Acacia*	*dictyophleba*			No	Native
Fabaceae	*Acacia*	*elachantha*			No	Native
Fabaceae	*Acacia*	*hamersleyensis*			No	Native
Fabaceae	*Acacia*	*hilliana*			No	Native
Fabaceae	*Acacia*	*inaequilatera*			No	Native
Fabaceae	*Acacia*	*maitlandii*			No	Native
Fabaceae	*Acacia*	*monticola*			No	Native
Fabaceae	*Acacia*	*pachyacra*			No	Native
Fabaceae	*Acacia*	*pruinocarpa*			No	Native
Fabaceae	*Acacia*	*pyrifolia*			No	Native
Fabaceae	*Acacia*	*spondylophylla*			No	Native
Fabaceae	*Acacia*	*tenuissima*			No	Native
Fabaceae	*Acacia*	*tetragonophylla*			No	Native
Fabaceae	*Acacia*	*tumida*	var.	*pilbarensis*	No	Native
Amaranthaceae	*Achyranthes*	*aspera*			No	Native
Poaceae	*Acrachne*	*racemosa*			No	Native

FAMILY	GENUS	SPECIES	INF_RANK	INF_NAME	SIGNIFCNT	INTRO_NATIVE
Amaranthaceae	*Aerva*	*javanica*			No	Introduced
Amaranthaceae	*Alternanthera*	*nana*			No	Native
Fabaceae	*Alysicarpus*	*muelleri*			No	Native
Amaranthaceae	*Amaranthus*	*undulatus*			No	Native
Lythraceae	*Ammannia*	*baccifera*			No	Native
Poaceae	*Amphipogon*	*sericeus*			No	Native
Malvaceae	*Androcalva*	*luteiflora*			No	Native
Poaceae	*Aristida*	*burbidgeae*			No	Native
Poaceae	*Aristida*	*contorta*			No	Native
Poaceae	*Aristida*	*holathera*	var.	*holathera*	No	Native
Poaceae	*Aristida*	*inaequiglumis*			No	Native
Araliaceae	*Astrotricha*	*hamptonii*			No	Native
Sapindaceae	*Atalaya*	*hemiglauca*			No	Native
Asteraceae	*Bidens*	*bipinnata*			No	Introduced
Nyctaginaceae	*Boerhavia*	*coccinea*			No	Native
Convolvulaceae	*Bonamia*	*erecta*			No	Native
Convolvulaceae	*Bonamia*	*pilbarensis*			No	Native
Poaceae	*Bothriochloa*	*ewartiana*			No	Native
Cyperaceae	*Bulbostylis*	*barbata*			No	Native
Myrtaceae	*Calytrix*	*carinata*			No	Native
Capparaceae	*Capparis*	*spinosa*	subsp.	*nummularia*	No	Native
Apocynaceae	*Carissa*	*lanceolata*			No	Native
Poaceae	*Cenchrus*	*ciliaris*			No	Introduced
Pteridaceae	*Cheilanthes*	*brownii*			No	Native
Pteridaceae	*Cheilanthes*	*sieberi*			No	Native
Poaceae	*Chrysopogon*	*fallax*			No	Native
Cleomaceae	*Cleome*	*viscosa*			No	Native

FAMILY	GENUS	SPECIES	INF_RANK	INF_NAME	SIGNIFCNT	INTRO_NATIVE
Lamiaceae	*Clerodendrum*	*floribundum*	var.	*angustifolium*	No	Native
Gyrostemonaceae	*Codonocarpus*	*cotinifolius*			No	Native
Convolvulaceae	*Convolvulus*		sp.	indet	No	Native
Asteraceae	*Conyza*	*bonariensis*			No	Introduced
Malvaceae	*Corchorus*	*crozophorifolius*			No	Native
Malvaceae	*Corchorus*	*lasiocarpus*			No	Native
Malvaceae	*Corchorus*	*tridens*			No	Native
Myrtaceae	*Corymbia*	*ferriticola*			No	Native
Myrtaceae	*Corymbia*	*hamersleyana*			No	Native
Fabaceae	*Crotalaria*	*medicaginea*	var.	*neglecta*	No	Native
Fabaceae	*Crotalaria*	*novae-hollandiae*			No	Native
Cucurbitaceae	*Cucumis*	*variabilis*			No	Native
Fabaceae	*Cullen*	*leucochaites*			No	Native
Poaceae	*Cymbopogon*	*ambiguus*			No	Native
Poaceae	*Cymbopogon*	*obtectus*			No	Native
Cyperaceae	*Cyperus*	*cunninghamii*	subsp.	*cunninghamii*	No	Native
Cyperaceae	*Cyperus*	*vaginatus*			No	Native
Goodeniaceae	*Dampiera*	*candicans*			No	Native
Poaceae	*Digitaria*	*brownii*			No	Native
Poaceae	*Digitaria*	*ctenantha*			No	Native
Loranthaceae	*Diplatia*	*grandibractea*			No	Native
Sapindaceae	*Dodonaea*	*coriacea*			No	Native
Sapindaceae	*Dodonaea*	*lanceolata*			No	Native
Sapindaceae	*Dodonaea*	*pachyneura*			No	Native
Convolvulaceae	*Duperreya*	*commixta*			No	Native
Chenopodiaceae	*Dysphania*	*rhadinostachya*			No	Native
Chenopodiaceae	*Enchylaena*	*tomentosa*			No	Native

FAMILY	GENUS	SPECIES	INF_RANK	INF_NAME	SIGNIFCNT	INTRO_NATIVE
Poaceae	*Enneapogon*	*caerulescens*			No	Native
Poaceae	*Enneapogon*	*lindleyanus*			No	Native
Poaceae	*Enneapogon*	*polyphyllus*			No	Native
Poaceae	*Enneapogon*	*robustissimus*			No	Native
Poaceae	*Enteropogon*	*ramosus*			No	Native
Poaceae	*Eragrostis*	*cumingii*			No	Native
Poaceae	*Eragrostis*	*eriopoda*			No	Native
Poaceae	*Eragrostis*	*tenellula*			No	Native
Scrophulariaceae	*Eremophila*	*fraseri*			No	Native
Scrophulariaceae	*Eremophila*	*jucunda*	subsp.	*pulcherrima*	No	Native
Scrophulariaceae	*Eremophila*	*latrobei*	subsp.	*filiformis*	No	Native
Scrophulariaceae	*Eremophila*	*latrobei*	subsp.	*latrobei*	No	Native
Scrophulariaceae	*Eremophila*	*longifolia*			No	Native
Poaceae	*Eriachne*	*aristidea*			No	Native
Poaceae	*Eriachne*	*lanata*			No	Native
Poaceae	*Eriachne*	*mucronata*			No	Native
Poaceae	*Eriachne*	*pulchella*	subsp.	*dominii*	No	Native
Poaceae	*Eriachne*	*tenuiculmis*			No	Native
Myrtaceae	*Eucalyptus*	*camaldulensis*			No	Native
Myrtaceae	*Eucalyptus*	*gamophylla*			No	Native
Myrtaceae	*Eucalyptus*	*leucophloia*	subsp.	*leucophloia*	No	Native
Myrtaceae	*Eucalyptus*	*victrix*			No	Native
Poaceae	*Eulalia*	*aurea*			No	Native
Euphorbiaceae	*Euphorbia*	*australis*	var.	*hispidula*	No	Native
Euphorbiaceae	*Euphorbia*	*australis*	var.	*subtomentosa*	No	Native
Euphorbiaceae	*Euphorbia*	*biconvexa*			No	Native
Euphorbiaceae	*Euphorbia*	*tannensis*	subsp.	*eremophila*	No	Native

FAMILY	GENUS	SPECIES	INF_RANK	INF_NAME	SIGNIFCNT	INTRO_NATIVE
Euphorbiaceae	*Euphorbia*		sp.	indet	No	Native
Convolvulaceae	*Evolvulus*	*alsinoides*	var.	*decumbens*	No	Native
Convolvulaceae	*Evolvulus*	*alsinoides*	var.	*villosicalyx*	No	Native
Moraceae	*Ficus*	*brachypoda*			No	Native
Cyperaceae	*Fimbristylis*	*dichotoma*			No	Native
Asteraceae	*Flaveria*	*trinervia*			No	Introduced
Fabaceae	*Gompholobium*	*oreophilum*			No	Native
Amaranthaceae	*Gomphrena*	*cunninghamii*			No	Native
Goodeniaceae	*Goodenia*	*muelleriana*			No	Native
Goodeniaceae	*Goodenia*	*nuda*			Yes	Native
Goodeniaceae	*Goodenia*	*stobbsiana*			No	Native
Goodeniaceae	*Goodenia*	*triodiophila*			No	Native
Malvaceae	*Gossypium*	*australe*			No	Native
Malvaceae	*Gossypium*	*robinsonii*			No	Native
Proteaceae	*Grevillea*	*berryana*			No	Native
Proteaceae	*Grevillea*	*pyramidalis*	subsp.	*leucadendron*	No	Native
Proteaceae	*Grevillea*	*wickhamii*	subsp.	*hispidula*	No	Native
Proteaceae	*Hakea*	*chordophylla*			No	Native
Proteaceae	*Hakea*	*lorea*	subsp.	*lorea*	No	Native
Boraginaceae	*Heliotropium*	*cunninghamii*			No	Native
Boraginaceae	*Heliotropium*	*inexplicitum*			No	Native
Boraginaceae	*Heliotropium*	*pachyphyllum*			No	Native
Boraginaceae	*Heliotropium*	*tenuifolium*			No	Native
Malvaceae	*Hibiscus*	*coatesii*			No	Native
Malvaceae	*Hibiscus*	*leptocladus*			No	Native
Malvaceae	*Hibiscus*	*sturtii*	var.	*campylochlamys*	No	Native
Malvaceae	*Hibiscus*	*sturtii*	var.	*platychlamys*	No	Native

FAMILY	GENUS	SPECIES	INF_RANK	INF_NAME	SIGNIFCNT	INTRO_NATIVE
Malvaceae	*Hibiscus*		sp.	Mt Robinson (G. Byrne 3537)	No	Native
Violaceae	*Hybanthus*	*aurantiacus*			No	Native
Fabaceae	*Indigofera*	*colutea*			No	Native
Fabaceae	*Indigofera*	*linifolia*			No	Native
Fabaceae	*Indigofera*	*monophylla*			No	Native
Fabaceae	*Indigofera*	*rugosa*			No	Native
Convolvulaceae	*Ipomoea*	*muelleri*			No	Native
Fabaceae	*Isotropis*	*atropurpurea*			No	Native
Oleaceae	*Jasminum*	*didymum*	subsp.	*lineare*	No	Native
Brassicaceae	*Lepidium*	*pedicellosum*			No	Native
Campanulaceae	*Lobelia*	*heterophylla*			No	Native
Chenopodiaceae	*Maireana*	*planifolia*			No	Native
Chenopodiaceae	*Maireana*	*tomentosa*			No	Native
Chenopodiaceae	*Maireana*	*villosa*			No	Native
Malvaceae	*Malvastrum*	*americanum*			No	Introduced
Myrtaceae	*Melaleuca*	*glomerata*			No	Native
Malvaceae	*Melhania*	*oblongifolia*			No	Native
Fabaceae	*Mirbelia*	*viminalis*			No	Native
Solanaceae	*Nicotiana*	*benthamiana*			No	Native
Phyllanthaceae	*Notoleptopus*	*decaisnei*			No	Native
Rubiaceae	*Oldenlandia*	*crouchiana*			No	Native
Poaceae	*Paraneurachne*	*muelleri*			No	Native
Poaceae	*Paspalidium*	*basicladum*			No	Native
Poaceae	*Paspalidium*	*clementii*			No	Native
Asteraceae	*Peripleura*	*arida*			No	Native
Asteraceae	*Peripleura*	*virgata*			No	Native
Poaceae	*Perotis*	*rara*			No	Native

FAMILY	GENUS	SPECIES	INF_RANK	INF_NAME	SIGNIFCNT	INTRO_NATIVE
Fabaceae	*Petalostylis*	*labicheoides*			No	Native
Phyllanthaceae	*Phyllanthus*	*maderaspatensis*			No	Native
Asteraceae	*Pluchea*	*dentex*			No	Native
Asteraceae	*Pluchea*	*dunlopii*			No	Native
Asteraceae	*Pluchea*	*rubelliflora*			No	Native
Caryophyllaceae	*Polycarpaea*	*corymbosa*			No	Native
Caryophyllaceae	*Polycarpaea*	*holtzei*			No	Native
Caryophyllaceae	*Polycarpaea*	*longiflora*			No	Native
Convolvulaceae	*Polymeria*	*ambigua*			No	Native
Asteraceae	*Pseudognaphalium*	*luteoalbum*			No	Native
Asteraceae	*Pterocaulon*	*serrulatum*			No	Native
Asteraceae	*Pterocaulon*	*sphacelatum*			No	Native
Amaranthaceae	*Ptilotus*	*astrolasius*			No	Native
Amaranthaceae	*Ptilotus*	*auriculifolius*			No	Native
Amaranthaceae	*Ptilotus*	*calostachyus*			No	Native
Amaranthaceae	*Ptilotus*	*clementii*			No	Native
Amaranthaceae	*Ptilotus*	*fusiformis*			No	Native
Amaranthaceae	*Ptilotus*	*nobilis*			No	Native
Amaranthaceae	*Ptilotus*	*obovatus*			No	Native
Amaranthaceae	*Ptilotus*	*rotundifolius*			No	Native
Chenopodiaceae	*Rhagodia*	*eremaea*			No	Native
Asteraceae	*Rhodanthe*	*margarethae*			No	Native
Fabaceae	*Rhynchosia*	*minima*			No	Native
Acanthaceae	*Rostellularia*	*adscendens*	var.	*latifolia*	Yes	Native
Polygonaceae	*Rumex*	*vesicarius*			No	Introduced
Chenopodiaceae	*Salsola*	*australis*			No	Native
Santalaceae	*Santalum*	*lanceolatum*			No	Native

FAMILY	GENUS	SPECIES	INF_RANK	INF_NAME	SIGNIFCNT	INTRO_NATIVE
Goodeniaceae	*Scaevola*	*browniana*			No	Native
Goodeniaceae	*Scaevola*	*spinescens*			No	Native
Gentianaceae	*Schenkia*	*australis*			No	Native
Poaceae	*Schizachyrium*	*fragile*			No	Native
Fabaceae	*Senna*	*artemisioides*	subsp.	*helmsii*	No	Native
Fabaceae	*Senna*	*artemisioides*	subsp.	*oligophylla*	No	Native
Fabaceae	*Senna*	*ferraria*			No	Native
Fabaceae	*Senna*	*glaucifolia*			No	Native
Fabaceae	*Senna*	*glutinosa*	subsp.	*glutinosa*	No	Native
Fabaceae	*Senna*	*glutinosa*	subsp.	*pruinosa*	No	Native
Fabaceae	*Senna*	*glutinosa*	subsp.	*x luerssenii*	No	Native
Fabaceae	*Senna*	*notabilis*			No	Native
Fabaceae	*Senna*	*venusta*			No	Native
Malvaceae	*Seringia*	*velutina*			No	Native
Poaceae	*Setaria*	*verticillata*			No	Introduced
Malvaceae	*Sida*	*arenicola*			No	Native
Malvaceae	*Sida*	*echinocarpa*			No	Native
Malvaceae	*Sida*		sp.	Articulation below (A.A. Mitchell PRP 1605)	No	Native
Malvaceae	*Sida*		sp.	Barlee Range (S. van Leeuwen 1642)	Yes	Native
Malvaceae	*Sida*		sp.	Excedentifolia (J.L. Egan 1925)	No	Native
Malvaceae	*Sida*		sp.	Golden calyces glabrous (H.N. Foote 32)	No	Native
Malvaceae	*Sida*		sp.	indet	No	Native
Malvaceae	*Sida*		sp.	Pilbara (A.A. Mitchell PRP 1543)	No	Native
Malvaceae	*Sida*		sp.	Shovelanna Hill (S. van Leeuwen 3842)	No	Native
Malvaceae	*Sida*		sp.	spiciform panicles (E. Leyland s.n. 14/8/90)	No	Native
Malvaceae	*Sida*		sp.	verrucose glands (F.H. Mollemans 2423)	No	Native

FAMILY	GENUS	SPECIES	INF_RANK	INF_NAME	SIGNIFCNT	INTRO_NATIVE
Solanaceae	*Solanum*	*cleistogamum*			No	Native
Solanaceae	*Solanum*	*gabrielae*			No	Native
Solanaceae	*Solanum*	*horridum*			No	Native
Solanaceae	*Solanum*	*lasiophyllum*			No	Native
Solanaceae	*Solanum*	*phlomoides*			No	Native
Asteraceae	*Sonchus*	*asper*			No	Introduced
Poaceae	*Sorghum*	*plumosum*			No	Native
Poaceae	*Sporobolus*	*australasicus*			No	Native
Plantaginaceae	*Stemodia*	*grossa*			No	Native
Asteraceae	*Streptoglossa*	*decurrens*			No	Native
Surianaceae	*Stylobasium*	*spathulatum*			No	Native
Fabaceae	*Swainsona*	*decurrens*			No	Native
Fabaceae	*Tephrosia*	*rosea*	var.	Fortescue creeks (M.I.H. Brooker 2186)	No	Native
Fabaceae	*Tephrosia*	*stipuligera*			No	Native
Fabaceae	*Tephrosia*	*virens*			No	Native
Fabaceae	*Tephrosia*		sp.	Bungaroo Creek (M.E. Trudgen 11601)	No	Native
Fabaceae	*Tephrosia*		sp.	Fortescue (A.A. Mitchell 606)	No	Native
Fabaceae	*Tephrosia*		sp.	Newman (A.A. Mitchell PRP 29)	No	Native
Poaceae	*Themeda*	*triandra*			No	Native
Poaceae	*Themeda*		sp.	Mt Barricade (M.E. Trudgen 2471)	No	Native
Menispermaceae	*Tinospora*	*smilacina*			No	Native
Araliaceae	*Trachymene*	*oleracea*			No	Native
Zygophyllaceae	*Tribulus*	*suberosus*			No	Native
Boraginaceae	*Trichodesma*	*zeylanicum*	var.	*zeylanicum*	No	Native
Molluginaceae	*Trigastrotheca*	*molluginea*			No	Native
Poaceae	*Triodia*	*biflora*			No	Native
Poaceae	*Triodia*	*brizoides*			No	Native

FAMILY	GENUS	SPECIES	INF_RANK	INF_NAME	SIGNIFCNT	INTRO_NATIVE
Poaceae	*Triodia*	*pungens*			No	Native
Poaceae	*Triodia*	*vanleeuwenii*			No	Native
Poaceae	*Triodia*	*wiseana*			No	Native
Poaceae	*Tripogonella*	*loliiformis*			No	Native
Malvaceae	*Triumfetta*	*clementii*			No	Native
Malvaceae	*Triumfetta*	*leptacantha*			No	Native
Malvaceae	*Triumfetta*	*maconochieana*			No	Native
Apocynaceae	*Tylophora*	*flexuosa*			No	Native
Typhaceae	*Typha*	*domingensis*			No	Native
Fabaceae	*Vachellia*	*farnesiana*			No	Introduced
Fabaceae	*Vigna*		sp.	Hamersley Clay (A.A. Mitchell PRP 113)	No	Native
Asteraceae	*Vittadinia*	*dissecta*	var.	*hirta*	No	Native
Campanulaceae	*Wahlenbergia*	*tumidifructa*			No	Native
Malvaceae	*Waltheria*	*indica*			No	Native

APPENDIX 7

Records for conservation significant species recorded from the study area

Genus	Species	Infra Rank	Infra Name	No. Plants	% Cover	Height (m)	Easting	Northing
Goodenia	*nuda*			3	<1	0.4	714406	7479846
Goodenia	*nuda*			2	<1	0.4	712812	7478642
Goodenia	*nuda*			2	<1	0.4	717883	7477255
Goodenia	*nuda*			5	<1	0.3	714186	7479622
Goodenia	*nuda*			8	<1	0.3	714152	7479525
Goodenia	*nuda*			25	<1	0.4	714165	7479530
Goodenia	*nuda*			11	<1	0.3	714148	7479491
Goodenia	*nuda*			10	<1	0.3	714171	7479395
Goodenia	*nuda*			3	<1	0.4	714150	7479369
Goodenia	*nuda*			2	<1	0.4	714099	7479361
Goodenia	*nuda*			7	<1	0.3	713216	7478831
Goodenia	*nuda*			5	<1	0.35	713185	7478810
Goodenia	*nuda*			2	<1	0.35	713158	7478789
Goodenia	*nuda*			11	<1	0.4	712989	7478629
Goodenia	*nuda*			2	<1	0.35	712917	7478611
Goodenia	*nuda*			7	<1	0.4	712876	7478619
Goodenia	*nuda*			2	<1	0.4	712837	7478616
Goodenia	*nuda*			3	<1	0.3	713122	7478666
Goodenia	*nuda*			7	<1	0.4	712989	7478629
Goodenia	*nuda*			15	<1	0.4	712917	7478611
Goodenia	*nuda*			8	<1	0.4	712876	7478619

Genus	Species	Infra Rank	Infra Name	No. Plants	% Cover	Height (m)	Easting	Northing
Goodenia	*nuda*			2	<1	0.4	712837	7478616
Goodenia	*nuda*			2	<1	0.4	712787	7478582
Goodenia	*nuda*			12	<1	0.4	712569	7478459
Goodenia	*nuda*			37	<1	0.4	712635	7478606
Goodenia	*nuda*			23	<1	0.4	712704	7478644
Goodenia	*nuda*			11	<1	0.4	717617	7477003
Goodenia	*nuda*			14	<1	0.3	712730	7478801
Goodenia	*nuda*			32	<1	0.3	712745	7478806
Goodenia	*nuda*			13	<1	0.3	713732	7478951
Goodenia	*nuda*			3	<1	0.3	713746	7478963
Goodenia	*nuda*			6	<1	0.3	713971	7479173
Goodenia	*nuda*			5	<1	0.3	714676	7479720
Goodenia	*nuda*			1	<1	0.3	714473	7479476
Goodenia	*nuda*			4	<1	0.3	714473	7479475
Goodenia	*nuda*			4	<1	0.3	714473	7479495
Goodenia	*nuda*			6	<1	0.3	714473	7479525
Goodenia	*nuda*			1	<1	0.3	714472	7479585
Goodenia	*nuda*			3	<1	0.3	714472	7479610
Goodenia	*nuda*			6	<1	0.3	714472	7479625
Goodenia	*nuda*			4	<1	0.3	714472	7479643
Goodenia	*nuda*			9	<1	0.3	714472	7479644

Genus	Species	Infra Rank	Infra Name	No. Plants	% Cover	Height (m)	Easting	Northing
Goodenia	*nuda*			3	<1	0.3	714676	7479720
Goodenia	*nuda*			15	<1	0.4	712787	7478582
Goodenia	*nuda*			31	<1	0.4	712783	7478530
Goodenia	*nuda*			3	<1	0.4	712569	7478459
Goodenia	*nuda*			5	<1	0.4	712635	7478606
Goodenia	*nuda*			5	<1	0.3	712704	7478644
Goodenia	*nuda*			2	<1	0.3	713732	7478951
Goodenia	*nuda*			2	<1	0.3	713746	7478963
Rostellularia	*adscendens*	var.	*latifolia*	3	<1	0.2	713498	7478928
Rostellularia	*adscendens*	var.	*latifolia*	12	<1	0.25	712812	7478642
Rostellularia	*adscendens*	var.	*latifolia*	50	<1	0.25	716600	7477636
Rostellularia	*adscendens*	var.	*latifolia*	50	<1	0.25	713802	7479188
Rostellularia	*adscendens*	var.	*latifolia*	70	<1	0.3	713460	7478888
Rostellularia	*adscendens*	var.	*latifolia*	5	<1	0.15	709693	7481671
Rostellularia	*adscendens*	var.	*latifolia*	4	<1	0.2	709823	7481245
Rostellularia	*adscendens*	var.	*latifolia*	1	<1	0.1	709823	7481245
Rostellularia	*adscendens*	var.	*latifolia*	1	<1	0.25	709841	7481228
Rostellularia	*adscendens*	var.	*latifolia*	9	<1	0.1	709776	7481114
Rostellularia	*adscendens*	var.	*latifolia*	2	<1	0.2	709818	7481125
Rostellularia	*adscendens*	var.	*latifolia*	5	<1	0.2	709682	7481579
Rostellularia	*adscendens*	var.	*latifolia*	15	<1	0.2	713805	7479193

Genus	Species	Infra Rank	Infra Name	No. Plants	% Cover	Height (m)	Easting	Northing
Rostellularia	*adscendens*	var.	*latifolia*	2	<1	0.2	713781	7479188
Rostellularia	*adscendens*	var.	*latifolia*	1	<1	0.2	713747	7479178
Rostellularia	*adscendens*	var.	*latifolia*	3	<1	0.2	713655	7479111
Rostellularia	*adscendens*	var.	*latifolia*	25	<1	0.1	712730	7478801
Rostellularia	*adscendens*	var.	*latifolia*	15	<1	0.15	712745	7478806
Rostellularia	*adscendens*	var.	*latifolia*	7	<1	0.2	709703	7481265
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	40	0.5	0.3	716475	7475875
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	8	<1	0.4	715586	7476095
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	1	<1	0.35	716584	7477616
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.3	717124	7475915
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.35	717179	7475907
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	3	<1	0.4	717226	7475864
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	7	<1	0.3	717213	7475826
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	6	<1	0.3	717179	7475804
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	7	<1	0.3	717165	7475793
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.3	717151	7475786
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	1	<1	0.3	717151	7475786
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	1	<1	0.3	717056	7475857
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	4	<1	0.3	717036	7475856
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	8	<1	0.4	716984	7475840
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	3	<1	0.4	716983	7475845

Genus	Species	Infra Rank	Infra Name	No. Plants	% Cover	Height (m)	Easting	Northing
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.3	716959	7475837
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	4	<1	0.3	716950	7475827
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	10	<1	0.3	716928	7475865
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	5	<1	0.3	716923	7475872
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	8	<1	0.3	716910	7475872
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	1	<1	0.3	716887	7475971
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.3	716849	7475969
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.3	716760	7475945
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.2	716683	7475927
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	8	<1	0.3	716684	7475907
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	6	<1	0.3	716666	7475850
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	1	<1	0.3	716675	7475889
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	8	<1	0.3	716654	7475937
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	4	<1	0.3	716674	7476025
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.2	716681	7476023
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.2	716686	7476016
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	1	<1	0.2	716699	7476010
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	7	<1	0.25	715156	7475796
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	3	<1	0.3	715257	7475933
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	5	<1	0.4	715516	7475964
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	5	<1	0.4	715523	7475979

Genus	Species	Infra Rank	Infra Name	No. Plants	% Cover	Height (m)	Easting	Northing
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	6	<1	0.4	715534	7475999
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.3	715542	7476019
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	3	<1	0.4	715574	7476106
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	4	<1	0.3	715583	7476129
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	3	<1	0.4	715585	7476150
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	7	<1	0.4	715584	7476172
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.3	715584	7476172
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.4	715584	7476172
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	600	<1	0.2	715641	7476575
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.3	715517	7475929
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	1	<1	0.3	716584	7475938
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	10	0.5	0.35	716570	7475936
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	8	0.5	0.35	716537	7475948
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	12	0.5	0.4	716517	7475952
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	10	0.5	0.35	716505	7475967
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	8	0.5	0.4	716504	7475974
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	20	1	0.4	716487	7475980
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	35	2	0.4	716478	7475991
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	25	1.5	0.4	716463	7476004
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	6	0.5	0.35	716450	7476021
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	6	<1	0.3	716433	7476040

Genus	Species	Infra Rank	Infra Name	No. Plants	% Cover	Height (m)	Easting	Northing
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	4	<1	0.25	716453	7475932
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	3	<1	0.3	716471	7475934
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	5	<1	0.4	716488	7475932
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	1	<1	0.4	716503	7475917
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	5	<1	0.4	716492	7475895
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	4	<1	0.35	716485	7475875
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.3	716473	7475858
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	18	2	0.45	716466	7475845
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.35	716461	7475836
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	6	<1	0.35	716505	7475930
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.45	716517	7475937
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	1	<1	0.3	716584	7475938
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	3	<1	0.4	716570	7475936
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	5	<1	0.4	716537	7475948
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	8	<1	0.4	716517	7475952
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	1	<1	0.4	716505	7475967
Sida		sp.	Barlee Range (S. van Leeuwen 1642)	2	<1	0.4	716504	7475974

APPENDIX 8

Records for introduced species recorded from the study area

Genus	Species	No. Plants	Count/Estimate	% Cover	Height (m)	Easting	Northing
Aerva	*javanica*	1	Count	<1	0.1	709782	7480682
Aerva	*javanica*	2	Count	<1	0.5	709776	7481114
Bidens	*bipinnata*	50	Count	<1	0.4	713498	7478928
Bidens	*bipinnata*	5	Count	<1	0.4	712812	7478642
Bidens	*bipinnata*	2	Count	<1	0.3	711844	7478999
Bidens	*bipinnata*	20	Count	<1	0.2	715586	7476095
Bidens	*bipinnata*	20	Count	<1	0.5	714353	7479441
Bidens	*bipinnata*	30	Count	<1	0.4	713802	7479188
Bidens	*bipinnata*	90	Count	<1	0.4	716923	7475872
Bidens	*bipinnata*	250	Count	<1	0.3	715550	7476069
Bidens	*bipinnata*	100	Count	<1	0.3	715641	7476575
Bidens	*bipinnata*	200	Count	0.5	0.4	715649	7476913
Bidens	*bipinnata*	10	Count	<1	0.3	716584	7475938
Bidens	*bipinnata*	20	Count	<1	0.2	709696	7481363
Bidens	*bipinnata*	5	Count	<1	0.2	709776	7481114
Bidens	*bipinnata*	10	Count	<1	0.2	714602	7479866
Bidens	*bipinnata*	100	Count	<1	0.2	713273	7478854
Bidens	*bipinnata*	40	Count	<1	0.4	714472	7479644
Bidens	*bipinnata*	150	Estimate	1	0.35	716853	7476817
Cenchrus	*ciliaris*	50	Count	<1	0.5	709904	7480408
Cenchrus	*ciliaris*	20	Count	1	0.5	709721	7481767

Genus	Species	No. Plants	Count/Estimate	% Cover	Height (m)	Easting	Northing
Cenchrus	*ciliaris*	10	Count	<1	0.5	714406	7479846
Cenchrus	*ciliaris*	300	Count	3	0.5	713498	7478928
Cenchrus	*ciliaris*	100	Count	2	0.5	712812	7478642
Cenchrus	*ciliaris*	5	Count	<1	0.5	716600	7477636
Cenchrus	*ciliaris*	20	Count	<1	0.5	717883	7477255
Cenchrus	*ciliaris*	200	Count	4	0.7	714353	7479441
Cenchrus	*ciliaris*	200	Estimate	7	0.7	714013	7479323
Cenchrus	*ciliaris*	15	Count	<1	0.4	711940	7479015
Cenchrus	*ciliaris*	5	Count	<1	0.6	709694	7481475
Cenchrus	*ciliaris*	20	Count	0.5	1	709841	7481228
Cenchrus	*ciliaris*	20	Count	<1	0.6	709915	7481110
Cenchrus	*ciliaris*	30	Count	<1	0.6	709947	7481080
Cenchrus	*ciliaris*	15	Count	<1	0.5	710172	7480970
Cenchrus	*ciliaris*	30	Count	<1	0.4	709965	7480988
Cenchrus	*ciliaris*	60	Count	2	0.4	709883	7480406
Cenchrus	*ciliaris*	50	Count	<1	0.5	714602	7479866
Cenchrus	*ciliaris*	500	Count	10	0.5	713273	7478854
Cenchrus	*ciliaris*	310	Count	6	0.7	714149	7479491
Cenchrus	*ciliaris*	300	Count	15	0.5	714052	7479290
Cenchrus	*ciliaris*	420	Count	9	0.5	713122	7478666
Cenchrus	*ciliaris*	40	Count	1	0.5	714472	7479644

Genus	Species	No. Plants	Count/Estimate	% Cover	Height (m)	Easting	Northing
Cenchrus	*ciliaris*	100	Count	2	0.5	712627	7478438
Cenchrus	*ciliaris*	40	Count	1.5	0.5	713971	7479173
Cenchrus	*ciliaris*	500	Estimate	10	0.5	716756	7476852
Cenchrus	*ciliaris*	60	Estimate	1	0.5	716853	7476817
Cenchrus	*ciliaris*	200	Estimate	3	0.5	716973	7476852
Cenchrus	*ciliaris*	250	Estimate	5	0.5	717498	7477175
Conyza	*bonariensis*	20	Count	<1	0.4	709904	7480408
Conyza	*bonariensis*	5	Count	<1	0.8	709883	7480406
Flaveria	*trinervia*	5	Count	<1	0.4	711844	7478999
Flaveria	*trinervia*	30	Count	<1	0.4	714353	7479441
Flaveria	*trinervia*	2	Count	<1	0.3	713921	7479251
Flaveria	*trinervia*	3	Count	<1	0.5	712019	7479021
Flaveria	*trinervia*	100	Count	<1	0.5	711940	7479015
Flaveria	*trinervia*	2	Count	<1	0.3	709693	7481671
Flaveria	*trinervia*	2	Count	<1	0.3	709782	7480682
Flaveria	*trinervia*	15	Count	<1	0.1	709818	7481125
Flaveria	*trinervia*	1	Count	<1	0.3	714052	7479290
Malvastrum	*americanum*	15	Count	<1	0.5	709721	7481767
Malvastrum	*americanum*	20	Count	<1	0.6	713498	7478928
Malvastrum	*americanum*	5	Count	<1	0.45	712812	7478642
Malvastrum	*americanum*	1	Count	<1	0.1	711844	7478999

Genus	Species	No. Plants	Count/Estimate	% Cover	Height (m)	Easting	Northing
Malvastrum	*americanum*	15	Count	<1	0.8	714353	7479441
Malvastrum	*americanum*	1	Count	<1	0.2	713802	7479188
Malvastrum	*americanum*	10	Count	<1	0.3	709693	7481671
Malvastrum	*americanum*	5	Count	<1	0.3	709823	7481245
Malvastrum	*americanum*	50	Count	<1	0.3	709857	7481217
Malvastrum	*americanum*	8	Count	<1	0.1	709947	7481080
Malvastrum	*americanum*	2	Count	<1	0.2	709818	7481125
Malvastrum	*americanum*	2	Count	<1	0.3	709883	7480406
Malvastrum	*americanum*	10	Count	<1	0.3	713655	7479111
Malvastrum	*americanum*	15	Count	<1	0.5	714474	7479476
Rumex	*vesicarius*	75	Estimate	2	1	714788	7477250
Setaria	*verticillata*	5	Count	<1	0.5	709904	7480408
Setaria	*verticillata*	30	Count	<1	0.5	713498	7478928
Setaria	*verticillata*	2	Count	<1	0.7	712812	7478642
Setaria	*verticillata*	15	Count	<1	0.4	714353	7479441
Setaria	*verticillata*	5	Count	<1	0.5	713802	7479188
Setaria	*verticillata*	10	Count	<1	0.4	709693	7481671
Setaria	*verticillata*	6	Count	<1	0.4	709694	7481475
Setaria	*verticillata*	25	Count	<1	0.4	709694	7481475
Setaria	*verticillata*	30	Count	<1	0.3	709823	7481245
Setaria	*verticillata*	150	Count	2	0.3	709841	7481228

Genus	Species	No. Plants	Count/Estimate	% Cover	Height (m)	Easting	Northing
Setaria	*verticillata*	20	Count	<1	0.3	709841	7481228
Setaria	*verticillata*	10	Count	<1	0.3	709947	7481080
Setaria	*verticillata*	40	Count	0.5	0.3	709782	7480682
Setaria	*verticillata*	2	Count	<1	0.2	709818	7481125
Setaria	*verticillata*	4	Count	<1	0.2	709682	7481579
Setaria	*verticillata*	10	Count	<1	0.2	709883	7480406
Setaria	*verticillata*	3	Count	<1	0.5	715944	7478351
Setaria	*verticillata*	15	Count	<1	0.5	713805	7479193
Setaria	*verticillata*	20	Count	<1	0.5	714052	7479290
Setaria	*verticillata*	2	Count	1	0.5	716853	7476817
Sonchus	*asper*	5	Count	<1	0.1	709786	7480691
Vachellia	*farnesiana*	1	Count	<1	2	709707	7481446

APPENDIX 9

Site sheets summarising raw data for quadrats within the study area

Site Data

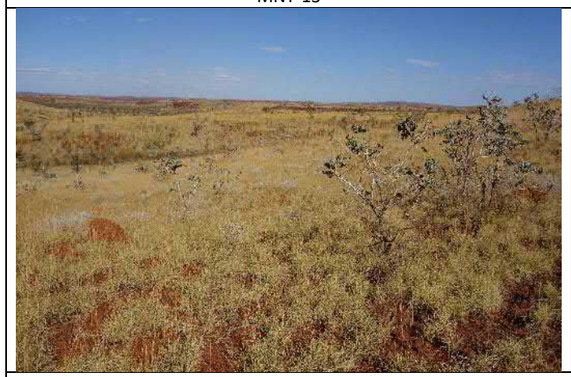
SITE_ID	LANDFORM	BROAD_FF	VEG_ASSOC	VEG_COND	ASPECT	SLOPE	SOIL_TYPE	SOIL_COLO	LAST_FIRE	MGA	EASTING	NORTHING
MNY-01	Major Drainage Line	Eucalyptus Open Forest	Open Forest of Eucalyptus camaldulensis and Eucalyptus victrix over Sedges of Cyperus vaginatus over Open Tussock Grassland of Sorghum plumosum, Themeda triandra and Eulalia aurea	Very Good	North	Low	Sand	Brown	Old (6+ yr)	MGA50	709904	7480408
MNY-02	Hillcrest/ Upper Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia wiseana with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia over Low Open Shrubland of Ptilotus obovatus	Excellent	East	Flat	Sandy Loam	Brown	Old (6+ yr)	MGA50	709613	7480924
MNY-03	Major Drainage Line	Themeda Tussock Grassland	Tussock Grassland of Themeda triandra, Sorghum plumosum and Enneapogon polyphyllus with Low Woodland of Eucalyptus victrix over Sedges of Cyperus vaginatus	Very Good	North	Flat	Sand	Brown	Old (6+ yr)	MGA50	709721	7481767
MNY-04	Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia wiseana with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia over Open Shrubland of Acacia bivenosa and Acacia ancistrocarpa	Excellent	West	Low	Sandy Loam	Brown	Moderate (3 to 5 yr)	MGA50	710068	7481321
MNY-05	Hillcrest/ Upper Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia wiseana and Triodia brizoides with High Open Shrubland of Acacia inaequilatera over Open Shrubland of Senna glutinosa subsp. glutinosa and Gossypium australe	Excellent	North/ West	Moderate	Sandy Loam	Brown	Moderate (3 to 5 yr)	MGA50	710410	7480956
MNY-06	Drainage Area/ Floodplain	Triodia Hummock Grassland	Hummock Grassland of Triodia pungens with Low Open Woodland of Corymbia hamersleyana and Hakea lorea subsp. lorea over Low Open Shrubland of Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186)	Excellent	Flat	Flat	Sandy Loam	Brown	Old (6+ yr)	MGA50	714406	7479846
MNY-07	Major Drainage Line	Eucalyptus Low Woodland	Low Woodland of Eucalyptus victrix over Low Shrubland of Corchorus crozophorifolius and Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186) over Open Tussock Grassland of Cymbopogon ambiguus (riverine form), Themeda triandra and Enneapogon lindleyanus	Very Good	Flat	Flat	Sand	Brown	Old (6+ yr)	MGA50	713498	7478928
MNY-08	Drainage Area/ Floodplain	Triodia Open Hummock Grassland	Open Hummock Grassland of Triodia pungens over Open Tussock Grassland of Themeda triandra, Enneapogon lindleyanus and Aristida contorta with Low Open Woodland of Corymbia hamersleyana, Hakea lorea subsp. lorea and Eucalyptus victrix	Very Good	South/ East	Low	Sandy Loam	Brown	Old (6+ yr)	MGA50	712812	7478642
MNY-09	Hillcrest/ Upper Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia vanleeuwenii and Triodia wiseana with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia over High Open Shrubland of Grevillea wickhamii subsp. hispidula	Excellent	East	Low	Sandy Loam	Brown	Old (6+ yr)	MGA50	714891	7477353
MNY-10	Cliff	Eriachne Open Tussock Grassland	Open Tussock Grassland of Eriachne mucronata, Cymbopogon ambiguus and Themeda sp. Mt Barricade (M.E. Trudgen 2471) with Low Open Woodland of Corymbia ferriticola and Eucalyptus leucophloia subsp. leucophloia over Very Open Hummock Grassland of Triodia wiseana	Excellent	South	Very Steep	Sandy Loam	Brown	Moderate (3 to 5 yr)	MGA50	716344	7477053
MNY-11	Gully	Themeda Tussock Grassland	Tussock Grassland of Themeda triandra, Cymbopogon ambiguus and Eriachne mucronata with Low Open Woodland of Corymbia ferriticola, Eucalyptus leucophloia subsp. leucophloia and Ficus brachypoda over Open Shrubland of Androcalva luteiflora, Acacia tumida var. pilbarensis and Abutilon sp. Dioicum (A.A. Mitchell PRP 1618)	Excellent	North/ East	Low	Silty Loam	Brown	Recent (0 to 2 yr)	MGA50	716600	7477636
MNY-12	Hillcrest/ Upper Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia vanleeuwenii and Triodia wiseana with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia over Very Open Herbs of Goodenia stobbsiana	Excellent	North	Low	Sandy Loam	Brown	Recent (0 to 2 yr)	MGA50	718098	7476146
MNY-13	Minor Drainage Line	Androcalva Shrubland	Shrubland of Androcalva luteiflora, Petalostylis labicheoides and Santalum lanceolatum over Low Shrubland of Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186)	Excellent	North	Low	Sandy Loam	Brown	Recent (0 to 2 yr)	MGA50	717920	7476529
MNY-14	Drainage Area/ Floodplain	Acacia Low Shrubland	Low Shrubland of Acacia pyrifolia, Sida sp. Shovelanna Hill (S. van Leeuwen 2846) and Ptilotus astrolasius over Open Hummock Grassland of Triodia pungens with Low Open Woodland of Corymbia hamersleyana	Excellent	Flat	Flat	Sandy Loam	Brown	Recent (0 to 2 yr)	MGA50	717883	7477255

SITE_ID	LANDFORM	BROAD_FF	VEG_ASSOC	VEG_COND	ASPECT	SLOPE	SOIL_TYPE	SOIL_COLO	LAST_FIRE	MGA	EASTING	NORTHING
MNY-15	Gorge	Corymbia Low Woodland	Low Woodland of Corymbia ferriticola, Eucalyptus leucophloia subsp. leucophloia and Ficus brachypoda over Open Tussock Grassland of Eriachne mucronata, Themeda triandra and Cymbopogon ambiguus with Open Hummock Grassland of Triodia pungens and Triodia wiseana	Excellent	East	Moderate	Sandy Loam	Brown	Old (6+ yr)	MGA50	716475	7475875
MNY-16	Hillcrest/ Upper Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia vanleeuwenii with Low Shrubland of Acacia hilliana and Acacia spondylophylla with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia and Corymbia hamersleyana	Excellent	North/ West	Low	Sandy Loam	Brown	Old (6+ yr)	MGA50	716032	7475954
MNY-17	Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia wiseana with High Open Shrubland of Acacia inaequilatera over Low Open Shrubland of Indigofera rugosa	Excellent	North/ East	Low	Silty Loam	Brown	Moderate (3 to 5 yr)	MGA50	713014	7480014
MNY-18	Medium Drainage Line	Themeda Open Tussock Grassland	Open Tussock Grassland of Themeda triandra, Cymbopogon ambiguus and Enneapogon lindleyanus with Open Sedges of Cyperus vaginatus with Low Open Woodland of Acacia coriacea subsp. pendens, Eucalyptus victrix and Corymbia hamersleyana	Excellent	East	Low	Silty Loam	Brown	Old (6+ yr)	MGA50	713181	7480069
MNY-19	Cliff	Acacia Low Woodland	Low Woodland of Acacia pruinocarpa, Eucalyptus leucophloia subsp. leucophloia and Corymbia ferriticola over Open Tussock Grassland of Themeda triandra, Cymbopogon ambiguus and Eriachne mucronata with Open Shrubland of Dodonaea pachyneura, Senna glutinosa subsp. glutinosa and Eremophila latrobei subsp. latrobei	Excellent	South/ East	Very Steep	Sandy Loam	Brown	Old (6+ yr)	MGA50	713973	7479381
MNY-20	Hillcrest/ Upper Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia pungens with Low Open Woodland of Acacia pruinocarpa, Eucalyptus leucophloia subsp. leucophloia and Hakea lorea subsp. lorea with Scattered Shrubs of Eremophila latrobei subsp. latrobei	Excellent	Flat	Flat	Sandy Loam	Brown	Old (6+ yr)	MGA50	713463	7479206
MNY-21	Hillcrest/ Upper Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia pungens and Triodia wiseana with Low Open Woodland of Acacia pruinocarpa and Eucalyptus leucophloia subsp. leucophloia over Open Shrubland of Grevillea wickhamii subsp. hispidula and Eremophila latrobei subsp. latrobei	Excellent	Flat	Flat	Sandy Loam	Brown	Old (6+ yr)	MGA50	712256	7479519
MNY-22	Minor Drainage Line	Acacia Open Scrub	Open Scrub of Acacia monticola, Acacia maitlandii and Acacia dictyophleba over Open Hummock Grassland of Triodia wiseana over Open Tussock Grassland of Themeda triandra, Cymbopogon obtectus and Paraneurachne muelleri	Very Good	North/ East	Low	Sandy Loam	Brown	Old (6+ yr)	MGA50	715109	7479415
MNY-23	Hillcrest/ Upper Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia pungens with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia and Acacia pruinocarpa over High Open Shrubland of Grevillea wickhamii subsp. hispidula	Excellent	Flat	Flat	Sandy Loam	Brown	Old (6+ yr)	MGA50	712971	7479044
MNY-24	Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia wiseana with Low Open Woodland of Corymbia hamersleyana over High Open Shrubland of Acacia inaequilatera	Excellent	South	Moderate	Loam	Brown	Moderate (3 to 5 yr)	MGA50	712269	7478999
MNY-25	Medium Drainage Line	Acacia Low Woodland	Low Woodland of Acacia coriacea subsp. pendens and Acacia aptaneura over Open Tussock Grassland of Eriachne tenuiculmis, Themeda triandra and Bothriochloa ewartiana with Open Sedges of Cyperus vaginatus	Very Good	East	Low	Loam	Brown	Old (6+ yr)	MGA50	711844	7478999
MNY-26	Gorge	Corymbia Low Woodland	Low Woodland of Corymbia ferriticola, Corymbia hamersleyana and Eucalyptus leucophloia subsp. leucophloia over High Shrubland of Acacia tumida var. pilbarensis, Acacia hamersleyensis and Grevillea wickhamii over Open Hummock Grassland of Triodia pungens and Triodia wiseana	Excellent	North	Low	Silty Loam	Brown	Old (6+ yr)	MGA50	715586	7476095
MNY-27	Major Drainage Line	Cymbopogon Tussock Grassland	Tussock Grassland of Cymbopogon ambiguus, Sorghum plumosum and Enneapogon lindleyanus with Woodland of Eucalyptus victrix over Low Shrubland of Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186), Corchorus crozophorifolius and Acacia pyrifolia	Very Good	North/ East	Flat	Loamy Sand	Brown	Old (6+ yr)	MGA50	714353	7479441
MNY-28	Stony Plain	Triodia Hummock Grassland	Hummock Grassland of Triodia wiseana with High Open Shrubland of Acacia inaequilatera, Acacia tenuissima and Acacia adsurgens with Low Open Woodland of Corymbia hamersleyana	Excellent	North/ East	Low	Sandy Loam	Brown	Old (6+ yr)	MGA50	714267	7478334

SITE_ID	LANDFORM	BROAD_FF	VEG_ASSOC	VEG_COND	ASPECT	SLOPE	SOIL_TYPE	SOIL_COLO	LAST_FIRE	MGA	EASTING	NORTHING
MNY-29	Cliff	Themeda Tussock Grassland	Tussock Grassland of Themeda triandra, Eriachne mucronata and Cymbopogon obtectus with Low Open Woodland of Corymbia ferriticola and Eucalyptus leucophloia subsp. leucophloia over Very Open Hummock Grassland of Triodia wiseana	Excellent	South/ East	Cliff	Sandy Loam	Brown	Moderate (3 to 5 yr)	MGA50	717040	7477362
MNY-30	Medium Drainage Line	Triodia Open Hummock Grassland	Open Hummock Grassland of Triodia wiseana over Open Tussock Grassland of Themeda triandra, Enneapogon lindleyanus and Cymbopogon ambiguus with High Open Shrubland of Acacia maitlandii	Excellent	East	Low	Sand	Brown	Moderate (3 to 5 yr)	MGA50	713155	7480580
MNY-31	Hillcrest/ Upper Hillslope	Triodia Hummock Grassland	Hummock Grassland of Triodia wiseana and Triodia brizoides with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia over Scattered Shrubs of Senna glutinosa subsp. glutinosa and Senna glutinosa subsp. pruinosa	Excellent	East	Low	Sandy Loam	Brown	Moderate (3 to 5 yr)	MGA50	710906	7480911
MNY-32	Minor Drainage Line	Acacia Open Scrub	Open Scrub of Acacia monticola, Gossypium robinsonii and Acacia maitlandii over Open Tussock Grassland of Themeda triandra and Cymbopogon ambiguus with Low Open Woodland of Corymbia hamersleyana and Eucalyptus leucophloia subsp. leucophloia	Excellent	East	Low	Sandy Loam	Brown	Moderate (3 to 5 yr)	MGA50	709310	7481805

Study Site Photos

			
MNY-1	MNY-2	MNY-3	MNY-4
			
MNY-5	MNY-6	MNY-7	MNY-8
			
MNY-9	MNY-10	MNY-11	MNY-12

			
MNY-13	MNY-14	MNY-15	MNY-16
			
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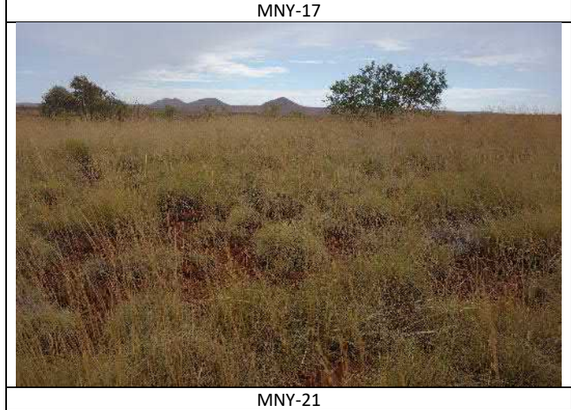	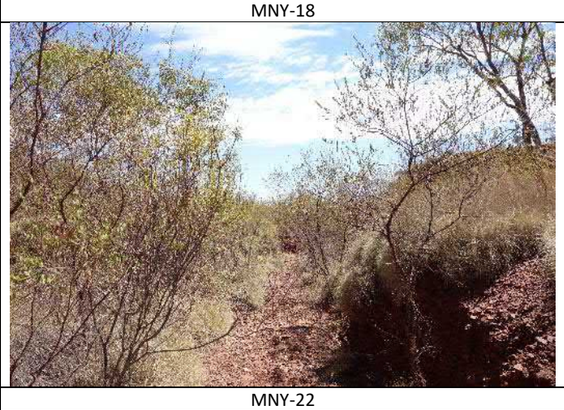	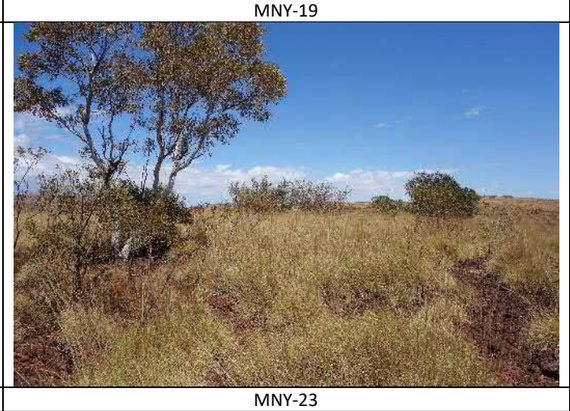	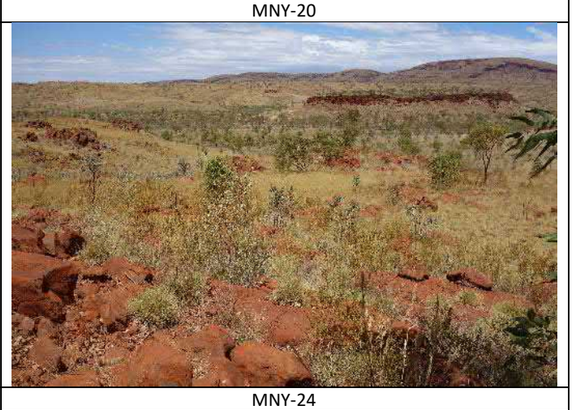
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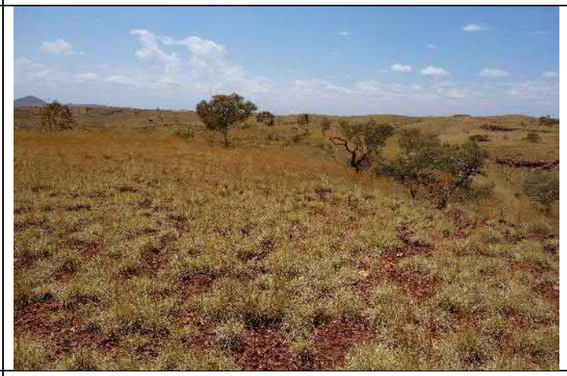
MNY-25	MNY-26	MNY-27	MNY-28
			
MNY-29	MNY-30	MNY-31	MNY-32

Species recorded from each study site

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-01	Opportunistic	Ammannia	baccifera			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Opportunistic	Typha	domingensis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Acacia	bivenosa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Acacia	maitlandii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Acacia	pyrifolia			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Amaranthus	undulatus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Aristida	holathera	var.	holathera	No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Atalaya	hemiglauca			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Boerhavia	coccinea			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Bothriochloa	ewartiana			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Cenchrus	ciliaris			No	Introduced	50	Count	<1	0.5	Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Cleome	viscosa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Conyza	bonariensis			No	Introduced	20	Count	<1	0.4	Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Corchorus	lasiocarpus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Crotalaria	medicaginea	var.	neglecta	No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Crotalaria	novae-hollandiae			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Cyperus	vaginatus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Enteropogon	ramosus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Eragrostis	tenellula			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Eremophila	longifolia			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Eriachne	tenuiculmis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Eucalyptus	camaldulensis			No	Native					Old (6+ yr)	Major Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-01	Quadrat	Eucalyptus	victrix			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Eulalia	aurea			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Euphorbia	australis	var.	subtomentosa	No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Gossypium	australe			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Gossypium	robinsonii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Hibiscus	coatesii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Melaleuca	glomerata			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Melhania	oblongifolia			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Phyllanthus	maderaspatensis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Pluchea	rubelliflora			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Pseudognaphalium	luteoalbum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Pterocaulon	sphacelatum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Rhynchosia	minima			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Salsola	australis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Schenkia	australis			No	Native	60	Count	<1	0.3	Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Setaria	verticillata			No	Introduced	5	Count	<1	0.5	Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Sorghum	plumosum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Stemodia	grossa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Tephrosia	rosea	var.	Fortescue creeks (M.I.H. Brooker 2186)	No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Major Drainage Line
MNY-01	Quadrat	Waltheria	indica			No	Native					Old (6+ yr)	Major Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-02	Quadrat	Acacia	adoxa	var.	adoxa	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Acacia	aptaneura			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Acacia	bivenosa			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Acacia	pruinocarpa			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Achyranthes	aspera			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Aristida	holathera	var.	holathera	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Bulbostylis	barbata			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Cleome	viscosa			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Duperreya	commixta			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Dysphania	rhadinostachya			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Eremophila	latrobei	subsp.	latrobei	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Eremophila	longifolia			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Eriachne	mucronata			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Gomphrena	cunninghamii			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Goodenia	stobbsiana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Hibiscus	coatesii			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Maireana	planifolia			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Maireana	tomentosa			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Paraneurachne	muelleri			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Polycarpaea	holtzei			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Pterocaulon	sphacelatum			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-02	Quadrat	Ptilotus	calostachyus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Ptilotus	fusiformis			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Ptilotus	nobilis			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Ptilotus	obovatus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Senna	ferraria			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Senna	glutinosa	subsp.	x luerssenii	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Sida		sp.	verrucose glands (F.H. Mollemans 2423)	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Sporobolus	australasicus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Tribulus	suberosus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Triodia	brizoides			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-02	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-03	Quadrat	Acacia	ancistrocarpa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Acacia	bivenosa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Acacia	coriacea	subsp.	pendens	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Acacia	maitlandii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Acacia	monticola			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Acacia	pruinocarpa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Acacia	pyrifolia			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Achyranthes	aspera			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Alysicarpus	muelleri			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Aristida	contorta			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Atalaya	hemiglauca			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Boerhavia	coccinea			No	Native					Old (6+ yr)	Major Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-03	Quadrat	Cenchrus	ciliaris			No	Introduced	20	Count	1	0.5	Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Cleome	viscosa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Corchorus	crozophorifolius			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Corchorus	lasiocarpus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Crotalaria	medicaginea	var.	neglecta	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Cyperus	vaginatus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Duperreya	commixta			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Enneapogon	robustissimus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Eragrostis	eriopoda			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Eriachne	tenuiculmis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Eucalyptus	camaldulensis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Eucalyptus	victrix			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Eulalia	aurea			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Euphorbia	australis	var.	subtomentosa	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Euphorbia	biconvexa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Evolvulus	alsinoides	var.	decumbens	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Gossypium	australe			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Gossypium	robinsonii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Indigofera	monophylla			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Indigofera	rugosa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Malvastrum	americanum			No	Introduced	15	Count	<1	0.5	Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Melaleuca	glomerata			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Melhania	oblongifolia			No	Native					Old (6+ yr)	Major Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-03	Quadrat	Paraneurachne	muelleri			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Phyllanthus	maderaspatensis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Pluchea	rubelliflora			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Pterocaulon	sphacelatum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Senna	artemisioides	subsp.	helmsii	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Sida		sp.	spiciform panicles (E. Leyland s.n. 14/8/90)	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Sorghum	plumosum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Stemodia	grossa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Tephrosia	rosea	var.	Fortescue creeks (M.I.H. Brooker 2186)	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Tephrosia		sp.	Fortescue (A.A. Mitchell 606)	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Old (6+ yr)	Major Drainage Line
MNY-03	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Major Drainage Line
MNY-04	Opportunistic	Carissa	lanceolata			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Opportunistic	Lepidium	pedicellosum			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Acacia	adoxa	var.	adoxa	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Acacia	ancistrocarpa			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Acacia	aptaneura			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Acacia	bivenosa			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Acacia	maitlandii			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Acacia	pruinocarpa			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Acacia	tenuissima			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Acacia	tetragonophylla			No	Native					Moderate (3 to 5 yr)	Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-04	Quadrat	Aristida	contorta			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Aristida	holathera	var.	holathera	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Bonamia	erecta			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Cleome	viscosa			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Corchorus	lasiocarpus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Cymbopogon	ambiguus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Cymbopogon	obtectus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Dodonaea	coriacea			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Enneapogon	lindleyanus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Enneapogon	polyphyllus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Eremophila	longifolia			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Eriachne	mucronata			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Gossypium	australe			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Gossypium	robinsonii			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Paraneurachne	muelleri			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Ptilotus	calostachyus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Ptilotus	obovatus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Senna	glutinosa	subsp.	pruinosa	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Senna	glutinosa	subsp.	x luerssenii	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Solanum	cleistogamum			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Solanum	lasiophyllum			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Tephrosia	rosea	var.	Fortescue creeks (M.I.H. Brooker 2186)	No	Native					Moderate (3 to 5 yr)	Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-04	Quadrat	Themeda	triandra			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Tribulus	suberosus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Triodia	brizoides			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-04	Quadrat	Triodia	wiseana			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-05	Quadrat	Abutilon		sp.	Dioicum (A.A. Mitchell PRP 1618)	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Acacia	adoxa	var.	adoxa	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Acacia	dictyophleba			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Acacia	inaequilatera			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Acacia	maitlandii			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Acacia	pruinocarpa			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Acacia	tenuissima			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Acacia	tetragonophylla			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Alysicarpus	muelleri			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Atalaya	hemiglauca			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Bonamia	pilbarensis			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Bulbostylis	barbata			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Cheilanthes	brownii			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Clerodendrum	floribundum	var.	angustifolium	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Corchorus	lasiocarpus			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Crotalaria	novae-hollandiae			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Cucumis	variabilis			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Cullen	leucochaites			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Cymbopogon	ambiguus			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Eremophila	longifolia			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Eriachne	mucronata			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Goodenia	triodiophila			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-05	Quadrat	Gossypium	australe			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Indigofera	monophylla			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Nicotiana	benthamiana			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Paraneurachne	muelleri			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Polycarpaea	holtzei			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Polycarpaea	longiflora			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Ptilotus	astrolasius			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Ptilotus	obovatus			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Ptilotus	rotundifolius			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Rhynchosia	minima			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Santalum	lanceolatum			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Senna	artemisioides	subsp.	helmsii	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Senna	glutinosa	subsp.	pruinosa	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Sida		sp.	spiciform panicles (E. Leyland s.n. 14/8/90)	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Solanum	lasiophyllum			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Swainsona	decurrens			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Tephrosia	stipuligera			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Tephrosia		sp.	Bungaroo Creek (M.E. Trudgen 11601)	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Tephrosia		sp.	Fortescue (A.A. Mitchell 606)	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Tephrosia		sp.	Newman (A.A. Mitchell PRP 29)	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Themeda	triandra			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-05	Quadrat	Tribulus	suberosus			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Triodia	brizoides			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-05	Quadrat	Triodia	wiseana			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-06	Opportunistic	Indigofera	linifolia			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Acacia	ancistrocarpa			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Acacia	dictyophleba			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Acacia	elachantha			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Acacia	inaequilatera			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Acacia	maitlandii			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Acacia	pachyacra			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Acacia	pyrifolia			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Alternanthera	nana			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Aristida	contorta			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Aristida	holathera	var.	holathera	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Aristida	inaequiglumis			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Atalaya	hemiglauca			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Bonamia	erecta			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Bothriochloa	ewartiana			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Bulbostylis	barbata			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Cenchrus	ciliaris			No	Introduced	10	Count	<1	0.5	Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Chrysopogon	fallax			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Convolvulus		sp.	indet	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Corchorus	lasiocarpus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Corymbia	hamersleyana			No	Native					Old (6+ yr)	Drainage Area/ Floodplain

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-06	Quadrat	Crotalaria	medicaginea	var.	neglecta	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Cymbopogon	obtectus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Digitaria	ctenantha			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Enneapogon	polyphyllus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Enneapogon	robustissimus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Eragrostis	cumingii			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Eragrostis	eriopoda			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Eragrostis	tenellula			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Eremophila	longifolia			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Eriachne	tenuiculmis			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Eulalia	aurea			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Euphorbia	australis	var.	subtomentosa	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Euphorbia	tannensis	subsp.	eremophila	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Evolvulus	alsinoides	var.	decumbens	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Goodenia	nuda			Yes	Native	3	Count	<1	0.4	Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Gossypium	australe			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Heliotropium	tenuifolium			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Hibiscus	sturtii	var.	platychlamys	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Hybanthus	aurantiacus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Indigofera	monophylla			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Melhania	oblongifolia			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Paraneurachne	muelleri			No	Native					Old (6+ yr)	Drainage Area/ Floodplain

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-06	Quadrat	Perotis	rara			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Polycarpaea	corymbosa			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Polymeria	ambigua			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Pterocaulon	sphacelatum			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Ptilotus	astrolasius			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Salsola	australis			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Senna	artemisioides	subsp.	helmsii	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Sida		sp.	spiciform panicles (E. Leyland s.n. 14/8/90)	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Sida		sp.	verrucose glands (F.H. Mollemans 2423)	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Sorghum	plumosum			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Sporobolus	australasicus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Streptoglossa	decurrens			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Tephrosia	rosea	var.	Fortescue creeks (M.I.H. Brooker 2186)	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Tephrosia		sp.	Bungaroo Creek (M.E. Trudgen 11601)	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Trigastrotheca	molluginea			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Triodia	pungens			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Vigna		sp.	Hamersley Clay (A.A. Mitchell PRP 113)	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-06	Quadrat	Waltheria	indica			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-07	Quadrat	Abutilon		sp.	Dioicum (A.A. Mitchell PRP 1618)	No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Acacia	maitlandii			No	Native					Old (6+ yr)	Major Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-07	Quadrat	Acacia	pyrifolia			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Achyranthes	aspera			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Alternanthera	nana			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Amaranthus	undulatus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Atalaya	hemiglauca			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Bidens	bipinnata			No	Introduced	50	Count	<1	0.4	Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Cenchrus	ciliaris			No	Introduced	300	Count	3	0.5	Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Cleome	viscosa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Corchorus	crozophorifolius			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Cucumis	variabilis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Digitaria	brownii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Digitaria	ctenantha			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Duperreya	commixta			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Enchylaena	tomentosa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Eragrostis	cumingii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Eragrostis	tenellula			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Eriachne	mucronata			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Eriachne	tenuiculmis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Eucalyptus	victrix			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Eulalia	aurea			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Euphorbia	australis	var.	subtomentosa	No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Euphorbia	australis	var.	subtomentosa	No	Native					Old (6+ yr)	Major Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-07	Quadrat	Gomphrena	cunninghamii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Gossypium	robinsonii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Hybanthus	aurantiacus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Indigofera	monophylla			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Ipomoea	muelleri			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Malvastrum	americanum			No	Introduced	20	Count	<1	0.6	Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Melhania	oblongifolia			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Phyllanthus	maderaspatensis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Pluchea	dentex			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Ptilotus	nobilis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Ptilotus	obovatus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Rostellularia	adscendens	var.	latifolia	Yes	Native	3	Count	<1	0.2	Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Salsola	australis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Setaria	verticillata			No	Introduced	30	Count	<1	0.5	Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Sorghum	plumosum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Stemodia	grossa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Tephrosia	rosea	var.	Fortescue creeks (M.I.H. Brooker 2186)	No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Triodia	pungens			No	Native					Old (6+ yr)	Major Drainage Line
MNY-07	Quadrat	Waltheria	indica			No	Native					Old (6+ yr)	Major Drainage Line
MNY-08	Quadrat	Acacia	maitlandii			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Acacia	monticola			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Acacia	pyrifolia			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Alternanthera	nana			No	Native					Old (6+ yr)	Drainage Area/ Floodplain

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-08	Quadrat	Androcalva	luteiflora			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Aristida	contorta			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Aristida	holathera	var.	holathera	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Atalaya	hemiglauca			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Bidens	bipinnata			No	Introduced	5	Count	<1	0.4	Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Boerhavia	coccinea			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Bulbostylis	barbata			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Cenchrus	ciliaris			No	Introduced	100	Count	2	0.5	Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Chrysopogon	fallax			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Cleome	viscosa			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Corchorus	crozophorifolius			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Crotalaria	medicaginea	var.	neglecta	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Cucumis	variabilis			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Cymbopogon	obtectus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Digitaria	brownii			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Digitaria	ctenantha			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Enneapogon	polyphyllus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Enneapogon	robustissimus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Eragrostis	cumingii			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Eremophila	longifolia			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Eriachne	mucronata			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Eriachne	tenuiculmis			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Eucalyptus	victrix			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Euphorbia	australis	var.	subtomentosa	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Euphorbia	biconvexa			No	Native					Old (6+ yr)	Drainage Area/ Floodplain

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-08	Quadrat	Evolvulus	alsinoides	var.	decumbens	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Goodenia	muelleriana			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Goodenia	nuda			Yes	Native	2	Count	<1	0.4	Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Gossypium	australe			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Hakea	chordophylla			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Heliotropium	tenuifolium			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Hybanthus	aurantiacus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Indigofera	monophylla			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Ipomoea	muelleri			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Isotropis	atropurpurea			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Malvastrum	americanum			No	Introduced	5	Count	<1	0.45	Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Melhania	oblongifolia			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Perotis	rara			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Phyllanthus	maderaspatensis			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Polycarpaea	corymbosa			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Polymeria	ambigua			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Pterocaulon	sphacelatum			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Ptilotus	astrolasius			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Ptilotus	nobilis			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Ptilotus	obovatus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Rhagodia	eremaea			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Rostellularia	adscendens	var.	latifolia	Yes	Native	12	Count	<1	0.25	Old (6+ yr)	Drainage Area/ Floodplain

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-08	Quadrat	Salsola	australis			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Senna	artemisioides	subsp.	helmsii	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Seringia	velutina			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Setaria	verticillata			No	Introduced	2	Count	<1	0.7	Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Sida		sp.	spiciform panicles (E. Leyland s.n. 14/8/90)	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Solanum	lasiophyllum			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Solanum	phlomoides			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Sporobolus	australasicus			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Stemodia	grossa			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Streptoglossa	decurrens			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Tephrosia	rosea	var.	Fortescue creeks (M.I.H. Brooker 2186)	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Trachymene	oleracea			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Trigastrotheca	molluginea			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Vittadinia	dissecta	var.	hirta	No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-08	Quadrat	Waltheria	indica			No	Native					Old (6+ yr)	Drainage Area/ Floodplain
MNY-09	Quadrat	Acacia	hilliana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Acacia	monticola			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Acacia	spondylophylla			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Bulbostylis	barbata			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Duperreya	commixta			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Dysphania	rhadinostachya			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-09	Quadrat	Eriachne	lanata			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Eriachne	mucronata			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Gompholobium	oreophilum			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Hakea	chordophylla			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Oldenlandia	crouchiana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Polycarpaea	holtzei			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Ptilotus	calostachyus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Scaevola	browniana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Seringia	velutina			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Solanum	lasiophyllum			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Trachymene	oleracea			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Triodia	vanleeuwenii			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-09	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-10	Opportunistic	Ficus	brachypoda			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Acacia	adoxa	var.	adoxa	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Acacia	hilliana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Acacia	maitlandii			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Acacia	pruinocarpa			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Amphipogon	sericeus			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Aristida	holathera	var.	holathera	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Astrotricha	hamptonii			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Bulbostylis	barbata			No	Native					Moderate (3 to 5 yr)	Cliff

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-10	Quadrat	Cheilanthes	sieberi			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Cleome	viscosa			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Clerodendrum	floribundum	var.	angustifolium	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Corchorus	lasiocarpus			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Corymbia	ferriticola			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Corymbia	hamersleyana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Cucumis	variabilis			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Cullen	leucochaites			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Cymbopogon	ambiguus			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Dampiera	candicans			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Dodonaea	coriacea			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Dysphania	rhadinostachya			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Eriachne	aristidea			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Eriachne	mucronata			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Gompholobium	oreophilum			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Gomphrena	cunninghamii			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Goodenia	stobbsiana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Gossypium	robinsonii			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Hakea	chordophylla			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Hibiscus	sturtii	var.	platychlamys	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Hibiscus		sp.	Mt Robinson (G. Byrne 3537)	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Mirbelia	viminalis			No	Native					Moderate (3 to 5 yr)	Cliff

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-10	Quadrat	Nicotiana	benthamiana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Oldenlandia	crouchiana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Paraneurachne	muelleri			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Peripleura	virgata			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Petalostylis	labicheoides			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Polycarpaea	holtzei			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Polycarpaea	longiflora			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Pterocaulon	serrulatum			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Ptilotus	clementii			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Ptilotus	fusiformis			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Ptilotus	nobilis			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Ptilotus	obovatus			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Rhodanthe	margarethae			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Senna	venusta			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Sida		sp.	Articulation below (A.A. Mitchell PRP 1605)	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Sida		sp.	Golden calyces glabrous (H.N. Foote 32)	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Sida		sp.	Shovelanna Hill (S. van Leeuwen 3842)	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Solanum	horridum			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Themeda		sp.	Mt Barricade (M.E. Trudgen 2471)	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Triodia	wiseana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-10	Quadrat	Triumfetta	maconochieana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-11	Quadrat	Abutilon		sp.	Dioicum (A.A. Mitchell PRP 1618)	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Acacia	adoxa	var.	adoxa	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Acacia	monticola			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Acacia	pruinocarpa			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Recent (0 to 2 yr)	Gully

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-11	Quadrat	Amaranthus	undulatus			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Androcalva	luteiflora			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Aristida	burbidgeae			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Atalaya	hemiglauca			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Bulbostylis	barbata			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Cenchrus	ciliaris			No	Introduced	5	Count	<1	0.5	Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Cheilanthes	sieberi			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Crotalaria	novae-hollandiae			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Cucumis	variabilis			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Cymbopogon	ambiguus			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Duperreya	commixta			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Dysphania	rhadinostachya			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Enneapogon	lindleyanus			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Eriachne	mucronata			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Eriachne	tenuiculmis			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Euphorbia		sp.	indet	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Evolvulus	alsinoides	var.	decumbens	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Ficus	brachypoda			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Gomphrena	cunninghamii			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Goodenia	stobbsiana			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Gossypium	australe			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Gossypium	robinsonii			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Grevillea	pyramidalis	subsp.	leucadendron	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Hibiscus	sturtii	var.	campylochlamys	No	Native					Recent (0 to 2 yr)	Gully

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-11	Quadrat	Hibiscus		sp.	Mt Robinson (G. Byrne 3537)	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Hybanthus	aurantiacus			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Isotropis	atropurpurea			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Nicotiana	benthamiana			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Paraneurachne	muelleri			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Paspalidium	clementii			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Polycarpaea	longiflora			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Pterocaulon	sphacelatum			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Ptilotus	obovatus			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Ptilotus	obovatus			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Rhodanthe	margarethae			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Rhynchosia	minima			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Rostellularia	adscendens	var.	latifolia	Yes	Native	50	Count	<1	0.25	Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Santalum	lanceolatum			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Senna	venusta			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Sida		sp.	Articulation below (A.A. Mitchell PRP 1605)	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Solanum	cleistogamum			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Solanum	phlomoides			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Stemodia	grossa			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Streptoglossa	decurrens			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Tephrosia	virens			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Tephrosia		sp.	Fortescue (A.A. Mitchell 606)	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Themeda	triandra			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Trachymene	oleracea			No	Native					Recent (0 to 2 yr)	Gully

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-11	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Triumfetta	leptacantha			No	Native					Recent (0 to 2 yr)	Gully
MNY-11	Quadrat	Tylophora	flexuosa			No	Native					Recent (0 to 2 yr)	Gully
MNY-12	Quadrat	Acacia	adoxa	var.	adoxa	No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Acacia	bivenosa			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Acacia	hilliana			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Acacia	pachyacra			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Amphipogon	sericeus			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Aristida	holathera	var.	holathera	No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Clerodendrum	floribundum	var.	angustifolium	No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Corymbia	hamersleyana			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Cucumis	variabilis			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Cymbopogon	ambiguus			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Dampiera	candicans			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Dysphania	rhadinostachya			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Eriachne	aristidea			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Fimbristylis	dichotoma			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Gompholobium	oreophilum			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Gomphrena	cunninghamii			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Goodenia	stobbsiana			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Hakea	chordophylla			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Heliotropium	inexplicitum			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Paspalidium	clementii			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-12	Quadrat	Polycarpaea	corymbosa			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Polycarpaea	holtzei			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Ptilotus	auriculifolius			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Ptilotus	calostachyus			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Ptilotus	nobilis			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Schizachyrium	fragile			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Senna	glutinosa	subsp.	pruinosa	No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Senna	glutinosa	subsp.	x luerssenii	No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Sida	arenicola			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Sida		sp.	Golden calyces glabrous (H.N. Foote 32)	No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Solanum	cleistogamum			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Solanum	lasiophyllum			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Solanum	phlomoides			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Trachymene	oleracea			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Triodia	vanleeuwenii			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Triodia	wiseana			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-12	Quadrat	Triumfetta	maconochieana			No	Native					Recent (0 to 2 yr)	Hillcrest/ Upper Hillslope
MNY-13	Quadrat	Acacia	pyrifolia			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Alternanthera	nana			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Androcalva	luteiflora			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Aristida	holathera	var.	holathera	No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Corchorus	lasiocarpus			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Corymbia	hamersleyana			No	Native					Recent (0 to 2 yr)	Minor Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-13	Quadrat	Cucumis	variabilis			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Cymbopogon	ambiguus			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Digitaria	brownii			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Duperreya	commixta			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Dysphania	rhadinostachya			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Eremophila	longifolia			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Eriachne	mucronata			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Eriachne	tenuiculmis			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Evolvulus	alsinoides	var.	villosicalyx	No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Gossypium	australe			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Gossypium	robinsonii			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Hibiscus	sturtii	var.	campylochlamys	No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Hybanthus	aurantiacus			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Petalostylis	labicheoides			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Polycarpaea	longiflora			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Ptilotus	astrolasius			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Santalum	lanceolatum			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Senna	venusta			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Sida		sp.	spiciform panicles (E. Leyland s.n. 14/8/90)	No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Tephrosia	rosea	var.	Fortescue creeks (M.I.H. Brooker 2186)	No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Tephrosia	virens			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Themeda	triandra			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-13	Quadrat	Triodia	pungens			No	Native					Recent (0 to 2 yr)	Minor Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-13	Quadrat	Triodia	wiseana			No	Native					Recent (0 to 2 yr)	Minor Drainage Line
MNY-14	Opportunistic	Wahlenbergia	tumidifructa			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Abutilon	otocarpum			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Acacia	adoxa	var.	adoxa	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Acacia	maitlandii			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Acacia	pyrifolia			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Androcalva	luteiflora			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Aristida	holathera	var.	holathera	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Atalaya	hemiglauca			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Bonamia	erecta			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Cenchrus	ciliaris			No	Introduced	20	Count	<1	0.5	Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Cleome	viscosa			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Corchorus	crozophorifolius			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Corchorus	lasiocarpus			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Corymbia	hamersleyana			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Crotalaria	medicaginea	var.	neglecta	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Cucumis	variabilis			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Duperreya	commixta			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Dysphania	rhadinostachya			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Eragrostis	eriopoda			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Eremophila	longifolia			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Eriachne	tenuiculmis			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Eucalyptus	victrix			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Eulalia	aurea			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Evolvulus	alsinoides	var.	villosicalyx	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Goodenia	nuda			Yes	Native	2	Count	<1	0.4	Recent (0 to 2 yr)	Drainage Area/ Floodplain

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-14	Quadrat	Gossypium	australe			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Heliotropium	cunninghamii			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Heliotropium	pachyphyllum			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Heliotropium	tenuifolium			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Hibiscus	sturtii	var.	platychlamys	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Hybanthus	aurantiacus			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Indigofera	monophylla			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Paraneurachne	muelleri			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Polycarpaea	corymbosa			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Polycarpaea	longiflora			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Polymeria	ambigua			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Ptilotus	astrolasius			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Ptilotus	calostachyus			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Ptilotus	nobilis			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Rhynchosia	minima			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Salsola	australis			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Santalum	lanceolatum			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Scaevola	spinescens			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Senna	glaucifolia			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Senna	notabilis			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Sida		sp.	verrucose glands (F.H. Mollemans 2423)	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Streptoglossa	decurrens			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Tephrosia	rosea	var.	Fortescue creeks (M.I.H. Brooker 2186)	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-14	Quadrat	Tephrosia		sp.	Bungaroo Creek (M.E. Trudgen 11601)	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Themeda	triandra			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Trigastrotheca	molluginea			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-14	Quadrat	Triodia	pungens			No	Native					Recent (0 to 2 yr)	Drainage Area/ Floodplain
MNY-15	Quadrat	Abutilon		sp.	Dioicum (A.A. Mitchell PRP 1618)	No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Acacia	monticola			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Acacia	pruinocarpa			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Amaranthus	undulatus			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Aristida	burbidgeae			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Astrotricha	hamptonii			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Atalaya	hemiglauca			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Boerhavia	coccinea			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Bulbostylis	barbata			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Cheilanthes	brownii			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Corymbia	ferriticola			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Cucumis	variabilis			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Cyperus	cunninghamii	subsp.	cunninghamii	No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Digitaria	brownii			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Duperreya	commixta			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Dysphania	rhadinostachya			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Enneapogon	polyphyllus			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Eriachne	mucronata			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Euphorbia	biconvexa			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Euphorbia		sp.	indet	No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Ficus	brachypoda			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Gomphrena	cunninghamii			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Gossypium	robinsonii			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Hybanthus	aurantiacus			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Lobelia	heterophylla			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Nicotiana	benthamiana			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Oldenlandia	crouchiana			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Paspalidium	clementii			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Petalostylis	labicheoides			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Ptilotus	obovatus			No	Native					Old (6+ yr)	Gorge

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-15	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Sida		sp.	Articulation below (A.A. Mitchell PRP 1605)	No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Sida		sp.	Barlee Range (S. van Leeuwen 1642)	Yes	Native	40	Count	0.5	0.3	Old (6+ yr)	Gorge
MNY-15	Quadrat	Sida		sp.	Shovelanna Hill (S. van Leeuwen 3842)	No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Solanum	cleistogamum			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Tephrosia	virens			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Tinospora	smilacina			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Trachymene	oleracea			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Triodia	pungens			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Triumfetta	leptacantha			No	Native					Old (6+ yr)	Gorge
MNY-15	Quadrat	Triumfetta	maconochieana			No	Native					Old (6+ yr)	Gorge
MNY-16	Quadrat	Acacia	hilliana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Acacia	monticola			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Acacia	pruinocarpa			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Acacia	spondylophylla			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Bulbostylis	barbata			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Corymbia	hamersleyana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Diplatia	grandibractea			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Eriachne	lanata			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Gompholobium	oreophilum			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Hakea	chordophylla			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Indigofera	monophylla			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Petalostylis	labicheoides			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-16	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Scaevola	browniana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Senna	glutinosa	subsp.	pruinosa	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Solanum	lasiophyllum			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Triodia	vanleeuwenii			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-16	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-17	Quadrat	Abutilon		sp.	indet	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Acacia	inaequilatera			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Acacia	maitlandii			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Acacia	pruinocarpa			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Aristida	holathera	var.	holathera	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Bonamia	erecta			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Corchorus	lasiocarpus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Cucumis	variabilis			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Cymbopogon	ambiguus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Enneapogon	lindleyanus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Enneapogon	robustissimus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Eremophila	fraseri			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Euphorbia	biconvexa			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Euphorbia		sp.	indet	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Evolvulus	alsinoides	var.	villosicalyx	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Gossypium	australe			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Heliotropium	tenuifolium			No	Native					Moderate (3 to 5 yr)	Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-17	Quadrat	Indigofera	rugosa			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Paraneurachne	muelleri			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Polycarpaea	longiflora			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Rhynchosia	minima			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Sida		sp.	indet	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Swainsona	decurrens			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Tephrosia		sp.	Bungaroo Creek (M.E. Trudgen 11601)	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Tephrosia		sp.	Fortescue (A.A. Mitchell 606)	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Triodia	wiseana			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-17	Quadrat	Triumfetta	clementii			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-18	Quadrat	Acacia	bivenosa			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Acacia	coriacea	subsp.	pendens	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Acacia	maitlandii			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Amaranthus	undulatus			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Aristida	holathera	var.	holathera	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Bothriochloa	ewartiana			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Bulbostylis	barbata			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Corchorus	lasiocarpus			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Corymbia	hamersleyana			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Crotalaria	medicaginea	var.	neglecta	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Cucumis	variabilis			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Cyperus	vaginatus			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Eremophila	fraseri			No	Native					Old (6+ yr)	Medium Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-18	Quadrat	Eremophila	longifolia			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Eriachne	mucronata			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Eriachne	tenuiculmis			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Eucalyptus	victrix			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Eulalia	aurea			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Euphorbia	biconvexa			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Gossypium	australe			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Melaleuca	glomerata			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Pluchea	dentex			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Pluchea	rubelliflora			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Pterocaulon	sphacelatum			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Rhynchosia	minima			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Sorghum	plumosum			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Stemodia	grossa			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Streptoglossa	decurrens			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Swainsona	decurrens			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Tephrosia		sp.	Fortescue (A.A. Mitchell 606)	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-18	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-19	Quadrat	Acacia	aptaneura			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Acacia	pruinocarpa			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Achyranthes	aspera			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Amaranthus	undulatus			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Aristida	burbidgeae			No	Native					Old (6+ yr)	Cliff

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-19	Quadrat	Capparis	spinosa	subsp.	nummularia	No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Clerodendrum	floribundum	var.	angustifolium	No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Codonocarpus	cotinifolius			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Corchorus	crozophorifolius			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Corymbia	ferriticola			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Cucumis	variabilis			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Dodonaea	pachyneura			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Duperreya	commixta			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Dysphania	rhadinostachya			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Enneapogon	polyphyllus			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Eremophila	latrobei	subsp.	latrobei	No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Eriachne	mucronata			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Eulalia	aurea			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Gomphrena	cunninghamii			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Hibiscus		sp.	Mt Robinson (G. Byrne 3537)	No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Maireana	villosa			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Paspalidium	clementii			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Ptilotus	obovatus			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Rhagodia	eremaea			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Rhodanthe	margarethae			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Sida		sp.	indet	No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Solanum	cleistogamum			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Cliff
MNY-19	Quadrat	Triodia	pungens			No	Native					Old (6+ yr)	Cliff
MNY-20	Quadrat	Acacia	adsurgens			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Acacia	dictyophleba			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Acacia	monticola			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Acacia	pachyacra			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Acacia	pruinocarpa			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Calytrix	carinata			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-20	Quadrat	Clerodendrum	floribundum	var.	angustifolium	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Corchorus	lasiocarpus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Eremophila	latrobei	subsp.	latrobei	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Eriachne	lanata			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Eucalyptus	gamophylla			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Gossypium	australe			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Gossypium	robinsonii			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Pterocaulon	sphacelatum			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Ptilotus	calostachyus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Senna	ferraria			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Senna	glutinosa	subsp.	x luerssenii	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Seringia	velutina			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Sida	arenicola			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Solanum	phlomoides			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Triodia	pungens			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-20	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Acacia	ancistrocarpa			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Acacia	dictyophleba			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Acacia	elachantha			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Acacia	pruinocarpa			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Duperreya	commixta			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-21	Quadrat	Eremophila	latrobei	subsp.	latrobei	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Eriachne	mucronata			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Gossypium	australe			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Gossypium	robinsonii			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Ptilotus	obovatus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Triodia	pungens			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-21	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-22	Quadrat	Abutilon	lepidum			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Acacia	adoxa	var.	adoxa	No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Acacia	ancistrocarpa			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Acacia	inaequilatera			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Acacia	maitlandii			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Acacia	monticola			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Alternanthera	nana			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Androcalva	luteiflora			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Aristida	holathera	var.	holathera	No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Bulbostylis	barbata			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Cleome	viscosa			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Corchorus	crozophorifolius			No	Native					Old (6+ yr)	Minor Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-22	Quadrat	Corchorus	lasiocarpus			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Corymbia	hamersleyana			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Cucumis	variabilis			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Euphorbia	biconvexa			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Gomphrena	cunninghamii			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Gossypium	robinsonii			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Isotropis	atropurpurea			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Paraneurachne	muelleri			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Phyllanthus	maderaspatensis			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Ptilotus	astrolasius			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Rhynchosia	minima			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Salsola	australis			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Schizachyrium	fragile			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Solanum	cleistogamum			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Streptoglossa	decurrens			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Trachymene	oleracea			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-22	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Minor Drainage Line
MNY-23	Opportunistic	Eremophila	jucunda	subsp.	pulcherrima	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Acacia	dictyophleba			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Acacia	pruinocarpa			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Aristida	holathera	var.	holathera	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-23	Quadrat	Chrysopogon	fallax			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Corchorus	lasiocarpus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Eremophila	fraseri			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Eremophila	latrobei	subsp.	latrobei	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Eremophila	longifolia			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Eriachne	mucronata			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Goodenia	stobbsiana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Gossypium	australe			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Lepidium	pedicellosum			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Polycarpaea	holtzei			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Ptilotus	astrolasius			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Ptilotus	calostachyus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Ptilotus	fusiformis			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Ptilotus	obovatus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Sida		sp.	Articulation below (A.A. Mitchell PRP 1605)	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Sida		sp.	Excedentifolia (J.L. Egan 1925)	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Solanum	lasiophyllum			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Themeda		sp.	Mt Barricade (M.E. Trudgen 2471)	No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Tribulus	suberosus			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-23	Quadrat	Triodia	pungens			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-23	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Hillcrest/ Upper Hillslope
MNY-24	Quadrat	Acacia	inaequilatera			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Acacia	maitlandii			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Achyranthes	aspera			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Aristida	contorta			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Aristida	holathera	var.	holathera	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Bonamia	pilbarensis			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Bulbostylis	barbata			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Cheilanthes	sieberi			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Clerodendrum	floribundum	var.	angustifolium	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Corchorus	lasiocarpus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Corymbia	hamersleyana			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Cullen	leucochaites			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Cymbopogon	ambiguus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Enneapogon	caerulescens			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Enneapogon	polyphyllus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Eremophila	fraseri			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Eremophila	longifolia			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Eriachne	aristidea			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Eriachne	mucronata			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Euphorbia	australis	var.	hispidula	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Euphorbia		sp.	indet	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Evolvulus	alsinoides	var.	decumbens	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Fimbristylis	dichotoma			No	Native					Moderate (3 to 5 yr)	Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-24	Quadrat	Gossypium	australe			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Gossypium	robinsonii			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Heliotropium	tenuifolium			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Hibiscus	leptocladus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Hybanthus	aurantiacus			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Indigofera	rugosa			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Isotropis	atropurpurea			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Paraneurachne	muelleri			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Polycarpaea	corymbosa			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Polycarpaea	holtzei			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Polycarpaea	longiflora			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Rhynchosia	minima			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Santalum	lanceolatum			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Swainsona	decurrens			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Tephrosia		sp.	Fortescue (A.A. Mitchell 606)	No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Themeda	triandra			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Triodia	wiseana			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-24	Quadrat	Tripogonella	loliiformis			No	Native					Moderate (3 to 5 yr)	Hillslope
MNY-25	Quadrat	Abutilon		sp.	Dioicum (A.A. Mitchell PRP 1618)	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Acacia	aptaneura			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Acacia	coriacea	subsp.	pendens	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Acacia	maitlandii			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Alysicarpus	muelleri			No	Native					Old (6+ yr)	Medium Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-25	Quadrat	Bidens	bipinnata			No	Introduced	2	Count	<1	0.3	Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Bothriochloa	ewartiana			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Clerodendrum	floribundum	var.	angustifolium	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Corchorus	lasiocarpus			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Corchorus	tridens			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Crotalaria	medicaginea	var.	neglecta	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Cucumis	variabilis			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Cyperus	vaginatus			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Digitaria	ctenantha			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Eragrostis	cumingii			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Eragrostis	tenellula			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Eremophila	fraseri			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Eremophila	longifolia			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Eriachne	tenuiculmis			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Euphorbia	biconvexa			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Evolvulus	alsinoides	var.	decumbens	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Flaveria	trinervia			No	Introduced	5	Count	<1	0.4	Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Gomphrena	cunninghamii			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Gossypium	australe			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Gossypium	robinsonii			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Indigofera	colutea			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Indigofera	linifolia			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Malvastrum	americanum			No	Introduced	1	Count	<1	0.1	Old (6+ yr)	Medium Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-25	Quadrat	Melaleuca	glomerata			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Melhania	oblongifolia			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Peripleura	arida			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Phyllanthus	maderaspatensis			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Pluchea	dentex			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Pluchea	rubelliflora			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Pseudognaphalium	luteoalbum			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Pterocaulon	sphacelatum			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Rhynchosia	minima			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Stemodia	grossa			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Streptoglossa	decurrens			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Tephrosia	rosea	var.	Fortescue creeks (M.I.H. Brooker 2186)	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Old (6+ yr)	Medium Drainage Line
MNY-25	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Medium Drainage Line
MNY-26	Quadrat	Abutilon		sp.	Dioicum (A.A. Mitchell PRP 1618)	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Acacia	adoxa	var.	adoxa	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Acacia	hamersleyensis			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Acacia	monticola			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Alternanthera	nana			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Amaranthus	undulatus			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Amaranthus	undulatus			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Androcalva	luteiflora			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Aristida	burbidgeae			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Bidens	bipinnata			No	Introduced	20	Count	<1	0.2	Old (6+ yr)	Gorge

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-26	Quadrat	Bulbostylis	barbata			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Capparis	spinosa	subsp.	nummularia	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Cleome	viscosa			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Clerodendrum	floribundum	var.	angustifolium	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Corchorus	lasiocarpus			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Corymbia	ferriticola			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Corymbia	hamersleyana			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Cucumis	variabilis			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Cyperus	cunninghamii	subsp.	cunninghamii	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Dodonaea	lanceolata			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Dodonaea	pachyneura			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Duperreya	commixta			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Dysphania	rhadinostachya			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Enneapogon	polyphyllus			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Eragrostis	tenellula			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Eremophila	longifolia			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Eriachne	mucronata			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Euphorbia	biconvexa			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Euphorbia		sp.	indet	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Ficus	brachypoda			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Gomphrena	cunninghamii			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Gossypium	robinsonii			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Hibiscus	coatesii			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Nicotiana	benthamiana			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Notoleptopus	decaisnei			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Paspalidium	clementii			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Peripleura	virgata			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Petalostylis	labicheoides			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Phyllanthus	maderaspatensis			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Pterocaulon	sphacelatum			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Ptilotus	obovatus			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Rhynchosia	minima			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Schizachyrium	fragile			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Sida		sp.	Articulation below (A.A. Mitchell PRP 1605)	No	Native					Old (6+ yr)	Gorge

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-26	Quadrat	Sida		sp.	Barlee Range (S. van Leeuwen 1642)	Yes	Native	8	Count	<1	0.4	Old (6+ yr)	Gorge
MNY-26	Quadrat	Sida		sp.	Shovelanna Hill (S. van Leeuwen 3842)	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Sida		sp.	spiciform panicles (E. Leyland s.n. 14/8/90)	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Solanum	cleistogamum			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Solanum	gabrielae			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Stylobasium	spathulatum			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Tephrosia	virens			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Trachymene	oleracea			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Triodia	biflora			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Triodia	pungens			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Gorge
MNY-26	Quadrat	Triumfetta	maconochieana			No	Native					Old (6+ yr)	Gorge
MNY-27	Quadrat	Abutilon	lepidum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Acacia	maitlandii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Acacia	pyrifolia			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Acrachne	racemosa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Aristida	contorta			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Atalaya	hemiglauca			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Bidens	bipinnata			No	Introduced	20	Count	<1	0.5	Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Capparis	spinosa	subsp.	nummularia	No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Cenchrus	ciliaris			No	Introduced	200	Count	4	0.7	Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Chrysopogon	fallax			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Cleome	viscosa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Corchorus	crozophorifolius			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Crotalaria	medicaginea	var.	neglecta	No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Cucumis	variabilis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Cymbopogon	ambiguus			No	Native					Old (6+ yr)	Major Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-27	Quadrat	Digitaria	brownii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Digitaria	ctenantha			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Enneapogon	lindleyanus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Enneapogon	robustissimus			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Eremophila	longifolia			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Eriachne	tenuiculmis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Eucalyptus	victrix			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Eulalia	aurea			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Euphorbia	australis	var.	subtomentosa	No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Euphorbia	biconvexa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Evolvulus	alsinoides	var.	decumbens	No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Flaveria	trinervia			No	Introduced	30	Count	<1	0.4	Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Gomphrena	cunninghamii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Gossypium	robinsonii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Heliotropium	cunninghamii			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Indigofera	monophylla			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Malvastrum	americanum			No	Introduced	15	Count	<1	0.8	Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Melhania	oblongifolia			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Paspalidium	basicladum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Phyllanthus	maderaspatensis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Pluchea	dentex			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Polycarpaea	longiflora			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Pterocaulon	sphacelatum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Ptilotus	nobilis			No	Native					Old (6+ yr)	Major Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-27	Quadrat	Salsola	australis			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Setaria	verticillata			No	Introduced	15	Count	<1	0.4	Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Sida		sp.	indet	No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Sorghum	plumosum			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Stemodia	grossa			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Tephrosia	rosea	var.	Fortescue creeks (M.I.H. Brooker 2186)	No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Themeda	triandra			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Triodia	pungens			No	Native					Old (6+ yr)	Major Drainage Line
MNY-27	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Major Drainage Line
MNY-28	Quadrat	Acacia	adsurgens			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Acacia	ancistrocarpa			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Acacia	bivenosa			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Acacia	dictyophleba			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Acacia	dictyophleba			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Acacia	inaequilatera			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Acacia	maitlandii			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Acacia	pachyacra			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Acacia	tenuissima			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Aristida	contorta			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Aristida	holathera	var.	holathera	No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Bulbostylis	barbata			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Corymbia	hamersleyana			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Cucumis	variabilis			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Cymbopogon	obtectus			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Dysphania	rhadinostachya			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Enneapogon	caerulescens			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Eremophila	longifolia			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Eucalyptus	gamophylla			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Gossypium	australe			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Gossypium	australe			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Hakea	chordophylla			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Heliotropium	pachyphyllum			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Hibiscus	sturtii	var.	platychlamys	No	Native					Old (6+ yr)	Stony Plain

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-28	Quadrat	Paraneurachne	muelleri			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Polycarpaea	corymbosa			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Polycarpaea	holtzei			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Pterocaulon	sphacelatum			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Ptilotus	astrolasius			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Ptilotus	calostachyus			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Rhynchosia	minima			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Santalum	lanceolatum			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Senna	glutinosa	subsp.	pruinosa	No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Senna	glutinosa	subsp.	x luerssenii	No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Tephrosia		sp.	Bungaroo Creek (M.E. Trudgen 11601)	No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Trachymene	oleracea			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Trigastrotheca	molluginea			No	Native					Old (6+ yr)	Stony Plain
MNY-28	Quadrat	Triodia	wiseana			No	Native					Old (6+ yr)	Stony Plain
MNY-29	Quadrat	Abutilon		sp.	Dioicum (A.A. Mitchell PRP 1618)	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Acacia	adoxa	var.	adoxa	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Acacia	monticola			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Acacia	pruinocarpa			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Aristida	burbidgeae			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Aristida	holathera	var.	holathera	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Astrotricha	hamptonii			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Bulbostylis	barbata			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Cheilanthes	sieberi			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Cleome	viscosa			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Corchorus	lasiocarpus			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Corymbia	ferriticola			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Cucumis	variabilis			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Cymbopogon	ambiguus			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Cyperus	cunninghamii	subsp.	cunninghamii	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Dampiera	candicans			No	Native					Moderate (3 to 5 yr)	Cliff

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-29	Quadrat	Digitaria	brownii			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Duperreya	commixta			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Dysphania	rhadinostachya			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Enneapogon	caerulescens			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Enneapogon	lindleyanus			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Eriachne	lanata			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Eriachne	mucronata			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Fimbristylis	dichotoma			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Gomphrena	cunninghamii			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Goodenia	muelleriana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Goodenia	stobbsiana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Hakea	chordophylla			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Hakea	lorea	subsp.	lorea	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Hibiscus		sp.	Mt Robinson (G. Byrne 3537)	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Hybanthus	aurantiacus			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Mirbelia	viminalis			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Nicotiana	benthamiana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Paraneurachne	muelleri			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Paspalidium	clementii			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Peripleura	virgata			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Polycarpaea	holtzei			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Polycarpaea	longiflora			No	Native					Moderate (3 to 5 yr)	Cliff

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-29	Quadrat	Ptilotus	astrolasius			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Ptilotus	calostachyus			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Ptilotus	clementii			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Ptilotus	fusiformis			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Ptilotus	nobilis			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Ptilotus	obovatus			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Rhodanthe	margarethae			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Santalum	lanceolatum			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Scaevola	browniana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Schizachyrium	fragile			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Senna	venusta			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Sida		sp.	Articulation below (A.A. Mitchell PRP 1605)	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Sida		sp.	spiciform panicles (E. Leyland s.n. 14/8/90)	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Solanum	cleistogamum			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Solanum	lasiophyllum			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Themeda	triandra			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Trichodesma	zeylanicum	var.	zeylanicum	No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Triodia	wiseana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Triumfetta	leptacantha			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-29	Quadrat	Triumfetta	maconochieana			No	Native					Moderate (3 to 5 yr)	Cliff
MNY-30	Quadrat	Acacia	dictyophleba			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Acacia	inaequilatera			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Acacia	maitlandii			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Acacia	monticola			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Acacia	tenuissima			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-30	Quadrat	Alysicarpus	muelleri			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Aristida	contorta			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Bulbostylis	barbata			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Cleome	viscosa			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Corchorus	lasiocarpus			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Corchorus	lasiocarpus			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Crotalaria	medicaginea	var.	neglecta	No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Cullen	leucochaites			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Cymbopogon	ambiguus			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Cymbopogon	ambiguus			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Cyperus	vaginatus			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Enneapogon	lindleyanus			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Eragrostis	tenellula			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Eremophila	fraseri			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Eriachne	aristidea			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Eriachne	tenuiculmis			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Eucalyptus	victrix			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Euphorbia	australis	var.	subtomentosa	No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Euphorbia	biconvexa			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Fimbristylis	dichotoma			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Gossypium	australe			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Heliotropium	cunninghamii			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Heliotropium	tenuifolium			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Hibiscus	coatesii			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Indigofera	colutea			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Indigofera	monophylla			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-30	Quadrat	Indigofera	rugosa			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Phyllanthus	maderaspatensis			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Pluchea	dentex			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Pluchea	rubelliflora			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Polycarpaea	longiflora			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Pterocaulon	sphacelatum			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Rhynchosia	minima			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Santalum	lanceolatum			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Sida	echinocarpa			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Stemodia	grossa			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Swainsona	decurrens			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Tephrosia		sp.	Fortescue (A.A. Mitchell 606)	No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Themeda	triandra			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-30	Quadrat	Triodia	wiseana			No	Native					Moderate (3 to 5 yr)	Medium Drainage Line
MNY-31	Quadrat	Acacia	aptaneura			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Acacia	dictyophleba			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Acacia	elachantha			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Acacia	maitlandii			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Acacia	pruinocarpa			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Acacia	tenuissima			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Aristida	holathera	var.	holathera	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Bonamia	pilbarensis			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Corchorus	lasiocarpus			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Cymbopogon	ambiguus			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Diplatia	grandibractea			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-31	Quadrat	Dysphania	rhadinostachya			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Enneapogon	robustissimus			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Eremophila	latrobei	subsp.	filiformis	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Eremophila	longifolia			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Eriachne	lanata			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Eriachne	mucronata			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Eriachne	pulchella	subsp.	dominii	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Hibiscus	coatesii			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Hibiscus	sturtii	var.	campylochlamys	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Oldenlandia	crouchiana			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Paraneurachne	muelleri			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Polycarpaea	holtzei			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Ptilotus	calostachyus			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Ptilotus	nobilis			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Ptilotus	obovatus			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Senna	glutinosa	subsp.	pruinosa	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Senna	glutinosa	subsp.	x luerssenii	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Sida		sp.	Excedentifolia (J.L. Egan 1925)	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Sida		sp.	Pilbara (A.A. Mitchell PRP 1543)	No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Solanum	cleistogamum			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Themeda	triandra			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Triodia	brizoides			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-31	Quadrat	Triodia	brizoides			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-31	Quadrat	Triodia	wiseana			No	Native					Moderate (3 to 5 yr)	Hillcrest/ Upper Hillslope
MNY-32	Opportunistic	Grevillea	berryana			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Acacia	adoxa	var.	adoxa	No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Acacia	maitlandii			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Acacia	monticola			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Acacia	pruinocarpa			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Acacia	tumida	var.	pilbarensis	No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Aristida	holathera	var.	holathera	No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Aristida	inaequiglumis			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Clerodendrum	floribundum	var.	angustifolium	No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Corymbia	hamersleyana			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Cymbopogon	ambiguus			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Dodonaea	coriacea			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Enneapogon	lindleyanus			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Eriachne	mucronata			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Eucalyptus	leucophloia	subsp.	leucophloia	No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Goodenia	stobbsiana			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Gossypium	australe			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Gossypium	robinsonii			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Grevillea	wickhamii	subsp.	hispidula	No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Hybanthus	aurantiacus			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Jasminum	didymum	subsp.	lineare	No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Paraneurachne	muelleri			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Pluchea	dunlopii			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Polycarpaea	holtzei			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Polycarpaea	longiflora			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line

SITE_ID	S_METHOD	GENUS	SPECIES	INF_ RANK	INF_NAME	SIGNIFCNT	INTRO_ NATIVE	NO_ INDVLS	COUN_EST	COVERAGE	PLANT_ HEIGHT	LAST_FIRE	LANDFORM
MNY-32	Quadrat	Ptilotus	astrolasius			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Santalum	lanceolatum			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Senna	artemisioides	subsp.	oligophylla	No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Senna	glutinosa	subsp.	glutinosa	No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Senna	glutinosa	subsp.	pruinosa	No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Stemodia	grossa			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Themeda	triandra			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line
MNY-32	Quadrat	Triodia	wiseana			No	Native					Moderate (3 to 5 yr)	Minor Drainage Line