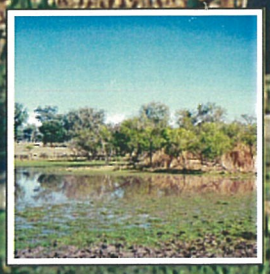

HYDER ENVIRONMENTAL

A DIVISION OF HYDER CONSULTING (AUSTRALIA) PTY LTD

Hyder Consulting

IMPACT ASSESSMENT STUDY FOR PROPOSED DAWSON DAM

FLORA

REPORT PREPARED FOR HYDER BY:

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Queensland Herbarium

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PREFACE

This report on the likely impacts of the construction and operation of the proposed Dawson Dam on flora is presented in two parts. The front section of the report presents the findings of the flora study undertaken by the Queensland Herbarium of the Department of Environment in October 1996 in relation to the original dam site specified in the Terms of Reference at 313.9 km AMTD and for a maximum Full Supply Level for the impoundment of 185 m elevation.

The survey highlighted four species of significance: *Rutidosis crispata*, *Cryptandra* sp., *Bertya pedicellata* and *Livistona* sp. *Rutidosis crispata* and *Bertya pedicellata* are both listed as rare plants in Schedule 4 of the nature Conservation (Wildlife) Regulation 1994 to the *Nature Conservation Act 1992.* was found above the 185 m elevation FSL.

Bertya pedicellata, a euphorb, was observed growing on the lower north eastern slope of Mt Glebe, well above the FSL 185 m level and in a location where neither dam construction or operation is likely to cause any concern for the protection of this plant population. The species is known from several sites in central Queensland.

The collection of *Rutidosis crispata* (synonym *Rutidosis* sp. (Theodore P.I.Forster PIF2639)), a native daisy, was only the second ever made. The species type was collected from Glenmoral Gap near Theodore. It was found growing on *Riverview* property north east of Taroom, above the maximum 185 m FSL but within about 200 metres of the impoundment.

The time constraints imposed on the original survey did not permit a detailed survey of the area to determine the extent of the distribution of the observed population. It was possible that the rare species might be found growing down to the Dawson river and be flooded by the dam.

It was recommended that a detailed survey be undertaken as quickly as possible to study the distribution of *Rutidosis crispata* so this could be taken into account in any considerations of the design FSL for the proposed dam.

The Department of Natural Resources supported this supplementary work and the survey was undertaken by the Queensland Herbarium in August 1997. The results of that supplementary survey constitute the second part of this report.

The survey found that *Rutidosis crispata* is more widespread than previously thought with a number of sites observed in the vicinity of the Dawson River, but mainly above the FSL while a further site was located in the Isla Gorge National Park. Nevertheless the conservation coding of *Rare* is still considered appropriate for the species.

A third rare plant, *Cryptandra* sp. was found adjacent to the site of the original proposed cutoff wall and upstream of it on the northern side. The proposed dam site has now moved 1.4 km upstream, and a population of this plant will lie outside the direct influence of the dam construction and operation. The species has also been collected in the Precipice National Park.

Livistona sp., an unnamed palm, occurs in a number of locations within the original impoundment area defined by the 313.9 km AMTD dam site and the 185 m elevation contour, including Palm Tree Creek, Price Creek and Spring Creek.

With the relocation of the proposed dam wall upstream above the Dawson River - Price Creek confluence, the palms in the Price Creek catchment are completely protected from inundation by the dam.

Should the maximum dam FSL be set at 182 m EL, there would be very little impact on the

extensive areas of palms in Palm Tree Creek. At an intermediate level of 183.5 m EL, some palms would be lost, but much less than would be the case with a maximum design FSL of 185 m EL.

It should also be noted that this palm also occurs in Nathan Gorge, and more extensively to the west in the Carnarvons, including the Carnarvon Gorge National Park. The species is referred to in the published literature as *Livistona* sp "Carnarvon".

The survey mapped the areas of each vegetation community within the impoundment area and the envelope. Twelve vegetation mapping units were recognised plus a large area of cleared land (over 71% of the impoundment area). Eight of the map units appear to equate to regional ecosystems of which five appear to equate to ecosystems which, according to a draft Department of Environment report (Sattler & Williams, in prep), are of some conservation concern.

Four units were listed as *of concern,* with one unit (the Tall woodland of *Casuarina cristata* (belah)) listed as *endangered.* The *Brachychiton rupestris* map unit would also merit an *endangered* rating, although it does not equate with any regional ecosystem listed in the DoE draft report.

The *Casuarina cristata* community occurs on *Balcarris* property and the *Brachychiton rupestris* on *Maloakey*, both communities being above the 185 m FSL, the latter considerably so.

While the communities listed in Sattler and Williams currently have no legal status, they do represent the current understanding of the conservation significance of these communities and as such it can be expected that they will form the basis of conservation planning in the future.

Dr Robert J. Thistlethwaite
Project Manager

PART A

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SUMMARY

This report presents a list of the species observed and the mapping units in which they were observed, a list of weed and introduced species, and a species list by family. Each mapping unit is described and its area determined. A vegetation map of the proposed dam impoundment and a surrounding envelope has been prepared at a scale of 1:50,000, and then reduced to a scale of 1:100,000 for presentation purposes The report then comments on the conservation status of species and communities observed in the study area.

The study has indicated that, apart from the *boggomosses*, there appear to be no unique areas of vegetation within the proposed impoundment area. All vegetation types within the impoundment are widespread, both within the impoundment itself and downstream of the dam to the junction of the Dawson River with the Mackenzie River.

There are, however, conservation concerns regarding some communities. Vegetation map units (1,2,3,and 7) appear to equate to regional ecosystems "of concern" and vegetation map unit 10 appears to equate to an "endangered" ecosystem. These are listed in a draft report from the Department of Environment on the conservation status of regional ecosystems (Sattler and Williams, in prep.). Of particular conservation concern was the discovery of the rare plant *Rutidosis crispata* adjacent to the impoundment area, and a detailed survey has been recommended to determine the extent of its occurrence and also whether it extends into the impoundment. (see Discussion sub-section *Species of Significance*). This survey should be undertaken before any decision is made concerning the design FSL for the dam.

INTRODUCTION

This report addresses a) the vegetation that occurs within the impoundment area of the proposed Dawson River Dam upstream of the Nathan Gorge at 313.9 km AMTD and within a design maximum Full Storage Level of 185 m EL; b) the vegetation occurring within an envelope surrounding the impoundment up to two kilometres in width; and c) riverine vegetation occurring downstream of the dam to the confluence of the Dawson and Mackenzie Rivers.

The report does not discuss the vegetation of the mound springs of the area, known locally as *boggomosses,* as these are the subject of a separate study.

AIMS AND OBJECTIVES

The aims of the study were to:

(1) identify areas of botanical significance in the dam impoundment and adjacent area, and assess
- potential adverse impact
- potential beneficial impacts
-

(2) prepare species lists for the study area, identifying any rare or endangered species

(3) produce a vegetation map at an appropriate scale suitable for planning and assessment purposes

(4) log new data on to the vegetation database for Queensland.

METHODOLOGY

The Queensland Herbarium HERBRECS data base was consulted to indicate which species were likely to occur within the dam impoundment or surrounding areas. Aerial photographs were examined and interpreted for vegetation types. In addition, LANDSAT Imagery was examined to delineate boundaries of vegetation units.

Field work was undertaken in October and November 1996:

- in the impoundment area and a surrounding envelope of land up to 2 kilometres in width
- at three Dawson River crossings downstream of the proposed dam at
    * Theodore
    * Moura
    * Baralaba

A total of 30 tertiary sites and 107 quaternary sites were examined using the Queensland Herbarium standard methodology (Thompson *et al*). The collected data were recorded on the Queensland Herbarium CORVEG data base.

A list of the plants observed or collected within the impoundment or envelope was made and a map showing the various verified vegetation units and their distribution was produced using GIS technology.

The schedules of the regulations of the Queensland *Nature Conservation Act 1992* (Anon 1992) were consulted to determine if there were any presumed extinct, endangered, vulnerable or rare plants within the impoundment or envelope. Sattler and Williams (in prep) was consulted to determine the conservation status of the various communities observed in the study area.

The naming convention used for structural form of the various communities is that proposed by Walker and Hopkins (1990). Botanical names used are those in Henderson (1994), except where the name has subsequently been changed, in which case the updated name is used. Names used are those current at 30th November 1996. A list of species observed or recorded during the course of the field work is presented in Appendix 1, Table 1 (Alphabetical List of Species) and Table 2 (Species Listing Sorted by Family).

TERRESTRIAL VEGETATION COMMUNITIES AND MAPPING UNITS

Within the impoundment and envelope study area the following mapping units and major vegetation communities within the impoundment are:

1. Tall Open forest of *Eucalyptus camaldulensis* (river red gum), *Eucalyptus tereticornis* (forest red gum) and *Eucalyptus coolabah* (coolibah)

2. Very tall Open forest-tall woodland of *Eucalyptus camaldulensis* (river red gum) and *Eucalyptus tereticornis* (forest red gum)

3. Tall woodland – Mid high Open forest of *Eucalyptus coolabah* (coolibah)

4. Tall Open forest of *Callitris glaucophylla* (white cypress pine)

5. Tall Open forest-Mid high Open forest – Mid high woodland of *Eucalyptus crebra* (narrow-leaved ironbark) and *Callitris glaucophylla* (white cypress pine)

6. Tall woodland- Mid high Open forest of *Acacia harpophylla* (brigalow), vine thicket and *Eucalyptus* spp.

7. Tall Open forest-Mid high woodland of *Eucalyptus populnea* (poplar box)

8. Tall woodland-Mid high Open forest-Mid high woodland of mixed *Eucalyptus* spp.

9a. Tall Open forest of Vine thicket.

9b. Tall woodland of *Brachychiton rupestris* (narrow-leaved bottle tree).

10. Tall woodland of *Casuarina cristata* (belah).

11. Mid high Open forest – Mid high woodland of *Acacia rhodoxylon* (rosewood).

12. Mid high Open forest – Mid high woodland of *Acacia rhodoxylon* (rosewood), *Acacia shirleyi* (lancewood) and *Acacia harpophylla* (brigalow).

13. Cleared. Lands used for agriculture, grazing and urban purposes

14. Water

Community and Mapping Unit Descriptions

1. Tall Open forest of *Eucalyptus camaldulensis* (river red gum), *Eucalyptus tereticornis* (forest red gum) and *Eucalyptus coolabah* (coolibah)

This unit occurs along the Dawson River and the tributaries that flow into it. *Eucalyptus camaldulensis* is common along the bank of the main river channel or along the edges of old river channels. *Eucalyptus tereticornis* can also be found growing in conjunction with *Eucalyptus camaldulensis* along the river channels but more commonly it is to be found growing higher on the river banks. *Eucalyptus coolabah* is always present being found along the river flats and higher up along the levee and along the river flood plain. *Melaleuca linariifolia* is also commonly present along the edges of the main river channel. *Livistona* sp. (Taroom R.W.Johnson 2764) may also be present in this unit. A sparse shrub layer is sometimes present and consists mainly of *Acacia spp*. The ground layer is somewhat variable, varying from sparse to dense depending on grazing pressure. It consists mainly of grass species but in parts *Lomandra longifolia* may become common. This community is generally associated with alluviums.

2. Very tall Open forest – tall woodland of *Eucalyptus camaldulensis* (river red gum) and *Eucalyptus tereticornis* (forest red gum)

This unit is found in the upper reaches of the tributaries of the Dawson River, though in places it may come close to the main Dawson River channel. It is also found in the Nathan Gorge. The tree species consists mainly of *Eucalyptus camaldulensis* and *Eucalyptus tereticornis* with *Eucalyptus tereticornis* being more common in the upper reaches of the

streams and *Eucalyptus camaldulensis* being more common towards the main Dawson River channel. Towards the upper reaches of the tributaries *Lophostemon suaveolens* becomes more common. *Livistona* sp. (Taroom R.W.Johnson 2764) may also be present in this unit. In the lower reaches there is generally little or no ground cover as a result of inundation and flooding and also probably as a result of grazing pressure. However in the upper reaches the ground layer is often very dense and consists mainly of grasses. This community is generally associated with alluviums.

3. Tall woodland – Mid high Open forest of *Eucalyptus coolabah* (coolibah)

This unit occurs on the Dawson River floodplain and associated creek systems where it is found on alluvial soils. The predominant tree species present is *Eucalyptus coolabah* though occasional clumps of *Acacia harpophylla* may be present. Along the main drainage lines of these communities, *Eucalyptus camaldulensis*, may be found but it is never common. Generally there is no shrub layer present and the ground layer varies from dense to sparse mainly as a result of grazing. The ground layer where present consists mainly of grasses. In some areas the soil layer is subject to sheet or rill erosion due to overgrazing.

4. Tall Open forest of *Callitris glaucophylla* (white cypress pine)

This unit mainly occurs on relatively deep sandy soils which are generally found overlaying sandstones. The predominant species present is *Callitris glaucophylla*, which commonly forms pure stands. The occasional eucalypt such as *Eucalyptus melanophloia* and *Eucalyptus tessellaris* may also be present. *Acacia decora*, *Acacia excelsa* and *Acacia leiocalyx* subsp. *leiocalyx* are also sometimes present in the shrub layer as are young trees of *Callitris glaucophylla*. The ground layer is generally fairly sparse and consists of a large range of species of both forbs and grasses.

5. Tall Open forest – Mid high Open forest – Mid high woodland of *Eucalyptus crebra* (narrow – leaved ironbark) and *Callitris glaucophylla* (white cypress pine)

This unit occurs on sandstone outcrops , mainly being found adjacent to Nathan Gorge. The predominant species present are *Eucalyptus crebra* and *Callitris glaucophylla* which may occur as either mixed stands or as small patches of relatively pure stands. Other species present in the tree layer include *Eucalyptus cambageana*, *Eucalyptus melanophloia*, *Eucalyptus tessellaris* and *Angophora floribunda* with *Acacia harpophylla* also being present. The shrub layer can vary from sparse to dense and consists mainly of *Acacia amblygona*, *Acacia caroleae*, *Acacia deanei* subsp. *deanei*, *Acacia juncifolia* subsp. *juncifolia*, *Acacia leiocalyx* subsp. *leiocalyx*, *Allocasuarina luehmannii*, *Alphitonia excelsa*, *Angophora leiocarpa* and *Eremophila mitchellii*. The ground layer tends to be variable in its density and species composition but consists of grasses and forbs.

6. Tall woodland –Mid high Open forest of *Acacia harpophylla* (brigalow), vine thicket and *Eucalyptus* spp.

This unit consists of mixed areas of *Acacia harpophylla*, vine thicket species and *Eucalyptus* species which often occur in pure communities but which are too small to map individually. This community mainly occurs on soils derived from sandstones. The main tree species present are *Acacia harpophylla*, *Eucalyptus crebra*, *Eucalyptus cambageana*, *Brachychiton*

rupestris and *Brachychiton australis*. The shrub layer tends to consist of many mixed species while the ground layer especially in the vine thickets tends to be sparse to non existent though *Carissa ovata* is often present. In the Eucalyptus stands the ground layer is often grassy.

7. Tall Open forest – Mid high woodland of *Eucalyptus populnea* (poplar box)

This unit is dominated by *Eucalyptus populnea* and mainly occurs on alluvium and associated soils adjacent to the Dawson River but also occurs along the drainage lines that drain into it. The shrub layer tends to be sparse and mainly consists of *Eremophila mitchellii* and *Geijera parviflora*. The ground layer varies from sparse to dense depending on grazing pressure and consists of a mixture of grasses and forb species.

8. Tall woodland – Mid high Open forest – Mid high woodland of mixed *Eucalyptus* spp.

This unit represents an intergrade between a number of community types. The main tree species present are *Eucalyptus cambageana Eucalyptus crebra, Eucalyptus populnea, Eucalyptus tenuipes, Acacia harpophylla* and *Callitris glaucophylla*. The shrub layer includes *Acacia conferta, Acacia decora, Acacia excelsa, Acacia macradenia, Acacia rhodoxylon, Alphitonia excelsa, Atalaya hemiglauca, Atalaya salicifolia, Canthium oleifolium, Denhamia pittosporoides, Geijera parviflora, Hakea fraseri, Lysiphyllum carronii, Owenia venosa* and *Petalostigma pubescens*. The ground layer consists of a mixture of forbs and grasses.

9a. Tall Open forest of Vine thicket

This unit is dominated by trees of *Brachychiton rupestris, Acacia fasciculifera, Casuarina cristata* and *Lysiphyllum carronii*. The low tree or shrub layer is varied and contains amongst other species *Acalypha eremorum, Alectryon connatus, Alectryon diversifolius, Atalaya salicifolia, Capparis lasiantha, Capparis mitchellii, Citriobatus spinescens, Croton insularis, Croton phebalioides, Denhamia oleaster, Geijera parviflora, Notelaea microcarpa, Pittosporum rhombifolium* and *Planchonella cotinifolia* var. *pubescens*. The ground layer is sparse and consists mainly of forbs and grasses with *Carissa ovata* commonly being present.

9b. Tall woodland of *Brachychiton rupestris* (narrow-leaved bottle tree)

This unit is dominated by large trees of *Brachychiton rupestris* with occasional trees of *Acacia fasciculifera* being present Only one community of this type is found and it is present on Maloakey. The shrub layer consists mainly of *Croton insularis, Croton phebalioides* and *Geijera parviflora*. The ground layer is sparse and consists mainly of grasses and forbs though *Carissa ovata* is common.

10. Tall woodland of *Casuarina cristata* (belah)

This unit is restricted to one location on Balcarris. The tree layer consists of an almost pure stand of *Casuarina cristata* with some *Eucalyptus populnea* being present. The shrub layer consists mainly of *Acacia excelsa, Alectryon diversifolius, Atalaya salicifolia, Eremocitrus glauca* and *Eremophila mitchellii*. The ground layer is sparse and consists of a mixture of grasses and herbs, however *Carissa ovata* is widespread in the ground layer.

11. Mid high Open forest – Mid high woodland of *Acacia rhodoxylon* (rosewood)

This unit consists of an almost pure stand of *Acacia rhodoxylon* though *Eucalyptus crebra* and *Eucalyptus exserta* may also be present. It generally occurs on areas of laterised soils. The shrub layer tends to be sparse and consists of *Alphitonia excelsa, Alstonia constricta, Croton phebalioides, Flindersia australis* and *Owenia venosa* The ground layer varies from dense to sparse depending on the depth of soils and grazing pressure. In highly disturbed areas *Cenchrus ciliaris* may be common

12. Mid high Open forest – Mid high woodland of *Acacia rhodoxylon* (rosewood), *Acacia shirleyi* (lancewood) and *Acacia harpophylla* (brigalow)

This unit mainly occurs on a mixture of lateritic soils and sandstone outcrops. It is made up of a mosaic of small patches of relatively pure stands of each of these species. *Acacia harpophylla, Acacia shirleyi* and *Acacia rhodoxylon* occur in pure stands or mixed in together. It is more common to find *Acacia shirleyi* and *Acacia rhodoxylon* together than it is to find them associated with *Acacia harpophylla* which tends to form pure stands. Occasionally *Eucalyptus cambageana* may also be present. The shrub layer is sparse and consists mainly of *Eremophila mitchellii* and *Geijera parviflora.* The shrub layer is sparse and consists of a mixture of grasses and herbs as well as *Carissa ovata.*

13. Cleared

This unit consists of areas cleared or predominantly cleared or thinned and which are used for various agricultural pursuits such as cropping or grazing as well as land used for urban purposes.

14. Water

This unit consists of areas of free standing water and is confined to the Dawson River in the area upstream of the Glebe Weir.

A map of the vegetation distribution of the impoundment area and surrounding envelope is attached at the rear of this report. An alphabetical listing of species and occurrence in vegetation communities and mapping units is found at Appendix 2, while a list of species by map unit is given in Appendix 3.

Areas of Each Vegetation Community Type

The areas of each vegetation community and mapping unit within the impoundment area for the proposed dam and within the envelope to 2 km from the maximum 185 m FSL are given in Table 1.

Over 71% of the impoundment area has been cleared for agriculture, grazing and urban purposes (Map Unit 13). The two main vegetation communities are Tall Open forest of *Eucalyptus camaldulensis* (river red gum), *Eucalyptus tereticornis* (forest red gum) and *Eucalyptus coolabah* (coolibah) (Map Unit 1) and Tall woodland-Mid high Open forest of *Eucalyptus coolabah* (coolibah) (Map Unit 3). Map Unit 1 (Refer Vegetation Map) is the riverine vegetation of the unregulated portion of the Dawson River, while Map Unit 3 is typical remnant vegetation of the alluvial flood plains and associated creek systems.

Map Unit	Description	Impoundment area within FSL 185 EL (ha)	% of impound-ment area	Envelope area to 2 km outside FSL 185 EL (ha)	Area mapped (ha)	Estimated Regional Ecosystem Type	Status of Regional Ecosystem according to Sattler and Willaims
1	Tall Open forest of *Eucalyptus camaldulensis* (river red gum), *Eucalyptus tereticornis* (forest red gum) and *Eucalyptus coolabah* (coolibah)	1568.8	10.5	336.8	1905.6	11.01.04	Of Concern
2	Very tall Open forest-tall woodland of *Eucalyptus camaldulensis* (river red gum) and *Eucalyptus tereticornis* (forest red gum)	339.1	2.3	235.2	574.3	11.01.04	Of Concern
3	Tall woodland-Mid high Open forest of *Eucalyptus coolabah* (coolibah)	1054.5	7.1	578.2	1632.7	11.01.03	Of Concern
4	Tall Open forest of *Callitris glaucophylla* (white cypress pine)	60.7	0.4	257.2	317.9	11.8.16	No concern at present
5	Tall Open forest-Mid high Open forest-Mid high woodland of *Eucalyptus crebra* (narrow-leaved ironbark) and *Callitris glaucophylla* (white cypress pine)	50.9	0.3	1386.5	1437.4		
6	Tall woodland- Mid high Open forest of *Acacia harpophylla* (brigalow), vine thicket and *Eucalyptus* spp.	193.4	1.3	2729.0	2922.4		
7	Tall Open forest-Mid high woodland of *Eucalyptus populnea* (poplar box)	365.1	2.4	199.6	564.7	11.01.02	Of concern
8	Tall woodland-Mid high Open forest-Mid high woodland of mixed *Eucalyptus* spp.	208.5	1.4	649.6	858.1		
9a	Tall Open forest of Vine thicket			30.9	30.9		
9b	Tall woodland of *Brachychiton rupestris* (narrow-leaved bottle tree)			19.2	19.2		
10	Tall woodland of *Casuarina cristata* (belah)			8.1	8.1	11.2.12	Endangered
11	Mid high Open forest-Mid high woodland of *Acacia rhodoxylon* (rosewood)			317.6	317.6	11.3.2.	No concern at Present
12	Mid high Open forest-Mid high woodland of *Acacia rhodoxylon* (rosewood), *Acacia shirleyi* (lancewood) and *Acacia harpophylla* (brigalow)	0.6	<0.1	84.9	85.5	11.3.2.	No concern at present
13	Cleared. Lands used for agriculture, grazing and urban purposes	10638.0	71.4	34188.9	44826.9		
14	Water	431.1	2.9		431.1		
	Total (ha)	14910.7	100.0	41021.7	55932.4		

Table 1. Areas of each vegetation community and mapping unit within the impoundment area for the proposed dam and within the examined envelope

Conservation Status of Communities

Eight of the map units appear to equate to regional ecosystems which are listed in a draft report from the Department of Environment on the conservation status of regional ecosystems (Sattler & Williams, in prep.). Five of the map units appear to equate to ecosystems which, according to Sattler & Williams, are of some conservation concern. Of the map units occurring within the impoundment area, Map Unit 1, Map Unit 2, Map Unit 3, and Map Unit 7 are listed as *of concern*. Within the envelope area, Map Unit 10 (the Tall woodland of *Casuarina cristata* (belah)) is listed as *endangered*. Although Map Unit 9b does not equate with any regional ecosystem listed by Sattler & Williams, there are ecosystems with similar descriptions or containing species similar to the *Brachychiton rupestris* map unit that are listed as endangered.

While the communities listed in Sattler and Williams currently have no legal status, they do represent the current understanding of the conservation significance of these communities and as such it can be expected that they will form the basis of conservation planning in the future. However, until the mapping of regional ecosystems is completed for Queensland, these classifications can at best be considered only as interim.

AQUATIC FLORA

There are no areas that can be mapped and described as aquatic mapping units. This is because:

(i) any areas likely to contain these species, such as billabongs, were dry at the time of field work, (and in any event they are not very common or widespread)
(ii) the high turbidity of the Dawson River and its tributaries precludes the growth of species that are normally described as aquatic.

The following aquatic species were observed growing in water bodies such as dams and water troughs within the study area: *Azolla pinnata, Chara* sp., *Lemna trisulca* and *Ludwigia peploides* subsp. *montevidensis*.

VEGETATION DOWNSTREAM OF THE DAM SITE

The vegetation along the Dawson River downstream of the proposed dam site to the junction of the Dawson and Mackenzie Rivers was examined at the Dawson River crossings at Theodore, Moura and Baralaba. Because of limited access to the river and the time frame for the study, these were the only sites that could be readily accessed.

There is a weir at each of these locations with areas of natural riverine vegetation downstream of each weir. The vegetation at these locations was found to be similar to the vegetation of the Dawson River adjacent to, and immediately downstream of, the Glebe Weir, consisting predominantly of *Eucalyptus camaldulensis*, *E. tereticornis* along the river bank and channel, and *E. coolabah* on the levees and floodplain. At Theodore, *Livistona* sp (Taroom R.W.Johnson 2764) is also present in the understory.

Examination of LANDSAT Imagery suggests that there are no special or unusual vegetation types downstream of the dam to the junction of the Dawson River with the Mackenzie River and that the downstream vegetation is similar to riverine vegetation within the proposed dam area.

DISCUSSION

Species of Significance

Rutidosis crispata

Rutidosis crispata (synonym *Rutidosis sp.* (Theodore P.I.Forster PIF2639) (Family Asteraceae) was observed growing on *Riverview* (G. Brodie) within the surveyed envelope adjacent to the area to be flooded. This is only the second collection of this species. The location of this plant was on the Taroom 1:100,000 topographic map Sheet No. 8846 at AMG Zone 55, 792546 7171932 with an error of ± 63m. It has previously been collected from Glenmoral Gap, 13 km west south west of Theodore. This species is listed as a rare[1] plant in Schedule 4 of the Nature Conservation (Wildlife) Regulation 1994 to the *Nature Conservation Act 1992.* It is listed because in its previously known location it is vulnerable to destruction from grazing, clearing and weed invasion.

Under the *Nature Conservation Act* cognisance of this species is necessary and the Department of Environment's advice should be sought if disturbance to this population is planned. It is recommended that a detailed survey be undertaken in the vicinity of the area in which this species was found to determine the full extent of its distribution. Because of the limited time frame for this study it has not been possible to conduct such a detailed survey. However, as it is possible that this rare species is growing in the area of the impoundment adjacent to where it was found, such survey should be mounted as soon as possible, and certainly before any final determination is made concerning the design FSL.

In this regard, it should be recognised that the distribution of *Rutidosis crispata* within the study area may determine on legal grounds the maximum design level for full storage.

Even where a detailed survey indicates that the species does not occur within the proposed impoundment area, this rare species remains vulnerable to destruction because of grazing pressure on the area in which it was found. A range of measures should be considered to conserve this species.

Depending on the extent of its remaining distribution, this might include protective fencing and/or using various propagation techniques. Such measures would require further study and appropriate approvals under the *Nature Conservation Act.*

Cryptandra sp.

The presence of *Cryptandra* sp. (Isla Gorge P. Sharpe 627) adjacent to the proposed dam wall will need consideration in planning the construction of the dam wall. This is only the second known collection of this species. It was recorded on Cracow 1:100,000 topographic map, Sheet No. 8947 at AMG Zone 56, 210121 7181456 with an error of ±36m. It has previously only been recorded from the Isla Gorge National Park, to the south west of Theodore. It was recorded from sandstone in an area adjacent to the north of the proposed dam wall but is widespread in the area adjacent to the proposed dam wall at AMTD 313.9 and upstream of it on the northern side of the Dawson River. Though only known from one other location, this plant is not listed in the schedules of the *Nature*

[1] The designation 'rare' is defined in the Nature Conservation Act 1992 as follows:

If the Governor in Council is of the opinion that native wildlife that is not threatened wildlife is rare, the wildlife may be prescribed as rare wildlife. (S79(1))

Rare wildlife may include native wildlife whose population is represented by —

(a) a relatively large population in a restricted range; or

smaller populations thiinly spread over a wider range (S79(2))

Conservation Act 1992 as the Isla Gorge National Park is its previously known location and is therefore considered to be conserved. Plants of this species within the construction zone should be located and clearly marked so they are not damaged or destroyed as a result of activities in the area before, during and after dam construction .

Bertya pedicellata

Bertya pedicellata F.Muell. (Family Euphorbiaceae) was observed growing on the lower northern eastern slope of Mt Glebe above the FSL 185 level but within the surveyed 2 km envelope. This species is known from several sites in central Queensland. The distribution extends from near Nebo south to near Mundubbera and west to Aramac. This plant is listed as a rare plant in Schedule 4 of the Nature Conservation (Wildlife) Regulation 1994 to the *Nature Conservation Act 1992*. This species should not be damaged or destroyed as a result of dam construction. The occurrence is well above the maximum design FSL and Mt Glebe is a considerable distance from the construction site of the proposed dam.

Livistona sp.

Another species that is likely to be of conservation concern is *Livistona* sp (Taroom R.W.Johnson 2764). Though not listed on the Schedules of the Regulations of the *Nature Conservation Act 1992*, this undescribed species of palm is of conservation significance because of its restricted distribution in the Taroom and Theodore districts, mainly in wetter areas along the Dawson and its tributaries. It is also common in the Carnarvon Gorge National Park where it grows in large colonies along streams and flood terraces, and extending to rocky gorges (Jones 1984). Colonies of the species occur at a number of locations within the impoundment area, including Palm Tree Creek, Price Creek and Spring Creek[2].

The destruction of the palm due to dam development may cause concern in the wider community because of the affinity of the general public with palms.

It is recommended that:

- specimens of this palm that will be destroyed as a result of dam construction or impoundment be recovered and transplanted elsewhere, or made available to the nursery trade, local authorities or the general public; and
- as much seed as possible should be collected for propagation purposes from trees that are to be destroyed.

Appropriate advice on the collection and growing of this seed should be sought from specialist organisations such as the Queensland Palm and Cycad Society and the Queensland Nursery Industry Association.

Grevillea robusta

Grevillea robusta (silkyoak) was observed growing on Bookabie (Property 26) in Map Unit 6 in a situation which indicated that it was a natural occurrence and not introduced by man. This locality is approximately 200km west of the nearest previously known locality of this species on the Woolooga to Biggenden road near Kilkivan and and represents a substantial extension of the known range of silkyoak in south east Queensland.

[2] Note that were the dam construction to proceed to a FSL of 182 m or less, the palms in Price Creek and Palm Tree Creek would not be impacted to any significant extent.

Areas of Remnant Vegetation

There are two areas *within the envelope* that contain communities that are considered to be of significance and worthy of special management or conservation action. These communities are:

(i) the *Casuarina cristata* community which occurs on *Balcarris* and
(ii) the *Brachychiton rupestris* community that occurs on *Maloakey*.

The *Casuarina cristata* community is listed in Sattler and Williams (in prep) as endangered. The community occurs only about 100 metres above the 185 m FSL.

Communities with similar descriptions or containing species similar to the *Brachychiton rupestris* community are also listed as endangered. These communities are subject to grazing pressure and the most appropriate management strategy would be to fence them. It should be noted from the Vegetation Map that the observed occurrence of this community (Map Unit 9b) was to the north east of Palm Tree Creek and some distance from the impoundment[3].

Introduced and weedy species

Those species that are considered to be alien and which are naturalised or which are classed as weeds are listed in Appendix 4. Except for buffel grass (*Cenchrus ciliaris*) no one species is particularly common or forms dense stands within the study area, with most species being widespread and occurring in most vegetation types.

The only species of particular importance as weeds are *Opuntia stricta* var. *stricta* and *Opuntia tomentosa* which are widespread throughout the area and in the past have posed serious problems, though they are now well controlled. *Opuntia aurantiaca* is also widespread and is probably spreading as a result of cattle and animal movement and to a lesser extent from vehicle movements[4].

Revegetation

Dam construction will result in the loss of the mixed *Eucalyptus camaldulensis, Eucalyptus tereticornis, Eucalyptus coolabah* communities, along the bed of the Dawson River, and *Eucalyptus coolabah* communities of the Dawson River floodplain and associated creek systems upstream of the dam to FSL 185.

It is likely, that over time, both community types, or ones similar in species content, will regenerate along the edge of the impoundment where conditions are suitable. For the *Eucalyptus camaldulensis, Eucalyptus tereticornis, Eucalyptus coolabah* communities this should occur where the banks of the dam are steeper or in the upper parts of the dam and streams running into it which are likely to remain in a more or less natural state and not be subject to gross fluctuations in water level. Regeneration of this community is occurring along the banks of the Dawson River and around the margins of the Glebe weir pool. Similar regeneration is likely to occur around parts of the banks of the proposed storage.

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[3] Note that with a reduction of the FSL to 182 metres EL, this *Brachychiton rupestris* community could not possibly be affected by the dam construction, operation or management. However, this community is uncommon in the area and is worthy of special conservation action.

[4] Special care should be taken with management of any buffer zone to the impoundment area to ensure that it does not become a harbour for *Opuntia aurantiaca* (tiger pear) and appropriate care is taken with stock and vehicle movements to reduce risk of its spread.

However, such regeneration is likely to be limited in extent because the relatively level banks that occur over much of the impoundment would favour the establishment of *E. coolabah* instead. The *Eucalyptus camaldulensis, Eucalyptus tereticornis, Eucalyptus coolabah* communities which do re-establish where the banks are steeper could not be expected to have the same width and extent of the original communities prior to impoundment.

Eucalyptus coolabah communities are widespread in areas of alluvial soils associated with the floodplain. Communities of this type have been extensively cleared for agricultural purposes. Many of the soil types on which they occur are in areas that are likely to be shallowly inundated. Coolibah is unlikely to regenerate on soil types that are different from those on which it naturally occurs. Regeneration of this species is likely when alluvial soils are subject to an extended period of drying as the water level of the dam falls following inundation. However as the water rises again, any coolibah regrowth will be killed because it cannot tolerate 'wet feet'.

Natural regeneration of poplar box, brigalow and narrow-leaved ironbark is likely to occur in many areas bordering the impoundment as they are widespread within the area surrounding the proposed dam. On the southern edge of the impoundment it is likely that both poplar box and brigalow will regenerate because of the nature of the soils and the natural occurrence of these species on the southern side of the proposed dam. On the northern bank of the impoundment, because of the sandier soils that occur there, poplar box and *Eucalyptus crebra* (narrow-leaved ironbark) are more likely to regenerate.

It should be feasible to plant or seed suitable areas with mixtures of *Eucalyptus camaldulensis, Eucalyptus tereticornis, Eucalyptus coolabah* and *Melaleuca linariifolia*. However, as noted earlier, in those areas that are suitable natural regeneration is likely to occur and seeding would therefore be a waste of time, money and effort, except where some special purpose is sought, such as the early recreation of habitat to facilitate wildlife movement.

Environmental Flows

The need for the maintenance of 'environmental flows to maintain river ecosystems is now of widespread community concern. The Dawson River downstream of the dam consists of a river bed with meanders and billabongs, and a river flood plain that contains some swampy areas as an integral part of that system. Peak flows below the proposed dam should be sufficient to flood the river, refill its billabongs, inundate the flood plain and periodically flush the river. Without peak flows to refill the billabongs and swamps, they are not viable in the long term and will be replaced by other drier ecosystem types.

The river vegetation downstream of the dam consists mainly of *Eucalyptus camaldulensis, Eucalyptus tereticornis, Eucalyptus coolabah* communities, similar in floristic and community composition to that to be found in the dam impoundment area and associated creek systems.

This vegetation is subject to periodic inundation, has adapted to that flood regime, and requires periodic flood flows to ensure long term survival. This is particularly important for the flood plain communities which consist mainly of *Eucalyptus coolabah*, for which long term maintenance and survival will depend on the provision of appropriate and timely environmental flows, including the simulation, if necessary, of flood flows.

Billabongs within the Dawson River need to be flooded periodically to maintain riparian species, most of which require damp soil or adjacent free standing water. These billabongs are normally

filled as a result of periodic flooding of the Dawson River but with dam construction may need to be filled periodically by special water releases from the dam storage.

For the long term viability of the vegetation that is dependent on these flows, a water storage system which permits the ready passage of flood flows and is managed to maintain environmental flows is preferable to a system which cannot accommodate these requirements. From the flora perspective, a series of smaller weirs, such as Glebe Weir, are considered more suitable system for water regulation for agricultural use than is a large dam. Such weirs permit peak flows to overtop the spillway during floods, whereas a large dam located on a river which experiences intermittent flows, and is expressly designed or managed to harvest flood flows for later slow release downstream, does not provide the same opportunity for maintaining those ecosystems which are dependent on periodic floods.

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APPENDIX 1

SPECIES OBSERVED DURING THE COURSE OF FIELD WORK

During the course of field work the following species were observed growing within the proposed impoundment area or within the surveyed envelope. These species are listed alphabetically together with their common name and special status, if any, in Table 1 below.

Due to the time frame of the survey and, more importantly, due to seasonal factors, this list will not contain all species that grow within these areas. Seasonal factors can result in other species being present at certain times of the year. For example, all billabongs were dry or nearly dry so many water plants that would normally be expected to occur (eg *Nymphaea)* were not present.

Table 2 lists the species by botanical Family.

Table 1 - Alphabetical List of Species

Note: ♦ *in Status represents introduced species or weed;*
R *= Rare as defined in Queensland Conservation Act 1992*

Species	Common name	Status
Abutilon fraseri (Hook.) Hook. ex Walp.	dwarf lantern flower	
Abutilon oxycarpum (F.Muell.) F. Muell. ex Benth. forma oxycarpum		
Abutilon oxycarpum forma acutatum Benth.	flannel weed	
Acacia amblygona Benth.	prickly wattle	
Acacia caroleae Pedley		
Acacia conferta Benth.	crowded-leaf wattle	
Acacia deanei (R.T. Baker) M.B. Welch, Coombs & McGlynn subsp. deanei	green wattle	
Acacia decora Rchb.	pretty wattle	
Acacia excelsa Benth.	ironwood	
Acacia farnesiana (L.) Willd.	mimosa bush	♦
Acacia fasciculifera F. Muell. ex Benth.	scrub ironbark	
Acacia harpophylla F. Muell. ex Benth.	brigalow	
Acacia juncifolia Benth. subsp. juncifolia		
Acacia leiocalyx (Domin) Pedley subsp. leiocalyx	Brisbane black wattle	
Acacia longispicata Benth.		
Acacia macradenia Benth.	zigzag wattle	
Acacia rhodoxylon Maiden	rosewood	
Acacia salicina Lindl.	sally wattle	
Acacia shirleyi Maiden	lancewood	
Acacia sparsiflora Maiden	currawong	
Acacia stenophylla A. Cunn. ex Benth.	river cooba	
Acalypha eremorum Muell. Arg.	soft acalypha	
Achyranthes aspera L.	chaff flower	♦
Adriana glabrata var. subglabra (Baill.) Airy Shaw		
Agrostis avenacea J.F. Gmel. var. avenacea	blowngrass	
Ajuga australis R. Br.	Australian bugle	
Alectryon connatus (F. Muell.) Radk.	grey birds-eye	
Alectryon diversifolius (F. Muell.) S. Reynolds	scrub boonaree	

Species	Common name	Status
Alectryon oleifolius subsp. elongatus S.T. Reynolds	boonaree	
Allocasuarina luehmannii (R.T. Barker) L.A.S. Johnson	bull oak	
Alphitonia excelsa (A. Cunn. ex Fenzl) Reissek ex Benth.	soap tree	
Alstonia constricta F.Muell.	bitterbark	
Alternanthera denticulata R. Br.	lesser joyweed	
Alternanthera nodiflora R.Br.	joyweed	
Amaranthus graecizans subsp. sylvestris (Vill.) Asch.		♦
Amaranthus viridis L.	green amaranth	♦
Ampelopteris prolifera (Retz.) Copel.		
Amyema congener (Sieber ex Schult. & Schult.f.) Tiegh. subsp. congener	erect mistletoe	
Amyema quandang var. bancroftii (F.M.Bailey) Barlow		
Ancistrachne uncinulata (R. Br.) S.T. Blake	hooky grass	
Angophora floribunda (Sm.) Sweet	roughbark apple	
Angophora leiocarpa (L.A.S. Johnson ex G.J. Leach) K.R. Thiele & Ladiges	smooth-bark apple	
Apophyllum anomalum F. Muell.	broom bush	
Argemone ochroleuca Sweet subsp. ochroleuca		♦
Aristida benthamii var. spinulifera B.K.Simon		
Aristida calycina R. Br. var. calycina		
Aristida calycina var. praealta Domin		
Aristida caput-medusae Domin	many headed wiregrass	
Aristida gracilipes (Domin) Henrard		
Aristida latifolia Domin		
Aristida leichhardtiana Domin		
Aristida lignosa B.K.Simon		
Aristida personata Henrard		
Aristida queenslandica Henrard var. queenslandica		
Aristida queenslandica var. dissimilis (S.T.Blake) B.K.Simon		
Aristida ramosa R.Br.	purple wiregrass	
Arundinella neplanensis Trin.	reed grass	
Asperula conferta Hook.f.	common woodruff	
Asperula geminifolia F. Muell.		
Aster subulatus Michx.	wild aster	♦
Atalaya hemiglauca (F.Muell) F.Muell. ex Benth.	whitewood	
Atalaya salicifolia (A. DC.) Blume	whitewood	
Atriplex muelleri Benth.	annual saltbush	
Austromyrtus bidwillii (Benth.) Burret	smooth-barked ironwood	
Austrostipa verticillata (Nees ex Spreng.) S.W.L. Jacobs & J. Everett	slender bamboo grass	
Azolla pinnata R.Br.	ferny azolla	
Baccharis halimifolia L.	groundsel bush	♦
Bacopa monnieri (L.) Pennell		
Basilicum polystachyon (L.) Moench		
Bertya oleifolia Planch.		
Bertya pedicellata F. Muell.		R
Bidens bipinnata L.	bipinnate beggar's ticks	♦
Boerhavia dominii Meidle & Hewson		
Boerhavia pubescens R. Br.		
Bothriochloa bladhii (Retz.) S.T. Blake subsp. bladhii	forest bluegrass	
Bothriochloa decipiens (Hack.) C.E. Hubb. var. decipiens	pitted bluegrass	
Brachiaria eruciformis (Sm.) Griseb.		♦
Brachiaria foliosa (R. Br.) Hughes	leafy panic	
Brachiaria subquadripara (Trin.) Hitch.		
Brachychiton australis (Schott & Endl.) A. Terracc.	broad-leaved bottle tree	
Brachychiton populneus (Schott & Endl.) R. Br. subsp. populneus	kurrajong	
Brachychiton rupestris (Mitch. ex Lindl.) K. Schum.	narrow-leaved bottle tree	
Brachyscome trachycarpa F. Muell.		
Bracteantha bracteata (Vent.) Anderb. & Haegi	golden everlasting	

Species	Common name	Status
Breynia oblongifolia (Muell. Arg.) Muell. Arg.	coffee bush	
Brunoniella australis (Cav.) Bremek.	blue trumpet	
Bursaria incana Lindl. var. incana		
Callitriche sonderi Hegelm.	starwort	
Callitris glaucophylla Thompson & L.A.S.Johnson	white cypress pine	
Calotis cuneata (F. Muell. ex Benth.) G.L. Davis	blue burr daisy	
Calotis cuneifolia R.Br.		
Calotis dentex R. Br.	white burr daisy	
Calotis hispidula (F. Muell.) F. Muell.	bogan flea	
Calotis lappulacea Benth.	yellow burr daisy	
Calyptochloa gracillima C.E. Hubb.		
Canthium coprosmoides F. Muell.	coastal coffee bush	
Canthium odoratum (G. Forst.) Seem.		
Canthium oleifolium Hook.	myrtle tree	
Canthium sp. (Berrigurra Station E.R.Anderson 2829)		
Canthium vacciniifolium F. Muell.	small-leaved canthium	
Capillipedium spicigerum S.T. Blake	scented top	
Capparis canescens Banks ex DC.	wild orange	
Capparis lasiantha R. Br. ex DC.	nipan	
Capparis loranthifolia var. bancroftii C.T. White ex M. Jacobs	narrow leaf bumble-tree	
Capparis mitchellii Lindl.		
Carex appressa R. Br.	tall sedge	
Carex polyantha F. Muell.		
Carissa ovata R.Br.	current bush	
Cassia tomentella Domin	velvet cassia	
Cassine australis var. angustifolia (Benth.) Jessup	red oliveplum	
Cassinia laevis R. Br.	coughbush	
Casuarina cristata Miq.	belah	
Cenchrus ciliaris L.	buffel grass	♦
Centaurea melitensis L.	Maltese cockspur	♦
Centaurium erythraea Rafn.	common centaury	♦
Centella asiatica (L.) Urb.	pennywort	
Centipeda minima (L.) A. Braun & Aschers	spreading sneezeweed	
Chamaesyce dallachyana (Baill.) D.C. Hassall	caustic-weed	
Chara sp.	stonewort	
Cheilanthes distans (R. Br.) Mett.	bristly cloak fern	
Cheilanthes sieberi Kunze subsp. sieberi	mulga fern	
Chenopodium ambrosioides L.	Mexican tea	♦
Chenopodium carinatum R. Br.	green crumbweed	
Chenopodium desertorum subsp. anidiophyllum (Aellen) Paul G. Wilson		
Chenopodium pumilio R. Br.	small crumbweed	
Chionachne cyathopoda (F. Muell.) F. Muell. ex Benth.	river grass	
Chloris divaricata R. Br.	slender chloris	
Chloris gayana Kunth	rhodes grass	♦
Chloris ventricosa R. Br.	tall chloris	
Chrysocephalum apiculatum (Labill.) Steetz	yellow buttons	
Ciclospermum leptophyllum (Pers.) Sprague	slender celery	♦
Cirsium vulgare (Sav.) Ten.	spear thistle	♦
Cissus opaca F. Muell.	slender grape	
Citriobatus spinescens (F. Muell.) Druce	large-fruited orange thorn	
Claoxylon tenerifolium (Baill.) F. Muell.	Queensland brittlewood	
Cleistochloa subjuncea C.E. Hubb.		
Clerodendrum floribundum R. Br.	lollybush	
Commelina diffusa Burm.f.	wandering jew	
Conyza bonariensis (L.) Cronq.	flaxleaf fleabane	♦
Coronopus didymus (L.) Smith	lesser swine-cress	♦

Species	Common name	Status
Corymbia clarksoniana (D.J. Carr & S.G. Carr) K.D. Hill & L.A.S. Johnson	long-fruited bloodwood	
Crassula sieberiana (Schult. & Schult.f.) Druce	native crassula	
Crotalaria incana L. subsp. incana	woolly rattlepod	♦
Crotalaria montana Roth		
Croton insularis Baill.	native cascarilla bark	
Croton phebalioides F. Muell. ex Muell. Arg.	narrow-leaved croton	
Cryptandra sp. (Isla Gorge P.Sharpe 627)		
Cuscuta campestris Yunck.	dodder	♦
Cyclosorus interruptus (Willd.) H.Ito		
Cymbidium canaliculatum R.Br.		
Cymbopogon bombycinus (R. Br.) Domin	silky oilgrass	
Cymbopogon refractus (R.Br.) A. Camus	barb wire grass	
Cynodon dactylon (L.) Pers. var. dactylon	green couch	
Cynoglossum australe R. Br. var. australe	Australian forget me not	
Cyperus difformis L.	rice sedge	
Cyperus flaccidus R. Br.		
Cyperus gracilis R. Br.	slender sedge	
Cyperus iria L.		
Cyperus lucidus R. Br.		
Cyperus polystachyos Rottb. var. polystachyos	bunchy sedge	
Cyperus pygmaeus Rottb.	dwarf sedge	
Cyperus rigidellus (Benth.) J.M. Black		
Cyperus rotundus L.	nutgrass	♦
Cyperus sanguinolentus Vahl		
Cyperus sphaeroideus L.A.S. Johnson & O.D. Evans	kyllinga weed	
Datura ferox L.	fierce thornapple	♦
Daucus glochidiatus (Labill.) Fischer, C.A.Meyer & Ave-Lall.	Australian carrot	
Denhamia oleaster (Lindl.) F. Muell.		
Denhamia pittosporoides F. Muell.	orange boxwood	
Desmodium brachypodum A. Gray		
Desmodium rhytidophyllum F. Muell. ex Benth.		
Desmodium varians (Labill.) G. Don	slender tick trefoil	
Dianella brevipedunculata R.F.J. Hend.		
Dianella caerulea var. vannata R.J.F. Hend.		
Dianella longifolia R. Br. var. longifolia		
Dichanthium sericeum subsp. humilius (J.M. Black) B.K. Simon		
Dichondra repens J.R. Forst. & G. Forst.	kidney weed	
Digitaria breviglumis (Domin) Henrard		
Digitaria brownii (Roem. & Schult.) Hughes	cotton panic	
Digitaria divaricatissima (R. Br.) Hughes	umbrella grass	
Digitaria longiflora (Retz.) Pers.		
Diospyros humilis (R. Br.) F. Muell.	small-leaved ebony	
Dodonaea heteromorpha J.G. West		
Dodonaea viscosa subsp. spatulata (Sm.) J.G. West	sticky hop bush	
Dysphania glomulifera (Nees) Paul G. Wilson subsp. glomulifera		
Echinochloa crusgalli (L.) P. Beauv.	barnyard grass	♦
Eclipta prostrata (L.) L.	white eclipta	
Ehretia membranifolia R. Br.	weeping koda	
Einadia hastata (R. Br.) A.J. Scott	ruby saltbush	
Einadia nutans (R. Br.) A.J. Scott subsp. nutans	nodding saltbush	
Einadia nutans subsp. linifolia (R. Br.) Paul G. Wilson	climbing saltbush	
Einadia trigonos subsp. stellulata (Benth.) Paul G. Wilson		
Elatine gratioloides A. Cunn.	waterwort	
Eleocharis cylindrostachys Boeck.		
Eleocharis equisetina C. Presl	spikerush	
Eleocharis plana S.T. Blake	ribbed spikerush	
Eleocharis pusilla R. Br.	small spikerush	

Species	Common name	Status
Enchylaena tomentosa R. Br.	ruby saltbush	
Enneapogon gracilis (R. Br.) P. Beauv.	slender nineawn	
Enneapogon lindleyanus (Domin) C.E. Hubb.	prickly couch	
Enteropogon acicularis (Lindl.) Lazarides	curly windmill grass	
Enteropogon ramosus B.K. Simon	windmill grass	
Enteropogon unispiceus (F. Muell.) Clayton		
Epaltes australis Less.	epalates	
Epilobium hirtigerum A. Cunn.		
Eragrostis elongata (Willd.) J. Jacq.	clustered love grass	
Eragrostis lacunaria F. Muell. ex Benth.	purple lovegrass	
Eragrostis leptostachya (R. Br.) Steud.	paddock love grass	
Eragrostis longipedicellata B.K. Simon		
Eremocitrus glauca (Lindl.) Swingle	limebush	
Eremophila debilis (Andrews) Chinnock	winter apple	
Eremophila longifolia (R,. Br.) F. Muell.	berrigan	
Eremophila mitchellii Benth.	bastard sandalwood	
Eriocaulon scariosum Sm.	pipewort	
Eriochloa decumbens F.M. Bailey		
Eriochloa pseudoacrotricha (Stapf ex Thell.) J.M. Black	early spring grass	
Erodium crinitum Carolin	blue crowfoot	
Erythrina vespertilio Benth.	bats-wing coral tree	
Erythroxylum sp. (Splityard Creek L.Pedley 5360)		
Eucalyptus camaldulensis Dehnh.	river red gum	
Eucalyptus cambageana Maiden	Dawson gum	
Eucalyptus coolabah Blakely & Jacobs	coolabah	
Eucalyptus crebra F. Muell.	narrow-leaved ironbark	
Eucalyptus exserta F. Muell.	Queensland peppermint	
Eucalyptus melanophloia F.Muell.	silver leaved ironbark	
Eucalyptus populnea F. Muell.	poplar box	
Eucalyptus tenuipes (Maiden & Blakely) Blakley & C.T. White	narrow-leaved mahogany	
Eucalyptus tereticornis Sm.	forest red gum	
Eucalyptus tessellaris F. Muell.	Moreton Bay ash	
Euchiton sphaericus (Willd.) Anderb.	cudweed	
Eulalia aurea (Bory) Kunth	silky browntop	
Euphorbia tannensis var. eremophila (A.Cunn.) D.C. Hassall	desert spurge	
Evolvulus alsinoides (L.) L.	tropical speedwell	
Excoecaria dallachyana (Baill.) Benth.	scrub poison	
Exocarpos latifolius R. Br.	native cherry	
Fallopia convolvulus (L.) A. Love		♦
Ficus opposita Miq.	sandpaper fig	
Fimbristylis dichotoma (L.) Vahl	common fringe-rush	
Flindersia australis R. Br.	crow's ash	
Flindersia collina F.M. Bailey	broad-leaved leopard tree	
Gahnia aspera (R.Br.) Spreng.		
Gaura parviflora Douglas	clockweed	♦
Geijera parviflora Lindl.	wilga	
Glinus lotoides L.	hairy carpet weed	
Glossocardia bidens (Retz.) Veldkamp	native cobbler's pegs	
Glycine tabacina (Labill.) Benth.	glycine pea	
Glycine tomentella Hayata	woolly glycine	
Gnaphalium polycaulon Pers.		
Gomphocarpus physocarpus E. Mey.	balloon cotton bush	♦
Gomphrena celosioides Mart.	soft khakiweed	♦
Goodenia fascicularis F. Muell. & Tate	fan flower	
Goodenia glabra R. Br.		
Goodenia grandiflora Sims		
Gratiola pedunculata R. Br.		
Grevillea robusta A. Cunn. ex R. Br.	silky oak	

Species	Common name	Status
Grevillea striata R. Br.	beefwood	
Grewia latifolia F. Muell. ex Benth.	dog's nuts	
Hakea fraseri R.Br.	corkwood oak	
Halgania brachyrhyncha Peter G. Wilson		
Haloragis aspera Lindl.	raspweed	
Helichrysum collinum DC.		
Heliotropium amplexicaule Vahl	blue heliotrope	♦
Heliotropium indicum L.		♦
Heteropogon contortus (L.) Beauv. ex. Roem. & Schult.	black speargrass	
Hibbertia sp.		
Hibiscus sturtii Hook.		
Hibiscus trionum L.	bladder ketmia	
Hovea lanceolata Sims		
Hovea longipes Benth.	brush hovea	
Hybanthus monopetalus (Schult.) Domin	lady's slipper	
Hypochaeris glabra L.	smooth catsear	♦
Imperata cylindrica (L.) Raeusch.	blady grass	
Indigofera linnaei Ali	nine-leaved indigo	
Indigofera sp.		
Isachne globosa (Thunb.) Kuntze	swamp millet	
Isotoma axillaris Lindl.	Australian harebell	
Ixiolaena leptolepis (DC.) Benth.	stalked ixiolaena	
Jacksonia scoparia R.Br.	dogwood	
Jacquemontia paniculata (Burm.f.) Hallier f.		
Jasminum didymum subsp. lineare (R. Br.) P.S.Green	native jasmine	
Jasminum simplicifolium subsp. australiense P.S. Green	stiff jasmine	
Juncus prismatocarpus R. Br.	branching rush	
Juncus sp.		
Juncus usitatus L.A.S. Johnson	rush	
Keraudrenia corollata (Steetz) Druce		
Laxmannia compacta Conran & P.I. Forst.		
Leersia hexandra Sw.	swamp rice grass	
Lemna trisulca L.		
Lepidium africanum (N. Burm.) DC.	common peppercress	♦
Lepidium bonariense L.	Argentine peppercress	♦
Leptochloa ciliolata (Jedwabn.) S.T. Blake		
Leptochloa digitata (R. Br.) Domin	umbrella canegrass	
Leptochloa peacockii (Maiden & Betche) Domin		
Leptospermum neglectum Joy Thomps.		
Livistona sp. (Taroom R.W.Johnson 2764)		
Lomandra confertifolia subsp. pallida A.T. Lee		
Lomandra filiformis (Thunb.) Britten subsp. filiformis		
Lomandra leucocephala (R.Br.) Ewart	woolly matrush	
Lomandra longifolia Labill.	spinyhead matrush	
Lomandra multiflora (R. Br.) Britten subsp. multiflora		
Lophostemon suaveolens (Sol. ex Gaertn.) Peter G. Wilson & J.T. Waterh.	swamp box	
Lotus australis Andrews	Australian trefoil	
Ludwigia octovalvis (Jacq.) Raven	willow primrose	
Ludwigia peploides subsp. montevidensis (Spreng.) P.H. Raven		♦
Lysicarpus angustifolius (Hook.) Druce	budgeroo	
Lysiphyllum carronii (F. Muell.) Pedley	ebony tree	
Macfadyena unguis-cati (L.) A.H. Gentry	cat's claw	♦
Macroptilium lathyroides (L.) Urb.	phasey bean	♦
Maireana microphylla (Moq.) Paul G. Wilson	saltbush	
Malva parviflora L.	marshmallow	♦
Malvastrum americanum (L.) Torr.	spiked malvastrum	♦
Malvastrum coromandelianum (L.) Garcke	prickly malvastrum	♦

Species	Common name	Status
Marsdenia microlepis Benth.		
Marsilea hirsuta R. Br.	hairy nardoo	
Maytenus cunninghamii (Hook.) Loes.		
Medicago polymorpha L.		♦
Melaleuca linariifolia var. trichostachya (Lindl.) Benth.	flaxleaf paperbark	
Melhania oblongifolia F. Muell.		
Melichrus urceolatus R. Br.	honey gorse	
Melicope erythrococca (F. Muell.) Benth.	tingletongue	
Melilotus indicus (L.) All.	hexham scent	♦
Melinis repens (Willd.) Zizka	red Natal grass	♦
Mimulus gracilis R. Br.		
Minuria integerrima (DC.) Benth.	smooth minuria	
Muehlenbeckia florulenta Meisner	lignum	
Murdannia graminea (R. Br.) Bruchn.	grass lily	
Neptunia gracilis Benth.	sensitive plant	
Nicotiana megalosiphon Huerck & Muell. Arg. subsp. megalosiphon		
Notelaea microcarpa R. Br.	small fruited mock olive	
Nyssanthes diffusa R. Br.	barbed-wire weed	
Oenothera indecora subsp. bonariensis W. Dietr.	small flower evening primrose	♦
Oldenlandia mitrasacmoides subsp. trachymenoides (F. Muell.) Halford		
Olearia canescens (Benth.) Hutch.		
Oplismenus aemulus (R. Br.) Roem. & Schult.	creeping shade grass	
Opuntia aurantiaca Lindl.	tiger pear	♦
Opuntia stricta (Haw.) Haw. var. stricta	prickly pear	♦
Opuntia tomentosa Salm-Dyck	velvety tree pear	♦
Ottelia ovalifolia (R. Br.) Rich.	swamp lily	
Owenia venosa F. Muell.	emu apple	
Oxalis perennans Haw.		
Ozothamnus diosmifolius (Vent.) DC.	sago flower	
Pandorea pandorana (Andrews) Steenis	wonga vine	
Panicum effusum R. Br. var. effusum	hairy panic	
Panicum laevinode Lindl.	pepper grass	
Panicum maximum var. trichoglume Eyles ex Robyns	green panic	♦
Parsonsia eucalyptophylla F.Muell.	gargaloo	
Parsonsia lanceolata R. Br.	northern silkpod	
Paspalidium caespitosum C.E.Hubb.	brigalow grass	
Paspalidium constrictum (Domin) C.E. Hubb.	knottybutt grass	
Paspalidium criniforme S.T.Blake		
Paspalidium disjunctum S.T.Blake		
Paspalidium distans (Trin.) Hughes	shotgrass	
Paspalidium gracile (R. Br.) Hughes	slender panic	
Paspalidium jubiflorum (Trin.) Hughes	warrego grass	
Paspalum dilatatum Poir.	paspalum	♦
Peripleura hispidula var. setosa (N.T. Burb.) G.L. Nesom		
Perotis rara R. Br.	comet grass	
Persicaria attenuata (R. Br.) Sojak subsp. attenuata		
Persicaria decipiens (R. Br.) K.L. Wilson		
Persicaria hydropiper (L.) Spach	water pepper	
Persicaria lapathifolia (L.) S.F. Gray		
Persicaria orientalis (L.) Spach		
Petalostigma pubescens Domin	quinine tree	
Phragmites australis (Cav.) Trin. ex Steud.	common reed	
Phyla canescens (Kunth) Greene	condamine couch	
Phyllanthus gasstroemii Muell. Arg.		
Phyllanthus maderaspatensis L. var. maderaspatensis		
Phyllanthus sp.		
Phyllanthus virgatus G. Forst.		

Species	Common name	Status
Physalis lanceifolia Nees		♦
Pimelea latifolia R. Br.		
Pimelea trichostachya Lindl.	spiked riceflower	
Pittosporum rhombifolium A. Cunn. ex Hook.		
Planchonella cotinifolia var. pubescens P. Royen		
Plantago cunninghamii Decne.		
Plantago turrifera B.G. Briggs, Carolin & Pulley		
Plectranthus parviflorus Willd.		
Poa fordeana F. Muell.	sweet swampgrass	
Podolepis longipedata Cunn. ex DC.		
Polycarpaea corymbosa (L.) Lam. var. corymbosa		
Polygonum plebeium R. Br.	small knotweed	
Polymeria calycina R. Br.	pink bindweed	
Polymeria pusilla R. Br.		
Portulaca bicolor F. Muell.		
Portulaca oleracea L.	pigweed	
Portulaca pilosa L. subsp. pilosa		
Potamogeton crispus L.	curly pondweed	
Potamogeton tricarinatus F. Muell. & A. Benn. ex A. Benn.	floating pondweed	
Prostanthera euphrasioides Benth.		
Pseuderanthemum variabile (R. Br.) Radlk.	loveflower	
Psoralea tenax Lindl.	emu-foot	
Pterocaulon redolens (Willd.) Fern.-Vill.		
Ptilotus exaltatus var. semilanatus (Lindl.) Maiden & Betche	Prince-of-Wales feather	
Ptilotus macrocephalus (R. Br.) Poir.	green pussytails	
Ranunculus lappaceus Sm.	common buttercup	
Rhodanthe polyphylla (F. Muell.) Paul G. Wilson		
Rhynchosia minima var. australis (Benth.) C. Moore	rhynchosia	
Richardia brasiliensis Gomes	Mexican clover	♦
Rorippa eustylis (F. Muell.) L.A.S. Johnson		
Rostellularia adscendens (R.Br.) R.M. Barker var. adscendens		
Rubus parvifolius L.	native raspberry	
Rumex brownii Campd.	swamp dock	
Rumex tenax Rech.f.		
Rutidosis crispata A.E. Holland		R
Sacciolepis indica (L.) Chase	Indian cupscale grass	
Salix babylonica L.	weeping willow	♦
Salsola kali L.	soft roly-poly	♦
Salvia plebeia R. Br.	common sage	
Salvia reflexa Hornem.	mintweed	♦
Santalum lanceolatum R. Br.	sandelwood	
Sarcostemma viminale subsp. brunonianum (Wight & Arn.) P.I Forst.	caustic-vine	
Schoenoplectus mucronatus (L.) Pall. ex J. Kern.		
Schoenoplectus validus (Vahl) A. Love & D. Love	umbrella sedge	
Schoenus kennyi (F.M. Bailey) S.T. Blake		
Scleria mackaviensis Boeck.		
Scleria sphacelata F.Muell.		
Sclerolaena birchii (F. Muell.) Domin	galvanised burr	
Sclerolaena muricata (Moq.) Domin var. muricata	prickly roly-poly	
Sclerolaena muricata var. villosa (Benth.) Ulbr.	prickly roly-poly	
Sclerolaena tetracuspis (C.T. White) A.J. Scott	brigalow burr	
Secamone elliptica R. Br.	milkvine	
Senecio lautus subsp. dissectifolius Ali	fireweed	
Senecio quadridentatus Labill.	cotton fireweed	
Senna artemisioides subsp. zygophylla (Benth.) Randell	silver cassia	
Senna barclayana (Sweet) Randell	pepper leaf senna	
Senna sophera (L.) Roxb. var. sophera		
Senna sophera var. (40Mile Scrub J.R.Clarkson+ 6908)		

Species	Common name	Status
Sesbania cannabina (Retz.) Poir. var cannabina		
Setaria dielsii Herrm.		
Setaria surgens Stapf		
Sida corrugata Lindl.	corrugated sida	
Sida filiformis A. Cunn.		
Sida pleiantha F. Muell. ex Benth.		
Sida rhombifolia L.	sida retusa	
Sida rohlenae Domin		
Sida spinosa L.	spiny sida	
Sida subspicata F. Muell. ex Benth.	spiked sida	
Sida trichopoda F. Muell.	high sida	
Silybum marianum (L.) Gaertn.	variegated thistle	♦
Sisymbrium thellungii O.E. Schulz	African turnip-weed	♦
Solanum americanum Mill.	glossy nightshade	
Solanum ellipticum R.Br.	potato bush	
Solanum esuriale Lindl.	potato weed	
Solanum parvifolium R. Br.		
Solanum semiarmatum F. Muell.	prickly nightshade	
Soliva anthemifolia (Juss.) R. Br. ex Less.	dwarf jo jo weed	♦
Sonchus oleraceus L.	common sowthistle	♦
Sorghum leiocladum (Hack.) C.E. Hubb.	wild sorghum	
Spartothamnella juncea (A. Cunn. ex Walp.) Briq.	native broom	
Spartothamnella puberula (F. Muell.) Maiden & Betche		
Spermacoce multicaulis Benth.		
Sporobolus caroli Mez.	yakka grass	
Sporobolus coromandelianus (Retz.) Kunth		♦
Sporobolus elongatus R. Br.	slender rat's-tail grass	
Sporobolus mitchellii (Trin.) C.E. Hubb. ex S.T. Blake	rat's tail couch	
Stackhousia muricata Lindl.		
Stellaria angustifolia Hook.	swamp starwort	
Swainsona galegifolia (Andrews) R.Br.	smooth Darling pea	
Swainsona oroboides F. Muell. ex Benth.	variable swainsona	
Tetragonia tetragonioides (Pallas) Kuntze	New Zealand spinach	
Thellungia advena Stapf ex Probst	coolibah grass	
Themeda avenacea (F. Muell.) Maiden & Betche	native oatgrass	
Themeda triandra Forssk.	kangaroo grass	
Thyridolepis xerophila (Domin) S.T. Blake		
Tragus australianus S.T. Blake	small burr grass	
Trianthema triquetra Rottb. ex Willd.	red spinach	
Tribulus micrococcus Domin		
Tricoryne elatior R. Br.	rush lily	
Triodia mitchellii Benth. var. mitchellii	buck spinifex	
Triodia pungens R. Br. var. pungens		
Turraea pubescens Hellen.	native honeysuckle	
Urochloa mosambicensis (Hack.) Dandy	sabi grass	♦
Utricularia dichotoma Labill.		
Utricularia gibba L.		
Verbena aristigera S.Moore	Mayne's pest	♦
Verbena litoralis Kunth	verbena	♦
Verbena officinalis L.	common verbena	
Verbesina encelioides (Cav.) Benth. & Hook.f. ex A. Gray	wild sunflower	♦
Vernonia cinerea (L.) Less. var. cinerea	vernonia	
Vetiveria filipes (Benth.) C.E. Hubb.	Australian vetiveria	
Vittadinia cuneata var. hirsuta N.T. Burb.		
Vittadinia dissecta var. hirta N.T. Burb.		
Vittadinia pterochaeta (F. Muell. ex Benth.) J.M. Black		
Vittadinia pustulata N.T. Burb.		
Wahlenbergia communis Carolin	an Australian bluebell	

Species	Common name	Status
Wahlenbergia gracilis (G. Forst.) A. DC.	an Australian bluebell	
Wahlenbergia tumidifructa P.J. Sm.	an Australian bluebell	
Xanthium spinosum L.	Bathurst burr	♦
Zaleya galericulata (Melville) H.Eichler subsp. galericulata	hogweed	
Zinnia peruviana (L.) L.	wild zinnia	♦
Zornia muriculata subsp. angustata S.T. Reynolds & A.E. Holland	zornia	
Zygophyllum apiculatum F. Muell.	gall weed	

Table 2 - Species listing sorted by Family

Note: ♦ *in Status represents introduced species or weed*
R = *Rare as defined in Queensland Conservation Act 1992*

Family	Species	Common name	Status
Algae			
Characeae	Chara sp.	stonewort	
Pteridophytes			
Adiantaceae	Cheilanthes distans (R. Br.) Mett.	bristly cloak fern	
Adiantaceae	Cheilanthes sieberi Kunze subsp. sieberi	mulga fern	
Azollaceae	Azolla pinnata R.Br.	ferny azolla	
Marsileaceae	Marsilea hirsuta R. Br.	hairy nardoo	
Thelypteridaceae	Ampelopteris prolifera (Retz.) Copel.		
Thelypteridaceae	Cyclosorus interruptus (Willd.) H.Ito		
Gymnosperms			
Cupressaceae	Callitris glaucophylla Thompson & L.A.S.Johnson	white cypress pine	
Angiosperms			
Acanthaceae	Brunoniella australis (Cav.) Bremek.	blue trumpet	
Acanthaceae	Pseuderanthemum variabile (R. Br.) Radlk.	loveflower	
Acanthaceae	Rostellularia adscendens (R.Br.) R.M. Barker var. adscendens		
Aizoaceae	Tetragonia tetragonioides (Pallas) Kuntze	New Zealand spinach	
Aizoaceae	Trianthema triquetra Rottb. ex Willd.	red spinach	
Aizoaceae	Zaleya galericulata (Melville) H.Eichler subsp. galericulata	hogweed	
Amaranthaceae	Achyranthes aspera L.	chaff flower	♦
Amaranthaceae	Alternanthera denticulata R. Br.	lesser joyweed	
Amaranthaceae	Alternanthera nodiflora R.Br.	joyweed	
Amaranthaceae	Amaranthus graecizans subsp. sylvestris (Vill.) Asch.		♦
Amaranthaceae	Amaranthus viridis L.	green amaranth	♦
Amaranthaceae	Gomphrena celosioides Mart.	soft khakiweed	♦
Amaranthaceae	Ptilotus exaltatus var. semilanatus (Lindl.) Maiden & Betche	Prince-of-Wales feather	
Amaranthaceae	Ptilotus macrocephalus (R. Br.) Poir.	green pussytails	
Amaranthaceae	Nyssanthes diffusa R. Br.	barbed-wire weed	
Apiaceae	Centella asiatica (L.) Urb.	pennywort	
Apiaceae	Ciclospermum leptophyllum (Pers.) Sprague	slender celery	♦
Apiaceae	Daucus glochidiatus (Labill.) Fischer, C.A.Meyer & Ave-Lall.	Australian carrot	
Apocynaceae	Alstonia constricta F.Muell.	bitterbark	
Apocynaceae	Carissa ovata R.Br.	current bush	
Apocynaceae	Parsonsia eucalyptophylla F.Muell.	gargaloo	
Apocynaceae	Parsonsia lanceolata R. Br.	northern silkpod	
Arecaceae	Livistona sp. (Taroom R.W.Johnson 2764)		
Asclepidaceae	Gomphocarpus physocarpus E. Mey.	balloon cotton bush	♦
Asclepidaceae	Marsdenia microlepis Benth.		
Asclepidaceae	Sarcostemma viminale subsp. brunonianum (Wight & Arn.) P.I Forst.	caustic-vine	
Asclepidaceae	Secamone elliptica R. Br.	milkvine	
Asteraceae	Aster subulatus Michx.	wild aster	♦
Asteraceae	Baccharis halimifolia L.	groundsel bush	♦
Asteraceae	Bidens bipinnata L.	bipinnate beggar's ticks	♦
Asteraceae	Brachyscome trachycarpa F. Muell.		

Family	Species	Common name	Status
Asteraceae	Bracteantha bracteata (Vent.) Anderb. & Haegi	golden everlasting	
Asteraceae	Calotis cuneata (F. Muell. ex Benth.) G.L. Davis	blue burr daisy	
Asteraceae	Calotis cuneifolia R.Br.		
Asteraceae	Calotis dentex R. Br.	white burr daisy	
Asteraceae	Calotis hispidula (F. Muell.) F. Muell.	bogan flea	
Asteraceae	Calotis lappulacea Benth.	yellow burr daisy	
Asteraceae	Cassinia laevis R. Br.	coughbush	
Asteraceae	Centaurea melitensis L.	Maltese cockspur	♦
Asteraceae	Centipeda minima (L.) A. Braun & Aschers	spreading sneezeweed	
Asteraceae	Chrysocephalum apiculatum (Labill.) Steetz	yellow buttons	
Asteraceae	Cirsium vulgare (Sav.) Ten.	spear thistle	♦
Asteraceae	Conyza bonariensis (L.) Cronq.	flaxleaf fleabane	♦
Asteraceae	Eclipta prostrata (L.) L.	white eclipta	
Asteraceae	Epaltes australis Less.	epalates	
Asteraceae	Euchiton sphaericus (Willd.) Anderb.	cudweed	
Asteraceae	Glossocardia bidens (Retz.) Veldkamp	native cobbler's pegs	
Asteraceae	Gnaphalium polycaulon Pers.		
Asteraceae	Helichrysum collinum DC.		
Asteraceae	Hypochaeris glabra L.	smooth catsear	♦
Asteraceae	Ixiolaena leptolepis (DC.) Benth.	stalked ixiolaena	
Asteraceae	Minuria integerrima (DC.) Benth.	smooth minuria	
Asteraceae	Olearia canescens (Benth.) Hutch.		
Asteraceae	Ozothamnus diosmifolius (Vent.) DC.	sago flower	
Asteraceae	Peripleura hispidula var. setosa (N.T. Burb.) G.L. Nesom		
Asteraceae	Podolepis longipedata Cunn. ex DC.		
Asteraceae	Pterocaulon redolens (Willd.) Fern.-Vill.		
Asteraceae	Rhodanthe polyphylla (F. Muell.) Paul G. Wilson		
Asteraceae	Rutidosis crispata A.E. Holland		R
Asteraceae	Senecio lautus subsp. dissectifolius Ali	fireweed	
Asteraceae	Senecio quadridentatus Labill.	cotton fireweed	
Asteraceae	Silybum marianum (L.) Gaertn.	variegated thistle	♦
Asteraceae	Soliva anthemifolia (Juss.) R. Br. ex Less.	dwarf jo jo weed	♦
Asteraceae	Sonchus oleraceus L.	common sowthistle	♦
Asteraceae	Verbesina encelioides (Cav.) Benth. & Hook.f. ex A. Gray	wild sunflower	♦
Asteraceae	Vernonia cinerea (L.) Less. var. cinerea	vernonia	
Asteraceae	Vittadinia cuneata var. hirsuta N.T. Burb.		
Asteraceae	Vittadinia dissecta var. hirta N.T. Burb.		
Asteraceae	Vittadinia pterochaeta (F. Muell. ex Benth.) J.M. Black		
Asteraceae	Vittadinia pustulata N.T. Burb.		
Asteraceae	Xanthium spinosum L.	Bathurst burr	♦
Asteraceae	Zinnia peruviana (L.) L.	wild zinnia	♦
Bignoniaceae	Macfadyena unguis-cati (L.) A.H. Gentry	cat's claw	♦
Bignoniaceae	Pandorea pandorana (Andrews) Steenis	wonga vine	
Boraginaceae	Cynoglossum australe R. Br. var. australe	Australian forget me not	
Boraginaceae	Ehretia membranifolia R. Br.	weeping koda	
Boraginaceae	Halgania brachyrhyncha Peter G. Wilson		
Boraginaceae	Heliotropium amplexicaule Vahl	blue heliotrope	♦
Boraginaceae	Heliotropium indicum L.		♦
Brassicaceae	Coronopus didymus (L.) Smith	lesser swine-cress	♦
Brassicaceae	Lepidium africanum (N. Burm.) DC.	common peppercress	♦
Brassicaceae	Lepidium bonariense L.	Argentine peppercress	♦
Brassicaceae	Rorippa eustylis (F. Muell.) L.A.S. Johnson		
Brassicaceae	Sisymbrium thellungii O.E. Schulz	African turnip-weed	♦
Cactaceae	Opuntia aurantiaca Lindl.	tiger pear	♦
Cactaceae	Opuntia stricta (Haw.) Haw. var. stricta	prickly pear	♦

Family	Species	Common name	Status
Cactaceae	Opuntia tomentosa Salm-Dyck	velvety tree pear	♦
Caesalpiniaceae	Cassia tomentella Domin	velvet cassia	
Caesalpiniaceae	Lysiphyllum carronii (F. Muell.) Pedley	ebony tree	
Caesalpiniaceae	Senna barclayana (Sweet) Randell	pepper leaf senna	
Caesalpiniaceae	Senna sophera (L.) Roxb. var. sophera		
Caesalpiniaceae	Senna sophera var. (40Mile Scrub J.R.Clarkson+ 6908)		
Caesalpiniaceae	Senna artemisioides subsp. zygophylla (Benth.) Randell	silver cassia	
Callitrichaceae	Callitriche sonderi Hegelm.	starwort	
Campanulaceae	Isotoma axillaris Lindl.	Australian harebell	
Campanulaceae	Wahlenbergia communis Carolin	an Australian bluebell	
Campanulaceae	Wahlenbergia gracilis (G. Forst.) A. DC.	an Australian bluebell	
Capmanulaceae	Wahlenbergia tumidifructa P.J. Sm.	an Australian bluebell	
Capparaceae	Apophyllum anomalum F. Muell.	broom bush	
Capparaceae	Capparis canescens Banks ex DC.	wild orange	
Capparaceae	Capparis lasiantha R. Br. ex DC.	nipan	
Capparaceae	Capparis loranthifolia var. bancroftii C.T. White ex M. Jacobs	narrow leaf bumble-tree	
Capparaceae	Capparis mitchellii Lindl.		
Caryophyllaceae	Polycarpaea corymbosa (L.) Lam. var. corymbosa		
Caryophyllaceae	Stellaria angustifolia Hook.	swamp starwort	
Casuarinaceae	Allocasuarina luehmannii (R.T. Barker) L.A.S. Johnson	bull oak	
Casuarinaceae	Casuarina cristata Miq.	belah	
Celastraceae	Cassine australis var. angustifolia (Benth.) Jessup	red oliveplum	
Celastraceae	Denhamia oleaster (Lindl.) F. Muell.		
Celastraceae	Denhamia pittosporoides F. Muell.	orange boxwood	
Celastraceae	Maytenus cunninghamii (Hook.) Loes.		
Chenopodiaceae	Atriplex muelleri Benth.	annual saltbush	
Chenopodiaceae	Chenopodium ambrosioides L.	Mexican tea	♦
Chenopodiaceae	Chenopodium carinatum R. Br.	green crumbweed	
Chenopodiaceae	Chenopodium desertorum subsp. anidiophyllum (Aellen) Paul G. Wilson		
Chenopodiaceae	Chenopodium pumilio R. Br.	small crumbweed	
Chenopodiaceae	Dysphania glomulifera (Nees) Paul G. Wilson subsp. glomulifera		
Chenopodiaceae	Einadia hastata (R. Br.) A.J. Scott	ruby saltbush	
Chenopodiaceae	Einadia nutans (R. Br.) A.J. Scott subsp. nutans	nodding saltbush	
Chenopodiaceae	Einadia nutans subsp. linifolia (R. Br.) Paul G. Wilson	climbing saltbush	
Chenopodiaceae	Einadia trigonos subsp. stellulata (Benth.) Paul G. Wilson		
Chenopodiaceae	Enchylaena tomentosa R. Br.	ruby saltbush	
Chenopodiaceae	Maireana microphylla (Moq.) Paul G. Wilson	saltbush	
Chenopodiaceae	Salsola kali L.	soft roly-poly	♦
Chenopodiaceae	Sclerolaena birchii (F. Muell.) Domin	galvanised burr	
Chenopodiaceae	Sclerolaena muricata (Moq.) Domin var. muricata	prickly roly-poly	
Chenopodiaceae	Sclerolaena muricata var. villosa (Benth.) Ulbr.	prickly roly-poly	
Chenopodiaceae	Sclerolaena tetracuspis (C.T. White) A.J. Scott	brigalow burr	
Commelinaceae	Commelina diffusa Burm.f.	wandering jew	
Commelinaceae	Murdannia graminea (R. Br.) Bruchn.	grass lily	
Convolvulaceae	Cuscuta campestris Yunck.	dodder	♦
Convolvulaceae	Dichondra repens J.R. Forst. & G. Forst.	kidney weed	
Convolvulaceae	Evolvulus alsinoides (L.) L.	tropical speedwell	
Convolvulaceae	Jacquemontia paniculata (Burm.f.) Hallier f.		
Convolvulaceae	Polymeria calycina R. Br.	pink bindweed	
Convolvulaceae	Polymeria pusilla R. Br.		

Family	Species	Common name	Status
Crassulaceae	Crassula sieberiana (Schult. & Schult.f.) Druce	native crassula	
Cyperaceae	Carex appressa R. Br.	tall sedge	
Cyperaceae	Carex polyantha F. Muell.		
Cyperaceae	Cyperus difformis L.	rice sedge	
Cyperaceae	Cyperus flaccidus R. Br.		
Cyperaceae	Cyperus gracilis R. Br.	slender sedge	
Cyperaceae	Cyperus iria L.		
Cyperaceae	Cyperus lucidus R. Br.		
Cyperaceae	Cyperus polystachyos Rottb. var. polystachyos	bunchy sedge	
Cyperaceae	Cyperus pygmaeus Rottb.	dwarf sedge	
Cyperaceae	Cyperus rigidellus (Benth.) J.M. Black		
Cyperaceae	Cyperus rotundus L.	nutgrass	♦
Cyperaceae	Cyperus sanguinolentus Vahl		
Cyperaceae	Cyperus sphaeroideus L.A.S. Johnson & O.D. Evans	kyllinga weed	
Cyperaceae	Eleocharis cylindrostachys Boeck.		
Cyperaceae	Eleocharis equisetina C. Presl	spikerush	
Cyperaceae	Eleocharis plana S.T. Blake	ribbed spikerush	
Cyperaceae	Eleocharis pusilla R. Br.	small spikerush	
Cyperaceae	Fimbristylis dichotoma (L.) Vahl	common fringe-rush	
Cyperaceae	Gahnia aspera (R.Br.) Spreng.		
Cyperaceae	Schoenoplectus mucronatus (L.) Pall. ex J. Kern.		
Cyperaceae	Schoenoplectus validus (Vahl) A. Love & D. Love	umbrella sedge	
Cyperaceae	Schoenus kennyi (F.M. Bailey) S.T. Blake		
Cyperaceae	Scleria mackaviensis Boeck.		
Cyperaceae	Scleria sphacelata F.Muell.		
Dilleniaceae	Hibbertia sp.		
Ebenaceae	Diospyros humilis (R. Br.) F. Muell.	small-leaved ebony	
Elatinaceae	Elatine gratioloides A. Cunn.	waterwort	
Epacridaceae	Melichrus urceolatus R. Br.	honey gorse	
Eriocaulaceae	Eriocaulon scariosum Sm.	pipewort	
Erythroxylaceae	Erythroxylum sp. (Splityard Creek L.Pedley 5360)		
Euphorbiaceae	Acalypha eremorum Muell. Arg.	soft acalypha	
Euphorbiaceae	Adriana glabrata var. subglabra (Baill.) Airy Shaw		
Euphorbiaceae	Bertya oleifolia Planch.		
Euphorbiaceae	Bertya pedicellata F. Muell.		R
Euphorbiaceae	Breynia oblongifolia (Muell. Arg.) Muell. Arg.	coffee bush	
Euphorbiaceae	Chamaesyce dallachyana (Baill.) D.C. Hassall	caustic-weed	
Euphorbiaceae	Claoxylon tenerifolium (Baill.) F. Muell.	Queensland brittlewood	
Euphorbiaceae	Croton insularis Baill.	native cascarilla bark	
Euphorbiaceae	Croton phebalioides F. Muell. ex Muell. Arg.	narrow-leaved croton	
Euphorbiaceae	Euphorbia tannensis var. eremophila (A.Cunn.) D.C. Hassall	desert spurge	
Euphorbiaceae	Excoecaria dallachyana (Baill.) Benth.	scrub poison	
Euphorbiaceae	Petalostigma pubescens Domin	quinine tree	
Euphorbiaceae	Phyllanthus gasstroemii Muell. Arg.		
Euphorbiaceae	Phyllanthus maderaspatensis L. var. maderaspatensis		
Euphorbiaceae	Phyllanthus sp.		
Euphorbiaceae	Phyllanthus virgatus G. Forst.		
Fabaceae	Crotalaria incana L. subsp. incana	woolly rattlepod	♦
Fabaceae	Crotalaria montana Roth		
Fabaceae	Desmodium brachypodum A. Gray		
Fabaceae	Desmodium rhytidophyllum F. Muell. ex Benth.		
Fabaceae	Desmodium varians (Labill.) G. Don	slender tick trefoil	
Fabaceae	Erythrina vespertilio Benth.	bats-wing coral tree	
Fabaceae	Glycine tabacina (Labill.) Benth.	glycine pea	
Fabaceae	Glycine tomentella Hayata	woolly glycine	

Family	Species	Common name	Status
Fabaceae	Hovea lanceolata Sims		
Fabaceae	Hovea longipes Benth.	brush hovea	
Fabaceae	Indigofera linnaei Ali	nine-leaved indigo	
Fabaceae	Indigofera sp.		
Fabaceae	Jacksonia scoparia R.Br.	dogwood	
Fabaceae	Lotus australis Andrews	Australian trefoil	
Fabaceae	Macroptilium lathyroides (L.) Urb.	phasey bean	♦
Fabaceae	Medicago polymorpha L.		♦
Fabaceae	Melilotus indicus (L.) All.	hexham scent	♦
Fabaceae	Psoralea tenax Lindl.	emu-foot	
Fabaceae	Rhynchosia minima var. australis (Benth.) C. Moore	rhynchosia	
Fabaceae	Sesbania cannabina (Retz.) Poir. var cannabina		
Fabaceae	Swainsona galegifolia (Andrews) R.Br.	smooth Darling pea	
Fabaceae	Swainsona oroboides F. Muell. ex Benth.	variable swainsona	
Fabaceae	Zornia muriculata subsp. angustata S.T. Reynolds & A.E. Holland	zornia	
Gentianaceae	Centaurium erythraea Rafn.	common centaury	♦
Geraniaceae	Erodium crinitum Carolin	blue crowfoot	
Goodeniaceae	Goodenia fascicularis F. Muell. & Tate	fan flower	
Goodeniaceae	Goodenia glabra R. Br.		
Goodeniaceae	Goodenia grandiflora Sims		
Haloragaceae	Haloragis aspera Lindl.	raspweed	
Hydrocharitaceae	Ottelia ovalifolia (R. Br.) Rich.	swamp lily	
Juncaceae	Juncus prismatocarpus R. Br.	branching rush	
Juncaceae	Juncus sp.		
Juncaceae	Juncus usitatus L.A.S. Johnson	rush	
Lamiaceae	Ajuga australis R. Br.	Australian bugle	
Lamiaceae	Basilicum polystachyon (L.) Moench		
Lamiaceae	Plectranthus parviflorus Willd.		
Lamiaceae	Prostanthera euphrasioides Benth.		
Lamiaceae	Salvia plebeia R. Br.	common sage	
Lamiaceae	Salvia reflexa Hornem.	mintweed	♦
Lemnaceae	Lemna trisulca L.		
Lentibulariaceae	Utricularia dichotoma Labill.		
Lentibulariaceae	Utricularia gibba L.		
Liliaceae	Dianella brevipedunculata R.F.J. Hend.		
Liliaceae	Dianella caerulea var. vannata R.J.F. Hend.		
Liliaceae	Dianella longifolia R. Br. var. longifolia		
Liliaceae	Laxmannia compacta Conran & P.I. Forst.		
Liliaceae	Tricoryne elatior R. Br.	rush lily	
Loranthaceae	Amyema congener (Sieber ex Schult. & Schult.f.) Tiegh. subsp. congener	erect mistletoe	
Loranthaceae	Amyema quandang var. bancroftii (F.M.Bailey) Barlow		
Malvaceae	Abutilon fraseri (Hook.) Hook. ex Walp.	dwarf lantern flower	
Malvaceae	Abutilon oxycarpum (F.Muell.) F. Muell. ex Benth. forma oxycarpum		
Malvaceae	Abutilon oxycarpum forma acutatum Benth.	flannel weed	
Malvaceae	Hibiscus sturtii Hook.		
Malvaceae	Hibiscus trionum L.	bladder ketmia	
Malvaceae	Malva parviflora L.	marshmallow	♦
Malvaceae	Malvastrum americanum (L.) Torr.	spiked malvastrum	♦
Malvaceae	Malvastrum coromandelianum (L.) Garcke	prickly malvastrum	♦
Malvaceae	Sida corrugata Lindl.	corrugated sida	
Malvaceae	Sida filiformis A. Cunn.		
Malvaceae	Sida pleiantha F. Muell. ex Benth.		
Malvaceae	Sida rhombifolia L.	sida retusa	
Malvaceae	Sida rohlenae Domin		

Family	Species	Common name	Status
Malvaceae	Sida spinosa L.	spiny sida	
Malvaceae	Sida subspicata F. Muell. ex Benth.	spiked sida	
Malvaceae	Sida trichopoda F. Muell.	high sida	
Meliaceae	Owenia venosa F. Muell.	emu apple	
Meliaceae	Turraea pubescens Hellen.	native honeysuckle	
Mimosaceae	Acacia amblygona Benth.	prickly wattle	
Mimosaceae	Acacia caroleae Pedley		
Mimosaceae	Acacia conferta Benth.	crowded-leaf wattle	
Mimosaceae	Acacia deanei (R.T. Baker) M.B. Welch, Coombs & McGlynn subsp. deanei	green wattle	
Mimosaceae	Acacia decora Rchb.	pretty wattle	
Mimosaceae	Acacia excelsa Benth.	ironwood	
Mimosaceae	Acacia farnesiana (L.) Willd.	mimosa bush	♦
Mimosaceae	Acacia fasciculifera F. Muell. ex Benth.	scrub ironbark	
Mimosaceae	Acacia harpophylla F. Muell. ex Benth.	brigalow	
Mimosaceae	Acacia juncifolia Benth. subsp. juncifolia		
Mimosaceae	Acacia leiocalyx (Domin) Pedley subsp. leiocalyx	Brisbane black wattle	
Mimosaceae	Acacia longispicata Benth.		
Mimosaceae	Acacia macradenia Benth.	zig-zag wattle	
Mimosaceae	Acacia rhodoxylon Maiden	rosewood	
Mimosaceae	Acacia salicina Lindl.	sally wattle	
Mimosaceae	Acacia shirleyi Maiden	lancewood	
Mimosaceae	Acacia sparsiflora Maiden	currawong	
Mimosaceae	Acacia stenophylla A. Cunn. ex Benth.	river cooba	
Mimosaceae	Neptunia gracilis Benth.	sensitive plant	
Molluginaceae	Glinus lotoides L.	hairy carpet weed	
Moraceae	Ficus opposita Miq.	sandpaper fig	
Myoporaceae	Eremophila debilis (Andrews) Chinnock	winter apple	
Myoporaceae	Eremophila longifolia (R,. Br.) F. Muell.	berrigan	
Myoporaceae	Eremophila mitchellii Benth.	bastard sandalwood	
Myrtaceae	Angophora floribunda (Sm.) Sweet	roughbark apple	
Myrtaceae	Angophora leiocarpa (L.A.S. Johnson ex G.J. Leach) K.R. Thiele & Ladiges	smooth-bark apple	
Myrtaceae	Austromyrtus bidwillii (Benth.) Burret	smooth-barked ironwood	
Myrtaceae	Corymbia clarksoniana (D.J. Carr & S.G. Carr) K.D. Hill & L.A.S. Johnson	long-fruited bloodwood	
Myrtaceae	Eucalyptus camaldulensis Dehnh.	river red gum	
Myrtaceae	Eucalyptus cambageana Maiden	Dawson gum	
Myrtaceae	Eucalyptus coolabah Blakely & Jacobs	coolabah	
Myrtaceae	Eucalyptus crebra F. Muell.	narrow-leaved ironbark	
Myrtaceae	Eucalyptus exserta F. Muell.	Queensland peppermint	
Myrtaceae	Eucalyptus melanophloia F.Muell.	silver leaved ironbark	
Myrtaceae	Eucalyptus populnea F. Muell.	poplar box	
Myrtaceae	Eucalyptus tenuipes (Maiden & Blakely) Blakley & C.T. White	narrow-leaved mahogany	
Myrtaceae	Eucalyptus tereticornis Sm.	forest red gum	
Myrtaceae	Eucalyptus tessellaris F. Muell.	Moreton Bay ash	
Myrtaceae	Leptospermum neglectum Joy Thomps.		
Myrtaceae	Lophostemon suaveolens (Sol. ex Gaertn.) Peter G. Wilson & J.T. Waterh.	swamp box	
Myrtaceae	Lysicarpus angustifolius (Hook.) Druce	budgeroo	
Myrtaceae	Melaleuca linariifolia var. trichostachya (Lindl.) Benth.	flaxleaf paperbark	
Nyctaginaceae	Boerhavia dominii Meidle & Hewson		
Nyctaginaceae	Boerhavia pubescens R. Br.		
Oleaceae	Jasminum didymum subsp. lineare (R. Br.) P.S.Green	native jasmine	

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Oleaceae	Jasminum simplicifolium subsp. australiense P.S. Green	stiff jasmine	
Oleaceae	Notelaea microcarpa R. Br.	small fruited mock olive	
Onagraceae	Epilobium hirtigerum A. Cunn.		
Onagraceae	Gaura parviflora Douglas	clockweed	♦
Onagraceae	Ludwigia octovalvis (Jacq.) Raven	willow primrose	
Onagraceae	Ludwigia peploides subsp. montevidensis (Spreng.) P.H. Raven		♦
Onagraceae	Oenothera indecora subsp. bonariensis W. Dietr.	small flower evening primrose	♦
Orchidaceae	Cymbidium canaliculatum R.Br.		
Oxalidaceae	Oxalis perennans Haw.		
Papaveraceae	Argemone ochroleuca Sweet subsp. ochroleuca		♦
Pittosporaceae	Bursaria incana Lindl. var. incana		
Pittosporaceae	Citriobatus spinescens (F. Muell.) Druce	large-fruited orange thorn	
Pittosporaceae	Pittosporum rhombifolium A. Cunn. ex Hook.		
Plantaginaceae	Plantago cunninghamii Decne.		
Plantaginaceae	Plantago turrifera B.G. Briggs, Carolin & Pulley		
Poaceae	Agrostis avenacea J.F. Gmel. var. avenacea	blowngrass	
Poaceae	Ancistrachne uncinulata (R. Br.) S.T. Blake	hooky grass	
Poaceae	Aristida benthamii var. spinulifera B.K.Simon		
Poaceae	Aristida calycina R. Br. var. calycina		
Poaceae	Aristida calycina var. praealta Domin		
Poaceae	Aristida caput-medusae Domin	many headed wiregrass	
Poaceae	Aristida gracilipes (Domin) Henrard		
Poaceae	Aristida latifolia Domin		
Poaceae	Aristida leichhardtiana Domin		
Poaceae	Aristida lignosa B.K.Simon		
Poaceae	Aristida personata Henrard		
Poaceae	Aristida queenslandica Henrard var. queenslandica		
Poaceae	Aristida queenslandica var. dissimilis (S.T.Blake) B.K.Simon		
Poaceae	Aristida ramosa R.Br.	purple wiregrass	
Poaceae	Arundinella neplanensis Trin.	reed grass	
Poaceae	Austrostipa verticillata (Nees ex Spreng.) S.W.L. Jacobs & J. Everett	slender bamboo grass	
Poaceae	Bothriochloa bladhii (Retz.) S.T. Blake subsp. bladhii	forest bluegrass	
Poaceae	Bothriochloa decipiens (Hack.) C.E. Hubb. var. decipiens	pitted bluegrass	
Poaceae	Brachiaria eruciformis (Sm.) Griseb.		♦
Poaceae	Brachiaria foliosa (R. Br.) Hughes	leafy panic	
Poaceae	Brachiaria subquadripara (Trin.) Hitch.		
Poaceae	Calyptochloa gracillima C.E. Hubb.		
Poaceae	Capillipedium spicigerum S.T. Blake	scented top	
Poaceae	Cenchrus ciliaris L.	buffel grass	♦
Poaceae	Chionachne cyathopoda (F. Muell.) F. Muell. ex Benth.	river grass	
Poaceae	Chloris divaricata R. Br.	slender chloris	
Poaceae	Chloris gayana Kunth	rhodes grass	♦
Poaceae	Chloris ventricosa R. Br.	tall chloris	
Poaceae	Cleistochloa subjuncea C.E. Hubb.		
Poaceae	Cymbopogon bombycinus (R. Br.) Domin	silky oilgrass	
Poaceae	Cymbopogon refractus (R.Br.) A. Camus	barb wire grass	
Poaceae	Cynodon dactylon (L.) Pers. var. dactylon	green couch	
Poaceae	Dichanthium sericeum subsp. humilius (J.M. Black) B.K. Simon		

Family	Species	Common name	Status
Poaceae	Digitaria breviglumis (Domin) Henrard		
Poaceae	Digitaria brownii (Roem. & Schult.) Hughes	cotton panic	
Poaceae	Digitaria divaricatissima (R. Br.) Hughes	umbrella grass	
Poaceae	Digitaria longiflora (Retz.) Pers.		
Poaceae	Echinochloa crusgalli (L.) P. Beauv.	barnyard grass	♦
Poaceae	Enneapogon gracilis (R. Br.) P. Beauv.	slender nineawn	
Poaceae	Enneapogon lindleyanus (Domin) C.E. Hubb.	prickly couch	
Poaceae	Enteropogon acicularis (Lindl.) Lazarides	curly windmill grass	
Poaceae	Enteropogon ramosus B.K. Simon	windmill grass	
Poaceae	Enteropogon unispiceus (F. Muell.) Clayton		
Poaceae	Eragrostis elongata (Willd.) J. Jacq.	clustered love grass	
Poaceae	Eragrostis lacunaria F. Muell. ex Benth.	purple lovegrass	
Poaceae	Eragrostis leptostachya (R. Br.) Steud.	paddock love grass	
Poaceae	Eragrostis longipedicellata B.K. Simon		
Poaceae	Eriochloa decumbens F.M. Bailey		
Poaceae	Eriochloa pseudoacrotricha (Stapf ex Thell.) J.M. Black	early spring grass	
Poaceae	Eulalia aurea (Bory) Kunth	silky browntop	
Poaceae	Heteropogon contortus (L.) Beauv. ex. Roem. & Schult.	black speargrass	
Poaceae	Imperata cylindrica (L.) Raeusch.	blady grass	
Poaceae	Isachne globosa (Thunb.) Kuntze	swamp millet	
Poaceae	Leersia hexandra Sw.	swamp rice grass	
Poaceae	Leptochloa ciliolata (Jedwabn.) S.T. Blake		
Poaceae	Leptochloa digitata (R. Br.) Domin	umbrella canegrass	
Poaceae	Leptochloa peacockii (Maiden & Betche) Domin		
Poaceae	Melinis repens (Willd.) Zizka	red Natal grass	♦
Poaceae	Oplismenus aemulus (R. Br.) Roem. & Schult.	creeping shade grass	
Poaceae	Panicum effusum R. Br. var. effusum	hairy panic	
Poaceae	Panicum laevinode Lindl.	pepper grass	
Poaceae	Panicum maximum var. trichoglume Eyles ex Robyns	green panic	♦
Poaceae	Paspalidium caespitosum C.E.Hubb.	brigalow grass	
Poaceae	Paspalidium constrictum (Domin) C.E. Hubb.	knottybutt grass	
Poaceae	Paspalidium criniforme S.T.Blake		
Poaceae	Paspalidium disjunctum S.T.Blake		
Poaceae	Paspalidium distans (Trin.) Hughes	shotgrass	
Poaceae	Paspalidium gracile (R. Br.) Hughes	slender panic	
Poaceae	Paspalidium jubiflorum (Trin.) Hughes	warrego grass	
Poaceae	Paspalum dilatatum Poir.	paspalum	♦
Poaceae	Perotis rara R. Br.	comet grass	
Poaceae	Phragmites australis (Cav.) Trin. ex Steud.	common reed	
Poaceae	Poa fordeana F. Muell.	sweet swampgrass	
Poaceae	Sacciolepis indica (L.) Chase	Indian cupscale grass	
Poaceae	Setaria dielsii Herrm.		
Poaceae	Setaria surgens Stapf		
Poaceae	Sorghum leiocladum (Hack.) C.E. Hubb.	wild sorghum	
Poaceae	Sporobolus caroli Mez.	yakka grass	
Poaceae	Sporobolus coromandelianus (Retz.) Kunth		♦
Poaceae	Sporobolus elongatus R. Br.	slender rat's-tail grass	
Poaceae	Sporobolus mitchellii (Trin.) C.E. Hubb. ex S.T. Blake	rat's tail couch	
Poaceae	Thellungia advena Stapf ex Probst	coolibah grass	
Poaceae	Themeda avenacea (F. Muell.) Maiden & Betche	native oatgrass	
Poaceae	Themeda triandra Forssk.	kangaroo grass	
Poaceae	Thyridolepis xerophila (Domin) S.T. Blake		
Poaceae	Tragus australianus S.T. Blake	small burr grass	
Poaceae	Triodia mitchellii Benth. var. mitchellii	buck spinifex	

Family	Species	Common name	Status
Poaceae	Triodia pungens R. Br. var. pungens		
Poaceae	Urochloa mosambicensis (Hack.) Dandy	sabi grass	♦
Poaceae	Vetiveria filipes (Benth.) C.E. Hubb.	Australian vetiveria	
Polygonaceae	Fallopia convolvulus (L.) A. Love		♦
Polygonaceae	Muehlenbeckia florulenta Meisner	lignum	
Polygonaceae	Persicaria attenuata (R. Br.) Sojak subsp. attenuata		
Polygonaceae	Persicaria decipiens (R. Br.) K.L. Wilson		
Polygonaceae	Persicaria hydropiper (L.) Spach	water pepper	
Polygonaceae	Persicaria lapathifolia (L.) S.F. Gray		
Polygonaceae	Persicaria orientalis (L.) Spach		
Polygonaceae	Polygonum plebeium R. Br.	small knotweed	
Polygonaceae	Rumex brownii Campd.	swamp dock	
Polygonaceae	Rumex tenax Rech.f.		
Portulacaceae	Portulaca bicolor F. Muell.		
Portulacaceae	Portulaca oleracea L.	pigweed	
Portulacaceae	Portulaca pilosa L. subsp. pilosa		
Potamogetonaceae	Potamogeton crispus L.	curly pondweed	
Potamogetonaceae	Potamogeton tricarinatus F. Muell. & A. Benn. ex A. Benn.	floating pondweed	
Proteaceae	Grevillea robusta A. Cunn. ex R. Br.	silky oak	
Proteaceae	Grevillea striata R. Br.	beefwood	
Proteaceae	Hakea fraseri R.Br.	corkwood oak	
Ranunculaceae	Ranunculus lappaceus Sm.	common buttercup	
Rhamnaceae	Alphitonia excelsa (A. Cunn. ex Fenzl) Reissek ex Benth.	soap tree	
Rhamnaceae	Cryptandra sp. (Isla Gorge P.Sharpe 627)		
Rosaceae	Rubus parvifolius L.	native raspberry	
Rubiaceae	Asperula conferta Hook.f.	common woodruff	
Rubiaceae	Asperula geminifolia F. Muell.		
Rubiaceae	Canthium coprosmoides F. Muell.	coastal coffee bush	
Rubiaceae	Canthium odoratum (G. Forst.) Seem.		
Rubiaceae	Canthium oleifolium Hook.	myrtle tree	
Rubiaceae	Canthium sp. (Berrigurra Station E.R.Anderson 2829)		
Rubiaceae	Canthium vacciniifolium F. Muell.	small-leaved canthium	
Rubiaceae	Oldenlandia mitrasacmoides subsp. trachymenoides (F. Muell.) Halford		
Rubiaceae	Richardia brasiliensis Gomes	Mexican clover	♦
Rubiaceae	Spermacoce multicaulis Benth.		
Rutaceae	Eremocitrus glauca (Lindl.) Swingle	limebush	
Rutaceae	Flindersia australis R. Br.	crow's ash	
Rutaceae	Flindersia collina F.M. Bailey	broad-leaved leopard tree	
Rutaceae	Geijera parviflora Lindl.	wilga	
Rutaceae	Melicope erythrococca (F. Muell.) Benth.	tingletongue	
Salicaceae	Salix babylonica L.	weeping willow	♦
Santalaceae	Exocarpos latifolius R. Br.	native cherry	
Santalaceae	Santalum lanceolatum R. Br.	sandelwood	
Sapindaceae	Alectryon connatus (F. Muell.) Radk.	grey birds-eye	
Sapindaceae	Alectryon diversifolius (F. Muell.) S. Reynolds	scrub boonaree	
Sapindaceae	Alectryon oleifolius subsp. elongatus S.T. Reynolds	boonaree	
Sapindaceae	Atalaya hemiglauca (F.Muell) F.Muell. ex Benth.	whitewood	
Sapindaceae	Atalaya salicifolia (A. DC.) Blume	whitewood	
Sapindaceae	Dodonaea heteromorpha J.G. West		
Sapindaceae	Dodonaea viscosa subsp. spatulata (Sm.) J.G. West	sticky hop bush	
Sapotaceae	Planchonella cotinifolia var. pubescens P. Royen		
Scrophulariaceae	Bacopa monnieri (L.) Pennell		
Scrophulariaceae	Gratiola pedunculata R. Br.		

Family	Species	Common name	Status
Scrophulariaceae	Mimulus gracilis R. Br.		
Solanaceae	Datura ferox L.	fierce thornapple	♦
Solanaceae	Nicotiana megalosiphon Huerck & Muell. Arg. subsp. megalosiphon		
Solanaceae	Physalis lanceifolia Nees		♦
Solanaceae	Solanum americanum Mill.	glossy nightshade	
Solanaceae	Solanum ellipticum R.Br.	potato bush	
Solanaceae	Solanum esuriale Lindl.	potato weed	
Solanaceae	Solanum parvifolium R. Br.		
Solanaceae	Solanum semiarmatum F. Muell.	prickly nightshade	
Stackhousiaceae	Stackhousia muricata Lindl.		
Sterculiaceae	Brachychiton australis (Schott & Endl.) A. Terracc.	broad-leaved bottle tree	
Sterculiaceae	Brachychiton populneus (Schott & Endl.) R. Br. subsp. populneus	kurrajong	
Sterculiaceae	Brachychiton rupestris (Mitch. ex Lindl.) K. Schum.	narrow-leaved bottle tree	
Sterculiaceae	Keraudrenia corollata (Steetz) Druce		
Sterculiaceae	Melhania oblongifolia F. Muell.		
Thymelaeaceae	Pimelea latifolia R. Br.		
Thymelaeaceae	Pimelea trichostachya Lindl.	spiked riceflower	
Tiliaceae	Grewia latifolia F. Muell. ex Benth.	dog's nuts	
Verbanaceae	Phyla canescens (Kunth) Greene	condamine couch	
Verbenaceae	Clerodendrum floribundum R. Br.	lollybush	
Verbenaceae	Spartothamnella juncea (A. Cunn. ex Walp.) Briq.	native broom	
Verbenaceae	Spartothamnella puberula (F. Muell.) Maiden & Betche		
Verbenaceae	Verbena aristigera S.Moore	Mayne's pest	♦
Verbenaceae	Verbena litoralis Kunth	verbena	♦
Verbenaceae	Verbena officinalis L.	common verbena	
Violaceae	Hybanthus monopetalus (Schult.) Domin	lady's slipper	
Vitaceae	Cissus opaca F. Muell.	slender grape	
Xanthorrhoeaceae	Lomandra confertifolia subsp. pallida A.T. Lee		
Xanthorrhoeaceae	Lomandra filiformis (Thunb.) Britten subsp. filiformis		
Xanthorrhoeaceae	Lomandra leucocephala (R.Br.) Ewart	woolly matrush	
Xanthorrhoeaceae	Lomandra longifolia Labill.	spinyhead matrush	
Xanthorrhoeaceae	Lomandra multiflora (R. Br.) Britten subsp. multiflora		
Zygophyllaceae	Tribulus micrococcus Domin		
Zygophyllaceae	Zygophyllum apiculatum F. Muell.	gall weed	

APPENDIX 2

SPECIES AND OCCURRENCE IN VEGETATION COMMUNITIES AND MAPPING UNITS

Listed below are the species recorded and the map units in which they were observed. Species not recorded in a site but observed in the field are recorded under others. Species listed as others are recorded under the habitat in which they were observed.

The codes for the vegetation types are those used elsewhere within this report, viz:

1. Mixed *Eucalyptus camaldulensis* (river red gum), *Eucalyptus tereticornis* (forest red gum), *Eucalyptus coolabah* (coolibah) communities of the Dawson River and its tributaries
2. Mixed *Eucalyptus camaldulensis* (river red gum), *Eucalyptus tereticornis* (forest red gum) of the tributaries of the Dawson River
3. *Eucalyptus coolabah* (coolibah) communities of the Dawson River floodplain and associated creek systems
4. *Callitris glaucophylla* (cypress pine) communities on sands
5. Mixed *Eucalyptus crebra* (ironbark) and *Callitris glaucophylla* (cypress pine) communities on sandstone
6. Mixed *Acacia harpophylla* (brigalow), vine thicket and *Eucalyptus* spp communities
7. *Eucalyptus populnea* (poplar box) communities on alluvium
8. Mixed *Eucalyptus* spp communities

9a. Vine thicket communities

9b. *Brachychiton rupestris* (bottle tree) communities

10. *Casuarina cristata* (belah) communities
11. *Acacia rhodoxylon* (rosewood) communities
12. Mixed *Acacia rhodoxylon* (rosewood), *Acacia shirleyi* (lancewood) and *Acacia harpophylla* (brigalow) communities

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Abutilon fraseri						6		8						
Abutilon oxycarpum forma acutatum						6		8	9a	9b				
Abutilon oxycarpum forma oxycarpum	1	2	3		5		7	8	9a			11	12	
Acacia amblygona					5									
Acacia caroleae					5			8						
Acacia conferta								8						
Acacia deanei subsp. deanei		2			5									
Acacia decora		2		4				8						
Acacia excelsa	1			4		6		8			10			
Acacia farnesiana	1	2	3											
Acacia fasciculifera						6			9a	9b				
Acacia harpophylla			3		5	6		8		9b			12	
Acacia juncifolia subsp. juncifolia					5									
Acacia leiocalyx subsp. leiocalyx				4	5									
Acacia longispicata						6								

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Acacia macradenia								8						
Acacia rhodoxylon								8				11	12	
Acacia salicina		2												
Acacia shirleyi													12	
Acacia sparsiflora					5									
Acacia stenophylla	1		3											
Acalypha eremorum						6			9a	9b				
Achyranthes aspera						6		8	9a					
Adriana glabrata var. subglabra		2												
Agrostis avenacea var. avenacea		2												
Ajuga australis		2												
Alectryon connatus						6			9a					
Alectryon diversifolius	1				5	6	7		9a	9b	10			
Alectryon oleifolius subsp. elongatus	1													
Allocasuarina luehmannii					5									
Alphitonia excelsa		2			5			8				11		
Alstonia constricta				4		6		8		9b		11	12	
Alternanthera denticulata	1	2	3											
Alternanthera nodiflora	1													
Amaranthus graecizans subsp. sylvestris									9a					
Amaranthus viridis			3											
Ampelopteris prolifera		2												
Amyema congener subsp. congener							7							
Amyema quandang var. bancroftii												11		
Ancistrachne uncinulata					5	6		8	9a	9b	10		12	
Angophora floribunda					5									
Angophora leiocarpa		2			5									
Apophyllum anomalum					5	6		8	9a	9b				
Argemone ochroleuca subsp. ochroleuca		2												
Aristida benthamii var. spinulifera				4										
Aristida calycina var. calycina							7							
Aristida calycina var. praealta		2			5	6	7	8				11		
Aristida caput-medusae				4	5	6		8				11	12	
Aristida gracilipes						6		8						
Aristida latifolia			3											
Aristida leichhardtiana					5									
Aristida lignosa					5	6								
Aristida personata	1	2			5		7				10			
Aristida queenslandica var. dissimilis								8						
Aristida queenslandica var. queenslandica					5									
Aristida ramosa					5									
Arundinella neplanensis		2			5			8						
Asperula conferta	1		3											
Asperula geminifolia		2												
Aster subulatus		2												
Atalaya hemiglauca					5	6		8						

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Atalaya salicifolia						6		8	9a		10	11		
Atriplex muelleri			3											
Austromyrtus bidwillii										9b				
Austrostipa verticillata				4				8	9a	9b				
Azolla pinnata														aquatic
Baccharis halimifolia		2												
Bacopa monnieri		2												
Basilicum polystachyon	1													
Bertya oleifolia		2			5									
Bertya pedicellata												11		
Bidens bipinnata		2												
Boerhavia dominii	1		3	4				8						
Boerhavia pubescens				4										
Bothriochloa bladhii subsp. bladhii	1	2												
Bothriochloa decipiens var. decipiens	1	2	3			6	7	8						
Brachiaria eruciformis							7							
Brachiaria foliosa								8	9a					
Brachiaria subquadripara		2					7							
Brachychiton australis						6								
Brachychiton populneus subsp. populneus		2												
Brachychiton rupestris						6		8	9a	9b				
Brachyscome trachycarpa			3											
Bracteantha bracteata					5	6								
Breynia oblongifolia				4		6				9b			12	
Brunoniella australis			3		5	6		8					12	
Bursaria incana var. incana						6				9b				
Callitriche sonderi		2												
Callitris glaucophylla				4	5	6		8						
Calotis cuneata	1	2	3				7							
Calotis cuneifolia					5									
Calotis dentex		2			5									
Calotis hispidula			3											
Calotis lappulacea	1			4										
Calyptochloa gracillima					5	6	7	8	9a	9b	10		12	
Canthium coprosmoides					5	6								
Canthium odoratum				4	5	6							12	
Canthium oleifolium								8						
Canthium sp. (Berrigurra Station E.R.Anderson 2829)						6		8		9b	10			
Canthium vacciniifolium					5	6			9a	9b	10		12	
Capillipedium spicigerum		2												
Capparis canescens						6								
Capparis lasiantha					5			8	9a	9b	10	11		
Capparis loranthifolia var. bancroftii						6							12	
Capparis mitchellii					5			8	9a			11		
Carex appressa	1	2												

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Carex polyantha		2												
Carissa ovata					5	6		8	9a	9b	10	11	12	
Cassia tomentella								8	9a					
Cassine australis var. angustifolia						6		8	9a		10			
Cassinia laevis					5									
Casuarina cristata									9a		10			
Cenchrus ciliaris	1	2	3	4			7	8	9a	9b	10	11	12	
Centaurea melitensis		2												
Centaurium erythraea		2												
Centella asiatica		2												
Centipeda minima	1	2												
Chamaesyce dallachyana	1		3				7	8						
Chara sp.														aquatic
Cheilanthes distans				4	5	6		8	9a					
Cheilanthes sieberi subsp. sieberi				4	5			8					12	
Chenopodium ambrosioides		2												
Chenopodium carinatum		2		4		6	7		9a			11		
Chenopodium desertorum subsp. anidiophyllum							7							
Chenopodium pumilio			3											
Chionachne cyathopoda		2												
Chloris divaricata			3											
Chloris gayana														roadside
Chloris ventricosa			3		5	6	7	8	9a	9b				
Chrysocephalum apiculatum				4	5									
Ciclospermum leptophyllum	1	2	3											
Cirsium vulgare		2												
Cissus opaca						6		8	9a	9b	10	11	12	
Citriobatus spinescens						6			9a	9b				
Claoxylon tenerifolium												11		
Cleistochloa subjuncea					5			8				11	12	
Clerodendrum floribundum					5							11		
Commelina diffusa	1			4								11		
Conyza bonariensis	1	2	3			6								
Coronopus didymus	1	2												
Corymbia clarksoniana					5			8						
Crassula sieberiana								8						
Crotalaria incana subsp. incana		2												
Crotalaria montana		2												
Croton insularis						6			9a	9b				
Croton phebalioides						6			9a			11		
Cryptandra sp. (Isla Gorge P.Sharpe 627)					5									
Cuscuta campestris	1													
Cyclosorus interruptus		2												
Cymbidium canaliculatum											10			
Cymbopogon bombycinus				4	5									

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Cymbopogon refractus					5	6	7	8						
Cynodon dactylon var. dactylon	1	2	3											
Cynoglossum australe var. australe							7							
Cyperus difformis		2												
Cyperus flaccidus	1													
Cyperus gracilis	1	2	3	4			7	8	9a	9b				
Cyperus iria	1		3											
Cyperus lucidus		2												
Cyperus polystachyos var. polystachyos		2												
Cyperus pygmaeus	1													
Cyperus rigidellus												11		
Cyperus rotundus		2	3											
Cyperus sanguinolentus		2												
Cyperus sphaeroideus		2												
Datura ferox														paddock
Daucus glochidiatus														paddock
Denhamia oleaster							7	8	9a		10			
Denhamia pittosporoides								8						
Desmodium brachypodum												11		
Desmodium rhytidophyllum					5									
Desmodium varians							7							
Dianella brevipedunculata					5									
Dianella caerulea var. vannata													12	
Dianella longifolia var. longifolia		2												
Dichanthium sericeum subsp. humilius	1		3				7							
Dichondra repens	1		3											
Digitaria breviglumis					5			8				11		
Digitaria brownii					5		7	8		9b				
Digitaria divaricatissima				4										
Digitaria longiflora				4										
Diospyros humilis						6			9a	9b			12	
Dodonaea heteromorpha					5									
Dodonaea viscosa subsp. spatulata					5		7						12	
Dysphania glomulifera subsp. glomulifera												11		
Echinochloa crusgalli		2												
Eclipta prostrata														bore
Ehretia membranifolia					5	6				9b				
Einadia hastata					5									
Einadia nutans subsp. linifolia		2					7			9b				
Einadia nutans subsp. nutans			3	4				8	9a	9b				
Einadia trigonos subsp. stellulata													12	
Elatine gratioloides		2												
Eleocharis cylindrostachys		2												
Eleocharis equisetina		2												
Eleocharis plana	1													
Eleocharis pusilla	1		3											

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Enchylaena tomentosa											10			
Enneapogon gracilis	1		3		5	6	7			9b				
Enneapogon lindleyanus				4	5	6		8			10		12	
Enteropogon acicularis			3		5		7	8			10			
Enteropogon ramosus					5		7							
Enteropogon unispiceus						6		8					12	
Epaltes australis				4										
Epilobium hirtigerum				4			7							bore
Eragrostis elongata				4	5		7							
Eragrostis lacunaria	1		3	4	5	6	7	8					12	
Eragrostis leptostachya				4			7							
Eragrostis longipedicellata								8					12	
Eremocitrus glauca			3								10			
Eremophila debilis	1	2			5									
Eremophila longifolia			3											
Eremophila mitchellii					5	6	7	8		9b	10		12	
Eriocaulon scariosum		2												
Eriochloa decumbens	1	2	3				7				10			
Eriochloa pseudoacrotricha					5	6								
Erodium crinitum							7							
Erythrina vespertilio								8						
Erythroxylum sp. (Splityard Creek L.Pedley 5360)					5	6				9b		11	12	
Eucalyptus camaldulensis	1	2	3											
Eucalyptus cambageana					5	6		8					12	
Eucalyptus coolabah	1		3											
Eucalyptus crebra					5	6		8				11		
Eucalyptus exserta												11		
Eucalyptus melanophloia				4	5									
Eucalyptus populnea	1						7	8			10			
Eucalyptus tenuipes								8						
Eucalyptus tereticornis		2												
Eucalyptus tessellaris				4	5									
Euchiton sphaericus	1	2	3	4			7		9a					
Eulalia aurea							7							
Euphorbia tannensis var. eremophila					5							11		
Evolvulus alsinoides	1			4	5	6		8					12	
Excoecaria dallachyana										9b				
Exocarpos latifolius									9a					
Fallopia convolvulus														paddock
Ficus opposita		2												
Fimbristylis dichotoma		2		4										
Flindersia australis						6						11	12	
Flindersia collina													12	
Gahnia aspera					5							11		
Gaura parviflora			3											

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Geijera parviflora	1		3	4	5	6	7	8	9a	9b	10		12	
Glinus lotoides	1													
Glossocardia bidens							7							
Glycine tabacina	1		3											
Glycine tomentella		2		4										
Gnaphalium polycaulon	1	2	3	4										
Gomphocarpus physocarpus		2												
Gomphrena celosioides	1						7							
Goodenia fascicularis	1	2	3											
Goodenia glabra					5			8						
Goodenia grandiflora					5									
Gratiola pedunculata	1	2												
Grevillea robusta						6								
Grevillea striata					5	6								
Grewia latifolia			3					8						
Hakea fraseri					5	6		8					12	
Halgania brachyrhyncha					5									
Haloragis aspera	1	2												
Helichrysum collinum					5	6								
Heliotropium amplexicaule		2												
Heliotropium indicum	1	2												
Heteropogon contortus		2		4			7							
Hibbertia sp.					5									
Hibiscus sturtii					5	6		8	9a			11	12	
Hibiscus trionum							7							
Hovea lanceolata					5									
Hovea longipes					5	6		8					12	
Hybanthus monopetalus					5	6								
Hypochaeris glabra							7							
Imperata cylindrica		2												
Indigofera linnaei							7							
Indigofera sp.								8					12	
Isachne globosa		2												
Isotoma axillaris												11		
Ixiolaena leptolepis			3											
Jacksonia scoparia					5									
Jacquemontia paniculata						6								
Jasminum didymum subsp. lineare	1		3		5			8		9b	10		12	
Jasminum simplicifolium subsp. australiense								8						
Juncus prismatocarpus		2												
Juncus sp.		2												
Juncus usitatus		2												
Keraudrenia corollata					5			8						
Laxmannia compacta				4		6								
Leersia hexandra		2												
Lemna trisulca														aquatic

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Lepidium africanum							7							
Lepidium bonariense	1	2					7			9b		11		
Leptochloa ciliolata										9b				
Leptochloa digitata	1	2	3											
Leptochloa peacockii		2			5	6							12	
Leptospermum neglectum								8						
Livistona sp. (Taroom R.W.Johnson 2764)	1	2												
Lomandra confertifolia subsp. pallida						6						11		
Lomandra filiformis subsp. filiformis		2						8						
Lomandra leucocephala				4										
Lomandra longifolia	1	2												
Lomandra multiflora subsp. multiflora	1		3		5							11	12	
Lophostemon suaveolens		2			5									
Lotus australis		2	3											
Ludwigia octovalvis														aquatic
Ludwigia peploides subsp. montevidensis														bore
Lysicarpus angustifolius					5			8						
Lysiphyllum carronii		2	3			6		8	9a	9b	10			
Macfadyena unguis-cati							7							
Macroptilium lathyroides	1													
Maireana microphylla		2						8	9a	9b	10	11		
Malva parviflora														paddock
Malvastrum americanum		2			5	6	7	8		9b				
Malvastrum coromandelianum							7							
Marsdenia microlepis												11	12	
Marsilea hirsuta	1	2												
Maytenus cunninghamii					5	6							12	
Medicago polymorpha	1													
Melaleuca linariifolia var. trichostachya	1	2												
Melhania oblongifolia						6		8						
Melichrus urceolatus								8						
Melicope erythrococca						6								
Melilotus indicus	1													
Melinis repens	1	2		4			7	8						
Mimulus gracilis	1													
Minuria integerrima			3											
Muehlenbeckia florulenta	1	2	3											
Murdannia graminea				4										
Neptunia gracilis	1		3											
Nicotiana megalosiphon subsp. megalosiphon														paddock
Notelaea microcarpa					5				9a				12	
Nyssanthes diffusa			3	4	5	6	7	8		9b	10			
Oenothera indecora subsp. bonariensis				4										
Oldenlandia mitrasacmoides subsp. trachymenoides				4										

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Olearia canescens									9a				12	
Oplismenus aemulus		2												
Opuntia aurantiaca				4		6				9b			12	
Opuntia stricta var. stricta		2				6	7		9a				12	
Opuntia tomentosa					5	6	7	8		9b				
Ottelia ovalifolia		2												
Owenia venosa						6		8	9a			11	12	
Oxalis perennans	1	2	3	4		6			9a			11	12	
Ozothamnus diosmifolius					5									
Pandorea pandorana								8				11		
Panicum effusum var. effusum					5		7	8						
Panicum laevinode	1	2												
Panicum maximum var. trichoglume		2						8				11		
Parsonsia eucalyptophylla								8			10			
Parsonsia lanceolata								8	9a	9b				
Paspalidium caespitosum			3											
Paspalidium constrictum		2												
Paspalidium criniforme	1	2					7			9b		11		
Paspalidium disjunctum			3											
Paspalidium distans	1	2	3			6	7	8			10			
Paspalidium gracile	1		3		5	6	7	8	9a		10	11	12	
Paspalidium jubiflorum	1													
Paspalum dilatatum		2												
Peripleura hispidula var. setosa					5									
Perotis rara				4										
Persicaria attenuata subsp. attenuata	1													
Persicaria decipiens		2												
Persicaria hydropiper	1	2												
Persicaria lapathifolia		2												
Persicaria orientalis	1													
Petalostigma pubescens				4	5			8						
Phragmites australis		2												
Phyla canescens	1		3											
Phyllanthus gasstroemii						6								
Phyllanthus maderaspatensis var. maderaspatensis	1		3											
Phyllanthus sp.					5									
Phyllanthus virgatus			3											
Physalis lanceifolia	1													
Pimelea latifolia												11		
Pimelea trichostachya							7							
Pittosporum rhombifolium									9a					
Planchonella cotinifolia var. pubescens						6			9a	9b	10			
Plantago cunninghamii	1		3											
Plantago turrifera			3											
Plectranthus parviflorus				4						9b				

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Poa fordeana	1													
Podolepis longipedata				4				8						
Polycarpaea corymbosa var. corymbosa				4										
Polygonum plebeium	1	2												
Polymeria calycina								8						
Polymeria pusilla	1		3											
Portulaca bicolor								8						
Portulaca oleracea									9a	9b				
Portulaca pilosa subsp. pilosa				4						9b				
Potamogeton crispus														
Potamogeton tricarinatus		2												
Prostanthera euphrasioides					5									
Pseuderanthemum variabile	1		3	4	5			8					12	
Psoralea tenax	1													
Pterocaulon redolens						6								
Ptilotus exaltatus var. semilanatus							7							
Ptilotus macrocephalus							7							
Ranunculus lappaceus		2												
Rhodanthe polyphylla			3											
Rhynchosia minima var. australis			3				7							
Richardia brasiliensis		2		4										
Rorippa eustylis		2												
Rostellularia adscendens var. adscendens			3	4	5		7			9b				
Rubus parvifolius		2												
Rumex brownii		2												
Rumex tenax	1		3											
Rutidosis crispata													12	
Sacciolepis indica		2												
Salix babylonica	1													
Salsola kali			3							9b				
Salvia plebeia		2												
Salvia reflexa														paddock
Santalum lanceolatum					5			8					12	
Sarcostemma viminale subsp. brunonianum						6						11		
Schoenoplectus mucronatus		2												
Schoenoplectus validus		2												
Schoenus kennyi								8						
Scleria mackaviensis					5									
Scleria sphacelata					5			8				11		
Sclerolaena birchii								8						
Sclerolaena muricata var. muricata			3											
Sclerolaena muricata var. villosa			3											
Sclerolaena tetracuspis			3											
Secamone elliptica						6								
Senecio lautus subsp. dissectifolius							7							
Senecio quadridentatus					5									

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Senna artemisioides subsp. zygophylla					5	6							12	
Senna barclayana							7							
Senna sophera var. (40Mile Scrub J.R.Clarkson+ 6908)												11		
Senna sophera var. sophera	1													
Sesbania cannabina var cannabina		2												
Setaria dielsii									9a			11	12	
Setaria surgens								8						
Sida corrugata			3		5		7							
Sida filiformis					5	6		8				11	12	
Sida pleiantha			3				7							
Sida rhombifolia		2												
Sida rohlenae			3	4								11		
Sida spinosa	1		3											
Sida subspicata							7	8				11		
Sida trichopoda	1		3											
Silybum marianum		2												
Sisymbrium thellungii			3				7							
Solanum americanum									9a	9b				
Solanum ellipticum					5	6		8				11		
Solanum esuriale														paddock
Solanum parvifolium								8		9b	10			
Solanum semiarmatum						6								
Soliva anthemifolia		2					7							
Sonchus oleraceus	1	2												
Sorghum leiocladum		2												
Spartothamnella juncea								8	9a				12	
Spartothamnella puberula					5									
Spermacoce multicaulis								8						
Sporobolus caroli	1		3				7	8		9b	10			
Sporobolus coromandelianus											10			
Sporobolus elongatus	1													
Sporobolus mitchellii	1		3					8						
Stackhousia muricata			3		5		7							
Stellaria angustifolia		2	3											
Swainsona galegifolia		2												
Swainsona oroboides							7							
Tetragonia tetragonioides	1	2	3	4						9b				
Thellungia advena		2	3	4	5	6	7	8		9b				
Themeda avenacea		2					7							
Themeda triandra		2			5								12	
Thyridolepis xerophila					5			8					12	
Tragus australianus						6		8	9a					
Trianthema triquetra							7							
Tribulus micrococcus									9a					
Tricoryne elatior		2												

Species	Map Unit													
	1	2	3	4	5	6	7	8	9a	9b	10	11	12	others
Triodia mitchellii var. mitchellii					5			8						
Triodia pungens var. pungens												11		
Turraea pubescens												11		
Urochloa mosambicensis	1													
Utricularia dichotoma		2												
Utricularia gibba		2												
Verbena aristigera	1	2					7							
Verbena litoralis		2												
Verbena officinalis	1	2					7							
Verbesina encelioides							7							
Vernonia cinerea var. cinerea	1			4				8						
Vetiveria filipes	1	2	3					8						
Vittadinia cuneata var. hirsuta				4	5									
Vittadinia dissecta var. hirta				4										
Vittadinia pterochaeta				4										
Vittadinia pustulata		2				6								
Wahlenbergia communis		2												
Wahlenbergia gracilis	1	2	3											
Wahlenbergia tumidifructa		2			5			8						
Xanthium spinosum		2												
Zaleya galericulata subsp. galericulata								8						
Zinnia peruviana							7							
Zornia muriculata subsp. angustata							7							
Zygophyllum apiculatum										9b				

APPENDIX 3

SPECIES LIST BY MAP UNIT

The species found in each map unit are listed below.

Map unit 1. Tall Open forest of *Eucalyptus camaldulensis* (river red gum), *Eucalyptus tereticornis* (forest red gum) and *Eucalyptus coolabah* (coolibah)

Abutilon oxycarpum forma oxycarpum
Acacia excelsa
Acacia farnesiana
Acacia stenophylla
Alectryon diversifolius
Alectryon oleifolius subsp. elongatus
Alternanthera denticulata
Alternanthera nodiflora
Aristida personata
Asperula conferta
Basilicum polystachyon
Boerhavia dominii
Bothriochloa bladhii subsp. bladhii
Bothriochloa decipiens var. decipiens
Calotis cuneata
Calotis lappulacea
Carex appressa
Cenchrus ciliaris
Centipeda minima
Chamaesyce dallachyana
Ciclospermum leptophyllum
Commelina diffusa
Conyza bonariensis
Coronopus didymus
Cuscuta campestris
Cynodon dactylon var. dactylon
Cyperus flaccidus
Cyperus gracilis
Cyperus iria
Cyperus pygmaeus
Dichanthium sericeum subsp. humilius
Dichondra repens
Eleocharis plana
Eleocharis pusilla
Enneapogon gracilis
Eragrostis lacunaria
Eremophila debilis
Eriochloa decumbens
Eucalyptus camaldulensis
Eucalyptus coolabah
Eucalyptus populnea
Euchiton sphaericus
Evolvulus alsinoides
Geijera parviflora
Glinus lotoides
Glycine tabacina
Gnaphalium polycaulon
Gomphrena celosioides
Goodenia fascicularis
Gratiola pedunculata
Haloragis aspera
Heliotropium indicum
Jasminum didymum subsp. lineare
Lepidium bonariense
Leptochloa digitata
Livistona sp. (Taroom R.W.Johnson 2764)
Lomandra longifolia
Lomandra multiflora subsp. multiflora
Macroptilium lathyroides
Medicago polymorpha
Melaleuca linariifolia var. trichostachya
Melilotus indicus
Melinis repens
Mimulus gracilis
Muehlenbeckia florulenta
Neptunia gracilis
Oxalis perennans
Panicum laevinode
Paspalidium criniforme
Paspalidium distans
Paspalidium gracile
Paspalidium jubiflorum
Persicaria attenuata subsp. attenuata
Persicaria hydropiper
Persicaria orientalis
Phyla canescens
Phyllanthus maderaspatensis var. maderaspatensis
Physalis lanceifolia

Plantago cunninghamii
Poa fordeana
Polygonum plebeium
Polymeria pusilla
Pseuderanthemum variabile
Psoralea tenax
Rumex tenax
Salix babylonica
Senna sophera var. sophera
Sida spinosa
Sida trichopoda
Sonchus oleraceus
Sporobolus caroli
Sporobolus elongatus
Sporobolus mitchellii
Tetragonia tetragonioides
Urochloa mosambicensis
Verbena aristigera
Verbena officinalis
Vernonia cinerea var. cinerea
Vetiveria filipes
Wahlenbergia gracilis

Map Unit 2 Very tall Open forest-tall woodland of *Eucalyptus camaldulensis* (river red gum) and *Eucalyptus tereticornis* (forest red gum)

Abutilon oxycarpum forma oxycarpum
Acacia deanei subsp. deanei
Acacia decora
Acacia farnesiana
Acacia salicina
Adriana glabrata var. subglabra
Agrostis avenacea var. avenacea
Ajuga australis
Alphitonia excelsa
Alternanthera denticulata
Ampelopteris prolifera
Angophora leiocarpa
Argemone ochroleuca subsp. ochroleuca
Aristida calycina var. praealta
Aristida personata
Arundinella neplanensis
Asperula geminifolia
Aster subulatus
Baccharis halimifolia
Bacopa monnieri
Bertya oleifolia
Bidens bipinnata
Bothriochloa bladhii subsp. bladhii
Bothriochloa decipiens var. decipiens
Brachiaria subquadripara
Brachychiton populneus subsp. populneus
Callitriche sonderi
Calotis cuneata
Calotis dentex
Capillipedium spicigerum
Carex appressa
Carex polyantha
Cenchrus ciliaris
Centaurea melitensis
Centaurium erythraea
Centella asiatica
Centipeda minima
Chenopodium ambrosioides
Chenopodium carinatum
Chionachne cyathopoda
Ciclospermum leptophyllum
Cirsium vulgare
Conyza bonariensis
Coronopus didymus
Crotalaria incana subsp. incana
Crotalaria montana
Cyclosorus interruptus
Cynodon dactylon var. dactylon
Cyperus difformis
Cyperus gracilis
Cyperus lucidus
Cyperus polystachyos var. polystachyos
Cyperus rotundus
Cyperus sanguinolentus
Cyperus sphaeroideus
Dianella longifolia var. longifolia
Echinochloa crusgalli
Einadia nutans subsp. linifolia
Elatine gratioloides
Eleocharis cylindrostachys
Eleocharis equisetina
Eremophila debilis
Eriocaulon scariosum
Eriochloa decumbens
Eucalyptus camaldulensis
Eucalyptus tereticornis
Euchiton sphaericus
Ficus opposita
Fimbristylis dichotoma
Glycine tomentella
Gnaphalium polycaulon
Gomphocarpus physocarpus
Goodenia fascicularis
Gratiola pedunculata
Haloragis aspera
Heliotropium amplexicaule
Heliotropium indicum
Heteropogon contortus
Imperata cylindrica
Isachne globosa
Juncus prismatocarpus

Juncus sp.
Juncus usitatus
Leersia hexandra
Lepidium bonariense
Leptochloa digitata
Leptochloa peacockii
Livistona sp. (Taroom R.W.Johnson 2764)
Lomandra filiformis subsp. filiformis
Lomandra longifolia
Lophostemon suaveolens
Lotus australis
Lysiphyllum carronii
Maireana microphylla
Malvastrum americanum
Marsilea hirsuta
Melaleuca linariifolia var. trichostachya
Melinis repens
Muehlenbeckia florulenta
Oplismenus aemulus
Opuntia stricta var. stricta
Ottelia ovalifolia
Oxalis perennans
Panicum laevinode
Panicum maximum var. trichoglume
Paspalidium constrictum
Paspalidium criniforme
Paspalidium distans
Paspalum dilatatum
Persicaria decipiens
Persicaria hydropiper
Persicaria lapathifolia
Phragmites australis
Polygonum plebeium
Potamogeton tricarinatus
Ranunculus lappaceus
Richardia brasiliensis
Rorippa eustylis
Rubus parvifolius
Rumex brownii
Sacciolepis indica
Salvia plebeia
Schoenoplectus mucronatus
Schoenoplectus validus
Sesbania cannabina var cannabina
Sida rhombifolia
Silybum marianum
Soliva anthemifolia
Sonchus oleraceus
Sorghum leiocladum
Stellaria angustifolia
Swainsona galegifolia
Tetragonia tetragonioides
Thellungia advena
Themeda avenacea
Themeda triandra
Tricoryne elatior
Utricularia dichotoma
Utricularia gibba
Verbena aristigera
Verbena litoralis
Verbena officinalis
Vetiveria filipes
Vittadinia pustulata
Wahlenbergia communis
Wahlenbergia gracilis
Wahlenbergia tumidifructa
Xanthium spinosum

Map Unit 3 Tall woodland-Mid high Open forest of *Eucalyptus coolabah* (coolibah)

Abutilon oxycarpum forma oxycarpum
Acacia farnesiana
Acacia harpophylla
Acacia stenophylla
Alternanthera denticulata
Amaranthus viridis
Aristida latifolia
Asperula conferta
Atriplex muelleri
Boerhavia dominii
Bothriochloa decipiens var. decipiens
Brachyscome trachycarpa
Brunoniella australis
Calotis cuneata
Calotis hispidula
Cenchrus ciliaris
Chamaesyce dallachyana
Chenopodium pumilio
Chloris divaricata
Chloris ventricosa
Ciclospermum leptophyllum
Conyza bonariensis
Cynodon dactylon var. dactylon
Cyperus gracilis
Cyperus iria
Cyperus rotundus
Dichanthium sericeum subsp. humilius
Dichondra repens
Einadia nutans subsp. nutans
Eleocharis pusilla
Enneapogon gracilis
Enteropogon acicularis
Eragrostis lacunaria
Eremocitrus glauca
Eremophila longifolia
Eriochloa decumbens
Eucalyptus camaldulensis

Eucalyptus coolabah
Euchiton sphaericus
Gaura parviflora
Geijera parviflora
Glycine tabacina
Gnaphalium polycaulon
Goodenia fascicularis
Grewia latifolia
Ixiolaena leptolepis
Jasminum didymum subsp. lineare
Leptochloa digitata
Lomandra multiflora subsp. multiflora
Lotus australis
Lysiphyllum carronii
Minuria integerrima
Muehlenbeckia florulenta
Neptunia gracilis
Nyssanthes diffusa
Oxalis perennans
Paspalidium caespitosum
Paspalidium disjunctum
Paspalidium distans
Paspalidium gracile
Phyla canescens
Phyllanthus maderaspatensis var. maderaspatensis
Phyllanthus virgatus
Plantago cunninghamii
Plantago turrifera
Polymeria pusilla
Pseuderanthemum variabile
Rhodanthe polyphylla
Rhynchosia minima var. australis
Rostellularia adscendens var. adscendens
Rumex tenax
Salsola kali
Sclerolaena muricata var. muricata
Sclerolaena muricata var. villosa
Sclerolaena tetracuspis
Sida corrugata
Sida pleiantha
Sida rohlenae
Sida spinosa
Sida trichopoda
Sisymbrium thellungii
Sporobolus caroli
Sporobolus mitchellii
Stackhousia muricata
Stellaria angustifolia
Tetragonia tetragonioides
Thellungia advena
Vetiveria filipes
Wahlenbergia gracilis

Map Unit 4 Tall Open forest of *Callitris glaucophylla* (white cypress pine)

Acacia decora
Acacia excelsa
Acacia leiocalyx subsp. leiocalyx
Alstonia constricta
Aristida benthamii var. spinulifera
Aristida caput-medusae
Austrostipa verticillata
Boerhavia dominii
Boerhavia pubescens
Breynia oblongifolia
Callitris glaucophylla
Calotis lappulacea
Canthium odoratum
Cenchrus ciliaris
Cheilanthes distans
Cheilanthes sieberi subsp. sieberi
Chenopodium carinatum
Chrysocephalum apiculatum
Commelina diffusa
Cymbopogon bombycinus
Cyperus gracilis
Digitaria divaricatissima
Digitaria longiflora
Einadia nutans subsp. nutans
Enneapogon lindleyanus
Epaltes australis
Epilobium hirtigerum
Eragrostis elongata
Eragrostis lacunaria
Eragrostis leptostachya
Eucalyptus melanophloia
Eucalyptus tessellaris
Euchiton sphaericus
Evolvulus alsinoides
Fimbristylis dichotoma
Geijera parviflora
Glycine tomentella
Gnaphalium polycaulon
Heteropogon contortus
Laxmannia compacta
Lomandra leucocephala
Melinis repens
Murdannia graminea
Nyssanthes diffusa
Oenothera indecora subsp. bonariensis
Oldenlandia mitrasacmoides subsp. trachymenoides
Opuntia aurantiaca
Oxalis perennans
Perotis rara
Petalostigma pubescens

Plectranthus parviflorus
Podolepis longipedata
Polycarpaea corymbosa var. corymbosa
Portulaca pilosa subsp. pilosa
Pseuderanthemum variabile
Richardia brasiliensis
Rostellularia adscendens var. adscendens
Sida rohlenae
Tetragonia tetragonioides
Thellungia advena
Vernonia cinerea var. cinerea
Vittadinia cuneata var. hirsuta
Vittadinia dissecta var. hirta
Vittadinia pterochaeta

Map Unit 5 Tall Open forest-Mid high Open forest-Mid high woodland of *Eucalyptus crebra* (narrow-leaved ironbark) and *Callitris glaucophylla* (white cypress pine)

Abutilon oxycarpum forma oxycarpum
Acacia amblygona
Acacia caroleae
Acacia deanei subsp. deanei
Acacia harpophylla
Acacia juncifolia subsp. juncifolia
Acacia leiocalyx subsp. leiocalyx
Acacia sparsiflora
Alectryon diversifolius
Allocasuarina luehmannii
Alphitonia excelsa
Ancistrachne uncinulata
Angophora floribunda
Angophora leiocarpa
Apophyllum anomalum
Aristida calycina var. praealta
Aristida caput-medusae
Aristida leichhardtiana
Aristida lignosa
Aristida personata
Aristida queenslandica var. queenslandica
Aristida ramosa
Arundinella neplanensis
Atalaya hemiglauca
Bertya oleifolia
Bracteantha bracteata
Brunoniella australis
Callitris glaucophylla
Calotis cuneifolia
Calotis dentex
Calyptochloa gracillima
Canthium coprosmoides
Canthium odoratum
Canthium vacciniifolium
Capparis lasiantha
Capparis mitchellii
Carissa ovata
Cassinia laevis
Cheilanthes distans
Cheilanthes sieberi subsp. sieberi
Chloris ventricosa
Chrysocephalum apiculatum
Cleistochloa subjuncea
Clerodendrum floribundum
Corymbia clarksoniana
Cryptandra sp. (Isla Gorge P.Sharpe 627)
Cymbopogon bombycinus
Cymbopogon refractus
Desmodium rhytidophyllum
Dianella brevipedunculata
Digitaria breviglumis
Digitaria brownii
Dodonaea heteromorpha
Dodonaea viscosa subsp. spatulata
Ehretia membranifolia
Einadia hastata
Enneapogon gracilis
Enneapogon lindleyanus
Enteropogon acicularis
Enteropogon ramosus
Eragrostis elongata
Eragrostis lacunaria
Eremophila debilis
Eremophila mitchellii
Eriochloa pseudoacrotricha
Erythroxylum sp. (Splityard Creek L.Pedley 5360)
Eucalyptus cambageana
Eucalyptus crebra
Eucalyptus melanophloia
Eucalyptus tessellaris
Euphorbia tannensis var. eremophila
Evolvulus alsinoides
Gahnia aspera
Geijera parviflora
Goodenia glabra
Goodenia grandiflora
Grevillea striata
Hakea fraseri
Halgania brachyrhyncha
Helichrysum collinum
Hibbertia sp.
Hibiscus sturtii
Hovea lanceolata
Hovea longipes
Hybanthus monopetalus
Jacksonia scoparia
Jasminum didymum subsp. lineare

Keraudrenia corollata
Leptochloa peacockii
Lomandra multiflora subsp. multiflora
Lophostemon suaveolens
Lysicarpus angustifolius
Malvastrum americanum
Maytenus cunninghamii
Notelaea microcarpa
Nyssanthes diffusa
Opuntia tomentosa
Ozothamnus diosmifolius
Panicum effusum var. effusum
Paspalidium gracile
Peripleura hispidula var. setosa
Petalostigma pubescens
Phyllanthus sp.
Prostanthera euphrasioides
Pseuderanthemum variabile
Rostellularia adscendens var. adscendens
Santalum lanceolatum
Scleria mackaviensis
Scleria sphacelata
Senecio quadridentatus
Senna artemisioides subsp. zygophylla
Sida corrugata
Sida filiformis
Solanum ellipticum
Spartothamnella puberula
Stackhousia muricata
Thellungia advena
Themeda triandra
Thyridolepis xerophila
Triodia mitchellii var. mitchellii
Vittadinia cuneata var. hirsuta
Wahlenbergia tumidifructa

Map Unit 6 Tall woodland- Mid high Open forest of *Acacia harpophylla* (brigalow), vine thicket and *Eucalyptus* spp.

Abutilon fraseri
Abutilon oxycarpum forma acutatum
Acacia excelsa
Acacia fasciculifera
Acacia harpophylla
Acacia longispicata
Acalypha eremorum
Achyranthes aspera
Alectryon connatus
Alectryon diversifolius
Alstonia constricta
Ancistrachne uncinulata
Apophyllum anomalum
Aristida calycina var. praealta
Aristida caput-medusae
Aristida gracilipes
Aristida lignosa
Atalaya hemiglauca
Atalaya salicifolia
Bothriochloa decipiens var. decipiens
Brachychiton australis
Brachychiton rupestris
Bracteantha bracteata
Breynia oblongifolia
Brunoniella australis
Bursaria incana var. incana
Callitris glaucophylla
Calyptochloa gracillima
Canthium coprosmoides
Canthium odoratum
Canthium sp. (Berrigurra Station E.R.Anderson 2829)
Canthium vacciniifolium
Capparis canescens
Capparis loranthifolia var. bancroftii
Carissa ovata
Cassine australis var. angustifolia
Cheilanthes distans
Chenopodium carinatum
Chloris ventricosa
Cissus opaca
Citriobatus spinescens
Conyza bonariensis
Croton insularis
Croton phebalioides
Cymbopogon refractus
Diospyros humilis
Ehretia membranifolia
Enneapogon gracilis

Enneapogon lindleyanus
Enteropogon unispiceus
Eragrostis lacunaria
Eremophila mitchellii
Eriochloa pseudoacrotricha
Erythroxylum sp. (Splityard Creek L.Pedley 5360)
Eucalyptus cambageana
Eucalyptus crebra
Evolvulus alsinoides
Flindersia australis
Geijera parviflora
Grevillea robusta
Grevillea striata
Hakea fraseri
Helichrysum collinum
Hibiscus sturtii
Hovea longipes
Hybanthus monopetalus
Jacquemontia paniculata
Laxmannia compacta
Leptochloa peacockii
Lomandra confertifolia subsp. pallida
Lysiphyllum carronii
Malvastrum americanum
Maytenus cunninghamii
Melhania oblongifolia
Melicope erythrococca
Nyssanthes diffusa
Opuntia aurantiaca
Opuntia stricta var. stricta
Opuntia tomentosa
Owenia venosa
Oxalis perennans
Paspalidium distans
Paspalidium gracile
Phyllanthus gasstroemii
Planchonella cotinifolia var. pubescens
Pterocaulon redolens
Sarcostemma viminale subsp. brunonianum
Secamone elliptica
Senna artemisioides subsp. zygophylla
Sida filiformis
Solanum ellipticum
Solanum semiarmatum
Thellungia advena
Tragus australianus
Vittadinia pustulata

Map Unit 7 Tall Open forest-Mid high woodland of *Eucalyptus populnea* (poplar box)

Abutilon oxycarpum forma oxycarpum
Alectryon diversifolius
Amyema congener subsp. congener
Aristida calycina var. calycina
Aristida calycina var. praealta
Aristida personata
Bothriochloa decipiens var. decipiens
Brachiaria eruciformis
Brachiaria subquadripara
Calotis cuneata
Calyptochloa gracillima
Cenchrus ciliaris
Chamaesyce dallachyana
Chenopodium carinatum
Chenopodium desertorum subsp. anidiophyllum
Chloris ventricosa
Cymbopogon refractus
Cynoglossum australe var. australe
Cyperus gracilis
Denhamia oleaster
Desmodium varians
Dichanthium sericeum subsp. humilius
Digitaria brownii
Dodonaea viscosa subsp. spatulata
Einadia nutans subsp. linifolia
Enneapogon gracilis
Enteropogon acicularis
Enteropogon ramosus
Epilobium hirtigerum
Eragrostis elongata
Eragrostis lacunaria
Eragrostis leptostachya
Eremophila mitchellii
Eriochloa decumbens
Erodium crinitum
Eucalyptus populnea
Euchiton sphaericus
Eulalia aurea
Geijera parviflora
Glossocardia bidens
Gomphrena celosioides
Heteropogon contortus
Hibiscus trionum
Hypochaeris glabra
Indigofera linnaei
Lepidium africanum
Lepidium bonariense
Macfadyena unguis-cati
Malvastrum americanum
Malvastrum coromandelianum
Melinis repens

Nyssanthes diffusa
Opuntia stricta var. stricta
Opuntia tomentosa
Panicum effusum var. effusum
Paspalidium criniforme
Paspalidium distans
Paspalidium gracile
Pimelea trichostachya
Ptilotus exaltatus var. semilanatus
Ptilotus macrocephalus
Rhynchosia minima var. australis
Rostellularia adscendens var. adscendens
Senecio lautus subsp. dissectifolius
Senna barclayana
Sida corrugata
Sida pleiantha
Sida subspicata
Sisymbrium thellungii
Soliva anthemifolia
Sporobolus caroli
Stackhousia muricata
Swainsona oroboides
Thellungia advena
Themeda avenacea
Trianthema triquetra
Verbena aristigera
Verbena officinalis
Verbesina encelioides
Zinnia peruviana
Zornia muriculata subsp. angustata

Map Unit 8 Tall woodland-Mid high Open forest-Mid high woodland of mixed *Eucalyptus* spp

Abutilon fraseri
Abutilon oxycarpum forma acutatum
Abutilon oxycarpum forma oxycarpum
Acacia caroleae
Acacia conferta
Acacia decora
Acacia excelsa
Acacia harpophylla
Acacia macradenia
Acacia rhodoxylon
Achyranthes aspera
Alphitonia excelsa
Alstonia constricta
Ancistrachne uncinulata
Apophyllum anomalum
Aristida calycina var. praealta
Aristida caput-medusae
Aristida gracilipes
Aristida queenslandica var. dissimilis
Arundinella neplanensis
Atalaya hemiglauca
Atalaya salicifolia
Austrostipa verticillata
Boerhavia dominii
Bothriochloa decipiens var. decipiens
Brachiaria foliosa
Brachychiton rupestris
Brunoniella australis
Callitris glaucophylla
Calyptochloa gracillima
Canthium oleifolium
Canthium sp. (Berrigurra Station E.R.Anderson 2829)
Capparis lasiantha
Capparis mitchellii
Carissa ovata
Cassia tomentella
Cassine australis var. angustifolia
Cenchrus ciliaris
Chamaesyce dallachyana
Cheilanthes distans
Cheilanthes sieberi subsp. sieberi
Chloris ventricosa
Cissus opaca
Cleistochloa subjuncea
Corymbia clarksoniana
Crassula sieberiana
Cymbopogon refractus
Cyperus gracilis
Denhamia oleaster
Denhamia pittosporoides
Digitaria breviglumis
Digitaria brownii
Einadia nutans subsp. nutans
Enneapogon lindleyanus
Enteropogon acicularis
Enteropogon unispiceus
Eragrostis lacunaria
Eragrostis longipedicellata
Eremophila mitchellii
Erythrina vespertilio
Eucalyptus cambageana
Eucalyptus crebra
Eucalyptus populnea
Eucalyptus tenuipes
Evolvulus alsinoides
Geijera parviflora
Goodenia glabra
Grewia latifolia
Hakea fraseri
Hibiscus sturtii
Hovea longipes
Indigofera sp.
Jasminum didymum subsp. lineare

Jasminum simplicifolium subsp. australiense
Keraudrenia corollata
Leptospermum neglectum
Lomandra filiformis subsp. filiformis
Lysicarpus angustifolius
Lysiphyllum carronii
Maireana microphylla
Malvastrum americanum
Melhania oblongifolia
Melichrus urceolatus
Melinis repens
Nyssanthes diffusa
Opuntia tomentosa
Owenia venosa
Pandorea pandorana
Panicum effusum var. effusum
Panicum maximum var. trichoglume
Parsonsia eucalyptophylla
Parsonsia lanceolata
Paspalidium distans
Paspalidium gracile
Petalostigma pubescens
Podolepis longipedata
Polymeria calycina
Portulaca bicolor
Pseuderanthemum variabile
Santalum lanceolatum
Schoenus kennyi
Scleria sphacelata
Sclerolaena birchii
Setaria surgens
Sida filiformis
Sida subspicata
Solanum ellipticum
Solanum parvifolium
Spartothamnella juncea
Spermacoce multicaulis
Sporobolus caroli
Sporobolus mitchellii
Thellungia advena
Thyridolepis xerophila
Tragus australianus
Triodia mitchellii var. mitchellii
Vernonia cinerea var. cinerea
Vetiveria filipes
Wahlenbergia tumidifructa
Zaleya galericulata subsp. galericulata

Map Unit 9a Tall Open forest of Vine thicket

Abutilon oxycarpum forma acutatum
Abutilon oxycarpum forma oxycarpum
Acacia fasciculifera
Acalypha eremorum
Achyranthes aspera
Alectryon connatus
Alectryon diversifolius
Amaranthus graecizans subsp. sylvestris
Ancistrachne uncinulata
Apophyllum anomalum
Atalaya salicifolia
Austrostipa verticillata
Brachiaria foliosa
Brachychiton rupestris
Calyptochloa gracillima
Canthium vacciniifolium
Capparis lasiantha
Capparis mitchellii
Carissa ovata
Cassia tomentella
Cassine australis var. angustifolia
Casuarina cristata
Cenchrus ciliaris
Cheilanthes distans
Chenopodium carinatum
Chloris ventricosa
Cissus opaca
Citriobatus spinescens
Croton insularis
Croton phebalioides
Cyperus gracilis
Denhamia oleaster
Diospyros humilis
Einadia nutans subsp. nutans
Euchiton sphaericus
Exocarpos latifolius
Geijera parviflora
Hibiscus sturtii
Lysiphyllum carronii
Maireana microphylla
Notelaea microcarpa
Olearia canescens
Opuntia stricta var. stricta
Owenia venosa
Oxalis perennans
Parsonsia lanceolata
Paspalidium gracile
Pittosporum rhombifolium
Planchonella cotinifolia var. pubescens
Portulaca oleracea
Setaria dielsii
Solanum americanum

Spartothamnella juncea
Tragus australianus
Tribulus micrococcus

Map Unit 9b Tall woodland of *Brachychiton rupestris* (narrow-leaved bottle tree)

Abutilon oxycarpum forma acutatum
Acacia fasciculifera
Acacia harpophylla
Acalypha eremorum
Alectryon diversifolius
Alstonia constricta
Ancistrachne uncinulata
Apophyllum anomalum
Austromyrtus bidwillii
Austrostipa verticillata
Brachychiton rupestris
Breynia oblongifolia
Bursaria incana var. incana
Calyptochloa gracillima
Canthium sp. (Berrigurra Station E.R.Anderson 2829)
Canthium vacciniifolium
Capparis lasiantha
Carissa ovata
Cenchrus ciliaris
Chloris ventricosa
Cissus opaca
Citriobatus spinescens
Croton insularis
Cyperus gracilis
Digitaria brownii
Diospyros humilis
Ehretia membranifolia
Einadia nutans subsp. linifolia
Einadia nutans subsp. nutans
Enneapogon gracilis
Eremophila mitchellii
Erythroxylum sp. (Splityard Creek L.Pedley 5360)
Excoecaria dallachyana
Geijera parviflora
Jasminum didymum subsp. lineare
Lepidium bonariense
Leptochloa ciliolata
Lysiphyllum carronii
Maireana microphylla
Malvastrum americanum
Nyssanthes diffusa
Opuntia aurantiaca
Opuntia tomentosa
Parsonsia lanceolata
Paspalidium criniforme
Planchonella cotinifolia var. pubescens
Plectranthus parviflorus
Portulaca oleracea
Portulaca pilosa subsp. pilosa
Rostellularia adscendens var. adscendens
Salsola kali
Solanum americanum
Solanum parvifolium
Sporobolus caroli
Tetragonia tetragonioides
Thellungia advena
Zygophyllum apiculatum

Map Unit 10 Tall woodland of *Casuarina cristata* (belah)

Acacia excelsa
Alectryon diversifolius
Ancistrachne uncinulata
Aristida personata
Atalaya salicifolia
Calyptochloa gracillima
Canthium sp. (Berrigurra Station E.R.Anderson 2829)
Canthium vacciniifolium
Capparis lasiantha
Carissa ovata
Cassine australis var. angustifolia
Casuarina cristata
Cenchrus ciliaris
Cissus opaca
Cymbidium canaliculatum
Denhamia oleaster
Enchylaena tomentosa
Enneapogon lindleyanus
Enteropogon acicularis
Eremocitrus glauca
Eremophila mitchellii
Eriochloa decumbens
Eucalyptus populnea
Eremophila mitchellii
Jasminum didymum subsp. lineare
Lysiphyllum carronii
Maireana microphylla
Nyssanthes diffusa
Parsonsia eucalyptophylla
Paspalidium distans
Paspalidium gracile
Planchonella cotinifolia var. pubescens
Solanum parvifolium
Sporobolus caroli
Sporobolus coromandelianus

Map Unit 11 Mid high Open forest-Mid high woodland of *Acacia rhodoxylon* (rosewood)

Abutilon oxycarpum forma oxycarpum
Acacia rhodoxylon
Alphitonia excelsa
Alstonia constricta
Amyema quandang var. bancroftii
Aristida calycina var. praealta
Aristida caput-medusae
Atalaya salicifolia
Bertya pedicellata
Capparis lasiantha
Capparis mitchellii
Carissa ovata
Cenchrus ciliaris
Chenopodium carinatum
Cissus opaca
Claoxylon tenerifolium
Cleistochloa subjuncea
Clerodendrum floribundum
Commelina diffusa
Croton phebalioides
Cyperus rigidellus
Desmodium brachypodum
Digitaria breviglumis
Dysphania glomulifera subsp. glomulifera
Erythroxylum sp. (Splityard Creek L.Pedley 5360)
Eucalyptus crebra
Eucalyptus exserta
Euphorbia tannensis var. eremophila
Flindersia australis
Gahnia aspera
Hibiscus sturtii
Isotoma axillaris
Lepidium bonariense
Lomandra confertifolia subsp. pallida
Lomandra multiflora subsp. multiflora
Maireana microphylla
Marsdenia microlepis
Owenia venosa
Oxalis perennans
Pandorea pandorana
Panicum maximum var. trichoglume
Paspalidium criniforme
Paspalidium gracile
Pimelea latifolia
Sarcostemma viminale subsp. brunonianum
Scleria sphacelata
Senna sophera var. (40Mile Scrub J.R.Clarkson+ 6908)
Setaria dielsii
Sida filiformis
Sida rohlenae
Sida subspicata
Solanum ellipticum
Triodia pungens var. pungens
Turraea pubescens

Map Unit 12 Mid high Open forest-Mid high woodland of *Acacia rhodoxylon* (rosewood), *Acacia shirleyi* (lancewood) and *Acacia harpophylla* (brigalow)

Abutilon oxycarpum forma oxycarpum
Acacia harpophylla
Acacia rhodoxylon
Acacia shirleyi
Alstonia constricta
Ancistrachne uncinulata
Aristida caput-medusae
Breynia oblongifolia
Brunoniella australis
Calyptochloa gracillima
Canthium odoratum
Canthium vacciniifolium
Capparis loranthifolia var. bancroftii
Carissa ovata
Cenchrus ciliaris
Cheilanthes sieberi subsp. sieberi
Cissus opaca
Cleistochloa subjuncea
Dianella caerulea var. vannata
Diospyros humilis
Dodonaea viscosa subsp. spatulata
Einadia trigonos subsp. stellulata
Enneapogon lindleyanus
Enteropogon unispiceus
Eragrostis lacunaria
Eragrostis longipedicellata
Eremophila mitchellii
Erythroxylum sp. (Splityard Creek L.Pedley 5360)
Eucalyptus cambageana
Evolvulus alsinoides
Flindersia australis
Flindersia collina
Geijera parviflora
Hakea fraseri
Hibiscus sturtii
Hovea longipes
Indigofera sp.
Jasminum didymum subsp. lineare
Leptochloa peacockii
Lomandra multiflora subsp. multiflora
Marsdenia microlepis

Maytenus cunninghamii
Notelaea microcarpa
Olearia canescens
Opuntia aurantiaca
Opuntia stricta var. stricta
Owenia venosa
Oxalis perennans
Paspalidium gracile
Pseuderanthemum variabile
Rutidosis crispata
Santalum lanceolatum
Senna artemisioides subsp. zygophylla
Setaria dielsii
Sida filiformis
Spartothamnella juncea
Themeda triandra
Thyridolepis xerophila

APPENDIX 4

WEEDS AND INTRODUCED SPECIES LIST

Species	Common name
Acacia farnesiana (L.) Willd.	mimosa bush
Achyranthes aspera L.	chaff flower
Amaranthus graecizans subsp. sylvestris (Vill.) Asch.	
Amaranthus viridis L.	green amaranth
Argemone ochroleuca Sweet subsp. ochroleuca	
Aster subulatus Michx.	wild aster
Baccharis halimifolia L.	groundsel bush
Bidens bipinnata L.	bipinnate beggar's ticks
Brachiaria eruciformis (Sm.) Griseb.	
Cenchrus ciliaris L.	buffel grass
Centaurea melitensis L.	Maltese cockspur
Centaurium erythraea Rafn.	common centaury
Chenopodium ambrosioides L.	Mexican tea
Chloris gayana Kunth	rhodes grass
Ciclospermum leptophyllum (Pers.) Sprague	slender celery
Cirsium vulgare (Sav.) Ten.	spear thistle
Conyza bonariensis (L.) Cronq.	flaxleaf fleabane
Coronopus didymus (L.) Smith	lesser swine-cress
Crotalaria incana L. subsp. incana	woolly rattlepod
Cuscuta campestris Yunck.	dodder
Cyperus rotundus L.	nutgrass
Datura ferox L.	fierce thornapple
Echinochloa crusgalli (L.) P. Beauv.	barnyard grass
Fallopia convolvulus (L.) A. Love	
Gaura parviflora Douglas	clockweed
Gomphocarpus physocarpus E. Mey.	balloon cotton bush
Gomphrena celosioides Mart.	soft khakiweed
Heliotropium amplexicaule Vahl	blue heliotrope
Heliotropium indicum L.	
Hypochaeris glabra L.	smooth catsear
Lepidium africanum (N. Burm.) DC.	common peppercress
Lepidium bonariense L.	Argentine peppercress
Ludwigia peploides subsp. montevidensis (Spreng.) P.H. Raven	
Macfadyena unguis-cati (L.) A.H. Gentry	cat's claw
Macroptilium lathyroides (L.) Urb.	phasey bean
Malva parviflora L.	marshmallow
Malvastrum americanum (L.) Torr.	spiked malvastrum
Malvastrum coromandelianum (L.) Garcke	prickly malvastrum
Medicago polymorpha L.	
Melilotus indicus (L.) All.	hexham scent
Melinis repens (Willd.) Zizka	red Natal grass
Oenothera indecora subsp. bonariensis W. Dietr.	small flower evening primrose

Species	Common name
Opuntia aurantiaca Lindl.	tiger pear
Opuntia stricta (Haw.) Haw. var. stricta	prickly pear
Opuntia tomentosa Salm-Dyck	velvety tree pear
Panicum maximum var. trichoglume Eyles ex Robyns	green panic
Paspalum dilatatum Poir.	paspalum
Physalis lanceifolia Nees	
Richardia brasiliensis Gomes	Mexican clover
Salix babylonica L.	weeping willow
Salsola kali L.	soft roly-poly
Salvia reflexa Hornem.	mintweed
Silybum marianum (L.) Gaertn.	variegated thistle
Sisymbrium thellungii O.E. Schulz	African turnip-weed
Soliva anthemifolia (Juss.) R. Br. ex Less.	dwarf jo jo weed
Sonchus oleraceus L.	common sowthistle
Sporobolus coromandelianus (Retz.) Kunth	
Urochloa mosambicensis (Hack.) Dandy	sabi grass
Verbena aristigera S.Moore	Mayne's pest
Verbena litoralis Kunth	verbena
Verbesina encelioides (Cav.) Benth. & Hook.f. ex A. Gray	wild sunflower
Xanthium spinosum L.	Bathurst burr
Zinnia peruviana (L.) L.	wild zinnia

APPENDIX 5

MISCELLANEOUS - OTHER LOCATIONS

Note: *The following additional species were observed during the course of field work but were not recorded in any of the sites. They were generally observed in disturbed areas.*

Azolla pinnata	aquatic
Chara sp.	aquatic
Chloris gayana	roadside
Datura ferox	paddock
Daucus glochidiatus	paddock
Eclipta prostrata	bore
Epilobium hirtigerum	bore
Fallopia convolvulus	paddock
Lemna trisulca	aquatic
Ludwigia octovalvis	aquatic
Ludwigia peploides subsp. montevidensis	bore
Malva parviflora	paddock
Nicotiana megalosiphon subsp. megalosiphon	paddock
Salvia reflexa	paddock
Solanum esuriale	paddock

PART B

TABLE OF CONTENTS

SUMMARY

This report presents the results of the investigation of the distribution of *Rutidosis crispata* within the vicinity of the Dawson Dam Proposal. A few sites within the Isla Gorge National Park were also examined. A total of 441 plants of *Rutidosis crispata* were recorded from eleven sites. Ten of the sites were located within the vicinity of the proposed dam area with one site located in Isla Gorge National Park. The population in the National Park consisted of 29 individuals which is approximately 7% of the known population. Approximately 56 % (250 individuals) of the total observed population was located at one site (site 2) within the surrounds of the proposed dam. Two of the ten sites (sites 6 & 7) within the vicinity of the proposed dam site occur within the 183.5 FSL level and the other site (site 3) is approximately within 30 m of the 183.5 m level. Sites 6 and 7 contain approximately 6 % and site 3 approximately 13 % of the known population of *Rutidosis crispata.*

Rutidosis crispata is more widespread than previously thought with a total range of 70 km and an extent of occurrence of approximately 700 km^2. Although the species appears to have specific habitat requirements, these do not appear to be unique or unusual. Other habitats are likely to be found for the species within its currently known 70 km range including the northern end of Precipice National Park, Mt Glebe, Morang Hill, and other hills between Isla Gorge and the Taroom locality which retain pre-European vegetation cover. However, the conservation coding of Rare is still considered to be appropriate.

INTRODUCTION

The 1996 report on the flora of the proposed dam site on the Dawson River recorded the native daisy *Rutidosis crispata* (synonym *Rutidosis* sp. (Theodore P.I.Forster PIF2639)) within the envelope surrounding the impoundment area but not within the impoundment area. *Rutidosis crispata* was considered of particular conservation concern as it is listed as Rare in Schedule 4 of the Nature Conservation (Wildlife) Regulation 1994 to the Queensland ***Nature Conservation Act 1992.***

It was recommended that the extent of its occurrence in the area be investigated. The report also recorded *Cryptandra* sp. (Isla Gorge P.Sharpe 627) from within the envelope surrounding of the impoundment area. This is only the third known collection of this species.

Field work has been undertaken to:

- investigate the distribution of *Rutidosis crispata* in the vicinity of the proposed Dawson River Dam
- determine whether *Rutidosis crispata* is present within Isla Gorge National Park
- determine whether *Cryptandra* sp. (Isla Gorge P.Sharpe 627) is still present in Isla Gorge National Park

SPECIES BACKGROUND

Rutidosis crispata

This species was first collected in 1986 and subsequently formerly named in 1994 (Holland 1994). Prior to its collection from the proposed Dawson Dam site in 1996, this species was only known from the single locality at Glenmoral Gap on the Dawson Range west of Theodore. It was

observed growing on a ridge top in shallow sandy soil on sandstone, in open eucalypt forest dominated by *Eucalyptus suffulgens, Eucalyptus tenuipes* and *Corymbia trachyphloia* with an understorey of *Triodia* sp.

The site near the Dawson River recorded in 1996 is on a slope of a low hill (220 m alt.) in sandy loam soil on sandstone, in open forest dominated by *Eucalyptus cambageana, Acacia shirleyi* and *Acacia rhodoxylon* with a sparse to moderately dense ground cover of annual and perennial grasses.

Cryptandra sp. (Isla Gorge P.Sharpe 627)

Cryptandra sp. (Isla Gorge P.Sharpe 627) was first collected in August 1973 from Isla Gorge, approximately 36 km NW from the proposed dam site. It was observed growing on a bank in an open eucalypt forest. It has recently been recorded from Precipice National Park. This species has not been formally named.

METHODS

Four and half days of field work were undertaken in August 1997. Three and half days were spent within the vicinity of the proposed dam site and one day in Isla Gorge National Park.

Firstly, an examination of the site where *Rutidosis crispata* was observed in October 1996 was undertaken. The area between this known site and the Dawson River was then examined by traversing the area on foot. Further searches were based on information gathered from the initial searches. Topographic maps (1:100 000), aerial photo-mosaics and the vegetation map of the area were examined to find areas of similar landform and vegetation. The selection of areas to be searched in Isla Gorge was based on information gleaned from the field work and assisted by discussions with the National Parks Ranger (Mr F. Carter) at Taroom.

The position of each population of *Rutidosis crispata* was recorded using a Garmin 45XL Geographical Positioning System (GPS) with external antenna. The GPS reading for each population was taken at the lowest topographical point for that population. The slope and aspect of the land surface was measured using a clinometer and compass respectively. A sample of the top 10 cm of the soil profile was collected from each site and analysed for texture (McDonald *et al.* 1990) and colour (Oyama & Takehara 1970). A general vegetation description was given for each site. The botanical names used follow Henderson 1997. Other general notes were also recorded. Herbarium specimens of *Rutidosis crispata* were collected from sites where a reasonable specimen could be obtained (sites 2, 6, 10 &11). The specimens have been lodged with the Queensland Herbarium.

Digital contour data for a Full Storage Level (FSL) of 183.5 m was supplied by the Department of Natural Resources. These data were imported into MAPINFO and intersected with the GPS point locations for the *Rutidosis crispata* populations. This information was used to assess whether the populations were within the impoundment area of the proposed dam at a Full Supply Level of 183.5 m EL. This assessment is based on the following assumptions:

- That the GPS readings are accurate. Some allowance has been made for inherent error of the GPS readings by placing a buffer with a 20 m radius around each point location.
- That the digital contour data for the FSL are accurate.

The locality information on the label of the specimen of *Cryptandra* sp. (Isla Gorge P.Sharpe 627) collected from Isla Gorge was of little value in accurately re-locating the original site. Discussions with the collector (Mr P. Sharpe) indicated the likely area of the National Park where the collection was made in 1973 while on a Queensland Naturalist expedition of the Gorge. This area occurred on the western edge of the park, north-west of Hewitt's Creek. This area was traversed on foot.

RESULTS & DISCUSSION

Rutidosis crispata

A total of 11 sites of *Rutidosis crispata* were recorded (Appendix 1) with a total population of 441 individuals observed (Table 1)(Figure 1). This does not include the population at the type locality whose size is currently unknown. *Rutidosis crispata* is more widespread than previously thought with a total range of approximately 70 km and an extent of occurrence[5] of approximately 700 km^2. However, the conservation coding of Rare is still considered to be appropriate.

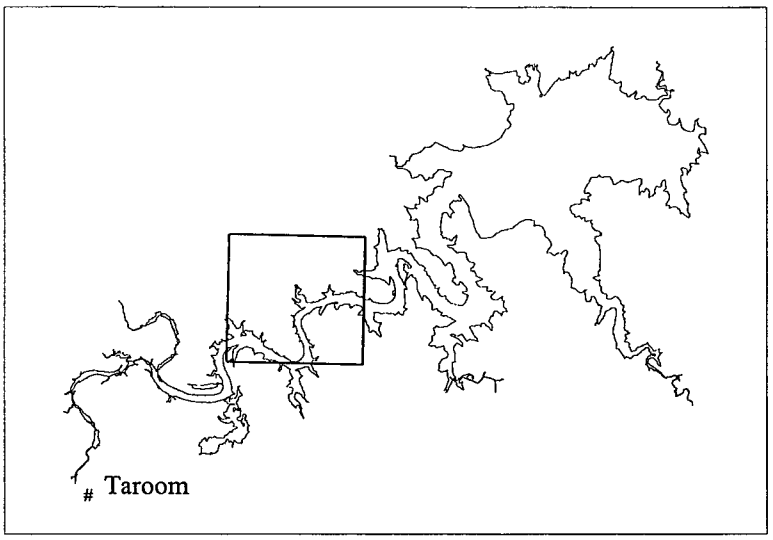
Table 1. Abundance of *Rutidosis crispata* at observed sites.

Site	Abundance.	% of known population	Area examined (m)	Land tenure
1	18	4.1	100 x 50	Freehold
2	250	56.7	100 x 100	Freehold
3	57	12.9	250 x 10	Freehold
4	2	0.5	100 x 100	Freehold
5	6	1.4	200 x 100	Freehold
6	12	2.7	150 x 60	Freehold
7	14	3.2	100 x 300	Freehold
8	9	2.0	100 x 10	Freehold
9	34	7.7	100 x 300	Freehold
10	10	2.3	20 x 200	Freehold
11	29	6.6	100 x 150	National Park
	Total 441	100.0		

All sites were relatively undisturbed except for site 5 which has been mostly cleared for pastoral development. One population of 29 individuals was observed within Isla Gorge National Park which is approximately 7% of the known population.

Approximately 56 % (250 individuals) of the total observed population was located at Site 2, about 150 metres from the storage perimeter. Of the ten sites within the vicinity of the proposed dam, seven (sites 1, 2, 4, 5, 8, 9, & 10) are clearly above the FSL 183.5 m (Figure 1). This accounts for 80% (329 plants) of the known population within the vicinity of the proposed dam site. Two of the ten sites (sites 6 & 7) occur within the 183.5 FSL level and the other site (site 3) is approximately within 30 m of the 183.5 m level. Sites 6 and 7 contain approximately 6 % and site 3 approximately 13 % of the known population of *Rutidosis crispata.*

[5] Extent of occurrence is defined as "the area contained within the shortest continuous imaginary boundary which can be draw to encompass all the known, inferred or projected sites of the present occurrence of a taxon, excluding cases of vagrancy" (IUCN 1994).



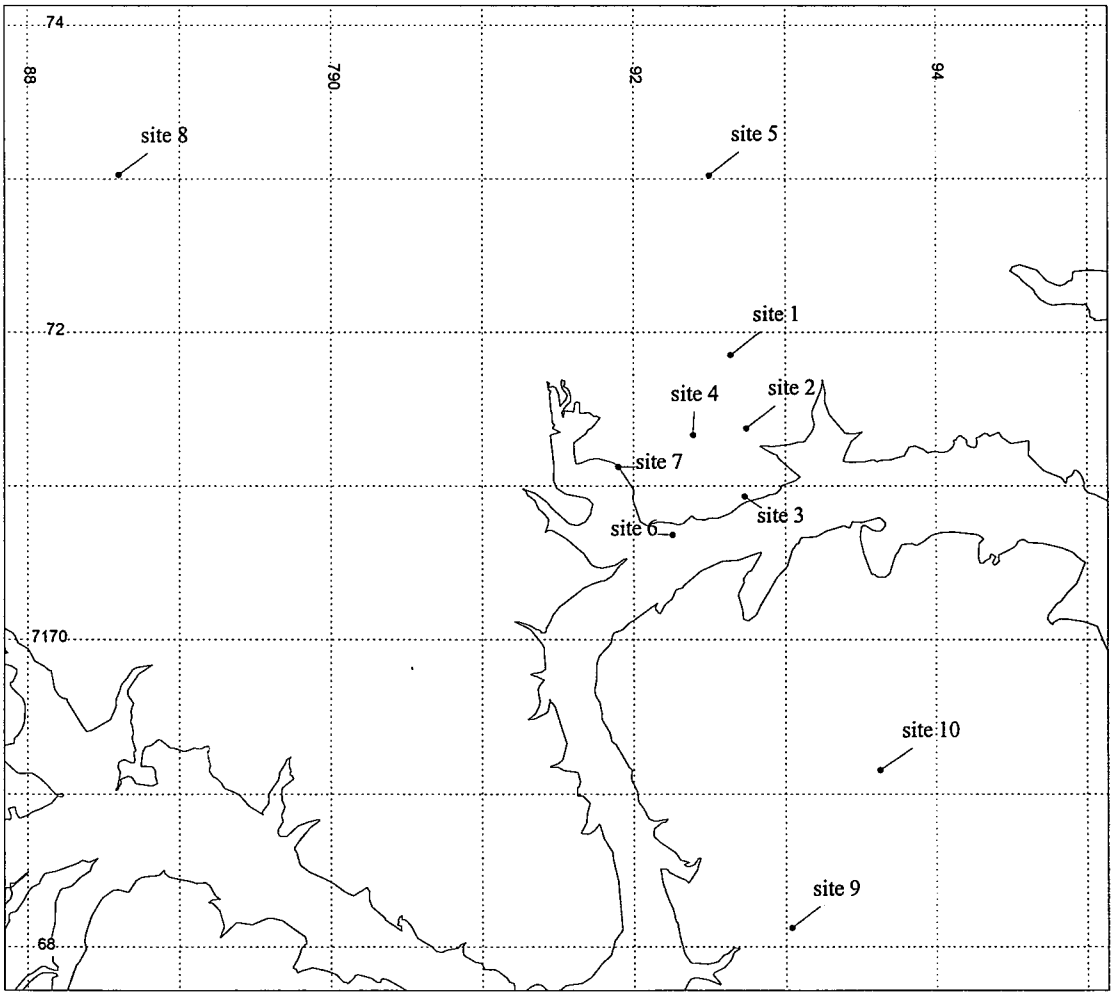


Figure 1. Locality map showing the location of *Rutidosis crispata* populations and the 183.5 full supply level of the proposed Dawson Dam

Although it appears to have specific habitat requirements they do not appear to be unique or unusual. The habitat is characterised by gentle to steep hill slopes with a southerly aspect. The generally shallow soils are derived from sandstones and are of fine sandy loam to silt loam texture. The tallest vegetation layer consists of an open forests with *Eucalyptus crebra* as the dominant tree species in the majority of sites (sites 2,3,4,6,7,9 & 10). Another frequent canopy species is *Acacia rhodoxylon.* A sparse to mid dense small tree or shrub layer is commonly present with *Hovea longipes, Canthium* sp. (Berrigurra Station E.R.Anderson 2829), *Geijera parviflora, Acacia decora* and *Notelaea microcarpa* being the most frequently observed species. A sparse to mid dense ground layer is predominantly grasses, with *Aristida caput-medusae, Calyptochloa gracillima, Cleistochloa subjuncea, Leptochloa peacockii* and *Paspalidium gracile* being the most frequent species. The low shrub *Carissa ovata* is also frequent in the ground layer at these sites.

With the extra information obtained from this investigation other habitats are likely to be found through its 70 km range. Areas which were identified as likely habitats but which were not searched due to time constraints include:

- the northern end of Precipice National Park,
- Mt Glebe,
- Morang Hill,
- other hills between Isla Gorge and the Taroom locality which retain pre-European vegetation cover.

Cryptandra sp. (Isla Gorge P.Sharpe 627)

During the field work we were unable to locate *Cryptandra* sp. (Isla Gorge P.Sharpe 627) in Isla Gorge National Park. The search was not extensive and the species should not be considered to have disappeared from the site. Further searches of the area would be required if the species needs to be located within the park boundaries.

From the examination of topographical maps it appears that the landform on which *Cryptandra* sp. (Isla Gorge P.Sharpe 627) occurs on near the proposed dam extends into the Precipice National Park. The Park covers approximately 10, 000 ha of sandstone escarpment and gorges north east of the proposed dam site. A flora checklist for Precipice National Park was compiled in November 1996 base on field work carried out in October 1996 by Mr P.I. Forster. *Cryptandra* sp. (Isla Gorge P.Sharpe 627) has not been recorded but a closely related species *Cryptandra longistaminea* was recorded for the Precipice National Park. Close examination of the specimen revealed that the material has been mistakenly identified and is in fact *Cryptandra* sp. (Isla Gorge P.Sharpe 627). The extent of the population within the park is unknown.

ACKNOWLEDGMENTS

All the landholders are thanked for their cooperation. We would like to thank Frank Carter (Queensland National Parks Service, Department of Environment (DoE)) for advice on access to Isla Gorge National Park, Peter Bostock (Queensland Herbarium, DoE) for providing figure 1, and Gordon Guymer (Queensland Herbarium, DoE) and Bill McDonald (Queensland Herbarium, DoE) for providing comments on drafts of the report.

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Appendix 1

SITE DATA FOR *RUTIDOSIS CRISPATA* OBSERVED DURING FIELD WORK AUGUST 1997

Site: 1

Location: "Riverview" locality observed in flora survey 1996, approximately 3.5 km E of Riverview homestead, 15.8 km NE (47°) of Taroom.

Latitude/Longitude: 25°32'31" 149°54'44" **Easting/Northing:** 792639, 7171853

Habitat Description

Landform Pattern: low hills **Landform Element:** hillslope **Altitude:** 220-240 m

Slope: 3° simple **Aspect:** SSW, 200°

Soil: fine sandy loam, greyish brown 7.5 YR 4/2 **Surface: Rock(%)** < 1 **Bare(%):** 30-40

Vegetation Description: Open forest: co-dominant canopy species *Acacia rhodoxylon, Acacia shirleyi* and *Eucalyptus cambageana.*

Small tree and shrub layer: sparse. Species present include *Alstonia constricta, Breynia oblongifolia, Eremophila mitchellii, Erythroxylum* sp. (Splityard Creek L.Pedley 5360), *Hovea longipes* and *Maytenus cunninghamii.*

Ground layer: sparse. Species present include *Abutilon oxycarpum, Aristida caput-medusae, Brunoniella australis, Calyptochloa gracillima, Carissa ovata, Cissus opaca, Cleistochloa subjuncea, Einadia trigonos* subsp. *stellulata, Enneapogon lindleyanus, Eragrostis longipedicellata, Evolvulus alsinoides, Hibiscus sturtii, Leptochloa peacockii, Marsdenia microlepis, Paspalidium gracile, Pseuderanthemum variabile, Rutidosis crispata, Setaria dielsii* and *Sida filiformis.*

Extent of Population: 18 individuals scattered over an area of approximately 0.75 ha (150 m down and 50 m across the slope) from the top of the ridge down the slope to gully channel.

General comments: There is some disturbance from animal trails across slope near the top of the slope.

Site: 2

Location: "Riverview" approximately 300 m S of site 1, 15.6 km NE (48°) of Taroom.

Approximate centre of population

Latitude/Longitude: 25°32'39" 149°54'45" **Easting/Northing:** 792677, 7171557

Lowest contour on slope where plants occurred

Latitude/Longitude: 25°32'45" 149°54'47" **Easting/Northing:** 792742, 7171377

Habitat Description:

Landform Pattern: low hills **Landform Element:** hillslope **Altitude:** 180-220 m

Slope: 15°, simple **Aspect:** SW, 230°

Soil: fine sandy loam, dark brown 10 YR 3/4 **Surface: Rock(%)** < 1 **Bare(%):** 10-20

Vegetation Description: Open forest: dominant canopy species *Eucalyptus crebra* with *Flindersia australis* occasionally present.

Small tree and shrub layer: sparse. Species present include *Acacia bancroftii, Acacia longispicata* subsp. *longispicata, Alphitonia excelsa, Canthium* sp. (Berrigurra Station E.R.Anderson 2829), *Eremophila mitchellii, Geijera parviflora, Hakea fraseri, Hovea longipes* and *Opuntia tomentosa*.*

Ground layer: sparse to mid dense. Species present included *Alectryon diversifolius, Ancistrachne uncinulata, Aristida caput-medusae, Aristida lignosa, Brunoniella australis, Calotis cuneifolia,*

Calyptochloa gracillima, Carissa ovata, Chenopodium carinatum, Cleistochloa subjuncea, Enneapogon lindleyanus, Eragrostis lacunaria, Evolvulus alsinoides, Jasminum didymum subsp. *racemosum, Leptochloa peacockii, Lomandra* sp., *Maireana microphylla, Malvastrum americanum, Maytenus cunninghamii, Pandorea pandorana, Panicum effusum* var. *effusum, Paspalidium gracile, Rutidosis crispata, Setaria dielsii, Sida filiformis, Solanum parvifolium, Spartothamnella juncea, Thellungia advena, Themeda triandra, Thyridolepis xerophila* and *Verbena aristigera* *.

Extent of Population: 250 individuals over the slope covering an area approximately 1 ha (100 x 100 m) from the gully channel up the slope. Plants more frequent and less drought stressed towards base of slope.

General comments: There is very little disturbance.

Site: 3

Location: "Riverview" approximately 1 km S of site 1 on edge of Dawson River flood plain, 15.3 km NE (53°) of Taroom.

Latitude/Longitude: 25°32'59" 149°54'47" **Easting/Northing:** 792730, 7170932

Habitat Description:

Landform Pattern: low hills **Landform Element:** slope at foot of cliff **Altitude:** 180-200 m

Slope: 20 **Aspect:** 175°, S

Soil: silt loam, brownish black 7.5 YR 3/2

Surface: Rock(%) 20 **Bare(%):** 10-20

Vegetation Description: Open forest: dominant canopy species *Eucalyptus crebra* with *Callitris glaucophylla* occasionally present.

Small tree and shrub layer: sparse. Species present include *Acacia decora, Acacia excelsa, Acacia stenophylla, Alectryon hemiglauca, Alectryon oleifolius, Canthium* sp. (Berrigurra Station E.R.Anderson 2829), *Citriobatus spinescens, Diospyros humilis, Geijera parviflora* and *Opuntia tomentosa* *

Ground layer: sparse. Species present include *Abutilon oxycarpum, Alectryon diversifolius, Ancistrachne uncinulata, Arundinella nepalensis, Austrostipa verticillata, Brachiaria foliosa, Calyptochloa gracillima, Carissa ovata, Chloris ventricosa, Dianella caerulea* var. *vannata, Enneapogon lindleyanus, Enteropogon unispiceus, Jasminum didymum* subsp. *racemosum , Leptochloa peacockii, Opuntia aurantiaca *, Pandorea pandorana, Panicum maximum* var. *trichoglume *, Paspalidium gracile, Plectranthus parviflorus, Rutidosis crispata, Scleria sphacelata, Tetragonia tetragonioides* and *Thellungia advena.*

Extent of Population: 57 plants observed in an area approximately 0.25 ha (250 m long and 10 m wide) along the cliff base. *Rutidosis crispata* was not observed to extend down onto the flats below the foot-slope.

General comments: There is some disturbance from animal trails across slope.

Site: 4

Location: "Riverview" approximately 500 m SSW of site 1, 15.2 km NE (48°) of Taroom.

Latitude/Longitude: 25°32'47", 149°54'35" **Easting/Northing:** 792394, 7171334

Habitat Description:

Landform Pattern: low hills **Landform Element:** crest **Altitude:** 240-260 m

Slope: 0°, flat hill top **Aspect:** not applicable

Soil: not recorded

Surface: Rock(%) 0 **Bare(%):** 10-20

Vegetation Description: Open forest: dominant canopy species *Eucalyptus crebra* with *Acacia harpophylla*

Extent of Population: 2 plants observed on top of hill within an area of approximately 1 ha (100 x 100 m)

General comments: disturbance none.

Site: 5

Location: "Riverview" on slope adjacent to Brodie's Road to "The Bend". approximately 3.5 km ESE of Riverview homestead, 16.6 km NE (44°) of Taroom.

Latitude/Longitude: 25°31'52" 149°54'37" **Easting/Northing:** 792500, 7173023

Habitat Description:

Landform Pattern: low hills **Landform Element:** hillslope **Altitude:** 220-240 m

Slope: 10° **Aspect:** SE, 75°

Soil: not recorded

Surface: Rock(%): <5 **Bare(%):** 20

Vegetation Description: Highly disturbed habitat remnant small trees and shrub on crest of hill. *Cenchrus ciliaris* dominant ground layer species.

Extent of Population: 6 plants recorded from near the top of slope on the edge of a remnant stand of trees.

General comments: Numerous animal trails through area.

Site: 6

Location: "Riverview" approximately 1 km SSW of site 1 on edge of the Dawson River floodplain, 14.8 km NE (49°) of Taroom.

Approximate centre of population

Latitude/Longitude: 25°33'02", 149°54'28" **Easting/Northing:** 792201, 7170849

Lowest contour on slope where plants occurred

Latitude/Longitude: 25°33'08", 149°54'30" **Easting/Northing:** 792259, 7170682

Habitat Description:

Landform Pattern: low hills **Landform Element:** hillslope **Altitude:** 180-200 m

Slope: 10°/30°, upper slope and cliff-foot slope **Aspect:** 180°, S

Soil: fine sandy loam, dark brown 7.5 YR 3/4

Surface: Rock(%) 20 **Bare(%):** 10-20

Vegetation Description: Open forest: dominant canopy species *Eucalyptus crebra* with *Eucalyptus populnea* occasionally present.

Small tree and shrub layer: sparse. Species present include *Acacia decora, Acacia excelsa, Acacia longispicata* subsp. *longispicata, Alstonia constricta, Brachychiton populneus* subsp. *populneus, Canthium vacciniifolium, Geijera parviflora, Alectryon diversifolius, Alphitonia excelsa, Callitris glaucophylla, Canthium* sp. (Berrigurra Station E.R.Anderson 2829), *Denhamia oleaster* and *Diospyros humilis.*

Ground layer: sparse. Species present include *Ancistrachne uncinulata, Aristida caput-medusae, Calotis cuneifolia, Calyptochloa gracillima, Carissa ovata, Cenchrus ciliaris *, Cleistochloa subjuncea, Dianella caerulea var. vannata, Enneapogon lindleyanus, Eremophila debilis, Goodenia glabra, Jasminum didymum* subsp. *racemosum , Leptochloa peacockii, Opuntia tomentosa *, Rutidosis crispata* and *Spartothamnella juncea.*

Extent of Population: 12 plants recorded in an area approximately 0.9 ha (150 x 60) from the base of small cliff up the slope.

General comments: disturbance none

Site: 7

Location: "Riverview" approximately 1 km SW of site 1, 14.7 km NE (47°) of Taroom.

Latitude/Longitude: 25°32'54", 149°54'17" **Easting/Northing:** 791899, 7171126

Habitat Description:

Landform Pattern: low hills **Landform Element:** hillslope **Altitude:** 180-200 m

Slope: 20°, simple **Aspect:** 195°, S

Soil: not recorded

Surface: Rock(%) 10 **Bare(%):** 30

Vegetation Description: Open forest: dominant canopy species *Eucalyptus crebra* with *Casuarina cristata, Acacia harpophylla* and *Eucalyptus populnea* occasionally present.

Small tree and shrub layer: sparse to mid dense. Species present include *Acacia decora, Alphitonia excelsa, Casuarina cristata, Eremophila mitchellii, Grevillea striata, Hovea longipes, Notelaea microcarpa, Abutilon oxycarpum* and *Alectryon hemiglauca.*

Ground layer: sparse to mid dense. Species present include *Ancistrachne uncinulata, Aristida caput-medusae, Brachiaria foliosa, Callitris glaucophylla, Calyptochloa gracillima, Carissa ovata, Cissus opaca, Jasminum didymum* subsp. *racemosum , Maireana microphylla, Pandorea pandorana, Paspalidium gracile* and *Rutidosis crispata.*

Extent of Population: 14 individuals recorded on the slope covering an area approximately 3 ha (100 x 300 m)

General comments: There is some disturbance from animal trails across slope.

Site: 8

Location: "Riverview" hill approximately 1 km NNW of Riverview homestead, 14.1 km NE (32°) of Taroom.

Latitude/Longitude: 25°31'54", 149°52'18" **Easting/Northing:** 788599, 7173027

Habitat Description:

Landform Pattern: low hills **Landform Element:** crest **Altitude:** 260-280 m

Slope: 4° **Aspect:** 175°, S

Soil: not recorded

Surface: Rock(%) 10 **Bare(%):** 80

Vegetation Description: Open forest: dominant canopy species *Acacia rhodoxylon.*

Ground layer: sparse. Species present include *Olearia canescens* and *Rutidosis crispata.*

Extent of Population: 9 individuals scattered over an area of approximately 0.1 ha (10 m down and 100 m along the crest).

General comments: The population occurs in a narrow band along the top of the hill on the southern side of the crest. The area has numerous animal trails on the crest. Plants drought stressed.

Site: 9

Location: "Bookabie", 13.9 km ENE (59°) of Taroom.

Latitude/Longitude: 25°34'30", 149°55'00"

Easting/Northing: 793038, 7168127

Habitat Description:

Landform Pattern: low hills **Landform Element:** hillslope **Altitude:** 200-220 m

Slope: 10°/30°, waxing upper-slope and maximal lower slope **Aspect:** S, 175°

Soil: silt loam, brownish black 7.5 YR 3/2

Surface: Rock(%) 20 **Bare(%):** 20

Vegetation Description: Open forest with dominant canopy species *Eucalyptus crebra* and *Eucalyptus melanophloia* with and open lower tree stratum including *Acacia decora, Acacia fasciculifera, Alectryon connatus, Callitris glaucophylla, Canthium odoratum, Canthium* sp. (Berrigurra Station E.R.Anderson 2829), *Ehretia membranifolia, Eremophila mitchellii, Geijera parviflora* and *Notelaea microcarpa.*
Shrub layer: sparse. Species present include *Alectryon diversifolius, Apophyllum anomalum, Denhamia oleaster, Erythroxylum* sp. (Splityard Creek L.Pedley 5360), *Grevillea striata, Hakea fraseri, Hovea longipes* and *Opuntia tomentosa *, Tarenna* sp. (Ka Ka Mundi N.P. W.J.McDonald+ 4642).
Ground layer: sparse to mid dense. Species present include *Abutilon oxycarpum, Achyranthes aspera, Ancistrachne uncinulata, Aristida caput-medusae, Aristida gracilipes, Aristida ramosa, Arundinella nepalensis, Brachiaria foliosa, Brachyscome microcarpa, Calyptochloa gracillima, Carissa ovata, Cleistochloa subjuncea, Cymbopogon refractus, Dianella caerulea* var. *vannata, Enneapogon lindleyanus, Eragrostis lacunaria, Leptochloa peacockii, Olearia canescens, Oxalis* sp., *Panicum effusum* var. *effusum, Paspalidium gracile, Plectranthus parviflorus, Rutidosis crispata, Sida corrugata* and *Thellungia advena.*
Extent of Population: 34 plants recorded in an area approximately 3 ha (100 x 300 m) from the base of the slope up to the middle of the upper slope.
General comments: A few animal trails present at the base of the slope.

Site: 10
Location: "Bookabie", 14.9 km ENE (57°) of Taroom.
Latitude/Longitude: 25°33'56", 149°55'21" **Easting/Northing:** 793627, 7169156
Habitat Description:
Landform Pattern: low hills **Landform Element:** hillslope **Altitude:** 240-260 m
Slope: 10°/20°, waxing upper-slope and maximal lower-slope **Aspect:** SE, 130°
Soil: , fine sandy loam, greyish brown 7.5 YR 4/2
Surface: Rock(%) 40 **Bare(%):** 10
Vegetation Description: Open forest: dominant canopy species *Eucalyptus crebra* and *Callitris glaucophylla* with a lower tree stratum of *Hakea fraseri, Canthium* sp. (Berrigurra Station E.R.Anderson 2829), *Flindersia australis* and *Geijera parviflora.*
Shrub layer: sparse. Species present include *Alectryon diversifolius, Bursaria incana, Canthium coprosmoides, Canthium vacciniifolium, Capparis canescens, Citriobatus spinescens, Denhamia oleaster, Eremophila mitchellii, Hakea fraseri, Hovea longipes, Notelaea microcarpa* and *Santalum lanceolatum.*
Ground layer: sparse to mid dense. Species present include *Aristida caput-medusae, Aristida lignosa, Calyptochloa gracillima, Carissa ovata, Cissus opaca, Cleistochloa subjuncea, Dianella caerulea* var. *vannata, Enneapogon lindleyanus, Eragrostis lacunaria, Laxmannia* sp., *Opuntia tomentosa *, Pandorea pandorana* and *Paspalidium gracile.*
Extent of Population: 10 plants recorded in an area approximately 0.4 ha (20 x 200 m) along the slope in a narrow band.
General comments: disturbance none

Site: 11
Location: Isla Gorge National Park, hill W of Leichhardt Highway, 55.4 km NNE (21°) of Taroom.
Latitude/Longitude: 25°10'40", 150°00'25" **Easting/Northing:** 798330, 7211999
Habitat Description:
Landform Pattern: low hills **Landform Element:** hillslope to crest **Altitude:** 260-280 m

Slope: 10°/20°, southern side of crest and upper slope **Aspect:** S, 190°
Soil: sandy loam, very dark brown 7.5 YR 2/3
Surface: Rock(%): 20 **Bare(%):** 40
Vegetation Description: Open forest: dominant canopy species *Acacia rhodoxylon, Corymbia citriodora, Eucalyptus cloeziana* and *Eucalyptus suffulgens.*
Small tree and shrub layer: sparse. Species present include *Alstonia constricta* and *Callitris endlicheri.*
Ground layer: sparse. Species present include *Acacia complanata, Aristida queenslandica* var. *dissimilis, Aristida ramosa, Cleistochloa subjuncea, Einadia hastata, Eragrostis longipedicellata, Gahnia aspera, Hibiscus sturtii, Leptochloa peacockii, Lomandra* sp., *Paspalidium gracile, Peripleura bicolor, Phyllanthus gasstroemii, Scleria sphacelata, Sida trichopoda* and *Solanum parvifolium.*
Extent of Population: 29 plants recorded in an area approximately 1.5 ha (100 x 150 m) from the crest down the slope to gully channel.
General comments: disturbance none; plants drought stressed.

MAP 1

1. Tall Open forest of Eucalyptus camaldulensis (river red gum), Eucalyptus tereticornis (forest red gum), Eucalyptus coolabah (coolibah) of the Dawson River and its tributaries
2. Very tall Open forest - tall woodland of Eucalyptus camaldulensis (river red gum), Eucalyptus tereticornis (forest red gum) of the tributaries of the Dawson River
3. Tall woodland - Mid high Open forest of Eucalyptus coolabah (coolibah) of the Dawson River floodplain and associated creek systems
4. Tall Open forest of Callitris glaucophylla (white cypress pine) on sands
5. Tall Open forest - Mid high Open forest - Mid high woodland of Eucalyptus crebra (narrow-leaved ironbark) and Callitris glaucophylla (white cypress pine) on sandstone
6. Tall woodland - Mid high Open forest of Acacia harpophylla (brigalow), vine thicket and Eucalyptus spp.
7. Tall Open forest - Mid high woodland of Eucalyptus populnea (poplar box) on alluvium
8. Tall woodland - Mid high Open forest - Mid high woodland of mixed Eucalyptus spp.
9a. Tall Open forest of Vine thicket
9b. Tall woodland of Brachychiton rupestris (narrow-leaved bottle tree)
10. Tall woodland of Casuarina cristata (belah)
11. Mid high Open forest - Mid high woodland of Acacia rhodoxylon (rosewood)
12. Mid high Open forest - Mid high woodland of Acacia rhodoxylon (rosewood), Acacia shirleyi (lancewood) and Acacia harpophylla (brigalow)
13. Cleared. Lands used for agriculture, grazing and urban purposes
14. Water

Hyder Consulting

DAM SITE AMTD 315.3 km

PRECIPICE NATIONAL PARK

TAROOM

0 5km

LEGEND

- Proposed Maximum FSL EL 185
- Alternative FSL EL 182
- Boggomoss locations
- Buildings

NOTES

1. The contours on this drawing have been taken from the 1995 survey.
2. Cadastral background obtained from Department of Natural Resources digital cadastral data base Shire of Taroom
3. Title search information current as July 1995

MAP PREPARED FOR HYDER BY

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QUEENSLAND GOVERNMENT — NATURAL RESOURCES

DAWSON DAM IMPACT ASSESSMENT STUDY

FULL SUPPLY LEVELS 182m and 185m

VEGETATION MAP UNITS

17/10/97

A4-6969083 RID FLORA 1