

Flora and Fauna Communities of the Cooper-Eromanga Basin

**Trevor J. Hobbs, David Armstrong, Dale Wenham,
Scott Howell, Jarrod Spencer, John Maconochie,
Augie Facelli, Rob Brandle, Zoë Bowen and Leah Fitzgerald**



**Government of
South Australia**



Flora and fauna communities of the Cooper-Eromanga Basin

Trevor J. Hobbs¹, David Armstrong¹, Dale Wenham²,
Scott Howell², Jarrod Spencer², John Maconochie¹, Augie Facelli¹,
Rob Brandle¹, Zoë Bowen³ and Leah Fitzgerald⁴

¹Department of Environment, Water and Natural Resources

²Department of the Premier and Cabinet

³Beach Energy Ltd

⁴Santos Ltd

July, 2017

DEWNR Technical report 2017/23

Department of Environment, Water and Natural Resources

GPO Box 1047, Adelaide SA 5001

Telephone National (08) 8463 6946
 International +61 8 8463 6946

Fax National (08) 8463 6999
 International +61 8 8463 6999

Website www.environment.sa.gov.au

Disclaimer

The Department of Environment, Water and Natural Resources and its employees do not warrant or make any representation regarding the use, or results of the use, of the information contained herein as regards to its correctness, accuracy, reliability, currency or otherwise. The Department of Environment, Water and Natural Resources and its employees expressly disclaims all liability or responsibility to any person using the information or advice. Information contained in this document is correct at the time of writing.



This work is licensed under the Creative Commons Attribution 4.0 International License.

To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

© Crown in right of the State of South Australia, through the Department of Environment, Water and Natural Resources 2017

ISBN 978-1-925668-22-3

Preferred way to cite this publication

Hobbs TJ, Armstrong D, Wenham D, Howell S, Spencer J, Maconochie J, Facelli F, Brandle R, Bowen Z & Fitzgerald L (2017). *Flora and fauna communities of the Cooper-Eromanga Basin*, DEWNR Technical report 2017/23, Government of South Australia, Department of Environment, Water and Natural Resources / Department of the Premier and Cabinet, Adelaide.

Download this document at <https://data.environment.sa.gov.au/Content/Publications/DEWNR-TR-2017-23.pdf>

Front Cover: Satellite imagery of the dunefields and stony plains of Cordillo Downs Station, SA (Source: DigitalGlobe 2011)

Inset: Cane-grass and spinifex covered dunefields of the Strzelecki Desert (Source: Dale Wenham 2017)

Foreword

The Department of Environment, Water and Natural Resources (DEWNR) is responsible for the management of the State's natural resources, ranging from policy leadership to on-ground delivery in consultation with government, industry and communities.

High-quality science and effective monitoring provides the foundation for the successful management of our environment and natural resources. This is achieved through undertaking appropriate research, investigations, assessments, monitoring and evaluation.

DEWNR's strong partnerships with educational and research institutions, industries, government agencies, Natural Resources Management Boards and the community ensures that there is continual capacity building across the sector, and that the best skills and expertise are used to inform decision making.

Sandy Pitcher
CHIEF EXECUTIVE
DEPARTMENT OF ENVIRONMENT, WATER AND NATURAL RESOURCES

Acknowledgements

Many thanks to our energy industry collaborators for the provision of biological data from well site assessments and pipeline trench surveys, guidance on environmental requirements of this report, logistic assistance during field surveys, and feedback on the technical report (Trina Jensen & Helen Wood, Senex Energy Ltd). We appreciate the support of a variety of staff across DEWNR: Gavin Baird and Anthony Freebairn (Natural Resources SA Arid Lands) for project support and access to pastoral photopoint datasets; Peter Canty (State Herbarium) for assistance in plant taxonomy; Adam Schutz (DEWNR Native Vegetation Management Unit) for advice on vegetation management; and Tim Herrmann and Giles Forward (DEWNR Sustainable Soils) for helpful soil protection advice.

Thanks to DEWNR Science and Information Group staff for technical and administrative assistance throughout this project, especially Peter Lang for help in plant identifications, Felicity Smith and Helen Owens for guidance in biological databases, vegetation mapping standards and taxonomy, David Thompson and Matt Miles for support with vegetation mapping and geographic information systems, Sharon Gillam for assistance with conservation lists, Nigel Willoughby for advice on R statistical software, Daniel Rogers for scientific advice, Craig Liddicoat for help with developing soil erosion risk metrics, and Katelyn Ryan for assistance in technical report preparation.

We greatly appreciate the efforts of Jeff Foulkes (NCSSA), Craig Neumann and Nerissa Haby (La Trobe University) for their scientific reviews of the final report and mapping products.

Contents

Foreword	iii
Acknowledgements	iv
Summary	viii
1 Introduction	1
1.1 Background	1
1.2 Purpose	2
1.3 Aims and objectives	2
2 Methods	4
2.1 Study area	4
2.2 Environmental data	4
2.2.1 Climate	6
2.2.2 Topography, water and soils	6
2.2.3 Landsat satellite cover data	10
2.2.4 Pastoral grazing	10
2.2.5 Environmental data processing	11
2.3 Vegetation	13
2.3.1 Past vegetation surveys	13
2.3.2 Landscape stratification	13
2.3.3 New vegetation surveys	14
2.4 Vegetation and landscapes	14
2.4.1 Classifying vegetation and landscape types	14
2.4.2 Ecotype descriptions	16
2.4.3 Potential distributions of ecotypes	17
2.5 Biological records	18
2.6 Conservation	18
2.7 Biophysical risks	19
2.7.1 Loss of plant biomass	19
2.7.2 Plant recruitment and regeneration	19
2.7.3 Soil erosion	20
3 Vegetation and landscapes	21
3.1 Mitchell-grass, Bindyi, Bluebush/Fissure-plant clay loam plains or floodplains	26
3.2 Bladder Saltbush, Mitchell-grass, Bindyi clay loam slopes	27
3.3 Mitchell-grass, Bindyi, Plover-daisy clay plains	28
3.4 Bindyi, Mitchell-grass, Desert Glasswort clay undulating hills	29
3.5 Desert Senna, Spiny Saltbush clay plains or loam dunes	30
3.6 Black Bluebush, Low bluebush, Bindyi clay slopes	31
3.7 Bindyi, Buckbush, Bottle-washers sandy slopes or dunes	32
3.8 Desert Senna over Three-awn/Wire-grass, Bindyi loam slopes	33
3.9 Red mulga over Bindyi, Three-awn/Wire-grass, Bindyi loam slopes	34
3.10 Coolibah over Lignum, Bindyi clay loam plains or floodplains	35

3.11	Lignum, Golden Goosefoot over Nardoo clay plains	36
3.12	Coolibah over Lignum, Germander clay loam plains	37
3.13	Bindyi, Goat-head Bindyi, Bristly Love-grass clay loam plains or floodplains	38
3.14	Lignum, Old-man Saltbush, Golden Goosefoot clay or clay loam slopes or floodplains	39
3.15	Bristly Love-grass, Goat-head Bindyi, Bindyi dunefield swales	40
3.16	Nitre-bush, Twinleaf loam slopes	41
3.17	Bare or rarely Cane-grass, Nitre Goosefoot loamy slopes, salt lakes or floodplains	42
3.18	Ray Grass/Couch, Scurf-pea, Desert Nightshade clay loam plains	43
3.19	Coolibah over Flat-sedge, Ray Grass/Couch loam plains	44
3.20	Bindyi, Annual saltbush, Samphire clay plains or floodplains	45
3.21	Mitchell-grass clay slopes	46
3.22	Black Oak over Bindyi sandy slopes	47
3.23	Bindyi, Low Bluebush, Bottle-washers loamy slopes or plains	48
3.24	Sandhill Cane-grass, Three-awn/Wire-grass, Hard Spinifex dunefields	49
3.25	Bindyi, Three-awn/Wire-grass sandy slopes	50
3.26	Umbrella Bush, Sandhill Cane-grass dunefields	51
3.27	Hard Spinifex with Sticky Hop-Bush, Umbrella Bush dunefields	52
3.28	Umbrella Bush over Ruby Saltbush, Bindyi slopes	53
3.29	Wetlands	54
4	Flora and fauna species	58
4.1	Taxonomy	58
4.2	Common flora and fauna species	58
5	Conservation	68
5.1	Bioregions and ecosystems	68
5.2	Conservation-listed flora and fauna	68
6	Biophysical risk	75
6.1	Loss of plant biomass	75
6.2	Plant recruitment and regeneration	75
6.3	Soil erosion	76
6.4	Average risk	76
7	Conclusion	81
8	Appendices	82
A.	Flora species records	82
B.	Fauna species records	107
C.	Flora species subregional conservation status	116
D.	Fauna species subregional conservation status	127
E.	Fauna species records associated with ecotypes	131
9	References	142

List of figures

Figure 1.1.	Location of the study area and bioregions within the Cooper-Eromanga Basin region of South Australia	3
Figure 2.1.	Major land uses of the Cooper-Eromanga Basin region of South Australia	5
Figure 2.2.	Major landform classes of the Cooper-Eromanga Basin region of South Australia	8
Figure 2.3.	Soil types of the Cooper-Eromanga Basin region of South Australia	9
Figure 2.4.	Pastoral livestock grazing intensity in the Cooper-Eromanga Basin region of South Australia	12
Figure 2.5.	Vegetation survey sites in the Cooper-Eromanga Basin region of South Australia	15
Figure 3.1.	Main vegetation and landscape types (i.e. ecotypes) of the Cooper-Eromanga Basin region of South Australia	24
Figure 3.2.	Quick reference guide to the use of summary information on vegetation-landscape ecotypes of the Cooper-Eromanga Basin region of South Australia	25
Figure 3.3.	Wetlands identified from satellite imagery in the Cooper-Eromanga Basin region of South Australia	55
Figure 5.1.	Native flora and fauna taxa richness within vegetation-landscape ecotypes of the Cooper-Eromanga Basin region of South Australia	70
Figure 5.2.	Conservation listed flora and fauna species richness within vegetation-landscape ecotypes of the Cooper-Eromanga Basin region of South Australia	71
Figure 6.1.	Potential risk of biomass loss (red=high risk, blue=low risk) in the Cooper-Eromanga Basin region of South Australia	77
Figure 6.2.	Potential risk of decreased plant recruitment (red=high risk, blue=low risk) due to water-limiting factors in the Cooper-Eromanga Basin region of South Australia	78
Figure 6.3.	Potential risk of soil erosion (maximum of wind or water; red=high risk, blue=low risk) in the Cooper-Eromanga Basin region of South Australia	79
Figure 6.4.	Average biophysical risk from potential biomass loss, plant recruitment and soil erosion factors (red=high risk, blue=low risk) in the Cooper-Eromanga Basin region of South Australia	80

List of tables

Table 2.1	Simplification of slope/relief classes used in this study	7
Table 2.2	Summary of environmental data used in the study	11
Table 2.3	Conversion of field survey cover classes to nominal crown cover estimates used in this study	16
Table 2.4	Plant life form classifications used in this study	17
Table 2.5	Conservation status codes and classifications with national and state legislation	19
Table 3.1.	Vegetation-landscape ecotypes of the Cooper-Eromanga Basin region of South Australia	22
Table 3.2.	Vegetation structure of ecotypes within the Cooper-Eromanga Basin region of South Australia	23
Table 3.3	Wetlands of the Cooper-Eromanga Basin region of South Australia	54
Table 3.4	Conservation-listed vertebrate species records associated with waterbodies and IBRA subregions of the Cooper-Eromanga Basin region of South Australia	56
Table 3.5	Conservation-listed vertebrate species records associated with waterbodies and ecotypes of the Cooper-Eromanga Basin region of South Australia	57
Table 4.1	Common flora species records of the Cooper-Eromanga Basin region of South Australia	59
Table 4.2	Common fauna species records of the Cooper-Eromanga Basin region of South Australia	64
Table 5.1.	The diversity of flora and fauna taxa recorded in the Cooper-Eromanga Basin region of South Australia over the last 50 years, including species listed within national or state conservation legislation	69
Table 5.2.	National or state legislation conservation-status-listed flora and fauna records (last 50 years), by IBRA subregion, in the Cooper-Eromanga Basin region of South Australia	72

Summary

This study describes and maps the native flora and fauna communities of the Cooper-Eromanga Basin region of South Australia. In past decades, regional conservation planning and environmental assessments by natural resource managers and energy industries were constrained by the lack of consistent and spatial information on the biodiversity assets of the region. Prior to this work, vegetation mapping and ecosystem information were unavailable for large portions of the region (54 000 km²), especially within Strzelecki Desert and Cooper Creek channel country. During 2016–17, this study collated biological and environmental information from government and industry sources, identified gaps in existing information, conducted new surveys in priority landscapes, analysed relationships between flora and fauna and their environment, identified dominant ecosystems (i.e. vegetation and landscapes) and their associated flora and fauna species, mapped the distribution of ecosystems, and identified areas with highest risk of disturbance (including conservation-listed species under federal and state legislation).

The new information and spatial tools created by this study significantly improves our understanding regional biodiversity for conservation planning and natural resource management decisions. It facilitates more efficient and scientifically-robust environmental assessments of petroleum/geothermal or pastoral development activities, and vegetation clearance/offset proposals in the region. Future environmental assessment, monitoring and reporting activities under legislative, regulatory and policy requirements can now be based on more reliable information on the flora and fauna communities of the Cooper-Eromanga Basin of South Australia.

1 Introduction

1.1 Background

The Department of the Premier and Cabinet (DPC) in South Australia aims to help industry, business and communities identify and capitalise on opportunities for job creation and economic growth. The DPC Energy Resources Division facilitates outcomes that continue to build South Australia's international profile and strengthen the state's economic prosperity, through sustainable development, best-practice regulation and delivery of energy markets and programs. The division aims to maximise the community's net benefits from the state's ownership of the rights to petroleum and geothermal resources. It is responsible for driving petroleum (oil and gas); greenhouse gas storage and geothermal energy exploration, development and production.

The Department of Environment, Water and Natural Resources (DEWNR) is responsible for the management of the state's natural resources, ranging from policy leadership to on-ground delivery in consultation with government, industry and communities. High-quality science and effective monitoring provides the foundation for the successful management of our environment and natural resources. This is achieved through undertaking appropriate research, investigations, assessments, monitoring and evaluation. DEWNR's strong partnerships with educational and research institutions, industries, government agencies, natural resources management boards and the community ensures that there is continual capacity building across the sector, and that the best skills and expertise are used to inform decision making.

Onshore petroleum, geothermal and gas storage exploration and development in South Australia is administered by the DPC Energy Resources Division (ERD) under the *Petroleum and Geothermal Energy Act 2000* (the PGE Act) and associated *Petroleum and Geothermal Energy Regulations 2013*. The PGE Act licensing and approvals process consists of three stages: 1. Licensing approval; 2. Environmental Impact Report (EIR) and approval of a Statement of Environmental Objectives (SEO); and 3. Site specific activity notification and approval.

During the Stage 2 process, an EIR is prepared, whereby the key information relevant to this project is captured including a description of the environment in particular the physical and biological aspects of the environment in which the proposed regulated activities are to be undertaken. A SEO is then prepared on the basis of an EIR in which it must state the environmental objectives to be achieved in carrying out the regulated activities.

During the Stage 3 process, prior to any regulated activities being undertaken, an environmental assessment is undertaken which identifies site specific management strategies to be implemented by the operator to ensure the objectives of the relevant SEO will be achieved.

SEOs are typically developed for high level activity types to be undertaken within a broad geographic area which often results in high level ecological objectives such as: minimise disturbance to native flora and fauna; avoid the introduction and spread of weeds, exotic pest's, fauna and pathogens; and remediate and rehabilitate operational areas (Eyre *et al.* 2011). DPC determined it would be beneficial to undertake a review of the current monitoring and assessment methods presented within current SEOs to ensure they remain best practice and capture current agreed standards. This process is further to the 5-yearly review of individual SEOs.

Having identified this area for review, ERD commissioned Jacobs in 2015, to develop an ecological monitoring framework for the Cooper-Eromanga Basin region of South Australia. Jacobs reviewed a number of EIR's and SEO's as part of this study and the associated report (Jacobs 2015) identified that the lack of an ecological monitoring framework results in a risk of inadequate monitoring and assessment of ecological impacts, and inconsistent collection of data between licensee's and respective projects which results in difficulties for data comparison or amalgamation. The report also noted a lack of available ecological data for proponents to draw upon, and subsequently recommended a study be undertaken to describe and assess the habitat value and resilience of key vegetation communities in the Cooper-Eromanga Basin.

1.2 Purpose

DEWNR affirms this statement of a need for better ecological information on which to make sustainable development and management decisions within the region. DEWNR's Science and Information Group (SIG) has a key role within the Government of South Australia to provide fit-for-purpose ecological knowledge for the state's environmental agencies, natural resource managers, industries and the community. The gaps in this information were identified by DEWNR and DPC ERD and plans were developed to undertake a study in 2016–17 to characterise flora and fauna communities within the Cooper-Eromanga Basin of South Australia (Figure 1.1). A significant gap in this information is the absence of historic vegetation mapping for a large portion (54,000 km²) of the region.

This study focuses on developing a better understanding of the natural environments, vegetation and fauna communities, high value natural assets (e.g. *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* and *National Parks and Wildlife (NPW) Act 1972* conservation listed flora, fauna and communities) and their spatial locations across the region. Results from the study can be used to inform the management of vegetation and natural assets of the region (i.e. regulations and policies under the *Native Vegetation Act 1991*, *Natural Resources Management Act 2004*). Future decisions on licensing and approvals of energy industry activities can be based on consistent and high-quality information on the ecosystems and their resilience across the region.

The project collates biological and environmental information, analyses associations between flora and fauna species and their environments, and generates maps of the distribution of dominant ecosystems (i.e. vegetation communities x landscapes) and their resilience to disturbance across the study area. Quantification of flora and fauna species and their occurrence within ecosystems provides benchmarks for future site assessments in the region. The project utilises expertise and data across several scientific disciplines: arid lands ecology, biology, conservation, field survey, landscape/soil science, energy industry, data management, remote sensing, spatial modelling and geographic information system applications. It draws together environmental scientists and natural resource managers from across many divisions and units of the DEWNR and DPC into a government partnership with unified approach to managing sustainable resources use of the Cooper-Eromanga Basin region.

1.3 Aims and objectives

This study aims to ensure better spatial information and data on flora and fauna is readily available to environmental agencies, the energy industry regulator, energy industries, pastoral industries and the community. The development and delivery of better ecological data for all stakeholders in the Cooper-Eromanga Basin region of South Australia are founded on key objectives to:

1. Identify gaps in historic vegetation surveys of the region
2. Undertake new vegetation surveys
3. Describe the dominant ecosystems (i.e. vegetation communities x landscapes ecotypes)
4. Map the distribution of dominant ecosystems
5. Provide ecological summaries and statistics for vegetation communities, landscapes, flora and fauna species, and bioregions/subregions
6. Provide lists of conservation listed flora and fauna (EPBC Act, SA NPW Act) for the region and indicators of their occurrence within ecosystems and bioregions/subregions
7. Provide indicators of ecosystem and landscape resilience to physical disturbance based on vegetation biomass, recruitment opportunities and soil erosion risk
8. Map indicators of ecosystem and landscape resilience to physical disturbance
9. Provide spatial tools to enable greater access to biological and environment information in the region.

Flora and Fauna Cooper-Eromanga

- Cooper Basin (SA)
- Eromanga Basin (SA)
- Bioregion
- Bioregion (subregion)
- / / Study area
- Study area (central)
- Unmapped vegetation
- Lakes
- Watercourses



Government of
South Australia

0 12.5 25 50 75 100
Kms

Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

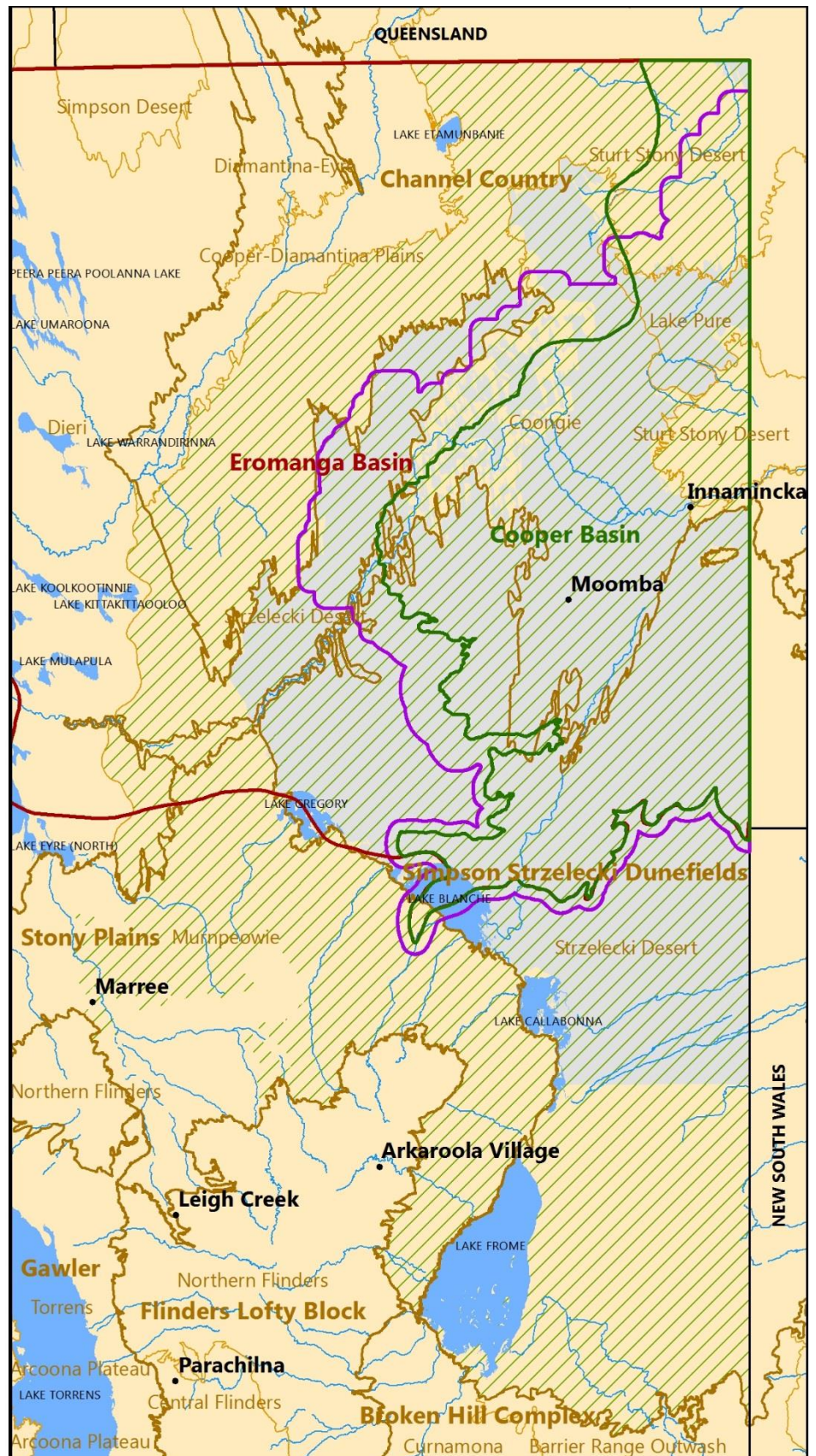


Figure 1.1. Location of the study area and bioregions within the Cooper-Eromanga Basin region of South Australia

2 Methods

2.1 Study area

The study area consists of the whole of the Cooper Basin within South Australia and extends to include parts of the Eromanga Basin to the west of Cooper Basin without existing DEWNR vegetation mapping (Figure 1.1). The study area is located within the Channel Country, Simpson Strzelecki Dunefields and Stony Plains bioregions (IBRA Version 7, DotE 2012), and includes five IBRA subregions (i.e. Coongie, Lake Pure, Sturt Stony Desert, Strzelecki Desert, Murnpeowie). The study area is defined by IBRA subregions (or IBRA associations) which intersect the central study area or landscapes where historic vegetation mapping is absent.

Pastoral grazing of livestock is the dominant land use within the region (Figure 2.1) with other large areas dedicated as conservation or regional reserves. Conservation areas include a wetland of international importance (i.e. Coongie Lakes) listed under the Ramsar Convention in 1985. Regional reserves also provide significant conservation values in the region but allow other heavily regulated uses within portions of these reserves (e.g. pastoral grazing, petroleum and thermal energy extraction). Petroleum/thermal energy industries, and their associated infrastructure (e.g. wells and pipelines) occur with pastoral grazing leases and regional reserves, predominantly within the Cooper Basin in the central parts of the study area.

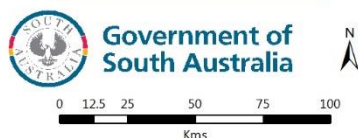
2.2 Environmental data

The location and composition of different flora and fauna communities in the arid zone is influenced by complex interactions between geology, topography, soil properties, climate, water redistribution and evolutionary history (e.g. Morton *et al.* 2011). A broad-scale (10s to 100s km²) and coarse classification of geomorphology and climate is captured within the Interim Biogeographic Regions of Australia (IBRA) classification and mapped uniformly across the Australian continent. Historically, land system (and land unit) mapping was undertaken within the pastoral regions of the state to help identify landscapes and vegetation types that are relatively homogenous from the perspective of their value for livestock grazing (Laut *et al.* 1977). However, these mapping products were incomplete across the arid zone or out-of-date, and unsuitable for contemporary use. In recent years, Australia-wide higher resolution (~1 ha to 1 km²) spatial data representing climate, topography, soils and water redistribution patterns have become available. These new, nationally-consistent data have allowed greater spatial discrimination of environments which influence the distribution and composition of vegetation communities across the arid zone of Australia. In this project, these new data were collated and synthesised to support the classification of ecosystems in the region (at multiple levels) and assess their influence on the distribution of flora and fauna communities.

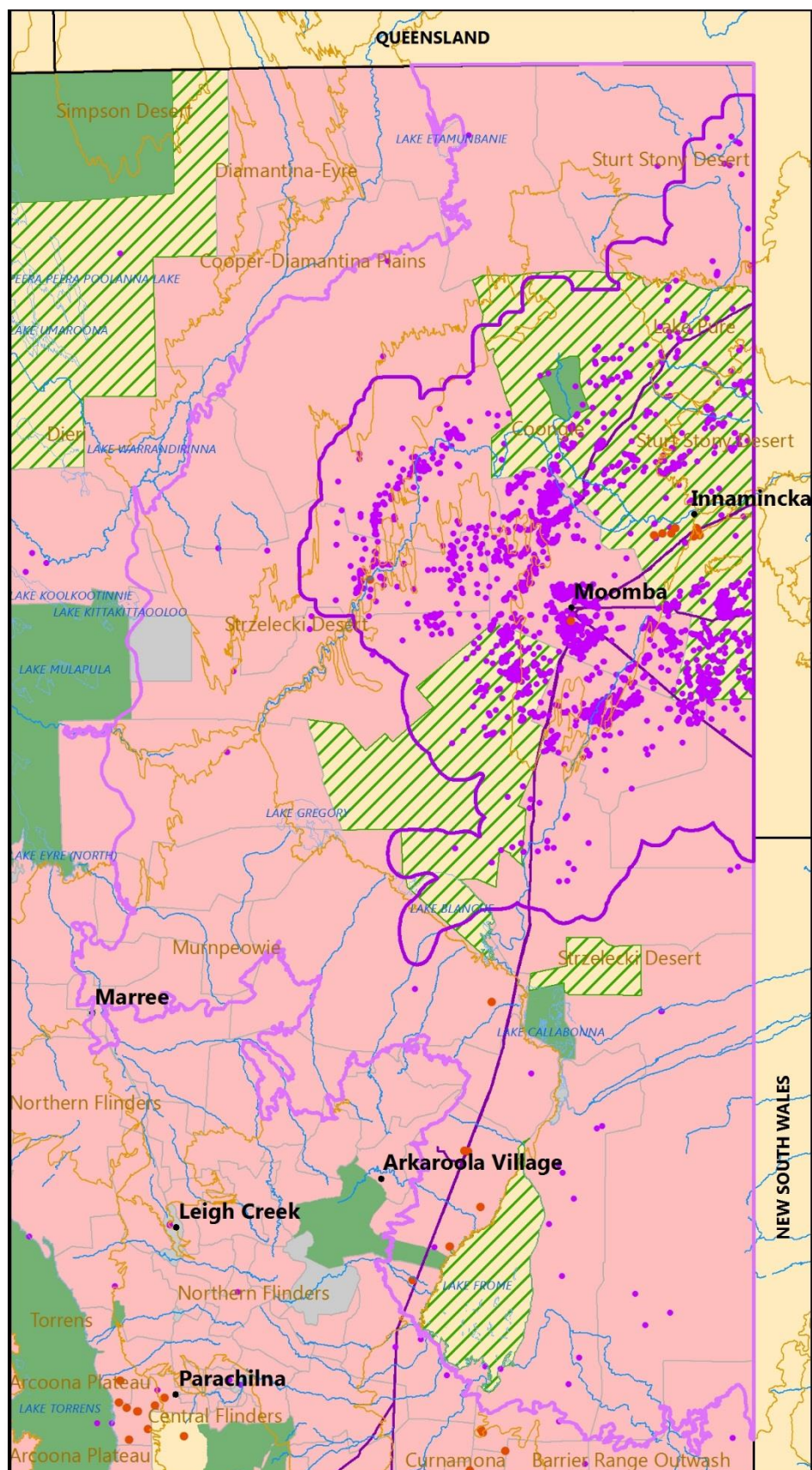
The environmental data selected for this study are a subset used by DEWNR SIG researchers to understand the distribution of ecosystems and associated species in South Australia (e.g. Hobbs *et al.* 2015, Bonifacio *et al.* 2016, Hobbs *et al.* 2017). Topography, soils, climate, water redistribution and vegetation cover have been shown by these studies to influence the distribution and function of South Australian ecosystems, species and primary productivity. The spatial extent of these environmental data are constrained to a rectangular area -25.5 to -31.5 °S and 137.5 to 141.5 °E (i.e. ~study area plus 50 km beyond the SA border).

Landuse

-



Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017



DEWNR Technical report 2017/23

2.2.1 Climate

While other SA studies have found that several bioclimatic variables can be useful in predicting the likely distribution of ecosystems and species over large geographic areas (e.g. 11 climate variables in rangeland ecosystems, Hobbs *et al.* 2015). At smaller scales (e.g. Cooper-Eromanga Basin study area) many bioclimatic variables (e.g. Hijmans *et al.* 2005; Xu & Hutchison 2013) become highly auto correlated and redundant when used in spatial analyses. For this study, the available suite of bioclimatic variables were constrained to mean annual rainfall, mean annual temperature and mean annual potential evaporation as previous studies indicated they often have a strongest influence on species distributions. Climate in the region can also be described in a single simplified "Aridity" index using rainfall and evaporation data.

Mean annual rainfall (MAR)

Mean annual rainfall in the region is 179 mm/year with a spatial range of 136–490 mm/year (WorldClim 1950–2000; Hijmans *et al.* 2005).

Mean annual temperature (MAT)

Mean annual temperature in the study area is 21.1 °C with a spatial range of 14.3–23.2 °C (WorldClim 1950–2000; Hijmans *et al.* 2005).

Mean annual potential evaporation (MAPE)

Mean annual potential evaporation is 3203 mm/year with a spatial range of 2169–3524 mm/year (ANUclim 1976–2005; Hutchinson *et al.* 2014).

Mean annual aridity (MAA)

Mean annual aridity index (i.e. rainfall/potential evaporation; MAR/MAPE) in the study area is 0.057 with a spatial range of 0.039–0.226.

2.2.2 Topography, water and soils

To map environmental features and estimate some ecological functions, the 'Digital Soils and Landscape Grid of Australia' (CSIRO 2015) provides access to topographic and soil spatial datasets that can quantify the distribution of landscape types, vegetation communities, ecological functions and associated fauna. Layers include landforms, soil characteristics and topographic features that influence water–redistribution and primary productivity across landscapes (CSIRO 2015). These spatial layers contain nationally consistent data (90m resolution) based on digital elevation models (DEM) data collected by NASA Space Shuttle missions NASA (2014).

To assist in landscape stratification for analysis and design of vegetation surveys, or provide insight into the likely distribution of flora and fauna communities, a subset of this data has been used in this project:

- Slope/relief class - landform classifications (Speight 2009)
- Topographic wetness index at local (30 m) and landscape (500 m) scales
- Soil depth
- Soil texture - multi-layer in upper 1 m of the soil profile
- Soil pH - soil acidity or alkalinity, multi-layer in upper 1 m of the soil profile

Landforms (slope/relief classes)

The Speight (2009) classification system identifies 38 potential landform classes and these have been simplified to five classes following Table 2.1.

Table 2.1 Simplification of slope/relief classes used in this study

Strata ID	General description	Slope/relief class
0	water bodies or lakes	0
1	level plains	11 to 14
2	gently inclined slopes	21 to 24
3	undulating hills	31 to 35
4	rolling hills to ranges	41 to 76

Topographic wetness index (TWI)

TWI is a measure of soil wetness resulting from local water redistribution patterns (~3 km maximum radius), lower values represent drier water-shedding areas and higher values represent wetter run-on or flood out areas (CSIRO 2015). It does not represent water flowing into landscapes from major drainage lines where the catchment area is beyond the local 25 km² area.

Landform index (TWI 500m)

The landform index (LI) is derived from mean topographic wetness index (TWI) within a 500 m radius of each grid cell. It provides a continuous and smoothed surrogate for broad topographic landform classes (i.e. low TWI 500 m represents hills and ranges and high TWI 500 m represents drainage lines and floodplains).

Soil depth (D)

Soil depth influences the root zone penetration of plant species, plant water balance and vegetation composition (i.e. species and structure). Depth can also provide a surrogate for geological influences on vegetation. The 'Digital Soils and Landscape Grid of Australia' (CSIRO 2015) provides information on soil depth (constrained to 1.5m maximum) and other soil attributes at pre-defined depth intervals (i.e. 0–5 cm, 5–15 cm, 15–30 cm, 30–60 cm, 60–100 cm, 100–150 cm). The average estimated is 0.93 m and ranges between 0.3 for shallow soils to 1.3 for deep soils in the study area.

Soil texture index (STI, "sand index")

To differentiate functional soil types (e.g. heavy clays through to deep sands) data on the proportion of sand in the 0–15 cm, 15–30 cm, 30–60 cm, 60–100 cm soil profiles (CSIRO 2015) was used to create a continuous soil texture index for the upper 1m soil profile (rather than many discrete soil group classifications) using the formula:

$$STI_{0-100cm} = Sand_{0-15cm} \times Sand_{15-30cm} \times Sand_{30-60cm} \times Sand_{60-100cm}$$

The index is weighted towards higher proportions of sand in uppermost soil layers (e.g. 0–15 cm layer represent 15% of the soil profile but contributes 25% of the index weight) which provides an ecological surrogate for increased rainfall absorption and lower runoff values from deeper sandy soils. The continuous STI data ranges between 0.01 for deep clay soils to 0.73 for deep sands in the study area.

Soil pH (acidity/alkalinity)

The average pH of soils for the upper 1 m soil profile was calculated from pH data (CSIRO 2015) in the 0–15 cm, 15–30 cm, 30–60 cm, 60–100 cm soil profiles using the formula:

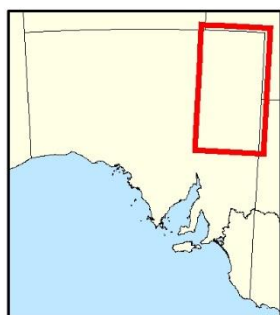
$$pH_{0-100cm} = (pH_{0-15cm} + pH_{15-30cm} + pH_{30-60cm} + pH_{60-100cm}) / 4$$

The index is slightly weighted by the pH values in the uppermost soil layers (e.g. 0–15 cm layer represent 15% of the soil profile but contributes 25% of the index weight) to reflect its likely influence on plant species and the typically higher proportions of plant roots in upper soil layers. The continuous Soil pH data ranges between 5.1 for acidic soils to 7.8 for alkaline soils in the study area.

Flora and Fauna Cooper-Eromanga

Landforms

-  Lakes
-  Level plains
-  Gently inclined slopes
-  Undulating hills
-  Rolling hills to ranges
-  Study area (central)
-  Study area (outer)
-  Bioregion (subregion)
-  Lakes
-  Watercourses



Government of
South Australia

0 12.5 25 50 75 100
Kms

Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

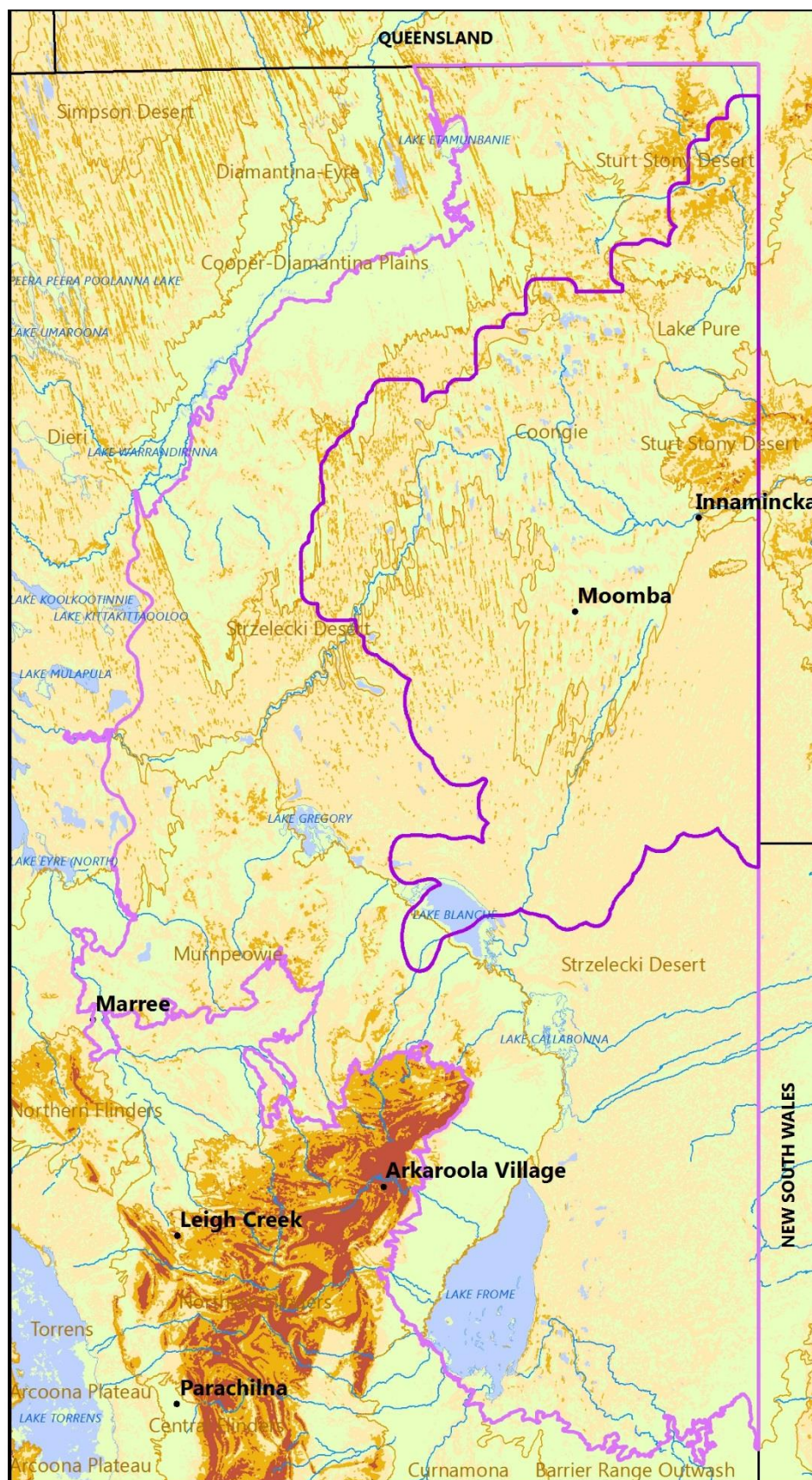


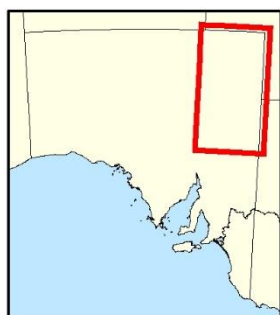
Figure 2.2. Major landform classes of the Cooper-Eromanga Basin region of South Australia

Flora and Fauna Cooper-Eromanga

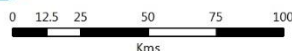
Soil type



- Study area (central)
- Study area (outer)
- Bioregion (subregion)
- Lakes
- Watercourses



**Government of
South Australia**



Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

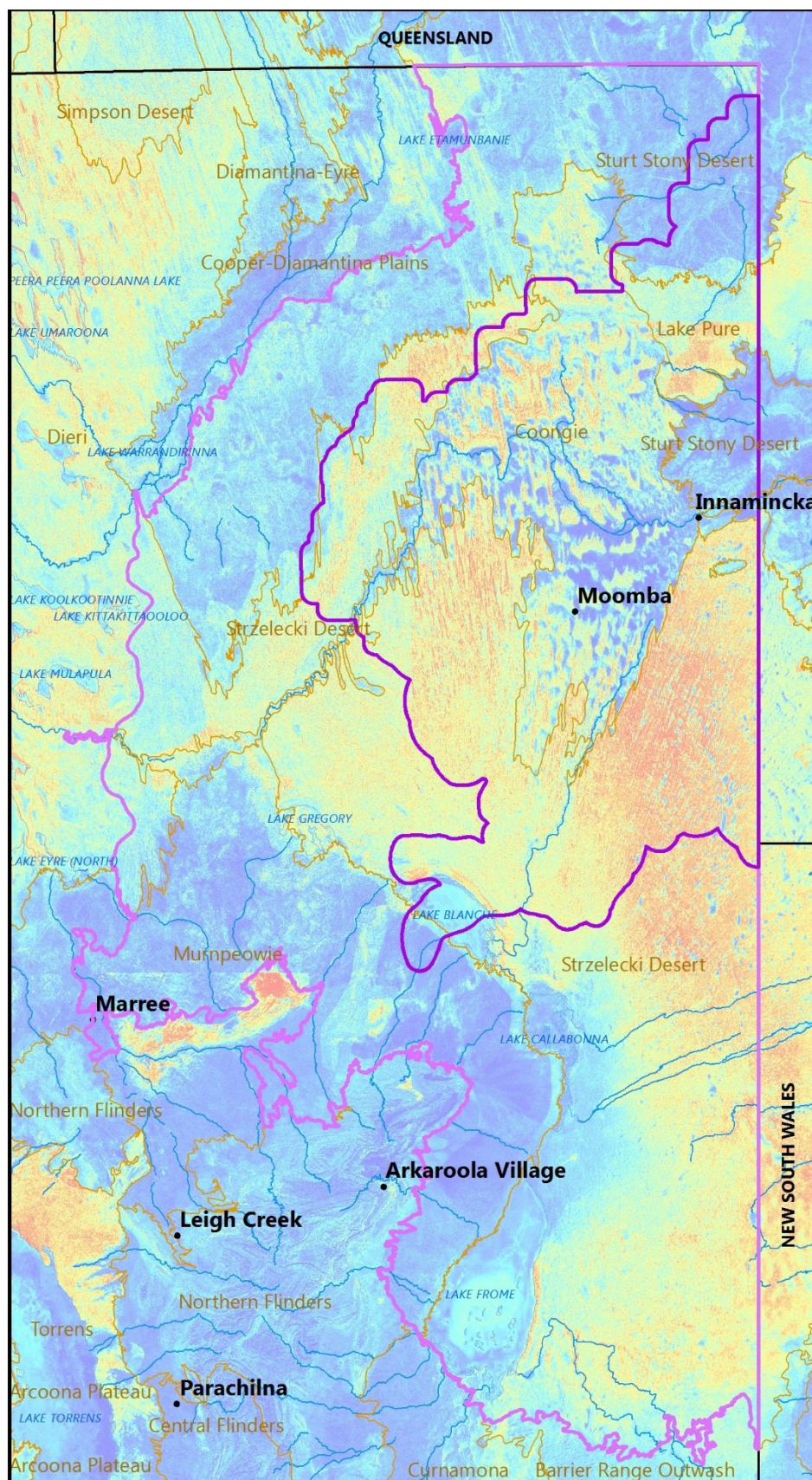


Figure 2.3. Soil types of the Cooper-Eromanga Basin region of South Australia

2.2.3 Landsat satellite cover data

Water observations from space (WOfS)

The occurrence of water covering landscapes is readily identified by sensors on the Landsat satellite. Landsat passes over the land with a 16 day return time and captures high resolution (30 m) data. Geoscience Australia (2015) has collated all imagery between 1987–2015, and calculated the percent of time any 30 m cell has water covering it. While the return frequency of Landsat means that some short-term flooding events are not captured in this data, it does identify persistence or frequently water-covered areas. The WOfS data is useful for floodplain and waterbody mapping, and identification of water dependent ecosystems.

Woody vegetation cover (WVC)

Auscover (2016) has created Australia-wide estimates of persistent green cover based on annual dry season Landsat imagery from 2000–10. The resulting product “Woody vegetation cover” (30 m resolution) provides a surrogate for native vegetation mapping but also provides estimates foliage-projected-cover (Auscover 2016, Gill *et al.* 2017) that can provide indicators of primary productivity, vegetation community types, vegetation health and species preferences.

Land cover change (LCC)

In 2016–17, DEWNR and the Arthur Rylah Institute (ARI, Victoria) constructed models of the likely occurrence of a variety of coarse land cover types using Landsat 30 m data for 5-yearly periodic environmental reporting. Each model represents the likelihood of occurrence for each cover type over each 5-year period (i.e. “epoch”). These “land cover by epoch” models (Version 3) commence in the mid-1980s and continue through to 2015. Maximum-likelihood classification analyses of different cover types within each epoch are used to identify the most “typical” cover type at each 30 m grid location for each epoch. Due to the timing of the majority of historic vegetation surveys, and to reduce the influence of the “Millennium Drought”, cover type models for the 1995 to 2000 epoch was chosen for this study. A subset of these models, with higher relevance in the study area, were chosen to assist in mapping ecotypes of the region (i.e. Landsat data with “Band” prefix). LCC models represent the likelihood of occurrence of: water; saline lakes; sand; saltpan; bare ground, trees (native); shrublands (native); herbaceous wetland (native); herbaceous dryland (native); grassland or pasture (native); and hummock grassland.

2.2.4 Pastoral grazing

The intensity of livestock grazing can influence vegetation structure and composition. These impacts tend to be greatest near “pastoral waterpoints”, such as permanent and near-permanent natural waterholes, or artificial waters (i.e. bores, tanks, troughs, dams). Impacts tend to diminish with distance from these waterpoints, constraints to livestock movement (e.g. slopes, hills) or be prevented by fences or very steep slopes/cliffs.

Pastoral infrastructure waterpoint data and near permanent waterholes (>50% of time) identified using Water Observations from Space (WOfS) satellite data were compiled by Hobbs *et al.* (2015) to provide an updated “pastoral waters” coverage across all South Australian pastoral lands. Potential livestock movements and intensity estimates were calculated using distance from pastoral waters, topographic slope-based modifiers to livestock movement energy activity costs, and fence line barriers. Livestock movement energy cost distances from pastoral waters values (i.e. metres, flat surface equivalent, m-fse), were mapped across the region and capped at maximum 32 km for areas very remote from waters or protected by fencing. These estimates of potential grazing gradient impacts on vegetation or biological communities permits comparisons between sites under different level of grazing intensity, and allow the identification of sites that are likely to exist in a more natural state (James *et al.* 1999, Landsberg *et al.* 1999).

2.2.5 Environmental data processing

All gridded environmental data was resampled to a consistent resolution (i.e. 30 m) and map coordinate system (i.e. WGC 1984; maximum extent -25.5 to -31.5 °S, 137.5 to 141.5 °E), and smoothed using 3 x 3 mean grid filter prior to analyses and mapping. A summary for these data, and their use within this study, can be found in Table 2.2.

Table 2.2 Summary of environmental data used in the study

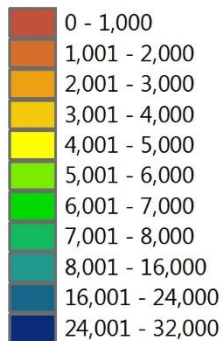
Environmental data	Mean	Min.	Max.		Strata						Use#
					Class1	Class2	Class3	Class4	Class5		
Bioregion											
IBRA subregion	-	-	-		Coongie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murnpeowie		s
Climate											
Mean annual rainfall, MAR (mm/year)	179	136	490	arid	136-165	165-175	175-185	185-195	195-490	dry	c,d
Mean annual temperature, MAT (°C)	211	143	232	mild	14.3-19.5	19.5-20.5	20.5-21.5	21.5-22.5	22.5-23.2	hot	c,d
Mean annual potential evaporation, MAPE (mm/year)	3203	2169	3524	dry	2169-2850	2850-3050	3050-3250	3250-3450	3450-3524	very dry	
Mean annual aridity, MAA (index)	0.057	0.039	0.226	arid	0.039-0.045	0.045-0.05	0.05-0.055	0.055-0.06	0.06-0.226	semi-arid	
Topography, water and soils											
Landform class (categorical)	-	-	-	lakes	0	11-14	21-24	31-35	41-76	hills	
Topographic wetness index, TWI (local)	10	3.7	21.8	runoff	3.7-8.3	8.3-9.7	9.7-11	11-12.5	12.5-21.8	runon	c,d
Landform index, TWI 500m radius (landscape)	10	5.6	17.7	hills	5.6-8.5	8.5-9.5	9.5-10.5	10.5-11.5	11.5-17.7	plains	c,d
Soil depth, D (m)	0.93	0.3	1.3	shallow	0.3-0.8	0.8-0.9	0.9-1	1-1.1	1.1-1.3	deep	c
Soil texture index, STI (sand index)	0.2	0	0.73	clay	0-0.1	0.1-0.17	0.17-0.25	0.25-0.35	0.35-0.73	sand	s,c,d
Soil pH (acidity/alkalinity)	6.7	5.1	7.8	acid	5.1-6.6	6.6-6.8	6.8-7	7-7.2	7.2-7.8	alkaline	c,d
Soil erodibility index	0.31	0	1	stable	0-0.1	0.1-0.2	0.2-0.33	0.33-0.5	0.5-1	erosive	r
Water and vegetation cover											
Water observations from space, WOfS Landsat (%)	1	0	100	dryland	0-1	1-10	10-25	25-50	50-100	wetland	c,d,r
Woody vegetation cover, WVC Landsat (%)	1	0	93	sparse	0-1	1-5	5-10	10-15	15-93	dense	c,d
Pastoral grazing gradients											
Pastoral grazing movement cost (flat km equivalents)	11	0	32		0-3	3-5	5-8	8-16	>16		s
Land cover change (LCC)											
Cover types, Landsat 1995 to 2000 epoch (% likelihood)	water, saline lakes, sand, saltpan, bare ground, trees (native), shrublands (native), herbaceous wetland (native), herbaceous dryland (native), grassland or pasture (native), hummock grassland										d

s=stratification or survey site selection; c=cluster analysis; d=distribution modelling; r=risk analysis

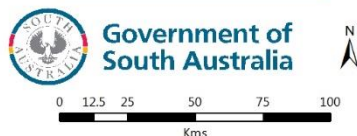
Flora and Fauna Cooper-Eromanga

Pastoral grazing gradient

Movement cost (flat metre equivalents)



- Study area (central)
- Study area (outer)
- Bioregion (subregion)
- Lakes
- Watercourses



Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

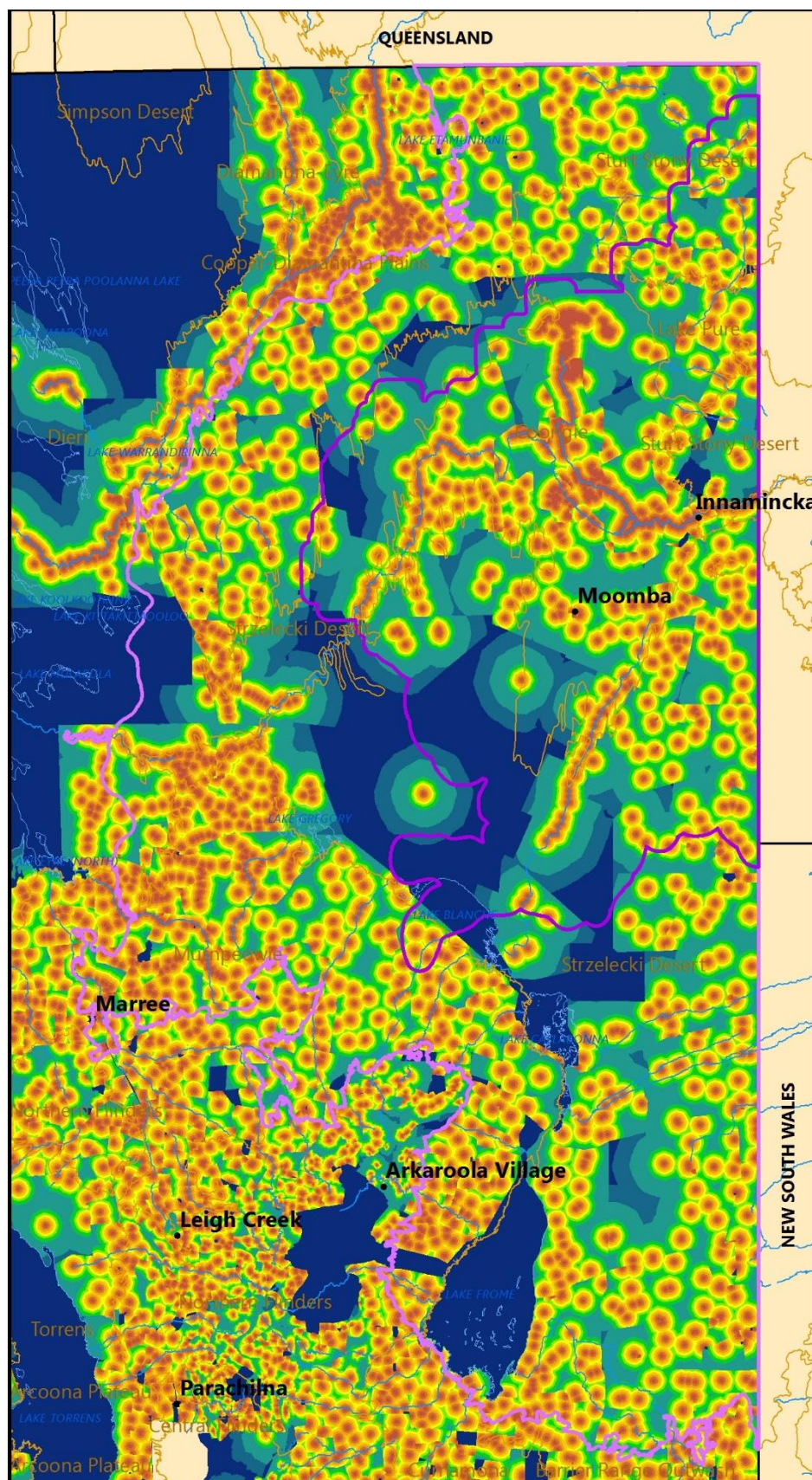


Figure 2.4. Pastoral livestock grazing intensity in the Cooper-Eromanga Basin region of South Australia

2.3 Vegetation

The location and composition of different vegetation communities in the arid zone is partially documented by a variety of mapping products, vegetation descriptions and survey datasets (Laut *et al.* 1977, Pisanu 2010). These data are not consistent or complete across the entire region and often contain insufficient detail useful for routine assessments of biological values. South Australian floristic and structural vegetation communities have been mapped across the majority of the state (e.g. SA Vegetation, NatureMaps) and these descriptions conform to the National Vegetation Information System (NVIS) framework Level VI classification (Australian Government 2016). Vegetation community extent and type have historically been interpreted from aerial photography or Landsat TM imagery at a 1:10 000 to 1:250 000 resolution, with limited ground-truthing in arid regions. Pisanu (2010) recognised limitations of this data, including specific issues with relevance to the north-east of the state: 1. incomplete mapping in the Strzelecki Desert region (see Figure 1.1); 2. some communities are difficult to interpret from available imagery (e.g. native grasslands and low shrublands); and 3. communities are mapped at a reasonably coarse resolution unlikely to realistically represent narrow linear vegetation (e.g. creek lines, dune/swale systems).

2.3.1 Past vegetation surveys

Parts of the study area were historically targeted by DEWNR for biological surveys using a systematic technique (i.e. "Biological Surveys of South Australia"; Heard & Channon 1997, DEWNR 2017). These surveys were focused on the Cooper Creek area (Mollenmans *et al.* 1984, Reid & Gillen 1988, Gillen & Drewien 1993), Olary Plains (Playfair & Robinson 1997), Stony Deserts (Brandle 1998, Canty & Brandle 2008), Flinders Ranges (Brandle 2001) and Marqualpie dunefields (Neagle & Armstrong 2010). At each survey site (Figure 2.5), detailed information was collected on plant species, life form and cover/abundance (i.e. modified Braun-Blanquet scale), and collected by experienced botanists. The data were stored in the Biological Databases of SA (BDBSA), and the scientific names were periodically updated as taxonomic changes occur. The Biological Surveys of South Australia provide a valuable resource that can be used to develop a vegetation-landscape ecotype map for the study area. Floristic data from Biological Surveys of South Australia sites were extracted from the BDBSA in April 2017 (i.e. "DEWNR BDBSA Flora").

Under the *Pastoral Land Management and Conservation Act 1989*, DEWNR conducts routine inspections and vegetation assessments on pastoral leases across the state (DENR 2011). Long-term vegetation and land condition monitoring occurs every 14 years at "photopoint" sites located with each pastoral paddock at ~3 km from waterpoints (i.e. "DEWNR Pastoral photopoints" Figure 2.5). At each site, each plant species is recorded and their vegetative cover estimated using a Crown Separation Ratio (CSR) method.

Environmental assessments made by the energy industry prior to commencing petroleum well developments typically include vegetation descriptions and site photographs. These assessments provide an additional source of information on vegetation communities in the region.

2.3.2 Landscape stratification

The study area was stratified by five IBRA subregions (i.e. Coongie, Lake Pure, Murnpeowie, Strzelecki Desert, Sturt Stony Desert) and three soil type classes (i.e. clays, loams, sands), and the area of each strata calculated. The number of DEWNR BDBSA Flora surveys or Pastoral photopoint assessments were tallied in each IBRA-soil stratum, and the proportion of sites per square kilometer in each stratum calculated to indicate which strata are currently under-represented by past surveys.

The location of energy industry environmental assessment sites (i.e. "Petroleum wells") were reviewed to identify which assessment reports could be used to provide vegetation data to supplement the historic DEWNR biological and pastoral vegetation survey data. Environmental assessment sites located within 5 km of pastoral waterpoints were excluded from selections and prioritised by IBRA-soil strata without adequate survey data. One-hundred and six assessment site reports and photos were summarised by species, lifeform and cover abundance (i.e. modified Braun-Blanquet scale; Figure 2.5).

2.3.3 New vegetation surveys

The coverage of historic DEWNR surveys (i.e. BDBSA Flora surveys, Pastoral photopoint assessments) and energy industry environmental assessments (i.e. Petroleum wells) were summarised for each IBRA-soil stratum. Potential new sites were identified within under-represented IBRA-soil strata. These sites were typically located >5 km from pastoral waterpoints and 5 km or more from other vegetation survey sites (i.e. historic or new). Geographic information systems (GIS) and satellite imagery were used to assist in the accurate location of new sites and ensure consistency in vegetation types within 100 m (or greater) radius of each site centre. Sites were located 200 m from existing roads to minimize roadside edge effects and enable easy walk-in access to each site. Precise coordinates of all survey sites were uploaded to Global Position System (GPS) devices to facilitate precise navigation to targeted sites.

One-hundred and twenty-three new DEWNR vegetation sites were surveyed between March and May 2017 (i.e. "DEWNR Surveys 2017", Figure 2.5) following protocols consistent with historic DEWNR biological surveys (Heard & Channon 1997, DEWNR 2017). During these surveys, the life form and cover/abundance (i.e. modified Braun-Blanquet scale) of each species was recorded. Survey efforts were focused on perennial (i.e. tree and shrubs), semi-perennial (e.g. bindyi) or persistent annual (e.g. wire-grass) species. Representative plant specimens or photographs were taken for professional botanical identification where plant taxonomy was unknown or unclear. At each site, photograph(s) were taken representing the vegetation and landscape of that location.

Geographic information systems (GIS) and satellite imagery were used to identify additional sites, devoid of vegetation, to provide records of bare and saline landscapes (i.e. "DEWNR Salt lakes") not represented by other vegetation surveys (Figure 2.5)

2.4 Vegetation and landscapes

2.4.1 Classifying vegetation and landscape types

Cluster analysis is a method for determining the degree of similarity between survey sites based on vegetation composition and/or environmental attributes. Prior to analyses, individual flora taxa were grouped at the species level (i.e. lumping subspecies and variants to binomial species levels; e.g. *Senna artemisioides* ssp. *filifolia* > *Senna artemisioides*). Within-genus groupings were also created for individual species that are closely related, difficult to separate taxonomically, or similar in ecological function based on life form and longevity characteristics (e.g. bindyi *Sclerolaena* sp., semi-annual saltbush *Atriplex* sp. "low"). Very short-lived and non-persistent annual species, and species <5 observations were excluded from the "Cluster species" dataset. The total number of "Cluster species" taxa across all sites was 375.

Cover abundance scores (CA, i.e. modified Braun-Blanquet scale) and crown separation ratios (CSR, i.e. pastoral photopoint surveys) were converted to nominal cover estimates for each record (Table 2.3). For each site (and ignoring life form classes) the sum of cover estimates (%) for each "Cluster species" was calculated (capped at a maximum value of 100%). To improve analytical power to discriminate between low cover values (e.g. 1%) and absence data (0%) the Cluster species data were transformed by adding 25% to all records where the cover value was $\geq 0.5\%$, with resulting values capped to a maximum of 100%.

Environmental data used in site cluster analyses (i.e. 9 variables, see Table 2.2) were rescaled to values between 0-100 (i.e. consistent with vegetation cover scales) to reduce biases in cluster analyses. The environmental data were linearly rescaled using each site value within the observed range of values for each environmental variable within the region (i.e. -25.5 to -31.5 °S and 137.5 to 141.5 °E).

Flora and Fauna Cooper-Eromanga

Vegetation surveys

- DEWNR BDBSA Flora
- DEWNR Pastoral photopoints
- DSD Petroleum wells
- DEWNR Salt lakes
- DEWNR Surveys 2017
- Study area (central)
- Study area (outer)
- Bioregion (subregion)
- Lakes
- Watercourses



Government of
South Australia

0 12.5 25 50 75 100
Kms

Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

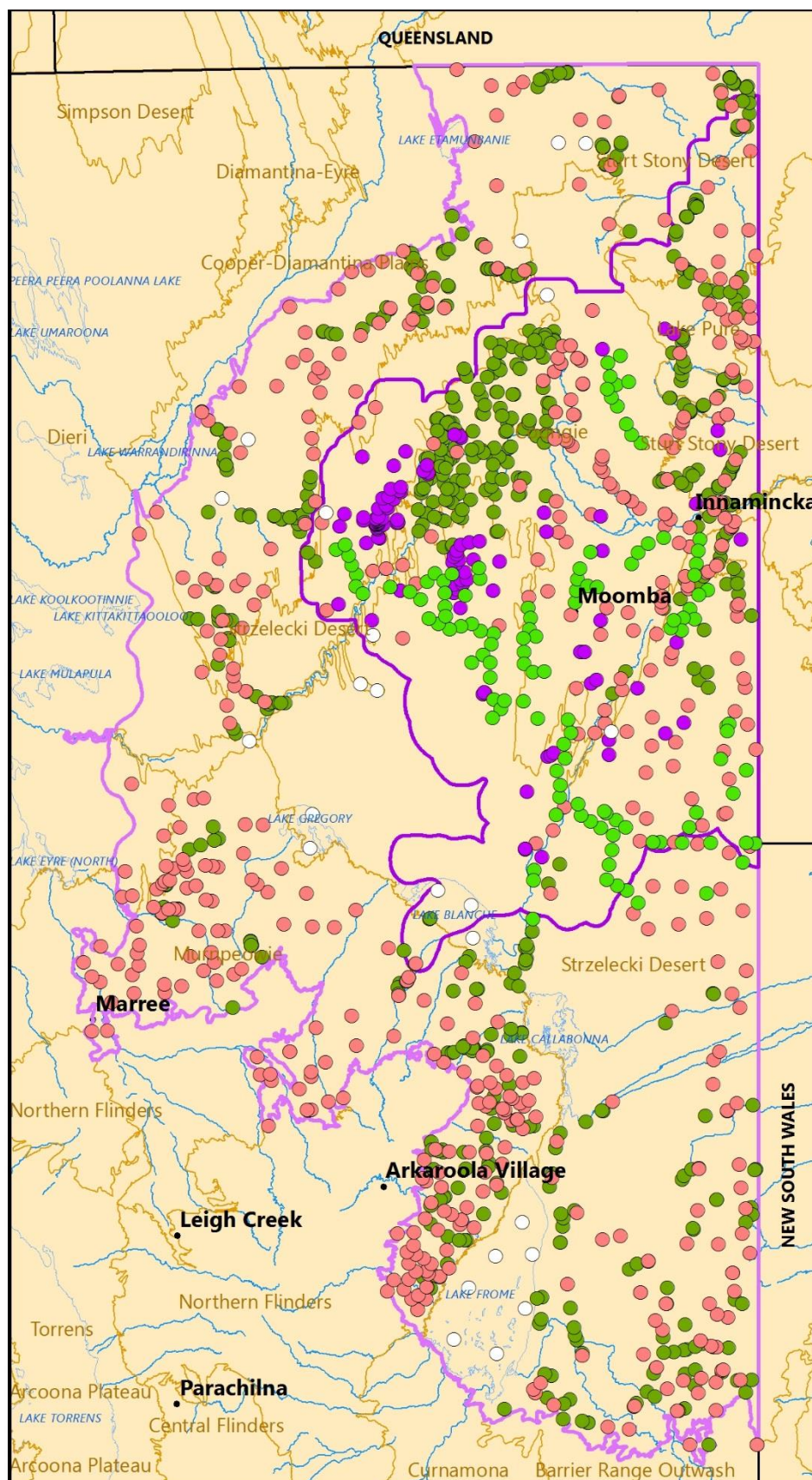


Figure 2.5. Vegetation survey sites in the Cooper-Eromanga Basin region of South Australia

Table 2.3 Conversion of field survey cover classes to nominal crown cover estimates used in this study

Biological survey Cover abundance (CA)	Cover (%)	Pastoral survey Crown separation ratio (CSR)	Cover (%)
N - not many, 1–10 individuals	1.0	0 - recorded but CSR not estimated	0.5
T - sparsely or very sparsely present; cover very small (less than 5%)	2.5	1 - present <12 plants in 200 m radii	0.6
1 - plentiful but of small cover (less than 5%)	2.5	2 - isolated clumps >20 CSR, clumps of two to five woody plants 200 m further apart	2.5
2 - any number of individuals covering 5–25% of the area	15.0	3 - isolated plants >20 CSR, trees >100 m apart	2.5
3 - any number of individuals covering 25–50% of the area	37.5	4 - very sparse 6–20 CSR, crowns well separated	7.7
4 - any number of individuals covering 50–75% of the area	62.5	5 - sparse 1–5 CSR, crowns clearly separated	33.3
5 - covering more than 75% of the area	87.5	6 - mid-dense 0–0.9 CSR crowns touching to slightly separated	85.0
		7 - closed or dense crowns touching to overlapping	99.0

Available vegetation survey and environmental data for 1390 unique sites within the study region were analysed using R statistical software (Version 3.3.2, R Core Development Team 2017; www.r-project.org). Between-site dissimilarities were calculated using the 'vegan' package and 'Bray' distance function (Oksanen *et al.* 2017) in 384 dimensions (i.e. 375 cluster species + 9 environmental variables). Sites were then grouped using in a hierarchical cluster analysis using the 'stats' package and 'ward.d2' clustering method (R Core Team 2017). A variety of dissimilarity thresholds were explored to identify meaningful groups of sites at several levels of classification.

The broadest classification (i.e. Level 1) resulted in 4 distinct groups of sites illustrating ecosystems responding to soil texture and water availability. Finer levels of classification gradually separate sites onto groups with more subtle variations in vegetation species composition, cover, soil and water balances. Using different thresholds further classification groups were identified: Level 2 represents 9 groups; Level 3 represents 17 groups; Level 4 represents 25 groups; and Level 5 represents 42 groups. Interpretation of summaries of vegetation species composition and cover of sites within each classification level and group revealed an optimum of approximately 25 groups to approach known vegetation types within the region. Some Level 4 groups with a large number of sites were inspected and found to contain discrete vegetation types at a finer level of classification.

The composite analyses across Level 4 and Level 5 classifications resulted in 28 discrete vegetation-landscape groups (i.e. ecotypes) being identified within the study area. Within each classification level and group the R statistical software identifies which variables (e.g. Cluster species) provide the strongest indicators of each cluster group. These "indicator" species are useful to discriminate between ecotypes for new survey or assessment sites. Indicator species often represent structurally dominant flora species (e.g. trees & shrubs), but can include understorey species typical of those ecotypes.

2.4.2 Ecotype descriptions

The vegetation–landscape types (i.e. ecotypes) identified by cluster analyses incorporate both vegetation composition and environmental information. Vegetation data can be summarised across sites to provide descriptions consistent with the National Vegetation Information System (NVIS) framework Level VI classification (Australian Government 2016) and SA Vegetation mapping products (Heard & Channon 1997, DEWNR 2017). For each ecotype, summaries of species, life forms (Table 2.4) and vegetation cover data have been used to classify Vegetation Formation types using NVIS standards. The dominant 3 overstorey species, emergent 3 species (if present) and 5 understorey species recorded for each ecotype have been used to create descriptions consistent with existing DEWNR biological survey products (Heard & Channon 1997). Soil, topographic, water-availability and climate characteristics of each ecotype have been tabulated and summarised into soil-landscape descriptions.

Table 2.4 Plant life form classifications used in this study

Major group	Class	BDBSA Code & Description	Height (m)
A_Trees/tall shrubs (>1 m)	1_Trees	M - Trees 15–30 m	23
		LA - Trees 5–15 m	10
		LB - Trees <5 m	4
		T - Trees >30 m	35
	2_Mallees	KT - Mallee (>3 m)	5
		KS - Low Mallee (<3 m)	2
	3_Shrubs	S - Shrubs >2m	2.5
		SA - Shrubs 1.5–2.0 m	2
		SB - Shrubs 1–1.5 m	1.5
		MI - Mistletoes	0.2
B_Low shrubs (<1 m)	4_Low shrubs	SC - Shrubs 0.5–1.0 m	1
C_Grasses/sedges	5_Grasses	SD - Shrubs 0–0.5 m	0.5
		H - Hummock grass	0.5
		GT - Grass >0.5 m	0.6
		GL - Grass <0.5 m	0.25
	6_Sedges	VT - Sedges >0.5 m	0.6
		VL - Sedges <0.5 m	0.25
D_Forbs	7_Forbs	J - Herbaceous spp	0.2
		V - Vines (twiners)	0.2
		X - Ferns	0.3
		P - Mat plants (single plant)	0.1

2.4.3 Potential distributions of ecotypes

All survey sites assigned the 28 ecotypes of the Cooper-Eromanga Basin (i.e. 1390 sites) were used within spatial distribution modelling software (i.e. MaxEnt; Phillips *et al.* 2006, Phillips 2015) to create models of the likelihood of occurrence of each ecotype. Environmental variables used in the distribution models are typical of those used during cluster analyses (Table 2.2), but include additional data from Landsat-based models of Land Cover Change (LCC) types. Model training points have been constrained to the 1390 survey sites, and do not include other background training data.

MaxEnt modelling iteratively processes relationships between ecotype survey site records and combinations of environmental variables to identify the optimal mixture of variables to estimate the likelihood of occurrence for each ecotype. MaxEnt then applies each model to the entire spatial dataset to create maps of the likelihood of occurrence of each ecotype. As DEWNR/ARI Landsat Land Cover Change (LCC) spatial data are not available outside of South Australia (SA), MaxEnt models were also generated for each ecotype in neighbouring areas of Queensland and New South Wales (i.e. <50 km from SA border) without LCC data, and appended to each SA ecotype distribution model.

For each 30 m grid cell, the ecotype distribution model with the maximum-likelihood of occurrence was allocated to each grid cell (i.e. as Ecotype ID raster value). Small patches (<0.25 ha) of an individual ecotype within the maximum-likelihood map were removed to reduce model “noise”, and in-filled by the most dominant ecotype in the neighbouring area. The extent of each ecotype (km²) within the study area, the central study area, and each IBRA subregion were calculated and summarised. The final composite Ecotype map was annotated with vegetation and environmental descriptions, area attributes, and summaries of vegetation and environmental attributes from the 1390 vegetation survey sites.

Wetlands are a diverse array of environments which can influence the distribution of flora and fauna species, and habitat values over time (Kingsford *et al.* 1999). The diversity of wetland types are influenced by water sources (e.g. surface flows, groundwater, constructed dams and tanks), duration (e.g. temporary to permanent, seasonal) and water qualities (e.g. fresh water to saline). In this study, we provide a simple expression of the range of wetland environments, based on satellite observations of the presence and duration of surface water (i.e. WOFS; Landsat

30 m resolution data). Some ecotypes are strongly associated with wetland environments. These ecotypes have been annotated with proportion of vegetation survey sites observed within each water duration class.

2.5 Biological records

All flora and fauna records from the Cooper-Eromanga Basin region were compiled from DEWNR's Biological Database of South Australia (BDBSA, DEWNR 2017), and an extract of all flora and fauna records held within the Atlas of Living Australia (ALA) for IBRA subregions matching the study area but located in Queensland (Qld) and New South Wales (NSW). Supplementary flora records were collected from energy industry environmental assessment reports and additional fauna records from energy industry surveys of fauna during pipeline construction activities. Following DEWNR vegetation surveys in 2017, flora survey data and opportunistic fauna records were added to the consolidated datasets (i.e. "FLORA" and FAUNA").

The consolidated datasets were closely inspected for any errors, duplicate records or transfers between source datasets. Taxonomy was standardised (i.e. scientific names and common name) to conventions used in DEWNR's BDBSA lists published in April 2017 (DEWNR 2017). All flora and fauna records were constrained to the boundaries of the study area (except for ALA Qld and NSW data located within 50 km of the SA state border) and the last 50 years of observations.

The spatial reliability of each record was classified into two groups: 1. "High" for sites where GPS or accurate mapping was used; and 2. "Low" where locational accuracy was noted as being unreliable or unknown. Each flora and fauna record with high spatial reliability were allocated to an ecotype matching that location from the final composite ecotype map.

The most commonly recorded life form class and major group (Table 2.4) of each flora taxa, across all flora records in the region, was assigned to the final flora taxa list for the study area. The total number of flora records for each IBRA subregion, life form class and plant taxa, across the study area, are presented in Appendix A.

The total number of fauna records for each IBRA subregion, vertebrate class and fauna taxa, across the study area, are presented in Appendix B.

These appendices include conservation status annotations to flora and fauna species recognised under South Australian (SA) and Australian Government (AUS) environmental legislation. Records of non-native flora and fauna species (i.e. "introduced") are also included in these lists.

2.6 Conservation

Conservation values are diverse for the region, and are dependant the perspectives and priorities of ecologists, environmental managers and the wider community. These values and priorities are expressed through environmental policies, legislation or international agreements. At the finest scale, individual species and their populations may be recognised within local priorities (e.g. IBRA subregional lists of conservation status; see Appendix C, Appendix D). At state and national scales, individual species and their populations may be recognised (i.e. "Conservation-listed species"; Table 2.5) within South Australian (SA) and Australian Government (AUS) legislation (e.g. *National Parks and Wildlife (NPW) Act 1972*; *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*), and are subject of consideration for all management and development activities (e.g. vegetation clearance, grazing, mining). Issues of regional ecology, ecosystem function, resilience and conservation are influence by species composition and community structure (e.g. individual species, species richness, functional diversity) of ecosystems.

Table 2.5 Conservation status codes and classifications with national and state legislation

EPBC Act 1999 (AUS)	NPW Act 1972 (SA)
EW - Extinct in the Wild	
EX - Extinct	
CE - Critically Endangered	E - Endangered (Schedule 7)
EN - Endangered	
VU - Vulnerable	V - Vulnerable (Schedule 8)
CD - Conservation Dependent	R - Rare (Schedule 9)

To inform judgements on conservation values of the region we have summarised all flora and fauna records, and calculated native species richness and conservation-listed species richness within the five IBRA subregions (i.e. high + low spatial quality data) and for each ecotype (i.e. high spatial quality data only). For each ecotype, the total number of each conservation-listed species associated with that ecotype have been tabulated. These tallies provide an indicator of the likelihood of discovering a conservation-listed species with that ecotype.

Wetlands are typically highly valued for conservation, to partially address this issue, we provide summary information on flora and fauna species, and ecotypes, associated within wetland environments.

2.7 Biophysical risks

Additional to species-level and community-level conservation priorities, the biophysical environment (e.g. plant biomass and/or carbon stored by plants, vegetation resilience, soil structure) are highly valued for a variety ecosystem functions (including biodiversity conservation), primary production, and many land uses (e.g. livestock production, transport, tourism). In this study, we consider three key risks of physical disturbance to the environments of the Cooper-Eromanga Basin region: **1. Loss of plant biomass; 2. Plant recruitment and regeneration; 3. Soil erosion**, and provide simple indicators of these risks across the region. These risk indicators are intended to guide planning and management decisions for a variety of potential activities that are likely to have physical impacts on the natural environment (e.g. road construction, mineral exploration, vegetation clearance).

2.7.1 Loss of plant biomass

The height, structure and cover of vegetation is strongly correlated to plant biomass and carbon sequestration values, and age of vegetation (Hobbs *et al.* 2013, 2016). For each ecotype, the average plant volume (i.e. mean cover x nominal height; see Table 2.4) was calculated for each perennial life form class (i.e. trees, shrubs, perennial grasses) and summed across life form classes with each ecotype to estimate the total volume of perennial vegetation. Reliable conversion factors do not yet exist to transform arid vegetation plant volume values into estimates of carbon stocks (t CO₂-e/ha). However, the volume estimates provide a relative measure of above-ground biomass, carbon stocks, and likely time for each ecotype to reach structural maturity.

The ecotype with the largest perennial vegetation volume was assigned a maximum Biomass index value of 1. Each ecotype volume calculation was expressed as a proportion of the maximum volume value. The resulting Biomass index value provides an indicator of barren or very young ecotypes (i.e. index=0), through to very mature or structurally diverse ecotypes with many taller trees (i.e. index=1). The distribution of vegetation biomass by ecotype is presented in Figure 6.1.

2.7.2 Plant recruitment and regeneration

The availability of soil moisture is a key requirement for the establishment and regeneration vegetation following clearance from mechanical activities (e.g. temporary tracks for mineral exploration) or natural disturbance events (e.g. bushfire, drought). Two sources of information (i.e. derivatives of digital elevation models and Landsat data) have been merged to provide an indicator of the likelihood of sites to receive sufficient moisture to recruit

perennial plant species (if soil structure and soil seedbanks are intact, and conditions are favourable for species that are typically difficult to propagate) and regenerate to a near-natural state within a ~30 year timeframe.

The Topographic wetness index (TWI, CSIRO 2015) is a measure of soil wetness resulting from local water redistribution patterns. Lower TWI values represent drier water-shedding areas and higher TWI values represent wetter run-on or flood out areas. TWI only represents local water distribution pattern, and does not represent larger volumes of water flowing into landscapes from major drainage lines and from distance sources.

Water observation from space (WOfS) Landsat satellite data provides information on the percent of time any location in Australia has water covering it. WOfS provides information on major drainage channels, floodplains and lakes receiving larger volumes of water, sourced from outside of the local catchment area (i.e. river flows, floods). WOfS data also reflects landscapes with poor drainage resulting from semi-impervious landscapes or the presence of groundwater near the earth surface.

The data from TWI and WOfS were combined to provide an indicator of frequency or duration of wet soils that can facilitate perennial plant species germination and recruitment events, and lead to vegetation regeneration after disturbance. Conversely, they also indicate some landscapes which can accumulate salts over time (e.g. salt lakes) and are associated with halophytic vegetation communities, or persistent water bodies.

The "Soil moisture index" (SMI) is calculated by expressing the TWI values at each point in the landscape as a proportion of the observed range of TWI values in the region (SMI_{TWI} , see Table 2.2). The proportion of time (i.e. 0 to 1) where satellites have observed water covering the earth at each point is then added to the base index value (i.e. SMI_{TWI}) and capped to maximum value of 1. The inverse of the Soil moisture index (i.e. $1 - SMI_{TWI}$) provides an indicator of locations where soils are frequently dry and have fewer opportunities for plant recruitment or re-establishment. A map of this "Plant recruitment risk" is presented in Figure 6.2.

2.7.3 Soil erosion

The inherent risk of wind and water erosion (i.e. "erodibility") for exposed or cultivated South Australian soils, based on combinations of soil texture and slope classes is documented in Maschmedt (2002). In general terms, very sandy soils with greater exposure to wind (i.e. dunes) are more susceptible to wind erosion than clay plains, and soils with high clay content and steep slopes are more susceptible to water erosion than sandy plains. Those soil texture and slope categories of erodibility have been translated into indices of wind and water potential risk using a combination of Soil Texture Index (STI, "sand index"; see Section 2.2.2) derived from the 'Digital Soils and Landscape Grid of Australia' data (CSIRO 2015), and slope data derived from NASA (2014) digital elevation models:

Wind erodibility index = soil texture index x slope factor

Water erodibility index = (1 - soil texture index) x slope factor

where the slope factor = $0.2306 \times \text{percent slope}^{0.2879}$

The maximum value of either wind or water erodibility index for each location provides an index of potential erosion risk (Figure 6.3). Vegetation cover, stony surfaces (e.g. gibbers) and soil crusts (e.g. cryptogams) provide significant reductions to erosion risk. The soil erosion index presented here assumes that vegetation cover, protective gibbers and soil surface crusts have been sufficiently disturbed to expose mobile soil particles.

The resilience of different soil types to recover after erosion events is strongly influenced by the cessation of soil movement (or loss), soil seedbank, soil moisture, and the recruitment of desirable plant species. Reductions in any of these factors will reduce soil resilience, prolong recovery times and increase the costs of restoration activities.

3 Vegetation and landscapes

Ecotypes

Twenty-eight ecotypes were identified from analyses of similarities in vegetation species, plant cover and environmental variables from 1390 vegetation survey sites (Table 3.1, Table 3.2). Hierarchical classifications of similarity metrics revealed 25 meaningful groups of sites representing known vegetation types within the region (at Level 4 classification thresholds, L4). Three of these L4 groups were found to contain additional discrete vegetation types at a finer level of classification (Level 5), these 3 groups were split, and resulted in a final classification containing 28 discrete ecotypes. Ecotype codes are embedded with information to identify similarities between ecotypes at broader levels of ecosystem classification, for example:

Bristly Love-grass, Goat-head Bindyi, Bindyi dunefield swales

C **2** **6** **11** **14** 41 Ecotype code

C 1 2 3 4 5 Level of classification

C 4 9 17 25 42 Number of groups at that level

Most ecotypes codes terminate at the Level 4 classification (highlighted red above), with 6 ecotypes identified at Level 5 (highlighted blue above). The greater the similarity in ecotypes codes (left to right) then the closer the association in species composition and environments between ecotypes (i.e. ecotype C26111441 is closely aligned to C260912 "Bindyi, Goat-head Bindyi, Bristly Love-grass clay loam plains or floodplains" and is very different to C481622 "Umbrella Bush over Ruby Saltbush, Bindyi slopes"). The broadest level of similarity classifications (i.e. Level 1 with 4 groups) are represented by different colour shadings in Table 3.1 and Table 3.2.

The vegetation-landscape ecotype short names and vegetation descriptions used in this report are simplifications of dominant species recorded across multiple sites. For this reason, care should be taken in interpreting simple ecotypes based on shortened names used in this report. Greater details on vegetation composition should be noted from the data provided ecotype summaries (Figure 3.2; Subsections 3.1 to 3.28), Appendices and digital data provided by this study.

Mapping of the most likely distribution of ecotypes are presented within Figure 3.1, with potential distribution models of each ecotype contained within summaries for each type (Subsections 3.1 to 3.28).

A quick reference guide (Figure 3.2) provides easier interpretation of the ecotype summaries provided in Subsections 3.1 to 3.28. Users should review of the methods described within this report to enable a greater understanding of the statistics provided within these summaries.

Wetlands

The study area contains a diverse range of ephemeral, seasonal and persistent wetland environments. These can be strongly associated with some ecotypes, or be components of other drier ecotypes. In this report, we provide maps of the range of wetland types found within the region, quantify the area of each wetland type within bioregions and ecotypes, and provide a summary of the number of conservation-listed species that are reliant on waterbodies.

Table 3.1. Vegetation-landscape ecotypes of the Cooper-Eromanga Basin region of South Australia

Colours represent ecotype classification levels and groups.

ID	Ecotype	Class. levels				Name	Study area		Prop. of ecotype by IBRA subregion				
		1	2	3	4		Prop. of total area	Area (km ²)	Coon gie	Lake Pure	Murn peowie	Strze lecki Desert	Sturt Stony Desert
1	C1 1 01 01					Mitchell-grass, Bindyi, Bluebush/Fissure-plant clay loam plains or floodplains	6.8%	8177	1.1%	0.1%	31.8%	5.0%	61.9%
2	C1 1 01 20					Bladder Saltbush, Mitchell-grass, Bindyi clay loam slopes	2.9%	3492	0.0%	0.0%	97.9%	2.0%	0.1%
3	C1 1 05 05					Mitchell-grass, Bindyi, Plover-daisy clay plains	1.3%	1510	0.0%	0.0%	97.7%	2.3%	0.0%
4	C1 1 05 25					Bindyi, Mitchell-grass, Desert Glasswort clay undulating hills	1.9%	2228	0.1%	0.0%	10.9%	0.2%	88.9%
5	C1 4 04 04					Desert Senna, Spiny Saltbush clay plains or loam dunes	1.2%	1470	0.0%	0.0%	99.1%	0.5%	0.5%
6	C1 4 04 21					Black Bluebush, Low Bluebush, Bindyi clay slopes	3.7%	4464	0.0%	0.0%	70.0%	30.0%	0.0%
7	C1 9 14 17					Bindyi, Buckbush, Bottle-washers sandy slopes or dunes	8.9%	10720	0.0%	0.0%	2.1%	97.9%	0.0%
8	C1 9 14 24					Desert Senna over Three-awn/Wire-grass, Bindyi loam slopes	4.7%	5642	17.2%	21.0%	3.2%	37.0%	21.6%
9	C1 9 17 23					Red Mulga over Bindyi, Three-awn/Wire-grass clay slopes	0.5%	564	2.6%	0.3%	0.0%	0.0%	97.0%
10	C2 2 02 02					Coolibah over Lignum, Bindyi clay loam plains or floodplains	1.3%	1525	78.1%	0.5%	6.3%	11.2%	3.8%
11	C2 2 02 09					Lignum, Golden Goosefoot over Nardoo clay plains	0.7%	819	85.8%	1.0%	0.3%	2.5%	10.4%
12	C2 2 08 08					Coolibah over Lignum, Germander clay loam plains	0.8%	934	89.9%	0.6%	0.0%	5.0%	4.5%
13	C2 6 09 12					Bindyi, Goat-head Bindyi, Bristly Love-grass clay loam plains or floodplains	1.5%	1756	16.4%	7.8%	0.5%	2.9%	72.4%
14	C2 6 11 14 00					Lignum, Old-man Saltbush, Golden Goosefoot clay or clay loam slopes or floodplains	5.1%	6091	36.2%	2.9%	3.3%	21.5%	36.0%
15	C2 6 11 14 41					Bristly Love-grass, Goat-head Bindyi, Bindyi dunefield swales	2.1%	2540	2.0%	1.3%	0.3%	95.9%	0.5%
16	C3 3 03 03 03					Nitre-bush, Twinleaf loam slopes	4.2%	5017	5.7%	0.0%	5.3%	88.8%	0.2%
17	C3 3 03 03 35					Bare or rarely Cane-grass, Nitre Goosefoot loamy slopes, salt lakes or floodplains	2.6%	3093	3.6%	0.0%	1.1%	92.8%	2.5%
18	C3 3 07 07					Ray Grass/Couch, Scurf-pea, Desert Nightshade clay loam plains	0.4%	488	89.6%	0.5%	0.0%	6.1%	3.8%
19	C3 3 07 10					Coolibah over Flat-sedge, Ray Grass/Couch loam plains	0.6%	684	77.4%	4.0%	0.8%	8.9%	8.9%
20	C3 5 06 06					Bindyi, Annual Saltbush, Samphire clay plains or floodplains	5.9%	7063	19.6%	0.1%	52.4%	16.6%	11.3%
21	C3 5 06 11					Mitchell-grass clay slopes	5.3%	6333	4.2%	0.9%	7.4%	2.7%	84.9%
22	C3 5 13 16 22					Black Oak over Bindyi sandy slopes	2.0%	2369	0.0%	0.0%	0.4%	99.6%	0.0%
23	C3 5 13 16 27					Bindyi, Low Bluebush, Bottle-washers loamy slopes or plains	3.8%	4594	0.0%	0.0%	2.3%	97.7%	0.0%
24	C4 7 10 13					Sandhill Cane-grass, Three-awn/Wire-grass, Hard Spinifex dunefields	9.4%	11260	24.6%	2.8%	0.7%	62.3%	9.5%
25	C4 8 12 15					Bindyi, Three-awn/Wire-grass sandy slopes	5.8%	7000	39.8%	0.6%	0.0%	58.0%	1.6%
26	C4 8 15 18					Umbrella Bush, Sandhill Cane-grass dunefields	8.6%	10283	15.0%	0.2%	0.3%	84.0%	0.5%
27	C4 8 15 19					Hard Spinifex with Sticky Hop-bush, Umbrella Bush dunefields	1.4%	1646	3.7%	9.2%	0.0%	56.3%	30.8%
28	C4 8 16 22					Umbrella Bush over Ruby Saltbush, Bindyi slopes	6.8%	8151	9.0%	0.0%	5.1%	61.0%	24.9%
Total							100.0%	119915	14.4%	1.8%	15.1%	49.8%	18.9%

Table 3.2. Vegetation structure of ecotypes within the Cooper-Eromanga Basin region of South Australia

Colours represent ecotype classification levels and groups.

ID	Ecotype	Class. levels				Vegetation formation	No. of sites	Life form group by cover (%)			
		1	2	3	4			Trees/ tall shrubs	Low shrubs	Grass/ sedges	Forbs
1	C1 1 01 01					Mitchell-grass, Bindyi, Bluebush/Fissure-plant clay loam	87	2.6	42.5	27.5	32.1
2	C1 1 01 20					Bladder Saltbush, Mitchell-grass, Bindyi clay loam slopes	25	1.5	48.6	27.7	13.4
3	C1 1 05 05					Mitchell-grass, Bindyi, Plover-daisy clay plains	56	3.3	39.3	20.7	19.0
4	C1 1 05 25					Bindyi, Mitchell-grass, Desert Glasswort clay undulating hills	34	0.5	45.0	15.7	33.6
5	C1 4 04 04					Desert Senna, Spiny Saltbush clay plains or loam dunes	44	20.0	26.5	21.0	13.6
6	C1 4 04 21					Black Bluebush, Low Bluebush, Bindyi clay slopes	61	4.4	39.2	10.6	5.0
7	C1 9 14 17					Bindyi, Buckbush, Bottle-washers sandy slopes or dunes	52	6.7	51.2	46.8	33.2
8	C1 9 14 24					Desert Senna over Three-awn/Wire-grass, Bindyi loam slopes	26	9.8	39.6	37.0	35.9
9	C1 9 17 23					Red Mulga over Bindyi, Three-awn/Wire-grass clay slopes	40	25.2	28.6	17.8	22.6
10	C2 2 02 02					Coolibah over Lignum, Bindyi clay loam plains or floodplains	60	31.6	27.4	12.2	17.6
11	C2 2 02 09					Lignum, Golden Goosefoot over Nardoo clay plains	32	20.6	13.4	4.6	17.2
12	C2 2 08 08					Coolibah over Lignum, Germander clay loam plains	65	35.9	22.1	10.1	30.1
13	C2 6 09 12					Bindyi, Goat-head Bindyi, Bristly Love-grass clay loam plains or	37	8.3	40.0	28.6	42.8
14	C2 6 11 14 00					Lignum, Old-man Saltbush, Golden Goosefoot clay or clay loam slopes	69	10.1	29.0	10.5	21.4
15	C2 6 11 14 41					Bristly Love-grass, Goat-head Bindyi, Bindyi dunefield swales	25	5.6	26.9	29.5	10.4
16	C3 3 03 03 03					Nitre-bush, Twinleaf loam slopes	16	4.5	16.5	3.3	32.9
17	C3 3 03 03 35					Bare or rarely Cane-grass, Nitre Goosefoot loamy slopes, salt lakes	33	6.2	8.1	6.5	0.3
18	C3 3 07 07					Ray Grass/Couch, Scurf-pea, Desert Nightshade clay loam plains	36	1.7	16.0	21.7	22.8
19	C3 3 07 10					Coolibah over Flat-sedge, Ray Grass/Couch loam plains	23	20.2	11.4	36.0	39.0
20	C3 5 06 06					Bindyi, Annual Saltbush, Samphire clay plains or floodplains	73	2.7	24.7	9.3	10.1
21	C3 5 06 11					Mitchell-grass clay slopes	70	1.9	20.1	13.5	5.6
22	C3 5 13 16 22					Black Oak over Bindyi sandy slopes	42	11.4	9.8	12.0	16.7
23	C3 5 13 16 27					Bindyi, Low Bluebush, Bottle-washers loamy slopes or plains	51	1.3	23.0	12.6	25.8
24	C4 7 10 13					Sandhill Cane-grass, Three-awn/Wire-grass, Hard Spinifex dunefields	69	6.8	20.9	19.3	15.1
25	C4 8 12 15					Bindyi, Three-awn/Wire-grass sandy slopes	89	5.4	16.0	15.8	2.8
26	C4 8 15 18					Umbrella Bush, Sandhill Cane-grass dunefields	97	7.5	8.5	21.3	3.0
27	C4 8 15 19					Hard Spinifex with Sticky Hop-bush, Umbrella Bush dunefields	20	19.2	12.1	22.0	5.4
28	C4 8 16 22					Umbrella Bush over Ruby Saltbush, Bindyi slopes	58	14.4	25.3	14.3	5.9

Flora and Fauna Cooper-Eromanga

Vegetation - Landscape

-  Bare or rarely Cane-grass, Nitre Goosefoot loamy slopes, saltlakes or floodplains
-  Bindyi, Annual Saltbush, Samphire clay plains or floodplains
-  Bindyi, Buckbush, Bottle-washers sandy slopes or dunes
-  Bindyi, Goat-head Bindyi, Bristly Love-grass clay loam plains or floodplains
-  Bindyi, Low Bluebush, Bottle-washers loamy slopes or plains
-  Bindyi, Mitchell-grass, Desert Glasswort clay undulating hills
-  Bindyi, Three-awn/Wire-grass sandy slopes
-  Black Bluebush, Low Bluebush, Bindyi clay slopes
-  Black Oak over Bindyi sandy slopes
-  Bladder Saltbush, Mitchell-grass, Bindyi clay loam slopes
-  Bristly Love-grass, Goat-head Bindyi, Bindyi dunefield swales
-  Coolibah over Flat-sedge, Ray Grass/Couch loam plains
-  Coolibah over Lignum, Bindyi clay loam plains or floodplains
-  Coolibah over Lignum, Germander clay loam plains
-  Desert Senna over Three-awn/Wire-grass, Bindyi loam slopes
-  Desert Senna, Spiny Saltbush clay plains or loam dunes
-  Hard Spinifex with Sticky Hop-bush, Umbrella Bush dunefields
-  Lignum, Golden Goosefoot over Nardoo clay plains
-  Lignum, Old-man Saltbush, Golden Goosefoot clay or clay loam slopes or floodplains
-  Mitchell-grass clay slopes
-  Mitchell-grass, Bindyi, Bluebush/Fissure-plant clay loam plains or floodplains
-  Mitchell-grass, Bindyi, Plover-daisy clay plains
-  Nitre-bush, Twinleaf loam slopes
-  Ray Grass/Couch, Scurf-pea, Desert Nightshade clay loam plains
-  Red Mulga over Bindyi, Three-awn/Wire-grass clay slopes
-  Sandhill Cane-grass, Three-awn/Wire-grass, Hard Spinifex dunefields
-  Umbrella Bush over Ruby Saltbush, Bindyi slopes
-  Umbrella Bush, Sandhill Cane-grass dunefields
-  Study area (central)



Government of
South Australia



0 5 10 20 30 40
Kms

Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

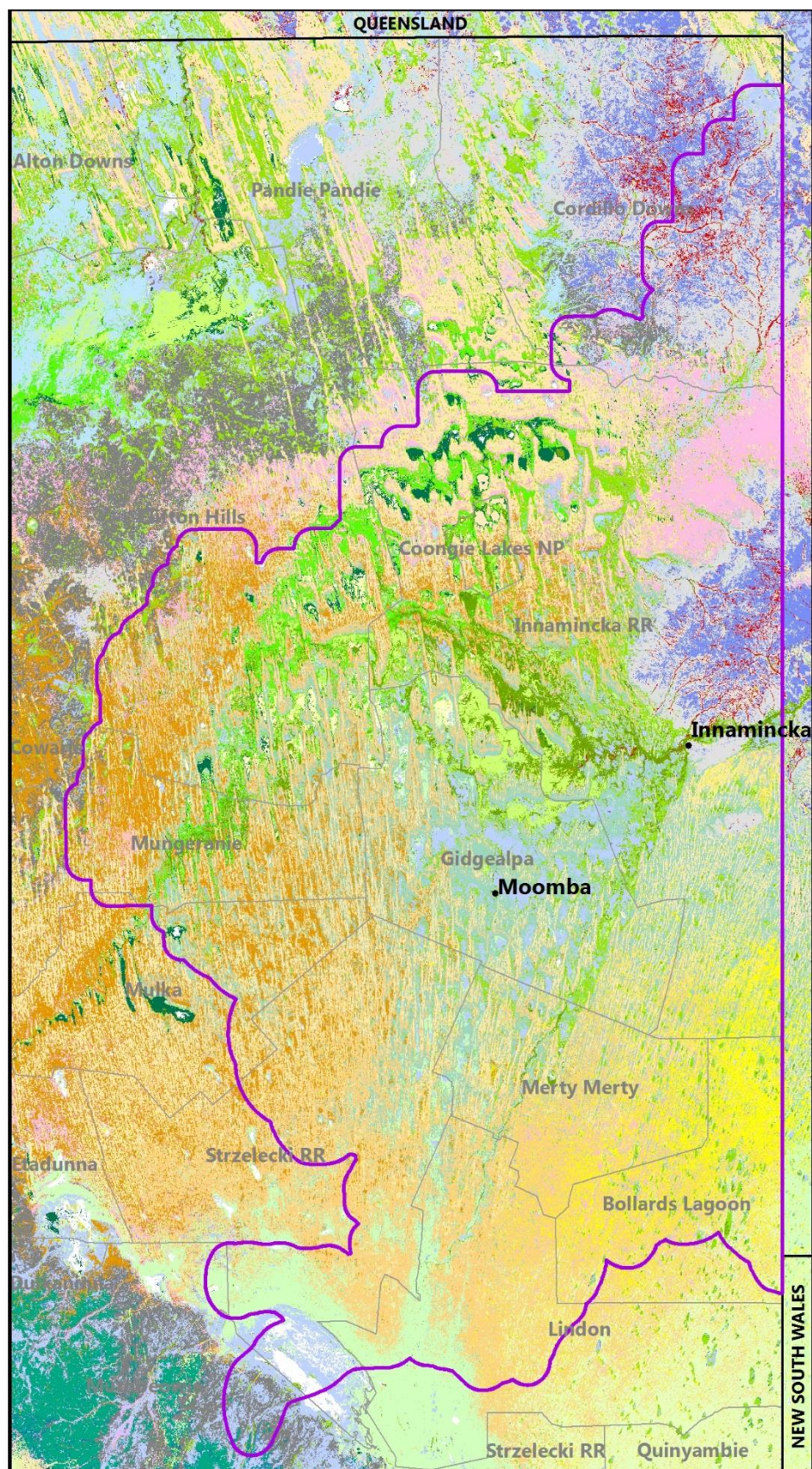


Figure 3.1. Main vegetation and landscape types (i.e. ecotypes) of the Cooper-Eromanga Basin region of South Australia

Quick reference guide - Ecotype summary information

Short descriptive name of the ecotype, with common names, soil types & landscapes

3.1

Mitchell-grass, Bindyi, Bluebush/Fissure-plant clay loam plains or floodplains

Ecotype codes, vegetation formation & description

Ecotype (ID): C110101 (1)
Formation: low tree/shrubland
Veg. description: *Astrelia* sp., *Sclerolaena* sp., *Maireana* sp. (low) with *Maireana aphylla*, *Atriplex vesicaria* over *Atriplex* sp. (annual), *Triopogon loliiformis*, *Goodenia* sp.

Area	8177 km²	6.8% of the study area
Sub IBRA	Coon gie	Lake Pure
Total	1.1%	0.1%
Central	0.5%	0.1%
	Sturt	Strzelecki
	Desert	Desert
	61.9%	5.0%
	3.4%	0.7%
	1.9%	1.9%

Ecotype area within study zones by IBRA subregions (%)

Vegetation cover by life form groups

Vegetation cover (%)	Survey sites = 87
Trees/tall shrubs	Low shrubs
2.6	42.5
Grasses/sedges	Forbs
27.5	32.1

Environmental classes (proportion of sites)						
arid	0.01	0.74	0.16	0.06	0.03	scrubland
hills	0.01	0.03	0.28	0.40	0.28	plains
clay	0.34	0.46	0.27	0.02	0.00	sand
acidic	0.05	0.32	0.47	0.16	0.00	alkaline
runoff	0.02	0.15	0.32	0.39	0.11	runon
dryland	0.95	0.05	0.00	0.00	0.00	wetland
stable	0.20	0.55	0.23	0.02	0.00	erosion

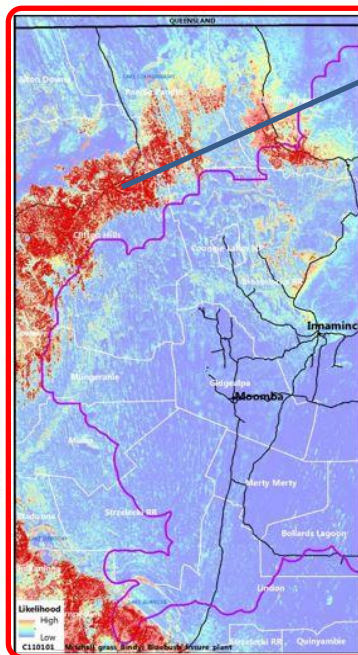
Proportion of survey sites within key environmental types & classes

Biophysical disturbance risk (index)			
Perennial biomass	0.16	Soil erosion	0.16
Plant recruitment	0.60	Average risk	0.39

Average biophysical risk for survey sites with each ecotype

Life forms, species & vegetation cover (%) typically found in surveys (% of sites) within the Ecotype.
 Annotations of flora species:
 #conservation status
 *non-native status
 ^indicator species associated with the ecotype.

Species (conservation status *non-native ^indicator)	Freq. (%)	Cover
Trees/tall shrubs (> 1 m)		
<i>Senna artemisioides</i> (Desert Senna)	22	0.6
Low shrubs (< 1 m)		
<i>Atriplex lindleyi</i> (Baldoo)	34	1.3
<i>Atriplex spongiosa</i> (Pop Saltbush)	25	0.8
<i>Atriplex vesicaria</i> (Bladder Saltbush)	56	3.5
<i>Dissocarpus biflorus</i> (Two-horn Saltbush)	25	0.8
<i>Enchylaena tomentosa</i> (Ruby Saltbush)	36	0.5
<i>Frankenia serpyllifolia</i> (Thyme Sea-heath)	49	1.1
<i>Maireana aphylla</i> (Cotton-bush)^	59	2.4
<i>Maireana coronata</i> (Crown Fissure-plant)	32	0.8
<i>Maireana georgei</i> (Satin Bluebush)	26	0.8
<i>Maireana pyramidalis</i> (Black Bluebush)	22	0.5
<i>Minuria cunninghamii</i> (Bush Minuria)	26	0.5
<i>Osteocarpum acropterum</i> (Bonefruit), #AUS: -, SA:	22	0.4
<i>Rhagodia spinescens</i> (Spiny Saltbush)	32	0.9
<i>Salsola australis</i> (Buckbush)	71	2.0
<i>Sclerolaena bicornis</i> (Goat-head Bindyi)	46	1.1
<i>Sclerolaena brachyptera</i> (Short-wing Bindyi)	52	1.8
<i>Sclerolaena diacantha</i> (Grey Bindyi)	25	1.1
<i>Sclerolaena divaricata</i> (Tangled Bindyi)	34	1.4
<i>Sclerolaena intricata</i> (Tangled Bindyi)	36	0.9
<i>Sclerolaena lanicuspis</i> (Spinach Bindyi)	40	1.2
<i>Sclerolaena ventricosa</i> (Salt Bindyi)	30	1.6
<i>Sida fibulifera</i> (Pin Sida)	43	1.1
Grasses/sedges		
<i>Aristida contorta</i> (Curly Wire-grass)	55	1.9
<i>Astrelia pectinata</i> (Barley Mitchell-grass)^	74	4.2
<i>Dactyloctenium radulans</i> (Button-grass)	39	2.0
<i>Enneapogon avenaceus</i> (Common Bottle-	61	3.6
<i>Eragrostis dielsii</i> (Mulka)	37	1.4
<i>Eragrostis setifolia</i> (Bristly Love-grass)	51	1.9
<i>Sporobolus actinocladius</i> (Ray Grass)	68	1.8
<i>Triopogon loliiformis</i> (Blue-mouthe Grass)^	68	3.6



Potential distribution of the ecotype within the study area. Dark red indicate the highest likelihood of occurrence

Frequency of species with legislated national or state conservation status & associated with the ecotype

Conservation listed species (records). 34 species recorded in this ecotype (including 10 wetland species - see Wetlands section). Plants: *Acacia carneorum* (Needle Wattle), #AUS: VU, SA: V [1], *Acacia pickardii* (Pickard's Wattle), #AUS: VU, SA: R [13], *Frankenia plicata* (Braided Sea-heath), #AUS: EN, SA: V [1], *Grewia spaldingii* (Western Tar-vine), #AUS: -, SA: R [2], *Maireana pentagona* (Slender Fissure-plant), #AUS: SA: R [13], *Osteocarpum pentstemonum* (Five-wing Bonefruit), #AUS: -, SA: E [1], *Pycnosorus chrysanthus* (Yellow Drumsticks), #AUS: CR, SA: E [1], *Sclerolaena fontinalis* (Mound Spring Bindyi), #AUS: -, SA: R [1], *Zygophyllum humilimum* (Small-leafed Ficus), #AUS: -, SA: R [2], *Birds:* *Ardeotis australis* (Australian Bustard), #AUS: -, SA: V [4], *Coturnix ypsilopis* (Brown Quail), #AUS: -, SA: V [1], *Elaenia scriptus* (Letter-winged Kite), #AUS: -, SA: R [2], *Falco hypoleucos* (Grey Falcon), #AUS: -, SA: R [1], *Falco peregrinus* (Peregrine Falcon), #AUS: -, SA: R [1], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [1], *Neophema chrysostoma* (Blue-winged Parrot), #AUS: -, SA: V [3], *Pedionomus torquatus* (Plains-wanderer), #AUS: CR, SA: E [1], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [9], *Mammals:* *Dasyurus cristicauda* (Crest-tailed Mulgara (Amputat)), #AUS: VU, SA: -, [2], *Dasyuroides byrnei* (Kowari), #AUS: VU, SA: V [402], *Notomys cervinus* (Fawn Hopping-mouse), #AUS: -, SA: V [66], *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [4], *Reptiles:* *Aspiloglossus ramsayi* (Woma), #AUS: -, SA: R [2], *Proleptophaps kinghorni* (Blackbill Skink), #AUS: -, SA: R [1].

Figure 3.2. Quick reference guide to the use of summary information on vegetation-landscape ecotypes of the Cooper-Eromanga Basin region of South Australia

3.1 Mitchell-grass, Bindyi, Bluebush/Fissure-plant clay loam plains or floodplains

Ecotype (ID): C110101 (1)

Formation: low chenopod shrubland

Veg. description: *Astrebula* sp., *Sclerolaena* sp., *Maireana* sp. (low) with *Maireana aphylla*, *Atriplex vesicaria* over *Atriplex* sp. (annual), *Tripogon loliiformis*, *Goodenia* sp.

Vegetation cover (%)		Survey sites = 87	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
2.6	42.5	27.5	32.1

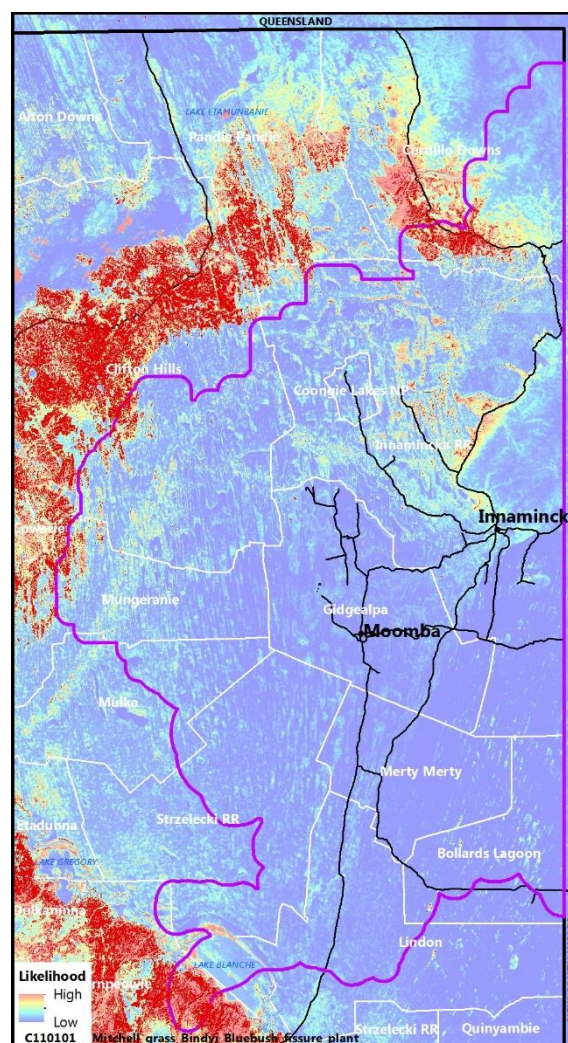
Species (#conservation status *non-native ^indicator)	Freq. (%)	Cover
Trees/tall shrubs (>1 m)		
<i>Senna artemisioides</i> (Desert Senna)	22	0.6
Low shrubs (<1 m)		
<i>Atriplex lindleyi</i> (Baldoo)	34	1.3
<i>Atriplex spongiosa</i> (Pop Saltbush)	25	0.8
<i>Atriplex vesicaria</i> (Bladder Saltbush)	56	3.5
<i>Dissocarpus biflorus</i> (Two-horn Saltbush)	25	0.8
<i>Enchylaena tomentosa</i> (Ruby Saltbush)	36	0.5
<i>Frankenia serpyllifolia</i> (Thyme Sea-heath)	49	1.1
<i>Maireana aphylla</i> (Cotton-bush)^	59	2.4
<i>Maireana coronata</i> (Crown Fissure-plant)	32	0.8
<i>Maireana georgei</i> (Satiny Bluebush)	26	0.8
<i>Maireana pyramidata</i> (Black Bluebush)	22	0.5
<i>Minuria cunninghamii</i> (Bush Minuria)	26	0.5
<i>Osteocarpum acropterum</i> (Bonefruit), #AUS: -, SA:	22	0.4
<i>Rhagodia spinescens</i> (Spiny Saltbush)	32	0.9
<i>Salsola australis</i> (Buckbush)	71	2.0
<i>Sclerolaena bicornis</i> (Goat-head Bindyi)	46	1.1
<i>Sclerolaena brachyptera</i> (Short-wing Bindyi)	52	1.8
<i>Sclerolaena diacantha</i> (Grey Bindyi)	25	1.1
<i>Sclerolaena divaricata</i> (Tangled Bindyi)	34	1.4
<i>Sclerolaena intricata</i> (Tangled Bindyi)	36	0.9
<i>Sclerolaena lanicuspis</i> (Spinach Bindyi)	40	1.2
<i>Sclerolaena ventricosa</i> (Salt Bindyi)	30	1.6
<i>Sida fibulifera</i> (Pin Sida)	43	1.1
Grasses/sedges		
<i>Aristida contorta</i> (Curly Wire-grass)	55	1.9
<i>Astrebula pectinata</i> (Barley Mitchell-grass)^	74	4.2
<i>Dactyloctenium radulans</i> (Button-grass)	39	2.0
<i>Enneapogon avenaceus</i> (Common Bottle-grass)	61	3.6
<i>Eragrostis dielsii</i> (Mulka)	37	1.4
<i>Eragrostis setifolia</i> (Bristly Love-grass)	51	1.9
<i>Sporobolus actinocladius</i> (Ray Grass)	68	1.8
<i>Tripogon loliiformis</i> (Five-minute Grass)^	68	3.6

Conservation listed species [records]. 34 species recorded in this ecotype (including 10 wetland species – see Wetlands section). Plants: *Acacia carneorum* (Needle Wattle), #AUS: VU, SA: V [1], *Acacia pickardii* (Pickard's Wattle), #AUS: VU, SA: R [13], *Frankenia plicata* (Braided Sea-heath), #AUS: EN, SA: V [4], *Gilesia biniiflora* (Western Tar-vine), #AUS: -, SA: R [2], *Maireana pentagona* (Slender Fissure-plant), #AUS: -, SA: R [13], *Osteocarpum pentapterum* (Five-wing Bonefruit), #AUS: -, SA: E [1], *Pycnosorus chrysanthus* (Yellow Drumsticks), #AUS: -, SA: E [1], *Sclerolaena fontinalis* (Mound Spring Bindyi), #AUS: -, SA: R [1], *Zygophyllum humillimum* (Small-fruit Twinleaf), #AUS: -, SA: R [2], **Birds:** *Ardeotis australis* (Australian Bustard), #AUS: -, SA: V [4], *Coturnix ypsilophora* (Brown Quail), #AUS: -, SA: V [1], *Elanus scriptus* (Letter-winged Kite), #AUS: -, SA: R [2], *Falco hypoleucos* (Grey Falcon), #AUS: -, SA: R [1], *Falco peregrinus* (Peregrine Falcon), #AUS: -, SA: R [1], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [1], *Neophema chrysostoma* (Blue-winged Parrot), #AUS: -, SA: V [3], *Pedionomus torquatus* (Plains-wanderer), #AUS: CR, SA: E [1], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [9], **Mammals:** *Dasyurus cristicauda* (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: - [2], *Dasyuroides byrnei* (Kowari), #AUS: VU, SA: V [402], *Notomys cervinus* (Fawn Hopping-mouse), #AUS: -, SA: V [66], *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [4], **Reptiles:** *Aspidites ramsayi* (Woma), #AUS: -, SA: R [2], *Proablepharus kinghorni* (Blacksoil Skink), #AUS: -, SA: R [1],

Area	8177 km ²		6.8% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peo wie
Total	1.1%	0.1%	61.9%	5.0%	31.8%
Central	0.5%	0.1%	3.4%	0.7%	1.9%

Environmental classes (proportion of sites)						
arid	0.01	0.74	0.16	0.06	0.03	semi-arid
hills	0.01	0.03	0.28	0.40	0.28	plains
clay	0.34	0.46	0.17	0.02	0.00	sand
acidic	0.05	0.32	0.47	0.16	0.00	alkaline
runoff	0.02	0.15	0.32	0.39	0.11	runon
dryland	0.95	0.05	0.00	0.00	0.00	wetland
stable	0.20	0.55	0.23	0.02	0.00	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.16	Soil erosion	0.16
Plant recruitment	0.60	Average risk	0.39



3.2 Bladder Saltbush, Mitchell-grass, Bindyi clay loam slopes

Ecotype (ID): C110120 (2)

Formation: low chenopod shrubland

Veg. description: *Atriplex vesicaria*, *Astrebula* sp., *Sclerolaena* sp. over *Sporobolus* sp., *Atriplex* sp. (low), *Pimelea* sp. (annual), *Minuria* sp.

Vegetation cover		Survey sites = 25	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
1.5	48.6	27.7	13.4

Species (#conservation status *non-native ^indicator sp.)	Freq.	Cover
Low shrubs (<1 m)		
<i>Abutilon halophilum</i> (Plains Lantern-bush)	52	1.2
<i>Atriplex angulata</i> (Fan Saltbush)	56	2.2
<i>Atriplex vesicaria</i> (Bladder Saltbush)^	96	8.7
<i>Cullen australasicum</i> (Tall Scurf-pea)	32	0.8
<i>Frankenia serpyllifolia</i> (Thyme Sea-heath)	28	1.1
<i>Maireana aphylla</i> (Cotton-bush)	48	1.4
<i>Maireana astrotricha</i> (Low Bluebush)	24	0.5
<i>Maireana georgei</i> (Satiny Bluebush)	32	0.8
<i>Minuria cunninghamii</i> (Bush Minuria)^	48	1.1
<i>Neobassia proceriflora</i> (Desert Glasswort)	28	2.1
<i>Osteocarpum acropterum</i> (Bonefruit), #AUS: -, SA:	32	1.1
<i>Rhagodia spinescens</i> (Spiny Saltbush)	32	0.7
<i>Salsola australis</i> (Buckbush)	52	2.0
<i>Sclerolaena brachyptera</i> (Short-wing Bindyi)	76	3.4
<i>Sclerolaena divaricata</i> (Tangled Bindyi)	60	2.3
<i>Sclerolaena ventricosa</i> (Salt Bindyi)	72	3.1
<i>Sida trichopoda</i> (High Sida)	32	0.8
Grasses/sedges		
<i>Aristida contorta</i> (Curly Wire-grass)	24	2.0
<i>Astrebula lappacea</i> (Curly Mitchell-grass)^	4	0.3
<i>Astrebula pectinata</i> (Barley Mitchell-grass)^	92	8.4
<i>Digitaria ammophila</i> (Spider Grass)^	4	0.1
<i>Digitaria brownii</i> (Cotton Panic-grass)^	4	0.1
<i>Digitaria divaricatissima</i> (Spider Grass)^	24	0.4
<i>Enneapogon avenaceus</i> (Common Bottle-	64	4.1
<i>Eragrostis setifolia</i> (Bristly Love-grass)	48	1.1
<i>Iseilema membranaceum</i> (Small Flinders-grass)	44	1.0
<i>Panicum decompositum</i> (Native Millet)	32	0.9
<i>Sporobolus actinocladius</i> (Ray Grass)	88	3.9
<i>Tripogon loliiformis</i> (Five-minute Grass)	60	2.1
Forbs		
<i>Minuria denticulata</i> (Woolly Minuria)^	4	0.1
<i>Minuria rigida</i> (Rigid Minuria)^	4	0.1
<i>Pimelea simplex</i> (Desert Riceflower)^	60	1.7
<i>Portulaca oleracea</i> (Common Purslane)	44	0.7

Conservation listed species [records]. 2 species recorded in this ecotype.

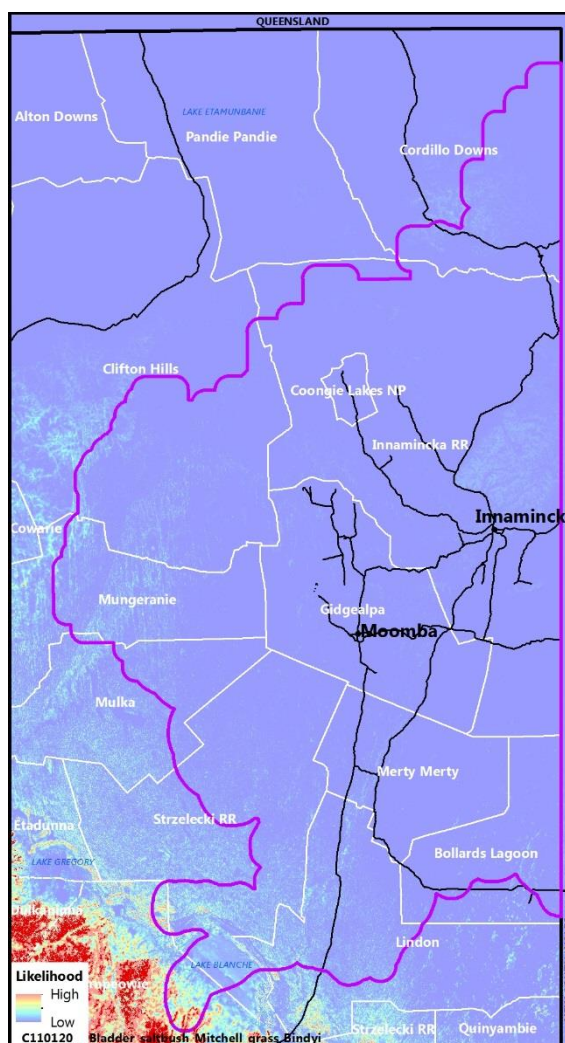
Plants: *Maireana pentagona* (Slender Fissure-plant), #AUS: -, SA: R [5],

Mammals: *Leporillus conditor* (Greater Stick-nest Rat), #AUS: VU, SA: V [1],

Area	3492 km ²		2.9% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peo wie
Total	0.0%	0.0%	0.1%	2.0%	97.9%
Central	0.0%	0.0%	0.0%	0.0%	0.3%

Environmental classes (proportion of sites)						
arid	0.00	0.16	0.56	0.28	0.00	semi-arid
hills	0.12	0.28	0.48	0.12	0.00	plains
clay	0.36	0.56	0.08	0.00	0.00	sand
acidic	0.08	0.16	0.44	0.32	0.00	alkaline
runoff	0.20	0.32	0.36	0.12	0.00	runon
dryland	1.00	0.00	0.00	0.00	0.00	wetland
stable	0.00	0.52	0.28	0.04	0.16	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.15	Soil erosion	0.28
Plant recruitment	0.68	Average risk	0.43



3.3 Mitchell-grass, Bindyi, Plover-daisy clay plains

Ecotype (ID): C110505 (3)

Formation: low chenopod shrubland

Veg. description: *Astrebula* sp., *Sclerolaena* sp. with *Leiocarpa* sp., *Maireana aphylla* +/- *Acacia victoriae* over *Eragrostis setifolia*, *Salsola australis* +/- *Pimelea* sp. (annual)

Vegetation cover		Survey sites = 56	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
3.3	39.3	20.7	19.0

Species (#conservation status *non-native ^indicator sp.)	Freq.	Cover (%)
Trees/tall shrubs (>1 m)		
<i>Acacia victoriae</i> (Elegant Wattle)	38	0.7
Low shrubs (<1 m)		
<i>Abutilon halophilum</i> (Plains Lantern-bush)	21	0.6
<i>Atriplex angulata</i> (Fan Saltbush)	36	1.6
<i>Atriplex spongiosa</i> (Pop Saltbush)	27	0.7
<i>Dissocarpus biflorus</i> (Two-horn Saltbush)	23	0.6
<i>Leiocarpa websteri</i> (Narrow Plover-daisy)^	9	0.2
<i>Maireana aphylla</i> (Cotton-bush)^	57	3.3
<i>Minuria cunninghamii</i> (Bush Minuria)	30	0.6
<i>Rhagodia spinescens</i> (Spiny Saltbush)	30	1.3
<i>Salsola australis</i> (Buckbush)	59	4.6
<i>Sclerolaena brachyptera</i> (Short-wing Bindyi)^	75	3.7
<i>Sclerolaena diacantha</i> (Grey Bindyi)^	14	0.4
<i>Sclerolaena divaricata</i> (Tangled Bindyi)^	64	3.9
<i>Sclerolaena lanicuspis</i> (Spinach Bindyi)^	9	0.4
<i>Sclerolaena limbata</i> (Pearl Bindyi)^	14	0.8
<i>Sclerolaena patentiuspis</i> (Spear-fruit Bindyi)^	9	0.4
<i>Sclerolaena tricuspis</i> (Three-spine Bindyi)^	13	0.7
<i>Sclerolaena ventricosa</i> (Salt Bindyi)^	57	5.5
Grasses/sedges		
<i>Astrebula lappacea</i> (Curly Mitchell-grass)^	4	0.1
<i>Astrebula pectinata</i> (Barley Mitchell-grass)^	77	5.5
<i>Astrebula</i> sp. (Mitchell-grass)^	9	0.7
<i>Enneapogon avenaceus</i> (Common Bottle-grass)	54	3.0
<i>Eragrostis eriopoda</i> (Woollybutt)	21	1.0
<i>Eragrostis setifolia</i> (Bristly Love-grass)	54	4.6
<i>Sporobolus actinocladius</i> (Ray Grass)	39	1.8
Forbs		
<i>Daucus glochidiatus</i> (Native Carrot)	25	0.6
<i>Euphorbia tannensis</i> (Desert Spurge)	25	0.6
<i>Gnephosis arachnoidea</i> (Spidery Button-flower)	21	0.4
<i>Goodenia pinnatifida</i> (Cut-leaf Goodenia)	23	0.4
<i>Leiocarpa brevicompta</i> (Plains Plover-daisy)^	14	0.2
<i>Leiocarpa websteri</i> (Narrow Plover-daisy)^	30	0.9
<i>Pimelea simplex</i> (Desert Riceflower)^	48	1.4
<i>Plantago drummondii</i> (Dark Plantain)	36	0.7
<i>Rhodanthe floribunda</i> (White Everlasting)	45	1.8

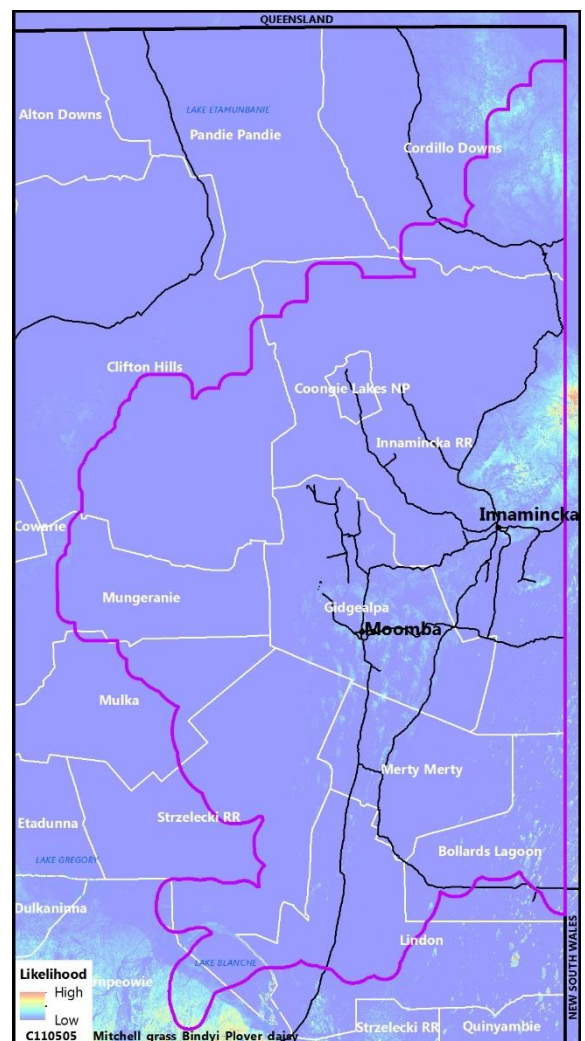
Conservation listed species [records]. 6 species recorded in ecotype.

Plants: *Aristida arida* (Dry Wire-grass), #AUS: -, SA: R [2], *Swainsona oligophylla* (Clay-pan Swainson-pea), #AUS: -, SA: R [3], *Swainsona procumbens* (Broughton Pea), #AUS: -, SA: V [1], *Swainsona viridis* (Creeping Darling Pea), #AUS: -, SA: V [3], **Birds:** *Microeca fascians* (Jacky Winter), #AUS: -, SA: ssp [1], **Mammals:** *Pseudomys australis* (Plains mouse), #AUS: VU, SA: V [7],

Area	1510 km ²		1.3% of the study area		
Sub IBRA	Coongie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie
Total	0.0%	0.0%	0.0%	2.3%	97.7%
Central	0.0%	0.0%	0.0%	0.0%	0.0%

Environmental classes (proportion of sites)						
arid	0.00	0.00	0.07	0.39	0.54	semi-arid
hills	0.02	0.11	0.29	0.36	0.23	plains
clay	0.70	0.30	0.00	0.00	0.00	sand
acidic	0.30	0.34	0.36	0.00	0.00	alkaline
runoff	0.02	0.30	0.38	0.21	0.09	runon
dryland	1.00	0.00	0.00	0.00	0.00	wetland
stable	0.52	0.34	0.14	0.00	0.00	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.14	Soil erosion	0.12
Plant recruitment	0.63	Average risk	0.37



3.4 Bindyi, Mitchell-grass, Desert Glasswort clay undulating hills

Ecotype (ID): C110525 (4)

Formation: low chenopod shrubland

Veg. description: *Sclerolaena* sp., *Astrebla* sp., *Neobassia proceriflora* over *Atriplex* sp. (annual), *Salsola australis*, *Lepidium* sp., *Plantago* sp.

Vegetation cover (%)		Survey sites = 34	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
0.5	45.0	15.7	33.6

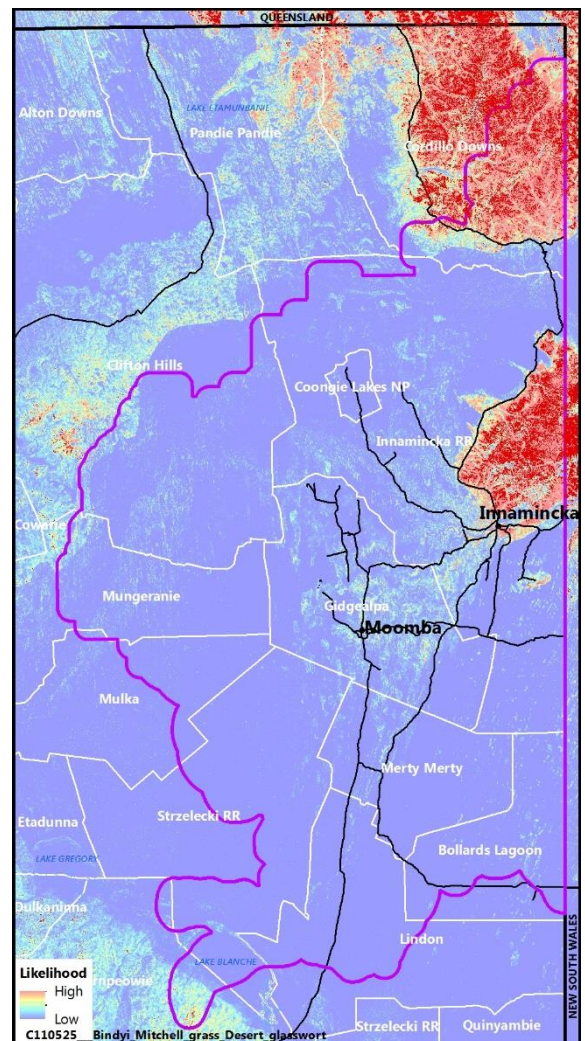
Species (#conservation status *non-native ^indicator)	Freq. (%)	Cover
Low shrubs (<1 m)		
<i>Abutilon halophilum</i> (Plains Lantern-bush)	38	0.9
<i>Atriplex angulata</i> (Fan Saltbush)	26	0.7
<i>Atriplex lindleyi</i> (Baldo)	50	1.5
<i>Atriplex spongiosa</i> (Pop Saltbush)^	26	1.6
<i>Atriplex vesicaria</i> (Bladder Saltbush)	24	0.5
<i>Dissocarpus paradoxus</i> (Ball Bindyi)	21	0.3
<i>Frankenia serpyllifolia</i> (Thyme Sea-heath)	35	0.5
<i>Maireana coronata</i> (Crown Fissure-plant)	26	0.8
<i>Neobassia proceriflora</i> (Desert Glasswort)^	74	6.1
<i>Salsola australis</i> (Buckbush)	62	3.8
<i>Sclerolaena brachyptera</i> (Short-wing Bindyi)	65	4.2
<i>Sclerolaena divaricata</i> (Tangled Bindyi)	56	4.3
<i>Sclerolaena glabra</i> (Smooth Bindyi)	41	1.4
<i>Sclerolaena lanicuspis</i> (Spinach Bindyi)	62	6.9
<i>Sclerolaena parallelicuspis</i> (Western Bindyi)	59	2.1
<i>Sclerolaena ventricosa</i> (Salt Bindyi)	21	1.1
<i>Sida fibulifera</i> (Pin Sida)	26	0.6
<i>Sida trichopoda</i> (High Sida)	26	0.6
Grasses/sedges		
<i>Aristida anthoxanthoides</i> (Yellow Three-awn)	21	0.5
<i>Astrebla pectinata</i> (Barley Mitchell-grass)^	97	8.2
<i>Dactyloctenium radulans</i> (Button-grass)	24	0.4
<i>Iseilema membranaceum</i> (Small Flinders-grass)	21	1.6
<i>Sporobolus actinocladus</i> (Ray Grass)	50	1.3
<i>Tripogon loliiformis</i> (Five-minute Grass)	41	1.4
Forbs		
<i>Atriplex holocarpa</i> (Pop Saltbush)^	50	3.6
<i>Lepidium papillosum</i> (Warty Peppergrass)^	29	0.7
<i>Lepidium phlebotetum</i> (Veined Peppergrass)^	15	0.5
<i>Lepidium rotundum</i> (Veined Peppergrass)^	24	0.5
<i>Plantago drummondii</i> (Dark Plantain)^	56	1.3
<i>Portulaca oleracea</i> (Common Purslane)	50	1.3
<i>Rhodanthe microglossa</i> (Clustered Everlasting)	29	3.2
<i>Trianthema triquetra</i> (Red Spinach)	41	3.8

Conservation listed species [records]. 20 species recorded in this ecotype (including 5 wetland species – see Wetlands section). Plants: *Osteocarpum pentapterum* (Five-wing Bonefruit), #AUS: -, SA: E [1], *Pycnosorus chrysanthus* (Yellow Drumsticks), #AUS: -, SA: E [1], *Zygophyllum humillimum* (Small-fruit Twinleaf), #AUS: -, SA: R [4], **Birds:** *Ardeotis australis* (Australian Bustard), #AUS: -, SA: V [2], *Coturnix ypsilophora* (Brown Quail), #AUS: -, SA: V [1], *Emblema pictum* (Painted Finch), #AUS: -, SA: R [1], *Geophaps plumifera* (Spinifex Pigeon), #AUS: -, SA: R [2], *Microeca fascians* (Jacky Winter), #AUS: -, SA: ssp [1], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [2], **Mammals:** *Leporillus conditor* (Greater Stick-nest Rat), #AUS: VU, SA: V [1] (now extinct on mainland), *Petrogale xanthopus xanthopus* (Yellow-footed Rock-wallaby), #AUS: VU, SA: - [1] (ranges only), *Pseudomys australis* (Plains mouse), #AUS: VU, SA: V [1], **Reptiles:** *Ctenotus joanae* (Blacksoil Ctenotus), #AUS: -, SA: R [2], *Proablepharus kinghorni* (Blacksoil Skink), #AUS: -, SA: R [2], *Pseudonaja guttata* (Spotted Brown Snake), #AUS: -, SA: R [1],

Area	2228 km ²		1.9% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peo wie
Total	0.1%	0.0%	88.9%	0.2%	10.9%
Central	0.0%	0.0%	50.3%	0.0%	0.1%

Environmental classes (proportion of sites)						
arid	0.00	0.16	0.56	0.28	0.00	semi-arid
hills	0.12	0.28	0.48	0.12	0.00	plains
clay	0.36	0.56	0.08	0.00	0.00	sand
acidic	0.08	0.16	0.44	0.32	0.00	alkaline
runoff	0.20	0.32	0.36	0.12	0.00	runon
dryland	1.00	0.00	0.00	0.00	0.00	wetland
stable	0.00	0.52	0.28	0.04	0.16	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.12	Soil erosion	0.21
Plant recruitment	0.66	Average risk	0.40



3.5 Desert Senna, Spiny Saltbush clay plains or loam dunes

Ecotype (ID): C140404 (5)

Formation: mid open shrubland

Veg. description: *Senna artemisioides*, *Rhagodia* sp. +/- *Melaleuca glomerata* with *Santalum lanceolatum* +/- *Acacia victoriae* over *Dodonaea microzyga* +/- *Malvastrum americanum*, *Salsola australis*

Vegetation cover (%)		Survey sites = 44	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
20.0	26.5	21.0	13.6

Species (#conservation status *non-native ^indicator sp.)	Freq.	Cover (%)
Trees/tall shrubs (>1 m)		
<i>Acacia tetragonophylla</i> (Dead Finish)	20	0.3
<i>Acacia victoriae</i> (Elegant Wattle)	39	1.5
<i>Melaleuca glomerata</i> (Inland Paper-bark)^	15	3.3
<i>Rhagodia spinescens</i> (Spiny Saltbush)^	11	1.1
<i>Santalum lanceolatum</i> (Plumbush)^	49	0.8
<i>Senna artemisioides</i> (Desert Senna)	48	4.4
Low shrubs (<1 m)		
<i>Dioscorea paradoxus</i> (Ball Bindyi)	23	0.7
<i>Dodonaea microzyga</i> (Brilliant Hop-bush)^	16	0.7
<i>Enchylaena tomentosa</i> (Ruby Saltbush)	50	1.1
<i>Maireana aphylla</i> (Cotton-bush)	23	1.2
<i>Maireana pyramidata</i> (Black Bluebush)	27	0.6
<i>Rhagodia spinescens</i> (Spiny Saltbush)^	70	2.8
<i>Salsola australis</i> (Buckbush)	50	4.4
<i>Sclerolaena limbata</i> (Pearl Bindyi)	20	0.6
<i>Sida fibulifera</i> (Pin Sida)	32	1.4
<i>Solanum ellipticum</i> (Velvet Potato-bush)	25	0.4
Grasses/sedges		
<i>Aristida contorta</i> (Curly Wire-grass)	32	3.0
<i>Enneapogon avenaceus</i> (Common Bottle-	59	3.5
<i>Enteropogon acicularis</i> (Umbrella Grass)	27	1.5
<i>Eragrostis eriopoda</i> (Woollybutt)	20	2.0
Forbs		
<i>Malvastrum americanum</i> (Malvastrum)^	43	1.4

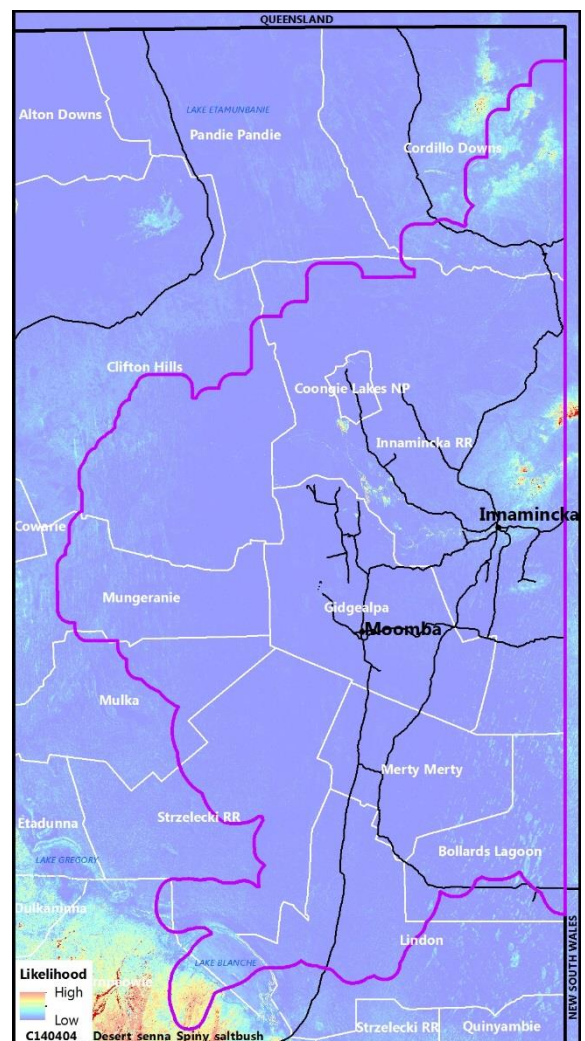
Conservation listed species [records]. 16 species recorded in this ecotype (including 3 wetland species – see Wetlands section).

Plants: *Aristida arida* (Dry Wire-grass), #AUS: -, SA: R [6], *Frankenia cupularis* (Cupped Sea-heath), #AUS: -, SA: R [1], *Picris squarrosa* (Squat Picris), #AUS: -, SA: R [1], **Birds:** *Ardeotis australis* (Australian Bustard), #AUS: -, SA: V [2], *Emblema pictum* (Painted Finch), #AUS: -, SA: R [2], *Falco peregrinus* (Peregrine Falcon), #AUS: -, SA: R [2], *Microeca fascians* (Jacky Winter), #AUS: -, SA: ssp [2], *Neophema chrysostoma* (Blue-winged Parrot), #AUS: -, SA: V [2], *Neophema elegans* (Elegant Parrot), #AUS: -, SA: R [1], *Pedionomus torquatus* (Plains-wanderer), #AUS: CR, SA: E [1], **Mammals:** *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [89], *Pseudomys australis* (Plains mouse), #AUS: VU, SA: V [5], **Reptiles:** *Aspidites ramsayi* (Woma), #AUS: -, SA: R [2],

Area	1470 km ²		1.2% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peo wie
Total	0.0%	0.0%	0.5%	0.5%	99.1%
Central	0.0%	0.0%	0.4%	0.0%	0.1%

Environmental classes (proportion of sites)						
arid	0.00	0.09	0.16	0.14	0.61	semi-arid
hills	0.02	0.07	0.32	0.52	0.07	plains
clay	0.52	0.36	0.09	0.02	0.00	sand
acidic	0.52	0.27	0.11	0.09	0.00	alkaline
runoff	0.05	0.25	0.23	0.27	0.20	runon
dryland	1.00	0.00	0.00	0.00	0.00	wetland
stable	0.34	0.43	0.16	0.05	0.02	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.38	Soil erosion	0.16
Plant recruitment	0.60	Average risk	0.39



3.6 Black Bluebush, Low bluebush, Bindyi clay slopes

Ecotype (ID): C140421 (6)

Formation: low open chenopod shrubland

Veg. description: Maireana pyramidata, Maireana astrotricha
+/-Atriplex vesicaria over Sclerolaena sp., Rhagodia sp.
+/-Maireana aphylla

Vegetation cover (%)		Survey sites = 61	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
4.4	39.2	10.6	5.0

Species (#conservation status *non-native ^indicator sp.)	Freq.	Cover
Trees/tall shrubs (>1 m)		
Acacia victoriae (Elegant Wattle)	34	0.5
Eremophila duttonii (Harlequin Emubush)^	4	0.0
Maireana pyramidata (Black Bluebush)^	5	0.3
Rhagodia eremaea (Desert Saltbush)^	2	0.0
Rhagodia spinescens (Spiny Saltbush)^	3	0.1
Senna artemisioides (Desert Senna)	30	0.4
Low shrubs (<1 m)		
Atriplex vesicaria (Bladder Saltbush)^	49	4.2
Enchylaena tomentosa (Ruby Saltbush)	21	0.4
Eremophila duttonii (Harlequin Emubush)^	23	0.6
Maireana aphylla (Cotton-bush)	34	2.8
Maireana astrotricha (Low Bluebush)^	57	5.0
Maireana pyramidata (Black Bluebush)^	77	4.9
Maireana sedifolia (Bluebush)^	2	0.0
Rhagodia spinescens (Spiny Saltbush)^	56	1.6
Salsola australis (Buckbush)	51	1.3
Sclerolaena brachyptera (Short-wing Bindyi)	33	1.5
Sclerolaena diacantha (Grey Bindyi)	26	1.4
Sclerolaena limbata (Pearl Bindyi)	36	1.2
Sclerolaena ventricosa (Salt Bindyi)	26	1.2
Grasses/ sedges		
Enneapogon avenaceus (Common Bottle-	51	3.5
Enneapogon cylindricus (Jointed Bottle-washers)	26	2.3

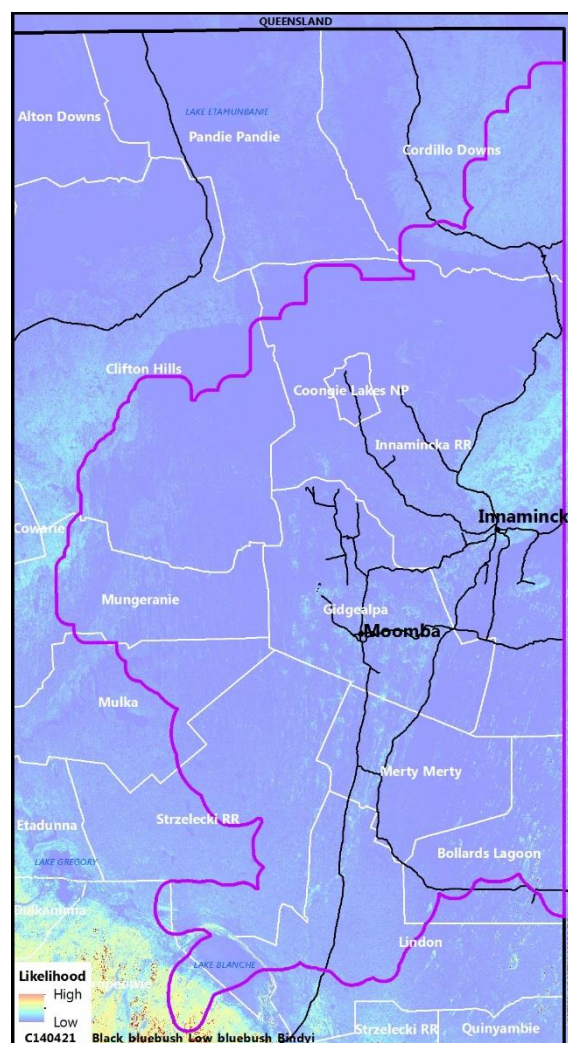
Conservation listed species [records]. 10 species recorded in this ecotype (including 1 wetland species – see Wetlands section).

Plants: Aristida arida (Dry Wire-grass), #AUS: -, SA: R [4], Eriocaulon carsonii ssp. carsonii (Salt Pipewort), #AUS: EN, SA: E [1], Frankenia cupularis (Cupped Sea-heath), #AUS: -, SA: R [1], Gilesia biniflora (Western Tar-vine), #AUS: -, SA: R [1], Gratwickia monochaeta (One-bristle Everlasting), #AUS: -, SA: R [1], Swainsona viridis (Creeping Darling Pea), #AUS: -, SA: V [1], **Birds:** Falco hypoleucos (Grey Falcon), #AUS: -, SA: R [1], Neophema elegans (Elegant Parrot), #AUS: -, SA: R [2], **Mammals:** Notomys fuscus (Dusky Hopping-mouse), #AUS: VU, SA: V [1],

Area	4464 km ²		3.7% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peo wie
Total	0.0%	0.0%	0.0%	30.0%	70.0%
Central	0.0%	0.0%	0.0%	0.1%	0.1%

Environmental classes (proportion of sites)						
arid	0.00	0.13	0.15	0.15	0.57	semi-arid
hills	0.00	0.16	0.36	0.31	0.16	plains
clay	0.44	0.44	0.08	0.00	0.03	sand
acidic	0.13	0.44	0.31	0.11	0.00	alkaline
runoff	0.11	0.16	0.28	0.28	0.16	runon
dryland	0.98	0.02	0.00	0.00	0.00	wetland
stable	0.26	0.44	0.23	0.00	0.07	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.19	Soil erosion	0.18
Plant recruitment	0.61	Average risk	0.39



3.7 Bindyi, Buckbush, Bottle-washers sandy slopes or dunes

Ecotype (ID): C191417 (7)

Formation: low chenopod shrubland

Veg. description: *Sclerolaena* sp., *Salsola australis*, *Sida* sp. over *Enneapogon* sp., *Euphorbia* sp., *Atriplex* sp. (annual)

Vegetation cover (%)		Survey sites = 44	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
6.7	51.2	46.8	33.2

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
---	-----------	-----------

Trees/tall shrubs (>1 m)

<i>Acacia aneura</i> (Mulga)^	38	1.7
<i>Acacia ligulata</i> (Umbrella Bush)	29	0.9
<i>Dodonaea viscosa</i> (Sticky Hop-bush)	27	0.5
<i>Senna artemisioides</i> (Desert Senna)	21	1.3

Low shrubs (<1 m)

<i>Atriplex limbata</i> (Spreading Saltbush)	23	0.7
<i>Enchylaena tomentosa</i> (Ruby Saltbush)	29	0.7
<i>Gunnipopsis quadrifida</i> (Sturt's Pigface)	27	2.0
<i>Maireana astrotricha</i> (Low Bluebush)	37	2.0
<i>Maireana pyramidata</i> (Black Bluebush)	21	0.4
<i>Osteocarpum acropterum</i> (Bonefruit), #AUS: -, SA:	35	1.0
<i>Salsola australis</i> (Buckbush)	92	9.5
<i>Sclerolaena bicornis</i> (Goat-head Bindyi)	23	1.0
<i>Sclerolaena brachyptera</i> (Short-wing Bindyi)	25	1.8
<i>Sclerolaena diacantha</i> (Grey Bindyi)	79	9.3
<i>Sclerolaena intricata</i> (Tangled Bindyi)	37	1.7
<i>Sclerolaena lanicuspis</i> (Spinach Bindyi)	25	1.5
<i>Sclerolaena ventricosa</i> (Salt Bindyi)	27	2.0
<i>Sida ammophila</i> (Sand Sida)	44	1.0
<i>Sida fibulifera</i> (Pin Sida)	40	1.0

Grasses/sedges

<i>Aristida contorta</i> (Curly Wire-grass)	46	2.0
<i>Dactyloctenium radulans</i> (Button-grass)	65	4.8
<i>Enneapogon avenaceus</i> (Common Bottle-washers)^	92	20.5
<i>Enneapogon cylindricus</i> (Jointed Bottle-washers)^	25	1.1
<i>Eragrostis setifolia</i> (Bristly Love-grass)	38	1.9
<i>Panicum decompositum</i> (Native Millet)	31	1.3
<i>Sporobolus actinocladus</i> (Ray Grass)	23	1.4
<i>Tripogon loliiformis</i> (Five-minute Grass)	44	6.6
<i>Triraphis mollis</i> (Purple Plume Grass)^	40	1.6

Forbs

<i>Convolvulus</i> sp. (Bindweed)^	15	1.0
<i>Euphorbia drummondii</i> (Caustic Weed)^	58	2.6
<i>Euphorbia tannensis</i> (Desert Spurge)^	56	3.5
<i>Portulaca oleracea</i> (Common Purslane)	63	2.5

Conservation listed species [records]. 15 species recorded in this ecotype (including 3 wetland species – see Wetlands section).

Plants: *Eragrostis lacunaria* (Purple Love-grass), #AUS: -, SA: R [1], *Maireana pentagona* (Slender Fissure-plant), #AUS: -, SA: R [1], *Malacocera gracilis* (Slender Soft-horns), #AUS: -, SA: V [1], *Zygophyllum humillimum* (Small-fruit Twinleaf), #AUS: -, SA: R [1], **Birds:** *Falco hypoleucos* (Grey Falcon), #AUS: -, SA: R [1], *Falco peregrinus* (Peregrine Falcon), #AUS: -, SA: R [2], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [1], *Myiagra inquieta* (Restless Flycatcher), #AUS: -, SA: R [1], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [5], **Mammals:** *Dasycercus cristicauda* (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: - [4], *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [160], *Pseudomys australis* (Plains mouse), #AUS: VU, SA: V [4],

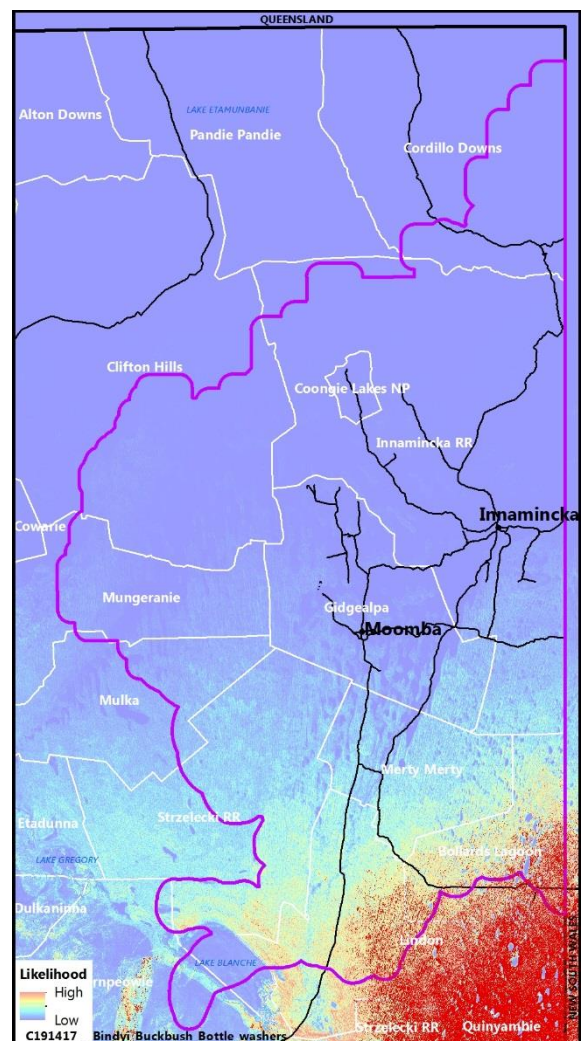
Area	10720 km ²		8.9% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peo wie
Total	0.0%	0.0%	0.0%	97.9%	2.1%
Central	0.0%	0.0%	0.0%	3.8%	0.0%

Environmental classes (proportion of sites)

arid	0.00	0.04	0.10	0.25	0.62	semi-arid
hills	0.00	0.29	0.46	0.23	0.02	plains
clay	0.02	0.10	0.25	0.44	0.19	sand
acidic	0.10	0.79	0.08	0.04	0.00	alkaline
runoff	0.04	0.15	0.44	0.33	0.04	runon
dryland	1.00	0.00	0.00	0.00	0.00	wetland
stable	0.02	0.08	0.29	0.38	0.23	erosive

Biophysical disturbance risk (index)

Perennial biomass	0.27	Soil erosion	0.39
Plant recruitment	0.62	Average risk	0.46



3.8 Desert Senna over Three-awn/Wire-grass, Bindyi loam slopes

Ecotype (ID): C191424 (8)

Formation: mid open shrubland

Veg. description: *Senna artemisioides* +/- *Acacia ligulata* +/- *Hakea leuoptera* with *Acacia aneura* +/- *Hakea eyreana* +/- *Corymbia terminalis* over *Aristida* sp., *Sclerolaena* sp., *Sida* sp., *Tephrosia* sp., *Scaevola* sp.

Vegetation cover (%)		Survey sites = 26	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
9.8	39.6	37.0	35.9

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Trees/tall shrubs (>1 m)		
<i>Acacia ligulata</i> (Umbrella Bush)	42	0.7
<i>Acacia victoriae</i> (Elegant Wattle)	23	0.3
<i>Atalaya hemiglauca</i> (Whitewood)	23	0.5
<i>Corymbia terminalis</i> (Plains Bloodwood)	23	0.5
<i>Hakea leuoptera</i> (Silver Needlewood)	38	1.2
<i>Senna artemisioides</i> (Desert Senna)^	69	2.8
Low shrubs (<1 m)		
<i>Abutilon otocarpum</i> (Desert Lantern-bush)	58	1.6
<i>Enchylaena tomentosa</i> (Ruby Saltbush)	54	1.0
<i>Evolvulus alsinoides</i> (Speedwell)^	15	0.4
<i>Hibiscus krichauffianus</i> (Velvet-leaf Hibiscus)	38	0.6
<i>Ptilotus sessilifolius</i> (Crimson-tails)	31	0.6
<i>Salsola australis</i> (Buckbush)	73	6.3
<i>Scaevola parvibarbat</i> (Small-beard Fanflower)^	46	1.3
<i>Scaevola spinescens</i> (Spiny Fanflower)^	15	0.2
<i>Sclerolaena diacantha</i> (Grey Bindyi)	58	2.1
<i>Senna artemisioides</i> (Desert Senna)^	31	0.8
<i>Sida ammophila</i> (Sand Sida)	46	1.5
<i>Sida fibulifera</i> (Pin Sida)	54	1.1
<i>Tephrosia sphaerospora</i> (Mulga Trefoil)^	35	2.0
Grasses/sedges		
<i>Aristida contorta</i> (Curly Wire-grass)	77	5.5
<i>Aristida holathera</i> (Tall Kerosene Grass)	38	2.2
<i>Enneapogon avenaceus</i> (Common Bottle-washers)	54	6.4
<i>Enneapogon cylindricus</i> (Jointed Bottle-washers)	35	1.0
<i>Enneapogon polyphyllus</i> (Leafy Bottle-washers)	35	0.9
<i>Eragrostis dielsii</i> (Mulka)	35	0.9
<i>Eragrostis setifolia</i> (Bristly Love-grass)	38	3.4
<i>Triodia basedowii</i> (Hard Spinifex)	42	7.8
<i>Triraphis mollis</i> (Purple Plume Grass)	38	2.3
<i>Zygochloa paradoxa</i> (Sandhill Cane-grass)	31	1.3

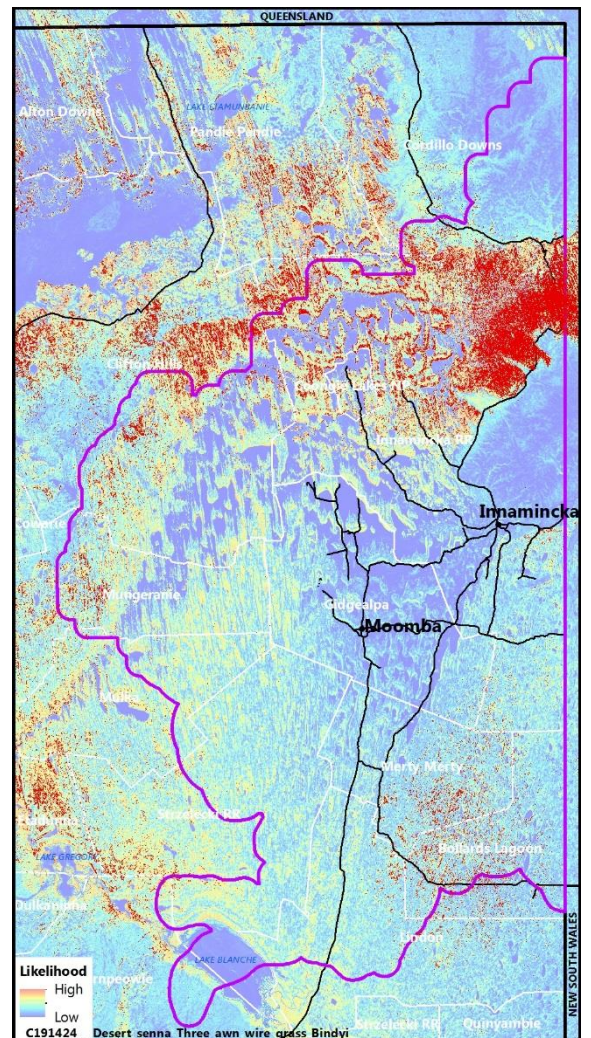
Conservation listed species [records]. 23 species recorded in ecotype (including 4 wetland species – see Wetlands section).

Plants: *Acacia pickardii* (Pickard's Wattle), #AUS: VU, SA: R [5], *Acacia tenuissima* (Slender Wattle), #AUS: -, SA: R [3], *Bergia occultipetala* (Hidden Water-fire), #AUS: -, SA: V [4], *Calandrinia stagnensis* (Waterhole Purslane), #AUS: -, SA: R [1], *Cyperus concinnus* (Trim Flat-sedge), #AUS: -, SA: R [2], *Cyperus dactyloides* (Flinger Flat-sedge), #AUS: -, SA: V [2], *Eremophila polyclada* (Twiggy Emubush), #AUS: -, SA: R [1], *Frankenia cupularis* (Cupped Sea-heath), #AUS: -, SA: R [1], *Maireana pentagona* (Slender Fissure-plant), #AUS: -, SA: R [1], *Stylidium desertorum* (Desert Triggerplant), #AUS: -, SA: V [6], *Swainsona oligophylla* (Clay-pan Swainson-pea), #AUS: -, SA: R [8], **Birds:** *Ardeotis australis* (Australian Bustard), #AUS: -, SA: V [12], *Falco hypoleucos* (Grey Falcon), #AUS: -, SA: R [2], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [2], *Microeca fascians* (Jacky Winter), #AUS: -, SA: ssp [1], *Myiagra inquieta* (Restless Flycatcher), #AUS: -, SA: R [1], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [4], **Mammals:** *Dasyurus cristicauda* (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: - [3], *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [1],

Area	5642 km ²		4.7% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peo wie
Total	17.2%	21.0%	21.6%	37.0%	3.2%
Central	10.7%	21.0%	3.2%	12.8%	0.0%

Environmental classes (proportion of sites)						
arid	0.04	0.35	0.54	0.04	0.04	semi-arid
hills	0.00	0.08	0.58	0.31	0.04	plains
clay	0.08	0.15	0.42	0.27	0.08	sand
acidic	0.27	0.31	0.35	0.08	0.00	alkaline
runoff	0.00	0.15	0.58	0.23	0.04	runon
dryland	1.00	0.00	0.00	0.00	0.00	wetland
stable	0.08	0.15	0.58	0.15	0.04	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.28	Soil erosion	0.27
Plant recruitment	0.62	Average risk	0.42



3.9 Red mulga over Bindyi, Three-awn/Wire-grass, Bindyi loam slopes

Ecotype (ID): C191723 (9)

Formation: low woodland

Veg. description: *Acacia cyperophylla* +/- *Acacia cambagei*, *Atalaya hemiglauc* with *Eucalyptus camaldulensis* +/- *Capparis mitchellii* over *Senna artemisioides* +/- *Eremophila freelingii*, *Sclerolaena* sp., *Aristida* sp., *Ptilotus obovatus*/sessilifolius

Vegetation cover (%)		Survey sites = 40	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
31.6	27.4	12.2	17.6

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Trees/tall shrubs (>1 m)		
<i>Acacia cambagei</i> (Gidgee)^	45	3.9
<i>Acacia cyperophylla</i> (Red Mulga)^	65	6.6
<i>Atalaya hemiglauc</i> (Whitewood)	50	1.3
<i>Eremophila freelingii</i> (Rock Emubush)^	25	0.5
<i>Eucalyptus camaldulensis</i> (River Red Gum)^	33	4.1
<i>Eucalyptus coolabah</i> (Coolibah)	28	0.7
<i>Santalum lanceolatum</i> (Plumbush)	28	0.5
<i>Senna artemisioides</i> (Desert Senna)	53	1.3
Low shrubs (<1 m)		
<i>Abutilon fraseri</i> (Dwarf Lantern-bush)	23	0.5
<i>Abutilon leucopetalum</i> (Desert Lantern-bush)	40	0.8
<i>Atriplex vesicaria</i> (Bladder Saltbush)	33	1.7
<i>Enchylaena tomentosa</i> (Ruby Saltbush)	60	1.6
<i>Eremophila freelingii</i> (Rock Emubush)^	20	1.4
<i>Frankenia serpyllifolia</i> (Thyme Sea-heath)	30	0.5
<i>Neobassia proceriflora</i> (Desert Glasswort)	23	0.8
<i>Ptilotus obovatus</i> (Silver-tails)	58	2.0
<i>Rhagodia spinescens</i> (Spiny Saltbush)	23	0.3
<i>Rostellularia adscendens</i> (Pink Tongues)^	20	0.4
<i>Salsola australis</i> (Buckbush)	43	0.9
<i>Sclerolaena brachyptera</i> (Short-wing Bindyi)	23	0.5
<i>Sclerolaena eriacantha</i> (Silky Bindyi)	38	0.8
<i>Sclerolaena glabra</i> (Smooth Bindyi)	28	0.7
<i>Sclerolaena lanicuspis</i> (Spinach Bindyi)	45	1.0
<i>Sclerolaena parallelispis</i> (Western Bindyi)	33	0.7
<i>Senna artemisioides</i> (Desert Senna)	30	0.7
<i>Sida fibulifera</i> (Pin Sida)	45	0.9
Grasses/sedges		
<i>Aristida contorta</i> (Curly Wire-grass)	60	2.3
<i>Astrela pectinata</i> (Barley Mitchell-grass)	60	1.5
<i>Sporobolus actinocladus</i> (Ray Grass)	45	0.9
<i>Triopogon loliiformis</i> (Five-minute Grass)	40	1.3

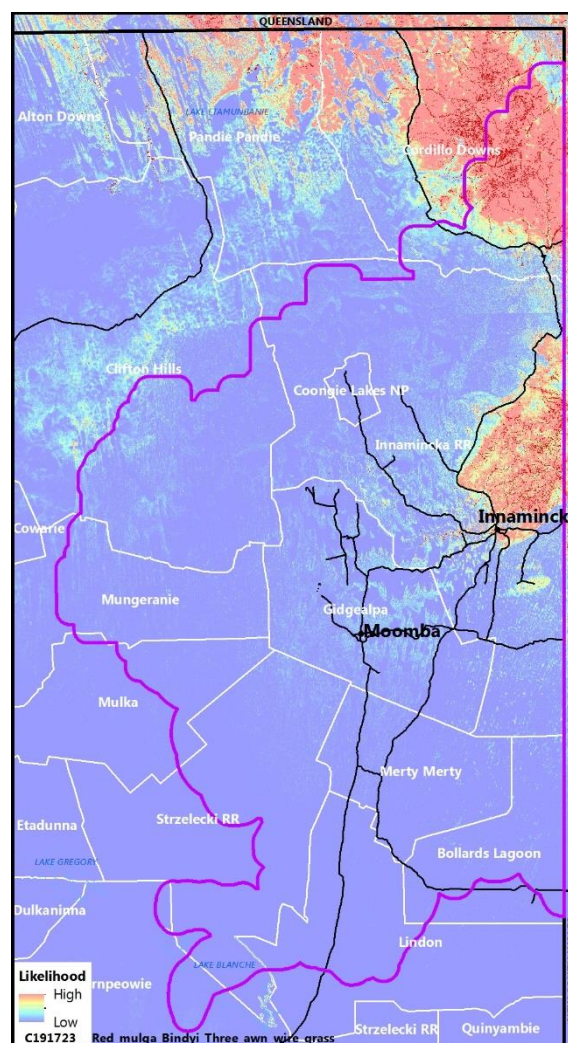
Conservation listed species [records]. 11 species recorded in this ecotype (including 2 wetland species – see Wetlands section).

Plants: *Calandrinia stagnensis* (Waterhole Purslane), #AUS: -, SA: R [1], *Osteocarpum pentapterum* (Five-wing Bonefruit), #AUS: -, SA: E [3], *Pycnosorus chrysanthus* (Yellow Drumsticks), #AUS: -, SA: E [2], *Synostemon ramosissimus* (Branched Spurge), #AUS: -, SA: V [4], *Zygophyllum humillimum* (Small-fruit Twinleaf), #AUS: -, SA: R [7], **Birds:** *Emblema pictum* (Painted Finch), #AUS: -, SA: R [1], *Falco peregrinus* (Peregrine Falcon), #AUS: -, SA: R [3], *Myiagra inquieta* (Restless Flycatcher), #AUS: -, SA: R [3], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [1],

Area	565 km ²		0.5% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie
Total	2.6%	0.3%	97.0%	0.0%	0.0%
Central	2.6%	0.3%	60.3%	0.0%	0.0%

Environmental classes (proportion of sites)						
arid	0.00	0.00	0.50	0.50	0.00	semi-arid
hills	0.18	0.25	0.38	0.18	0.03	plains
clay	0.40	0.48	0.10	0.03	0.00	sand
acidic	0.38	0.48	0.15	0.00	0.00	alkaline
runoff	0.23	0.20	0.28	0.18	0.13	runon
dryland	1.00	0.00	0.00	0.00	0.00	wetland
stable	0.03	0.33	0.33	0.10	0.23	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.98	Soil erosion	0.16
Plant recruitment	0.51	Average risk	0.39



3.10 Coolibah over Lignum, Bindyi clay loam plains or floodplains

Ecotype (ID): C220202 (10)

Formation: low woodland

Veg. description: Eucalyptus coolabah +/-Acacia stenophylla +/- Eremophila bignoniiflora over Duma florulenta +/-Atriplex nummularia, Sclerolaena sp., Enchylaena tomentosa

Vegetation cover (%)		Survey sites = 60	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
31.6	27.4	12.2	17.6

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Trees/tall shrubs (>1 m)		
Acacia stenophylla (River Cooba)^	33	1.2
Atriplex nummularia (Old-man Saltbush)	28	4.7
Bauhinia gilva (Bauhinia)	22	0.7
Duma florulenta (Lignum)^	70	5.2
Eremophila bignoniiflora (Bignonia Emubush)^	30	0.8
Eucalyptus coolabah (Coolibah)^	80	9.8
Low shrubs (<1 m)		
Atriplex velutinella (Sandhill Saltbush)	32	1.2
Chenopodium auricomum (Golden Goosefoot)	27	2.4
Duma coccoloboides (Sandhill Lignum)^	2	0.1
Einadia nutans (Climbing Saltbush)	42	0.9
Enchylaena tomentosa (Ruby Saltbush)	78	1.9
Salsola australis (Buckbush)	50	2.5
Sclerolaena bicornis (Goat-head Bindyi)	47	1.2
Sclerolaena diacantha (Grey Bindyi)	33	1.0
Sclerolaena intricata (Tangled Bindyi)	42	3.6
Teucrium racemosum (Grey Germander)	33	1.2
Grasses/ sedges		
Eragrostis dielsii (Mulka)	22	1.6
Eragrostis setifolia (Bristly Love-grass)	38	2.9
Setaria jubiflora (Warrego Summer-grass)^	17	0.6
Forbs		
Tetragonia tetragonioides (New Zealand)	22	0.9

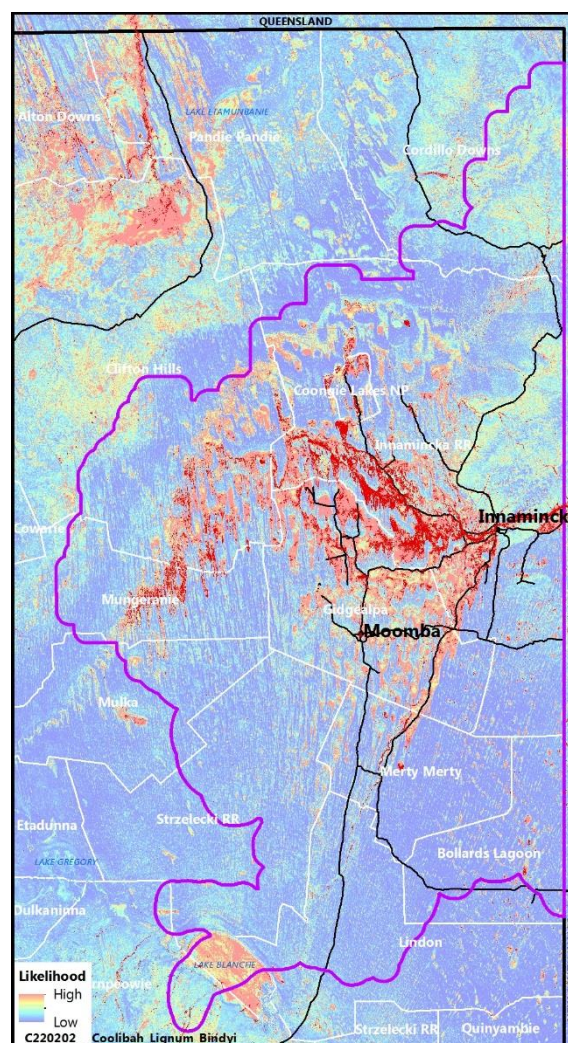
Conservation listed species [records]. 44 species recorded in this ecotype (including 15 wetland species – see Wetlands section).

Plants: Bulbostylis turbinata (Top-shape Watergrass), #AUS: -, SA: R [1], Callitriche sonderi (Matted Water Starwort), #AUS: -, SA: R [1], Calceolophus sonderi (Pale Beauty-heads), #AUS: -, SA: R [1], Cyperus dactyloides (Finger Flat-sedge), #AUS: -, SA: V [2], Elacholoma prostrata (Small Monkey-flower), #AUS: -, SA: R [1], Eleocharis plana (Flat Spike-rush), #AUS: -, SA: R [1], Eryngium vesiculosum (Prostrate Blue Devil), #AUS: -, SA: R [1], Frankenia cupularis (Cupped Sea-heath), #AUS: -, SA: R [3], Frankenia plicata (Braided Sea-heath), #AUS: EN, SA: V [1], Orobancha cernua var. australiana (Australian Broomrape), #AUS: -, SA: R [1], Pycnosorus chrysanthus (Yellow Drumsticks), #AUS: -, SA: E [2], Zygophyllum humillimum (Small-fruit Twinleaf), #AUS: -, SA: R [1], **Birds:** Aprosmictus erythropterus (Red-winged Parrot), #AUS: -, SA: R [2], Ardeotis australis (Australian Bustard), #AUS: -, SA: V [2], Chlamydera maculata (Spotted Bowerbird), #AUS: -, SA: E [1], Climacteris affinis (White-browed Treecreeper), #AUS: -, SA: R [1], Coturnix ypsilophora (Brown Quail), #AUS: -, SA: V [1], Elanus scriptus (Letter-winged Kite), #AUS: -, SA: R [1], Falco hypoleucos (Grey Falcon), #AUS: -, SA: R [2], Geophaps plumifera (Spinifex Pigeon), #AUS: -, SA: R [1], Hamirostra melanosternon (Black-breasted Buzzard), #AUS: -, SA: R [14], Lichmera indistincta (Brown Honeyeater), #AUS: -, SA: R [1], Microeca fascians (Jacky Winter), #AUS: -, SA: ssp [13], Myiagra inquieta (Restless Flycatcher), #AUS: -, SA: R [14], Ninox connivens (Barking Owl), #AUS: -, SA: R [8], Phaps histrionica (Flock Bronzewing), #AUS: -, SA: R [1], **Mammals:** Notomys fuscus (Dusky Hopping-mouse), #AUS: VU, SA: V [3], **Reptiles:** Aspidites ramsayi (Woma), #AUS: -, SA: R [2], Morelia spilota (Carpet Python), #AUS: -, SA: R [1],

Area	1525 km ²		1.3% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peo wie
Total	78.1%	0.5%	3.8%	11.2%	6.3%
Central	76.1%	0.5%	2.0%	5.8%	0.4%

Environmental classes (proportion of sites)						
arid	0.00	0.57	0.33	0.10	0.00	semi-arid
hills	0.00	0.02	0.33	0.53	0.12	plains
clay	0.25	0.53	0.17	0.05	0.00	sand
acidic	0.02	0.30	0.32	0.28	0.08	alkaline
runoff	0.00	0.07	0.38	0.38	0.17	runon
dryland	0.50	0.35	0.08	0.03	0.03	wetland
stable	0.35	0.37	0.25	0.03	0.00	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.98	Soil erosion	0.16
Plant recruitment	0.51	Average risk	0.39



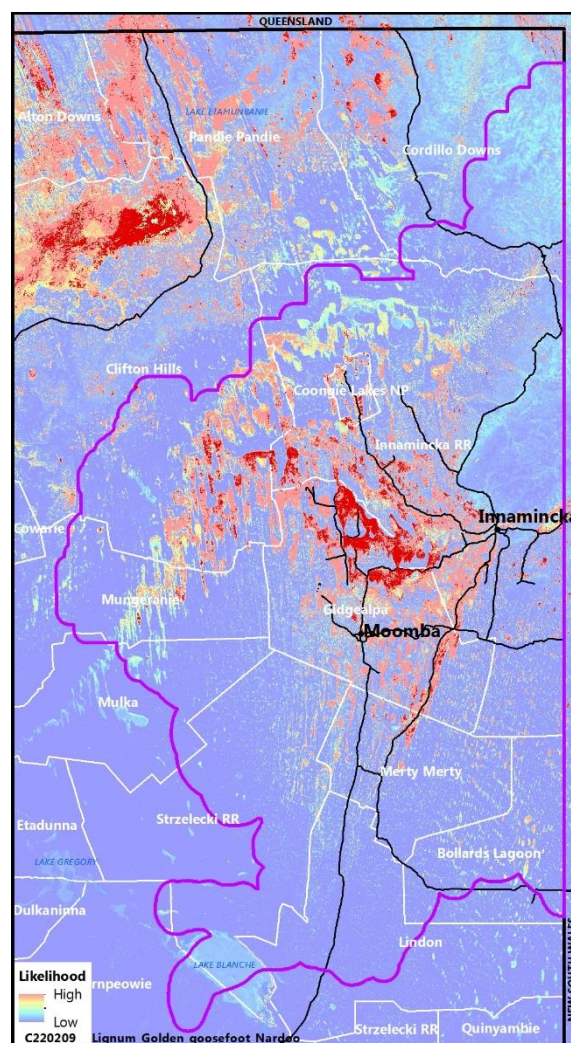
3.11 Lignum, Golden Goosefoot over Nardoo clay plains

Ecotype (ID): C220209 (11)			
Formation: mid open shrubland			
Veg. description: Duma florulenta, Chenopodium auricomum with Eucalyptus coolabah over Marsilea sp. +/-Sclerolaena sp. +/-Atriplex sp. (annual)			
Vegetation cover (%)		Survey sites = 32	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
20.6	13.4	4.6	17.2
Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)	
Trees/tall shrubs (>1 m)			
Chenopodium auricomum (Golden Goosefoot)^	34	6.4	
Duma florulenta (Lignum)^	84	10.9	
Eucalyptus coolabah (Coolibah)^	47	2.0	
Low shrubs (<1 m)			
Atriplex intermedia (Intermediate Saltbush)	25	1.4	
Chenopodium auricomum (Golden Goosefoot)^	47	3.9	
Ethuliopsis cunninghamii (Tall Nut-heads)^	9	1.0	
Sclerolaena intricata (Tangled Bindyi)	34	1.3	
Forbs			
Marsilea drummondii (Common Nardoo)^	62	9.6	

Area	820 km ²			0.7% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murnooowie	
Total	85.8%	1.0%	10.4%	2.5%	0.3%	
Central	85.6%	1.0%	0.5%	2.5%	0.0%	
Environmental classes (proportion of sites)						
arid	0.00	0.59	0.38	0.03	0.00	semi-arid
hills	0.00	0.00	0.13	0.63	0.25	plains
clay	0.44	0.44	0.09	0.03	0.00	sand
acidic	0.03	0.16	0.19	0.38	0.25	alkaline
runoff	0.00	0.09	0.31	0.41	0.19	runon
dryland	0.25	0.53	0.22	0.00	0.00	wetland
stable	0.38	0.47	0.13	0.03	0.00	erosive
Biophysical disturbance risk (index)						
Perennial biomass		0.32		Soil erosion		0.13
Plant recruitment		0.51		Average risk		0.38

Conservation listed species [records]. 17 species recorded in this ecotype (including 3 wetland species – see Wetlands section).

Plants: *Brachyscome eriogona* (Gibber Daisy), #AUS: -, SA: R [2], *Cyperus nervulosus* (Annual Flat-sedge), #AUS: -, SA: R [1], *Frankenia cupularis* (Cupped Sea-heath), #AUS: -, SA: R [9], *Gilesia biniflora* (Western Tar-vine), #AUS: -, SA: R [1], *Swainsona oligophylla* (Clay-pan Swainson-pea), #AUS: -, SA: R [1], **Birds:** *Amytornis barbatus* (Grey Grasswren), #AUS: -, SA: R [1], *Climacteris affinis* (White-browed Treecreeper), #AUS: -, SA: R [1], *Elanus scriptus* (Letter-winged Kite), #AUS: -, SA: R [1], *Microeca fascians* (Jacky Winter), #AUS: -, SA: ssp [2], *Myiagra inquieta* (Restless Flycatcher), #AUS: -, SA: R [1], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [2], **Reptiles:** *Aspidites ramsayi* (Woma), #AUS: -, SA: R [1], *Ctenotus joanae* (Blacksoil Ctenotus), #AUS: -, SA: R [2], **Frogs:** *Cyclorana cultripes* (Knife-footed Frog), #AUS: -, SA: R [2].



3.12 Coolibah over Lignum, Germander clay loam plains

Ecotype (ID): C220808 (12)
Formation: low woodland
Veg. description: Eucalyptus coolabah with Duma florulenta +/- Atriplex nummularia +/-Chenopodium nitrariaceum over Teucrium sp., Atriplex sp. (annual) +/-Ethuliopsis cunninghamii, Sclerolaena sp.

Vegetation cover (%)		Survey sites = 65	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
35.9	22.1	10.1	30.1

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Trees/tall shrubs (>1 m)		
Atriplex nummularia (Old-man Saltbush)	28	3.3
Duma florulenta (Lignum)^	78	15.5
Ethuliopsis cunninghamii (Tall Nut-heads)^	5	0.7
Eucalyptus coolabah (Coolibah)	71	9.0
Senecio lanibracteus (Inland Shrubby Groundsel)^	17	1.2
Low shrubs (<1 m)		
Atriplex intermedia (Intermediate Saltbush)	34	0.8
Atriplex leptocarpa (Slender-fruit Saltbush)	38	1.3
Atriplex spongiosa (Pop Saltbush)	32	0.8
Ethuliopsis cunninghamii (Tall Nut-heads)^	40	3.2
Sclerolaena intricata (Tangled Bindyi)	63	1.6
Senecio lanibracteus (Inland Shrubby Groundsel)^	26	0.8
Solanum oligacanthum (Desert Nightshade)	42	1.4
Tecticornia indica (Brown-head Samphire)	40	3.4
Teucrium racemosum (Grey Germander)^	29	2.0
Grasses/sedges		
Dactyloctenium radulans (Button-grass)	35	0.9
Eragrostis parviflora (Weeping Love-grass)	22	0.5
Sporobolus mitchellii (Rat-tail Couch)	60	7.6
Forbs		
Alternanthera nodiflora (Common Joyweed)	48	1.2
Boerhavia schomburgkiana (Schomburgk's Tar-vine)	25	0.6
Dentella pulvinata (Dentella)	29	0.7
Glinus lotoides (Hairy Carpet-weed)	25	0.6
Haloragis aspera (Rough Raspwort)	43	1.5
Marsilea drummondii (Common Nardoo)	23	2.6
Portulaca oleracea (Common Purslane)	75	3.2
Rutidosia helichrysoides (Grey Wrinklewort)^	34	2.4
Salsola australis (Buckbush)	37	0.9
Stemodia florulenta (Bluerod)	55	2.2
Teucrium racemosum (Grey Germander)^	48	2.2
Trianthema triquetra (Red Spinach)	49	1.2
Wahlenbergia tumidifructa (Swollen-fruit Bluebell)	26	0.7

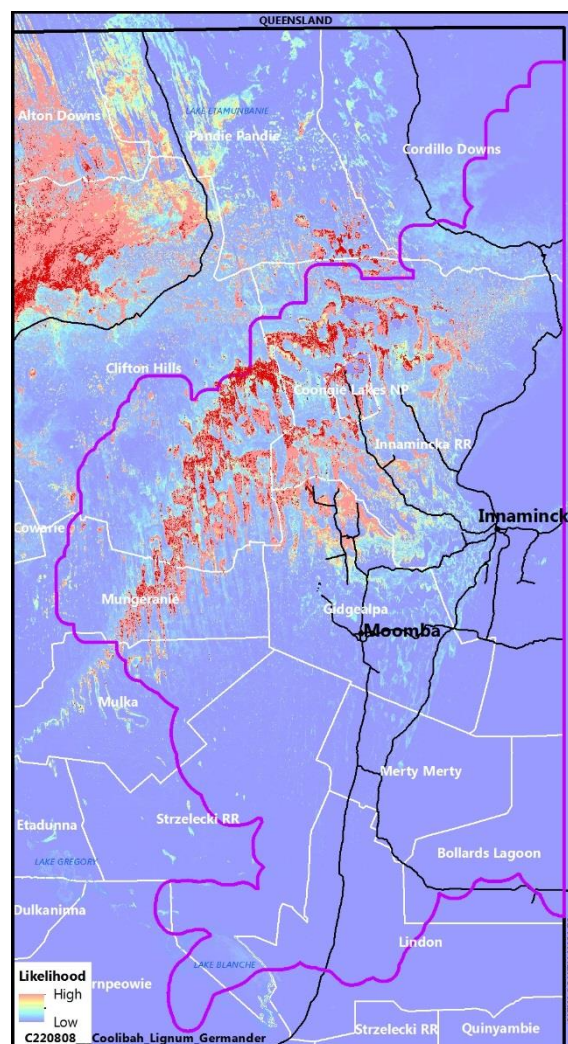
Conservation listed species [records]. 12 species recorded in this ecotype (including 7 wetland species – see Wetlands section).

Plants: Frankenia cupularis (Cupped Sea-heath), #AUS: -, SA: R [22], **Birds:** Amytornis barbatus (Grey Grasswren), #AUS: -, SA: R [2], Hamirostra melanosternon (Black-breasted Buzzard), #AUS: -, SA: R [1], Myiagra inquieta (Restless Flycatcher), #AUS: -, SA: R [2], Ninox connivens (Barking Owl), #AUS: -, SA: R [1],

Area	934 km ²		0.8% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie
Total	89.9%	0.6%	4.5%	5.0%	0.0%
Central	80.6%	0.6%	0.0%	4.2%	0.0%

Environmental classes (proportion of sites)						
arid	0.00	1.00	0.00	0.00	0.00	semi-arid
hills	0.00	0.03	0.29	0.58	0.09	plains
clay	0.26	0.49	0.20	0.05	0.00	sand
acidic	0.00	0.11	0.23	0.54	0.12	alkaline
runoff	0.00	0.15	0.48	0.26	0.11	runon
dryland	0.09	0.63	0.26	0.02	0.00	wetland
stable	0.25	0.46	0.25	0.03	0.02	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.80	Soil erosion	0.17
Plant recruitment	0.53	Average risk	0.39



3.13 Bindyi, Goat-head Bindyi, Bristly Love-grass clay loam plains or floodplains

Ecotype (ID): C260912 (13)

Formation: low open chenopod shrubland

Veg. description: *Sclerolaena* sp., *Sclerolaena bicornis*, *Chenopodium auricomum* with *Leiocarpa* sp. +/- *Eucalyptus coolabah* +/- *Senna artemisioides* over *Eragrostis setifolia*, *Astrebla* sp., *Atriplex* sp. (annual), *Marsilea* sp. +/- *Eleocharis* sp.

Vegetation cover (%)		Survey sites = 37	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
8.3	40.0	28.6	42.8

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
---	-----------	-----------

Trees/tall shrubs (>1 m)

<i>Eucalyptus coolabah</i> (Coolibah)	38	1.8
<i>Senna artemisioides</i> (Desert Senna)	24	0.6

Low shrubs (<1 m)

<i>Atriplex angulata</i> (Fan Saltbush)	27	0.7
<i>Chenopodium auricomum</i> (Golden Goosefoot)^	65	3.6
<i>Einadia nutans</i> (Climbing Saltbush)	32	0.7
<i>Enchylaena tomentosa</i> (Ruby Saltbush)	38	0.7
<i>Frankenia serpyllifolia</i> (Thyme Sea-heath)	27	0.5
<i>Leiocarpa leptolepis</i> (Pale Plover-daisy)	27	0.9
<i>Maireana aphylla</i> (Cotton-bush)	49	2.8
<i>Maireana coronata</i> (Crown Fissure-plant)	35	1.2
<i>Salsola australis</i> (Buckbush)	54	2.0
<i>Sclerolaena bicornis</i> (Goat-head Bindyi)^	81	3.8
<i>Sclerolaena calcarata</i> (Redburr Bindyi)	32	0.7
<i>Sclerolaena intricata</i> (Tangled Bindyi)	46	2.5
<i>Solanum esuriale</i> (Quena)	30	0.7

Grasses/sedges

<i>Astrebla pectinata</i> (Barley Mitchell-grass)	49	2.9
<i>Dactyloctenium radulans</i> (Button-grass)	57	3.4
<i>Diplachne fusca</i> (Brown Beetle-grass)	32	0.7
<i>Eleocharis pallens</i> (Pale Spike-rush)^	16	0.6
<i>Eragrostis australasica</i> (Cane-grass)	22	0.8
<i>Eragrostis dielsii</i> (Mulka)	32	1.4
<i>Eragrostis setifolia</i> (Bristly Love-grass)	86	7.3
<i>Eragrostis tenellula</i> (Delicate Love-grass)	22	0.6
<i>Iseilema membranaceum</i> (Small Flinders-grass)	32	0.8
<i>Tripogon loliiformis</i> (Five-minute Grass)	24	0.7

Forbs

<i>Marsilea drummondii</i> (Common Nardoo)^	32	1.2
<i>Marsilea hirsuta</i> (Short-fruit Nardoo)^	32	0.9
<i>Portulaca oleracea</i> (Common Purslane)	54	2.1

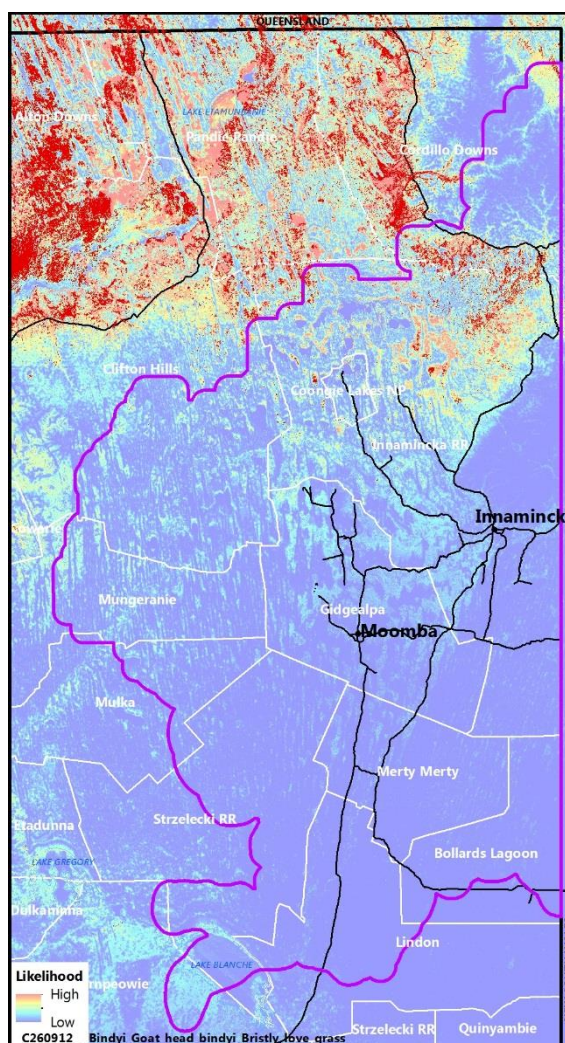
Conservation listed species [records]. 26 species recorded in this ecotype (including 4 wetland species – see Wetlands section).

Plants: *Cyperus bifax* (Downs Flat-sedge), #AUS: -, SA: R [3], *Cyperus dactylotes* (Flinger Flat-sedge), #AUS: -, SA: V [1], *Elacholoma prostrata* (Small Monkey-flower), #AUS: -, SA: R [2], *Eleocharis plana* (Flat Spike-rush), #AUS: -, SA: R [1], *Eremophila polyclada* (Twiggy Emubush), #AUS: -, SA: R [3], *Frankenia plicata* (Braided Sea-heath), #AUS: EN, SA: V [1], *Gilesia biniflora* (Western Tar-vine), #AUS: -, SA: R [3], *Pycnosorus chrysanthus* (Yellow Drumsticks), #AUS: -, SA: E [3], *Santalum spicatum* (Sandalwood), #AUS: -, SA: V [1], *Swainsona oligophylla* (Clay-pan Swainson-pea), #AUS: -, SA: R [2]. **Birds:** *Amytornis barbatus* (Grey Grasswren), #AUS: -, SA: R [4], *Ardeotis australis* (Australian Bustard), #AUS: -, SA: V [3], *Coturnix ypsilophora* (Brown Quail), #AUS: -, SA: V [1], *Elanus scriptus* (Letter-winged Kite), #AUS: -, SA: R [1], *Epthianura crocea* (Yellow Chat), #AUS: -, SA: E [3], *Geopelia plumifera* (Spinifex Pigeon), #AUS: -, SA: R [2], *Myiagra inquieta* (Restless Flycatcher), #AUS: -, SA: R [2], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [11], **Mammals:** *Dasyuroides byrnei* (Kowari), #AUS: VU, SA: V [15], **Reptiles:** *Ctenotus joanae* (Blacksoil Ctenotus), #AUS: -, SA: R [1], *Pseudonaja guttata* (Spotted Brown Snake), #AUS: -, SA: R [1], **Frogs:** *Cyclorana cultripes* (Knife-footed Frog), #AUS: -, SA: R [3],

Area	1756 km ²		1.5% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peo wie
Total	16.4%	7.8%	72.4%	2.9%	0.5%
Central	2.7%	7.7%	7.5%	0.4%	0.0%

Environmental classes (proportion of sites)						
arid	0.05	0.62	0.24	0.08	0.00	semi-arid
hills	0.00	0.00	0.19	0.54	0.27	plains
clay	0.30	0.41	0.24	0.05	0.00	sand
acidic	0.19	0.19	0.35	0.27	0.00	alkaline
runoff	0.00	0.00	0.46	0.22	0.32	runon
dryland	0.81	0.19	0.00	0.00	0.00	wetland
stable	0.32	0.41	0.27	0.00	0.00	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.27	Soil erosion	0.39
Plant recruitment	0.62	Average risk	0.46



3.14 Lignum, Old-man Saltbush, Golden Goosefoot clay or clay loam slopes or floodplains

Ecotype (ID): C26111400 (14)

Formation: mid sparse shrubland

Veg. description: *Duma florulenta* +/- *Atriplex nummularia*, *Chenopodium auricomum* with *Maireana aphylla* over *Sclerolaena* sp., *Sclerolaena bicornis*, *Eragrostis setifolia*, *Atriplex* sp. (annual)

Vegetation cover (%)

Survey sites = 69

Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
10.1	29.0	10.5	21.4

Species (#conservation status *non-native ^indicator sp.) Freq. (%) Cover (%)

Trees/tall shrubs (>1 m)

<i>Atriplex nummularia</i> (Old-man Saltbush)^	38	4.2
<i>Duma florulenta</i> (Lignum)	46	3.6
<i>Eucalyptus coolabah</i> (Coolibah)	28	0.9

Low shrubs (<1 m)

<i>Atriplex angulata</i> (Fan Saltbush)	25	1.4
<i>Chenopodium auricomum</i> (Golden Goosefoot)^	51	2.7
<i>Maireana aphylla</i> (Cotton-bush)^	43	3.5
<i>Maireana coronata</i> (Crown Fissure-plant)	20	0.6
<i>Salsola australis</i> (Buckbush)	51	2.3
<i>Sclerolaena bicornis</i> (Goat-head Bindyi)	71	2.4
<i>Sclerolaena calcarata</i> (Redburr Bindyi)	20	1.0
<i>Sclerolaena diacantha</i> (Grey Bindyi)	26	0.6
<i>Sclerolaena intricata</i> (Tangled Bindyi)	54	3.9

Grasses/sedges

<i>Enneapogon avenaceus</i> (Common Bottle-washers)	22	1.1
<i>Eragrostis dielsii</i> (Mulka)	25	0.7
<i>Eragrostis setifolia</i> (Bristly Love-grass)	75	3.3

Forbs

<i>Calotis hispidula</i> (Hairy Burr-daisy)	35	1.4
<i>Marsilea drummondii</i> (Common Nardoo)	25	1.5
<i>Plantago drummondii</i> (Dark Plantain)^	22	0.4

Conservation listed species [records]. 41 species recorded in this ecotype (including 9 wetland species – see Wetlands section). Plants:

Bergia occulpetala (Hidden Water-fire), #AUS: -, SA: V [2], *Calandrinia stagnensis* (Waterhole Purslane), #AUS: -, SA: R [1], *Cyperus concinnus* (Trim Flat-sedge), #AUS: -, SA: R [2], *Cyperus dactyloides* (Flinger Flat-sedge), #AUS: -, SA: V [4], *Elacholoma prostrata* (Small Monkey-flower), #AUS: -, SA: R [1], *Frankenia cupularis* (Cupped Sea-heath), #AUS: -, SA: R [2], *Gilesia biniflora* (Western Tarvine), #AUS: -, SA: R [1], *Maireana pentagona* (Slender Fissure-plant), #AUS: -, SA: R [2], *Pycnosorus chrysanthus* (Yellow Drumsticks), #AUS: -, SA: E [2], *Stylidium desertorum* (Desert Triggerplant), #AUS: -, SA: V [3], **Birds:** *Amytornis barbatus* (Grey Grasswren), #AUS: -, SA: R [4], *Amytornis modestus* (Thick-billed Grasswren), #AUS: VU, SA: - [1], *Aprosmictus erythropterus* (Red-winged Parrot), #AUS: -, SA: R [4], *Ardeotis australis* (Australian Bustard), #AUS: -, SA: V [6], *Chlamydera maculata* (Spotted Bowerbird), #AUS: -, SA: E [1], *Coturnix ypsilophora* (Brown Quail), #AUS: -, SA: V [1], *Falco hypoleucos* (Grey Falcon), #AUS: -, SA: R [2], *Geophaps plumifera* (Spinifex Pigeon), #AUS: -, SA: R [2], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [3], *Microeca fascinans* (Jacky Winter), #AUS: -, SA: ssp [2], *Myiagra inquieta* (Restless Flycatcher), #AUS: -, SA: R [1], *Neophema chrysostoma* (Blue-winged Parrot), #AUS: -, SA: V [3], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [13], **Mammals:** *Dasycercus cristicauda* (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: - [1], *Dasyuroides byrnei* (Kowari), #AUS: VU, SA: V [72], *Notomys cervinus* (Fawn Hopping-mouse), #AUS: -, SA: V [22], *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [3], *Pseudomys australis* (Plains mouse), #AUS: VU, SA: V [1], **Reptiles:** *Ctenotus astarte* (Ashy Downs Ctenotus), #AUS: -, SA: R [9], *Ctenotus joanae* (Blacksoil Ctenotus), #AUS: -, SA: R [5], *Demansia rimicola* (Channel Country Whipsnake), #AUS: -, SA: R [1], **Frogs:** *Cyclorana cultripes* (Knife-footed Frog), #AUS: -, SA: R [1],

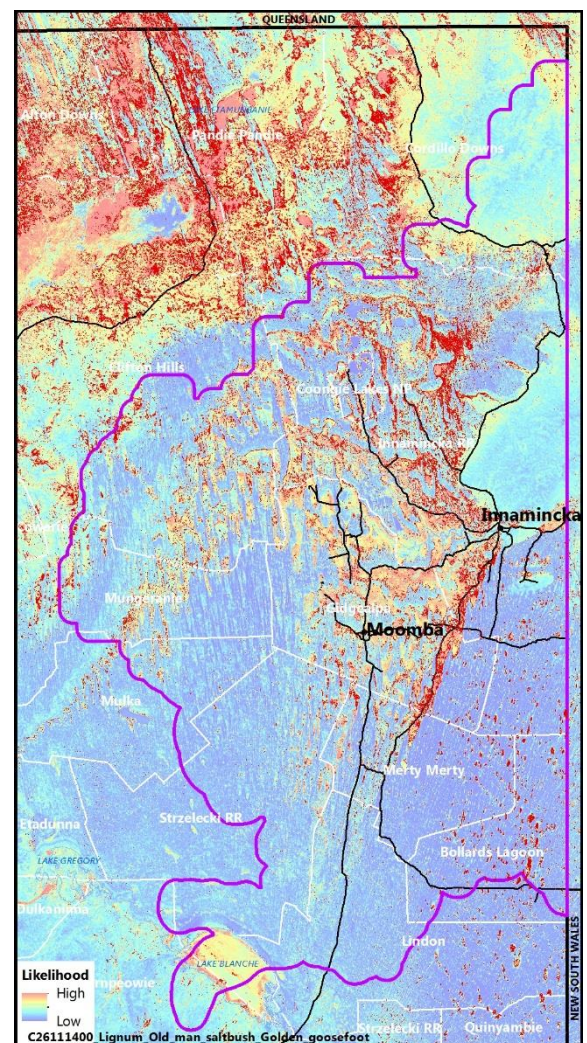
Area	6091 km ²	5.1% of the study area			
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie
Total	36.2%	2.9%	36.0%	21.5%	3.3%
Central	29.0%	2.9%	2.3%	8.8%	0.1%

Environmental classes (proportion of sites)

arid	0.00	0.58	0.32	0.04	0.06	semi-arid
hills	0.00	0.04	0.29	0.33	0.33	plains
clay	0.26	0.38	0.30	0.06	0.00	sand
acidic	0.10	0.20	0.48	0.22	0.00	alkaline
runoff	0.03	0.07	0.30	0.38	0.22	runon
dryland	0.61	0.32	0.06	0.01	0.00	wetland
stable	0.28	0.36	0.30	0.06	0.00	erosive

Biophysical disturbance risk (index)

Perennial biomass	0.22	Soil erosion	0.17
Plant recruitment	0.56	Average risk	0.39



3.15 Bristly Love-grass, Goat-head Bindyi, Bindyi dunefield swales

Ecotype (ID): C26111441 (15)

Formation: low open chenopod shrubland

Veg. description: *Eragrostis setifolia*, *Sclerolaena bicornis*, *Sclerolaena* sp. over *Salsola australis* +/- *Chenopodium auricomum*

Vegetation cover (%)		Survey sites = 25	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
5.6	26.9	29.5	10.4

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Low shrubs (<1 m)		
<i>Chenopodium auricomum</i> (Golden Goosefoot)^	44	4.9
<i>Enchylaena tomentosa</i> (Ruby Saltbush)	32	0.3
<i>Salsola australis</i> (Buckbush)	68	4.2
<i>Sclerolaena bicornis</i> (Goat-head Bindyi)^	92	5.4
<i>Sclerolaena diacantha</i> (Grey Bindyi)	48	1.4
<i>Sclerolaena intricata</i> (Tangled Bindyi)	48	3.6
<i>Teucrium racemosum</i> (Grey Germander)	28	0.7
Grasses/ sedges		
<i>Aristida contorta</i> (Curly Wire-grass)	24	0.6
<i>Dactyloctenium radulans</i> (Button-grass)	24	0.8
<i>Enneapogon avenaceus</i> (Common Bottle-washers)	44	2.5
<i>Eragrostis australasica</i> (Cane-grass)^	20	1.5
<i>Eragrostis setifolia</i> (Bristly Love-grass)^	92	17.1
Forbs		
<i>Marsilea drummondii</i> (Common Nardoo)^	32	2.4

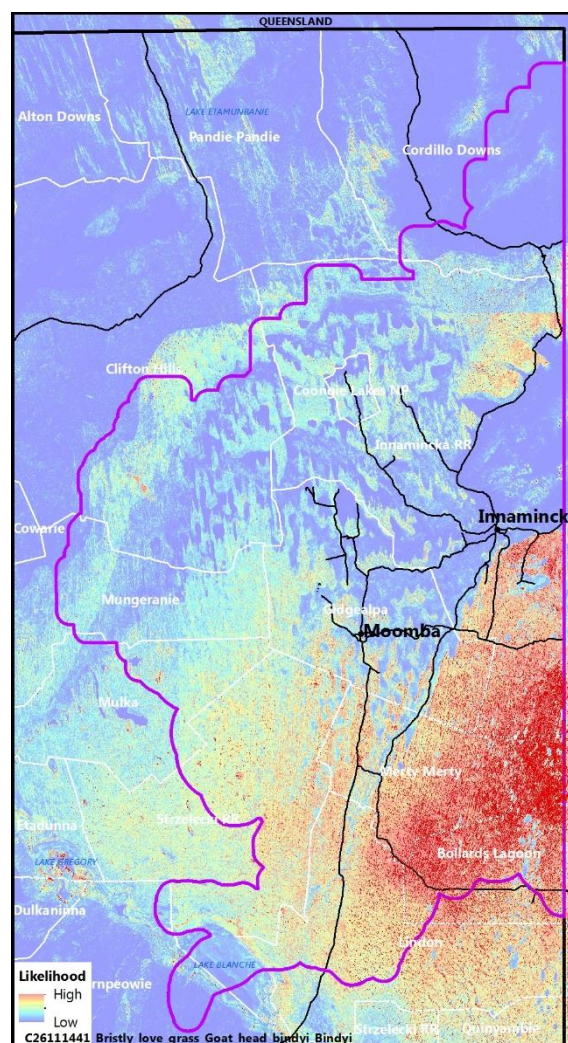
Area	2540 km ²		2.1% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie
Total	2.0%	1.3%	0.5%	95.9%	0.3%
Central	1.8%	1.3%	0.3%	78.5%	0.0%

Environmental classes (proportion of sites)						
arid	0.00	0.04	0.60	0.28	0.08	semi-arid
hills	0.00	0.36	0.32	0.28	0.04	plains
clay	0.00	0.04	0.12	0.68	0.16	sand
acidic	0.56	0.20	0.20	0.04	0.00	alkaline
runoff	0.12	0.24	0.16	0.32	0.16	runon
dryland	0.92	0.08	0.00	0.00	0.00	wetland
stable	0.00	0.04	0.20	0.60	0.16	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.21	Soil erosion	0.41
Plant recruitment	0.61	Average risk	0.47

Conservation listed species [records]. 14 species recorded in this ecotype (including 4 wetland species – see Wetlands section).

Plants: *Bergia occultipetala* (Hidden Water-fire), #AUS: -, SA: V [2], *Frankenia cupularis* (Cupped Sea-heath), #AUS: -, SA: R [1], *Ophioglossum polyphyllum* (Large Adder's-tongue), #AUS: -, SA: R [1], *Swainsona oligophylla* (Clay-pan Swainson-pea), #AUS: -, SA: R [1], **Birds:** *Aprosmictus erythropterus* (Red-winged Parrot), #AUS: -, SA: R [1], *Myiagra inquieta* (Restless Flycatcher), #AUS: -, SA: R [6], *Neophema chrysostoma* (Blue-winged Parrot), #AUS: -, SA: V [1], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [1], **Mammals:** *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [2], *Pseudomys australis* (Plains mouse), #AUS: VU, SA: V [1],



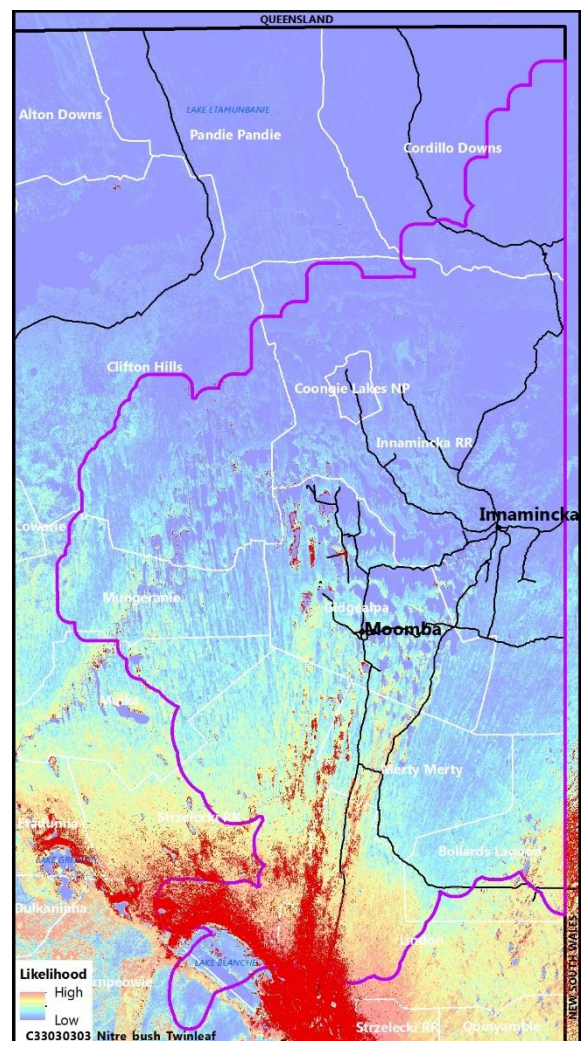
3.16 Nitre-bush, Twinleaf loam slopes

Ecotype (ID): C33030303 (16)			
Formation: low open shrubland			
Veg. description: Nitraria billardierei, Zygophyllum sp., Phyllanthus sp.			
Vegetation cover (%)		Survey sites = 16	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
4.5	16.5	3.3	32.9
Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)	
Trees/tall shrubs (>1 m)			
Acacia ayersiana (Blue Mulga)^	6	0.1	
Nitraria billardierei (Nitre-bush)^	31	1.5	
Low shrubs (<1 m)			
Enchylaena tomentosa (Ruby Saltbush)	25	0.5	
Nitraria billardierei (Nitre-bush)^	44	6.4	
Salsola australis (Buckbush)	38	0.9	
Senecio magnificus (Showy Groundsel)^	6	0.2	
Zygophyllum ammophilum (Sand Twinleaf)^	19	0.5	
Zygophyllum aurantiacum (Shrubby Twinleaf)^	6	0.9	
Zygophyllum howittii (Clasping Twinleaf)^	31	0.8	
Forbs			
Blennodia pterosperma (Wild Stock)	38	1.6	
Brassica tournefortii (Wild Turnip)*	69	7.8	
Calocephalus platycephalus (Western Beauty-heads)	50	2.0	
Cullen patens (Spreading Scurf-pea)	25	0.6	
Nicotiana velutina (Velvet Tobacco)	25	0.6	
Phyllanthus lacunarius (Lagoon Spurge)^	50	1.8	
Polycalymma stuartii (Poached-egg Daisy)	63	3.1	
Rhodanthe moschata (Musk Daisy)	31	1.6	
Senecio gregorii (Fleshy Groundsel)	38	0.9	

Conservation listed species [records]. 24 species recorded in this ecotype (including 7 wetland species – see Wetlands section).

Plants: *Atriplex eichleri* (Eichler's Saltbush), #AUS: -, SA: R [3], *Eriocaulon carsonii* ssp. *carsonii* (Salt Pipewort), #AUS: EN, SA: E [45], *Gilesia biniflora* (Western Tar-vine), #AUS: -, SA: R [1], *Orobancha cernua* var. *australiana* (Australian Broomrape), #AUS: -, SA: R [2], *Swainsona oligophylla* (Clay-pan Swainson-pea), #AUS: -, SA: R [1], *Utricularia violacea* (Violet Bladderwort), #AUS: -, SA: R [1], **Birds:** *Ardeotis australis* (Australian Bustard), #AUS: -, SA: V [1], *Elanus scriptus* (Letter-winged Kite), #AUS: -, SA: R [4], *Falco hypoleucos* (Grey Falcon), #AUS: -, SA: R [2], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [6], *Myiagra inquieta* (Restless Flycatcher), #AUS: -, SA: R [3], *Neophema chrysostoma* (Blue-winged Parrot), #AUS: -, SA: V [4], *Tyto longimembris* (Eastern Grass Owl), #AUS: -, SA: R [1], **Mammals:** *Dasyercus cristicauda* (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: - [19], *Macropus giganteus* (Eastern Grey Kangaroo), #AUS: -, SA: R [1], *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [247], *Saccolaimus flaviventris* (Yellow-bellied Sheath-tailed Bat), #AUS: -, SA: R [1],

Area	5017 km ²			4.2% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie	
Total	5.7%	0.0%	0.2%	88.8%	5.3%	
Central	4.5%	0.0%	0.0%	27.5%	0.1%	
Environmental classes (proportion of sites)						
arid	0.00	0.19	0.50	0.06	0.25	semi-arid
hills	0.00	0.13	0.56	0.31	0.00	plains
clay	0.00	0.38	0.44	0.13	0.06	sand
acidic	0.00	0.38	0.31	0.31	0.00	alkaline
runoff	0.00	0.38	0.44	0.13	0.06	runon
dryland	1.00	0.00	0.00	0.00	0.00	wetland
stable	0.13	0.13	0.56	0.13	0.06	erosive
Biophysical disturbance risk (index)						
Perennial biomass		0.11		Soil erosion		0.26
Plant recruitment		0.65		Average risk		0.42



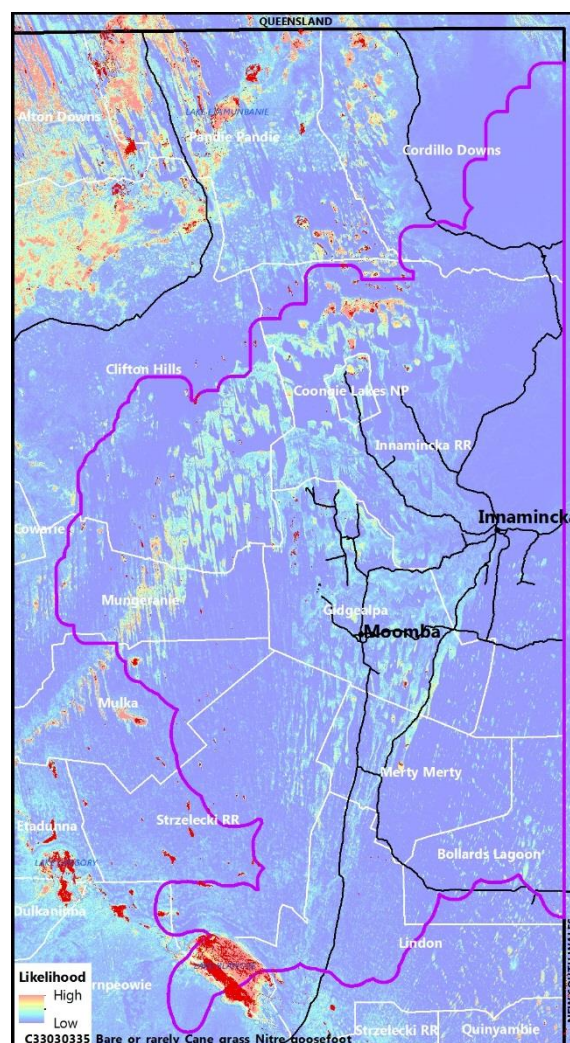
3.17 Bare or rarely Cane-grass, Nitre Goosefoot loamy slopes, salt lakes or floodplains

Ecotype (ID): C33030335 (17)		
Formation: low isolated shrubs		
Veg. description: Bare or rarely +/-Eragrostis australasica +/-Chenopodium nitrariaceum +/-Duma florulenta +/-Eucalyptus coolabah +/-Sida sp. +/-Trichodesma zeylanicum		
Vegetation cover (%)		Survey sites = 66
Trees/tall shrubs	Low shrubs	Grasses/sedges
6.2	8.1	6.5
		Forbs
		0.3
Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Trees/tall shrubs (>1 m)		
Chenopodium nitrariaceum (Nitre Goosefoot)^	3	0.2
Duma florulenta (Lignum)^	3	0.1
Eucalyptus coolabah (Coolibah)^	5	0.4
Low shrubs (<1 m)		
Duma florulenta (Lignum)^	2	0.0
Trichodesma zeylanicum (Camel Bush)^	3	0.0
Grasses/sedges		
Eragrostis australasica (Cane-grass)^	6	0.7

Area	3093 km ²		2.6% of the study area			
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie	
Total	3.6%	0.0%	2.5%	92.8%	1.1%	
Central	1.7%	0.0%	0.0%	6.1%	0.0%	
Environmental classes (proportion of sites)						
arid	0.39	0.30	0.15	0.03	0.12	semi-arid
hills	0.00	0.00	0.42	0.36	0.21	plains
clay	0.12	0.27	0.56	0.05	0.00	sand
acidic	0.00	0.09	0.33	0.47	0.11	alkaline
runoff	0.00	0.02	0.62	0.27	0.09	runon
dryland	0.24	0.32	0.35	0.09	0.00	wetland
stable	0.80	0.14	0.06	0.00	0.00	erosive
Biophysical disturbance risk (index)						
Perennial biomass		0.03	Soil erosion		0.10	
Plant recruitment		0.49	Average risk		0.37	

Conservation listed species [records]. 5 species recorded in this ecotype (including 2 wetland species – see Wetlands section).

Birds: Ardeotis australis (Australian Bustard), #AUS: -, SA: V [1], Phaps histrionica (Flock Bronzewing), #AUS: -, SA: R [4], **Mammals:** Saccolaimus flaviventris (Yellow-bellied Sheath-tailed Bat), #AUS: -, SA: R [1],



3.18 Ray Grass/Couch, Scurf-pea, Desert Nightshade clay loam plains

Ecotype (ID): C330707 (18)

Formation: low open shrubland

Veg. description: Sporobolus sp., Cullen sp., Solanum sp. (nightshade) over Cressa australis +/-Glinus sp.

Vegetation cover (%)		Survey sites = 36	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
1.7	16.0	21.7	22.8

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Low shrubs (<1 m)		
Atriplex spongiosa (Pop Saltbush)	25	1.3
Cullen cinereum (Annual Scurf-pea)	36	7.5
Solanum oligacanthum (Desert Nightshade)^	67	5.0
Grasses/Sedges		
Sporobolus mitchellii (Rat-tail Couch)^	89	20.0
Forbs		
Austrobryonia micrantha (Desert Cucumber)^	25	0.6
Cressa australis (Rosinweed)^	47	6.5
Cullen cinereum (Annual Scurf-pea)	25	3.0
Euphorbia drummondii (Caustic Weed)	28	1.4
Glinus lotoides (Hairy Carpet-weed)^	44	2.8
Trigonella suavissima (Sweet Fenugreek)	36	2.9

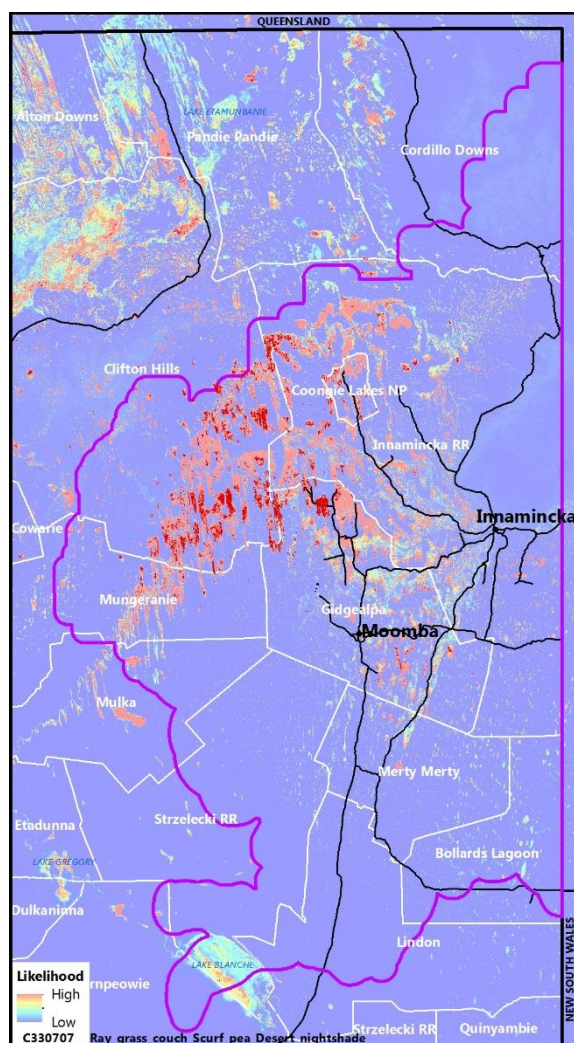
Area	488 km ²		0.4% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie
Total	89.6%	0.5%	3.8%	6.1%	0.0%
Central	87.8%	0.5%	0.1%	5.7%	0.0%

Environmental classes (proportion of sites)						
arid	0.00	1.00	0.00	0.00	0.00	semi-arid
hills	0.00	0.00	0.25	0.53	0.22	plains
clay	0.31	0.56	0.08	0.06	0.00	sand
acidic	0.00	0.06	0.25	0.58	0.11	alkaline
runoff	0.00	0.00	0.50	0.36	0.14	runon
dryland	0.03	0.28	0.42	0.28	0.00	wetland
stable	0.39	0.44	0.17	0.00	0.00	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.12	Soil erosion	0.13
Plant recruitment	0.42	Average risk	0.38

Conservation listed species [records]. 1 species recorded in this ecotype

Plants: Frankenia cupularis (Cupped Sea-heath), #AUS: -, SA: R [2],



3.19 Coolibah over Flat-sedge, Ray Grass/Couch loam plains

Ecotype (ID): C330710 (19)

Formation: low woodland

Veg. description: Eucalyptus coolabah +/-Acacia stenophylla
+/-Duma florulenta over Cyperus sp., Sporobolus sp., Stemodia sp.,
Sphaeromorphaea littoralis, Heliotropium sp.

Vegetation cover (%)		Survey sites = 23	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
20.2	11.4	36.0	39.0

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Trees/tall shrubs (>1 m)		
Acacia salicina (Willow Wattle)	22	0.5
Acacia stenophylla (River Cooba)	30	2.3
Duma florulenta (Lignum)	35	6.0
Eucalyptus coolabah (Coolibah)	57	9.5
Low shrubs (<1 m)		
Atriplex velutinella (Sandhill Saltbush)	35	0.8
Enchylaena tomentosa (Ruby Saltbush)	35	0.9
Osteocarpum acropterum (Bonefruit), #AUS: -, SA: R	22	0.5
Sclerolaena intricata (Tangled Bindyi)	39	1.0
Solanum oligacanthum (Desert Nightshade)	39	1.0
Tecticornia indica (Brown-head Samphire)	43	2.2
Grasses/sedges		
Cyperus exaltatus (Splendid Flat-sedge)^	9	0.2
Cyperus gymnocaulos (Spiny Flat-sedge)^	74	14.3
Cyperus pygmaeus (Pygmy Flat-sedge)^	9	0.2
Eragrostis dielsii (Mulka)	39	2.1
Sporobolus mitchellii (Rat-tail Couch)	87	14.4
Forbs		
Alternanthera nodiflora (Common Joyweed)	30	0.8
Cressa australis (Rosinweed)	39	1.5
Glinus lotoides (Hairy Carpet-weed)	35	0.9
Heliotropium curassavicum (Smooth Heliotrope)^*	48	2.8
Heliotropium supinum (Creeping Heliotrope)^*	26	0.6
Lotus cruentus (Red-flower Lotus)	35	0.8
Nicotiana velutina (Velvet Tobacco)	39	0.9
Phyllanthus lacunarius (Lagoon Spurge)	43	1.6
Salsola australis (Buckbush)	30	0.8
Sphaeromorphaea littoralis (Spreading Nut-heads)^	91	4.1
Stemodia florulenta (Bluerod)^	78	6.7
Thyridia repens (Creeping Monkey-flower)^	22	1.0
Trianthema triquetra (Red Spinach)	52	1.8
Trigonella suavissima (Sweet Fenugreek)	48	1.7
Verbena officinalis (Common Verbena)*	35	2.0

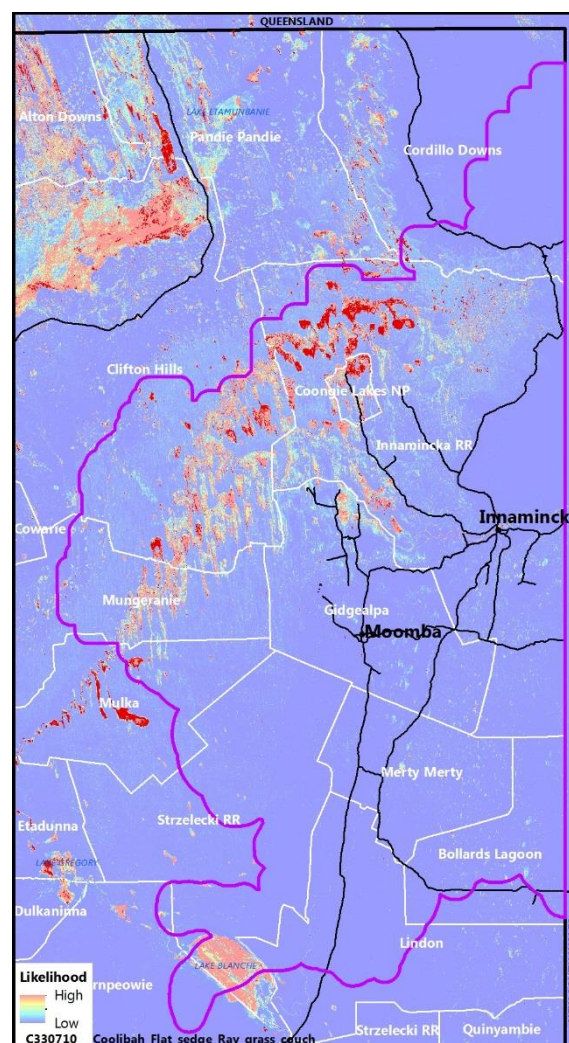
Conservation listed species [records]. 18 species recorded in this ecotype (including 13 wetland species – see Wetlands section).

Plants: Elacholoma prostrata (Small Monkey-flower), #AUS: -, SA: R [1],
Frankenia cupularis (Cupped Sea-heath), #AUS: -, SA: R [2], **Birds:** Amytornis
barbatus (Grey Grasswren), #AUS: -, SA: R [7], Myiagra inquieta (Restless
Flycatcher), #AUS: -, SA: R [3], Ninox connivens (Barking Owl), #AUS: -, SA: R
[2],

Area	684 km ²		0.6% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie
Total	77.4%	4.0%	8.9%	8.9%	0.8%
Central	54.2%	3.7%	0.2%	3.8%	0.0%

Environmental classes (proportion of sites)						
arid	0.00	1.00	0.00	0.00	0.00	semi-arid
hills	0.00	0.04	0.35	0.43	0.17	plains
clay	0.04	0.43	0.35	0.17	0.00	sand
acidic	0.09	0.17	0.52	0.22	0.00	alkaline
runoff	0.04	0.26	0.35	0.22	0.13	runon
dryland	0.04	0.26	0.48	0.13	0.09	wetland
stable	0.09	0.39	0.30	0.22	0.00	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.03	Soil erosion	0.10
Plant recruitment	0.49	Average risk	0.37



3.20 Bindyi, Annual saltbush, Samphire clay plains or floodplains

Ecotype (ID): C350606 (20)

Formation: low open chenopod shrubland

Veg. description: *Sclerolaena* sp., *Atriplex* sp. (annual) over *Tecticornia* sp., *Salsola australis* +/- *Dissocarpus* sp. +/- *Frankenia* sp.

Vegetation cover (%)		Survey sites = 73	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
2.7	24.7	9.3	10.1

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Shrubs (<1 m)		
<i>Atriplex lindleyi</i> (Baldoos)^	16	1.4
<i>Atriplex</i> sp. (Saltbush)^	16	0.4
<i>Atriplex spongiosa</i> (Pop Saltbush)^	18	0.4
<i>Atriplex vesicaria</i> (Bladder Saltbush)	26	1.1
<i>Dissocarpus biflorus</i> (Two-horn Saltbush)^	21	0.4
<i>Dissocarpus paradoxus</i> (Ball Bindyi)^	10	0.7
<i>Frankenia serpyllifolia</i> (Thyme Sea-heath)	21	0.8
<i>Osteocarpum acropterum</i> (Bonefruit)^, #AUS: -, SA: R	18	0.4
<i>Salsola australis</i> (Buckbush)	41	1.1
<i>Sclerolaena bicornis</i> (Goat-head Bindyi)	33	1.5
<i>Sclerolaena brachyptera</i> (Short-wing Bindyi)^	18	0.5
<i>Sclerolaena divaricata</i> (Tangled Bindyi)^	40	1.7
<i>Sclerolaena intricata</i> (Tangled Bindyi)^	47	1.8
<i>Sclerolaena</i> sp. (Bindyi)^	19	0.8
<i>Sclerolaena ventricosa</i> (Salt Bindyi)^	10	0.5
<i>Tecticornia</i> sp. (Samphire)^	11	0.2
<i>Tecticornia tenuis</i> (Slender Samphire)^	12	0.7
Grasses/sedges		
<i>Astrela pectinata</i> (Barley Mitchell-grass)	25	0.8
<i>Dactyloctenium radulans</i> (Button-grass)	22	0.5

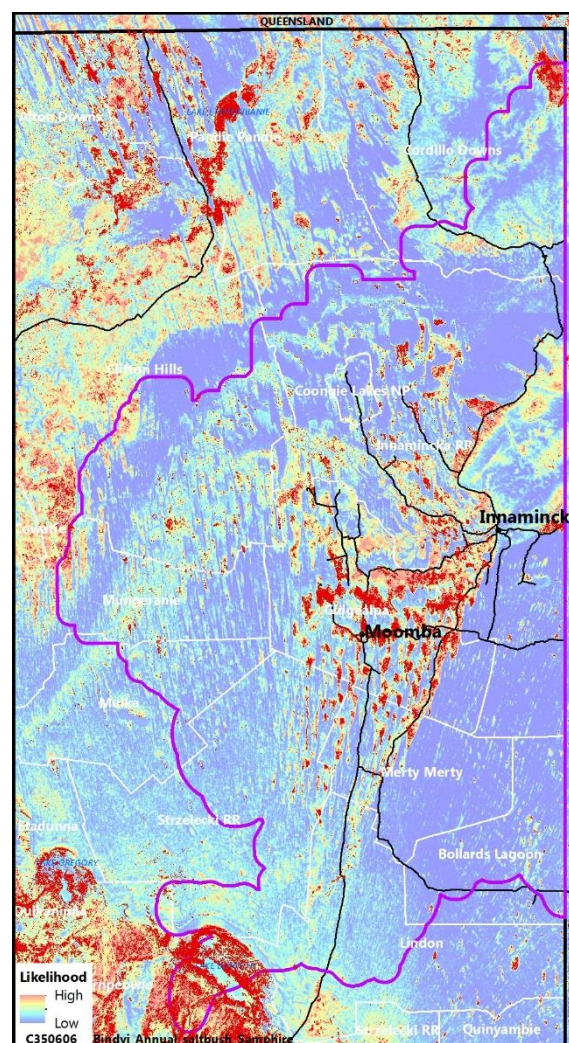
Conservation listed species [records]. 32 species recorded in this ecotype (including 9 wetland species – see Wetlands section).

Plants: *Frankenia cupularis* (Cupped Sea-heath), #AUS: -, SA: R [4], *Frankenia plicata* (Braided Sea-heath), #AUS: EN, SA: V [4], *Gilesia biniflora* (Western Tar-vine), #AUS: -, SA: R [2], *Maireana pentagona* (Slender Fissure-plant), #AUS: -, SA: R [3], *Osteocarpum pentapterum* (Five-wing Bonefruit), #AUS: -, SA: E [1], *Pycnosorus chrysanthus* (Yellow Drumsticks), #AUS: -, SA: E [2], *Sclerolaena blackiana* (Black's Bindyi), #AUS: -, SA: R [2], *Zygophyllum humillimum* (Small-fruit Twinleaf), #AUS: -, SA: R [1], **Birds:** *Amytornis barbatus* (Grey Grasswren), #AUS: -, SA: R [2], *Ardeotis australis* (Australian Bustard), #AUS: -, SA: V [1], *Elanus scriptus* (Letter-winged Kite), #AUS: -, SA: R [1], *Ephianura crocea* (Yellow Chat), #AUS: -, SA: E [5], *Falco hypoleucos* (Grey Falcon), #AUS: -, SA: R [1], *Falco peregrinus* (Peregrine Falcon), #AUS: -, SA: R [1], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [5], *Ninox connivens* (Barking Owl), #AUS: -, SA: R [1], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [3], **Mammals:** *Dasyuroides byrnei* (Kowari), #AUS: VU, SA: V [12], *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [315], *Pseudomys australis* (Plains mouse), #AUS: VU, SA: V [2], **Reptiles:** *Aspidites ramsayi* (Woma), #AUS: -, SA: R [7], *Demansia rimicola* (Channel Country Whipsnake), #AUS: -, SA: R [1], *Proablepharus kinghorni* (Blacksoil Skink), #AUS: -, SA: R [1],

Area	7063 km ²		5.9% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie
Total	19.6%	0.1%	11.3%	16.6%	52.4%
Central	18.0%	0.1%	1.8%	5.5%	2.0%

Environmental classes (proportion of sites)						
arid	0.00	0.47	0.40	0.07	0.07	semi-arid
hills	0.00	0.07	0.12	0.53	0.27	plains
clay	0.42	0.41	0.14	0.03	0.00	sand
acidic	0.00	0.12	0.53	0.33	0.01	alkaline
runoff	0.03	0.10	0.22	0.41	0.25	runon
dryland	0.78	0.18	0.04	0.00	0.00	wetland
stable	0.34	0.44	0.14	0.07	0.01	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.11	Soil erosion	0.15
Plant recruitment	0.56	Average risk	0.38



3.21 Mitchell-grass clay slopes

Ecotype (ID): C350611 (21)

Formation: low open chenopod shrubland

Veg. description: *Astrebla* sp., *Sclerolaena* sp.

Vegetation cover (%)		Survey sites = 70	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
1.9	20.1	13.5	5.6

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Low shrubs (<1 m)		
<i>Atriplex lindleyi</i> (Baldoo)^	26	1.3
<i>Maireana aphylla</i> (Cotton-bush)	27	0.5
<i>Salsola australis</i> (Buckbush)	40	0.7
<i>Sclerolaena brachyptera</i> (Short-wing Bindyi)^	40	2.0
<i>Sclerolaena cuneata</i> (Tangled Bindyi)^	10	0.3
<i>Sclerolaena diacantha</i> (Grey Bindyi)^	13	0.4
<i>Sclerolaena divaricata</i> (Tangled Bindyi)^	31	2.2
<i>Sclerolaena eriakantha</i> (Silky Bindyi)^	17	0.6
<i>Sclerolaena glabra</i> (Smooth Bindyi)^	13	0.3
<i>Sclerolaena intricata</i> (Tangled Bindyi)^	14	0.4
<i>Sclerolaena lanicuspis</i> (Spinach Bindyi)^	13	0.3
<i>Sclerolaena patenticuspis</i> (Spear-fruit Bindyi)^	10	1.3
<i>Sclerolaena ventricosa</i> (Salt Bindyi)^	17	1.7
Grasses/sedges		
<i>Astrebla pectinata</i> (Barley Mitchell-grass)^	87	7.0
<i>Eragrostis setifolia</i> (Bristly Love-grass)	23	0.5
<i>Sporobolus actinocladus</i> (Ray Grass)^	43	1.5
<i>Triopogon loliiformis</i> (Five-minute Grass)^	36	1.3

Conservation listed species [records]. 27 species recorded in this ecotype (including 5 wetland species – see Wetlands section).

Plants: *Acacia pickardii* (Pickard's Wattle), #AUS: VU, SA: R [2], *Bergia occulitpetala* (Hidden Water-fire), #AUS: -, SA: V [1], *Cyperus dactyloides* (Flinger Flat-sedge), #AUS: -, SA: V [2], *Frankenia plicata* (Braided Sea-heath), #AUS: EN, SA: V [2], *Maireana excavata* (Bottle Fissure-plant), #AUS: -, SA: V [1], *Maireana pentagona* (Slender Fissure-plant), #AUS: -, SA: R [2], *Osteocarpum pentapterum* (Five-wing Bonefruit), #AUS: -, SA: E [2], *Pycnosorus chrysanthus* (Yellow Drumsticks), #AUS: -, SA: E [1], *Sclerolaena fontinalis* (Mound Spring Bindyi), #AUS: -, SA: R [3], *Zygophyllum humillimum* (Small-fruit Twinleaf), #AUS: -, SA: R [3], **Birds:** *Ardeotis australis* (Australian Bustard), #AUS: -, SA: V [5], *Coturnix ptilophora* (Brown Quail), #AUS: -, SA: V [1], *Geophaps plumifera* (Spinifex Pigeon), #AUS: -, SA: R [1], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [1], *Microeca fascians* (Jacky Winter), #AUS: -, SA: ssp [3], *Ninox connivens* (Barking Owl), #AUS: -, SA: R [1], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [4], **Mammals:** *Dasyuroides byrnei* (Kowari), #AUS: VU, SA: V [47], *Notomys cervinus* (Fawn Hopping-mouse), #AUS: -, SA: V [9], **Reptiles:** *Aspidites ramsayi* (Woma), #AUS: -, SA: R [1], *Ctenotus joanae* (Blacksoil Ctenotus), #AUS: -, SA: R [1], **Frogs:** *Cyclorana cultripes* (Knife-footed Frog), #AUS: -, SA: R [2],

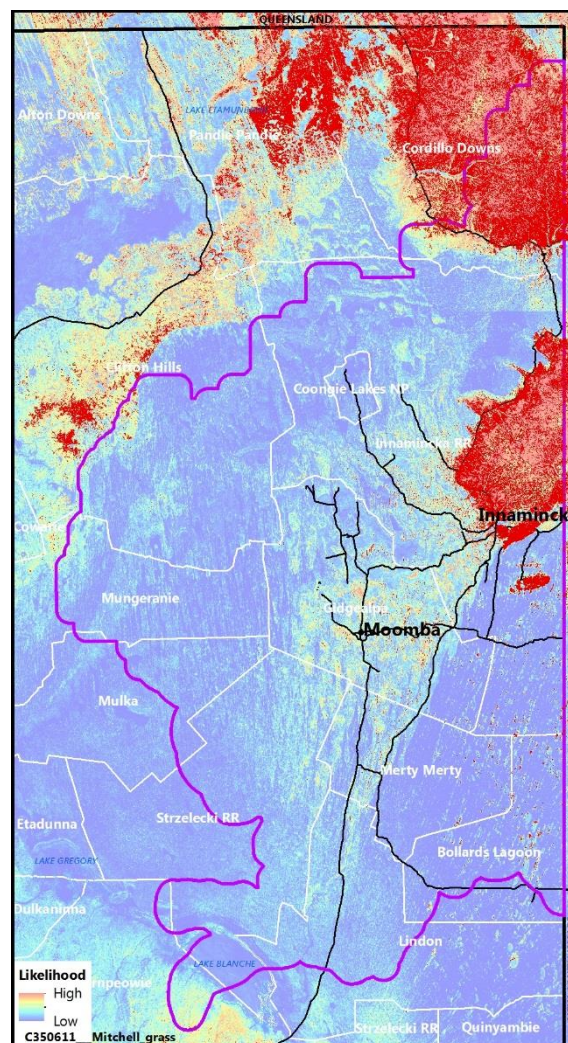
Area	6333 km ²		5.3% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie
Total	4.2%	0.9%	84.9%	2.7%	7.4%
Central	3.9%	0.9%	37.4%	1.5%	0.0%

Environmental classes (proportion of sites)

arid	0.00	0.16	0.46	0.33	0.06	semi-arid
hills	0.03	0.16	0.39	0.31	0.11	plains
clay	0.44	0.43	0.10	0.03	0.00	sand
acidic	0.23	0.36	0.34	0.07	0.00	alkaline
runoff	0.10	0.21	0.40	0.24	0.04	runon
dryland	0.97	0.01	0.01	0.00	0.00	wetland
stable	0.20	0.51	0.13	0.11	0.04	erosive

Biophysical disturbance risk (index)

Perennial biomass	0.10	Soil erosion	0.19
Plant recruitment	0.64	Average risk	0.40



3.22 Black Oak over Bindyi sandy slopes

Ecotype (ID): C35131622 (22)

Formation: low open woodland

Veg. description: Casuarina pauper +/-Acacia aneura

+/-Alectryon oleifolius over Sclerolaena sp., Salsola australis

+/-Acacia ligulata

Vegetation cover (%)

Survey sites = 42

Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
11.4	9.8	12.0	16.7

Species (#conservation status *non-native ^indicator sp.) Freq. (%) Cover (%)

Trees/tall shrubs (>1 m)

Acacia aneura (Mulga)	43	0.9
Acacia ligulata (Umbrella Bush)	26	2.4
Alectryon oleifolius (Bullock Bush)^	36	0.6
Callitris glaucophylla (White Cypress-pine)^	21	1.0
Casuarina pauper (Black Oak)^	43	3.2
Dodonaea viscosa (Sticky Hop-bush)	21	1.2
Eucalyptus largiflorens (River Box)^	12	1.2

Low shrubs (<1 m)

Atriplex velutinella (Sandhill Saltbush)	26	0.6
Salsola australis (Buckbush)	36	1.1

Grasses/Sedges

Enneapogon avenaceus (Common Bottle-washers)	21	2.1
Gramineae sp. (Grass Family)^	50	1.3
Schismus barbatus (Arabian Grass)*	60	3.5

Forbs

Atriplex holocarpa (Pop Saltbush)	26	0.7
Brassica tournefortii (Wild Turnip)*	69	2.0
Bulbine semibarbata (Small Leek-lily)	40	1.0
Erodium cygnorum (Blue Heron's-bill)	26	0.7
Polycalymma stuartii (Poached-egg Daisy)	43	1.1
Pycnosorus pleiocephalus (Soft Billy-buttons)	24	0.6
Rhodanthe moschata (Musk Daisy)	31	0.8
Salsola australis (Buckbush)	52	1.3
Tetragonia eremaea (Desert Spinach)	40	1.0
Zygophyllum ammophilum (Sand Twinleaf)	36	0.9

Conservation listed species [records]. 11 species recorded in this ecotype (including 5 wetland species – see Wetlands section).

Plants: Acacia carneorum (Needle Wattle), #AUS: VU, SA: V [2], Hakea tephrosperma (Hooked Needlewood), #AUS: -, SA: R [2], Pimelea penicillaris (Sandhill Riceflower), #AUS: -, SA: R [1], **Birds:** Aprosmictus erythropterus (Red-winged Parrot), #AUS: -, SA: R [1], **Mammals:** Notomys fuscus (Dusky Hopping-mouse), #AUS: VU, SA: V [82], **Reptiles:** Aspidites ramsayi (Woma), #AUS: -, SA: R [1],

Area 2369 km² 2.0% of the study area

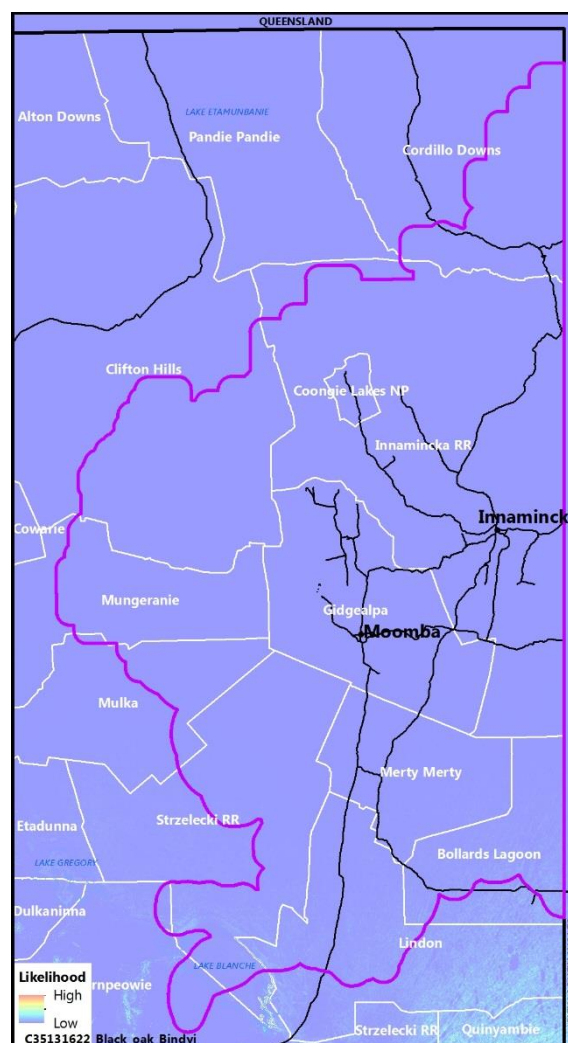
Sub IBRA	Coongie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie
Total	0.0%	0.0%	0.0%	99.6%	0.4%
Central	0.0%	0.0%	0.0%	0.0%	0.0%

Environmental classes (proportion of sites)

arid	0.00	0.00	0.00	0.00	1.00	semi-arid
hills	0.00	0.17	0.48	0.33	0.02	plains
clay	0.00	0.05	0.29	0.55	0.12	sand
acidic	0.12	0.67	0.21	0.00	0.00	alkaline
runoff	0.05	0.38	0.26	0.24	0.07	runon
dryland	0.95	0.05	0.00	0.00	0.00	wetland
stable	0.00	0.07	0.31	0.45	0.17	erosive

Biophysical disturbance risk (index)

Perennial biomass	0.32	Soil erosion	0.38
Plant recruitment	0.64	Average risk	0.46



3.23 Bindyi, Low Bluebush, Bottle-washers loamy slopes or plains

Ecotype (ID): C35131627 (23)

Formation: low open chenopod shrubland

Veg. description: *Sclerolaena* sp. +/- *Maireana astrotricha*, *Atriplex* sp. (annual) over *Salsola australis*, *Enneapogon* sp., *Zygophyllum* sp.

Vegetation cover (%)

Survey sites = 51

Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
1.3	23.0	12.6	25.8

Species (#conservation status *non-native ^indicator sp.) Freq. (%) Cover (%)

Low shrubs (<1 m)

<i>Atriplex vesicaria</i> (Bladder Saltbush)	31	1.8
<i>Maireana astrotricha</i> (Low Bluebush)^	47	4.1
<i>Salsola australis</i> (Buckbush)	43	1.7
<i>Sclerolaena brachyptera</i> (Short-wing Bindyi)	25	0.9
<i>Sclerolaena decurrens</i> (Green Bindyi)	25	0.6
<i>Sclerolaena diacantha</i> (Grey Bindyi)	24	2.0
<i>Sclerolaena divaricata</i> (Tangled Bindyi)	24	1.3

Grasses/sedges

<i>Austrostipa nitida</i> (Balcarra Spear-grass)^	16	0.3
<i>Enneapogon avenaceus</i> (Common Bottle-washers)	55	5.1
Gramineae sp. (Grass Family)^	31	1.3
<i>Schismus barbatus</i> (Arabian Grass)*	29	1.0
<i>Triopogon loliiformis</i> (Five-minute Grass)	33	1.5

Forbs

<i>Atriplex holocarpa</i> (Pop Saltbush)	37	1.1
<i>Brassica tournefortii</i> (Wild Turnip)*	43	2.5
<i>Bulbine semibarbata</i> (Small Leek-lily)^	31	1.0
<i>Erodium cygnorum</i> (Blue Heron's-bill)	45	1.3
<i>Polycalymma stuartii</i> (Poached-egg Daisy)	24	1.2
<i>Pycnosorus pleiocephalus</i> (Soft Billy-buttons)	25	0.9
<i>Rhodanthe floribunda</i> (White Everlasting)	49	1.7
<i>Salsola australis</i> (Buckbush)	22	0.5
<i>Senecio pinnatifolius</i> (Variable Groundsel)	33	1.3
<i>Stenopetalum lineare</i> (Narrow Thread-petal)	27	0.9
<i>Tetragonia eremaea</i> (Desert Spinach)	33	0.8
<i>Zygophyllum ammophilum</i> (Sand Twinleaf)^	24	0.5
<i>Zygophyllum iodocarpum</i> (Violet Twinleaf)^	25	0.8

Conservation listed species [records]. 10 species recorded in this ecotype (including 3 wetland species – see Wetlands section).

Plants: *Acacia carneorum* (Needle Wattle), #AUS: VU, SA: V [8], *Maireana pentagona* (Slender Fissure-plant), #AUS: -, SA: R [4], *Malacocera gracilis* (Slender Soft-horns), #AUS: -, SA: V [1], *Zygophyllum humillimum* (Small-fruit Twinleaf), #AUS: -, SA: R [1], **Mammals:** *Macropus giganteus* (Eastern Grey Kangaroo), #AUS: -, SA: R [2], *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [23], *Pseudomys australis* (Plains mouse), #AUS: VU, SA: V [3],

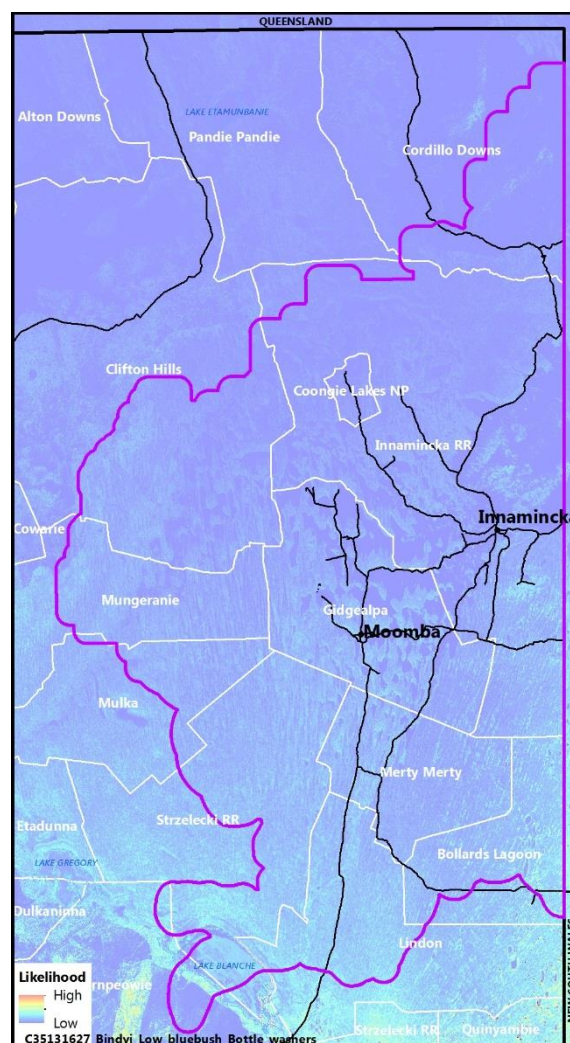
Area	4594 km ²	3.8% of the study area			
Sub IBRA	Coongie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie
Total	0.0%	0.0%	0.0%	97.7%	2.3%
Central	0.0%	0.0%	0.0%	0.0%	0.0%

Environmental classes (proportion of sites)

arid	0.00	0.08	0.02	0.06	0.84	semi-arid
hills	0.00	0.08	0.49	0.39	0.04	plains
clay	0.04	0.20	0.43	0.33	0.00	sand
acidic	0.12	0.59	0.27	0.02	0.00	alkaline
runoff	0.02	0.20	0.29	0.35	0.14	runon
dryland	0.96	0.02	0.02	0.00	0.00	wetland
stable	0.02	0.24	0.37	0.35	0.02	erosive

Biophysical disturbance risk (index)

Perennial biomass	0.09	Soil erosion	0.28
Plant recruitment	0.60	Average risk	0.43



3.24 Sandhill Cane-grass, Three-awn/Wire-grass, Hard Spinifex dunefields

Ecotype (ID): C471013 (24)

Formation: low open shrubland

Veg. description: *Zygochloa paradoxa*, *Aristida* sp. +/- *Triodia basedowii* with *Acacia ligulata* +/- *Acacia murrayana* over *Crotalaria eremaea*, *Sida* sp., *Salsola australis* +/- *Cynanchum* sp., *Abutilon* sp.

Vegetation cover (%)		Survey sites = 69	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
6.8	20.9	19.3	15.1

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Trees/tall shrubs (>1 m)		
Acacia ligulata (Umbrella Bush)	83	1.8
Acacia murrayana (Colony Wattle)	28	0.5
Low shrubs (<1 m)		
Abutilon sp. (Lantern-bush)	29	0.7
Crotalaria cunninghamii (Bird-flower Rattle-pod)^	28	0.5
Crotalaria eremaea (Loose-flowered Rattle-pod)^	67	1.6
Cynanchum floribundum (Desert Cynanchum)^	42	1.4
Enchylaena tomentosa (Ruby Saltbush)	49	1.3
Lechenaultia divaricata (Tangled Lechenaultia)	28	0.7
Ptilotus polystachyus (Long-tails)	20	0.4
Salsola australis (Buckbush)	88	3.8
Scaevola parvibarbata (Small-beard Fanflower)	20	0.4
Sclerolaena diacantha (Grey Bindyi)	43	1.6
Sida ammophila (Sand Sida)	55	1.3
Tephrosia sphaerospora (Mulga Trefoil)	28	0.6
Grasses/sedges		
Aristida holathera (Tall Kerosene Grass)	61	3.1
Triodia basedowii (Hard Spinifex)	35	3.1
Zygochloa paradoxa (Sandhill Cane-grass)^	83	9.3
Forbs		
Nicotiana velutina (Velvet Tobacco)	20	0.5
Polycalymma stuartii (Poached-egg Daisy)	48	1.4
Portulaca intraterranea (Buttercup Purslane)	23	1.1
Portulaca sp. (Purslane)	42	1.1
Tribulus hystrix (Spiky Caltrop)	43	1.0
Trichodesma zeylanicum (Camel Bush)^	30	0.7

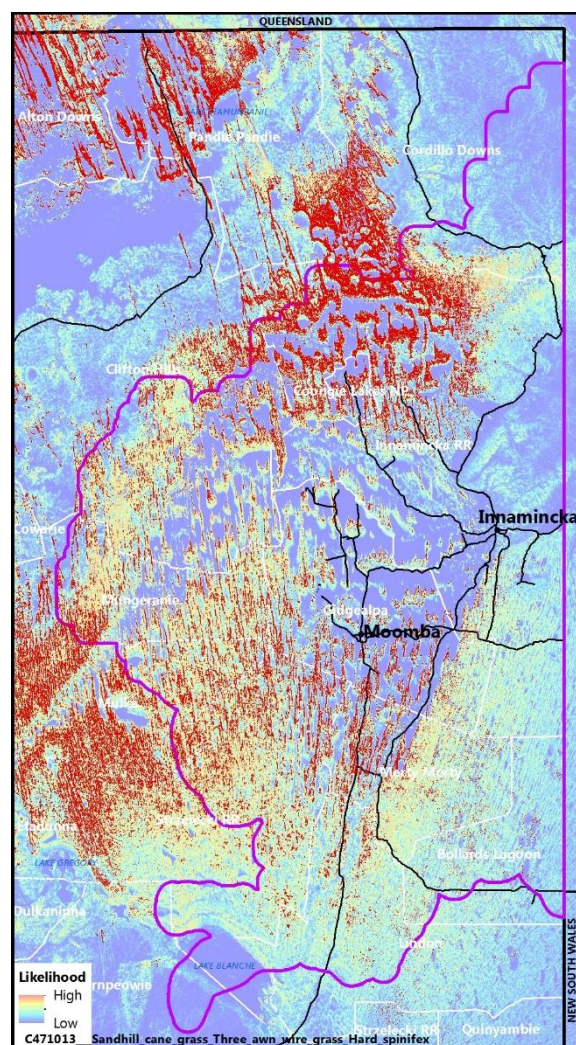
Conservation listed species [records]. 14 species recorded in this ecotype (including 5 wetland species – see Wetlands section).

Plants: *Acacia pickardii* (Pickard's Wattle), #AUS: VU, SA: R [4], *Elacholoma prostrata* (Small Monkey-flower), #AUS: -, SA: R [1], **Birds:** *Amytornis barbatus* (Grey Grasswren), #AUS: -, SA: R [1], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [1], *Neophema chrysostoma* (Blue-winged Parrot), #AUS: -, SA: V [3], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [6], **Mammals:** *Dasyiscrus cristicauda* (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: - [37], *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [31], **Reptiles:** *Aspidites ramsayi* (Woma), #AUS: -, SA: R [1],

Area	11260 km ²		9.4% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peo wie
Total	24.6%	2.8%	9.5%	62.3%	0.7%
Central	17.5%	2.7%	0.5%	21.7%	0.0%

Environmental classes (proportion of sites)						
arid	0.00	0.59	0.35	0.06	0.00	semi-arid
hills	0.04	0.52	0.29	0.13	0.01	plains
clay	0.00	0.17	0.28	0.32	0.23	sand
acidic	0.41	0.43	0.16	0.00	0.00	alkaline
runoff	0.45	0.32	0.13	0.07	0.03	runon
dryland	1.00	0.00	0.00	0.00	0.00	wetland
stable	0.01	0.10	0.25	0.17	0.46	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.18	Soil erosion	0.43
Plant recruitment	0.71	Average risk	0.48



3.25 Bindyi, Three-awn/Wire-grass sandy slopes

Ecotype (ID): C481215 (25)

Formation: low open chenopod shrubland

Veg. description: *Sclerolaena* sp. over *Salsola australis*
+/-*Aristida* sp. +/-*Eragrostis dielsii*

Vegetation cover (%)		Survey sites = 89	
Trees/tall shrubs	Low shrubs	Grasses/sedges	Forbs
5.4	16.0	15.8	2.8

Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Trees/tall shrubs (>1 m)		
<i>Acacia ligulata</i> (Umbrella Bush)	27	0.6
<i>Senna artemisioides</i> (Desert Senna)	25	1.0
Low shrubs (<1 m)		
<i>Salsola australis</i> (Buckbush)^	62	2.5
<i>Sclerolaena bicornis</i> (Goat-head Bindyi)	28	0.9
<i>Sclerolaena diacantha</i> (Grey Bindyi)^	25	0.9
<i>Sclerolaena divaricata</i> (Tangled Bindyi)^	16	0.5
<i>Sclerolaena intricata</i> (Tangled Bindyi)^	12	0.4
<i>Sclerolaena</i> sp. (Bindyi)^	47	3.3
Grasses/Sedges		
<i>Aristida contorta</i> (Curly Wire-grass)^	39	5.2
<i>Aristida holathera</i> (Tall Kerosene Grass)^	1	<0.1
<i>Aristida latifolia</i> (Feather-top Wire-grass)^	2	0.2
<i>Erneapogon avenaceus</i> (Common Bottle-washers)	20	1.1
<i>Eragrostis dielsii</i> (Mulka)^	38	3.1
<i>Eragrostis setifolia</i> (Bristly Love-grass)	24	2.7

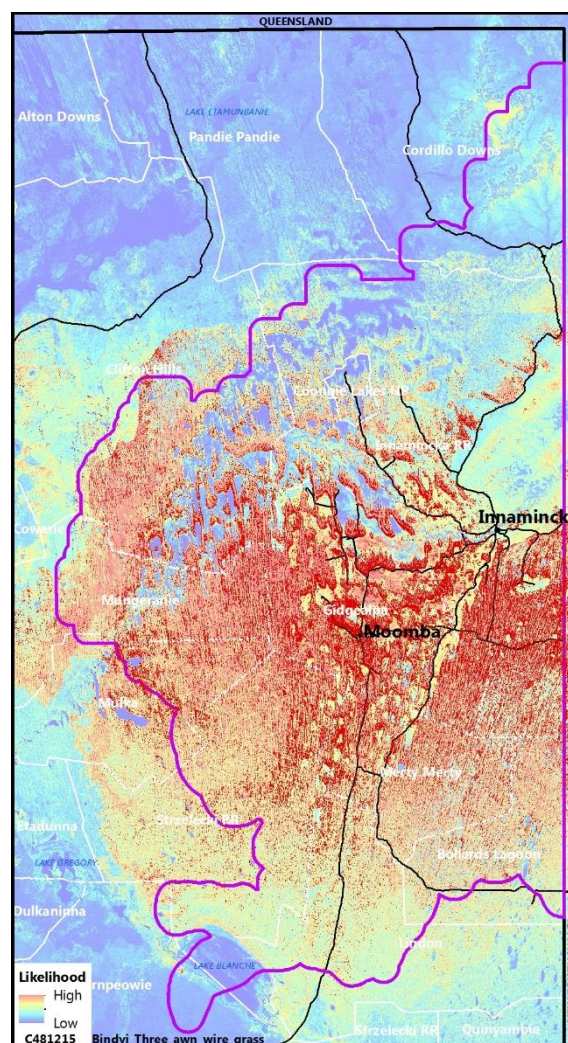
Conservation listed species [records]. 22 species recorded in this ecotype (including 6 wetland species – see Wetlands section).

Plants: *Bergia occulpetala* (Hidden Water-fire), #AUS: -, SA: V [2], *Frankenia cupularis* (Cupped Sea-heath), #AUS: -, SA: R [1], *Gilesia biniflora* (Western Tar-vine), #AUS: -, SA: R [2], *Gratwickia monochaeta* (One-bristle Everlasting), #AUS: -, SA: R [1], *Pycnosorus chrysanthus* (Yellow Drumsticks), #AUS: -, SA: E [3], *Swainsona oligophylla* (Clay-pan Swainson-pea), #AUS: -, SA: R [1], **Birds:** *Elanus scriptus* (Letter-winged Kite), #AUS: -, SA: R [1], *Falco hypoleucos* (Grey Falcon), #AUS: -, SA: R [4], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [2], *Microeca fascians* (Jacky Winter), #AUS: -, SA: ssp [1], *Neophema chrysostoma* (Blue-winged Parrot), #AUS: -, SA: V [1], **Mammals:** *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [58], *Pseudomys australis* (Plains mouse), #AUS: VU, SA: V [2], **Reptiles:** *Aspidites ramsayi* (Woma), #AUS: -, SA: R [8], *Demansia rimicola* (Channel Country Whipsnake), #AUS: -, SA: R [1], *Pseudonaja guttata* (Spotted Brown Snake), #AUS: -, SA: R [1],

Area	7000 km ²		5.8% of the study area		
Sub IBRA	Coongie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murnpeowie
Total	39.8%	0.6%	1.6%	58.0%	0.0%
Central	39.6%	0.6%	0.6%	53.3%	0.0%

Environmental classes (proportion of sites)						
arid	0.00	0.46	0.37	0.15	0.02	semi-arid
hills	0.00	0.25	0.44	0.25	0.07	plains
clay	0.08	0.10	0.29	0.43	0.10	sand
acidic	0.30	0.31	0.24	0.12	0.02	alkaline
runoff	0.07	0.20	0.30	0.31	0.11	runon
dryland	0.92	0.08	0.00	0.00	0.00	wetland
stable	0.04	0.10	0.33	0.38	0.15	erosive

Biophysical disturbance risk (index)			
Perennial biomass	0.13	Soil erosion	0.35
Plant recruitment	0.61	Average risk	0.45

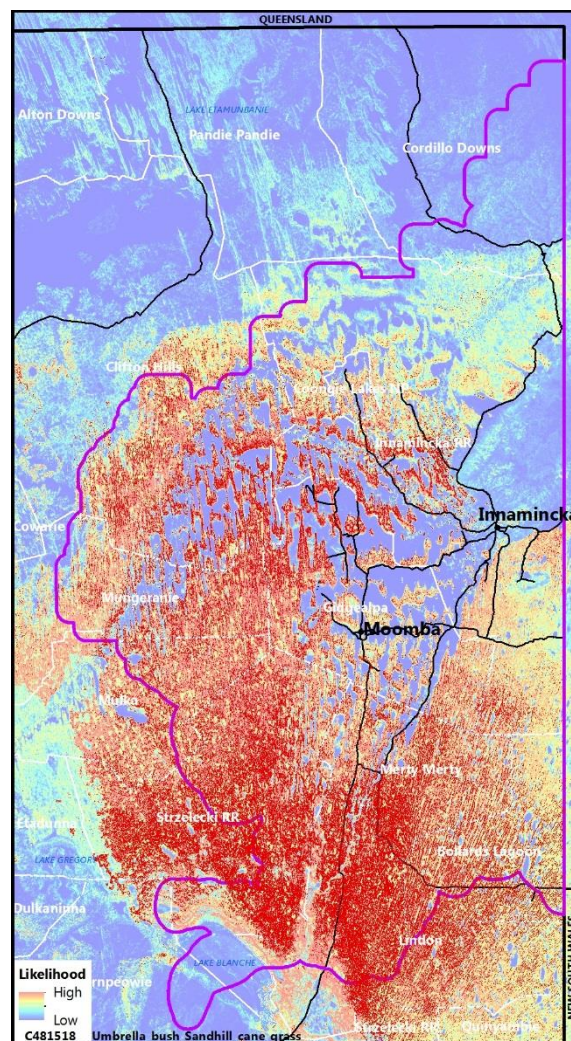


3.26 Umbrella Bush, Sandhill Cane-grass dunefields

Ecotype (ID): C481518 (26)		
Formation: mid sparse shrubland		
Veg. description: <i>Acacia ligulata</i> +/- <i>Zygochloa paradoxa</i> over <i>Aristida</i> sp.		
Vegetation cover (%)		Survey sites = 97
Trees/tall shrubs	Low shrubs	Grasses/sedges
7.5	8.5	21.3
		Forbs
		3.0
Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Trees/tall shrubs (>1 m)		
<i>Acacia dictyophleba</i> (Net-veined Wattle)^	1	<0.1
<i>Acacia ligulata</i> (Umbrella Bush)^	82	3.0
<i>Senna artemisioides</i> (Desert Senna)	22	1.3
Low shrubs (<1 m)		
<i>Crotalaria eremaea</i> (Loose-flowered Rattle-pod)^	24	1.2
<i>Salsola australis</i> (Buckbush)	32	1.5
Grasses/Sedges		
<i>Aristida contorta</i> (Curly Wire-grass)^	48	5.5
<i>Aristida holathera</i> (Tall Kerosene Grass)^	15	0.8
<i>Triodia basedowii</i> (Hard Spinifex)^	22	1.8
<i>Zygochloa paradoxa</i> (Sandhill Cane-grass)^	37	4.2

Area	10283 km ²		8.6% of the study area		
Sub IBRA	Coongie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murnpeowie
Total	15.0%	0.2%	0.5%	84.0%	0.3%
Central	14.9%	0.2%	0.1%	58.8%	0.0%
Environmental classes (proportion of sites)					
arid hills	0.00	0.43	0.45	0.07	0.04
clay	0.01	0.04	0.29	0.41	0.25
acidic runoff	0.31	0.44	0.24	0.01	0.00
dryland	0.19	0.40	0.27	0.11	0.03
stable	0.00	0.04	0.00	0.00	0.00
	0.00	0.03	0.24	0.36	0.37
					erosive
Biophysical disturbance risk (index)					
Perennial biomass		0.13	Soil erosion		0.44
Plant recruitment		0.68	Average risk		0.48

Conservation listed species [records]. 10 species recorded in this ecotype. **Birds:** *Elanus scriptus* (Letter-winged Kite), #AUS: -, SA: R [1], *Falco hypoleucos* (Grey Falcon), #AUS: -, SA: R [1], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [4], *Microeca fascinans* (Jacky Winter), #AUS: -, SA: ssp [1], *Myiagra inquieta* (Restless Flycatcher), #AUS: -, SA: R [1], *Neophema chrysostoma* (Blue-winged Parrot), #AUS: -, SA: V [1], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [1], **Mammals:** *Dasycercus cristicauda* (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: - [3], *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [31], **Reptiles:** *Aspidites ramsayi* (Woma), #AUS: -, SA: R [4],



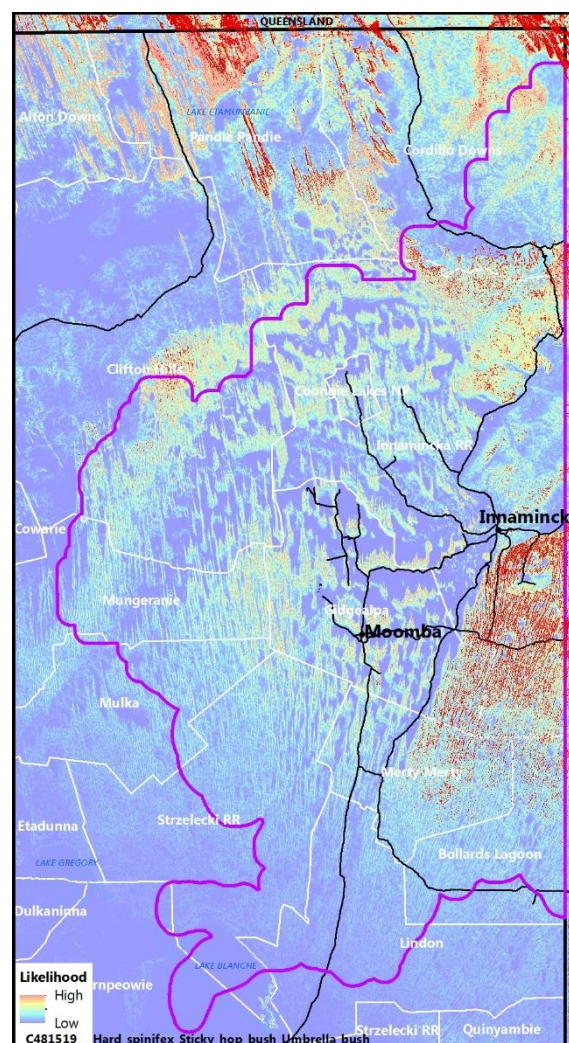
3.27 Hard Spinifex with Sticky Hop-Bush, Umbrella Bush dunefields

Ecotype (ID): C481519 (27)		
Formation: mid open shrubland		
Veg. description: Triodia basedowii +/- Zygochloa paradoxa with Dodonaea viscosa, Acacia ligulata, Atalaya hemiglauca		
Vegetation cover (%)		Survey sites = 20
Trees/tall shrubs	Low shrubs	Grasses/sedges
19.2	12.1	22.0
		Forbs
		5.4
Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Trees/tall shrubs (>1 m)		
Acacia ligulata (Umbrella Bush)^	85	2.9
Acacia murrayana (Colony Wattle)	30	0.7
Atalaya hemiglauca (Whitewood)^	75	2.4
Dodonaea viscosa (Sticky Hop-bush)^	80	4.4
Grevillea stenobotrya (Rattle-pod Grevillea)^	10	1.5
Grevillea stenobotrya (Rattle-pod Grevillea)^	25	1.3
Owenia acidula (Sour Plum)	25	0.5
Senna artemisioides (Desert Senna)	45	1.8
Low shrubs (<1 m)		
Enchylaena tomentosa (Ruby Saltbush)	55	1.0
Rhagodia spinescens (Spiny Saltbush)	40	0.9
Salsola australis (Buckbush)	50	1.8
Sclerolaena diacantha (Grey Bindyi)	30	2.6
Grasses/sedges		
Triodia basedowii (Hard Spinifex)^	85	17.0
Zygochloa paradoxa (Sandhill Cane-grass)	35	2.7
Forbs		
Lechenaultia divaricata (Tangled Lechenaultia)	25	0.6
Polycalymma stuartii (Poached-egg Daisy)	30	1.4
Salsola australis (Buckbush)	30	0.8

Conservation listed species [records]. 18 species recorded in this ecotype (including 3 wetland species – see Wetlands section).

Plants: Bergia occulpetala (Hidden Water-fire), #AUS: -, SA: V [1], Gilesia biniflora (Western Tar-vine), #AUS: -, SA: R [1], Zygophyllum humillimum (Small-fruit Twinleaf), #AUS: -, SA: R [1], **Birds:** Aprosmictus erythropterus (Red-winged Parrot), #AUS: -, SA: R [1], Ardeotis australis (Australian Bustard), #AUS: -, SA: V [2], Coracina papuensis (White-bellied Cuckooshrike), #AUS: -, SA: R [1], Coturnix ypsilophora (Brown Quail), #AUS: -, SA: V [2], Elanus scriptus (Letter-winged Kite), #AUS: -, SA: R [1], Emblema pictum (Painted Finch), #AUS: -, SA: R [4], Geophaps plumifera (Spinifex Pigeon), #AUS: -, SA: R [3], Phaps histrionica (Flock Bronzewing), #AUS: -, SA: R [2], **Mammals:** Macropus giganteus (Eastern Grey Kangaroo), #AUS: -, SA: R [1], Notomys fuscus (Dusky Hopping-mouse), #AUS: VU, SA: V [3], **Reptiles:** Aspidites ramsayi (Woma), #AUS: -, SA: R [1], **Frogs:** Cyclorana cultripes (Knife-footed Frog), #AUS: -, SA: R [2],

Area	1646 km ²		1.4% of the study area			
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie	
Total	3.7%	9.2%	30.8%	56.3%	0.0%	
Central	0.3%	9.1%	4.1%	54.9%	0.0%	
Environmental classes (proportion of sites)						
arid	0.00	0.25	0.30	0.45	0.00	semi-arid
hills	0.00	0.55	0.35	0.10	0.00	plains
clay	0.00	0.20	0.25	0.40	0.15	sand
acidic	0.75	0.25	0.00	0.00	0.00	alkaline
runoff	0.40	0.30	0.15	0.15	0.00	runon
dryland	1.00	0.00	0.00	0.00	0.00	wetland
stable	0.00	0.10	0.25	0.30	0.35	erosive
Biophysical disturbance risk (index)						
Perennial biomass		0.35		Soil erosion		0.41
Plant recruitment		0.71		Average risk		0.47



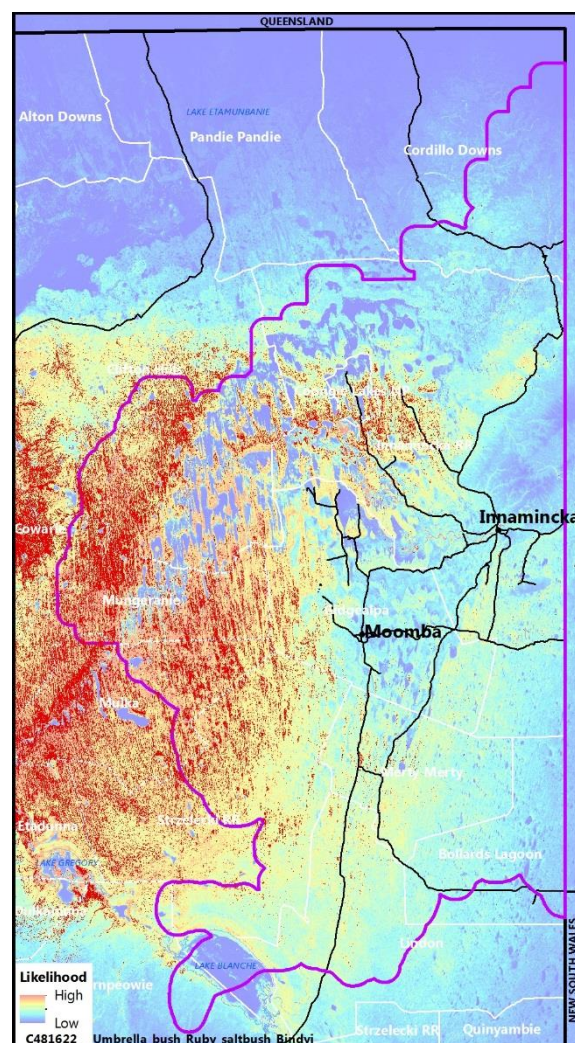
3.28 Umbrella Bush over Ruby Saltbush, Bindyi slopes

Ecotype (ID): C481622 (28)		
Formation: mid open shrubland		
Veg. description: <i>Acacia ligulata</i> +/- <i>Acacia victoriae</i> +/- <i>Senna artemisioides</i> over <i>Enchylaena tomentosa</i> , <i>Sclerolaena</i> sp., <i>Salsola australis</i> , <i>Aristida</i> sp. +/- <i>Zygochloa paradoxa</i>		
Vegetation cover (%)		Survey sites = 58
Trees/tall shrubs	Low shrubs	Grasses/sedges
14.4	25.3	14.3
		Forbs
		5.9
Species (#conservation status *non-native ^indicator sp.)	Freq. (%)	Cover (%)
Trees/tall shrubs (>1 m)		
<i>Acacia ligulata</i> (Umbrella Bush)^	72	5.5
<i>Acacia victoriae</i> (Elegant Wattle)	29	1.4
<i>Eremophila longifolia</i> (Weeping Emubush)^	26	0.5
<i>Hakea leucoptera</i> (Silver Needlewood)^	43	0.8
<i>Senna artemisioides</i> (Desert Senna)	33	1.2
Low shrubs (<1 m)		
<i>Atriplex limbata</i> (Spreading Saltbush)	31	0.7
<i>Enchylaena tomentosa</i> (Ruby Saltbush)^	84	3.4
<i>Rhagodia spinescens</i> (Spiny Saltbush)	26	0.4
<i>Salsola australis</i> (Buckbush)	84	4.2
<i>Sclerolaena bicornis</i> (Goat-head Bindyi)	38	0.9
<i>Sclerolaena diacantha</i> (Grey Bindyi)	45	1.7
<i>Sida ammophila</i> (Sand Sida)	21	0.5
Grasses/sedges		
<i>Aristida contorta</i> (Curly Wire-grass)	41	2.5
<i>Aristida holathera</i> (Tall Kerosene Grass)	29	1.6
<i>Enneapogon avenaceus</i> (Common Bottle-washers)	28	0.7
<i>Eragrostis dielsii</i> (Mulka)	34	1.0
<i>Zygochloa paradoxa</i> (Sandhill Cane-grass)^	43	3.4

Conservation listed species [records]. 27 species recorded in this ecotype (including 10 wetland species – see Wetlands section).

Plants: *Acacia pickardii* (Pickard's Wattle), #AUS: VU, SA: R [10], *Cyperus dactyloides* (Flinger Flat-sedge), #AUS: -, SA: V [1], *Maireana pentagona* (Slender Fissure-plant), #AUS: -, SA: R [1], *Pycnosorus chrysanthus* (Yellow Drumsticks), #AUS: -, SA: E [2], *Swainsona procumbens* (Broughton Pea), #AUS: -, SA: V [1], **Birds:** *Ardeotis australis* (Australian Bustard), #AUS: -, SA: V [2], *Elanus scriptus* (Letter-winged Kite), #AUS: -, SA: R [1], *Falco hypoleucos* (Grey Falcon), #AUS: -, SA: R [4], *Hamirostra melanosternon* (Black-breasted Buzzard), #AUS: -, SA: R [2], *Myiagra inquieta* (Restless Flycatcher), #AUS: -, SA: R [2], *Neophema chrysostoma* (Blue-winged Parrot), #AUS: -, SA: V [6], *Ninox connivens* (Barking Owl), #AUS: -, SA: R [1], *Phaps histrionica* (Flock Bronzewing), #AUS: -, SA: R [2], **Mammals:** *Dasyurus cristicauda* (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: - [7], *Notomys fuscus* (Dusky Hopping-mouse), #AUS: VU, SA: V [55], **Reptiles:** *Aspidites ramsayi* (Woma), #AUS: -, SA: R [2], *Pseudonaja guttata* (Spotted Brown Snake), #AUS: -, SA: R [1],

Area	8151 km ²			6.8% of the study area		
Sub IBRA	Coon gie	Lake Pure	Sturt Stony Desert	Strzelecki Desert	Murn peowie	
Total	9.0%	0.0%	24.9%	61.0%	5.1%	
Central	6.8%	0.0%	1.0%	28.5%	0.0%	
Environmental classes (proportion of sites)						
arid	0.05	0.66	0.21	0.09	0.00	semi-arid
hills	0.02	0.17	0.41	0.29	0.10	plains
clay	0.12	0.21	0.26	0.33	0.09	sand
acidic	0.14	0.34	0.38	0.14	0.00	alkaline
runoff	0.07	0.17	0.34	0.26	0.16	runon
dryland	0.95	0.05	0.00	0.00	0.00	wetland
stable	0.07	0.22	0.26	0.34	0.10	erosive
Biophysical disturbance risk (index)						
Perennial biomass			0.29	Soil erosion		0.32
Plant recruitment			0.61	Average risk		0.44



3.29 Wetlands

Ephemeral, seasonal and persistent wetlands occupy approximately 9.7% (i.e. 8355 km²) of the Cooper-Eromanga Basin study area (Figure 3.3, Table 3.3) based on classifications of Landsat Water Observations from Space water-cover-duration data. The most persistent (i.e. >50% water cover) waterholes, lakes, floodouts and drainage channels, mainly occur within the Cooper IBRA subregion (94 km²), and are mainly associated with the Cooper Creek system. The Coongie and Strzelecki Desert IBRA subregions also contain many temporary/seasonal wetlands (i.e. 11-50% water cover; ~2.4% of the study area, ~2918 km²), and many ephemeral wetlands (i.e. 1–10% water cover; ~5.6% of the study area, 6698 km²). The Sturt Stony Desert also contains smaller areas of ephemeral or seasonal wetlands (i.e. 1613 km², 1.3% of the study area). A summary of wetland areas (i.e. water cover duration classes) for each ecotype is located in Table 3.3. Conservation-listed species, with a strong preference for waterbodies, have been summarised by IBRA subregion (Table 3.4) and ecotype (Table 3.5). Fish species records for the study area have been summarised in Table 4.2, Appendix B and Appendix E.

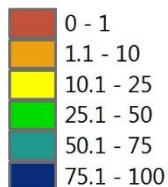
Table 3.3 Wetlands of the Cooper-Eromanga Basin region of South Australia

Region or Ecotype	Wetland area (km ²) by WOfS water cover class						Area by type
	1-10%	11-25%	26-50%	51-75%	76-90%	91-100%	
Study area	8354.7	2672.5	536.2	58.1	24.9	12.0	9.7%
IBRA subregion							
Coongie	3352.0	952.9	311.2	57.5	24.6	11.9	27.3%
Lake Pure	138.9	20.8	2.5				7.4%
Murnpeowie	126.1	41.5	4.5	<0.1			0.9%
Strzelecki Desert	3346.4	1453.9	200.2	0.5	0.3	<0.1	8.4%
Sturt Stony Desert	1391.3	203.3	17.8	0.1	<0.1		7.1%
Ecotype (ID), Name							
C110101 (1), Mitchell-grass, Bindyi, Bluebush/Fissure-plant clay loam plains or floodplains	29.3	0.6					0.4%
C110120 (2), Bladder Saltbush, Mitchell-grass, Bindyi clay loam slopes	1.3						0.0%
C110505 (3), Mitchell-grass, Bindyi, Plover-daisy clay plains	0.1	0.2	<0.1				0.0%
C110525 (4), Bindyi, Mitchell-grass, Desert Glasswort clay undulating hills	0.2						0.0%
C140404 (5), Desert Senna, Spiny Saltbush clay plains	1.8	0.1	<0.1				0.1%
C140421 (6), Black Bluebush, Low Bluebush, Bindyi clay slopes	2.6	0.1					0.1%
C191417 (7), Bindyi, Buckbush, Bottle-washers sandy slopes	132.0	0.6					1.2%
C191424 (8), Desert Senna over Three-awn/Wire-grass, Bindyi loam slopes	2.2	<0.1					0.0%
C191723 (9), Red Mulga over Bindyi, Three-awn/Wire-grass clay slopes	<0.1	<0.1					0.0%
C220202 (10), Coolibah over Lignum, Bindyi clay loam plains or floodplains	575.4	137.2	52.3	11.9	9.3	3.8	51.8%
C220209 (11), Lignum, Golden Goosefoot over Nardoo clay plains	545.6	118.2	4.1				81.5%
C220808 (12), Coolibah over Lignum, Germander clay loam plains	591.0	221.6	0.2				87.0%
C260912 (13), Bindyi, Goat-head Bindyi, Bristly Love-grass clay loam plains or floodplains	255.6	0.7	<0.1				14.6%
C26111400 (14), Lignum, Old-man Saltbush, Golden Goosefoot clay or clay loam slopes or floodplains	2283.8	121.5	3.3				39.5%
C26111441 (15), Bristly Love-grass, Goat-head Bindyi, Bindyi dunefield swales	342.7	1.1					13.5%
C33030303 (16), Nitre-bush, Twinleaf loam slopes	156.9	<0.1					3.1%
C33030335 (17), Bare or rarely Cane-grass, Nitre Goosefoot loamy slopes, salt lakes or floodplains	1310.7	1382.1	216.6	4.5	2.9	1.2	94.3%
C330707 (18), Ray Grass/Couch, Scurf-pea, Desert Nightshade clay loam plains	137.0	246.5	98.1	0.1			98.7%
C330710 (19), Coolibah over Flat-sedge, Ray Grass/Couch loam plains	139.8	321.5	161.1	41.7	12.7	7.0	99.9%
C350606 (20), Bindyi, Annual Saltbush, Samphire clay plains or floodplains	1192.6	113.1	0.1				18.5%
C350611 (21), Mitchell-grass clay slopes	2.7	0.4					0.0%
C35131622 (22), Black Oak over Bindyi sandy slopes	15.4	0.6	<0.1				0.7%
C35131627 (23), Bindyi, Low Bluebush, Bottle-washers loamy slopes or plains	99.7	4.7	0.3				2.3%
C471013 (24), Sandhill Cane-grass, Three-awn/Wire-grass, Hard Spinifex dunefields	29.8	0.2	0.1				0.3%
C481215 (25), Bindyi, Three-awn/Wire-grass sandy slopes	343.1	<0.1	<0.1				4.9%
C481518 (26), Umbrella Bush, Sandhill Cane-grass dunefields	114.6	1.5	<0.1				1.1%
C481519 (27), Hard Spinifex with Sticky Hop-bush, Umbrella Bush dunefields	4.4	<0.1					0.3%
C481622 (28), Umbrella Bush over Ruby Saltbush, Bindyi slopes	44.3	<0.1	<0.1				0.5%

Flora and Fauna Cooper-Eromanga

Wetlands

% water cover



Study area (central)

Pastoral stations

Roads



**Government of
South Australia**

0 5 10 20 30 40
Kms



Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

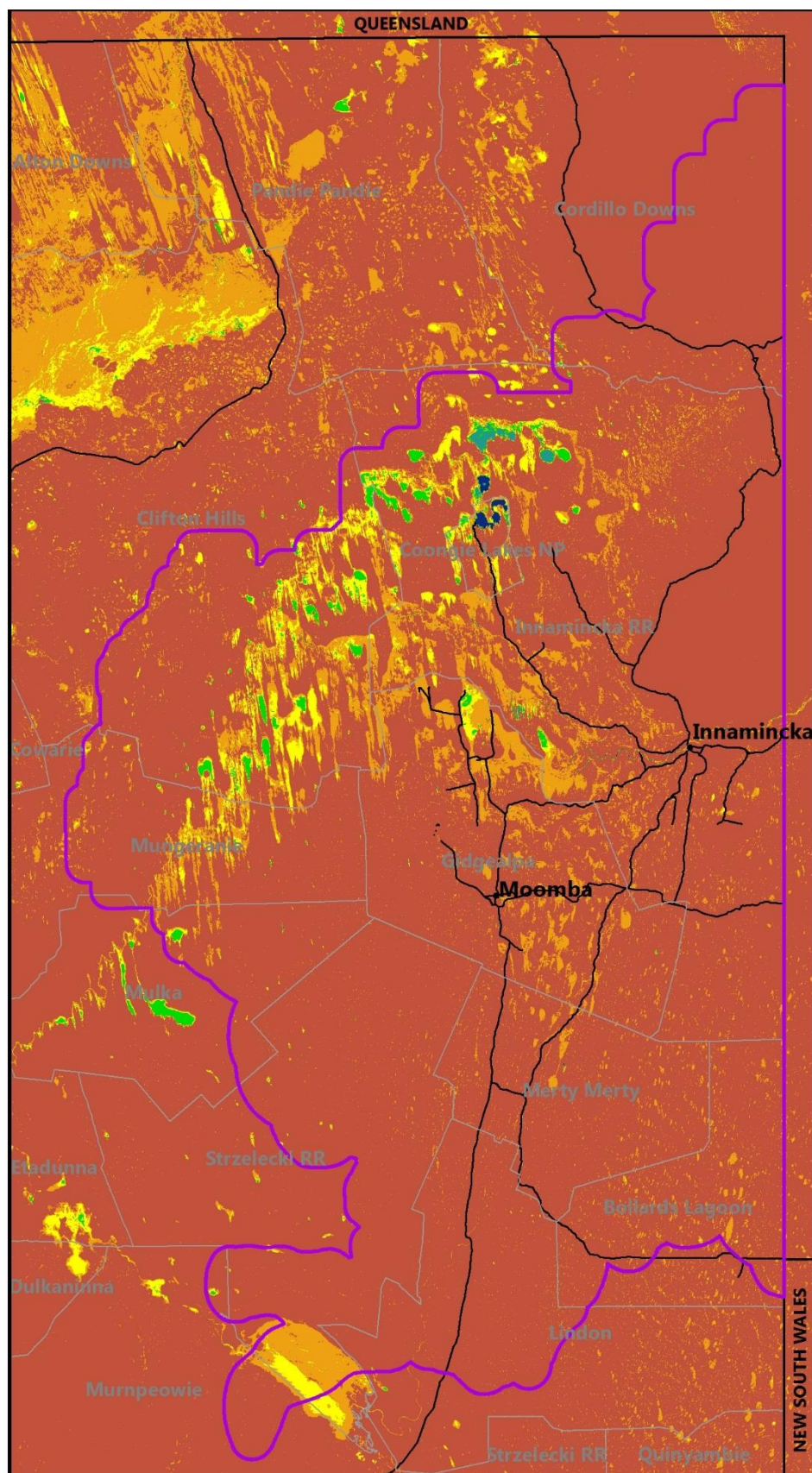


Figure 3.3. Wetlands identified from satellite imagery in the Cooper-Eromanga Basin region of South Australia

Table 3.4 Conservation-listed vertebrate species records associated with waterbodies and IBRA subregions of the Cooper-Eromanga Basin region of South Australia

Vertebrate class / Taxa, #conservation status	IBRA subregion			Strzelecki Desert	Sturt Stony Desert	Grand Total
	Coongie	Lake Pure	Murnpeowie			
Waterbirds	543	19	84	186	280	1112
Actitis hypoleucos (Common Sandpiper), #AUS: -, SA: R	4			2	2	8
Anas rhynchos (Australasian Shoveler), #AUS: -, SA: R	30		3	32	5	70
Anhinga novaehollandiae (Australasian Darter), #AUS: -, SA: R	170	2	16	10	61	259
Anseranas semipalmata (Magpie Goose), #AUS: -, SA: E	1			1		2
Ardea ibis (Cattle Egret), #AUS: -, SA: R	1					1
Ardea intermedia (Intermediate Egret), #AUS: -, SA: R	43		2	2	11	58
Arenaria interpres (Ruddy Turnstone), #AUS: -, SA: R				1		1
Biziura lobata (Musk Duck), #AUS: -, SA: R	59		6	25	12	102
Botaurus poiciloptilus (Australasian Bittern), #AUS: EN, SA: V			1			1
Calidris ferruginea (Curlew Sandpiper), #AUS: CR, SA: -	3			2	2	7
Calidris melanotos (Pectoral Sandpiper), #AUS: -, SA: R	1				1	2
Calidris subminuta (Long-toed Stint), #AUS: -, SA: R	1		1		1	3
Charadrius mongolus (Lesser Sand Plover), #AUS: EN, SA: R			1		2	3
Cladorhynchus leucocephalus (Banded Stilt), #AUS: -, SA: V	3		5	13		21
Egretta garzetta (Little Egret), #AUS: -, SA: R	20	1		1	13	35
Gallinago hardwickii (Latham's Snipe), #AUS: -, SA: R	1					1
Grus rubicunda (Brolga), #AUS: -, SA: V	58	11	38	20	131	258
Limosa limosa (Black-tailed Godwit), #AUS: -, SA: R	5			6		11
Oxyura australis (Blue-billed Duck), #AUS: -, SA: R	25			9	3	37
Plegadis falcinellus (Glossy Ibis), #AUS: -, SA: R	57	5		8	19	89
Pluvialis fulva (Pacific Golden Plover), #AUS: -, SA: R	2					2
Podiceps cristatus (Great Crested Grebe), #AUS: -, SA: R	17		1	5		23
Porzana tabuensis (Spotless Crake), #AUS: -, SA: R	2		1	4	8	15
Rostratula australis (Australian Painted-snipe), #AUS: EN, SA: V					1	1
Stictonetta naevosa (Freckled Duck), #AUS: -, SA: V	38		7	44	6	95
Thinornis rubricollis (Hooded Plover (Hooded Dotterel)), #AUS: VU, SA: V				1		1
Tringa glareola (Wood Sandpiper), #AUS: -, SA: R	2		2		2	6
Reptiles						
Emydura macquarii (Macquarie Tortoise), #AUS: -, SA: V	90				2	92

Table 3.5 Conservation-listed vertebrate species records associated with waterbodies and ecotypes of the Cooper-Eromanga Basin region of South Australia

Vertebrate class / Taxa, #conservation status	Ecotype																										Total Records		
	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518		C481519	C481622
Waterbirds	27			6	9	1	9	15	6	155	7	12	14	50	6	16	2		46	28	13	17	6	8	10		7	36	506
Actitis hypoleucos (Common Sandpiper), #AUS: -, SA: R										2									3										5
Anas rhynchos (Australasian Shoveler), #AUS: -, SA: R	2				1	1	5			2		1		3		1			3			6	2	1	1				29
Anhinga novaehollandiae (Australasian Darter), #AUS: -, SA: R	3			2	7			3	3	64		4	1	12	1				10	3	3			2	4		2	6	130
Anseranas semipalmata (Magpie Goose), #AUS: -, SA: E										1																			1
Ardea intermedia (Intermediate Egret), #AUS: -, SA: R	1									16		1							1		2				1		1	1	24
Biziura lobata (Musk Duck), #AUS: -, SA: R	1									5		2		6	3	3	1		9		1	1	1	1				4	38
Calidris ferruginea (Curlew Sandpiper), #AUS: CR, SA: -													1																1
Cladorhynchus leucocephalus (Banded Stilt), #AUS: -, SA: V										1				1		4	1			3								1	11
Egretta garzetta (Little Egret), #AUS: -, SA: R	2			1						12				2					1		1							1	20
Grus rubicunda (Brolga), #AUS: -, SA: V	14			1	1		1	9	3	26	4		11	16	1				3	12	6	1		3	2		4	17	135
Limosa limosa (Black-tailed Godwit), #AUS: -, SA: R																				1									1
Oxyura australis (Blue-billed Duck), #AUS: -, SA: R	1			1						4		2							3	1		1			1			2	16
Plegadis falcinellus (Glossy Ibis), #AUS: -, SA: R	1			1				2		9	3	1	1	4		2			6	5								2	37
Podiceps cristatus (Great Crested Grebe), #AUS: -, SA: R										5						2			3									1	11
Porzana tabuensis (Spotless Crake), #AUS: -, SA: R								1		3						3			1	1								1	10
Stictonetta naevosa (Freckled Duck), #AUS: -, SA: V	1						3			5				5	1	1			2	1		8	3	1	1				32
Thinornis rubricollis (Hooded Plover/Dotterel)), #AUS: VU, SA: V														1															1
Tringa glareola (Wood Sandpiper), #AUS: -, SA: R	1											1							1	1									4
3_Reptiles																													
Emydura macquarii (Macquarie Tortoise), #AUS: -, SA: V										2	1																		3

4 Flora and fauna species

4.1 Taxonomy

The taxonomic resolution of flora and fauna records in the Cooper-Eromanga Basin region, and official lists within the Biological Databases of South Australia (BDBSA) are variable. The majority of these records exist at the species-level (i.e. binomial scientific names). However, many records exist where taxonomic classifications are more refined, difficult to precisely be determined, or represent discrete populations of organisms. These records include descriptions at the sub-species- or variant-levels of taxonomy (i.e. trinomial scientific names), genus-level of taxonomy, and taxonomic groupings where the precise identity of an organism is difficult to distinguish (i.e. when insufficient descriptive information is available for the observation). This mixture of taxonomic resolution within scientific names means that each discrete taxonomic identity should be referred to by the term “taxa” rather than “species”.

This issue is a fairly minor one in most cases, as lists and tallies of true species-level records and all taxa-levels records are almost identical. The reason for raising this issue in this report is to raise awareness of when the terms “species” and “taxa” are used in more official or technical situations. In this report, the terms “species” and “taxa” effectively have a similar meaning, but in some cases these terms will be used in their more precise context.

4.2 Common flora and fauna species

Summaries of the flora and fauna taxa recorded in the region over the last 50 years provide a guide to the most likely species to be encountered in the region. For ecotypes defined by vegetation survey data, the frequency of flora species across ecotype sites is a good indicator of the likelihood of encountering those species when visiting that sites within that ecotype.

The collection of flora and fauna records in the region will contain some biases in species observed due to a variety of reasons, including: purpose of surveys; repeated observations; species detectability; seasonal weather; distribution of human activities; road access; and observer skill levels. We cannot remove all these biases within the Flora and Fauna records data, and so the following lists should only be used as a guide for local use. More detailed lists of flora and fauna taxa are contained within Appendix A and Appendix B.

This report provides summaries of the “most common” flora and fauna species to be encountered within IBRA subregions (Table 4.1, Table 4.2).

Common flora species within each ecotype are summarised in Section 3 Vegetation and landscapes, (i.e. Subsections 3.1 to 3.28). All fauna species associated with each ecotype, based on high-spatial-quality fauna records, are provided in Appendix E.

More detailed information (i.e. complete flora and fauna taxonomic lists, and record summaries) are provided in the Appendix A. Appendix B and supplementary digital data sets.

Table 4.1 Common flora species records of the Cooper-Eromanga Basin region of South Australia

Life form class / Common flora taxa, #conservation status, *introduced	IBRA subregion					Grand Total
	Coon gie	Lake Pure	Murn peowie	Strze lecki Desert	Sturt Stony Desert	
1_Trees (all records)	911	433	457	960	569	3330
Acacia aneura var. (Mulga)	3	18	28	172	9	230
Acacia cambagei (Gidgee)	14	2	1	2	43	62
Acacia cyperophylla var. cyperophylla (Red Mulga)	11	8			60	79
Acacia salicina (Willow Wattle)	66	5	42	43	19	175
Acacia stenophylla (River Cooba)	100	12	15	11	27	165
Alectryon oleifolius ssp. canescens (Bullock Bush)	1		12	73		86
Atalaya hemiglauca (Whitewood)	88	52	1	82	59	282
Bauhinia gilva (Bauhinia)	73	14	1	11	33	132
Casuarina pauper (Black Oak)			5	58		63
Corymbia terminalis (Plains Bloodwood)	2	87		9	11	109
Eremophila bignoniiflora (Bignonia Emubush)	87	26	11	18	17	159
Eucalyptus camaldulensis ssp. (River Red Gum)	20		16	5	19	60
Eucalyptus coolabah (Coolibah)	317	42	35	71	75	540
Grevillea striata (Beefwood)	27	10		12	30	79
Hakea eyreana (Fork-leaf Corkwood)	12	61		21	15	109
Owenia acidula (Sour Plum)	25	14		18	25	82
Pittosporum angustifolium (Native Apricot)	8	3	42	25	14	92
Santalum lanceolatum (Plumbush)	20	21	119	24	74	258
Tamarix aphylla (Athel Pine)*	4		53	188	2	247
3 Shrubs (all records)	1262	771	1056	2278	1246	6613
Acacia ligulata (Umbrella Bush)	145	90	38	533	76	882
Acacia murrayana (Colony Wattle)	64	29	6	92	22	213
Acacia oswaldii (Umbrella Wattle)	47	11	47	72	26	203
Acacia pickardii (Pickard's Wattle), #AUS: VU, SA: R				2	68	70
Acacia tetragonophylla (Dead Finish)	32	12	53	87	47	231
Acacia victoriae ssp. (Elegant Wattle)	72	28	175	95	55	425
Amyema preissii (Wire-leaf Mistletoe)	27		25	22	18	92
Atriplex nummularia ssp. (Old-man Saltbush)	117	5	38	51	46	257
Chenopodium nitrariaceum (Nitre Goosefoot)	54	2	3	22	3	84
Dodonaea viscosa ssp. angustissima (Narrow-leaf Hop-bush)	16	58	12	225	17	328
Duma florulenta (Lignum)	283	30	8	93	27	441
Eremophila freelingii (Rock Emubush)		5	45	3	37	90
Eremophila longifolia (Weeping Emubush)	35	41	29	97	36	238
Eremophila sturtii (Turpentine Bush)	1		52	21		74
Grevillea stenobotrya (Rattle-pod Grevillea)	2	43		66	13	124
Hakea leucoptera ssp. leucoptera (Silver Needlewood)	52	22	19	183	28	304
Lysiana exocarpi ssp. exocarpi (Harlequin Mistletoe)	42	12	54	33	27	168
Myoporum montanum (Native Myrtle)	2		44	33	2	81
Senna artemisioides ssp. filifolia (Fine-leaf Desert Senna)	39	52	42	102	37	272
Senna artemisioides ssp. helmsii (Blunt-leaf Senna)	2	27	30	14	45	118
Senna artemisioides ssp. oligophylla (Limestone Senna)	4	39	26	22	39	130
Senna artemisioides ssp. petiolaris (Flat-stalk Senna)	10	15	73	48	41	187
Senna artemisioides ssp. quadrifolia (Four-leaf Desert Senna)	7	1	20	23	24	75
Senna artemisioides ssp. zygophylla (Twin-leaf Desert Senna)	3	8	12	42	14	79
Senna phyllodinea (Silver Cassia)	6	7	14	15	26	68
Vachellia farnesiana (Sweet Acacia)*	89	62	2		191	344
4 Low shrubs (all records)	4122	2065	5952	7863	5389	25391
Abutilon halophilum (Plains Lantern-bush)	4	2	66	18	47	137
Abutilon leucopetalum (Desert Lantern-bush)	3	5	20	7	37	72
Abutilon otocarpum (Desert Lantern-bush)	42	40	11	137	29	259
Atriplex angulata (Fan Saltbush)	72	14	87	63	88	324
Atriplex crassipes var. crassipes (Duck-foot Saltbush)	44	7	2	5	5	63
Atriplex leptocarpa (Slender-fruit Saltbush)	82		10	7	2	101
Atriplex limbata (Spreading Saltbush)	35	9	14	126	27	211
Atriplex lindleyi ssp. (Baldoo)	19	4	74	17	92	206

Life form class / Common flora taxa, #conservation status, *introduced	IBRA subregion					Grand Total
	Coon gie	Lake Pure	Murn peowie	Strze lecki Desert	Sturt Stony Desert	
Atriplex spongiosa (Pop Saltbush)	112	27	44	44	108	335
Atriplex stipitata (Bitter Saltbush)			5	59	2	66
Atriplex velutinella (Sandhill Saltbush)	100	17	20	123	25	285
Atriplex vesicaria (Bladder Saltbush)	4	2	159	75	173	413
Brachyscome ciliaris var. lanuginosa (Woolly Variable Daisy)	16	1	45	27	18	107
Chenopodium auricomum (Golden Goosefoot)	142	36	12	69	63	322
Crotalaria cunninghamii ssp. sturtii (Bird-flower Rattle-pod)	33	27		48	18	126
Crotalaria eremaea ssp. (Loose-flowered Rattle-pod)	50	43	26	201	48	368
Cullen australasicum (Tall Scurf-pea)	22	15	70	17	52	176
Cullen cinereum (Annual Scurf-pea)	72	19	14	28	29	162
Cullen pallidum (White Scurf-pea)	34	22	2	34	11	103
Cullen patens (Spreading Scurf-pea)	5	2	15	31	10	63
Cynanchum floribundum (Desert Cynanchum)	60	11	4	84	33	192
Dissocarpus biflorus var. (Two-horn Saltbush)	24	2	61	30	49	166
Dissocarpus paradoxus (Ball Bindyi)	12	11	99	97	15	234
Einadia nutans ssp. (Climbing Saltbush)	58	45	29	39	58	229
Enchylaena tomentosa var. (Ruby Saltbush)	137	62	123	323	126	771
Eremophila duttonii (Harlequin Emubush)		4	97	4		105
Eriochiton sclerolaenoides (Woolly-fruit Bluebush)			47	31	14	92
Ethuliopsis cunninghamii (Tall Nut-heads)	76	5	4	1	8	94
Frankenia serpyllifolia (Thyme Sea-heath)	23	6	67	30	174	300
Gunniiopsis quadrifida (Sturt's Pigface)	19	8	27	106	21	181
Hibiscus krichauffianus (Velvet-leaf Hibiscus)	7	34	10	78	12	141
Indigofera psammophila (Sand Indigo)	8	16	3	29	11	67
Lechenaultia divaricata (Tangled Lechenaultia)	50	7	1	54	30	142
Leiocarpa leptolepis (Pale Plover-daisy)	10	8	35	13	49	115
Maireana aphylla (Cotton-bush)	22	26	194	109	140	491
Maireana appressa (Pale-fruit Bluebush)			24	32	17	73
Maireana astrotricha (Low Bluebush)	2	2	120	158	13	295
Maireana ciliata (Hairy Fissure-plant)	8		36	13	25	82
Maireana coronata (Crown Fissure-plant)	49	19	21	28	84	201
Maireana georgei (Satiny Bluebush)	4	7	59	24	70	164
Maireana microcarpa (Swamp Bluebush)	6	2	5	13	40	66
Maireana pyramidata (Black Bluebush)	1	2	171	98	41	313
Malacocera albolanata (Woolly Soft-horns)	29		11	19	19	78
Malacocera tricornis (Goat-head Soft-horns)	4		33	24	23	84
Minuria cunninghamii (Bush Minuria)	3		91	43	38	175
Neobassia proceriflora (Desert Glasswort)	29	7	34	8	62	140
Nitraria billardieri (Nitrate-bush)	1	2	15	52	5	75
Osteocarpum acropterum var. (Bonefruit)	63	2	49	100	46	260
Osteocarpum dipterocarpum (Two-wing Bonefruit)	10	7	42	18	20	97
Phyllanthus fuernrohrii (Sand Spurge)	22	2	2	76	11	113
Pluchea dunlopiae (Pink Plains-bush)	13	22		29	3	67
Pterocaulon sphacelatum (Apple-bush)	28	35	47	67	33	210
Ptilotus latifolius (Tangled Mulla Mulla)	7	11		29	15	62
Ptilotus obovatus (Silver-tails)	10	4	32	42	42	130
Ptilotus sessilifolius (Crimson-tails)	15	38	3	22	4	82
Rhagodia spinescens (Spiny Saltbush)	13	48	235	125	80	501
Salsola australis (Buckbush)	233	93	284	555	283	1448
Scaevola collaris (Collared Fanflower)	14		15	35	1	65
Scaevola parvibarbata (Small-beard Fanflower)	37	42	21	118	46	264
Scaevola spinescens (Spiny Fanflower)	6	11	13	17	39	86
Sclerolaena bicornis var. bicornis (Goat-head Bindyi)	139	40	67	168	146	560
Sclerolaena brachyptera (Short-wing Bindyi)	16	3	216	102	131	468
Sclerolaena calcarata (Redburr Bindyi)	60	11	10	11	32	124
Sclerolaena cuneata (Tangled Bindyi)	5	14	26	40	44	129
Sclerolaena decurrens (Green Bindyi)	27	2	20	76	21	146
Sclerolaena diacantha (Grey Bindyi)	105	39	78	417	77	716
Sclerolaena divaricata (Tangled Bindyi)	43	13	174	116	78	424

Life form class / Common flora taxa, #conservation status, *introduced	IBRA subregion					Grand Total
	Coon gie	Lake Pure	Murn peowie	Strze lecki Desert	Sturt Stony Desert	
Sclerolaena eriacantha (Silky Bindyi)	6	2	2	15	59	84
Sclerolaena glabra (Smooth Bindyi)	11	15		7	55	88
Sclerolaena intricata (Tangled Bindyi)	184	26	48	171	140	569
Sclerolaena lanicuspis (Spinach Bindyi)	24	32	67	113	179	415
Sclerolaena limbata (Pearl Bindyi)		1	140	18		159
Sclerolaena obliquicuspis (Oblique-spined Bindyi)	1		80	48	1	130
Sclerolaena parallelispis (Western Bindyi)	10	7	41	8	79	145
Sclerolaena patentispis (Spear-fruit Bindyi)	5	7	57	25	4	98
Sclerolaena uniflora (Small-spine Bindyi)	10	11	6	50		77
Sclerolaena ventricosa (Salt Bindyi)	8		212	77	28	325
Senecio lanibracteatus (Inland Shrubby Groundsel)	70	5	35	29	2	141
Senna pleurocarpa var. pleurocarpa (Stripe-pod Senna)	5	38		58	7	108
Sida ammophila (Sand Sida)	64	39	36	313	41	493
Sida corrugata var. (Corrugated Sida)	1	1	22	19	17	60
Sida cunninghamii (Ridge Sida)	21	13	8	95	8	145
Sida fibulifera (Pin Sida)	32	66	134	187	120	539
Sida intricata (Twiggy Sida)	2	6	86	94	21	209
Sida trichopoda (High Sida)	10	1	63	13	88	175
Solanum ellipticum (Velvet Potato-bush)	5	46	70	48	43	212
Solanum esuriale (Quena)	44	19	12	69	29	173
Solanum oligacanthum (Desert Nightshade)	102		27	61	18	208
Stemodia florulenta (Bluerod)	122	13	14	51	30	230
Stemodia glabella (Smooth Bluerod)	13	8		6	34	61
Swainsona campylantha (Gilgai Darling Pea)	13	20	9	10	48	100
Synostemon rhytidospemus (Rough-seed Spurge)	26	2	2	98	13	141
Tecticornia indica ssp. leiostachya (Brown-head Samphire)	73	2	16	21	10	122
Tecticornia tenuis (Slender Samphire)	7		39	8	22	76
Tephrosia sphaerospora (Mulga Trefoil)	33	13	6	95	42	189
Teucrium racemosum (Grey Germander)	134	42	5	69	27	277
5 Grasses (all records)	1947	1186	2413	4092	2806	12444
Aristida anthoxanthoides (Yellow Three-awn)	18	4	11	19	37	89
Aristida contorta (Curly Wire-grass)	56	93	95	289	151	684
Aristida holathera var. holathera (Tall Kerosene Grass)	46	69	9	140	40	304
Aristida latifolia (Feather-top Wire-grass)	11	9	3	9	48	80
Astrebla lappacea (Curly Mitchell-grass)	6	7	33	15	13	74
Astrebla pectinata (Barley Mitchell-grass)	27	12	221	86	270	616
Cenchrus ciliaris (Buffel Grass)*	377	178	91	96	208	950
Dactyloctenium radulans (Button-grass)	100	15	88	189	145	537
Diplachne fusca ssp. fusca (Brown Beetle-grass)	14	2	7	5	34	62
Eleocharis pallens (Pale Spike-rush)	29	7	9	12	22	79
Enneapogon avenaceus (Common Bottle-washers)	60	43	275	421	118	917
Enneapogon cylindricus (Jointed Bottle-washers)	3	17	107	60	24	211
Enneapogon polyphyllus (Leafy Bottle-washers)	15	60	34	45	67	221
Enteropogon acicularis (Umbrella Grass)	2	2	28	11	19	62
Enteropogon ramosus (Umbrella Grass)	2	19	23	5	25	74
Eragrostis australasica (Cane-grass)	25	10	16	50	32	133
Eragrostis basedowii (Neat Love-grass)	26	8	4	19	28	85
Eragrostis dielsii var. dielsii (Mulka)	100	36	47	235	111	529
Eragrostis eriopoda (Woollybutt)	8	44	49	55	7	163
Eragrostis leptocarpa (Drooping Love-grass)	27	2	17	28	40	114
Eragrostis setifolia (Bristly Love-grass)	118	85	149	309	175	836
Eragrostis xerophila (Knotty-butt Neverfail)	10	23	40	51	50	174
Eriachne aristidea (Three-awn Wanderrie)	20	39	7	86	15	167
Eriochloa australiensis (Australian Cupgrass)	15		12	23	10	60
Eulalia aurea (Silky Brown-top)	10	3	25	3	26	67
Iseilema membranaceum (Small Flinders-grass)	18	1	37	18	48	122
Panicum decompositum var. decompositum (Native Millet)	26	19	63	134	35	277
Paractaenum novae-hollandiae ssp. reversum (Barbed-wire Grass)	7		14	63	5	89
Paractaenum refractum (Bristle-brush Grass)	10	16	1	40	14	81

Life form class / Common flora taxa, #conservation status, *introduced	IBRA subregion					Grand Total
	Coon gie	Lake Pure	Murn peowie	Strze lecki Desert	Sturt Stony Desert	
Schismus barbatus (Arabian Grass)*			30	55		85
Sporobolus actinocladus (Ray Grass)	28	15	129	116	189	477
Sporobolus mitchellii (Rat-tail Couch)	162	1	3	19		185
Tragus australianus (Small Burr-grass)	24	5	15	75	30	149
Triodia basedowii (Hard Spinifex)	17	99		181	23	320
Tripogon loliiformis (Five-minute Grass)	33	17	84	119	205	458
Triraphis mollis (Purple Plume Grass)	55	17	58	202	28	360
Zygochloa paradoxa (Sandhill Cane-grass)	71	19	14	154	50	308
6_Sedges (all records)	162	75	756	287	211	1491
Cyperus gymnocaulos (Spiny Flat-sedge)	59		122	32	8	221
Cyperus laevigatus (Bore-drain Sedge)	1		483	35	10	529
Cyperus victoriensis (Yelka)	13	4	9	10	26	62
Fimbristylis dichotoma (Common Fringe-rush)	11	17	1	43	49	121
Juncus kraussii (Sea Rush)			28	40		68
7_Forbs (all records)	4365	1828	3493	6890	4499	21075
Acetosa vesicaria (Rosy Dock)*	6		70	15	1	92
Alternanthera denticulata (Lesser Joyweed)	10	14	7	13	22	66
Alternanthera nodiflora (Common Joyweed)	86	4	7	22	29	148
Anemocarpa podolepidium (Rock Everlasting)	1		26	8	36	71
Arabidella eremigena (Priddiwalkatji)	22	19		9	11	61
Atriplex holocarpa (Pop Saltbush)	53	13	85	187	97	435
Bergia trimera (Three-part Water-fire)	16	11	8	23	15	73
Blennodia pterosperma (Wild Stock)	20	5	4	34	11	74
Boerhavia dominii (Tar-vine)	16	3	17	108	28	172
Boerhavia schomburgkiana (Schomburgk's Tar-vine)	24	11	5	33	31	104
Brassica tournefortii (Wild Turnip)*	26	2	20	185	6	239
Bulbine alata (Winged Bulbine-lily)	35	10	9	58	29	141
Bulbine semibarbata (Small Leek-lily)	9	4	5	49	13	80
Calocephalus platycephalus (Western Beauty-heads)	37	24	15	93	15	184
Calotis hispidula (Hairy Burr-daisy)	63	35	45	119	68	330
Calotis plumulifera (Woolly-headed Burr-daisy)	26	22	14	44	44	150
Calotis porphyroglossa (Channel Burr-daisy)	54	23		19	14	110
Centipeda thespidioides (Desert Sneezeweed)	10	7	12	16	41	86
Citrullus lanatus (Bitter Melon)*	6	4	13	43	11	77
Convolvulus erubescens complex (Blushing Bindweed)	15	5	22	79	14	135
Convolvulus remotus (Grassy Bindweed)	3	4	71	25	18	121
Cressa australis (Rosinweed)	65		6	9	5	85
Cucumis argenteus (Snake Vine)	10	8	8	30	21	77
Daucus glochidiatus (Native Carrot)	25	10	46	36	49	166
Dentella pulvinata (Dentella)	47	6	1	14	7	75
Dysphania cristata (Crested Crumbweed)	9	1	5	55	4	74
Erodium crinitum (Blue Heron's-bill)	11	7	18	29	30	95
Erodium cygnorum (Blue Heron's-bill)	4	7	36	119	17	183
Euphorbia drummondii s.str. (Caustic Weed)	53	23	63	249	48	436
Euphorbia parvicaruncula (Rough-seeded Spurge)	2	1	17	13	45	78
Euphorbia stevenii (Bottletree Spurge)	13	4	34	17	37	105
Euphorbia tannensis ssp. eremophila (Desert Spurge)	44	50	47	112	85	338
Euphorbia wheeleri (Wheeler's Spurge)	15	22	2	16	36	91
Glinus lotoides (Hairy Carpet-weed)	72	19	2	9	8	110
Glycine canescens (Silky Glycine)	17	10	15	34	18	94
Gnephosis arachnoidea (Spidery Button-flower)	8	16	74	27	102	227
Gnephosis eriocarpa (Native Camomile)	55	20	20	64	90	249
Goodenia cycloptera (Serrated Goodenia)	14	3	4	38	21	80
Goodenia fascicularis (Silky Goodenia)	36	15	76	35	146	308
Goodenia lunata (Stiff Goodenia)	3	16	21	13	48	101
Haloragis aspera (Rough Raspwort)	98	17	21	46	37	219
Harmsiodoxa blennodioides (Hairy-pod Cress)	25			62	4	91
Heliotropium supinum (Creeping Heliotrope)*	57	2	2	14	2	77
Leiocarpa websteri (Narrow Plover-daisy)	5		90	27	25	147

Life form class / Common flora taxa, #conservation status, *introduced	IBRA subregion					Grand Total
	Coon gie	Lake Pure	Murn peowie	Strze lecki Desert	Sturt Stony Desert	
Lepidium muelleri-ferdinandi (Mueller's Peppercress)	22	12	11	6	19	70
Lepidium phlebopetalum (Veined Peppercress)	11	24	48	48	60	191
Lotus cruentus (Red-flower Lotus)	25	8	61	55	36	185
Malva preissiana (Australian Hollyhock)	37	4	10	5	5	61
Malvastrum americanum var. americanum (Malvastrum)	15	25	106	6	55	207
Marsilea drummondii (Common Nardoo)	107	20	16	62	48	253
Marsilea hirsuta (Short-fruit Nardoo)	6	13	9	12	29	69
Minuria denticulata (Woolly Minuria)	48	24	31	42	53	198
Minuria integerrima (Smooth Minuria)	20	2	8	10	24	64
Minuria rigida (Rigid Minuria)	33	1	29	9	12	84
Nicotiana velutina (Velvet Tobacco)	102	29	28	114	64	337
Phyllanthus lacunarius (Lagoon Spurge)	56	4	13	54	18	145
Pimelea simplex ssp. (Desert Riceflower)	5	3	78	72	32	190
Pimelea trichostachya (Spiked Riceflower)	8	15	5	33	6	67
Plantago drummondii (Dark Plantain)	34	13	62	52	53	214
Polycalymma stuartii (Poached-egg Daisy)	71	43	7	267	50	438
Portulaca intraterranea (Buttercup Purslane)	52	17	5	110	40	224
Portulaca oleracea (Common Purslane)	126	31	58	156	146	517
Ptilotus polystachyus (Long-tails)	25	44	1	92	30	192
Pycnosorus pleiocephalus (Soft Billy-buttons)	7		15	49	15	86
Rhodanthe floribunda (White Everlasting)	33	57	117	161	86	454
Rhodanthe microglossa (Clustered Everlasting)	14	8	39	13	32	106
Rhodanthe moschata (Musk Daisy)	43	24	35	88	33	223
Rhodanthe stricta (Slender Everlasting)	33	3	32	25	58	151
Rutidosis helichrysoides ssp. helichrysoides (Grey Wrinklewort)	53	13	6	10	58	140
Schenkia australis (Spike Centaury)	36	7	10	25	7	85
Senecio gregorii (Fleshy Groundsel)	69	32	14	146	49	310
Senecio pinnatifolius group (Variable Groundsel)	5		20	44	10	79
Sonchus oleraceus (Common Sow-thistle)*	25	7	21	21	11	85
Sphaeromorphaea littoralis (Spreading Nut-heads)	67		3	23	7	100
Stenopetalum lineare (Narrow Thread-petal)	5	13	30	29	25	102
Streptoglossa adscendens (Desert Daisy)	15	14	23	18	59	129
Swainsona phacoides (Dwarf Swainson-pea)	33	17	18	53	10	131
Tetragonia eremaea (Desert Spinach)	8	5	30	58	9	110
Tetragonia tetragonioides (New Zealand Spinach)	79	3	20	64	16	182
Trachymene glaucifolia (Blue Parsnip)	17	38	6	70	20	151
Trianthema triquetra (Red Spinach)	96	7	51	76	143	373
Tribulus eichlerianus (Eichler's Caltrop)	15	14	14	34	41	118
Tribulus hystrix (Spiky Caltrop)	26	19	2	37	34	118
Tribulus terrestris (Caltrop)*	21	4	21	17	11	74
Trichodesma zeylanicum var. zeylanicum (Camel Bush)	41	27	9	129	27	233
Trigonella suavissima (Sweet Fenugreek)	71	7	13	28	4	123
Wahlenbergia tumidifructa (Swollen-fruit Bluebell)	32	22	8	9	11	82
Zygophyllum ammophilum (Sand Twinleaf)	35	29	6	76	28	174
Zygophyllum howittii (Clasping Twinleaf)	22	19	12	82	29	164
Grand Total (all records)	12769	6358	14132	22371	14720	70350

Table 4.2 Common fauna species records of the Cooper-Eromanga Basin region of South Australia

Vertebrate class / Common fauna taxa, #conservation status, *introduced	IBRA subregion			Strzelecki Desert	Sturt Stony Desert	Grand Total
	Coongie	Lake Pure	Murn peowie			
1_Birds (all records)	18578	3215	9830	21310	14189	67122
Acanthagenys rufogularis (Spiny-cheeked Honeyeater)	132	36	193	132	127	620
Acanthiza uropygialis (Chestnut-rumped Thornbill)	30	6	26	113	19	194
Acrocephalus australis (Australian Reed Warbler)	46	1	40	4	54	145
Aegotheles cristatus (Australian Owlet-nightjar)	96	4	22	62	25	209
Amytornis goyderi (Eyrean Grasswren)	33	8	3	88	58	190
Anas gracilis (Grey Teal)	268	26	73	312	159	838
Anas superciliosa (Pacific Black Duck)	243	3	42	103	87	478
Anhinga novaehollandiae (Australasian Darter), #AUS: -, SA: R	170	2	16	10	61	259
Anthus australis (Australian Pipit)	90	21	171	316	171	769
Aphelocephala leucopsis (Southern Whiteface)	86	10	69	265	11	441
Aphelocephala nigrincta (Banded Whiteface)	28	8	3	90	20	149
Aquila audax (Wedge-tailed Eagle)	130	21	180	386	138	855
Ardea alba (Great Egret)	186	6	21	10	68	291
Ardea pacifica (White-necked Heron)	223	15	27	45	136	446
Artamus cinereus (Black-faced Woodswallow)	373	95	214	696	304	1682
Artamus leucorhynchus (White-breasted Woodswallow)	189	10	56	105	85	445
Artamus personatus (Masked Woodswallow)	78	49	76	120	66	389
Artamus superciliosus (White-browed Woodswallow)	49	10	27	98	27	211
Ashbyia lovensis (Gibberbird)	11	2	40	14	113	180
Aythya australis (Hardhead)	202	10	31	88	67	398
Barnardius zonarius (Australian Ringneck)	97	2	61	33	19	212
Cacatua sanguinea (Little Corella)	443	89	236	438	293	1499
Cacomantis pallidus (Pallid Cuckoo)	24	7	10	67	29	137
Certhionyx variegatus (Pied Honeyeater)	12	54	30	123	33	252
Chalcites basalis (Horsfield's Bronze Cuckoo)	92	25	35	147	64	363
Charadrius ruficapillus (Red-capped Plover)	30	13	14	44	30	131
Chenonetta jubata (Maned Duck (Australian Wood Duck))	167	23	35	159	61	445
Cheramoeca leucosterna (White-backed Swallow)	121	21	45	388	165	740
Chlidonias hybrida (Whiskered Tern)	63	4	13	40	25	145
Chroicocephalus novaehollandiae (Silver Gull)	89	4	13	56	14	176
Cincloramphus cruralis (Brown Songlark)	60	32	74	158	102	426
Cincloramphus mathewsi (Rufous Songlark)	126	33	62	116	81	418
Cinclosoma cinnamomeum (Cinnamon Quailthrush)	52	28	134	146	195	555
Circus assimilis (Spotted Harrier)	23	21	31	43	73	191
Climacteris picumnus (Brown Treecreeper)	194	2	2	29	13	240
Colluricincla harmonica (Grey Shrikethrush)	224	6	19	16	40	305
Coracina novaehollandiae (Black-faced Cuckooshrike)	170	13	82	128	124	517
Corvus bennetti (Little Crow)	195	35	104	555	211	1100
Corvus coronoides (Australian Raven)	455	66	267	453	319	1560
Cygnus atratus (Black Swan)	119		24	89	13	245
Dicaeum hirundinaceum (Mistletoebird)	84	12	67	138	102	403
Dromaius novaehollandiae (Emu)	55	23	359	315	93	845
Egretta novaehollandiae (White-faced Heron)	196	9	48	54	108	415
Elanus axillaris (Black-shouldered Kite)	35	4	52	24	31	146
Elsyornis melanops (Black-fronted Dotterel)	187	19	59	123	161	549
Eolophus roseicapilla (Galah)	458	105	344	514	368	1789
Epthianura aurifrons (Orange Chat)	74	31	126	232	172	635
Epthianura tricolor (Crimson Chat)	99	114	100	322	121	756
Erythronyx cinctus (Red-kneed Dotterel)	48	6	19	52	49	174
Falco berigora (Brown Falcon)	167	60	142	425	243	1037
Falco cenchroides (Nankeen Kestrel)	136	28	240	368	255	1027
Falco longipennis (Australian Hobby)	33	16	27	41	23	140
Fulica atra (Eurasian Coot)	161	2	27	81	88	359
Gavialis virescens (Singing Honeyeater)	125	99	351	780	292	1647
Gelochelidon nilotica (Gull-billed Tern)	56	10	37	73	22	198

Vertebrate class / Common fauna taxa, #conservation status, *introduced	IBRA subregion Coon gie	Lake Pure	Murn peowie	Strze lecki Desert	Sturt Stony Desert	Grand Total
Geopelia cuneata (Diamond Dove)	222	77	116	252	178	845
Geopelia placida (Peaceful Dove)	293	9	57	106	71	536
Grallina cyanoleuca (Magpielark)	445	40	125	350	276	1236
Grus rubicunda (Brolga), #AUS: -, SA: V	58	11	38	20	131	258
Gymnorhina tibicen (Australian Magpie)	237	49	179	501	285	1251
Haliastur sphenurus (Whistling Kite)	431	15	50	118	145	759
Hieraaetus morphnoides (Little Eagle)	71	6	20	43	25	165
Himantopus leucocephalus (White-headed Stilt)	60	3	26	131	85	305
Hirundo neoxena (Welcome Swallow)	47	3	44	109	86	289
Lalage tricolor (White-winged Triller)	79	57	61	142	82	421
Malacorhynchus membranaceus (Pink-eared Duck)	147	18	32	170	90	457
Malurus lamberti (Variegated Fairywren)	170	45	195	297	176	883
Malurus leucopterus (White-winged Fairywren)	298	119	314	672	437	1840
Manorina flavigula (Yellow-throated Miner)	374	84	124	459	262	1303
Megalurus gramineus (Little Grassbird)	40		27	31	78	176
Melopsittacus undulatus (Budgerigar)	289	167	192	526	342	1516
Merops ornatus (Rainbow Bee-eater)	138	34	116	85	92	465
Microcarbo melanoleucos (Little Pied Cormorant)	68	1	7	37	41	154
Milvus migrans (Black Kite)	415	93	192	518	429	1647
Neopsephotus bourkii (Bourke's Parrot)	27	10		63	73	173
Northiella haematogaster (Bluebonnet), #AUS: -, SA: ssp	155	37	57	418	79	746
Nycticorax caledonicus (Nankeen Night Heron)	96	2	5	9	55	167
Nymphicus hollandicus (Cockatiel)	102	46	48	134	83	413
Ocyphaps lophotes (Crested Pigeon)	449	97	300	635	414	1895
Oreoica gutturalis (Crested Bellbird)	11	7	19	128	7	172
Pachycephala rufiventris (Rufous Whistler)	46	13	68	26	44	197
Pardalotus rubricatus (Red-browed Pardalote)	137	24	36	130	62	389
Pardalotus striatus (Striated Pardalote)	38		62	57	9	166
Passer domesticus (House Sparrow)*	41		33	85	62	221
Pelecanus conspicillatus (Australian Pelican)	348	6	6	21	54	435
Petrochelidon ariel (Fairy Martin)	247	18	57	157	169	648
Petrochelidon nigricans (Tree Martin)	383	27	164	198	132	904
Petroica goodenovii (Red-capped Robin)	65	31	107	175	91	469
Phalacrocorax carbo (Great Cormorant)	129	1	10	21	51	212
Phalacrocorax sulcirostris (Little Black Cormorant)	120	1	14	31	70	236
Phalacrocorax varius ((Australian) Pied Cormorant)	129	1	7	11	26	174
Phaps histrionica (Flock Bronzewing), #AUS: -, SA: R	19	11	10	32	65	137
Platalea flavipes (Yellow-billed Spoonbill)	166	6	11	36	58	277
Platalea regia (Royal Spoonbill)	102	3	8	6	39	158
Poliocephalus poliocephalus (Hoary-headed Grebe)	58	7	19	82	46	212
Pomatostomus ruficeps (Chestnut-crowned Babbler)	91	26	33	319	16	485
Porphyrio porphyrio (Purple Swamphen)	43		6	1	80	130
Psephotus haematonotus (Red-rumped Parrot)	388	10	6	49	92	545
Psephotus varius (Mulga Parrot)	7		86	47	3	143
Psophodes cristatus (Chirruping Wedgebill)	139	24	199	321	28	711
Ptilotula penicillata (White-plumed Honeyeater)	568	48	201	259	325	1401
Recurvirostra novaehollandiae (Red-necked Avocet)	64	19	27	142	56	308
Rhipidura leucophrys (Willie Wagtail)	556	96	309	652	484	2097
Stiltia isabella (Australian Pratincole)	36	11	53	41	127	268
Tachybaptus novaehollandiae (Australasian Grebe)	53	6	22	73	78	232
Taeniopygia guttata (Zebra Finch)	466	173	427	827	577	2470
Threskiornis spinicollis (Straw-necked Ibis)	117	5	17	20	78	237
Todiramphus pyrrhopygius (Red-backed Kingfisher)	127	25	104	117	77	450
Tribonyx ventralis (Black-tailed Nativehen)	167	25	43	130	104	469
Turnix velox (Little Buttonquail)	28	16	30	34	37	145
Tyto delicatula (Eastern Barn Owl)	48	8	24	25	45	150
Vanellus miles (Masked Lapwing)	119	7	37	125	106	394
Vanellus tricolor (Banded Lapwing)	24	10	19	94	39	186

Vertebrate class / Common fauna taxa, #conservation status, *introduced	IBRA subregion					
	Coon gie	Lake Pure	Murn peowie	Strze lecki Desert	Sturt Stony Desert	Grand Total
2 Mammals (all records)	2351	816	3378	4157	3678	14380
Antechinomys laniger (Kultarr)	2	1	1	3	358	365
Austronomus australis (White-striped Free-tailed Bat)	12	6	7	14	3	42
Bos taurus (Cattle (European Cattle))*	34	6	195	79	103	417
Camelus dromedarius (One-humped Camel)*	3	4	4	25	3	39
Canis lupus (Feral Dog, Dingo)*	39	32	43	152	98	364
Chalinolobus gouldii (Gould's Wattled Bat)	10	3	25	23	17	78
Dasycercus cristicauda (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: -	1		5	49	30	85
Dasyuroides byrnei (Kowari)+, #AUS: VU, SA: V					568	568
Equus caballus (Horse (Brumby))*	9		24	13	32	78
Felis catus (Domestic Cat (Feral Cat))*	9	11	47	46	13	126
Leggadina forresti (Central Short-tailed Mouse (Forrest's Mouse))	271	16	99	38	85	509
Macropus fuliginosus (Western Grey Kangaroo)			57	31		88
Macropus robustus (Euro)			78	2		80
Macropus rufus (Red Kangaroo)	9	12	1379	487	44	1931
Mus musculus (House Mouse)*	397	92	368	951	120	1928
Notomys alexis (Spinifex Hopping-mouse)	22	19	1	10	2	54
Notomys cervinus (Fawn Hopping-mouse)+, #AUS: -, SA: V					128	128
Notomys fuscus (Dusky Hopping-mouse), #AUS: VU, SA: V	320		111	775	34	1240
Nyctophilus geoffroyi (Lesser Long-eared Bat)	13	22	29	57	32	153
Oryctolagus cuniculus (Rabbit (European Rabbit))*	56	19	228	328	115	746
Planigale gilesi (Giles' Planigale (Paucident Planigale))	44	2	8	18	3	75
Planigale ingrami (Long-tailed Planigale)	5	6		3	26	40
Planigale tenuirostris (Narrow-nosed Planigale)	1	17	32	6	3	59
Pseudomys australis (Plains mouse), #AUS: VU, SA: V	4		14	10	48	76
Pseudomys desertor (Desert Mouse)	49	52	60	26	35	222
Pseudomys hermannsburgensis (Sandy Inland Mouse)	188	227	17	271	158	861
Rattus villosissimus (Long-haired Rat (Plague Rat))	206	108	46	148	1094	1602
Scotorepens greyii (Little Broad-nosed Bat)	22	7	5	39	33	106
Sminthopsis crassicaudata (Fat-tailed Dunnart)	346	31	134	206	162	879
Sminthopsis macroura (Stripe-faced Dunnart)	217	69	146	144	205	781
Vulpes vulpes (Fox (Red Fox))*	13	7	53	74	37	184
3 Reptiles (all records)	2591	2018	2107	4776	1506	12998
Anilius endoterus (Centralian Blind Snake)	13	15		30	4	62
Aspidites ramsayi (Woma), #AUS: -, SA: R	41	1	5	27	6	80
Cryptoblepharus australis (Desert Wall Skink)	14		30	7	11	62
Ctenophorus fordii (Mallee Dragon)			28	273		301
Ctenophorus isolepis (Military Dragon)		128			1	129
Ctenophorus nuchalis (Central Netted Dragon)	115	107	27	178	32	459
Ctenophorus pictus (Painted Dragon)	247	35	36	371	66	755
Ctenopus brooksi (Sandhill Ctenopus)	2			465	4	471
Ctenopus inornatus (Brown Ctenopus)		64		41	8	113
Ctenopus leae (Centralian Coppertail)	3	38		15	8	64
Ctenopus leonhardii (Common Desert Ctenopus)		69	138	12	11	230
Ctenopus olympicus (Saltbush Ctenopus)			103	11	5	119
Ctenopus pantherinus (Leopard Skink)		95	11	1	1	108
Ctenopus regius (Eastern Desert Ctenopus)	115	167	110	147	71	610
Ctenopus schomburgkii (Sandplain Ctenopus)	2	47	97	311	6	463
Ctenopus strauchii (Short-legged Ctenopus)	16	5	108	50	61	240
Ctenopus taeniatus (Eyrean Ctenopus)	122	50	19	234	81	506
Delma butleri (Spinifex Snake-lizard)		43	2	9		54
Diplodactylus tessellatus (Tessellated Gecko)	96	31	70	24	25	246
Diporiphora winnecki (revised) (Canegrass Dragon)	11	11	4	11	5	42
Emydura macquarii (Macquarie Tortoise), #AUS: -, SA: V	90				2	92
Eremiascincus phantasmus (Ghost Skink)	77	116	4	496	60	753
Eremiascincus richardsonii (Broad-banded Sandswimmer)	22	10	28	9	8	77
Gehyra purpurascens (Purple Dtella)	17		3	32	1	53
Gehyra variegata complex (Western Tree Dtella)	63	28	55	100	44	290
Heteronotia binoei (Bynoe's Gecko)	134	24	84	102	139	483

Vertebrate class / Common fauna taxa, #conservation status, *introduced	IBRA subregion			Strzelecki Desert	Sturt Stony Desert	Grand Total
	Coongie	Lake Pure	Murn peowie			
Lerista labialis (Eastern Two-toed Slider)	61	92	48	177	31	409
Lialis burtonis (Burton's Legless Lizard)	1	62	9	26	4	102
Liopholis inornata (Desert Skink)	1	6		60	1	68
Lucasium byrnei (Pink-blotched Gecko)	2		48	71	36	157
Lucasium damaeum (Beaded Gecko)	121	32	10	238	3	404
Lucasium stenodactylum (revised) (Sandplain Gecko)	11	18	3	52		84
Menetia greyii (Dwarf Skink)	41	23	203	77	22	366
Morethia adelaidensis (Adelaide Snake-eye)	73		25	37	26	161
Morethia boulengeri (Common Snake-eye)	96	9	141	9	50	305
Nephurus levis (Smooth Knob-tailed Gecko)	128	85	10	143	29	395
Pogona vitticeps (Central Bearded Dragon)	319	109	72	296	73	869
Pseudechis australis (Mulga Snake)	18	56	4	32	13	123
Pseudonaja aspidorhyncha (Patch-nosed Brown Snake)	95		6	116	2	219
Pseudonaja mengdeni (Gwardar)	6	48	5	11	5	75
Rhynchoedura ornata (revised) (Western Beaked Gecko)	15	7	22	8	15	67
Strophurus ciliaris (Northern Spiny-tailed Gecko)	12	14	12	32	3	73
Suta suta (Curl Snake)	122	41	18	20	44	245
Tiliqua multifasciata (Centralian Bluetongue)	5	47		7	3	62
Tiliqua rugosa (Sleepy Lizard)			79	34		113
Tympanocryptis intima (Smooth-snouted Earless Dragon)	2		67	1	172	242
Tympanocryptis lineata (Five-lined Earless Dragon)	30		9	17	2	58
Tympanocryptis tetraporophora (Eyrean Earless Dragon)	53	5	163	5	91	317
Varanus gouldii (Sand Goanna)	64	83	37	171	18	373
4 Frogs (all records)	286	113	45	267	226	937
Crinia deserticola (Desert Froglet)	32			1	9	42
Cyclorana cultripes (Knife-footed Frog), #AUS: -, SA: R	11	5			14	30
Cyclorana platycephala (Water-holding Frog)	49	2	9	5	17	82
Limnodynastes tasmaniensis (Spotted Marsh Frog)	60	3		1	11	75
Litoria rubella (Desert Tree Frog)	14	21	16	3	17	71
Neobatrachus sudelli (Sudell's Frog)	88	67	20	251	153	579
5 Fish (all records)	16964		160	490	723	18337
Ambassis sp. (northwest glassfish) (Northwest Glassfish)	2135			5	3	2143
Bidyanus welchi (Welch's Grunter)	753			2	28	783
Carassius auratus (Goldfish)*	469			1		470
Craterocephalus eyresii (Lake Eyre Hardyhead)	840		15	7	8	870
Gambusia holbrooki (Eastern Gambusia)*	1055		60	57	46	1218
Hypseleotris spp. (complex) (Carp Gudgeon)	1879		1	1	9	1890
Leiopotherapon unicolor (Spangled Perch)	1340		9	269	111	1729
Macquaria ambigua ambigua (Murray-Darling Golden Perch)	1413			1	131	1545
Macquaria sp. (undescribed) (Lake Eyre Golden Perch)	244				11	255
Melanotaenia splendida tatei (Desert Rainbow Fish)	1405		1	40		1446
Nematalosa erebi (Bony Bream)	3588		44	104	112	3848
Neosilurus hyrtlii (Hyrtl's Tandan)	1138			2	177	1317
Porochilus argenteus (Silver Catfish)	423				10	433
Retropinna semoni (Australian Smelt)	180		1		65	246
Scortum barcoo (Barcoo Grunter)	67				7	74
Grand Total (all records)	40770	6162	15520	31000	20322	113774

+ Subject of targeted surveys, total records are higher than typically expected.

5 Conservation

5.1 Bioregions and ecosystems

The diversity of flora and fauna species (e.g. taxonomic richness) recorded in the Cooper-Eromanga Basin region study area (i.e. 119 915 km²) are summarised in Table 5.1. While landscapes containing more productive wetland environments (e.g. Coongie IBRA subregion) are highly valued for conservation, the total diversity of flora and fauna species across IBRA subregions are relatively consistent across the region (except for Lake Pure subregion which occupies <2% of the study area).

The Coongie Lakes wetlands are of international importance (i.e. listed under the Ramsar Convention in 1985) and are protected by National Park (NP) status (i.e. National Parks & Wildlife SA Reserve; Figure 2.1). In the south, parts of the study area are conserved within the Vulkathunha-Gammon Ranges NP and Lake Callabonna Fossil Reserve. Large parts of the Cooper-Eromanga Basin region are managed under the SA Government Regional Reserves (RR) system (i.e. Innamincka RR, Strzelecki RR, Lake Frome RR) which are regulated to provide multiple benefits (e.g. conservation, pastoralism, mining) in the region.

The vegetation–landscape ecotypes identified by this study (and their associated maps, species lists and statistics) provide indicators of conservation values within the region (Smyth *et al.* 2009). These values can be expressed in naïve mapping of species diversity (Figure 5.1) or diversity of legislated conservation priority species (Figure 5.2). Vegetation structural diversity can be estimated by life form and cover data annotated to each ecotype (Table 3.2). Primary productivity, carbon stocks and resilience can be estimated from plant biomass and cover (e.g. Figure 6.1, Table 3.2), species composition (e.g. Section 3 Vegetation and landscapes), regeneration capacity (e.g. Figure 6.2) and soil stability (e.g. Figure 6.3).

This report deliberately does not provide absolute recommendations on conservation values of the region, as the complexity of those decisions is beyond the scope of this study. Processes already exist within DEWNR Natural Resources South Australian Arid Lands (NR SAAL) management plans, priorities and business activities to provide regional conservation recommendations. This report is intended to provide information to guide planning processes and assist with site assessments in the region. The associations between ecotypes and individual species identified from this report can be used to assist conservation planning at the species level.

5.2 Conservation-listed flora and fauna

National or state legislation (i.e. *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*; *National Parks and Wildlife (NPW) Act 1972*) conservation-status-listed flora and fauna species recorded in IBRA subregions over the last 50 years within the Cooper-Eromanga Basin area have been summarised in Table 5.2. Species with regional conservation values are contained in Appendix C (i.e. flora) and Appendix D (i.e. fauna).

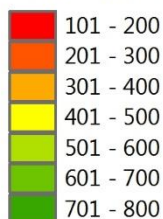
Ecotype and wetland summaries in Section 3 Vegetation and landscapes, (i.e. Subsections 3.1 to 3.29) contain lists of species with legislated priority for conservation.

Table 5.1. The diversity of flora and fauna taxa recorded in the Cooper-Eromanga Basin region of South Australia over the last 50 years, including species listed within national or state conservation legislation

Area	All Native taxa	Cons. list	Flora Native taxa	Cons. list	Fauna Native taxa	Cons. list	Cons. list (wetland)
Study area	1756	157	1300	63	456	94	28
IBRA subregion							
Coongie	1081	76	749	21	332	55	23
Lake Pure	844	32	593	12	251	20	4
Murnpeowie	1099	68	791	27	308	41	13
Strzelecki Desert	1242	81	902	30	340	51	18
Sturt Stony Desert	1151	87	803	25	348	62	18
ID, Ecotype name							
1, Mitchell-grass, Bindyi, Bluebush/Fissure-plant clay loam plains or floodplains	665	34	474	9	191	25	10
2, Bladder Saltbush, Mitchell-grass, Bindyi clay loam slopes	318	2	236	1	82	1	0
3, Mitchell-grass, Bindyi, Plover-daisy clay plains	404	6	288	4	116	2	0
4, Bindyi, Mitchell-grass, Desert Glasswort clay undulating hills	353	20	201	3	152	17	5
5, Desert Senna, Spiny Saltbush clay plains and loam dunes	582	16	364	3	218	13	3
6, Black Bluebush, Low Bluebush, Bindyi clay slopes	527	10	378	6	149	4	1
7, Bindyi, Buckbush, Bottle-washers sandy slopes	524	15	335	4	189	11	3
8, Desert Senna over Three-awn/Wire-grass, Bindyi loam slopes	707	23	523	11	184	12	4
9, Red Mulga over Bindyi, Three-awn/Wire-grass clay slopes	505	11	353	5	152	6	2
10, Coolibah over Lignum, Bindyi clay loam plains or floodplains	684	44	438	12	246	32	15
11, Lignum, Golden Goosefoot over Nardoo clay plains	316	17	147	5	169	12	3
12, Coolibah over Lignum, Germander clay loam plains	339	12	191	1	148	11	7
13, Bindyi, Goat-head Bindyi, Bristly Love-grass clay loam plains or floodplains	631	26	454	10	177	16	4
14, Lignum, Old-man Saltbush, Golden Goosefoot clay or clay loam slopes or floodplains	761	41	523	10	238	31	9
15, Bristly Love-grass, Goat-head Bindyi, Bindyi dunefield swales	536	14	359	4	177	10	4
16, Nitre-bush, Twinleaf loam slopes	475	24	275	6	200	18	7
17, Bare or rarely Cane-grass, Nitre Goosefoot loamy slopes, salt lakes or floodplains	149	5	51	0	98	5	2
18, Ray Grass/Couch, Scurf-pea, Desert Nightshade clay loam plains	135	1	99	1	36	0	0
19, Coolibah over Flat-sedge, Ray Grass/Couch loam plains	351	18	175	2	176	16	13
20, Bindyi, Annual Saltbush, Samphire clay plains or floodplains	646	32	421	8	225	24	9
21, Mitchell-grass clay slopes	608	27	422	10	186	17	5
22, Black Oak over Bindyi sandy slopes	296	11	180	3	116	8	5
23, Bindyi, Low Bluebush, Bottle-washers loamy slopes or plains	363	10	273	4	90	6	3
24, Sandhill Cane-grass, Three-awn/Wire-grass, Hard Spinifex dunefields	556	14	378	2	178	12	5
25, Bindyi, Three-awn/Wire-grass sandy slopes	640	22	421	6	219	16	6
26, Umbrella Bush, Sandhill Cane-grass dunefields	451	10	296	0	155	10	0
27, Hard Spinifex with Sticky Hop-bush, Umbrella Bush dunefields	474	18	283	3	191	15	3
28, Umbrella Bush over Ruby Saltbush, Bindyi slopes	597	27	375	5	222	22	10

Flora and Fauna Cooper-Eromanga

Native flora and fauna
taxa richness



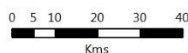
Study area (central)

Pastoral stations

Roads



Government of
South Australia



Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

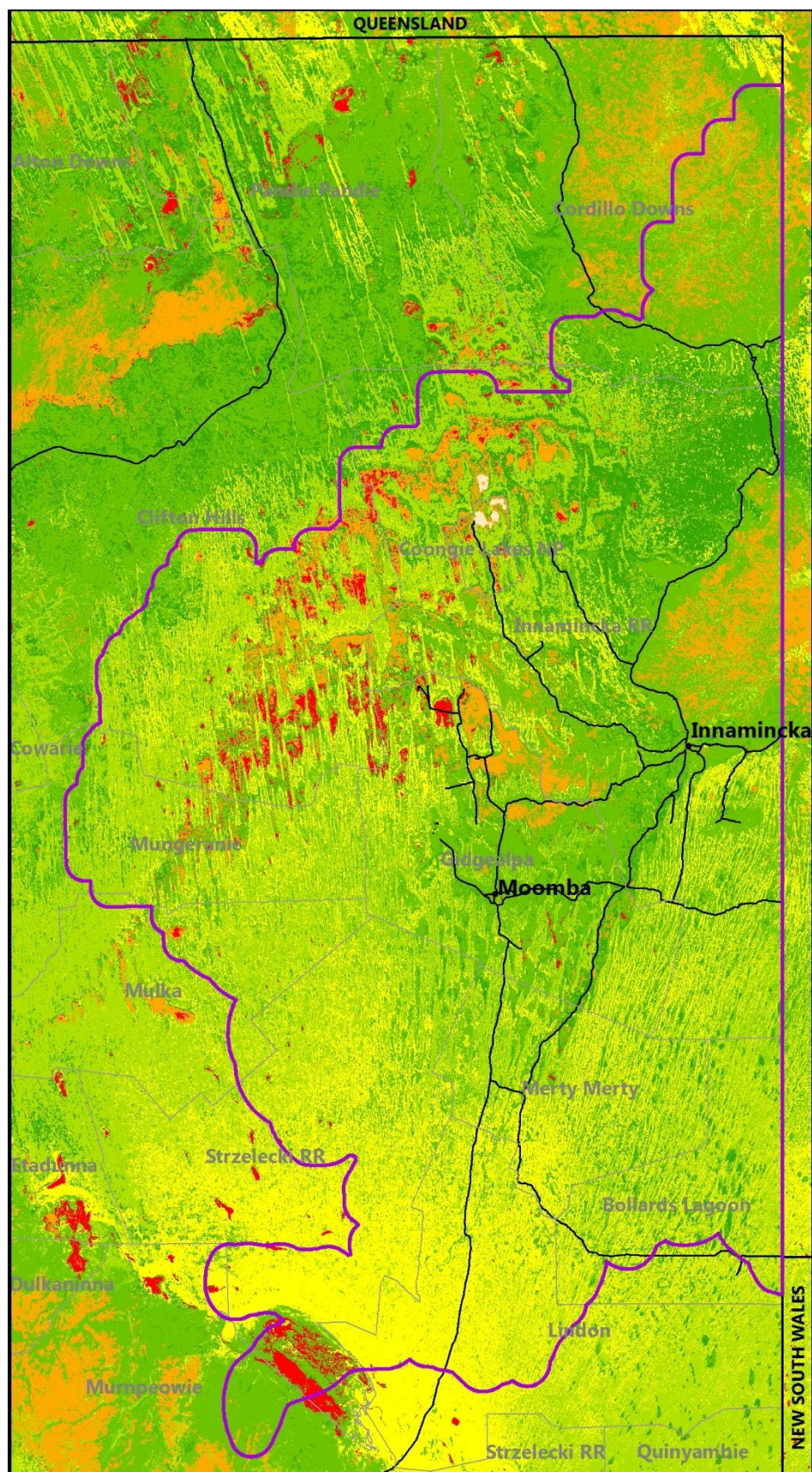
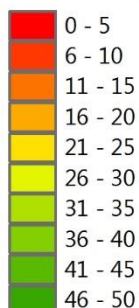


Figure 5.1. Native flora and fauna taxa richness within vegetation–landscape ecotypes of the Cooper-Eromanga Basin region of South Australia

Flora and Fauna Cooper-Eromanga

Conservation-listed flora
and fauna species richness



Study area (central)

Pastoral stations

Roads



**Government of
South Australia**

0 5 10 20 30 40
Kms

Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

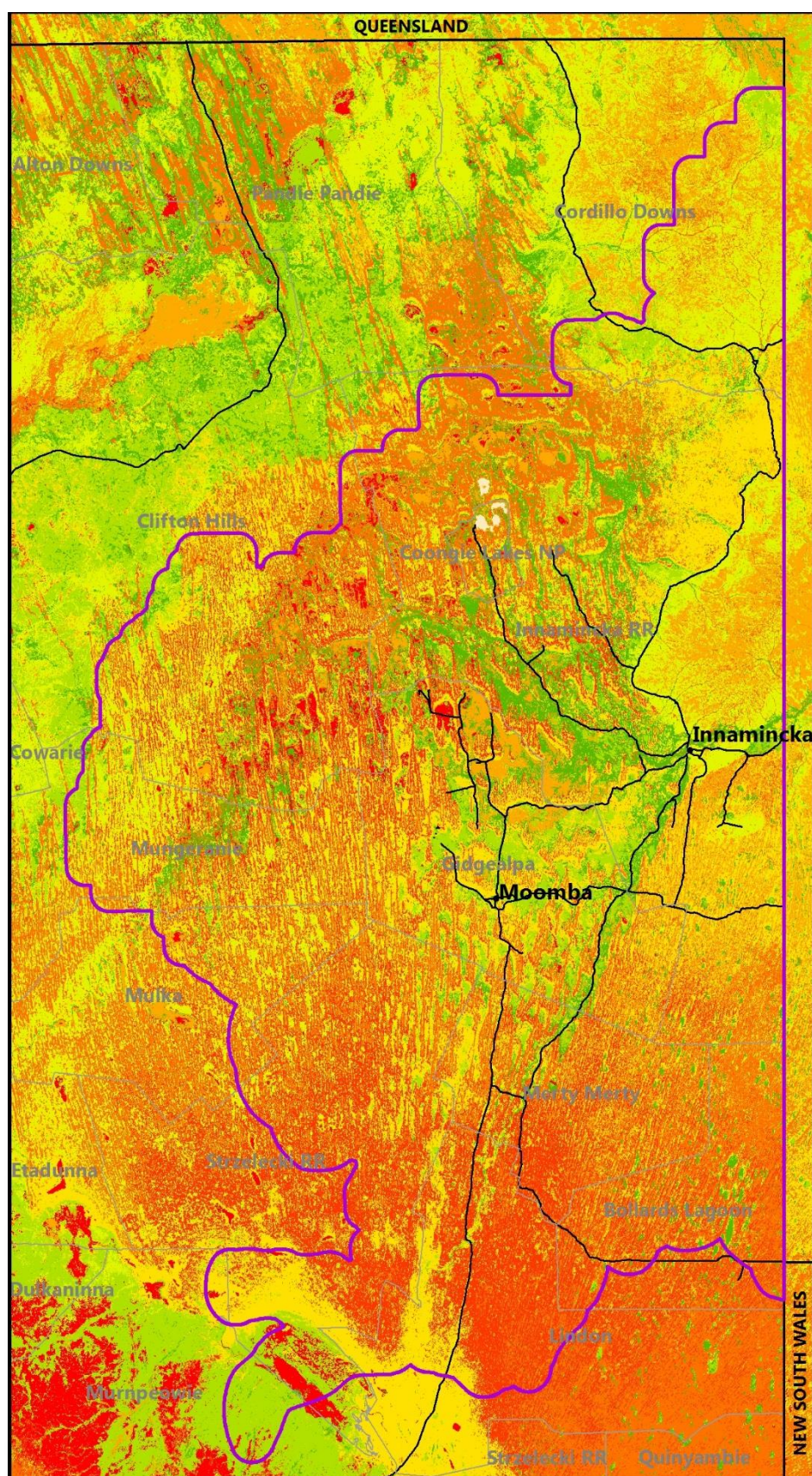


Figure 5.2. Conservation listed flora and fauna species richness within vegetation-landscape ecotypes of the Cooper-Eromanga Basin region of South Australia

Table 5.2. National or state legislation conservation-status-listed flora and fauna records (last 50 years), by IBRA subregion, in the Cooper-Eromanga Basin region of South Australia

Life form class / Conservation-listed species, #conservation status	IBRA subregion			Strzelecki Desert	Sturt Stony Desert	Grand Total
	Coongie	Lake Pure	Murn peowie			
All flora	100	62	141	104	166	573
1_Trees				1	2	3
Acacia georginae (Georgina Gidgee), #AUS: -, SA: R					1	1
Codonocarpus pyramidalis (Slender Bell-fruit), #AUS: VU, SA: E				1		1
Santalum spicatum (Sandalwood), #AUS: -, SA: V					1	1
3_Shrubs	3		6	28	76	113
Acacia carneorum (Needle Wattle), #AUS: VU, SA: V				20	1	21
Acacia confluens (Arkaroola Wattle), #AUS: -, SA: V			6			6
Acacia Ioderi (Nealie), #AUS: -, SA: R					1	1
Acacia pickardii (Pickard's Wattle), #AUS: VU, SA: R				2	68	70
Eremophila polyclada (Twiggy Emubush), #AUS: -, SA: R	3			4	6	13
Hakea tephrosperma (Hooked Needlewood), #AUS: -, SA: R				2		2
4_Low shrubs	45	8	84	22	43	202
Acacia tenuissima (Slender Wattle), #AUS: -, SA: R	1	5				6
Atriplex eichleri (Eichler's Saltbush), #AUS: -, SA: R			4	5		9
Atriplex papillata (Coral Saltbush), #AUS: -, SA: E				1		1
Eriocaulon carsonii ssp. carsonii (Salt Pipewort), #AUS: EN, SA: E			53			53
Frankenia cupularis (Cupped Sea-heath), #AUS: -, SA: R	43	3	4	1	1	52
Frankenia plicata (Braided Sea-heath), #AUS: EN, SA: V			4		8	12
Frankenia subteres (Round Sea-heath), #AUS: -, SA: R			2			2
Maireana excavata (Bottle Fissure-plant), #AUS: -, SA: V					1	1
Maireana melanocarpa (Black-fruit Bluebush), #AUS: -, SA: R			1			1
Maireana pentagona (Slender Fissure-plant), #AUS: -, SA: R			15	5	12	32
Malacocera gracilis (Slender Soft-horns), #AUS: -, SA: V				6		6
Osteocarpum acropterum var. deminutum (Wingless Bonefruit), #AUS: -, SA: R	1					1
Osteocarpum pentapterum (Five-wing Bonefruit), #AUS: -, SA: E				2	9	11
Pimelea penicillaris (Sandhill Riceflower), #AUS: -, SA: R				1	1	2
Sclerolaena blackiana (Black's Bindyi), #AUS: -, SA: R				1	2	3
Sclerolaena fontinalis (Mound Spring Bindyi), #AUS: -, SA: R					5	5
Solanum eremophilum (Rare Nightshade), #AUS: -, SA: R			1			1
Synostemon ramosissimus (Branched Spurge), #AUS: -, SA: V					4	4
5_Grasses	1	2	17	7	2	29
Aristida arida (Dry Wire-grass), #AUS: -, SA: R			15			15
Aristida australis (Southern Wire-grass), #AUS: -, SA: R			1			1
Bothriochloa macra (Red-leg Grass), #AUS: -, SA: R				1		1
Eleocharis plana (Flat Spike-rush), #AUS: -, SA: R	1		1		1	3
Eragrostis lacunaria (Purple Love-grass), #AUS: -, SA: R				6	1	7
Neurachne lanigera (Woolly Mulga-grass), #AUS: -, SA: R		2				2
6_Sedges	5	16	1		9	31
Cyperus bifax (Downs Flat-sedge), #AUS: -, SA: R	4		1		1	6
Cyperus concinnus (Trim Flat-sedge), #AUS: -, SA: R		5				5
Cyperus dactylotes (Flinger Flat-sedge), #AUS: -, SA: V	1	10			8	19
Cyperus nervulosus (Annual Flat-sedge), #AUS: -, SA: R		1				1
7_Forbs	46	36	33	46	34	195
Bergia occultipetala (Hidden Water-fire), #AUS: -, SA: V		10		5		15
Brachyscome breviscapis (Short-stem Daisy), #AUS: -, SA: R				1		1
Brachyscome eriogona (Gibber Daisy), #AUS: -, SA: R	2		2			4
Bulbostylis turbinata (Top-shape Watergrass), #AUS: -, SA: R			1			1
Calandrinia stagnensis (Waterhole Purslane), #AUS: -, SA: R	5	1			1	7
Callitriche sonderi (Matted Water Starwort), #AUS: -, SA: R	2	1		1		4
Calocephalus sonderi (Pale Beauty-heads), #AUS: -, SA: R	1			2		3
Crassula sieberiana (Sieber's Crassula), #AUS: -, SA: E				2		2
Elacholoma prostrata (Small Monkey-flower), #AUS: -, SA: R	6		1	2	2	11
Elatine gratioloides (Waterwort), #AUS: -, SA: R	2					2
Eryngium vesiculosum (Prostrate Blue Devil), #AUS: -, SA: R	1					1
Gilesia biniflora (Western Tar-vine), #AUS: -, SA: R	1		5	8	3	17
Gratwickia monochaeta (One-bristle Everlasting), #AUS: -, SA: R			2	1		3
Ophioglossum polyphyllum (Large Adder's-tongue), #AUS: -, SA: R				1		1
Orobanche cernua var. australiana (Australian Broomrape), #AUS: -, SA: R			8	3		11

Life form class / Conservation-listed species, #conservation status	IBRA subregion			Strzelecki Desert	Sturt Stony Desert	Grand Total
	Coongie	Lake Pure	Murn peowie			
Phlegmatospermum eremaeum (Spreading Cress), #AUS: -, SA: R	1		1			2
Picris squarrosa (Squat Picris), #AUS: -, SA: R			1			1
Ptilotus nobilis ssp. semilanatus (Lamb's Tails), #AUS: -, SA: E				1		1
Pycnosorus chrysanthus (Yellow Drumsticks), #AUS: -, SA: E	4		2	5	12	23
Pycnosorus globosus (Drumsticks), #AUS: -, SA: V	1				1	2
Stylidium desertorum (Desert Triggerplant), #AUS: -, SA: V		11				11
Swainsona oligophylla (Clay-pan Swainson-pea), #AUS: -, SA: R	17	12	3	9		41
Swainsona procumbens (Broughton Pea), #AUS: -, SA: V			1	1		2
Swainsona viridis (Creeping Darling Pea), #AUS: -, SA: V	1		4			5
Utricularia violacea (Violet Bladderwort), #AUS: -, SA: R			1			1
Zygophyllum humillimum (Small-fruit Twinleaf), #AUS: -, SA: R	2	1	1	4	15	23
All vertebrate fauna	1361	81	301	1279	1501	4523
Terrestrial vertebrates	728	62	217	1093	1219	3319
1. Birds	345	49	75	216	344	1029
Acanthiza iredalei iredalei (Slender-billed Thornbill (western ssp)), #AUS: -, SA: R					1	1
Accipiter novaehollandiae (Grey Goshawk), #AUS: -, SA: E					1	1
Amytornis barbatus (Grey Grasswren), #AUS: -, SA: R	1			1	42	44
Amytornis modestus (Thick-billed Grasswren), #AUS: VU, SA: -			4	1	8	13
Aphelocephala pectoralis (Chestnut-breasted Whiteface), #AUS: -, SA: R			3			3
Aprosmictus erythropterus (Red-winged Parrot), #AUS: -, SA: R	9	2		4	4	19
Ardeotis australis (Australian Bustard), #AUS: -, SA: V	23	21	3	31	37	115
Burhinus grallarius (Bush Stonecurlew), #AUS: -, SA: R	3				1	4
Cacatua leadbeateri (Major Mitchell's Cockatoo), #AUS: -, SA: R				2		2
Chlamydera maculata (Spotted Bowerbird), #AUS: -, SA: E					2	2
Cinclosoma castanotum (Chestnut-backed Quailthrush (Chestnut Quailthrush))			1			1
Climacteris affinis (White-browed Treecreeper), #AUS: -, SA: R	10		1		1	12
Conopophila whitei (Grey Honeyeater), #AUS: -, SA: R					1	1
Coracina papuensis (White-bellied Cuckooshrike), #AUS: -, SA: R	1					1
Coturnix ypsilophora (Brown Quail), #AUS: -, SA: V	8		1	3	7	19
Elanus scriptus (Letter-winged Kite), #AUS: -, SA: R	9	3	1	21	14	48
Emblema pictum (Painted Finch), #AUS: -, SA: R			3	3	9	15
Epthianura crocea (Yellow Chat), #AUS: -, SA: E					26	26
Falco hypoleucos (Grey Falcon), #AUS: -, SA: R	17	2	5	18	15	57
Falco peregrinus (Peregrine Falcon), #AUS: -, SA: R	5	1	4	14	9	33
Geophaps plumifera (Spinifex Pigeon), #AUS: -, SA: R					25	25
Gerygone fusca (Western Gerygone), #AUS: -, SA: R				3		3
Grantiella picta (Painted Honeyeater), #AUS: VU, SA: V				2	3	5
Haliaeetus leucogaster (White-bellied Sea Eagle), #AUS: -, SA: E	2					2
Hamirostra melanosternon (Black-breasted Buzzard), #AUS: -, SA: R	56		17	26	5	104
Lichmera indistincta (Brown Honeyeater), #AUS: -, SA: R	1	3			3	7
Lophoictinia isura (Square-tailed Kite), #AUS: -, SA: E	2				1	3
Melithreptus gularis laetior (Golden-backed Honeyeater), #AUS: -, SA: R	2					2
Microeca fascians (Jacky Winter), #AUS: -, SA: ssp	73	2	4	5	11	95
Myiagra cyanoleuca (Satin Flycatcher), #AUS: -, SA: E			1			1
Myiagra inquieta (Restless Flycatcher), #AUS: -, SA: R	44	3	2	18	17	84
Neophema chrysostoma (Blue-winged Parrot), #AUS: -, SA: V	7	1	5	23	16	52
Neophema elegans (Elegant Parrot), #AUS: -, SA: R			6			6
Neophema splendida (Scarlet-chested Parrot), #AUS: -, SA: R	1					1
Ninox connivens (Barking Owl), #AUS: -, SA: R	49				5	54
Oriolus sagittatus (Olive-backed Oriole), #AUS: -, SA: R	1			2	2	5
Pedionomus torquatus (Plains-wanderer), #AUS: CR, SA: E			3		3	6
Pezoporus occidentalis (Night Parrot), #AUS: EN, SA: E	1					1
Phaps histrionica (Flock Bronzewing), #AUS: -, SA: R	19	11	10	32	65	137
Plectorhyncha lanceolata (Striped Honeyeater), #AUS: -, SA: R				2		2
Turnix pyrrhorostris (Red-chested Buttonquail), #AUS: -, SA: R				2	1	3
Tyto longimembris (Eastern Grass Owl), #AUS: -, SA: R			1	3	9	13
Tyto novaehollandiae (Australian Masked Owl), #AUS: -, SA: E	1					1
2. Mammals	329	1	136	845	808	2119
Dasyercus cristicauda (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: -	1		5	49	30	85
Dasyuroides byrnei (Kowari), #AUS: VU, SA: V					568	568
Leporillus conditor (Greater Stick-nest Rat), #AUS: VU, SA: V (extinct on mainland)			2			2
Macropus giganteus (Eastern Grey Kangaroo), #AUS: -, SA: R				6		6

Life form class / Conservation-listed species, #conservation status	IBRA subregion			Strzelecki Desert	Sturt Stony Desert	Grand Total
	Coongie	Lake Pure	Murn peowie			
Macrotis lagotis (Greater Bilby (Bilby)), #AUS: VU, SA: V				1		1
Notomys cervinus (Fawn Hopping-mouse), #AUS: -, SA: V					128	128
Notomys fuscus (Dusky Hopping-mouse), #AUS: VU, SA: V	320		111	775	34	1240
Petrogale xanthopus xanthopus (Yellow-footed Rock-wallaby), #AUS: VU, SA: -			1			1
Pseudomys australis (Plains mouse), #AUS: VU, SA: V	4		14	10	48	76
Pteropus scapulatus (Little Red Flying-fox), #AUS: -, SA: R			1	1		2
Saccolaimus flaviventris (Yellow-bellied Sheath-tailed Bat), #AUS: -, SA: R	2	1	2	3		8
Trichosurus vulpecula (Common Brushtail Possum), #AUS: -, SA: R	2					2
3. Reptiles	43	7	6	32	53	141
Aspidites ramsayi (Woma), #AUS: -, SA: R	41	1	5	27	6	80
Ctenotus astarte (Ashy Downs Ctenotus), #AUS: -, SA: R		2			16	18
Ctenotus joanae (Blacksoil Ctenotus), #AUS: -, SA: R					15	15
Delma borea (Northern Snake-lizard), #AUS: -, SA: R					1	1
Demansia rimicola (Channel Country Whipsnake), #AUS: -, SA: R		2		1	4	7
Lucasium steindachneri (Map Gecko), #AUS: -, SA: R				1		1
Morelia spilota (Carpet Python), #AUS: -, SA: R				1	1	2
Proablepharus kinghorni (Blacksoil Skink), #AUS: -, SA: R	2				5	7
Pseudonaja guttata (Spotted Brown Snake), #AUS: -, SA: R		2		2	5	9
Vermicella annulata (Common Bandy Bandy), #AUS: -, SA: R			1			1
4. Frogs	11	5			14	30
Cyclorana cultripes (Knife-footed Frog), #AUS: -, SA: R	11	5			14	30
Wetland vertebrates	633	19	84	186	282	1204
1. Birds	543	19	84	186	280	1112
Actitis hypoleucos (Common Sandpiper), #AUS: -, SA: R	4			2	2	8
Anas rhynchotis (Australasian Shoveler), #AUS: -, SA: R	30		3	32	5	70
Anhinga novaehollandiae (Australasian Darter), #AUS: -, SA: R	170	2	16	10	61	259
Anseranas semipalmata (Magpie Goose), #AUS: -, SA: E	1			1		2
Ardea ibis (Cattle Egret), #AUS: -, SA: R	1					1
Ardea intermedia (Intermediate Egret), #AUS: -, SA: R	43		2	2	11	58
Arenaria interpres (Ruddy Turnstone), #AUS: -, SA: R				1		1
Biziura lobata (Musk Duck), #AUS: -, SA: R	59		6	25	12	102
Botaurus poiciloptilus (Australasian Bittern), #AUS: EN, SA: V			1			1
Calidris ferruginea (Curlew Sandpiper), #AUS: CR, SA: -	3			2	2	7
Calidris melanotos (Pectoral Sandpiper), #AUS: -, SA: R	1				1	2
Calidris subminuta (Long-toed Stint), #AUS: -, SA: R	1		1		1	3
Charadrius mongolus (Lesser Sand Plover), #AUS: EN, SA: R			1		2	3
Cladorhynchus leucocephalus (Banded Stilt), #AUS: -, SA: V	3		5	13		21
Egretta garzetta (Little Egret), #AUS: -, SA: R	20	1		1	13	35
Gallinago hardwickii (Latham's Snipe), #AUS: -, SA: R	1					1
Grus rubicunda (Brolga), #AUS: -, SA: V	58	11	38	20	131	258
Limosa limosa (Black-tailed Godwit), #AUS: -, SA: R	5			6		11
Oxyura australis (Blue-billed Duck), #AUS: -, SA: R	25			9	3	37
Plegadis falcinellus (Glossy Ibis), #AUS: -, SA: R	57	5		8	19	89
Pluvialis fulva (Pacific Golden Plover), #AUS: -, SA: R	2					2
Podiceps cristatus (Great Crested Grebe), #AUS: -, SA: R	17		1	5		23
Porzana tabuensis (Spotless Crane), #AUS: -, SA: R	2		1	4	8	15
Rostratula australis (Australian Painted-snipe), #AUS: EN, SA: V					1	1
Stictonetta naevosa (Freckled Duck), #AUS: -, SA: V	38		7	44	6	95
Thinornis rubricollis (Hooded Plover (Hooded Dotterel)), #AUS: VU, SA: V				1		1
Tringa glareola (Wood Sandpiper), #AUS: -, SA: R	2		2		2	6
3. Reptiles	90				2	92
Emydura macquarii (Macquarie Tortoise), #AUS: -, SA: V	90				2	92

Conservation status. **AUS:** EW - Extinct in the Wild; EX - Extinct; CE - Critically Endangered; EN - Endangered; VU - Vulnerable; CD - Conservation Dependent. **SA:** E - Endangered; V - Vulnerable; R - Rare.

6 Biophysical risk

Vegetation-landscape ecotype information, species associations with ecotypes, and species-level conservation priorities should be used to minimise the biodiversity risks of management and development activities within the region (e.g. roads, seismic lines, well sites, pipelines). At higher levels of conservation risk, these activities may have an impact on ecosystem functions that influence biophysical values (e.g. vegetation structure, soil structure, landscape resilience). These ecosystem functions often influence the presence or absence of flora and fauna species, and can influence conservation values of the region.

The energy industry already recognises conservation priorities of many flora species (and their ecosystem function) within the region (SANTOS, Wiltshire & Schmidt 2003; DSD 2016). In field guides, they list common plants and provide indicators of longevity, growth rate, regeneration rate and abundance, to assign 4 levels of conservation priority. The following sections of this report provides additional (and spatial) information on potential plant biomass, primary productivity, regeneration and resilience of vegetation and/or landscapes in the region. These indices can be used to spatially explore a range of biophysical risks which may be evaluated to reduce the potential impact of new development activities in the region. When proposing linear development activities (e.g. roads, pipelines) planners can use geographic information systems to route pathways of least risk over great distances using the mapping products provided by this report.

6.1 Loss of plant biomass

The Biomass index (based on the typical vegetation height, structure and cover of each ecotype) provides a composite indicator (Figure 6.1) of vegetation biomass, carbon stocks, structural diversity and age. It can be used to indicate the potential loss of habitat values (i.e. structure, resource diversity, primary production) and the time taken for a site to recover to a mature state after disturbance (e.g. fire, clearance). Ecotype C220202 (ID 10) "Coolibah over Lignum, Bindyi clay loam plains or floodplains", on average, contains the greatest biomass, is taller and structurally diverse, and has a high level of primary productivity as a result of flooding and nutrient rich soils. Shrublands on sand dunes have mid-range values due to reasonable vegetation cover and vegetation structure. Lower values occur on lower grasslands (e.g. Mitchell grasslands), low chenopod shrublands (e.g. Bindyi shrubs), and ephemeral pastures or naturally bare saline area (e.g. forbs, salt lakes).

The Biomass loss risk index mapped in this report (Figure 6.1) are based on average ecotype values and should only be used as a guide to planning. Individual sites should be assessed independently of their mapped values (i.e. using aerial photography, site assessments) to determine the local natural variability of vegetation patches and optimum locations for developments or activities.

6.2 Plant recruitment and regeneration

Increases in the frequency or volume of soil moisture increases the likelihood of plant recruitment and vegetation regeneration following clearance from mechanical activities (e.g. temporary tracks for mineral exploration) or natural disturbance events (e.g. bushfire, drought). Soils are typically wetter within areas which receive additional moisture from local drainage patterns or regional flooding events (e.g. creek lines, floodplains), or local run-on areas adjacent to hills and slopes.

Areas which do not receive additional moisture from local runoff or flooding typically take longer to naturally recover after disturbance (Figure 6.2). If soil structure and seedbanks are intact, recruitment events on drier landscapes are driven by the return frequency of larger rainfall events (i.e. approximately 1 in 30 years in this region; Nicholls *et al.* 1996). In wetter areas, the opportunity for recruitment increases closer to 1 in 10 years. When soils have been eroded, or soil seedbanks have been removed, then disturbed sites take longer to recover or may never recover to an original state.

Increases in soil moisture typically increases primary production and recovery rates of vegetation following disturbance. These wetter areas tend to be more resilient and have higher flora and fauna conservation values. Dry hills, clay slopes and dune crests have the greatest plant recruitment and regeneration risks within the Cooper-Eromanga Basin region (Figure 6.2). Risks are increased for very long lived species (e.g. Mulga, Pickard's Wattle) which grow in drier landscapes.

6.3 Soil erosion

Several landscapes of the Cooper-Eromanga Basin region have soil types and topography which make them susceptible to wind or water erosion (Figure 6.3). The exposed taller dunes of the Strzelecki Desert, with very sandy soils, are most susceptible to wind erosion, especially after long periods of drought when vegetation cover is naturally low. Hills and steep slopes with clay soils are most susceptible to water erosion (e.g. gibber-covered hills of the Sturt Stony Desert/Murnpeowie regions), especially during high intensity summer storms within the region.

Natural events (e.g. fire, drought, thunder storms) and management activities (e.g. vegetation clearance, grazing, road building) increase the likelihood of soil erosion events. Vegetation cover provides the greatest and most cost-effective measure to reduce soil erosion risk. Management activities should strongly prioritise soil erosion risks, as soils are the most difficult and costly physical asset to re-establish, and have multiple flow-on effects to native flora and fauna communities.

6.4 Average risk

The composite biophysical risk presented in this report (i.e. unweighted average risk of biomass loss, plant recruitment and soil erosion) provides a generalised measure of risk across the Cooper-Eromanga Basin region (Figure 6.4). This metric is intended to guide planning and evaluation processes, but does not remove the need for site inspections and environmental assessment. It should be used in conjunction with vegetation-landscape ecotype information, and conservation-listed species likelihood of occurrence data, to evaluate total environmental and ecological risk of management activities within the region.

Flora and Fauna Cooper-Eromanga

Biomass loss risk



Study area (central)

Pastoral stations

Roads



**Government of
South Australia**

0 5 10 20 30 40
Kms

Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

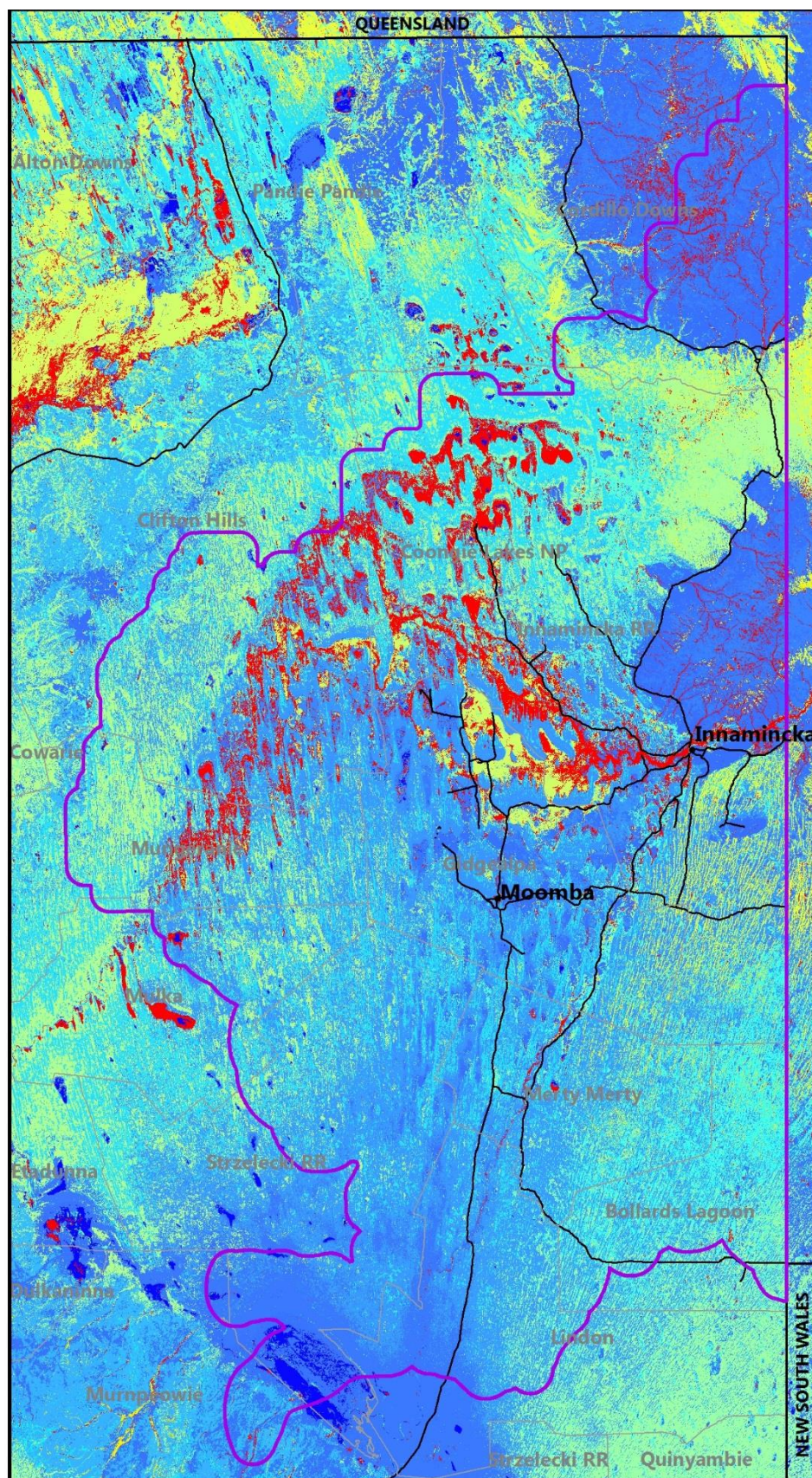


Figure 6.1. Potential risk of biomass loss (red=high risk, blue=low risk) in the Cooper-Eromanga Basin region of South Australia

Flora and Fauna Cooper-Eromanga

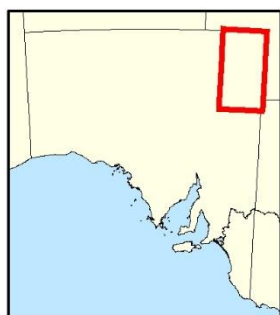
Plant recruitment risk



Study area (central)

Pastoral stations

Roads



Government of
South Australia

0 5 10 20 30 40
Kms

Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

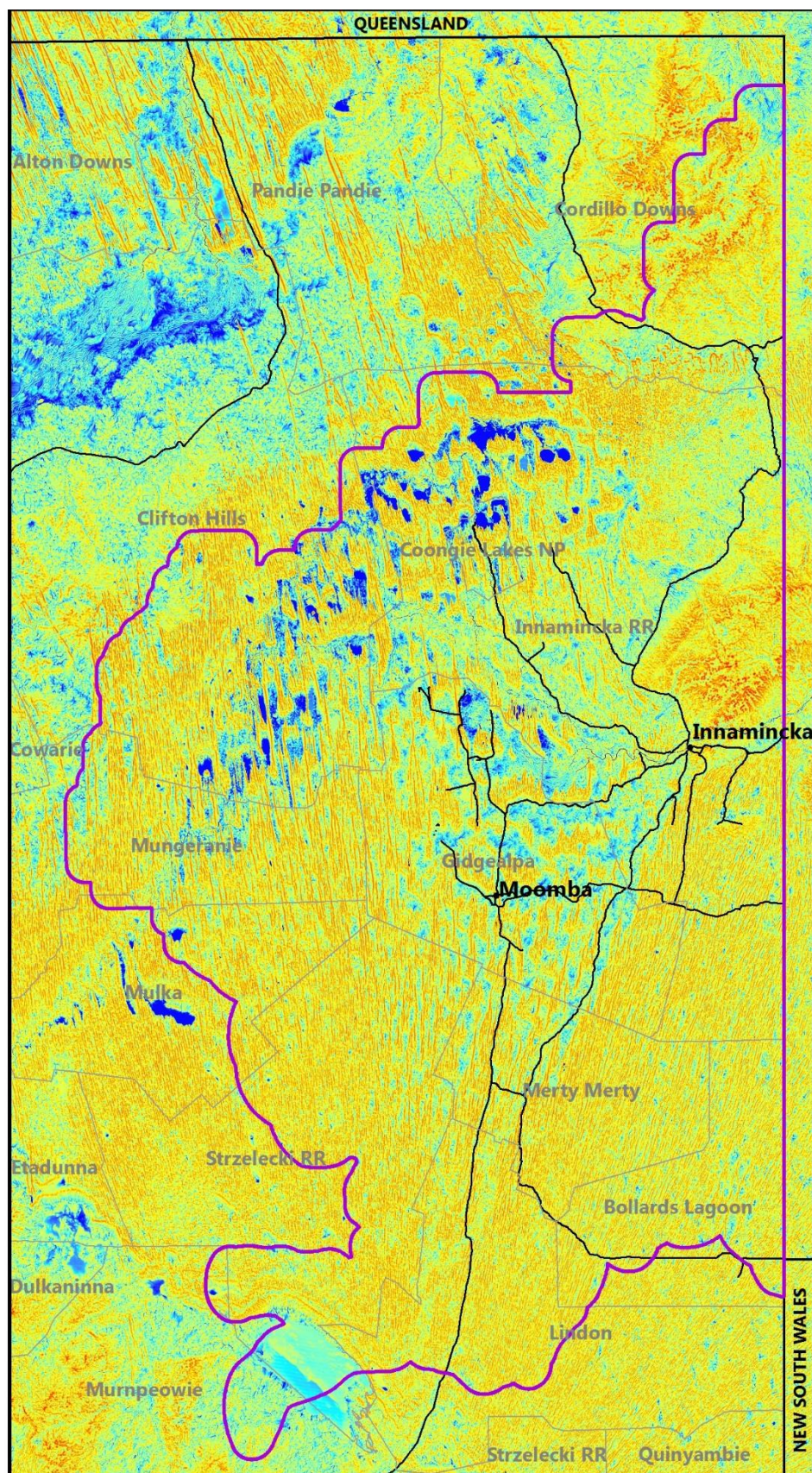


Figure 6.2. Potential risk of decreased plant recruitment (red=high risk, blue=low risk) due to water-limiting factors in the Cooper-Eromanga Basin region of South Australia

Flora and Fauna Cooper-Eromanga

Soil erosion risk



Study area (central)

Pastoral stations

Roads



Government of
South Australia

0 5 10 20 30 40
Kms

Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

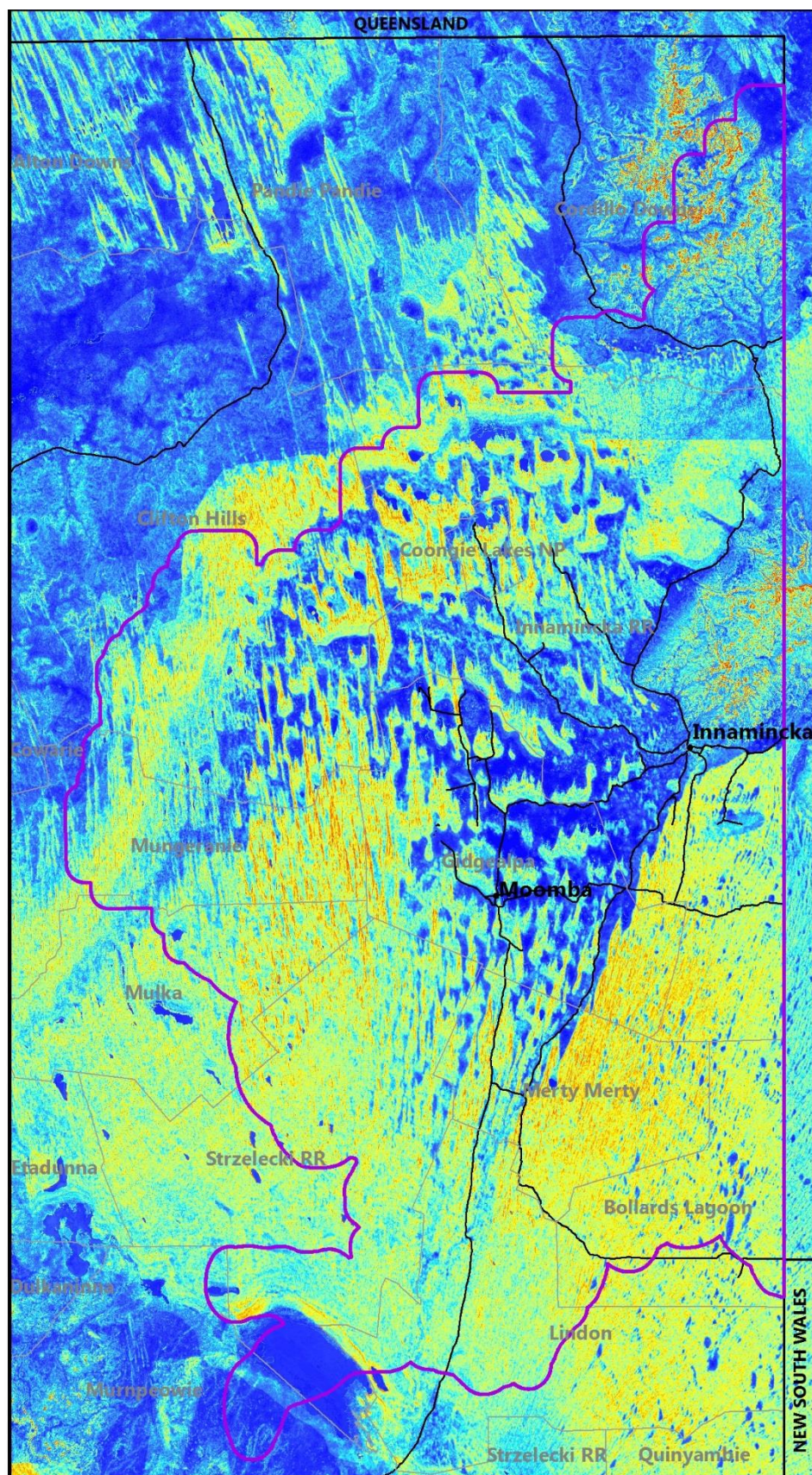


Figure 6.3. Potential risk of soil erosion (maximum of wind or water; red=high risk, blue=low risk) in the Cooper-Eromanga Basin region of South Australia

Flora and Fauna Cooper-Eromanga

Biophysical risk



Study area (central)

Pastoral stations

Roads



Government of
South Australia

0 5 10 20 30 40
Kms

Produced by: Science and Information Group
Department of Environment, Water
and Natural Resources

Map Projection: MGA Zone 54, Transverse Mercator
Map Datum: Geocentric Datum of Australia 1994
Date: June 2017

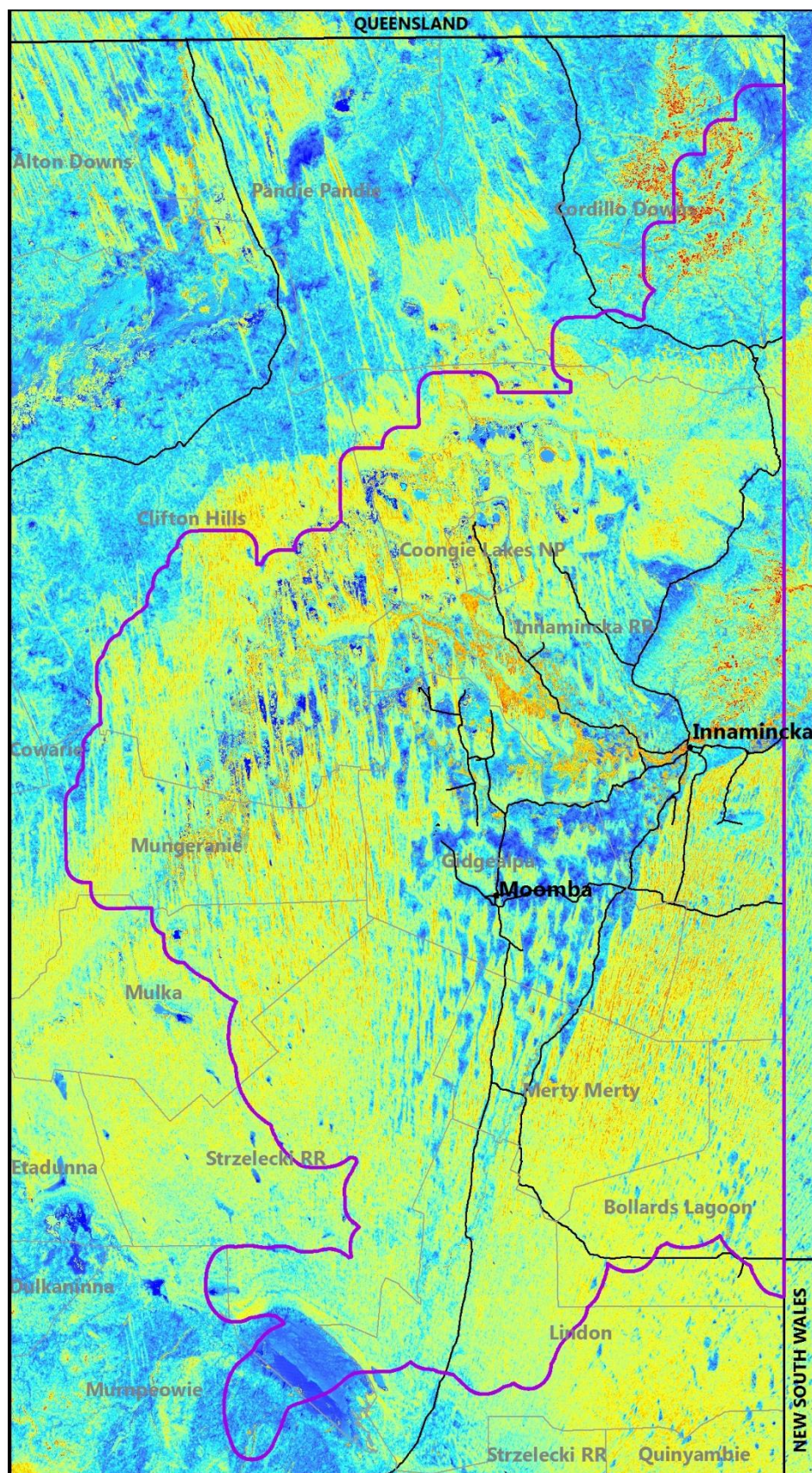


Figure 6.4. Average biophysical risk from potential biomass loss, plant recruitment and soil erosion factors (red=high risk, blue=low risk) in the Cooper-Eromanga Basin region of South Australia

7 Conclusion

In past decades, regional conservation planning and environmental assessments by natural resource managers and energy industries were constrained by the lack of consistent and spatial information on the biodiversity assets of the region. Prior to this work, vegetation mapping and ecosystem information were unavailable for large portions of the region (54 000 km² or 45% of the area), especially within Strzelecki Desert and Cooper Creek channel country. Previously, the only consistent source of information for the region were land system mapping and vegetation descriptions created in the 1970s (i.e. Laut *et al.* 1977), which have become out-dated, and lack the spatial resolution and taxonomic precision required for modern-day environmental assessments.

During 2016–17, this study collated a huge amount of biological and environmental information from government and industry sources across the Cooper-Eromanga Basin region of South Australia, and adjacent parts of Queensland and New South Wales. Biological records from biological surveys, pastoral assessments, energy industry environmental assessments, herbarium and museum collections, and supplementary data contained within state and national databases, provide more than 70 000 flora observations, almost 114 000 fauna observations, and over 5000 conservation-listed species observations, from the last 50 years of records. Spatial information on climate, landscapes, soils, vegetation cover, water cover and land cover change have provided 26 environmental variables, which have been used to identify landscapes types under-represented by past surveys.

The distribution of historical vegetation surveys and assessments were analysed to identify gaps in existing information, and to target new vegetation surveys for priority landscapes. Data has been compiled from 1390 vegetation survey sites, including 123 new vegetation surveys conducted in 2017. Spatial environmental information were used to identify relationships between vegetation and landscapes, classify ecosystem types, produce distribution models of flora and fauna communities, provide maps of the native flora and fauna communities of the region, and identify areas with the highest biophysical and ecological risk of disturbance (including conservation-listed species under federal and state legislation).

Summary information generated by the study (e.g. species lists, statistics, maps) for flora and fauna species, bioregions and ecosystem types provide a contemporary benchmark for environmental assessments and ecological knowledge. The new information and spatial tools created by this study significantly improves our understanding of regional biodiversity for conservation planning and natural resource management decisions, and facilitates more efficient and scientifically robust environmental assessments of petroleum/geothermal or pastoral development activities, and vegetation clearance/offset proposals in the region. Future environmental assessment, monitoring and reporting activities under legislative, regulatory and policy requirements can now be based on more reliable and consistent information on the flora and fauna communities of the Cooper-Eromanga Basin of South Australia.

8 Appendices

A. Flora species records

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn	Strze	Sturt	Grand
	Coon gie	Lake Pure	peo wie	lecki Desert	Stony Desert	
All flora	12768	6358	14132	22371	14720	70349
1_Trees	911	433	457	960	569	3330
Acacia adsurgens (Whipstick Wattle)		13				13
Acacia aneura var. (Mulga)	3	18	28	172	9	230
Acacia aneura var. aneura (Mulga)	1	10	5	22		38
Acacia aneura var. tenuis (Mulga)			2	1	2	5
Acacia ayersiana (Blue Mulga)			2	3		5
Acacia brachystachya (Turpentine Mulga)	4		3	10	1	18
Acacia calcicola (Northern Myall)	1					1
Acacia cambagei (Gidgee)	14	2	1	2	43	62
Acacia cyperophylla var. cyperophylla (Red Mulga)	11	8			60	79
Acacia georginae (Georgina Gidgee), #AUS: -, SA: R					1	1
Acacia papyrocarpa (Western Myall)			1			1
Acacia paraneura (Weeping Mulga)		1				1
Acacia salicina (Willow Wattle)	66	5	42	43	19	175
Acacia saligna (Golden Wreath Wattle)*			1			1
Acacia sericophylla (Wirewood)	1	17				18
Acacia stenophylla (River Cooba)	100	12	15	11	27	165
Alectryon oleifolius ssp. canescens (Bullock Bush)	1		12	73		86
Atalaya hemiglauca (Whitewood)	88	52	1	82	59	282
Bauhinia gilva (Bauhinia)	73	14	1	11	33	132
Callitris glaucophylla (White Cypress-pine)				29		29
Capparis mitchellii (Native Orange)	8	10	3	1	23	45
Casuarina pauper (Black Oak)			5	58		63
Codonocarpus cotinifolius (Desert Poplar)		2			1	3
Codonocarpus pyramidalis (Slender Bell-fruit), #AUS: VU, SA: E				1		1
Corymbia terminalis (Plains Bloodwood)	2	87		9	11	109
Eremophila bignoniiflora (Bignonia Emubush)	87	26	11	18	17	159
Eucalyptus camaldulensis ssp. (River Red Gum)	20		16	5	19	60
Eucalyptus camaldulensis ssp. arida (Northern River Red Gum)	5	1	1	1	6	14
Eucalyptus camaldulensis ssp. minima (River Red Gum)			2			2
Eucalyptus coolabah (Coolibah)	317	42	35	71	75	540
Eucalyptus intertexta (Gum-barked Coolibah)	2		2	2		6
Eucalyptus largiflorens (River Box)	7			36		43
Eucalyptus sp. (Gums)	1					1
Grevillea striata (Beefwood)	27	10		12	30	79
Hakea divaricata (Corkbark)					1	1
Hakea ednieana (Flinders Ranges Corkwood)	2	3	4	2		11
Hakea eyreana (Fork-leaf Corkwood)	12	61		21	15	109
Hakea lorea ssp. lorea (Long-leaf Corkwood)	1					1
Melaleuca glomerata (Inland Paper-bark)			31	8		39
Myoporum platycarpum ssp. (False Sandalwood)			8	1		9
Myoporum platycarpum ssp. platycarpum (False Sandalwood)			1			1
Owenia acidula (Sour Plum)	25	14		18	25	82
Pittosporum angustifolium (Native Apricot)	8	3	42	25	14	92
Pittosporum sp. (Pittosporum)		1	1			2
Santalum acuminatum (Quandong)			4		1	5
Santalum lanceolatum (Plumbush)	20	21	119	24	74	258
Santalum sp. (Sandalwood)			5			5
Santalum spicatum (Sandalwood), #AUS: -, SA: V					1	1
Tamarix aphylla (Athel Pine)*	4		53	188	2	247

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
2_Mallees			5	1		6
Eucalyptus gillii (Curly Mallee)			4	1		5
Eucalyptus socialis ssp. socialis (Beaked Red Mallee)			1			1
3_Shrubs	1262	771	1056	2278	1246	6613
Acacia aneura var. conifera (Christmas-tree Mulga)				3		3
Acacia aneura var. intermedia (Broad-leaf Mulga)					1	1
Acacia burkittii (Pin-bush Wattle)				2		2
Acacia carneorum (Needle Wattle), #AUS: VU, SA: V				20	1	21
Acacia confluens (Arkaroola Wattle), #AUS: -, SA: V			6			6
Acacia dictyophleba (Net-veined Wattle)	3	10		7	19	39
Acacia kempeana (Witchetty Bush)		1	1			2
Acacia ligulata (Umbrella Bush)	145	90	38	533	76	882
Acacia loderi (Nealie), #AUS: -, SA: R					1	1
Acacia murrayana (Colony Wattle)	64	29	6	92	22	213
Acacia oswaldii (Umbrella Wattle)	47	11	47	72	26	203
Acacia pickardii (Pickard's Wattle), #AUS: VU, SA: R				2	68	70
Acacia ramulosa var. (Horse Mulga)		1		9	1	11
Acacia ramulosa var. linophylla (Horse Mulga)				2		2
Acacia ramulosa var. ramulosa (Horse Mulga)		5	4	1	2	12
Acacia rivalis (Silver Wattle)			9			9
Acacia sibirica (Bastard Mulga)		3		2	1	6
Acacia tetragonophylla (Dead Finish)	32	12	53	87	47	231
Acacia victoriae ssp. (Elegant Wattle)	49	19	133	90	46	337
Acacia victoriae ssp. arida (Downy Elegant Wattle)	14		2	12	13	41
Acacia victoriae ssp. victoriae (Elegant Wattle)	23	9	42	5	9	88
Adriana tomentosa var. hookeri (Mallee Bitter-bush)		9				9
Agave americana (Century Plant)*				1		1
Amyema linophylla ssp. orientalis (Casuarina Mistletoe)				2		2
Amyema maidenii ssp. maidenii (Pale-leaf Mistletoe)	4	1	13	28	6	52
Amyema miraculosa ssp. boormanii (Fleshy Mistletoe)	1		14	3		18
Amyema preissii (Wire-leaf Mistletoe)	27		25	22	18	92
Amyema quandang var. quandang (Grey Mistletoe)			10	2	11	23
Amyema sp. (Mistletoe)	1		1			2
Atriplex nummularia ssp. (Old-man Saltbush)	98	1	28	46	24	197
Atriplex nummularia ssp. nummularia (Old-man Saltbush)	19	4	10	5	22	60
Chenopodium nitrariaceum (Nitrate Goosefoot)	54	2	3	22	3	84
Diplatia grandibractea (Coolibah Mistletoe)	27		7	7	5	46
Dodonaea petiolaris (Balloon Hop-bush)				1	9	10
Dodonaea sp. (Hop-bush)		2				2
Dodonaea viscosa ssp. (Sticky Hop-bush)	3	6	1	38	2	50
Dodonaea viscosa ssp. angustissima (Narrow-leaf Hop-bush)	16	58	12	225	17	328
Dodonaea viscosa ssp. spatulata (Sticky Hop-bush)		1	1	1		3
Duboisia hopwoodii (Pituri)				1		1
Duma florulenta (Lignum)	283	30	8	93	27	441
Eremophila alternifolia (Narrow-leaf Emubush)			2	1		3
Eremophila dalyana (Desert Fuschia)	3	1			27	31
Eremophila deserti (Turkey-bush)			2	1		3
Eremophila freelingii (Rock Emubush)		5	45	3	37	90
Eremophila latrobei ssp. (Crimson Emubush)	1	3		3	17	24
Eremophila latrobei ssp. glabra (Crimson Emubush)		10		2	14	26
Eremophila latrobei ssp. latrobei (Grey-leaf Crimson Emubush)	1	1			7	9
Eremophila longifolia (Weeping Emubush)	35	41	29	97	36	238
Eremophila macgillivrayi (Dog-bush)		8	1		37	46
Eremophila neglecta (Northern Emubush)					1	1
Eremophila oppositifolia ssp. oppositifolia (Opposite-leaved Emubush)			2	2		4
Eremophila polyclada (Twiggy Emubush), #AUS: -, SA: R	3			4	6	13
Eremophila scoparia (Broom Emubush)					1	1
Eremophila sp. (Emubush/Turkey-bush)	4	4	1	1	2	12
Eremophila sturtii (Turpentine Bush)	1		52	21		74

Life form class / Taxa, #conservation status, *introduced	IBRA subregion					Grand total
	Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	
Exocarpos aphyllus (Leafless Cherry)				1		1
Goodenia ovata (Hop Goodenia)					1	1
Gossypium sturtianum var. sturtianum (Sturt's Desert Rose)			6			6
Grevillea juncifolia ssp. juncifolia (Honeysuckle Grevillea)	1	24		6	1	32
Grevillea nematophylla ssp. nematophylla (Water Bush)				1	2	3
Grevillea sp. (Grevillea)					1	1
Grevillea stenobotrya (Rattle-pod Grevillea)	2	43		66	13	124
Gyrostemon ramulosus (Bushy Wheel-fruit)		6			1	7
Gyrostemon tepperi (Tepper's Wheel-fruit)					1	1
Hakea leucoptera ssp. leucoptera (Silver Needlewood)	52	22	19	183	28	304
Hakea sp. (Hakea/Needlewood)	1					1
Hakea tephrosperma (Hooked Needlewood), #AUS: -, SA: R				2		2
Leiocarpa sp. (Plover-daisy)	2		10	5	6	23
Loranthaceae sp. (Mistletoe Family)			4			4
Lycium australe (Australian Boxthorn)			1	1	1	3
Lycium ferocissimum (African Boxthorn)*			1	2		3
Lycium sp. (Boxthorn)				1		1
Lysiana exocarpi ssp. exocarpi (Harlequin Mistletoe)	42	12	54	33	27	168
Lysiana sp. (Mistletoe)	1		2		1	4
Lysiana subfalcata (Northern Mistletoe)	16	15		11	13	55
Melaleuca dissitiflora (Creek Tea-tree)			6			6
Melaleuca interioris (Broombush)				7	1	8
Melaleuca lanceolata (Dryland Tea-tree)			1	1		2
Melaleuca sp. (Tea-tree)			3			3
Melaleuca trichostachya (Narrow-leaf Honey-myrtle)	4				5	9
Melaleuca uncinata (Broombush)				11		11
Myoporum brevipes (Warty Boobialla)			13			13
Myoporum montanum (Native Myrtle)	2		44	33	2	81
Myoporum sp. (Boobialla)			3	2		5
Nerium oleander (Oleander)*			1	1		2
Nicotiana excelsior (Native Tobacco)				1		1
Nicotiana glauca (Tree Tobacco)*	3		6	12		21
Parkinsonia aculeata (Jerusalem Thorn)*				2		2
Psyrax latifolia (Broad-leaf Native Currant)				1	2	3
Rhagodia eremaea (Desert Saltbush)			1		1	2
Senna artemisioides ssp. (Desert Senna)	7	16	6	25	1	55
Senna artemisioides ssp. artemisioides x ssp. coriacea (Desert Senna)			1			1
Senna artemisioides ssp. artemisioides x ssp. filifolia (Desert Senna)				4		4
Senna artemisioides ssp. filifolia (Fine-leaf Desert Senna)	39	52	42	102	37	272
Senna artemisioides ssp. helmsii (Blunt-leaf Senna)	2	27	30	14	45	118
Senna artemisioides ssp. oligophylla (Limestone Senna)	4	39	26	22	39	130
Senna artemisioides ssp. petiolaris (Flat-stalk Senna)	10	15	73	48	41	187
Senna artemisioides ssp. quadrifolia (Four-leaf Desert Senna)	7	1	20	23	24	75
Senna artemisioides ssp. X artemisioides (Silver Senna)	4	17	22	9	10	62
Senna artemisioides ssp. X sturtii (Grey Senna)	5	13	18	15	21	72
Senna artemisioides ssp. zygomphylla (Twin-leaf Desert Senna)	3	8	12	42	14	79
Senna barclayana (Pepper-leaf Senna)*				1		1
Senna glutinosa ssp. pruinosa (White Senna)		1			8	9
Senna notabilis (Showy Senna)	1	6			2	9
Senna phyllodinea (Silver Cassia)	6	7	14	15	26	68
Senna sp. (Senna)	1	8	7	4	4	24
Vachellia farnesiana (Sweet Acacia)*	89	62	2		191	344
Vachellia nilotica ssp. indica (Indian Acacia)*					14	14

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
4_Low shrubs	4122	2065	5952	7863	5389	25391
Abutilon cryptopetalum ssp. (Hill Lantern-bush)	2	5	2			9
Abutilon cryptopetalum ssp. cryptopetalum (Hill Lantern-bush)		2				2
Abutilon fraseri ssp. (Dwarf Lantern-bush)	2	2	4	3	10	21
Abutilon fraseri ssp. diplotrichum (Dwarf Lantern-bush)		2	1			3
Abutilon fraseri ssp. fraseri (Dwarf Lantern-bush)	2			1	7	10
Abutilon halophilum (Plains Lantern-bush)	4	2	66	18	47	137
Abutilon leucopetalum (Desert Lantern-bush)	3	5	20	7	37	72
Abutilon malvaefolium (Scrambling Lantern-bush)	10	5	5	3	11	34
Abutilon otocarpum (Desert Lantern-bush)	42	40	11	137	29	259
Abutilon sp. (Lantern-bush)	13	6	8	38	5	70
Abutilon theophrasti (Swamp Lantern-bush)*	2					2
Acacia elachantha (Cowle's Wattle)		7			4	11
Acacia havilandiorum (Needle Wattle)			1			1
Acacia sp. (Wattle)	2	2	1	8	1	14
Acacia sp. Blyth Range (W.V.Fitzgerald s.n. 1898) (Blyth Range Wattle)			1			1
Acacia tenuissima (Slender Wattle), #AUS: -, SA: R	1	5				6
Aizoaceae sp. (Pigface Family)				3		3
Ammannia multiflora (Jerry-jerry)	12	1	2	4	4	23
Amyema miquelii (Box Mistletoe)	2	1	2			5
Androcalva loxophylla (Purar-purarpa)	1	19				20
Arabidella filifolia (Thread-leaf Cress)			2			2
Arabidella procumbens (Creeping Cress)	4		2	1	4	11
Arabidella trisecta (Shrubby Cress)		1	17	3	14	35
Asterolasia sp. (Star-bush)				1		1
Atriplex acutibractea ssp. (Pointed Saltbush)		1		1	2	4
Atriplex angulata (Fan Saltbush)	72	14	87	63	88	324
Atriplex cordifolia (Cord-leaf Saltbush)			8	7	8	23
Atriplex crassipes var. crassipes (Duck-foot Saltbush)	44	7	2	5	5	63
Atriplex eardleyae (Eardley's Saltbush)	6		8	9		23
Atriplex eichleri (Eichler's Saltbush), #AUS: -, SA: R			4	5		9
Atriplex elachophylla (Annual Saltbush)	2		2			4
Atriplex fissivalvis (Gibber Saltbush)	1		7	3	25	36
Atriplex incrassata (Oodnadatta Saltbush)			8	1	4	13
Atriplex intermedia (Intermediate Saltbush)	35		1	4	1	41
Atriplex leptocarpa (Slender-fruit Saltbush)	82		10	7	2	101
Atriplex limbata (Spreading Saltbush)	35	9	14	126	27	211
Atriplex lindleyi ssp. (Baldoo)	15	1	39	13	53	121
Atriplex lindleyi ssp. conduplicata (Baldoo)	4	3	35	4	39	85
Atriplex lindleyi ssp. inflata (Corky Saltbush)	2		2	2	1	7
Atriplex lindleyi ssp. lindleyi (Baldoo)			14	6	7	27
Atriplex lindleyi ssp. quadripartita (Baldoo)			2		2	4
Atriplex macropterocarpa (Wing-fruited Saltbush)					1	1
Atriplex muelleri (Mueller's Saltbush)	18	4	2		7	31
Atriplex obconica (Flat-cone Saltbush)			1			1
Atriplex papillata (Coral Saltbush), #AUS: -, SA: E				1		1
Atriplex pseudocampanulata (Spreading Saltbush)	21		6	13	7	47
Atriplex pumilio (Mat Saltbush)	3				1	4
Atriplex quadrivalvata var. (Four-valve Saltbush)			2			2
Atriplex quinii (Kidney-fruit Saltbush)	2			2	9	13
Atriplex semibaccata (Berry Saltbush)			1			1
Atriplex sp. (Saltbush)	27	4	44	58	34	167
Atriplex spongiosa (Pop Saltbush)	112	27	44	44	108	335
Atriplex stipitata (Bitter Saltbush)			5	59	2	66
Atriplex suberecta (Lagoon Saltbush)	1		2			3
Atriplex turbinata (Turbinate Saltbush)			3	4	1	8
Atriplex velutinella (Sandhill Saltbush)	100	17	20	123	25	285
Atriplex vesicaria (Bladder Saltbush)	4	2	159	75	173	413
Beyeria opaca (Dark Turpentine Bush)				1		1

Life form class / Taxa, #conservation status, *introduced	IBRA subregion	Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
Bonamia deserticola (Creep Weed)			1				1
Bonamia media (Common Bonamia)			2		1	1	4
Brachyscome ciliaris var. (Variable Daisy)		5		8	27	7	47
Brachyscome ciliaris var. ciliaris (Variable Daisy)			1	2	15	1	19
Brachyscome ciliaris var. lanuginosa (Woolly Variable Daisy)		16	1	45	27	18	107
Brachyscome ciliaris var. lyrifolia (Lyrate-leaf Daisy)				2			2
Brachyscome tesquorum (Shrubby Desert Daisy)		1					1
Calotis erinacea (Tangled Burr-daisy)		9	18		25	3	55
Calotis latiuscula (Leafy Burr-daisy)		1	1	7	1		10
Carpobrotus sp. (Pigface)				1			1
Chenopodiaceae sp. (Goosefoot Family)		1	1	1	1	13	17
Chenopodium album (Fat Hen)*				1			1
Chenopodium auricomum (Golden Goosefoot)		142	36	12	69	63	322
Chenopodium curvispicatum (Cottony Goosefoot)			7		3		10
Chenopodium desertorum ssp. (Desert Goosefoot)					9		9
Chenopodium desertorum ssp. anidiophyllum (Mallee Goosefoot)			1	3	6		10
Chenopodium desertorum ssp. desertorum (Frosted Goosefoot)				4	4		8
Chenopodium gaudichaudianum (Scrambling Goosefoot)					1		1
Chenopodium murale (Nettle-leaf Goosefoot)*				7		1	8
Chenopodium sp. (Goosefoot)		4		4	4	10	22
Chrysocephalum eremaeum (Sand Button-bush)			31		1	4	36
Commicarpus australis (Pink Gum-fruit)		1		10	2	2	15
Corynotheca micrantha var. divaricata (Small-flower Sand Lily)			16				16
Corynotheca sp. (Sand Lily)			1				1
Crotalaria cunninghamii ssp. sturtii (Bird-flower Rattle-pod)		33	27		48	18	126
Crotalaria dissitiflora ssp. (Plains Rattle-pod)		1			1	2	4
Crotalaria dissitiflora ssp. dissitiflora (Plains Rattle-pod)		2	2			6	10
Crotalaria dissitiflora ssp. rugosa (Plains Rattle-pod)		1	1			1	3
Crotalaria eremaea ssp. (Loose-flowered Rattle-pod)		20	10	3	87	16	136
Crotalaria eremaea ssp. eremaea (Downy Loose-flowered Rattle-pod)		30	33	23	114	32	232
Crotalaria eremaea ssp. strehlowii (Smooth Loose-flowered Rattle-pod)		2	4	4		2	12
Crotalaria medicaginea var. neglecta (Trefoil Rattle-pod)			6				6
Crotalaria smithiana (Low Rattle-pod)		15	4		7	14	40
Crotalaria sp. (Rattle-pod/Bird-flower)		2			1		3
Cullen australasicum (Tall Scurf-pea)		22	15	70	17	52	176
Cullen cinereum (Annual Scurf-pea)		72	19	14	28	29	162
Cullen discolor (Prostrate Scurf-pea)		14		4	19	1	38
Cullen pallidum (White Scurf-pea)		34	22	2	34	11	103
Cullen patens (Spreading Scurf-pea)		5	2	15	31	10	63
Cullen sp. (Scurf-pea)		7	2	12	16	12	49
Cynanchum floribundum (Desert Cynanchum)		60	11	4	84	33	192
Cynanchum viminale ssp. australe (Caustic Bush)				3	3	8	14
Datura leichhardtii (Leichhardt's Thorn-apple)*		6		9	1	9	25
Dicrasyllis costelloi (Sand-sage)			2		1	3	6
Dicrasyllis lewellinii (Purple Sand-sage)			30			1	31
Dicrasyllis sp. (Sand-sage)			6				6
Dipteracanthus australasicus ssp. (Desert Petunia)					2	5	7
Dipteracanthus australasicus ssp. australasicus (Desert Petunia)					1	4	5
Dipteracanthus australasicus ssp. glabratus (Smooth Petunia)						11	11
Dissocarpus biflorus var. (Two-horn Saltbush)		13		38	21	28	100
Dissocarpus biflorus var. biflorus (Two-horn Saltbush)		11	2	23	9	21	66
Dissocarpus biflorus var. villosus (Woolly Two-horn Saltbush)		1					1
Dissocarpus fontinalis (Spring Ball Bindyi)				10			10
Dissocarpus latifolius (Side-leaf Ball Bindyi)		10			14	3	27
Dissocarpus paradoxus (Ball Bindyi)		12	11	99	97	15	234
Dissocarpus sp. (Ball Bindyi)		1	1			1	3
Dodonaea lobulata (Lobed-leaf Hop-bush)				4			4
Dodonaea microzyga var. microzyga (Brilliant Hop-bush)				26	1	4	31
Duma coccoloboides (Sandhill Lignum)		3	1	8	21		33

Life form class / Taxa, #conservation status, *introduced	IBRA subregion					Grand total
	Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	
Einadia nutans ssp. (Climbing Saltbush)	29	26	24	19	42	140
Einadia nutans ssp. eremaea (Dryland Climbing Saltbush)	29	19	5	20	16	89
Einadia nutans ssp. nutans (Climbing Saltbush)	4		8	10	5	27
Einadia nutans ssp. oxycarpa (Pointed-fruit Climbing Saltbush)					1	1
Enchylaena sp. (Ruby Saltbush)			1	3		4
Enchylaena tomentosa var. (Ruby Saltbush)	87	37	91	256	104	575
Enchylaena tomentosa var. glabra (Smooth Ruby Saltbush)	38		1	4	8	51
Enchylaena tomentosa var. tomentosa (Ruby Saltbush)	50	25	32	67	22	196
Eremophila bowmanii ssp. latifolia (Velvet Emubush)		1		1	1	3
Eremophila duttonii (Harlequin Emubush)		4	97	4		105
Eremophila fallax (Deceitful Emubush)			1			1
Eremophila gilesii ssp. gilesii (Hairy-fruit Emubush)		2	2	1		5
Eremophila glabra ssp. (Tar Bush)	1	1	2	8	1	13
Eremophila glabra ssp. glabra (Tar Bush)			7	4	1	12
Eremophila macdonnellii (Macdonnell's Emubush)	12	14	1	8	6	41
Eremophila maculata ssp. (Spotted Emubush)	7	10	1	9	5	32
Eremophila maculata ssp. maculata (Spotted Emubush)	7	7	7	5	9	35
Eremophila obovata ssp. obovata (Obovate-leaved Emubush)	2	22		1		25
Eremophila rotundifolia (Round-leaf Emubush)	1	7			1	9
Eremophila serrulata (Green Emubush)				1		1
Eriocaulon carsonii ssp. carsonii (Salt Pipewort), #AUS: EN, SA: E			53			53
Eriochiton sclerolaenoides (Woolly-fruit Bluebush)			47	31	14	92
Ethuliopsis cunninghamii (Tall Nut-heads)	76	5	4	1	8	94
Euphorbia biconvexa (Twin Spurge)	2	1			10	13
Frankenia cupularis (Cupped Sea-heath), #AUS: -, SA: R	43	3	4	1	1	52
Frankenia foliosa (Leafy Sea-heath)	2		9	2	1	14
Frankenia pauciflora var. (Southern Sea-heath)		1	4		1	6
Frankenia pauciflora var. gunnii (Southern Sea-heath)				1		1
Frankenia plicata (Braided Sea-heath), #AUS: EN, SA: V			4		8	12
Frankenia serpyllifolia (Thyme Sea-heath)	23	6	67	30	174	300
Frankenia sp. (Sea-heath)	1	1	9	13	25	49
Frankenia subteres (Round Sea-heath), #AUS: -, SA: R			2			2
Goodenia vernicosa (Wavy Goodenia)			1			1
Gunniopsis kochii (Koch's Pigface)			2			2
Gunniopsis papillata (Twin-leaf Pigface)			3	4	2	9
Gunniopsis quadrifida (Sturt's Pigface)	19	8	27	106	21	181
Gunniopsis sp. (Pigface)				1	1	2
Halgania cyanea (Rough Blue-flower)		25		1	2	28
Heliotropium asperum (Rough Heliotrope)		1	5	2		8
Heliotropium filaginoides (Woolly Heliotrope)			1		15	16
Hibiscus krichauffianus (Velvet-leaf Hibiscus)	7	34	10	78	12	141
Hibiscus sp. (Hibiscus)	1	1		2	8	12
Hibiscus sturtii var. (Sturt's Hibiscus)					1	1
Hibiscus sturtii var. sturtii (Sturt's Hibiscus)					2	2
Indigofera australis ssp. australis (Austral Indigo)			1			1
Indigofera helmsii (Helm's Indigo)		1				1
Indigofera leucotricha (Silver Indigo)		1	1		10	12
Indigofera linifolia (Flax-leaf Indigo)		19		1	7	27
Indigofera linnaei (Birdsville Indigo)	6	8	1	8	15	38
Indigofera psammophila (Sand Indigo)	8	16	3	29	11	67
Indigofera sp. (Indigo)	1	5		1	5	12
Isotropis wheeleri (Wheeler's Lamb-poison)	2	17	2	5		26
Josephinia eugeniae (Josephina Burr)	2	1		3	5	11
Keraudrenia nephrosperma (Northern Firebush)	5	23		3		31
Keraudrenia sp. (Firebush)		1				1
Keraudrenia sp. North West (J.Z.Weber 6475) (Common Firebush)		2				2
Kippistia suaedifolia (Fleshy Kippistia)	1			3		4
Lawrencia squamata (Thorny Lawrenceia)			3			3
Lechenaultia divaricata (Tangled Lechenaultia)	50	7	1	54	30	142

Life form class / Taxa, #conservation status, *introduced	IBRA subregion			Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure					
Lechenaultia sp. (Lechenaultia)	2				2		4
Leguminosae sp. (Legumes)		2			1		3
Leiocarpa leptolepis (Pale Plover-daisy)	10	8	35		13	49	115
Leiocarpa semicalva ssp. (Hill Button-bush)					1		1
Leiocarpa semicalva ssp. semicalva (Scented Button-bush)	1	1	3		2		7
Lepidium leptopetalum (Shrubby Peppergrass)					10		10
Lepidium stronglyllophyllum (Round-leaved Peppergrass)						9	9
Linum marginale (Native Flax)			1				1
Lysiana murrayi (Mulga Mistletoe)				1			1
Maireana aphylla (Cotton-bush)	22	26	194	109	140		491
Maireana appressa (Pale-fruit Bluebush)			24	32	17		73
Maireana astrotricha (Low Bluebush)	2	2	120	158	13		295
Maireana brevifolia (Short-leaf Bluebush)			1	1			2
Maireana campanulata (Bell-fruit Bluebush)					10		10
Maireana ciliata (Hairy Fissure-plant)	8		36	13	25		82
Maireana coronata (Crown Fissure-plant)	49	19	21	28	84		201
Maireana eriantha (Woolly Bluebush)			18	2	9		29
Maireana excavata (Bottle Fissure-plant), #AUS: -, SA: V					1		1
Maireana georgei (Satiny Bluebush)	4	7	59	24	70		164
Maireana integra (Entire-wing Bluebush)			13	5	22		40
Maireana lobiflora (Lobed Bluebush)			7	1			8
Maireana melanocarpa (Black-fruit Bluebush), #AUS: -, SA: R			1				1
Maireana microcarpa (Swamp Bluebush)	6	2	5	13	40		66
Maireana ovata (Ovate-leaved Bluebush)				1			1
Maireana pentagona (Slender Fissure-plant), #AUS: -, SA: R			15	5	12		32
Maireana pentatropis (Erect Mallee Bluebush)				3	2		5
Maireana pyramidata (Black Bluebush)	1	2	171	98	41		313
Maireana radiata (Radiata Bluebush)			2		2		4
Maireana schistocarpa (Split-fruit Bluebush)				4			4
Maireana scleroptera (Hard-wing Bluebush)				1	1		2
Maireana sedifolia (Bluebush)	1		7	5			13
Maireana sp. (Bluebush/Fissure-plant)		1	10	9	16		36
Maireana spongiocarpa (Spongy-fruit Bluebush)			4	1	21		26
Maireana tomentosa ssp. urceolata (Tomentose Bluebush)			7				7
Maireana trichoptera (Hairy-fruit Bluebush)			1				1
Maireana triptera (Three-wing Bluebush)		1		2			3
Maireana turbinata (Top-fruit Bluebush)			19	6	16		41
Maireana villosa (Silky Bluebush)	1	1		1	7		10
Malacocera albolanata (Woolly Soft-horns)	29		11	19	19		78
Malacocera biflora (Two-flower Soft-horns)	1		3	2	2		8
Malacocera gracilis (Slender Soft-horns), #AUS: -, SA: V				6			6
Malacocera sp. (Soft-horns)	4				11		15
Malacocera tricornis (Goat-head Soft-horns)	4		33	24	23		84
Malvaceae sp. (Mallows)		4	1	1			6
Melhanian oblongifolia (Velvet Hibiscus)		2	4	10	2		18
Minuria cunninghamii (Bush Minuria)	3		91	43	38		175
Muehlenbeckia sp. (Lignum)	5			1			6
Muelleranthus stipularis (Sand Pea)		4					4
Neobassia proceriflora (Desert Glasswort)	29	7	34	8	62		140
Neptunia dimorphantha (Sensitive Plant)	3	10			20		33
Newcastelia cephalantha (Large-head Grey-bush)	1	6					7
Nitraria billardieri (Nitrate-bush)	1	2	15	52	5		75
Olearia decurrens (Winged Daisy-bush)			1				1
Oncosiphon suffruticosum (Calomba Daisy)*	1						1
Osteocarpum acropterum var. (Bonefruit)	25	1	41	75	44		186
Osteocarpum acropterum var. acropterum (Tuberculate Bonefruit)	38	1	8	25	2		74
Osteocarpum acropterum var. deminutum (Wingless Bonefruit), #AUS: -, SA: R	1						1
Osteocarpum dipterocarpum (Two-wing Bonefruit)	10	7	42	18	20		97
Osteocarpum pentapterum (Five-wing Bonefruit), #AUS: -, SA: E				2	9		11

Life form class / Taxa, #conservation status, *introduced	IBRA subregion					Grand total
	Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	
Osteocarpum sp. (Bonefruit)	2		8	15	20	45
Peganum harmala (African Rue)*			3			3
Petalostylis cassioides (Cassia Butterfly Bush)		1				1
Petalostylis labicheoides (Butterfly Bush)			3			3
Phyllanthus fuernrohrii (Sand Spurge)	22	2	2	76	11	113
Phyllanthus sp. (Spurge)	3			5		8
Pimelea micrantha (Silky Riceflower)			1			1
Pimelea microcephala ssp. (Shrubby Riceflower)			22			22
Pimelea microcephala ssp. microcephala (Shrubby Riceflower)	1		15	1		17
Pimelea penicillaris (Sandhill Riceflower), #AUS: -, SA: R				1	1	2
Pluchea dentex (Bowl Daisy)			2	1	2	5
Pluchea dunlopia (Pink Plains-bush)	13	22		29	3	67
Pluchea rubelliflora (Reddish Plains-bush)	6	6	7	5	2	26
Polycarpaea breviflora (Small-leaved Copper Plant)	1			3	9	13
Pomax umbellata (Pomax)		3				3
Prostanthera striatiflora (Striated Mintbush)				2		2
Pterocaulon sphacelatum (Apple-bush)	28	35	47	67	33	210
Ptilotus incanus/obovatus (Silver Mulla Mulla)	1	2	43	5	19	70
Ptilotus latifolius (Tangled Mulla Mulla)	7	11		29	15	62
Ptilotus obovatus (Silver-tails)	10	4	32	42	42	130
Ptilotus sessilifolius (Crimson-tails)	15	38	3	22	4	82
Rhagodia parabolica (Mealy Saltbush)			11	2		13
Rhagodia sp. (Saltbush)		1	1	7		9
Rhagodia spinescens (Spiny Saltbush)	13	48	235	125	80	501
Rhagodia ulicina (Intricate Saltbush)			3			3
Ricinus communis (Castor Oil Plant)*			2			2
Rostellularia adscendens ssp. (Pink Tongues)			1		2	3
Rostellularia adscendens ssp. adscendens var. (Pink Tongue)	2	2			11	15
Rostellularia adscendens var. clementii (Pink Tongues)	2					2
Rostellularia adscendens var. pogonanthra (Pink Tongues)	2	1	6	1	14	24
Rostellularia sp. (Pink Tongues)					1	1
Salsola australis (Buckbush)	233	93	284	555	283	1448
Salvia verbenaca var. (Wild Sage)*				2		2
Samphire sp. (Samphire)	1		40	1		42
Sarcocornia blackiana (Thick-head Samphire)				1		1
Sarcocornia sp. (Samphire)	1					1
Scaevola aemula (Fairy Fanflower)	3		2	3	2	10
Scaevola collaris (Collared Fanflower)	14		15	35	1	65
Scaevola depauperata (Skeleton Fanflower)	3	33		13	8	57
Scaevola parvibarbata (Small-beard Fanflower)	37	42	21	118	46	264
Scaevola sp. (Fanflower)	5	4	1	9	1	20
Scaevola spinescens (Spiny Fanflower)	6	11	13	17	39	86
Sclerolaena anisacanthoides (Yellowburr Bindyi)	2					2
Sclerolaena articulata (Jointed Bindyi)	2		5	3	14	24
Sclerolaena bicornis var. bicornis (Goat-head Bindyi)	139	40	67	168	146	560
Sclerolaena birchii (Galvanised Burr)				1		1
Sclerolaena blackiana (Black's Bindyi), #AUS: -, SA: R				1	2	3
Sclerolaena brachyptera (Short-wing Bindyi)	16	3	216	102	131	468
Sclerolaena calcarata (Redburr Bindyi)	60	11	10	11	32	124
Sclerolaena constricta (Compressed Bindyi)	5		19	12	8	44
Sclerolaena convexula (Tall Bindyi)	5	33		11	7	56
Sclerolaena cornishiana (Cartwheel Bindyi)			1			1
Sclerolaena costata (Ribbed Bindyi)	6			3	3	12
Sclerolaena cuneata (Tangled Bindyi)	5	14	26	40	44	129
Sclerolaena decurrens (Green Bindyi)	27	2	20	76	21	146
Sclerolaena diacantha (Grey Bindyi)	105	39	78	417	77	716
Sclerolaena diacantha/uniflora (Grey Bindyi)				2		2
Sclerolaena divaricata (Tangled Bindyi)	43	13	174	116	78	424
Sclerolaena eriacantha (Silky Bindyi)	6	2	2	15	59	84

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
Sclerolaena fontinalis (Mound Spring Bindyi), #AUS: -, SA: R					5	5
Sclerolaena glabra (Smooth Bindyi)	11	15		7	55	88
Sclerolaena holtiana (Holt's Bindyi)	2		18	15	11	46
Sclerolaena intricata (Tangled Bindyi)	184	26	48	171	140	569
Sclerolaena johnsonii (Johnson's Bindyi)	1	8		9	3	21
Sclerolaena lanicuspis (Spinach Bindyi)	24	32	67	113	179	415
Sclerolaena limbata (Pearl Bindyi)		1	140	18		159
Sclerolaena longicuspis (Long-spine Bindyi)	2	1	36	14	1	54
Sclerolaena minuta (Small Bindyi)					2	2
Sclerolaena muricata var. (Five-spine Bindyi)	4	2		5	1	12
Sclerolaena muricata var. muricata (Five-spine Bindyi)	16	3	2	1	3	25
Sclerolaena obliquicuspis (Oblique-spined Bindyi)	1		80	48	1	130
Sclerolaena parallelicuspis (Western Bindyi)	10	7	41	8	79	145
Sclerolaena parviflora (Small-flower Bindyi)		3		1		4
Sclerolaena patenticuspis (Spear-fruit Bindyi)	5	7	57	25	4	98
Sclerolaena sp. (Bindyi)	47	7	24	101	33	212
Sclerolaena stelligera (Star Bindyi)				1		1
Sclerolaena tatei (Tate's Bindyi)	1		9	2	6	18
Sclerolaena tricuspis (Three-spine Bindyi)	5	3	27	9	11	55
Sclerolaena uniflora (Small-spine Bindyi)	10	11	6	50		77
Sclerolaena ventricosa (Salt Bindyi)	8		212	77	28	325
Senecio cunninghamii var. (Bushy Groundsel)	9		17	28		54
Senecio laceratus (Cut-leaf Groundsel)	1					1
Senecio lanibracteatus (Inland Shrubby Groundsel)	70	5	35	29	2	141
Senecio quadridentatus (Cotton Groundsel)				3		3
Senna artemisioides ssp. alicia (Desert Senna)	1	3	7	3	4	18
Senna artemisioides ssp. filifolia x ssp. petiolaris (Fine-leaf Desert Senna)			2			2
Senna artemisioides ssp. petiolaris x ssp. sturtii (Flat-stalk Senna x Grey Senna)			3	1		4
Senna artemisioides ssp. X coriacea (Broad-leaf Desert Senna)	6	2	34	7	9	58
Senna occidentalis (Western Senna)					1	1
Senna pleurocarpa var. pleurocarpa (Stripe-pod Senna)	5	38		58	7	108
Sida ammophila (Sand Sida)	64	39	36	313	41	493
Sida argillacea (Clay Sida)	6	1		2	1	10
Sida corrugata var. (Corrugated Sida)	1	1	22	19	17	60
Sida corrugata var. corrugata (Corrugated Sida)			1	2		3
Sida cunninghamii (Ridge Sida)	21	13	8	95	8	145
Sida fibulifera (Pin Sida)	32	66	134	187	120	539
Sida filiformis (Fine Sida)	2	1	2		2	7
Sida goniocarpa (Angled Sida)	4	1	8	5	11	29
Sida intricata (Twiggy Sida)	2	6	86	94	21	209
Sida petrophila (Rock Sida)			28	5	4	37
Sida phaeotricha (Hill Sida)				1	1	2
Sida platycalyx (Lifesaver Burr)	2					2
Sida rohlenae ssp. rohlenae (Shrub Sida)	3	22			10	35
Sida sp. (Sida)	13	18	44	35	25	135
Sida sp. Mitrata (R.E.Winkworth 798) (Mitrata Sida)		1				1
Sida spodochroma (Grey Sida)					1	1
Sida trichopoda (High Sida)	10	1	63	13	88	175
Solanum centrale (Desert Raisin)			1			1
Solanum chenopodium (Goosefoot Potato-bush)		2	13	2	6	23
Solanum cleistogamum (Shy Nightshade)			1			1
Solanum coactiliferum (Tomato-bush)	1			4		5
Solanum ellipticum (Velvet Potato-bush)	5	46	70	48	43	212
Solanum ellipticum/quadriloculatum (Nightshade/Potato-bush)			20			20
Solanum eremophilum (Rare Nightshade), #AUS: -, SA: R			1			1
Solanum esuriale (Quena)	44	19	12	69	29	173
Solanum ferocissimum (Spiny Potato-bush)				2	1	3
Solanum laciniatum (Cut-leaf Kangaroo-apple)				1		1
Solanum oligacanthum (Desert Nightshade)	102		27	61	18	208

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
<i>Solanum petrophilum</i> (Rock Nightshade)			3		1	4
<i>Solanum quadriloculatum</i> (Plains Nightshade)	1		22			23
<i>Solanum</i> sp. (Potato-bush)	1	7	12	9		29
<i>Solanum sturtianum</i> (Sturt's Nightshade)			15	2		17
<i>Spartothamnella teucriflora</i> (Bead Bush)			1			1
<i>Stackhousia clementii</i> (Limestone Candles)				2		2
<i>Stemodia florulenta</i> (Bluerod)	122	13	14	51	30	230
<i>Stemodia glabella</i> (Smooth Bluerod)	13	8		6	34	61
<i>Stemodia</i> sp. (Bluerod/Stemodia)	1			1	2	4
<i>Suaeda australis</i> (Austral Seablite)				16		16
<i>Suaeda</i> sp. (Seablite)			1	1		2
<i>Swainsona campylantha</i> (Gilgai Darling Pea)	13	20	9	10	48	100
<i>Swainsona flavicarinata</i> (Yellow-keel Swainson-pea)	2	11	15	4	8	40
<i>Swainsona laxa</i> (Yellow Swainson-pea)	15		2	6	10	33
<i>Swainsona oroboides</i> (Variable Swainson-pea)	6		1	4	17	28
<i>Synostemon ramosissimus</i> (Branched Spurge), #AUS: -, SA: V					4	4
<i>Synostemon rhytidospermus</i> (Rough-seed Spurge)	26	2	2	98	13	141
<i>Synostemon</i> sp. (Spurge)	1	1				2
<i>Tecticornia disarticulata</i> (Stony Samphire)			5		2	7
<i>Tecticornia fontinalis</i> (Mound Spring Samphire)			1			1
<i>Tecticornia halocnemoides</i> ssp. (Grey Samphire)			1	2	3	6
<i>Tecticornia halocnemoides</i> ssp. <i>halocnemoides</i> (Grey Samphire)	1		4			5
<i>Tecticornia halocnemoides</i> ssp. <i>longispicata</i> (Grey Samphire)	3		1	7		11
<i>Tecticornia halocnemoides</i> ssp. <i>tenuis</i> (Grey Samphire)	5					5
<i>Tecticornia indica</i> ssp. (Brown-head Samphire)	6			1	2	9
<i>Tecticornia indica</i> ssp. <i>bidens</i> (Brown-head Samphire)				2		2
<i>Tecticornia indica</i> ssp. <i>leiostachya</i> (Brown-head Samphire)	73	2	16	21	10	122
<i>Tecticornia medullosa</i> (Fleshy Samphire)			4	2	8	14
<i>Tecticornia nitida</i> (Shining Glasswort)				3		3
<i>Tecticornia pergranulata</i> ssp. (Black-seed Samphire)	2		3	5		10
<i>Tecticornia pergranulata</i> ssp. <i>divaricata</i> (Black-seed Samphire)	2		2	5	1	10
<i>Tecticornia pergranulata</i> ssp. <i>elongata</i> (Black-seed Samphire)			1			1
<i>Tecticornia pergranulata</i> ssp. <i>pergranulata</i> (Black-seed Samphire)			3	3		6
<i>Tecticornia pluriflora</i> (Flowery Samphire)	5		7	8		20
<i>Tecticornia</i> sp. (Samphire)	12	2	47	91	5	157
<i>Tecticornia tenuis</i> (Slender Samphire)	7		39	8	22	76
<i>Tecticornia triandra</i> (Desert Glasswort)			1			1
<i>Templetonia egena</i> (Broombush Templetonia)			2	1		3
<i>Tephrosia</i> sp. (Trefoil)				1	2	3
<i>Tephrosia sphaerospora</i> (Mulga Trefoil)	33	13	6	95	42	189
<i>Tephrosia supina</i> (Whispering Trefoil)		11			2	13
<i>Teucrium albicaule</i> (Scurfy Germander)	9	1	2		7	19
<i>Teucrium racemosum</i> (Grey Germander)	134	42	5	69	27	277
<i>Teucrium sessiliflorum</i> (Mallee Germander)	1					1
<i>Teucrium</i> sp. (Germander)	4				3	7
<i>Threlkeldia inchoata</i> (Tall Bonefruit)				2		2
<i>Threlkeldia</i> sp. (Bonefruit)			3	1		4
<i>Vittadinia blackii</i> (Narrow-leaf New Holland Daisy)				1		1
<i>Vittadinia cuneata</i> var. (Fuzzy New Holland Daisy)	1	2	10	7	1	21
<i>Vittadinia cuneata</i> var. <i>cuneata</i> (Fuzzy New Holland Daisy)				1		1
<i>Wilsonia backhousei</i> (Narrow-leaf Wilsonia)			9	3		12
<i>Zygophyllum aurantiacum</i> ssp. (Shrubby Twinleaf)	1		11	4	1	17
<i>Zygophyllum aurantiacum</i> ssp. <i>aurantiacum</i> (Shrubby Twinleaf)			5	4	10	19
<i>Zygophyllum aurantiacum</i> ssp. <i>cuneatum</i> (Wedge Shrubby Twinleaf)				1		1
<i>Zygophyllum aurantiacum</i> ssp. <i>simplicifolium</i> (Simple Shrubby Twinleaf)			2			2
<i>Zygophyllum aurantiacum</i> ssp. <i>verticillatum</i> (Shrubby Twinleaf)			4		2	6
<i>Zygophyllum aurantiacum/eremaeum</i> (Shrubby Twinleaf)					1	1
<i>Zygophyllum simile</i> (White Twinleaf)	9	2	11	12	4	38
<i>Zygophyllum</i> sp. (Twinleaf)	3	1	10	5	9	28

Life form class / Taxa, #conservation status, *introduced	IBRA subregion			Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure					
5. Grasses	1929	1186		2413	4091	2806	12425
Agrostis sp. (Blown-grass/Bent Grass)	1			1			2
Alopecurus geniculatus (Marsh Fox-tail)*	3	2			1	1	7
Amphipogon caricinus var. caricinus (Long Grey-beard Grass)		3					3
Amphipogon sp. (Grey-beard Grass)		1					1
Aristida anthoxanthoides (Yellow Three-awn)	18	4		11	19	37	89
Aristida arida (Dry Wire-grass), #AUS: -, SA: R				15			15
Aristida australis (Southern Wire-grass), #AUS: -, SA: R				1			1
Aristida contorta (Curly Wire-grass)	56	93		95	289	151	684
Aristida holathera var. holathera (Tall Kerosene Grass)	46	69		9	140	40	304
Aristida inaequiglumis (Feather-top Three-awn)		8					8
Aristida latifolia (Feather-top Wire-grass)	11	9		3	9	48	80
Aristida nitidula (Brush Three-awn)	1			41	1	6	49
Aristida personata (Purple Wire-grass)				2		3	5
Aristida sp. (Three-awn/Wire-grass)	10	1		18	14	3	46
Aristida strigosa (Rough Three-awn)						1	1
Astrebla lappacea (Curly Mitchell-grass)	6	7		33	15	13	74
Astrebla pectinata (Barley Mitchell-grass)	27	12		221	86	270	616
Astrebla sp. (Mitchell-grass)	2	1		9	5	4	21
Astrebla squarrosa (Bull Mitchell-grass)						1	1
Austrostipa nitida (Balcarra Spear-grass)				21	27		48
Austrostipa nodosa (Tall Spear-grass)				4			4
Austrostipa scabra ssp. (Rough Spear-grass)				2			2
Austrostipa scabra ssp. falcata (Slender Spear-grass)				2			2
Austrostipa scabra ssp. scabra (Rough Spear-grass)				1			1
Austrostipa sp. (Spear-grass)	3	1		39	20		63
Austrostipa trichophylla (Three-leaf Spear-grass)				1			1
Avena sativa (Cultivated Oat)*				1		1	2
Bothriochloa ewartiana (Desert Blue-grass)	1	1		5	1	6	14
Bothriochloa macra (Red-leg Grass), #AUS: -, SA: R					1		1
Brachyachne ciliaris (Hairy Native Couch)				3	5	19	27
Bromus arenarius (Sand Brome)	1				10		11
Bromus diandrus (Great Brome)*				1			1
Bromus rubens (Red Brome)*				2		1	3
Bromus sp. (Brome)				3			3
Carex sp. (Sedge)	1				1	1	3
Cenchrus ciliaris (Buffel Grass)*	377	178		91	96	208	950
Cenchrus ciliaris/pennisetiformis (Buffel Grass)*				3			3
Cenchrus pennisetiformis (Buffel Grass)*				13			13
Cenchrus setiger (Birdwood Buffel Grass)*					1	3	4
Chloris pectinata (Comb Windmill Grass)	9	1		10	15	20	55
Chloris sp. (Windmill Grass/Chloris)	2	2		1	5		10
Chloris truncata (Windmill Grass)	2			26	14		42
Chloris virgata (Feather-top Rhodes Grass)*		1		4	1		6
Chrysopogon fallax (Golden-beard Grass)	4	11			3	12	30
Cymbopogon ambiguus (Lemon-grass)		1		14	1		16
Cymbopogon oblectus (Silky-head Lemon-grass)	1	35			1	3	40
Cymbopogon sp. (Lemon Grass)		2					2
Cynodon dactylon var. dactylon (Couch)*	15			5	3	5	28
Cynodon sp. (Couch)*	6						6
Dactyloctenium radulans (Button-grass)	100	15		88	189	145	537
Dichanthium sericeum ssp. (Silky Blue-grass)	7	2		24	15	10	58
Dichanthium sericeum ssp. humilium (Annual Silky Blue-grass)	8	2		6	14	4	34
Dichanthium sericeum ssp. sericeum (Silky Blue-grass)		1		20	12	6	39
Digitaria ammophila (Spider Grass)		3		17	1	6	27
Digitaria brownii (Cotton Panic-grass)	5	11		6	13	23	58
Digitaria ctenantha (Comb Finger-grass)					2		2
Digitaria divaricatissima var. divaricatissima (Spider Grass)	1			18	9	11	39
Digitaria sanguinalis (Crab Grass)*					1		1

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
Digitaria sp. (Summer-grass)	1		1	1	1	4
Diplachne fusca ssp. fusca (Brown Beetle-grass)	14	2	7	5	34	62
Diplachne fusca ssp. muelleri (Brown Beetle-grass)	1		2	7	4	14
Echinochloa colona (Awnless Barnyard Grass)*	2					2
Echinochloa crus-galli (Common Barnyard Grass)*					1	1
Echinochloa inundata (Channel Millet)	19			1	1	21
Echinochloa sp. (Barnyard Grass/Millet)					1	1
Echinochloa turneriana (Channel Millet)	7	2			1	10
Eleocharis acuta (Common Spike-rush)	1					1
Eleocharis pallens (Pale Spike-rush)	29	7	9	12	22	79
Eleocharis plana (Flat Spike-rush), #AUS: -, SA: R	1		1		1	3
Eleocharis pusilla (Small Spike-rush)	1			1		2
Eleocharis sp. (Spike-rush)			1			1
Elytrophorus spicatus (Spike-grass)	3			1	6	10
Enneapogon avenaceus (Common Bottle-washers)	60	43	275	421	118	917
Enneapogon caeruleus (Blue Bottle-washers)			1			1
Enneapogon cylindricus (Jointed Bottle-washers)	3	17	107	60	24	211
Enneapogon intermedius (Tall Bottle-washers)			1	11		12
Enneapogon nigricans (Black-head Grass)			1	23	1	25
Enneapogon polyphyllus (Leafy Bottle-washers)	15	60	34	45	67	221
Enneapogon sp. (Bottle-washers/Nineawn)	13	1	18	55	11	98
Enteropogon acicularis (Umbrella Grass)	2	2	28	11	19	62
Enteropogon ramosus (Umbrella Grass)	2	19	23	5	25	74
Enteropogon sp. (Umbrella Grass)	1	1	5			7
Eragrostis australasica (Cane-grass)	25	10	16	50	32	133
Eragrostis barrelieri (Pitted Love-grass)*			6		3	9
Eragrostis basedowii (Neat Love-grass)	26	8	4	19	28	85
Eragrostis brownii (Bentham's Love-grass)				1		1
Eragrostis cilianensis (Stink Grass)*				1		1
Eragrostis confertiflora (Spike Love-grass)	4				5	9
Eragrostis dielsii var. dielsii (Mulka)	100	36	47	235	111	529
Eragrostis elongata (Clustered Love-grass)			1	4		5
Eragrostis eriopoda (Woollybutt)	8	44	49	55	7	163
Eragrostis falcata (Sickle Love-grass)	6	6	13	6		31
Eragrostis kennedyae (Small-flower Love-grass)		2		4		6
Eragrostis lacunaria (Purple Love-grass), #AUS: -, SA: R				6	1	7
Eragrostis laniflora (Hairy-flower Woollybutt)		9	3	18	1	31
Eragrostis leptocarpa (Drooping Love-grass)	27	2	17	28	40	114
Eragrostis parviflora (Weeping Love-grass)	29	1	2	8	12	52
Eragrostis setifolia (Bristly Love-grass)	118	85	149	309	175	836
Eragrostis sp. (Love-grass)	20	11	18	48	19	116
Eragrostis speciosa (Handsome Love-grass)	1	3			1	5
Eragrostis tenellula (Delicate Love-grass)	13	3	1	8	21	46
Eragrostis xerophila (Knotty-butt Neverfail)	10	23	40	51	50	174
Eriachne aristidea (Three-awn Wanderrie)	20	39	7	86	15	167
Eriachne helmsii (Woollybutt Wanderrie)				3	5	8
Eriachne mucronata (Mountain Wanderrie)	3		2		9	14
Eriachne ovata (Swamp Wanderrie)	1		1		28	30
Eriachne pulchella ssp. pulchella (Pretty Wanderrie Grass)		1			6	7
Eriachne sp. (Wanderrie Grass)	4	1		8		13
Eriochloa australiensis (Australian Cupgrass)	15		12	23	10	60
Eriochloa crebra (Tall Cupgrass)	2					2
Eriochloa pseudoacrotricha (Perennial Cupgrass)	14	1	7	5	4	31
Eulalia aurea (Silky Brown-top)	10	3	25	3	26	67
Gramineae sp. (Grass Family)	19	8	20	95	21	163
Hordeum glaucum (Blue Barley-grass)*			1	1		2
Iseilema eremaeum (Desert Flinders-grass)	1		3	6	31	41
Iseilema membranaceum (Small Flinders-grass)	18	1	37	18	48	122
Iseilema sp. (Flinders-grass)	2	1	4	1	8	16

Life form class / Taxa, #conservation status, *introduced	IBRA subregion					Grand total
	Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	
Iseilema vaginiflorum (Red Flinders-grass)	3		4	17	12	36
Isolepis australiensis (Southern Club-rush)	10	1	2	8	1	22
Isolepis marginata (Little Club-rush)*	1					1
Lachnagrostis filiformis (Common Blown-grass)	25			2	2	29
Lachnagrostis perennis (Perennial Blown-grass)	1			1		2
Lachnagrostis sp. (Blown-grass)	1					1
Lipocarpa microcephala (Button Rush)					2	2
Lolium rigidum (Wimmera Ryegrass)*			1			1
Monachather paradoxus (Bandicoot Grass)				3		3
Neurachne lanigera (Woolly Mulga-grass), #AUS: -, SA: R		2				2
Neurachne munroi (Window Mulga-grass)		9			3	12
Oxychloris scariosa (Wing Chloris)	1				3	4
Panicum decompositum var. decompositum (Native Millet)	26	19	63	134	35	277
Panicum effusum var. effusum (Hairy Panic)			1	11	2	14
Panicum laevinode (Pepper Grass)	9		1	15	3	28
Panicum schinzii (Sweet Panic)*				1	1	2
Panicum sp. (Panic/Millet)	4	1		9	4	18
Paractaenum novae-hollandiae ssp. reversum (Barbed-wire Grass)	7		14	63	5	89
Paractaenum refractum (Bristle-brush Grass)	10	16	1	40	14	81
Paraneurachne muelleri (Northern Mulga-grass)	1	14		2	1	18
Paspalum sp. (Millet)*					1	1
Phragmites australis (Common Reed)			43	8		51
Poa fordeana (Forde's Poa)	3					3
Rostraria cristata (Annual Cat's-tail)*				1		1
Rostraria pumila (Tiny Bristle-grass)*			1	8		9
Rytidosperma sp. (Wrinklewort)			1			1
Schinus molle (Pepper-tree)*	3		4		1	8
Schismus barbatus (Arabian Grass)*			30	55		85
Schismus sp. (Arabian Grass)*					1	1
Setaria basiclada (Short-spiked Paspalidium)			1		1	2
Setaria clementii (Clement's Paspalidium)					3	3
Setaria constricta (Knotty-butt Paspalidium)		1		4	4	9
Setaria dielsii (Diel's Pigeon-grass)	5		11			16
Setaria jubiflora (Warrego Summer-grass)	19	3	3	2	19	46
Setaria reflexa (Bent Paspalidium)				2		2
Setaria verticillata (Whorled Pigeon-grass)*		1			1	2
Sorghum bicolor (Grain Sorghum)*	1					1
Sorghum sp. (Sorghum)*	1					1
Sporobolus actinocladus (Ray Grass)	28	15	129	116	189	477
Sporobolus australasicus (Australian Fairy Grass)		1				1
Sporobolus caroli (Yakka Grass)	2	2			5	9
Sporobolus creber (Western Rat-tail Grass)					1	1
Sporobolus mitchellii (Rat-tail Couch)	162	1	3	19		185
Sporobolus sp. (Ray Grass/Couch)	1	3	9	4	2	19
Sporobolus virginicus (Salt Couch)	4		21	2	1	28
Themeda avenacea (Tall Oat-grass)			1		2	3
Themeda sp. (Ilintji)		1				1
Themeda triandra (Kangaroo Grass)	1	2	3	4	13	23
Thyridolepis mitchelliana (Window Mulga-grass)				1	1	2
Tragus australianus (Small Burr-grass)	24	5	15	75	30	149
Tragus sp. (Burr-grass)				1		1
Triodia basedowii (Hard Spinifex)	17	99		181	23	320
Triodia irritans (Spinifex)	1	2	1	3		7
Triodia scariosa (Spinifex)					1	1
Triodia sp. (Spinifex)				9		9
Tripogon loliiformis (Five-minute Grass)	33	17	84	119	205	458
Triraphis mollis (Purple Plume Grass)	55	17	58	202	28	360
Triticum aestivum (Wheat)*					1	1
Uranthoecium truncatum (Flat-stem Grass)	1		1	2	7	11

Life form class / Taxa, #conservation status, *introduced	IBRA subregion			Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure					
Urochloa gilesii var. gilesii (Hairy-edged Arm-grass)						2	2
Urochloa panicoides var. panicoides (Panicum Arm-grass)*					1		1
Urochloa piligera (Hairy Arm-grass)		3				5	8
Urochloa praetervisa (Large Arm-grass)	1		3	1	1	1	6
Urochloa sp. (Arm-grass)			1	1	1		3
Walwhalleya proluta (Rigid Panic)				2			2
Yakirra australiensis var. australiensis (Bunch Panic)	2	3		9	3		17
Zygochloa paradoxa (Sandhill Cane-grass)	71	19	14	154	50		308
6 Sedges	162	75	756	287	211		1491
Bolboschoenus caldwellii (Salt Club-rush)	2		17	15	9		43
Cyperaceae sp. (Sedge Family)				3	1		4
Cyperus alterniflorus (Umbrella Flat-sedge)			8				8
Cyperus bifax (Downs Flat-sedge), #AUS: -, SA: R	4		1		1		6
Cyperus bulbosus (Bulbous Flat-sedge)	7	1	13	10	12		43
Cyperus centralis (Inland Flat-sedge)			1				1
Cyperus concinnus (Trim Flat-sedge), #AUS: -, SA: R		5					5
Cyperus dactylotes (Flinger Flat-sedge), #AUS: -, SA: V	1	10			8		19
Cyperus difformis (Variable Flat-sedge)	13	2	3	3	8		29
Cyperus exaltatus (Splendid Flat-sedge)	16			1	8		25
Cyperus gilesii (Giles' Flat-sedge)	2	1	1	2	6		12
Cyperus gymnocaulos (Spiny Flat-sedge)	59		122	32	8		221
Cyperus iria (Rice Flat-sedge)	4	2	1	2	10		19
Cyperus laevigatus (Bore-drain Sedge)	1		483	35	10		529
Cyperus nervulosus (Annual Flat-sedge), #AUS: -, SA: R		1					1
Cyperus pygmaeus (Pygmy Flat-sedge)	7		2	2	3		14
Cyperus rigidellus (Dwarf Flat-sedge)	3	3	4	11	12		33
Cyperus rotundus (Nut-grass)*					4		4
Cyperus sp. (Flat-sedge)	3				5		8
Cyperus squarrosus (Bearded Flat-sedge)	4	8	5	4	7		28
Cyperus vaginatus (Stiff Flat-sedge)				1			1
Cyperus victoriensis (Yelka)	13	4	9	10	26		62
Fimbristylis dichotoma (Common Fringe-rush)	11	17	1	43	49		121
Fimbristylis ferruginea (Rusty Fringe-rush)			17		2		19
Fimbristylis sieberiana (Sieber's Fringe-rush)			1				1
Fimbristylis sp. (Fringe-rush)				2			2
Fimbristylis velata (Veiled Fringe-rush)	2			1			3
Juncus kraussii (Sea Rush)			28	40			68
Juncus sp. (Rush)				1			1
Leptochloa digitata (Umbrella Cane-grass)	1	16	2	4	4		27
Polypogon monspeliensis (Annual Beard-grass)*			10	28			38
Schoenoplectiella dissachantha (Inland Club-rush)		1	1		4		6
Schoenoplectus litoralis/validus (Club-rush)			1				1
Schoenoplectus sp. (Club-rush)	1			1			2
Schoenoplectus subulatus (Shore Club-rush)			1				1
Schoenoplectus validus (River Club-rush)			2				2
Triglochin hexagona (Six-point Arrowgrass)	1		1				2
Triglochin isingiana (Spurred Arrowgrass)	1	1					2
Triglochin sp. (Arrowgrass/Water-ribbons)	2			4	5		11
Triglochin sp. A Flora of Australia (G.J.Keighery 2477) (Spurred Arrowgrass)		3			3		6
Triglochin striata (Streaked Arrowgrass)			1	1			2
Typha domingensis (Narrow-leaf Bulrush)	3		18	30	6		57
Typha orientalis (Broad-leaf Bulrush)			2				2
Typha sp. (Bulrush)	1			1			2

Life form class / Taxa, #conservation status, *introduced	IBRA subregion					Grand total
	Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	
7_Forbs	4382	1828	3493	6891	4499	21093
Acetosa vesicaria (Rosy Dock)*	6		70	15	1	92
Actinobole uliginosum (Flannel Cudweed)			3	8		11
Aeschynomene indica (Budda Pea)	11	2	4	2	18	37
Ajuga australis (Australian Bugle)	11			5		16
Allium neapolitanum (Naples Onion)*					1	1
Alternanthera angustifolia (Narrow-leaf Joyweed)	5	3	3	10	19	40
Alternanthera denticulata (Lesser Joyweed)	10	14	7	13	22	66
Alternanthera nana (Hairy Joyweed)	1					1
Alternanthera nodiflora (Common Joyweed)	86	4	7	22	29	148
Alternanthera sp. (Joyweed)	2	1		2	2	7
Alyssum linifolium (Flax-leaf Alyssum)*		1		10		11
Amaranthus centralis (Central Amaranth)					1	1
Amaranthus cuspidifolius (Boggabri Weed)	1					1
Amaranthus graecizans ssp. sylvestris (Amaranth)*					1	1
Amaranthus grandiflorus (Large-flower Amaranth)	6		1	19	7	33
Amaranthus interruptus (Native Amaranth)					2	2
Amaranthus macrocarpus var. macrocarpus (Large-fruit Amaranth)	2			3		5
Amaranthus mitchellii (Boggabri Weed)	10	1	2	8	16	37
Amaranthus sp. (Amaranth)	1			5	3	9
Anacampseros australiana (Australian Anacampseros)				2		2
Anagallis arvensis (Pimpernel)*			1	4		5
Anemocarpa podolepidium (Rock Everlasting)	1		26	8	36	71
Angianthus brachypappus (Spreading Angianthus)				2		2
Angianthus sp. (Angianthus)	1					1
Angianthus tomentosus (Hairy Angianthus)	1				1	2
Arabidella eremigena (Priddiwalkatji)	22	19		9	11	61
Arabidella glaucescens (Bluish Cress)		1	4	3	16	24
Arabidella nasturtium (Yellow Cress)			16	2		18
Arabidella sp. (Native Cress)				2	1	3
Arctotheca calendula (Cape Weed)*			2			2
Argemone ochroleuca ssp. ochroleuca (Mexican Poppy)*		3	4	2	1	10
Arthropodium strictum (Common Vanilla-lily)			1			1
Asperula gemella (Twin-leaf Bedstraw)	8					8
Asphodelus fistulosus (Onion Weed)*	4		9	16	2	31
Atriplex holocarpa (Pop Saltbush)	53	13	85	187	97	435
Atriplex lobativalvis (Lobed-valve Saltbush)	3	7		4	5	19
Austrobryonia micrantha (Desert Cucumber)	27		2	13	7	49
Azolla rubra (Pacific Azolla)	6				1	7
Bergia ammannioides (Jerry Water-fire)	6	1		6	6	19
Bergia diacheiron (Clasping Water-fire)		7		3	2	12
Bergia occultipetala (Hidden Water-fire), #AUS: -, SA: V		10		5		15
Bergia pedicellaris (Long Stalk Water-fire)	1			2	3	6
Bergia trimera (Three-part Water-fire)	16	11	8	23	15	73
Blennodia canescens (Native Stock)	7	13	2	11	10	43
Blennodia pterosperma (Wild Stock)	20	5	4	34	11	74
Blennodia sp. (Wild Stock)	5	1		5	2	13
Blennospora drummondii (Dwarf Button-flower)				1	1	2
Boerhavia burbridgeana (Tar-vine)	1		2			3
Boerhavia coccinea (Tar-vine)	2	2	8	7	16	35
Boerhavia dominii (Tar-vine)	16	3	17	108	28	172
Boerhavia repleta (Tar-vine)		3				3
Boerhavia schomburgkiana (Schomburgk's Tar-vine)	24	11	5	33	31	104
Boerhavia sp. (Tar-vine)	6	4	2	17	14	43
Boraginaceae sp. (Borage Family)		1		1		2
Brachyloma ericoides ssp. (Brush Heath)			1			1
Brachyscome breviscapis (Short-stem Daisy), #AUS: -, SA: R				1		1
Brachyscome campylocarpa (Large White Daisy)	8		1	6	5	20
Brachyscome dentata (Lobe-seed Daisy)			11	2	1	14

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
Brachyscome dichromosomatica var. dichromosomatica (Large Hard-head Daisy)	1		1			2
Brachyscome eriogona (Gibber Daisy), #AUS: -, SA: R	2		2			4
Brachyscome lineariloba (Hard-head Daisy)	1		4	18	1	24
Brachyscome rara (Rare Daisy)	26					26
Brachyscome sp. (Native Daisy)			10	8	3	21
Brassica oleracea (Cabbage)*			1			1
Brassica sp. (Wild Turnip)*	2		1	1		4
Brassica tournefortii (Wild Turnip)*	26	2	20	185	6	239
Buglossoides arvensis (Sheepweed)*			1			1
Bulbine alata (Winged Bulbine-lily)	35	10	9	58	29	141
Bulbine bulbosa (Bulbine-lily)				4		4
Bulbine semibarbata (Small Leek-lily)	9	4	5	49	13	80
Bulbine sp. (Bulbine-lily)	4	1		10	7	22
Bulbostylis barbata (Bearded Watergrass)	1	7		4		12
Bulbostylis turbinata (Top-shape Watergrass), #AUS: -, SA: R			1			1
Caladenia sp. (Spider-orchid)				1		1
Calandrinia balonensis (Broad-leaf Parakeelya)		9		37	1	47
Calandrinia disperma (Two-seed Purslane)				2		2
Calandrinia eremaea (Dryland Purslane)	3	2	1	8	2	16
Calandrinia polyandra (Parakeelya)		1				1
Calandrinia ptychosperma (Creeping Parakeelya)	6	6		28	7	47
Calandrinia pumila (Tiny Purslane)	4	2		1		7
Calandrinia remota (Round-leaf Parakeelya)		15		7		22
Calandrinia sp. (Purslane/Parakeelya)		2		20	6	28
Calandrinia stagnensis (Waterhole Purslane), #AUS: -, SA: R	5	1			1	7
Callitriche sonderi (Matted Water Starwort), #AUS: -, SA: R	2	1		1		4
Calocephalus knappii (Knapp's Beauty-heads)		2				2
Calocephalus platycephalus (Western Beauty-heads)	37	24	15	93	15	184
Calocephalus sonderi (Pale Beauty-heads), #AUS: -, SA: R	1			2		3
Calocephalus sp. (Beauty-heads)	3	1	10	1	3	18
Calostemma luteum (Yellow Garland-lily)	5		3	3	3	14
Calostemma purpureum (Pink Garland-lily)			1	2		3
Calotis ancyrocarpa (Anchor Burr-daisy)	26			10	7	43
Calotis cymbacantha (Showy Burr-daisy)				32		32
Calotis hispidula (Hairy Burr-daisy)	63	35	45	119	68	330
Calotis multicaulis (Woolly-headed Burr-daisy)	3	1		2	10	16
Calotis plumulifera (Woolly-headed Burr-daisy)	26	22	14	44	44	150
Calotis porphyroglossa (Channel Burr-daisy)	54	23		19	14	110
Calotis scabiosifolia var. scabiosifolia (Rough Burr-daisy)				1		1
Calotis sp. (Burr-daisy)	4	4	3	5	5	21
Carinavalva glauca (Beautiful Cress)					3	3
Carrichtera annua (Ward's Weed)*	1		9	3	1	14
Carthamus lanatus (Saffron Thistle)*			1	3		4
Caryophyllaceae sp. (Pink Family)				2		2
Cassytha flindersii (Flinders Ranges Dodder-laurel)			3			3
Centaurea melitensis (Malta Thistle)*			11	1		12
Centaurea sp. (Centaury)*					1	1
Centaurium sp. (Centaury)*	3			3		6
Centaurium tenuiflorum (Branched Centaury)*	1		1			2
Centipeda crateriformis ssp. compacta (Desert Sneezeweed)				1		1
Centipeda crateriformis ssp. crateriformis (Common Sneezeweed)	8	2	3	12		25
Centipeda cunninghamii (Common Sneezeweed)	15	4	4	7	12	42
Centipeda minima ssp. minima (Spreading Sneezeweed)	11	2		3	3	19
Centipeda nidiformis (Spreading Sneezeweed)	1				1	2
Centipeda pleiocephala (Tall Sneezeweed)		2				2
Centipeda sp. (Sneezeweed)	1			5		6
Centipeda thespidioides (Desert Sneezeweed)	10	7	12	16	41	86
Centrolepis eremica (Dryland Centrolepis)	2	2		3		7
Cheilanthes austrotenuifolia (Annual Rock-fern)				1		1

Life form class / Taxa, #conservation status, *introduced	IBRA subregion					Grand total
	Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	
Cheilanthes lasiophylla (Woolly Cloak-fern)				2	5	7
Cheilanthes sieberi ssp. pseudovellea (Rock-fern)					2	2
Cheilanthes sieberi ssp. sieberi (Narrow Rock-fern)			1	2		3
Chrysocephalum apiculatum (Common Everlasting)	1	6	1	28	8	44
Chrysocephalum pterochaetum (Shrub Everlasting)	2	1	3	2	9	17
Chrysocephalum sp. (Everlasting)					2	2
Chthonocephalus pseudevax (Ground-heads)				1		1
Citrullus colocynthis (Colocynth)*	15	2	5	25	1	48
Citrullus lanatus (Bitter Melon)*	6	4	13	43	11	77
Citrullus sp. (Wild Melon)*		1	1	6		8
Cleome viscosa (Tickweed)	3	5	3		5	16
Compositae sp. (Daisy Family)	10	9	33	21	24	97
Convolvulaceae sp. (Bindweed Family)				7	1	8
Convolvulus angustissimus ssp. angustissimus (Australian Bindweed)	2	1			2	5
Convolvulus clementii (Desert Bindweed)	6	21	11	13	3	54
Convolvulus erubescens complex (Blushing Bindweed)	15	5	22	79	14	135
Convolvulus eyreanus (Silver Bindweed)	6		10	9	12	37
Convolvulus microsepalus (Small-flower Bindweed)			3	1		4
Convolvulus recurvatus ssp. nullarborensis (Nullarbor Bindweed)			3		3	6
Convolvulus remotus (Grassy Bindweed)	3	4	71	25	18	121
Convolvulus sp. (Bindweed)	3	3	3	19	4	32
Convolvulus tedmoorei (Pink Bindweed)	2	1			2	5
Conyza bonariensis (Flax-leaf Fleabane)*				2		2
Craspedia sp. (Billy-buttons)	1			2	2	5
Craspedia variabilis (Billy-buttons)				1	3	4
Crassula colorata var. (Dense Crassula)	2				7	9
Crassula colorata var. acuminata (Dense Crassula)				2	1	3
Crassula sieberiana (Sieber's Crassula), #AUS: -, SA: E				2		2
Crassula sieberiana complex (Australian Stonecrop)	1			14		15
Crassula sp. (Crassula/Stonecrop)	1					1
Crassula tetramera (Australian Stonecrop)	1		1	3		5
Cressa australis (Rosinweed)	65		6	9	5	85
Crinum flaccidum (Murray Lily)	18	6	6	10	7	47
Crinum sp. (Lily)					1	1
Cruciferae sp. (Cress Family)	2	3		2	8	15
Cucumis argenteus (Snake Vine)	10	8	8	30	21	77
Cucumis melo (Ulcardo Melon)	21	2	2	3	18	46
Cucumis myriocarpus (Paddy Melon)*	2		15	29		46
Cucumis sp. (Melon)*	5			2	1	8
Cucurbita pepo (Marrow)*					1	1
Cucurbitaceae sp. (Melon Family)				2	1	3
Cullen graveolens (Native Lucerne)	3		7	9	27	46
Cuphonotus andraeanus (Downy Mother-of-misery)				2		2
Cuscuta victoriana (Queen's Dodder)	1		3	4	1	9
Daucus glochidiatus (Native Carrot)	25	10	46	36	49	166
Daucus sp. (Carrot)				2		2
Dentella pulvinata (Dentella)	47	6	1	14	7	75
Dianella sp. (Flax-lily)	2					2
Dichromochlamys dentatifolia (Tooth-leaved Daisy)	3		6	1	11	21
Dimorphocoma minutula (Tiny Daisy)	1			1		2
Dipogon lignosus (Lavatory Creeper)*		1				1
Disphyma crassifolium ssp. clavellatum (Round-leaf Pigface)			3			3
Drosera finlaysoniana (Finlayson Sundew)		1			1	2
Dysphania cristata (Crested Crumbweed)	9	1	5	55	4	74
Dysphania glomulifera ssp. (Red Crumbweed)					4	4
Dysphania glomulifera ssp. eremaea (Red Crumbweed)			4			4
Dysphania glomulifera ssp. glomulifera (Red Crumbweed)		2				2
Dysphania kalpari (Kalpari)			1			1
Dysphania melanocarpa (Black Crumbweed)	1			5	4	10

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
Dysphania plantaginella (Plantain Crumbweed)			2	2	1	5
Dysphania platycarpa (Flat-fruit Crumbweed)	7		2	7	2	18
Dysphania pumilio (Small Crumbweed)	1	2			2	5
Dysphania rhadinostachya ssp. rhadinostachya (Green Crumbweed)		1			3	4
Dysphania simulans (Erect Crumbweed)			9	1		10
Dysphania truncata (Short Crumbweed)	1	2		5		8
Eclipta alatocarpa (Winged-fruit Twin-head)	1					1
Elacholoma prostrata (Small Monkey-flower), #AUS: -, SA: R	6		1	2	2	11
Elatine gratioloides (Waterwort), #AUS: -, SA: R	2					2
Emex australis (Three-corner Jack)*				6	1	7
Epaltes sp. (Nut-heads)	1					1
Eriochlamys behrii (Woolly Mantle)				1		1
Erodium aureum (Golden Heron's-bill)*	1	2	6	9	3	21
Erodium botrys (Long Heron's-bill)*			1			1
Erodium carolinianum (Clammy Heron's-bill)	9	2	6	15	2	34
Erodium cicutarium (Cut-leaf Heron's-bill)*	1		12	10		23
Erodium crinitum (Blue Heron's-bill)	11	7	18	29	30	95
Erodium cygnorum (Blue Heron's-bill)	4	7	36	119	17	183
Erodium malacoides (Oval Heron's-bill)*	1	2	14	14	5	36
Erodium sp. (Heron's-bill/Crowfoot)	1	3	13	10	2	29
Eryngium plantagineum (Long Eryngium)	8			1		9
Eryngium supinum (Little Devil)	9					9
Eryngium vesiculosum (Prostrate Blue Devil), #AUS: -, SA: R	1					1
Euchiton sphaericus (Annual Cudweed)	1			1		2
Euphorbia australis var. erythrantha (Southern Spurge)			2	1		3
Euphorbia dallachyana (Caustic Weed)	5					5
Euphorbia dendroides (Tree Spurge)*			1			1
Euphorbia drummondii s.str. (Caustic Weed)	53	23	63	249	48	436
Euphorbia ferdinandi var. appendiculata (Ferdinand's Spurge)	2		1		4	7
Euphorbia ferdinandi var. ferdinandi (Ferdinand's Spurge)	2	3		2		7
Euphorbia ferdinandi var. saxosiplaniticola (Ferdinand's Spurge)	1		2		6	9
Euphorbia flindersica (Flinder's Spurge)			1			1
Euphorbia inappendiculata var. queenslandica (Queensland Spurge)	2		2	10	3	17
Euphorbia multifaria (Manifold Spurge)				2		2
Euphorbia parvicaruncula (Rough-seeded Spurge)	2	1	17	13	45	78
Euphorbia porcata (Grooved Spurge)	7	3	1	17	14	42
Euphorbia sp. (Spurge)	4	5	5	9	5	28
Euphorbia sp. Damparanie Creek (F.J.Badman 6660) (Damparanie Creek Spurge)					2	2
Euphorbia stevenii (Bottletree Spurge)	13	4	34	17	37	105
Euphorbia tannensis ssp. eremophila (Desert Spurge)	44	50	47	112	85	338
Euphorbia thelephora var. australis (Nippled Spurge)		2	2	1	1	6
Euphorbia thelephora var. thelephora (Nippled Spurge)					3	3
Euphorbia wheeleri (Wheeler's Spurge)	15	22	2	16	36	91
Euphorbiaceae sp. (Spurge Family)	1					1
Evolvulus alsinoides var. (Speedwell)	6	15		9	9	39
Evolvulus alsinoides var. decumbens (Tropical Speedwell)	1	1		6		8
Evolvulus alsinoides var. villosicalyx (Shaggy Speedwell)	5	27	2	2	8	44
Flaveria trinervia (Speedy Weed)*			5			5
Fumaria densiflora (Dense Fumitory)*				2		2
Fumaria parviflora var. parviflora (Small-flower Fumitory)*				2		2
Galenia pubescens var. pubescens (Coastal Galenia)*			1			1
Galium bulliformis (Reflexed Bedstraw)			2			2
Galium migrans ssp. inversum (Loose Bedstraw)			1			1
Geranium solanderi (Austral Geranium)			1			1
Gilesia biniflora (Western Tar-vine), #AUS: -, SA: R	1		5	8	3	17
Glaucium corniculatum (Bristly Horned-poppy)*			1			1
Glinus lotoides (Hairy Carpet-weed)	72	19	2	9	8	110
Glinus orygioides (Desert Carpet-weed)		5			6	11
Glossocardia bidens (Native Cobbler's-pegs)			2	3		5

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
Glossostigma diandrum (Two-anther Mud-mat)			1		2	3
Glossostigma sp. (Mud-mat)			1			1
Glycine canescens (Silky Glycine)	17	10	15	34	18	94
Glycine rubiginosa (Twining Glycine)			4	1	4	9
Glycine sp. (Glycine)			1	1	1	3
Glycyrrhiza acanthocarpa (Native Liquorice)				3	1	4
Gnaphalium diamantinense (Diamantina Cudweed)	4	5			2	11
Gnaphalium indutum ssp. indutum (Tiny Cudweed)				2		2
Gnaphalium polycaulon (Indian Cudweed)*	5	8			2	15
Gnaphalium sp. (Cudweed)	1			1		2
Gnephosis arachnoidea (Spidery Button-flower)	8	16	74	27	102	227
Gnephosis eriocarpa (Native Camomile)	55	20	20	64	90	249
Gnephosis sp. (Button-flower)	6			9	16	31
Gnephosis tenuissima (Dwarf Golden-tip)	2		2	17		21
Goodenia berardiana (Split-end Goodenia)	1	5			3	9
Goodenia calcarata (Streaked Goodenia)				2	5	7
Goodenia cycloptera (Serrated Goodenia)	14	3	4	38	21	80
Goodenia fascicularis (Silky Goodenia)	36	15	76	35	146	308
Goodenia glabra (Smooth Goodenia)				2		2
Goodenia glauca (Pale Goodenia)	14	2	5	10	3	34
Goodenia havilandii (Hill Goodenia)				2		2
Goodenia heterochila (Serrated Goodenia)			1		2	3
Goodenia lobata (Lobed Goodenia)			1			1
Goodenia lunata (Stiff Goodenia)	3	16	21	13	48	101
Goodenia occidentalis (Western Goodenia)					3	3
Goodenia pinnatifida (Cut-leaf Goodenia)	1		23	13		37
Goodenia pusilliflora (Small-flower Goodenia)				1		1
Goodenia sp. (Goodenia)	13	3	7	25	26	74
Goodenia triodiophila (Spiny-leaved Goodenia)			1	1		2
Gratwickia monochaeta (One-bristle Everlasting), #AUS: -, SA: R			2	1		3
Haloragaceae sp. (Raspwort)		1				1
Haloragis aspera (Rough Raspwort)	98	17	21	46	37	219
Haloragis glauca f. glauca (Bluish Raspwort)	3					3
Haloragis glauca f. sclopetifera (Grey Raspwort)	2					2
Haloragis gossei (Gosse's Raspwort)		7		2		9
Haloragis odontocarpa f. (Mulga Nettle)			1		1	2
Haloragis odontocarpa f. pterocarpa (Mulga Nettle)		2				2
Haloragis sp. (Raspwort)	3		3	2	6	14
Harmsiodoxa blennodioides (Hairy-pod Cress)	25			62	4	91
Harmsiodoxa brevipes var. (Short Cress)		1		21		22
Harmsiodoxa brevipes var. brevipes (Short Cress)	3			15	2	20
Harmsiodoxa brevipes var. major (Short Cress)	1		1			2
Harmsiodoxa puberula (Scented Cress)	3			7	5	15
Harmsiodoxa sp. (Native Cress)			1			1
Helichrysum sp. (Everlasting)	6	4	2	5		17
Heliotropium ammophilum (Tough-leaved Heliotrope)		3	2			5
Heliotropium cunninghamii (Bushy Heliotrope)		4	2	3	14	23
Heliotropium curassavicum (Smooth Heliotrope)*	34	1	7	14	2	58
Heliotropium europaeum (Common Heliotrope)			4			4
Heliotropium moorei (Bushy Heliotrope)		2		14		16
Heliotropium sp. (Heliotrope)	2	3		3		8
Heliotropium supinum (Creeping Heliotrope)*	57	2	2	14	2	77
Heliotropium tanythrix (Long-haired Heliotrope)	1	3	1		5	10
Herniaria cinerea (Rupturewort)*			1			1
Hibiscus brachysiphonius (Low Hibiscus)	4	1	7	5	26	43
Hibiscus trionum var. (Bladder Ketmia)					4	4
Hibiscus verdcourtii (Bladder Ketmia)	2				1	3
Hyalosperma demissum (Dwarf Sunray)				2		2
Hyalosperma semisterile (Orange Sunray)	2	4	1	10	1	18

Life form class / Taxa, #conservation status, *introduced	IBRA subregion					Grand total
	Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	
Hyalosperma sp. (Sunray)				2		2
Hybanthus aurantiacus (Yellow Slender Violet)	1				16	17
Hypericum gramineum (Small St John's Wort)		3				3
Hypochaeris glabra (Smooth Cat's Ear)*			1			1
Indigastrium parviflorum (Narrow-leaved Indigo)		2			3	5
Indigofera colutea (Sticky Indigo)	10	3		11	15	39
Indigofera ewartiana (Ewart's Indigo)		1				1
Iotasperma sessilifolium (Iotasperma)	1					1
Ipomoea diamantinensis (Desert Cow-vine)	2					2
Ipomoea lonchophylla (Cow-vine)	1	1	5	2	3	12
Ipomoea muelleri (Native Morning-glory)	5	8			16	29
Ipomoea polymorpha (Silky Cow-vine)	16		1	7	19	43
Ipomoea sp. (Morning-glory/Cow-vine)				20	3	23
Isoetopsis graminifolia (Grass Cushion)				1		1
Isotoma petraea (Rock Isotome)		1	1	2	8	12
Ixiochlamys cuneifolia (Silverton Daisy)			2	1		3
Ixiochlamys filicifolia (Fern-leaved Daisy)		3				3
Ixiochlamys nana (Small Fuzzweed)			3	2		5
Jasminum didymum ssp. lineare (Native Jasmine)			3	2		5
Kennedia prorepens (Kalpil-kalpilpa)		1				1
Lactuca serriola f. integrifolia (Prickly Lettuce)*	1					1
Lactuca serriola f. serriola (Prickly Lettuce)*			1			1
Lawrencia glomerata (Clustered Lawrencia)	4		21	33	1	59
Leiocarpa brevicompta (Plains Plover-daisy)	22		11	2	15	50
Leiocarpa tomentosa (Woolly Plover-daisy)	1		6	4	1	12
Leiocarpa websteri (Narrow Plover-daisy)	5		90	27	25	147
Lemna disperma (Common Duckweed)	2					2
Lemooria burkittii (Wires-and-wool)	1		3	17	1	22
Lepidium fasciculatum (Bundled Peppergrass)				2	2	4
Lepidium muelleri-ferdinandi (Mueller's Peppergrass)	22	12	11	6	19	70
Lepidium oxytrichum (Green Peppergrass)	7	11	9	5	13	45
Lepidium papillosum (Warty Peppergrass)	5	2		1	22	30
Lepidium phlebopetalum (Veined Peppergrass)	11	24	48	48	60	191
Lepidium pseudohyssopifolium (Native Peppergrass)			1	1		2
Lepidium rotundum (Veined Peppergrass)	3	3		8	22	36
Lepidium sagittulatum (Fine-leaf Peppergrass)	7		2	6	3	18
Lepidium sp. (Peppergrass)	9	7	4	5	16	41
Lepidium strictum (Matted Peppergrass)*				1		1
Leptorhynchus baileyi (Bailey's Buttons)				1		1
Leucanthemum x superbum (Shasta Daisy)*				1		1
Leucochrysum molle (Hoary Sunray)				2		2
Leucochrysum stipitatum (Salt-spoon Daisy)		5				5
Limosella australis (Australian Mudwort)	2					2
Linum trigynum (French Flax)*			1			1
Lotus cruentus (Red-flower Lotus)	25	8	61	55	36	185
Lotus sp. (Lotus)		1		1	1	3
Ludwigia peploides ssp. montevidensis (Water Primrose)*	23					23
Lythrum hyssopifolia (Lesser Loosestrife)				1	1	2
Lythrum paradoxum (Paradox Loosestrife)			1			1
Lythrum wilsonii (Wilson's Loosestrife)	7	2	4	6	2	21
Macgregoria racemigera (Snowflake)	1	15				16
Malva parviflora (Small-flower Marshmallow)*	2		9	5		16
Malva preissiana (Australian Hollyhock)	37	4	10	5	5	61
Malva sp. (Mallow)*	1	1	2	1		5
Malva weinmanniana (Australian Hollyhock)	1		1			2
Malvastrum americanum var. americanum (Malvastrum)	15	25	106	6	55	207
Marsdenia australis (Native Pear)			14	6	6	26
Marsilea costulifera (Narrow-leaf Nardoo)	6		3		2	11
Marsilea drummondii (Common Nardoo)	107	20	16	62	48	253

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
Marsilea exarata (Swayback Nardoo)	1		3	5	7	16
Marsilea hirsuta (Short-fruit Nardoo)	6	13	9	12	29	69
Marsilea sp. (Nardoo)	1		1	1	15	18
Marsileaceae sp. (Nardoo Family)				1		1
Medicago polymorpha var. polymorpha (Burr-medic)*	1		1	2		4
Medicago sp. (Medic)*	1		1	2		4
Melia azedarach (White Cedar)*	1					1
Menkea crassa (Fat Spectacles)	7		3	3	5	18
Mentha australis (River Mint)	20	1	3	1	2	27
Mesembryanthemum nodiflorum (Slender Iceplant)*			2			2
Millotia greevesii ssp. greevesii (Creeping Millotia)	1			19		20
Mimulus gracilis (Slender Monkey-flower)	3		1	1	2	7
Minuria annua (Annual Minuria)			3	7		10
Minuria denticulata (Woolly Minuria)	48	24	31	42	53	198
Minuria integerrima (Smooth Minuria)	20	2	8	10	24	64
Minuria leptophylla (Minnie Daisy)	1	1	8	22	25	57
Minuria rigida (Rigid Minuria)	33	1	29	9	12	84
Minuria sp. (Minuria)	3	2	8		4	17
Mollugo cerviana (Wire-stem Chickweed)	2		4	19	12	37
Momordica balsamina (Balsam Apple)	3					3
Mukia sp. (Native Cucumber)			1	1		2
Myosurus australis (Mousetail)	2			1		3
Myriocephalus pluriflorus (Inland Woolly-heads)		7	2	1	1	11
Myriocephalus rudallii (Small Poached-egg Daisy)	15	6		1	2	24
Myriocephalus sp. (Poached-egg Daisy)				4		4
Myriophyllum salsugineum (Lake Milfoil)	3					3
Myriophyllum verrucosum (Red Milfoil)	14	1	3	4		22
Nicotiana occidentalis ssp. obliqua (Western Tobacco)					6	6
Nicotiana simulans (Native Tobacco)			5	3	6	14
Nicotiana sp. (Tobacco)	5		7	5	1	18
Nicotiana velutina (Velvet Tobacco)	102	29	28	114	64	337
Ocimum basilicum (Basil)*			1			1
Omphalolappula concava (Burr Stickseed)	7		18	29	4	58
Ophioglossum polyphyllum (Large Adder's-tongue), #AUS: -, SA: R				1		1
Ophioglossum sp. (Adder's-tongue)					3	3
Orobanche cernua var. australiana (Australian Broomrape), #AUS: -, SA: R			8	3		11
Osteospermum sp. (African Daisy)*					1	1
Oxalis perennans (Native Sorrel)				3		3
Parietaria cardiostegia (Mallee Smooth-nettle)	1					1
Peplidium aithocheilum (Western Peplidium)					4	4
Peplidium foecundum (Dwarf Peplidium)	5			3	7	15
Peplidium sp. (Peplidium)					1	1
Persicaria attenuata ssp. attenuata (Smart Weed)	2				1	3
Persicaria lapathifolia (Pale Knotweed)	9					9
Persicaria prostrata (Creeping Knotweed)					1	1
Phlegmatospermum cochlearinum (Downy Cress)	7		7	17	2	33
Phlegmatospermum eremaeum (Spreading Cress), #AUS: -, SA: R	1		1			2
Phlegmatospermum sp. (Native Cress)				2		2
Phyla canescens (Lippia)*			1			1
Phyllanthus lacunarius (Lagoon Spurge)	56	4	13	54	18	145
Phyllanthus lacunellus (Lagoon Spurge)	8	1	9	25	14	57
Phyllanthus maderaspatensis (Madras Leaf-Flower)	2	4		2	4	12
Phyllanthus oblanceolatus (Sandhill Spurge)				2		2
Picris squarrosa (Squat Picris), #AUS: -, SA: R			1			1
Pimelea elongata (Long Riceflower)			1			1
Pimelea simplex ssp. (Desert Riceflower)	5	3	78	72	32	190
Pimelea simplex ssp. continua (Desert Riceflower)	1		15	15	10	41
Pimelea simplex ssp. simplex (Desert Riceflower)	6	1	11	21	7	46
Pimelea sp. (Riceflower)			1		3	4

Life form class / Taxa, #conservation status, *introduced	IBRA subregion Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
Pimelea trichostachya (Spiked Riceflower)	8	15	5	33	6	67
Plagiobothrys plurisepaleus (White Rochelia)	7	2		11	2	22
Plantago bellardii (Hairy Plantain)*			1			1
Plantago cunninghamii (Clay Plantain)			3	2	1	6
Plantago debilis (Shade Plantain)			1			1
Plantago drummondii (Dark Plantain)	34	13	62	52	53	214
Plantago sp. (Plantain)	7	1	12	3	7	30
Plantago sp. B (R.Bates 44765) (Little Plantain)					4	4
Plantago turriifera (Crowned Plantain)	5			1	1	7
Plantago varia (Variable Plantain)	2		2			4
Pleurosorus rutifolius (Blanket Fern)			1			1
Podolepis arachnoidea (Clustered Copper-wire Daisy)			1			1
Podolepis capillaris (Wiry Podolepis)		2	8	18		28
Podolepis sp. (Copper-wire Daisy)				1	2	3
Polycalymma stuartii (Poached-egg Daisy)	71	43	7	267	50	438
Polycarpaea arida (Inland Copper Plant)	3			9	11	23
Polycarpaea sp. (Copper Plant)				1		1
Polygala triflora (Tri-coloured Milkwort)		3				3
Polygonum aviculare (Wireweed)*	1					1
Polygonum plebeium (Small Knotweed)	11	4	2	17	1	35
Portulaca filifolia (Slender Purslane)	5	4		3	38	50
Portulaca intraterranea (Buttercup Purslane)	52	17	5	110	40	224
Portulaca oleracea (Common Purslane)	126	31	58	156	146	517
Portulaca sp. (Purslane)	31	10	5	39	9	94
Portulacaceae sp. (Portulaca)	2		12			14
Potamogeton crispus (Curly Pondweed)			4			4
Potamogeton pectinatus (Fennel Pondweed)				1		1
Potentilla nanopetala (Native Cinquefoils)	2				2	4
Pratia sp. (Pratia)					1	1
Pseudognaphalium luteoalbum (Jersey Cudweed)	22	5	8	19	4	58
Pseudoraphis spinescens (Spiny Mud-grass)	9				1	10
Ptilotus decipiens (False Mulla Mulla)			1			1
Ptilotus fusiformis (Pom-pom Mulla Mulla)				1		1
Ptilotus helipteroides (Hairy Mulla Mulla)					1	1
Ptilotus helipteroides/pseudohelipteroides (Hairy Mulla Mulla)					1	1
Ptilotus macrocephalus (Feather-heads)	1			6	9	16
Ptilotus murrayi (Murray's Fox-tail)	1	1			3	5
Ptilotus nobilis ssp. nobilis (Yellow-tails)	3	5	6	9	28	51
Ptilotus nobilis ssp. semilanatus (Lamb's Tails), #AUS: -, SA: E				1		1
Ptilotus polystachyus (Long-tails)	25	44	1	92	30	192
Ptilotus propinquus (Gammon Ranges Fox-tail)			1			1
Ptilotus remotiflorus (Cordillo Downs Pussy-tail)				1	14	15
Ptilotus sp. (Mulla Mulla)	5	2	1	5	12	25
Pycnosorus chrysanthus (Yellow Drumsticks), #AUS: -, SA: E	4		2	5	12	23
Pycnosorus eremaeus (Golden Billy-buttons)	4	3	5	5	4	21
Pycnosorus globosus (Drumsticks), #AUS: -, SA: V	1				1	2
Pycnosorus melleus (Long-head Buttons)	15			1	2	18
Pycnosorus pleiocephalus (Soft Billy-buttons)	7		15	49	15	86
Pycnosorus sp. (Billy-buttons)					1	1
Ranunculus hamatosetosus (Hill Buttercup)			2			2
Ranunculus pentandrus var. pentandrus (Smooth Buttercup)				1		1
Ranunculus pentandrus var. platycarpus (Smooth Buttercup)	10	2	3	6	1	22
Ranunculus pumilio var. pumilio (Ferny Buttercup)	3			1		4
Ranunculus sessiliflorus var. sessiliflorus (Annual Buttercup)			1		2	3
Rhodanthe corymbiflora (Paper Everlasting)			2	1	9	12
Rhodanthe floribunda (White Everlasting)	33	57	117	161	86	454
Rhodanthe gossypina (Cotton Everlasting)	3					3
Rhodanthe laevis (Smooth Daisy)				1		1
Rhodanthe microglossa (Clustered Everlasting)	14	8	39	13	32	106

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
Rhodanthe moschata (Musk Daisy)	43	24	35	88	33	223
Rhodanthe polygalifolia (Milkwort Everlasting)					1	1
Rhodanthe pygmaea (Pigmy Daisy)	3		9	2	3	17
Rhodanthe sp. (Everlasting)	1		3	11	2	17
Rhodanthe stricta (Slender Everlasting)	33	3	32	25	58	151
Rhodanthe stuartiana (Clay Everlasting)			2	2	1	5
Rhodanthe troedelii (Small Paper-everlasting)	7			2	1	10
Rhodanthe uniflora (Woolly Daisy)	2	4	22	10	21	59
Rhyncharhena sp. (Rhynchosia)				1		1
Rhynchosia australis (Southern Rhynchosia)			2			2
Rhynchosia minima (Small Rhynchosia)	2	3	3	2	3	13
Rorippa eustylis (River Bitter-cress)	5			1	1	7
Rumex crystallinus (Glistening Dock)	30	4	5	14	5	58
Rumex sp. (Dock)				1		1
Ruppia maritima (Sea Tassel)				7		7
Rutidosia helichrysoides ssp. helichrysoides (Grey Wrinklewort)	53	13	6	10	58	140
Samolus repens (Creeping Brookweed)			3	10		13
Scaevola albida (Pale Fanflower)	2					2
Scaevola humilis (Inland Fanflower)			2			2
Scaevola parvifolia ssp. parvifolia (Camel Weed)		7			2	9
Schenkia australis (Spike Centaury)	36	7	10	25	7	85
Schoenia ramosissima (Dainty Everlasting)	8	1	1	8	10	28
Scleroblitum atriplicinum (Starry Goosefoot)				3		3
Senecio depressicola (Short Groundsel)	41	4		1	9	55
Senecio glossanthus (Annual Groundsel)	7		15	15	2	39
Senecio gregorii (Fleshy Groundsel)	69	32	14	146	49	310
Senecio lacustrinus (Lake Groundsel)	1		6	6		13
Senecio magnificus (Showy Groundsel)	1		31	15	2	49
Senecio pinnatifolius group (Variable Groundsel)	5		20	44	10	79
Senecio runcinifolius (Thistle-leaf Groundsel)	6		2		1	9
Senecio sp. (Groundsel)	5		7	14	2	28
Sesbania cannabina var. cannabina (Sesbania Pea)	28			1	3	32
Sesbania sp. (Sesbania Pea)					2	2
Sigesbeckia orientalis (Oriental Sigesbeckia)			1			1
Sisymbrium erysimoides (Smooth Mustard)*		4	26	22		52
Sisymbrium irio (London Mustard)*	1		3	2	2	8
Sisymbrium orientale (Indian Hedge Mustard)*			4			4
Sisymbrium sp. (Wild Mustard)*			3			3
Solanum lacunarium (Lagoon Nightshade)			2	2		4
Solanum nigrum (Black Nightshade)*	38		5	7	5	55
Sonchus asper ssp. (Rough Sow-thistle)*	1			1	1	3
Sonchus hydrophilus (Native Sow-thistle)	2				1	3
Sonchus oleraceus (Common Sow-thistle)*	25	7	21	21	11	85
Sonchus sp. (Sow-thistle)	1		1	3		5
Spergularia bocconeii (Red Sand-spurrey)*				2		2
Spergularia diandra (Lesser Sand-spurrey)*	2		1			3
Spergularia diandroides (Lesser Sand-spurrey)	4		2	8		14
Spergularia marina (Salt Sand-spurrey)			9	3		12
Spergularia rubra (Red Sand-spurrey)*				2		2
Spergularia sp. (Sand-spurrey)*			2	1		3
Sphaeromorphaea littoralis (Spreading Nut-heads)	67		3	23	7	100
Stenopetalum anfractum (Inland Thread-petal)			5			5
Stenopetalum lineare (Narrow Thread-petal)	5	13	30	29	25	102
Stenopetalum nutans (Nodding Thread-petal)	2	1		3	23	29
Stenopetalum sp. (Thread-petal)	1					1
Stenopetalum velutinum (Velvet Thread-petal)		1		1	4	6
Streptoglossa adscendens (Desert Daisy)	15	14	23	18	59	129
Streptoglossa bubakii (Stinking Mintbush Daisy)					1	1
Streptoglossa cylindriceps (Tube-flower Mintbush Daisy)			5		1	6

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
Streptoglossa decurrens (Ground Mintbush Daisy)					2	2
Streptoglossa liatroides (Wertaloona Daisy)	1	5	14			20
Streptoglossa sp. (Mintbush Daisy)			1			1
Stuartina hamata (Prickly Cudweed)				1		1
Stylidium desertorum (Desert Triggerplant), #AUS: -, SA: V		11				11
Swainsona acuticarinata (Burke's Swainson-pea)			1	1		2
Swainsona adenophylla (Violet Swainson-pea)			6	2		8
Swainsona affinis (Small-leaf Swainson-pea)		9	2	6		17
Swainsona burkittii (Woolly Darling Pea)			3			3
Swainsona canescens (Grey Swainson-pea)			1	1		2
Swainsona colutoides (Bladder Swainson-pea)			1			1
Swainsona extrajacens (Cooper Creek Pea)	10	2	7	2	1	22
Swainsona fissimontana (Broken Hill Pea)			1		1	2
Swainsona formosa (Sturt Pea)			8	2		10
Swainsona greyana (Darling Pea)			1			1
Swainsona microphylla (Small-leaf Swainson-pea)		1		9	5	15
Swainsona oligophylla (Clay-pan Swainson-pea), #AUS: -, SA: R	17	12	3	9		41
Swainsona oroboides complex (Variable Swainson-pea)	9			3	3	15
Swainsona phacoides (Dwarf Swainson-pea)	33	17	18	53	10	131
Swainsona procumbens (Broughton Pea), #AUS: -, SA: V			1	1		2
Swainsona purpurea (Purple Swainson-pea)	1		4	9		14
Swainsona sp. (Swainson-pea)	11	5	16	29	22	83
Swainsona stipularis (Orange Swainson-pea)	1		31	5	5	42
Swainsona swainsonioides (Downy Swainson-pea)			22	3		25
Swainsona tephrotricha (Ashy-haired Swainson-pea)			2	1		3
Swainsona villosa (Villous Swainson-pea)		3				3
Swainsona viridis (Creeping Darling Pea), #AUS: -, SA: V	1		4			5
Synaptantha tillaeacea var. (Native Madder)	1	3		6	8	18
Synaptantha tillaeacea var. hispidula (Hairy Native Madder)	4	2	2		2	10
Synaptantha tillaeacea var. tillaeacea (Native Madder)	11	3	2	5	7	28
Tetragonia eremaea (Desert Spinach)	8	5	30	58	9	110
Tetragonia moorei (New Zealand Spinach)	19	18	3	12	3	55
Tetragonia sp. (False Spinach)	1		4	1		6
Tetragonia tetragonoides (New Zealand Spinach)	79	3	20	64	16	182
Thyridia repens (Creeping Monkey-flower)	7			2	1	10
Thysanotus baueri (Mallee Fringe-lily)				1		1
Thysanotus sp. (Fringe-lily)				2		2
Trachymene glaucifolia (Blue Parsnip)	17	38	6	70	20	151
Trachymene pilosa (Dwarf Trachymene)					1	1
Trachymene sp. (Trachymene)	1	1				2
Trianthema pilosa (Hairy Horse Purslane)	3	3		1	13	20
Trianthema sp. (Horse Purslane)				9		9
Trianthema triquetra (Red Spinach)	96	7	51	76	143	373
Tribulus eichlerianus (Eichler's Caltrop)	15	14	14	34	41	118
Tribulus hystrix (Spiky Caltrop)	26	19	2	37	34	118
Tribulus macrocarpus (Big-fruited Caltrop)		1	1		1	3
Tribulus minutus (Small Caltrop)			3			3
Tribulus sp. (Caltrop)	7	2	5	19	16	49
Tribulus terrestris (Caltrop)*	21	4	21	17	11	74
Tribulus terrestris (long style) (Caltrop)			1			1
Tribulus terrestris (short style) s.str. (Caltrop)				1		1
Trichanthodium skirrophorum (Woolly Yellow-heads)	6	12	4	11	10	43
Trichodesma zeylanicum var. zeylanicum (Camel Bush)	41	27	9	129	27	233
Trifolium dubium (Suckling Clover)*	1					1
Trifolium glomeratum (Cluster Clover)*			2			2
Trifolium sp. (Clover)*			1			1
Trigonella suavissima (Sweet Fenugreek)	71	7	13	28	4	123
Utricularia dichotoma (Purple Bladderwort)			1			1
Utricularia fenshamii (Mound Spring Bladderwort)			5			5

Life form class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
Utricularia violacea (Violet Bladderwort), #AUS: -, SA: R			1			1
Velleia arguta (Toothed Velleia)				1		1
Velleia glabrata (Smooth Velleia)					1	1
Verbena aristigera (Mayne's Pest)*				2		2
Verbena bonariensis (Purple-top Verbena)*	1					1
Verbena officinalis (Common Verbena)*	32			12	4	48
Verbena sp. (Verbena)*	2					2
Verbena supina var. (Trailing Verbena)*			1	3		4
Verbena supina var. erecta (Trailing Verbena)*			1	2		3
Verbena supina var. supina (Trailing Verbena)*				3		3
Veronica peregrina ssp. xalapensis (Wandering Speedwell)*	10		1	1		12
Vicia monantha (Spurred Vetch)*				1		1
Vigna lanceolata var. latifolia (Maloga Bean)	1	8			1	10
Vittadinia arida (Arid New Holland Daisy)			4	3		7
Vittadinia cervicularis var. cervicularis (Waisted New Holland Daisy)			3			3
Vittadinia eremaea (Desert New Holland Daisy)	1	11	29	13	1	55
Vittadinia pterochaeta (Rough New Holland Daisy)			5	4		9
Vittadinia sp. (New Holland Daisy)	1	2	15	5	4	27
Vittadinia sulcata (Furrowed New Holland Daisy)			1	3	1	5
Wahlenbergia aridicola (Dryland Bluebell)	3	2	1		2	8
Wahlenbergia communis (Tufted Bluebell)	4		15	3		22
Wahlenbergia fluminalis (River Bluebell)	3					3
Wahlenbergia gracilentia (Annual Bluebell)	3		1			4
Wahlenbergia gracilis (Sprawling Bluebell)	1					1
Wahlenbergia luteola (Yellow-wash Bluebell)			1			1
Wahlenbergia queenslandica (Northern Bluebell)	9	3	1	3	2	18
Wahlenbergia sp. (Native Bluebell)	9	2	4	1		16
Wahlenbergia stricta ssp. stricta (Tall Bluebell)	1		1	1		3
Wahlenbergia tumidifruta (Swollen-fruit Bluebell)	32	22	8	9	11	82
Wurmbea australis (Inland Nancy)					1	1
Wurmbea citrina (Green-flower Nancy)	2	1				3
Wurmbea sp. (Nancy)			1			1
Xanthium spinosum (Bathurst Burr)*		2	3	6		11
Xanthium strumarium (Californian Burr)*	2	2		5		9
Xerochrysum bracteatum (Golden Everlasting)				1		1
Zaleya galericulata ssp. australis (Hogweed)	15	6		4	17	42
Zygophyllum ammophilum (Sand Twinleaf)	35	29	6	76	28	174
Zygophyllum apiculatum (Pointed Twinleaf)	1	1	2	2	9	15
Zygophyllum compressum (Rabbit-ears Twinleaf)			4	1		5
Zygophyllum crenatum (Notched Twinleaf)			1	1		2
Zygophyllum eichleri (Western Twinleaf)	1					1
Zygophyllum emarginatum (Notched Twinleaf)	1	1	2	3	2	9
Zygophyllum eremaeum (Desert Twinleaf)				2		2
Zygophyllum howittii (Clasping Twinleaf)	22	19	12	82	29	164
Zygophyllum humillimum (Small-fruit Twinleaf), #AUS: -, SA: R	2	1	1	4	15	23
Zygophyllum iodocarpum (Violet Twinleaf)	9	1	19	26	4	59
Zygophyllum ovatum (Dwarf Twinleaf)			1			1
Zygophyllum prismatothecum (Square-fruit Twinleaf)			22	17	2	41

Conservation status. **AUS:** EW - Extinct in the Wild; EX - Extinct; CE - Critically Endangered; EN - Endangered; VU - Vulnerable; CD - Conservation Dependent. **SA:** E - Endangered; V - Vulnerable; R - Rare.

B. Fauna species records

Vertebrate Class / Taxa, #conservation status, *introduced	IBRA subregion					
	Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
All fauna	40758	6156	15509	30990	20297	113710
1_Birds	18575	3214	9826	21307	14187	67109
Acanthagenys rufogularis (Spiny-cheeked Honeyeater)	132	36	193	132	127	620
Acanthiza apicalis (Inland Thornbill)	1	1	10	10	1	23
Acanthiza chrysorrhoa (Yellow-rumped Thornbill)	1	1	7	7		16
Acanthiza iredalei iredalei (Slender-billed Thornbill (western ssp)), #AUS: -, SA: R					1	1
Acanthiza lineata (Striated Thornbill)			3			3
Acanthiza robustirostris (Slaty-backed Thornbill)					3	3
Acanthiza uropygialis (Chestnut-rumped Thornbill)	30	6	26	113	19	194
Accipiter cirrocephalus (Collared Sparrowhawk)	19	2	13	26	14	74
Accipiter fasciatus (Brown Goshawk)	25	5	18	24	33	105
Accipiter novaehollandiae (Grey Goshawk), #AUS: -, SA: E					1	1
Acrocephalus australis (Australian Reed Warbler)	46	1	40	4	54	145
Actitis hypoleucos (Common Sandpiper), #AUS: -, SA: R	4			2	2	8
Aegotheles cristatus (Australian Owlet-nightjar)	96	4	22	62	25	209
Amytornis barbatus (Grey Grasswren), #AUS: -, SA: R	1			1	42	44
Amytornis goyderi (Eyrean Grasswren)	33	8	3	88	58	190
Amytornis modestus (Thick-billed Grasswren), #AUS: VU, SA: -			4	1	8	13
Amytornis textilis (Western Grasswren)			8		10	18
Anas castanea (Chestnut Teal)	6		3	9	2	20
Anas clypeata (Northern Shoveler)	2					2
Anas gracilis (Grey Teal)	268	26	73	312	159	838
Anas rhynchotis (Australasian Shoveler), #AUS: -, SA: R	30		3	32	5	70
Anas superciliosa (Pacific Black Duck)	243	3	42	103	87	478
Anhinga novaehollandiae (Australasian Darter), #AUS: -, SA: R	170	2	16	10	61	259
Anseranas semipalmata (Magpie Goose), #AUS: -, SA: E	1			1		2
Anthus australis (Australian Pipit)	90	21	171	316	171	769
Aphelocephala leucopsis (Southern Whiteface)	86	10	69	265	11	441
Aphelocephala nigricincta (Banded Whiteface)	28	8	3	90	20	149
Aphelocephala pectoralis (Chestnut-breasted Whiteface), #AUS: -, SA: R			3			3
Aprosmictus erythropterus (Red-winged Parrot), #AUS: -, SA: R	9	2		4	4	19
Apus pacificus (Pacific Swift (Fork-tailed Swift))	8		1	3	4	16
Aquila audax (Wedge-tailed Eagle)	130	21	180	386	138	855
Ardea alba (Great Egret)	186	6	21	10	68	291
Ardea ibis (Cattle Egret), #AUS: -, SA: R	1					1
Ardea intermedia (Intermediate Egret), #AUS: -, SA: R	43		2	2	11	58
Ardea pacifica (White-necked Heron)	223	15	27	45	136	446
Ardeotis australis (Australian Bustard), #AUS: -, SA: V	23	21	3	31	37	115
Arenaria interpres (Ruddy Turnstone), #AUS: -, SA: R				1		1
Artamus cinereus (Black-faced Woodswallow)	373	95	214	696	304	1682
Artamus cyanopterus (Dusky Woodswallow)	1		8			9
Artamus leucorhynchus (White-breasted Woodswallow)	189	10	56	105	85	445
Artamus minor (Little Woodswallow)	1			3		4
Artamus personatus (Masked Woodswallow)	78	49	76	120	66	389
Artamus sp. (Woodswallow)		2		4		6
Artamus superciliosus (White-browed Woodswallow)	49	10	27	98	27	211
Ashbyia lovensis (Gibberbird)	11	2	40	14	113	180
Aythya australis (Hardhead)	202	10	31	88	67	398
Barnardius zonarius (Australian Ringneck)	97	2	61	33	19	212
Biziura lobata (Musk Duck), #AUS: -, SA: R	59		6	25	12	102
Botaurus poiciloptilus (Australasian Bittern), #AUS: EN, SA: V			1			1
Burhinus grallarius (Bush Stonecurlew), #AUS: -, SA: R	3				1	4
Cacatua galerita (Sulphur-crested Cockatoo)			1	1		2
Cacatua leadbeateri (Major Mitchell's Cockatoo), #AUS: -, SA: R				2		2
Cacatua sanguinea (Little Corella)	443	89	236	438	293	1499
Cacomantis flabelliformis (Fan-tailed Cuckoo)	1			2		3

Vertebrate Class / Taxa, #conservation status, *introduced	IBRA subregion Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
Cacomantis pallidus (Pallid Cuckoo)	24	7	10	67	29	137
Calamanthus (Calamanthus) campestris (Rufous Fieldwren)	3		61	15	7	86
Calidris acuminata (Sharp-tailed Sandpiper)	31	2	5	29	13	80
Calidris ferruginea (Curlew Sandpiper), #AUS: CR, SA: -	3			2	2	7
Calidris melanotos (Pectoral Sandpiper), #AUS: -, SA: R	1				1	2
Calidris ruficollis (Red-necked Stint)	3			8	2	13
Calidris subminuta (Long-toed Stint), #AUS: -, SA: R	1		1		1	3
Calyptorhynchus banksii samueli (Red-tailed Black Cockatoo (far north SA ssp))	1	2			3	6
Certhionyx variegatus (Pied Honeyeater)	12	54	30	123	33	252
Chalcites basalis (Horsfield's Bronze Cuckoo)	92	25	35	147	64	363
Chalcites osculans (Black-eared Cuckoo)	5	1	6	15	9	36
Charadrius bicinctus (Double-banded Plover)					1	1
Charadrius mongolus (Lesser Sand Plover), #AUS: EN, SA: R			1		2	3
Charadrius ruficapillus (Red-capped Plover)	30	13	14	44	30	131
Charadrius veredus (Oriental Plover)	2			1	1	4
Chenonetta jubata (Maned Duck (Australian Wood Duck))	167	23	35	159	61	445
Cheramoeca leucosterna (White-backed Swallow)	121	21	45	388	165	740
Chlamydera maculata (Spotted Bowerbird), #AUS: -, SA: E					2	2
Chlidonias hybrida (Whiskered Tern)	63	4	13	40	25	145
Chlidonias leucopterus (White-winged Tern)	1					1
Chroicocephalus novaehollandiae (Silver Gull)	89	4	13	56	14	176
Cincloramphus cruralis (Brown Songlark)	60	32	74	158	102	426
Cincloramphus mathewsi (Rufous Songlark)	126	33	62	116	81	418
Cinclosoma castaneothorax (Chestnut-breasted Quail-thrush)					1	1
Cinclosoma castanotum (Chestnut-backed Quailthrush (Chestnut Quailthrush))			1			1
Cinclosoma cinnamomeum (Cinnamon Quailthrush)	52	28	134	146	195	555
Circus approximans (Swamp Harrier)	23	1	8	10	24	66
Circus assimilis (Spotted Harrier)	23	21	31	43	73	191
Cladorhynchus leucocephalus (Banded Stilt), #AUS: -, SA: V	3		5	13		21
Climacteris affinis (White-browed Treecreeper), #AUS: -, SA: R	10		1		1	12
Climacteris picumnus (Brown Treecreeper)	194	2	2	29	13	240
Colluricincla harmonica (Grey Shrikethrush)	224	6	19	16	40	305
Columba livia (Feral Pigeon (Rock Dove))*			1	1		2
Conopophila whitei (Grey Honeyeater), #AUS: -, SA: R					1	1
Coracina maxima (Ground Cuckooshrike)	21	4	8	31	15	79
Coracina novaehollandiae (Black-faced Cuckooshrike)	170	13	82	128	124	517
Coracina papuensis (White-bellied Cuckooshrike), #AUS: -, SA: R	1					1
Corvus bennetti (Little Crow)	195	35	104	555	211	1100
Corvus coronoides (Australian Raven)	455	66	267	453	319	1560
Corvus mellori (Little Raven)	2		23	1		26
Corvus orru (Torresian Crow)		1			5	6
Corvus sp. (Crow or Raven)	40	15	35	55	37	182
Coturnix pectoralis (Stubble Quail)	14	1	21	17	14	67
Coturnix ypsilophora (Brown Quail), #AUS: -, SA: V	8		1	3	7	19
Cracticus nigrogularis (Pied Butcherbird)	5	2	1	37	2	47
Cracticus torquatus (Grey Butcherbird)	5	8	11	25	37	86
Cygnus atratus (Black Swan)	119		24	89	13	245
Dacelo novaeguineae (Laughing Kookaburra)			1			1
Dendrocygna arcuata (Wandering Whistling Duck)	1				1	2
Dendrocygna eytoni (Plumed Whistling Duck)	28	5	1	7	16	57
Dicaeum hirundinaceum (Mistletoebird)	84	12	67	138	102	403
Dromaius novaehollandiae (Emu)	55	23	359	315	93	845
Egretta garzetta (Little Egret), #AUS: -, SA: R	20	1		1	13	35
Egretta novaehollandiae (White-faced Heron)	196	9	48	54	108	415
Egretta picata (Pied Heron)					1	1
Elanus axillaris (Black-shouldered Kite)	35	4	52	24	31	146
Elanus scriptus (Letter-winged Kite), #AUS: -, SA: R	9	3	1	21	14	48
Elseyonornis melanops (Black-fronted Dotterel)	187	19	59	123	161	549
Emblema pictum (Painted Finch), #AUS: -, SA: R			3	3	9	15

Vertebrate Class / Taxa, #conservation status, *introduced	IBRA subregion Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
Eolophus roseicapilla (Galah)	458	105	344	514	368	1789
Ephippiorhynchus asiaticus (Black-necked Stork)	1			1		2
Epthianura albifrons (White-fronted Chat)				8		8
Epthianura aurifrons (Orange Chat)	74	31	126	232	172	635
Epthianura crocea (Yellow Chat), #AUS: -, SA: E					26	26
Epthianura tricolor (Crimson Chat)	99	114	100	322	121	756
Erythronyctes alba (Red-kneed Dotterel)	48	6	19	52	49	174
Eurostopodus argus (Spotted Nightjar)	7	4	27	14	35	87
Falco berigora (Brown Falcon)	167	60	142	425	243	1037
Falco cenchroides (Nankeen Kestrel)	136	28	240	368	255	1027
Falco hypoleucos (Grey Falcon), #AUS: -, SA: R	17	2	5	18	15	57
Falco longipennis (Australian Hobby)	33	16	27	41	23	140
Falco peregrinus (Peregrine Falcon), #AUS: -, SA: R	5	1	4	14	9	33
Falco subniger (Black Falcon)	37	6	9	41	23	116
Fulica atra (Eurasian Coot)	161	2	27	81	88	359
Gallinago hardwickii (Latham's Snipe), #AUS: -, SA: R	1					1
Gallinula tenebrosa (Dusky Moorhen)	20		1	1	15	37
Gallirallus philippensis (Buff-banded Rail)	14				6	20
Gavialis virens (Singing Honeyeater)	125	99	351	780	292	1647
Gelochelidon nilotica (Gull-billed Tern)	56	10	37	73	22	198
Geopelia cuneata (Diamond Dove)	222	77	116	252	178	845
Geopelia placida (Peaceful Dove)	293	9	57	106	71	536
Geophaps plumifera (Spinifex Pigeon), #AUS: -, SA: R					25	25
Gerygone fusca (Western Gerygone), #AUS: -, SA: R				3		3
Glareola maldivarum (Oriental Pratincole)					1	1
Gliciphila melanops (Tawny-crowned Honeyeater)				1		1
Grallina cyanoleuca (Magpie)	445	40	125	350	276	1236
Grantiella picta (Painted Honeyeater), #AUS: VU, SA: V				2	3	5
Grus rubicunda (Brolga), #AUS: -, SA: V	58	11	38	20	131	258
Gymnorhina tibicen (Australian Magpie)	237	49	179	501	285	1251
Haliaeetus leucogaster (White-bellied Sea Eagle), #AUS: -, SA: E	2					2
Haliastur sphenurus (Whistling Kite)	431	15	50	118	145	759
Hamirostra melanosternon (Black-breasted Buzzard), #AUS: -, SA: R	56		17	26	5	104
Hieraaetus morphnoides (Little Eagle)	71	6	20	43	25	165
Himantopus leucocephalus (White-headed Stilt)	60	3	26	131	85	305
Hirundo neoxena (Welcome Swallow)	47	3	44	109	86	289
Hirundo rustica (Barn Swallow)				1		1
Hydroprogne caspia (Caspian Tern)	99		4	15	11	129
Lalage tricolor (White-winged Triller)	79	57	61	142	82	421
Lichenostomus melanops (Yellow-tufted Honeyeater)			1			1
Lichmera indistincta (Brown Honeyeater), #AUS: -, SA: R	1	3			3	7
Limosa limosa (Black-tailed Godwit), #AUS: -, SA: R	5			6		11
Lophoictinia isura (Square-tailed Kite), #AUS: -, SA: E	2				1	3
Malacorhynchus membranaceus (Pink-eared Duck)	147	18	32	170	90	457
Malurus lamberti (Variegated Fairywren)	170	45	195	297	176	883
Malurus leucopterus (White-winged Fairywren)	298	119	314	672	437	1840
Malurus sp. (Fairywren)	18	2	6	3	6	35
Malurus splendens (Splendid Fairywren)			1	5		6
Manorina flavigula (Yellow-throated Miner)	374	84	124	459	262	1303
Manorina melanocephala (Noisy Miner)					1	1
Manorina sp. (Miner)				7		7
Megalurus grammurus (Little Grassbird)	40		27	31	78	176
Megalurus timoriensis (Tawny Grassbird)	1					1
Melanodryas cucullata (Hooded Robin)	4	1	8	9	1	23
Melithreptus gularis laetior (Golden-backed Honeyeater), #AUS: -, SA: R	2					2
Melopsittacus undulatus (Budgerigar)	289	167	192	526	342	1516
Merops ornatus (Rainbow Bee-eater)	138	34	116	85	92	465
Microcarbo melanoleucos (Little Pied Cormorant)	68	1	7	37	41	154
Microeca fascians (Jacky Winter), #AUS: -, SA: ssp	73	2	4	5	11	95

Vertebrate Class / Taxa, #conservation status, *introduced	IBRA subregion Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
Milvus migrans (Black Kite)	415	93	192	518	429	1647
Mirafra javanica (Horsfield's Bush Lark)	16	3		2	16	37
Myiagra cyanoleuca (Satin Flycatcher), #AUS: -, SA: E			1			1
Myiagra inquieta (Restless Flycatcher), #AUS: -, SA: R	44	3	2	18	17	84
Neochmia modesta (Plum-headed Finch)	4				4	8
Neophema chrysostoma (Blue-winged Parrot), #AUS: -, SA: V	7	1	5	23	16	52
Neophema elegans (Elegant Parrot), #AUS: -, SA: R			6			6
Neophema splendida (Scarlet-chested Parrot), #AUS: -, SA: R	1					1
Neopsephotus bourkii (Bourke's Parrot)	27	10		63	73	173
Ninox boobook (Southern Boobook)	12	5	7	12	15	51
Ninox connivens (Barking Owl), #AUS: -, SA: R	49				5	54
Northiella haematogaster (Bluebonnet)	155	37	57	418	79	746
Nycticorax caledonicus (Nankeen Night Heron)	96	2	5	9	55	167
Nymphicus hollandicus (Cockatiel)	102	46	48	134	83	413
Ocyphaps lophotes (Crested Pigeon)	449	97	300	635	414	1895
Oreoica gutturalis (Crested Bellbird)	11	7	19	128	7	172
Oriolus sagittatus (Olive-backed Oriole), #AUS: -, SA: R	1			2	2	5
Oxyura australis (Blue-billed Duck), #AUS: -, SA: R	25			9	3	37
Pachycephala rufiventris (Rufous Whistler)	46	13	68	26	44	197
Pardalotus punctatus (Spotted Pardalote)				1		1
Pardalotus rubricatus (Red-browed Pardalote)	137	24	36	130	62	389
Pardalotus striatus (Striated Pardalote)	38		62	57	9	166
Passer domesticus (House Sparrow)*	41		33	85	62	221
Pedionomus torquatus (Plains-wanderer), #AUS: CR, SA: E			3		3	6
Pelecanus conspicillatus (Australian Pelican)	348	6	6	21	54	435
Peltohyas australis (Inland Dotterel)	8	5	30	23	59	125
Petrochelidon ariel (Fairy Martin)	247	18	57	157	169	648
Petrochelidon nigricans (Tree Martin)	383	27	164	198	132	904
Petroica goodenovii (Red-capped Robin)	65	31	107	175	91	469
Pezoporus occidentalis (Night Parrot), #AUS: EN, SA: E	1					1
Phalacrocorax carbo (Great Cormorant)	129	1	10	21	51	212
Phalacrocorax sulcirostris (Little Black Cormorant)	120	1	14	31	70	236
Phalacrocorax varius ((Australian) Pied Cormorant)	129	1	7	11	26	174
Phaps chalcoptera (Common Bronzewing)	10	8	23	38	17	96
Phaps histrionica (Flock Bronzewing), #AUS: -, SA: R	19	11	10	32	65	137
Platalea flavipes (Yellow-billed Spoonbill)	166	6	11	36	58	277
Platalea regia (Royal Spoonbill)	102	3	8	6	39	158
Plectorhyncha lanceolata (Striped Honeyeater), #AUS: -, SA: R				2		2
Plegadis falcinellus (Glossy Ibis), #AUS: -, SA: R	57	5		8	19	89
Pluvialis fulva (Pacific Golden Plover), #AUS: -, SA: R	2					2
Podargus strigoides (Tawny Frogmouth)	17	1	12	10	16	56
Podiceps cristatus (Great Crested Grebe), #AUS: -, SA: R	17		1	5		23
Poliocephalus poliocephalus (Hoary-headed Grebe)	58	7	19	82	46	212
Pomatostomus halli (Hall's Babbler)		1		4		5
Pomatostomus ruficeps (Chestnut-crowned Babbler)	91	26	33	319	16	485
Pomatostomus superciliosus (White-browed Babbler)	9	1	52	19	3	84
Porphyrio porphyrio (Purple Swamphen)	43		6	1	80	130
Porzana fluminea (Australian Crane (Australian Spotted Crane))	10	1	6	28	11	56
Porzana pusilla (Baillon's Crane)			1	2	14	17
Porzana tabuensis (Spotless Crane), #AUS: -, SA: R	2		1	4	8	15
Psephotus haematonotus (Red-rumped Parrot)	388	10	6	49	92	545
Psephotus varius (Mulga Parrot)	7		86	47	3	143
Psophodes cristatus (Chirruping Wedgebill)	139	24	199	321	28	711
Ptilotula penicillata (White-plumed Honeyeater)	568	48	201	259	325	1401
Ptilotula plumula (Grey-fronted Honeyeater)	2	1	2	3	4	12
Purnella albifrons (White-fronted Honeyeater)		2	15	11	5	33
Pyrrholaemus brunneus (Redthroat)		1	5	5	1	12
Recurvirostra novaehollandiae (Red-necked Avocet)	64	19	27	142	56	308
Rhipidura albiscapa (Grey Fantail)	20	1	4	8	20	53

Vertebrate Class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
Rhipidura leucophrys (Willie Wagtail)	556	96	309	652	484	2097
Rostratula australis (Australian Painted-snipe), #AUS: EN, SA: V					1	1
Smicromis brevirostris (Weebill)	9		14	12		35
Stictonetta naevosa (Freckled Duck), #AUS: -, SA: V	38		7	44	6	95
Stiltia isabella (Australian Pratincole)	36	11	53	41	127	268
Struthidea cinerea (Apostlebird)	1	1		81	2	85
Struthio camelus (Common Ostrich)*			1			1
Sturnus tristis (Common (Indian) Mynah)*		3				3
Sturnus vulgaris (Common Starling)*	4	1	8	11	26	50
Sugomel niger (Black Honeyeater)	8	19	7	30	22	86
Tachybaptus novaehollandiae (Australasian Grebe)	53	6	22	73	78	232
Tadorna tadornoides (Australian Shelduck)	37		2	52	5	96
Taeniopygia guttata (Zebra Finch)	466	173	427	827	577	2470
Thinornis rubricollis (Hooded Plover (Hooded Dotterel)), #AUS: VU, SA: V				1		1
Threskiornis moluccus (Australian White Ibis)	69	2	2	5	21	99
Threskiornis spinicollis (Straw-necked Ibis)	117	5	17	20	78	237
Todiramphus pyrrhopygius (Red-backed Kingfisher)	127	25	104	117	77	450
Todiramphus sanctus (Sacred Kingfisher)	86		6	14	14	120
Tribonyx ventralis (Black-tailed Nativehen)	167	25	43	130	104	469
Tringa flavipes (Lesser Yellowlegs)	2					2
Tringa glareola (Wood Sandpiper), #AUS: -, SA: R	2		2		2	6
Tringa nebularia (Common Greenshank)	21	1	3	10	8	43
Tringa stagnatilis (Marsh Sandpiper)	14		1	11	2	28
Turdus philomelos (Song Thrush)*				3		3
Turnix pyrrhorthorax (Red-chested Buttonquail), #AUS: -, SA: R				2	1	3
Turnix velox (Little Buttonquail)	28	16	30	34	37	145
Tyto delicatula (Eastern Barn Owl)	48	8	24	25	45	150
Tyto longimembris (Eastern Grass Owl), #AUS: -, SA: R			1	3	9	13
Tyto novaehollandiae (Australian Masked Owl), #AUS: -, SA: E	1					1
Vanellus miles (Masked Lapwing)	119	7	37	125	106	394
Vanellus tricolor (Banded Lapwing)	24	10	19	94	39	186
Zosterops lateralis (Silvereye)			1			1
2. Mammals	2349	814	3374	4156	3670	14363
Antechinomys laniger (Kultarr)	2	1	1	3	358	365
Austronomus australis (White-striped Free-tailed Bat)	12	6	7	14	3	42
Bos taurus (Cattle (European Cattle))*	34	6	195	79	103	417
Camelus dromedarius (One-humped Camel (Dromedary, Arabian Camel))*	3	4	4	25	3	39
Canis lupus (Feral Dog, Dingo)*	18		3	34	1	56
Canis lupus dingo (Dingo)*	21	32	40	118	97	308
Canis lupus familiaris (Feral Dog)*	1		4	1	4	10
Canis sp. (Feral Dog or Dingo)*		1	1		6	8
Capra hircus (Goat (Feral Goat))*			11			11
Cervus dama (Fallow Deer)*			2	1		3
Cervus elaphus (Red Deer)*			3	9		12
Chalinolobus gouldii (Gould's Wattled Bat)	10	3	25	23	17	78
Chalinolobus morio (Chocolate Wattled Bat)			2			2
Dasyercus cristicauda (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: -	1		5	49	30	85
Dasyuroides byrnei (Kowari), #AUS: VU, SA: V					568	568
Equus asinus (Donkey (Feral Donkey))*	1	1	5	1	17	25
Equus caballus (Horse (Brumby))*	9		24	13	32	78
Felis catus (Domestic Cat (Feral Cat))*	9	11	47	46	13	126
Hydromys chrysogaster (Water Rat)	8	1			4	13
Leggadina forresti (Central Short-tailed Mouse (Forrest's Mouse))	271	16	99	38	85	509
Leporillus conditor (Greater Stick-nest Rat), #AUS: VU, SA: V			2			2
Macropus fuliginosus (Western Grey Kangaroo)			57	31		88
Macropus giganteus (Eastern Grey Kangaroo), #AUS: -, SA: R				6		6
Macropus robustus (Euro)			78	2		80
Macropus rufus (Red Kangaroo)	9	12	1379	487	44	1931
Macropus sp. (Kangaroo/Wallaby)	3		8	7	9	27

Vertebrate Class / Taxa, #conservation status, *introduced	IBRA subregion		Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
	Coon gie	Lake Pure				
Macrotis lagotis (Greater Bilby (Bilby)), #AUS: VU, SA: V				1		1
Mormopterus petersi (Inland Free-tailed Bat)	2		12	12		26
Mormopterus planiceps (Southern Free-tailed Bat)	3		11	8		22
Mormopterus sp. (Free-tailed Bat)	1		6	8		15
Mus musculus (House Mouse)*	397	92	368	951	120	1928
Ningauai ridei (Wongai Ningau)	9	26				35
Notomys alexis (Spinifex Hopping-mouse)	22	19	1	10	2	54
Notomys cervinus (Fawn Hopping-mouse), #AUS: -, SA: V					128	128
Notomys fuscus (Dusky Hopping-mouse), #AUS: VU, SA: V	320		111	775	34	1240
Notomys sp. (Hopping-mouse)	2	2	8	36	18	66
Nyctophilus geoffroyi (Lesser Long-eared Bat)	13	22	29	57	32	153
Oryctolagus cuniculus (Rabbit (European Rabbit))*	56	19	228	328	115	746
Petrogale xanthopus xanthopus (Yellow-footed Rock-wallaby), #AUS: VU, SA: -			1			1
Planigale gilesi (Giles' Planigale (Paucident Planigale))	44	2	8	18	3	75
Planigale ingrami (Long-tailed Planigale)	5	6		3	26	40
Planigale sp. (Planigale)	2		1	4	1	8
Planigale tenuirostris (Narrow-nosed Planigale)	1	17	32	6	3	59
Pseudomys australis (Plains mouse), #AUS: VU, SA: V	4		14	10	48	76
Pseudomys bolami (Bolam's Mouse)			16	5		21
Pseudomys desertor (Desert Mouse)	49	52	60	26	35	222
Pseudomys hermannsburgensis (Sandy Inland Mouse)	188	227	17	271	158	861
Pseudomys sp. (Native Mouse)	2	6		3	6	17
Pteropus scapulatus (Little Red Flying-fox), #AUS: -, SA: R			1	1		2
Rattus villosissimus (Long-haired Rat (Plague Rat))	206	108	46	148	1094	1602
Saccolaimus flaviventris (Yellow-bellied Sheath-tailed Bat), #AUS: -, SA: R	2	1	2	3		8
Scotorepens balstoni (Inland Broad-nosed Bat)		6	12	7		25
Scotorepens greyii (Little Broad-nosed Bat)	22	7	5	39	33	106
Sminthopsis crassicaudata (Fat-tailed Dunnart)	346	31	134	206	162	879
Sminthopsis macroura (Stripe-faced Dunnart)	217	69	146	144	205	781
Sminthopsis sp. (Dunnart)	6		2	2	6	16
Sus scrofa (Pig (Feral Pig))*	3			3	2	8
Tachyglossus aculeatus (Short-beaked Echidna)		1	16	9	8	34
Trichosurus vulpecula (Common Brushtail Possum), #AUS: -, SA: R	2					2
Vespadelus baverstocki (Inland Forest Bat)			31	1		32
Vespadelus finlaysoni (Finlayson's Cave Bat)			1			1
Vulpes vulpes (Fox (Red Fox))*	13	7	53	74	37	184
3 Reptiles	2588	2015	2105	4771	1493	12972
Acritoscincus duperreyi (Eastern Three-lined Skink)					1	1
Amphibolurus burnsii (Channel Dragon)	10				6	16
Anilius bicolor (Southern Blind Snake)				2		2
Anilius bituberculatus (Rough-nosed Blind Snake)	7		6	4	2	19
Anilius endoterus (Centralian Blind Snake)	13	15		30	4	62
Anilius grypous (Hook-nosed Blind Snake)		1			1	2
Anilius sp. (Blind Snake)		9		1	1	11
Antaresia stimsoni (Stimson's Python)			2		2	4
Aspidites ramsayi (Woma), #AUS: -, SA: R	41	1	5	27	6	80
Brachyuropsis australis (Coral Snake)				1		1
Brachyuropsis fasciolatus (Narrow-banded Snake)		1	4	8		13
Cryptoblepharus australis (Desert Wall Skink)	14		30	7	11	62
Cryptoblepharus ochrus (Eyrean Wall Skink)	2			3	1	6
Cryptoblepharus pannosus (Speckled Wall Skink)	1					1
Ctenophorus caudicinctus (Ring-tailed Dragon)		1	1			2
Ctenophorus cristatus (Crested Dragon)				1	1	2
Ctenophorus fordi (Mallee Dragon)			28	273		301
Ctenophorus isolepis (Military Dragon)		128			1	129
Ctenophorus maculosus (Lake Eyre Dragon)			7	23		30
Ctenophorus nuchalis (Central Netted Dragon)	115	107	27	178	32	459
Ctenophorus pictus (Painted Dragon)	247	35	36	371	66	755
Ctenophorus vadrappa (Red-barred Dragon)			4			4

Vertebrate Class / Taxa, #conservation status, *introduced	IBRA subregion	Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
Ctenotus ariadnae (Pin-striped Ctenotus)			34				34
Ctenotus astarte (Ashy Downs Ctenotus), #AUS: -, SA: R			2			16	18
Ctenotus brooksi (Sandhill Ctenotus)	2				465	4	471
Ctenotus inornatus (Brown Ctenotus)			64		41	8	113
Ctenotus joanae (Blacksoil Ctenotus), #AUS: -, SA: R						15	15
Ctenotus leae (Centralian Coppertail)	3		38		15	8	64
Ctenotus leonhardii (Common Desert Ctenotus)			69	138	12	11	230
Ctenotus olympicus (Saltbush Ctenotus)				103	11	5	119
Ctenotus orientalis (Spotted Ctenotus)				2	1	1	4
Ctenotus pantherinus (Leopard Skink)			95	11	1	1	108
Ctenotus regius (Eastern Desert Ctenotus)	115		167	110	147	71	610
Ctenotus schomburgkii (Sandplain Ctenotus)	2		47	97	311	6	463
Ctenotus septenarius (Gibber Ctenotus)						2	2
Ctenotus sp. (Ctenotus)	3		4	7	4	9	27
Ctenotus spaldingi (Eastern Striped Skink)				9	1	2	12
Ctenotus strauchii (Short-legged Ctenotus)	16		5	108	50	61	240
Ctenotus taeniatus (Eyrean Ctenotus)	122		50	19	234	81	506
Cyclodomorphus venustus (Saltbush Slender Bluetongue)			4			8	12
Delma borea (Northern Snake-lizard), #AUS: -, SA: R						1	1
Delma butleri (Spinifex Snake-lizard)			43	2	9		54
Delma nasuta (Centralian Snake-lizard)			1			1	2
Delma tinctoria (Black-necked Snake-lizard)	21			3		8	32
Demansia psammophis (Yellow-faced Whipsnake)			6	1			7
Demansia rimicola (Channel Country Whipsnake), #AUS: -, SA: R			2		1	4	7
Diplodactylus conspicillatus (revised) (Variable Fat-tailed Gecko)			17				17
Diplodactylus laevis (Desert Fat-tailed Gecko)			1				1
Diplodactylus tessellatus (Tessellated Gecko)	96		31	70	24	25	246
Diporiphora nobbi (Nobbi Dragon)				2			2
Diporiphora winneckeii (revised) (Canegrass Dragon)	11		11	4	11	5	42
Egernia stokesii (Gidgee Skink)	1		2	15		11	29
Emydura macquarii (Macquarie Tortoise), #AUS: -, SA: V	90					2	92
Eremiascincus pallidus (Western Sand-swimming Skink)					2		2
Eremiascincus phantasmus (Ghost Skink)	77		116	4	496	60	753
Eremiascincus richardsonii (Broad-banded Sandswimmer)	22		10	28	9	8	77
Eremiascincus sp. (Sandswimmer)	3				7		10
Furina diadema (Red-naped Snake)	4			2	1		7
Gehyra purpurascens (Purple Dtella)	17			3	32	1	53
Gehyra sp. (Dtella)	3			23	8	1	35
Gehyra variegata (revised) (Western Tree Dtella)	30		7	46	88	17	188
Gehyra variegata complex (Western Tree Dtella)	33		21	9	12	27	102
Gehyra versicolor (Eastern Tree Dtella)	1		11			22	34
Gowidon longirostris (Long-nosed Dragon)				1		1	2
Heteronotia binoei (Bynoe's Gecko)	134		24	84	102	139	483
Lampropholis guichenoti (Garden Skink)						1	1
Lerista aericeps (Yellow-tailed Slider)	3		1	5	24		33
Lerista bipes (Western Two-toed Slider)					1		1
Lerista bougainvillii (Bougainville's Skink)						1	1
Lerista labialis (Eastern Two-toed Slider)	61		92	48	177	31	409
Lerista punctatovittata (Spotted Slider)				11	1		12
Lerista timida (Dwarf Three-toed Slider)			1	25			26
Lialis burtonis (Burton's Legless Lizard)	1		62	9	26	4	102
Liopholis inornata (Desert Skink)	1		6		60	1	68
Liopholis margaretae (Masked Rock Skink)				1			1
Lucasium byrnei (Pink-blotched Gecko)	2			48	71	36	157
Lucasium damaeum (Beaded Gecko)	121		32	10	238	3	404
Lucasium steindachneri (Map Gecko), #AUS: -, SA: R					1		1
Lucasium stenodactylum (revised) (Sandplain Gecko)	11		18	3	52		84
Menetia greyii (Dwarf Skink)	41		23	203	77	22	366
Morelia spilota (Carpet Python), #AUS: -, SA: R					1	1	2

Vertebrate Class / Taxa, #conservation status, *introduced	IBRA subregion Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
Morethia adelaidensis (Adelaide Snake-eye)	73		25	37	26	161
Morethia boulengeri (Common Snake-eye)	96	9	141	9	50	305
Nephurus levis (Smooth Knob-tailed Gecko)	128	85	10	143	29	395
Nephurus sp. (Knob-tailed Gecko)	25			1	2	28
Oxyuranus microlepidotus (Inland Taipan)	7	7			23	37
Pogona vitticeps (Central Bearded Dragon)	319	109	72	296	73	869
Proablepharus kinghorni (Blacksoil Skink), #AUS: -, SA: R	2				5	7
Pseudechis australis (Mulga Snake)	18	56	4	32	13	123
Pseudonaja aspidorhyncha (Patch-nosed Brown Snake)	95		6	116	2	219
Pseudonaja guttata (Spotted Brown Snake), #AUS: -, SA: R		2		2	5	9
Pseudonaja mengdeni (Gwardar)	6	48	5	11	5	75
Pseudonaja modesta (Five-ringed Snake)		12	4	2	1	19
Pseudonaja sp. (Brown Snake)	3	1	2	20		26
Pseudonaja textilis (Eastern Brown Snake)	3	7	1		11	22
Pygopus nigriceps (Black-headed Scaly-foot)		9		14	1	24
Pygopus schraderi (Hooded Scaly-foot)	2	1	2	2	4	11
Rhynchoedura eyrensis (Eyre Basin Beaked Gecko)				1	4	5
Rhynchoedura ormsbyi (Eastern Beaked Gecko)				33		33
Rhynchoedura ornata (revised) (Western Beaked Gecko)	15	7	22	8	15	67
Strophurus ciliaris (Northern Spiny-tailed Gecko)	12	14	12	32	3	73
Strophurus elderi (Jewelled Gecko)		30			4	34
Strophurus intermedius (Southern Spiny-tailed Gecko)	6		1	1	1	9
Suta suta (Curl Snake)	122	41	18	20	44	245
Tiliqua multifasciata (Centralian Bluetongue)	5	47		7	3	62
Tiliqua occipitalis (Western Bluetongue)				1		1
Tiliqua rugosa (Sleepy Lizard)			79	34		113
Tiliqua scincoides (Eastern Bluetongue)		1				1
Tympanocryptis intima (Smooth-snouted Earless Dragon)	2		67	1	172	242
Tympanocryptis lineata (Five-lined Earless Dragon)	30		9	17	2	58
Tympanocryptis sp. (Earless Dragon)				2	5	7
Tympanocryptis tetraporophora (Eyrean Earless Dragon)	53	5	163	5	91	317
Underwoodisaurus milii (Barking Gecko)	3		10			13
Varanus eremius (Desert Pygmy Goanna)		18				18
Varanus giganteus (Perentie)		8				8
Varanus gouldii (Sand Goanna)	64	83	37	171	18	373
Varanus panoptes (Yellow-spotted Monitor)	1					1
Varanus tristis (Black-headed Goanna)	1				4	5
Vermicella annulata (Common Bandy Bandy), #AUS: -, SA: R			1			1
4 Frogs	286	113	45	267	226	937
Crinia deserticola (Desert Froglet)	32			1	9	42
Cyclorana cultripes (Knife-footed Frog), #AUS: -, SA: R	11	5			14	30
Cyclorana novaehollandiae (New Holland Frog)					1	1
Cyclorana platycephala (Water-holding Frog)	49	2	9	5	17	82
Limnodynastes fletcheri (Long-thumbed Frog)				1		1
Limnodynastes tasmaniensis (Spotted Marsh Frog)	60	3		1	11	75
Litoria caerulea (Green Tree Frog)	9	6		1	1	17
Litoria electrica (Buzzing Tree Frog)		1				1
Litoria latopalmata (Broad-palmed Frog)	11			1	1	13
Litoria rubella (Desert Tree Frog)	14	21	16	3	17	71
Neobatrachus sp. (Burrowing Frog)	4			3		7
Neobatrachus sudelli (Sudell's Frog)	88	67	20	251	153	579
Notaden nicholli (Desert Spadefoot Toad)		8			1	9
Platyplectrum spenceri (Spencer's Burrowing Frog)	8				1	9

Vertebrate Class / Taxa, #conservation status, *introduced	IBRA subregion	Coon gie	Lake Pure	Murn peo wie	Strze lecki Desert	Sturt Stony Desert	Grand total
5_Fish		16960		159	489	721	18329
Ambassis agassizii (Agassiz's Glassfish)		1					1
Ambassis sp. (Northwest Glassfish)		2135			5	3	2143
Bidyanus welchi (Welch's Grunter)		753			2	28	783
Carassius auratus (Goldfish)*		469			1		470
Chlamydogobius eremius (Desert Goby)				8			8
Craterocephalus eyresii (Lake Eyre Hardyhead)		840		15	7	8	870
Craterocephalus stercusmuscarum (Fly-specked Hardyhead)				8			8
Gambusia holbrooki (Eastern Gambusia)*		1055		60	57	46	1218
Hypseleotris klunzingeri (Western Carp Gudgeon)		5		3		1	9
Hypseleotris spp. (complex) (Carp Gudgeon)		1879		1	1	9	1890
Leiopotherapon unicolor (Spangled Perch)		1340		9	269	111	1729
Macquaria ambigua ambigua (Murray-Darling Golden Perch)		1413			1	131	1545
Macquaria sp. (undescribed) (Lake Eyre Golden Perch)		244				11	255
Melanotaenia splendida (Desert Rainbow Fish)		6		9			15
Melanotaenia splendida tatei (Desert Rainbow Fish)		1405		1	40		1446
Nematalosa erebi (Bony Bream)		3588		44	104	112	3848
Neosiluroides cooperensis (Cooper Creek Tandan)		14				2	16
Neosilurus hyrtlai (Hyrtl's Tandan)		1138			2	177	1317
Oxyeleotris lineolata (Sleepy Cod)		5					5
Porochilus argenteus (Silver Catfish)		423				10	433
Retropinna semoni (Australian Smelt)		180		1		65	246
Scortum barcoo (Barcoo Grunter)		67				7	74

Conservation status. **AUS**: EW - Extinct in the Wild; EX - Extinct; CE - Critically Endangered; EN - Endangered; VU - Vulnerable; CD - Conservation Dependent. **SA**: E - Endangered; V - Vulnerable; R - Rare.

C. Flora species subregional conservation status

IUCN (2003, V3.0 Regional Level) status: CR - Critically Endangered; EN - Endangered; NT - Near Threatened; RA - Rare; RE - Regionally Extinct; VU - Vulnerable.

Flora Taxa	IBRA subregion			Strze lecki Desert	Sturt Stony Desert
	Coon gie	Lake Pure	Murn peowie		
Abutilon fraseri ssp. diplotrichum (Dwarf Lantern-bush)			RA		
Abutilon fraseri ssp. fraseri (Dwarf Lantern-bush)	NT			NT	NT
Abutilon halophilum (Plains Lantern-bush)	NT	RA		NT	
Abutilon leucopetalum (Desert Lantern-bush)				NT	
Abutilon malvaefolium (Scrambling Lantern-bush)			NT		
Acacia adsurgens		VU			
Acacia brachystachya (Turpentine Mulga)	NT			NT	NT
Acacia cambagei (Gidgee)		NT		VU	
Acacia carneorum (Needle Wattle)			RA		
Acacia confluens (Arkaroola Wattle)				RA	NT
Acacia dictyophleba (Net-veined Wattle)	RA				
Acacia elachantha (Cowle's Wattle)		RA			
Acacia georginae (Georgina Gidgee)					RA
Acacia havilandiorum (Needle Wattle)			RA		
Acacia murrayana (Colony Wattle)			RA		
Acacia oswaldii (Umbrella Wattle)		NT			
Acacia pickardii (Pickard's Wattle)				VU	RA
Acacia rivalis (Silver Wattle)			RA		
Acacia salicina (Willow Wattle)		RA			
Acacia sericophylla (Wirewood)		VU			
Acacia sibirica (Bastard Mulga)			RA		VU
Acacia sp. Blyth Range (W.V.Fitzgerald s.n. 1898)			VU		
Acacia stenophylla (River Cooba)				RA	
Acacia tenuissima (Slender Wattle)		VU			
Actinobole uliginosum (Flannel Cudweed)			NT		
Adriana tomentosa var. hookeri (Mallee Bitter-bush)		RA			
Aeschynomene indica (Budda Pea)	NT	RA	NT		NT
Alectryon oleifolius ssp. canescens (Bullock Bush)	RA				
Alternanthera angustifolia (Narrow-leaf Joyweed)	NT	NT	NT	NT	
Amaranthus interruptus (Native Amaranth)					RA
Amaranthus macrocarpus var. macrocarpus (Large-fruit Amaranth)	RA				
Ammannia multiflora (Jerry-jerry)				NT	
Amphipogon caricinus var. caricinus (Long Grey-beard Grass)		NT			
Amyema linophylla ssp. orientalis (Casuarina Mistletoe)				RA	
Amyema maidenii ssp. maidenii (Pale-leaf Mistletoe)	NT				NT
Amyema miquelii (Box Mistletoe)		RA	RA		
Amyema miraculosa ssp. boormanii (Fleshy Mistletoe)	RA			RA	
Amyema quandang var. quandang (Grey Mistletoe)				RA	NT
Anemocarpa podolepidium (Rock Everlasting)	RA			RA	
Angianthus brachypappus (Spreading Angianthus)				RA	
Arabidella eremigena (Priddiwalkatji)			RA		
Arabidella glaucescens		RA			
Arabidella procumbens (Creeping Cress)	NT		NT	NT	NT
Aristida arida			RA		
Aristida capillifolia (Needle-leaf Three-awn)			RA		
Aristida inaequiglumis		NT	RA		
Aristida latifolia (Feather-top Wire-grass)				NT	
Aristida nitidula (Brush Three-awn)	RA		NT		RA
Aristida personata (Purple Wire-grass)			NT		NT
Aristida strigosa (Rough Three-awn)			NT		
Asperula gemella (Twin-leaf Bedstraw)	RA		VU		
Atalaya hemiglauca (Whitewood)			RA		
Atriplex acutibractea ssp. acutibractea (Pointed Saltbush)			RA		
Atriplex acutiloba				RA	

Flora Taxa	IBRA subregion			Strzelecki Desert	Sturt Stony Desert
	Coongie	Lake Pure	Murn peowie		
<i>Atriplex cordifolia</i>	NT		NT	NT	NT
<i>Atriplex crassipes</i> var. <i>crassipes</i>		NT	NT		
<i>Atriplex eichleri</i> (Eichler's Saltbush)			NT	NT	
<i>Atriplex elachophylla</i>	RA		RA		
<i>Atriplex incrassata</i> (Oodnadatta Saltbush)			RA	RA	RA
<i>Atriplex intermedia</i>			NT		
<i>Atriplex leptocarpa</i> (Slender-fruit Saltbush)				NT	NT
<i>Atriplex lindleyi</i> ssp. <i>conduplicata</i> (Baldoo)				NT	
<i>Atriplex lindleyi</i> ssp. <i>inflata</i> (Corky Saltbush)	NT		NT	NT	
<i>Atriplex lindleyi</i> ssp. <i>quadrupartita</i> (Baldoo)			NT	NT	
<i>Atriplex lobativalvis</i>				RA	
<i>Atriplex macropterocarpa</i>			RA		NT
<i>Atriplex morrisii</i>			EN		
<i>Atriplex muelleri</i> (Mueller's Saltbush)			RA		
<i>Atriplex obconica</i>			NT		
<i>Atriplex papillata</i> (Coral Saltbush)				VU	
<i>Atriplex pseudocampanulata</i> (Spreading Saltbush)				NT	
<i>Atriplex pumilio</i> (Mat Saltbush)	NT			NT	NT
<i>Atriplex quadrivalvata</i> var. <i>quadrivalvata</i>			RA		
<i>Atriplex quinii</i> (Kidney-fruit Saltbush)	RA		RA		
<i>Atriplex stipitata</i> (Bitter Saltbush)			NT		
<i>Atriplex suberecta</i> (Lagoon Saltbush)	NT		NT		
<i>Atriplex turbinata</i>			RA	RA	
<i>Austrobryonia micrantha</i> (Desert Cucumber)					NT
<i>Austrostipa nitida</i> (Balcarra Spear-grass)					NT
<i>Austrostipa nodosa</i> (Tall Spear-grass)			RA		
<i>Austrostipa scabra</i> ssp. <i>falcata</i> (Slender Spear-grass)			RA		
<i>Austrostipa scabra</i> ssp. <i>scabra</i> (Rough Spear-grass)			RA		
<i>Austrostipa trichophylla</i>			RA		
<i>Bauhinia gilva</i> (Bauhinia)				NT	
<i>Baumea juncea</i> (Bare Twig-rush)			VU		
<i>Bergia ammannioides</i> (Jerry Water-fire)	NT				NT
<i>Bergia diacheiron</i>	NT	NT		NT	
<i>Bergia occultipetala</i>		NT		NT	
<i>Bergia pedicellaris</i>	NT			NT	NT
<i>Blennodia canescens</i> (Native Stock)			NT		
<i>Blennodia pterosperma</i> (Wild Stock)			RA		
<i>Bolboschoenus caldwellii</i> (Salt Club-rush)			NT	VU	NT
<i>Bonamia deserticola</i>		RA			
<i>Bonamia media</i>		RA			RA
<i>Bothriochloa ewartiana</i> (Desert Blue-grass)			NT	RA	
<i>Brachiaria notochthona</i> (Hairy-edged Arm-grass)	NT		NT		
<i>Brachyscome ciliaris</i> var. <i>lyrifolia</i> (Lyrate-leaf Daisy)			RA		
<i>Brachyscome dentata</i> (Lobe-seed Daisy)			NT		
<i>Brachyscome rara</i> (Rare Daisy)	RA				
<i>Bromus arenarius</i> (Sand Brome)	NT		NT	NT	
<i>Bulbine semibarbata</i> (Small Leek-lily)			RA		
<i>Bulbostylis barbata</i>	NT	NT		NT	
<i>Bulbostylis turbinata</i>			RA		
<i>Calandrinia balonensis</i> (Broad-leaf Parakeelya)		NT		NT	
<i>Calandrinia eremaea</i> (Dryland Purslane)	NT	NT	RA	NT	
<i>Calandrinia ptychosperma</i> (Creeping Parakeelya)	NT		RA	NT	NT
<i>Calandrinia pumila</i> (Tiny Purslane)	RA	RA	NT	RA	
<i>Calandrinia remota</i> (Round-leaf Parakeelya)				NT	
<i>Calandrinia stagnensis</i>	RA				
<i>Callitriche sonderi</i> (Matted Water Starwort)		RA			NT
<i>Callitris glaucophylla</i> (White Cypress-pine)			RA		
<i>Calostemma luteum</i> (Yellow Garland-lily)	NT			NT	NT
<i>Calotis ancyrocarpa</i> (Anchor Burr-daisy)				NT	NT

Flora Taxa	IBRA subregion			Strzelecki Desert	Sturt Stony Desert
	Coongie	Lake Pure	Murn peowie		
Calotis multicaulis (Woolly-headed Burr-daisy)	RA	RA	NT		RA
Calotis porphyroglossa (Channel Burr-daisy)			RA		
Calotis scabiosifolia var. scabiosifolia (Rough Burr-daisy)			VU		
Carinavalva glauca					RA
Cassytha flindersii (Flinders Ranges Dodder-laurel)			RA		
Centipeda minima ssp. minima (Spreading Sneezeweed)	RA	RA			RA
Centipeda nidiformis (Spreading Sneezeweed)	NT				NT
Centipeda pleiocephala		NT	NT		
Centrolepis eremica (Dryland Centrolepis)	NT	NT	NT	NT	
Cheilanthes lasiophylla (Woolly Cloak-fern)			RA		RA
Cheilanthes sieberi ssp. pseudovellea					RA
Chenopodium curvispicatum (Cottony Goosefoot)		NT			
Chenopodium desertorum ssp. anidiophyllum (Mallee Goosefoot)			NT		
Chenopodium desertorum ssp. desertorum (Frosted Goosefoot)			NT		
Chenopodium desertorum ssp. microphyllum (Small-leaf Goosefoot)			RA		
Chloris truncata (Windmill Grass)			RA	RA	
Chrysocephalum apiculatum (Common Everlasting)		RA		RA	RA
Chrysocephalum pterochaetum (Shrub Everlasting)	NT	NT	NT		NT
Chrysopogon fallax (Golden-beard Grass)	NT			NT	
Codonocarpus cotinifolius (Desert Poplar)		RA			RA
Codonocarpus pyramidalis (Slender Bell-fruit)			RA		
Convolvulus microsepalus (Small-flower Bindweed)			NT	RA	
Convolvulus recurvatus ssp. nullarborensis			RA		
Convolvulus recurvatus ssp. recurvatus (Australian Bindweed)			NT		
Convolvulus tedmoorei	VU				
Corymbia terminalis (Plains Bloodwood)	NT			NT	
Corynotheca micrantha var. divaricata (Small-flower Sand Lily)		NT			RA
Crassula colorata var. acuminata (Dense Crassula)			NT		
Crassula colorata var. colorata (Dense Crassula)			NT		
Crassula tetramera (Australian Stonecrop)	NT		NT	NT	
Crotalaria eremaea ssp. strehlowii (Smooth Loose-flowered Rattle-pod)	RA	NT	RA		NT
Crotalaria medicaginea var. neglecta (Trefoil Rattle-pod)		NT			
Crotalaria smithiana (Low Rattle-pod)			RA	NT	
Cullen discolor (Prostrate Scurf-pea)					NT
Cullen graveolens (Native Lucerne)	NT			NT	
Cullen patens (Spreading Scurf-pea)	NT			NT	
Cuscuta victoriana	NT		NT		NT
Cymbopogon ambiguus (Lemon-grass)		RA			
Cymbopogon obtectus (Silky-head Lemon-grass)	RA				NT
Cyperus alterniflorus (Umbrella Flat-sedge)			NT		
Cyperus bifax (Downs Flat-sedge)	RA		RA		
Cyperus bulbosus (Bulbous Flat-sedge)		RA			
Cyperus concinnus		RA			
Cyperus dactylotes		RA			RA
Cyperus exaltatus (Splendid Flat-sedge)					NT
Cyperus gilesii (Giles' Flat-sedge)	NT	RA			NT
Cyperus iria			NT		
Cyperus laevigatus (Bore-drain Sedge)	RA			NT	
Cyperus nervulosus		NT			
Cyperus pygmaeus (Pygmy Flat-sedge)			RA		NT
Cyperus rigidellus (Dwarf Flat-sedge)			NT		
Cyperus victoriensis (Yelka)				NT	
Dichanthium sericeum ssp. sericeum (Silky Blue-grass)				RA	
Dicrastylis costelloi var. costelloi (Sand-sage)	RA	RA		RA	
Dicrastylis costelloi var. violacea (Sand-sage)	RA	RA			
Digitaria ammophila (Spider Grass)		NT			
Digitaria coenicola (NC) (Spider Grass)	RA		NT		NT
Digitaria ctenantha (Comb Finger-grass)				VU	
Dimorphocoma minutula			NT	RA	

Flora Taxa	IBRA subregion			Strzelecki Desert	Sturt Stony Desert
	Coongie	Lake Pure	Murn peowie		
Dipteracanthus australasicus ssp. australasicus					RA
Dipteracanthus australasicus ssp. glabratus					RA
Dissocarpus biflorus var. villosus (Woolly Two-horn Saltbush)	RA				
Dissocarpus latifolius			NT		NT
Distichlis distichophylla (Emu-grass)			NT		
Dodonaea lobulata (Lobed-leaf Hop-bush)			NT		
Dodonaea microzyga var. microzyga (Brilliant Hop-bush)				RA	NT
Dodonaea petiolaris (Balloon Hop-bush)					RA
Drosera indica (Indian Sundew)		RA			RA
Duma coccoloboides (Sandhill Lignum)	NT	RA			
Dysphania glomulifera ssp. glomulifera (Red Crumbweed)		NT	NT		
Dysphania kalpari (Kalpari)			RA		
Dysphania melanocarpa f. melanocarpa (NC) (Black-fruit Goosefoot)					NT
Dysphania plantaginella (Plantain Crumbweed)					NT
Dysphania rhadinostachya ssp. rhadinostachya (Green Crumbweed)		NT			NT
Echinochloa inundata (Channel Millet)	NT				RA
Echinochloa turneriana (Channel Millet)	NT				NT
Eclipta alatocarpa	NT				
Einadia nutans ssp. nutans (Climbing Saltbush)	NT		NT		NT
Elachanthus pusillus (Elachanth)			RA		
Elatine gratioloides (Waterwort)			RA		
Eleocharis papillosa			RA		
Eleocharis plana (Flat Spike-rush)	RA		RA		RA
Eleocharis pusilla (Small Spike-rush)	RA			RA	
Elytrophorus spicatus (Spike-grass)			RA		
Enneapogon caeruleus (Blue Bottle-washers)			NT		
Enneapogon nigricans (Black-head Grass)					RA
Enteropogon acicularis (Umbrella Grass)		NT		NT	
Enteropogon ramosus (Umbrella Grass)	RA			NT	
Epaltes cunninghamii (Tall Nut-heads)			NT		
Eragrostis confertiflora (Spike Love-grass)	NT				NT
Eragrostis lacunaria (Purple Love-grass)					NT
Eragrostis laniflora (Hairy-flower Woollybutt)			NT	RA	
Eragrostis pergracilis (Small Love-grass)			NT		
Eragrostis speciosa (Handsome Love-grass)	RA	RA			RA
Eremophila bignoniiflora (Bignonia Emubush)			NT		
Eremophila dalyana	NT				NT
Eremophila deserti (Turkey-bush)			NT	RA	
Eremophila duttonii (Harlequin Emubush)		RA		RA	
Eremophila fallax			RA		
Eremophila glabra ssp. glabra (Tar Bush)				RA	RA
Eremophila latrobei ssp. glabra (Crimson Emubush)	NT			RA	
Eremophila latrobei ssp. latrobei (Grey-leaf Crimson Emubush)	RA				NT
Eremophila macdonnellii (Macdonnell's Emubush)				RA	
Eremophila macgillivrayi (Dog-bush)	RA	NT			NT
Eremophila maculata ssp. maculata (Spotted Emubush)				NT	
Eremophila obovata ssp. obovata		NT		RA	RA
Eremophila oppositifolia ssp. oppositifolia (Opposite-leaved Emubush)			RA		
Eremophila polyclada (Twiggy Emubush)	VU			VU	VU
Eremophila sturtii (Turpentine Bush)				NT	
Eriachne helmsii (Woollybutt Wanderrie)					NT
Eriachne mucronata (Mountain Wanderrie)	RA				
Eriachne ovata (Swamp Wanderrie)	RA		NT		
Eriachne pulchella ssp. pulchella (Pretty Wanderrie Grass)		RA			
Erigeron sessilifolius	RA				
Eriocaulon carsonii ssp. carsonii (Salt Pipewort)			VU		
Eriochlamys eremaea (Woolly Mantle)				RA	
Eriochloa crebra (Tall Cupgrass)			NT	NT	
Erodium cygnorum (Blue Heron's-bill)		NT	NT	NT	NT

Flora Taxa	IBRA subregion	Coon gie	Lake Pure	Murn peowie	Strze lecki Desert	Sturt Stony Desert
Eryngium plantagineum (Long Eryngium)		RA				
Eryngium supinum (Little Devil)		NT				
Eucalyptus camaldulensis ssp. arida (Northern River Red Gum)		RA				RA
Eucalyptus camaldulensis ssp. minima (River Red Gum)				RA		
Eucalyptus intertexta (Gum-barked Coolibah)				RA	RA	
Eucalyptus largiflorens (River Box)		VU			RA	
Euchiton sphaericus (Annual Cudweed)		RA				
Eulalia aurea (Silky Brown-top)					NT	
Euphorbia alsiniflora						RA
Euphorbia australis			RA	NT		RA
Euphorbia centralis				NT		
Euphorbia inappendiculata				RA		
Euphorbia mitchelliana		RA	NT	RA	RA	
Euphorbia parvicaruncula (Rough-seeded Spurge)		NT			NT	
Euphorbia wheeleri (Wheeler's Spurge)				RA		
Evolvulus alsinoides var. villosicalyx				NT		NT
Fimbristylis ferruginea				VU		
Fimbristylis velata (Veiled Fringe-rush)		RA				
Frankenia foliosa (Leafy Sea-heath)					NT	
Frankenia subteres				RA		
Gahnia trifida (Cutting Grass)				EN		
Galium bulliformis (Reflexed Bedstraw)				RA		
Gilesia biniflora (Western Tar-vine)		NT				NT
Glinus orygioides (Desert Carpet-weed)			RA			RA
Glossocardia bidens (Native Cobbler's-pegs)				NT		
Glossostigma diandrum (Two-anther Mud-mat)				NT		NT
Glycyrrhiza acanthocarpa (Native Liquorice)					RA	
Gnaphalium diamantinense (Diamantina Cudweed)		NT	NT			RA
Goodenia anfracta				RA		
Goodenia berardiana (Split-end Goodenia)			NT	RA		RA
Goodenia calcarata (Streaked Goodenia)				RA		RA
Goodenia glauca (Pale Goodenia)			RA		RA	RA
Goodenia pinnatifida (Cut-leaf Goodenia)				RA	RA	
Goodenia pusilliflora (Small-flower Goodenia)					RA	
Gossypium sturtianum var. sturtianum (Sturt's Desert Rose)				NT		
Gratwickia monochaeta				RA		
Grevillea juncifolia ssp. juncifolia (Honeysuckle Grevillea)		NT				
Grevillea nematophylla ssp. nematophylla (Water Bush)						RA
Grevillea stenobotrya (Rattle-pod Grevillea)		NT				
Grevillea striata (Beefwood)				RA	NT	
Gunniopsis papillata (Twin-leaf Pigface)						RA
Gunniopsis septifraga (Green Pigface)				NT		
Gunniopsis tenuifolia (Narrow-leaf Pigface)				NT		
Gyrostemon ramulosus (Bushy Wheel-fruit)			RA			RA
Gyrostemon tepperi (Tepper's Wheel-fruit)						RA
Hakea divaricata (Corkbark)						RA
Hakea ednieana (Flinders Ranges Corkwood)				NT		
Hakea eyreana (Fork-leaf Corkwood)		NT				
Halgania cyanea (Rough Blue-flower)			NT		RA	RA
Haloragis glauca f. glauca (Bluish Raspwort)		RA				
Haloragis glauca f. sclopetifera (Grey Raspwort)		RA		RA		
Haloragis gossei (Gosse's Raspwort)			NT		RA	
Haloragis odontocarpa f. pterocarpa (Mulga Nettle)			RA			
Harmsiodoxa brevipes var. brevipes (Short Cress)		RA		RA	RA	RA
Harmsiodoxa brevipes var. major (Short Cress)		RA		RA		
Harmsiodoxa puberula (Scented Cress)		NT		NT	NT	NT
Heliotropium ammophilum			NT	NT		
Heliotropium asperrimum (Rough Heliotrope)			RA	NT		
Heliotropium cunninghamii (Bushy Heliotrope)				RA	RA	RA

Flora Taxa	IBRA subregion			Strzelecki Desert	Sturt Stony Desert
	Coongie	Lake Pure	Murn peowie		
<i>Heliotropium europaeum</i> (Common Heliotrope)			NT		
<i>Heliotropium filaginoides</i>			RA		
<i>Heliotropium moorei</i> (Bushy Heliotrope)		NT		NT	
<i>Heliotropium tanythrix</i>	RA	NT	RA		
<i>Hemichroa diandra</i> (Mallee Hemichroa)			RA		
<i>Hibiscus brachysiphonius</i> (Low Hibiscus)		NT		NT	
<i>Hibiscus krichauffianus</i> (Velvet-leaf Hibiscus)	NT				
<i>Hibiscus sturtii</i> var. <i>sturtii</i> (Sturt's Hibiscus)					RA
<i>Hyalosperma demissum</i> (Dwarf Sunray)				RA	
<i>Hyalosperma semisterile</i> (Orange Sunray)	RA	RA		RA	
<i>Hybanthus aurantiacus</i> (Yellow Slender Violet)					NT
<i>Hypericum gramineum</i> (Small St John's Wort)		RA			
<i>Indigastrum parviflorum</i>					RA
<i>Indigofera cornuligera</i> ssp. <i>cornuligera</i> (Silver Indigo)					RA
<i>Indigofera georgei</i> (George's Indigo)		NT			NT
<i>Indigofera helmsii</i> (Helm's Indigo)		RA			
<i>Ipomoea lonchophylla</i> (Cow-vine)	NT	NT			NT
<i>Ipomoea polymorpha</i> (Silky Cow-vine)			RA	NT	
<i>Ipomoea racemigera</i> (Inland Bell-vine)	NT	NT			NT
<i>Iseilema eremaeum</i>	NT				
<i>Iseilema vaginiflorum</i> (Red Flinders-grass)	NT				
<i>Isolepis australiensis</i> (Southern Club-rush)		RA	RA	RA	RA
<i>Isotoma petraea</i> (Rock Isotome)		NT			
<i>Isotropis wheeleri</i> (Wheeler's Lamb-poison)	NT	NT	RA	RA	RA
<i>Ixiochlamys filicifolia</i>		RA	RA		
<i>Jasminum didymum</i> ssp. <i>lineare</i> (Native Jasmine)			RA		
<i>Josephinia eugeniae</i> (Josephina Burr)	RA	RA		RA	RA
<i>Juncus aridicola</i> (Inland Rush)				RA	
<i>Juncus bufonius</i> (Toad Rush)			RA		
<i>Juncus kraussii</i> (Sea Rush)			RA	RA	
<i>Keraudrenia nephrosperma</i>	RA	NT		RA	
<i>Kippistia suaedifolia</i> (Fleshy Kippistia)			RA	RA	
<i>Lachnagrostis filiformis</i> (Common Blown-grass)				RA	RA
<i>Lawrencia squamata</i> (Thorny Lawrencia)					NT
<i>Lechenaultia divaricata</i> (Tangled Lechenaultia)			NT		
<i>Leiocarpa brevicompta</i> (Plains Plover-daisy)				NT	
<i>Leiocarpa semicalva</i> ssp. <i>semicalva</i> (Scented Button-bush)			NT		
<i>Lemooria burkittii</i> (Wires-and-wool)				NT	
<i>Lepidium fasciculatum</i> (Bundled Peppergrass)			VU		
<i>Lepidium oxytrichum</i> (Green Peppergrass)				NT	
<i>Lepidium papillosum</i> (Warty Peppergrass)	RA	RA	RA		RA
<i>Lepidium sagittulatum</i> (Fine-leaf Peppergrass)			NT	NT	NT
<i>Lepidium stronglyllophyllum</i>					RA
<i>Leptorhynchus baileyi</i> (Bailey's Buttons)			RA		
<i>Leucochrysum molle</i> (Hoary Sunray)			RA		
<i>Leucochrysum stipitatum</i> (Salt-spoon Daisy)		RA			
<i>Linum marginale</i> (Native Flax)			RA		
<i>Lipocarpa microcephala</i> (Button Rush)					RA
<i>Lysiana subfalcata</i> (Northern Mistletoe)	NT	NT		NT	NT
<i>Lythrum hyssopifolia</i> (Lesser Loosestrife)			RA	RA	RA
<i>Lythrum paradoxum</i>			RA		
<i>Macgregoria racemigera</i> (Snowflake)		RA			
<i>Maireana astrotricha</i> (Low Bluebush)	RA	RA			
<i>Maireana brevifolia</i> (Short-leaf Bluebush)			NT		
<i>Maireana campanulata</i> (Bell-fruit Bluebush)			NT		
<i>Maireana cannonii</i> (Cannon's Bluebush)			RA		
<i>Maireana lobiflora</i> (Lobed Bluebush)			NT		
<i>Maireana melanocarpa</i> (Black-fruit Bluebush)			RA		
<i>Maireana microcarpa</i> (Swamp Bluebush)		NT		NT	

Flora Taxa	IBRA subregion			Strzelecki Desert	Sturt Stony Desert
Maireana ovata				NT	RA
Maireana pentatropis (Erect Mallee Bluebush)			RA		
Maireana pyramidata (Black Bluebush)		RA			
Maireana radiata (Radiate Bluebush)			NT		RA
Maireana sedifolia (Bluebush)			NT	RA	
Maireana tomentosa ssp. urceolata			RA		
Maireana trichoptera (Hairy-fruit Bluebush)			RA		
Maireana triptera (Three-wing Bluebush)		RA			
Maireana turbinata (Top-fruit Bluebush)	RA			NT	
Maireana villosa (Silky Bluebush)				RA	
Malacocera biflora (Two-flower Soft-horns)			RA		
Malacocera gracilis (Slender Soft-horns)			RA	NT	
Marsdenia australis (Native Pear)				RA	
Marsilea costulifera (Narrow-leaf Nardoo)	NT		RA		RA
Marsilea exarata (Swayback Nardoo)	RA			NT	
Melaleuca dissitiflora			RA		
Melaleuca glomerata (Inland Paper-bark)			RA	RA	
Melaleuca trichostachya (Narrow-leaf Honey-myrtle)	RA				RA
Melhania oblongifolia (Velvet Hibiscus)		NT	NT	RA	NT
Menkea australis (Fairy Spectacles)			NT	NT	
Menkea crassa (Fat Spectacles)				NT	NT
Mentha australis (River Mint)		RA	NT	RA	RA
Millotia greevesii ssp. greevesii (Creeping Millotia)	NT		NT	NT	
Mimulus gracilis (Slender Monkey-flower)	RA				RA
Mimulus prostratus (Small Monkey-flower)				RA	NT
Mimulus repens (Creeping Monkey-flower)	RA		RA		RA
Minuria annua (Annual Minuria)			NT	NT	
Minuria rigida				NT	
Momordica balsamina (Balsam Apple)	RA				
Muelleranthus stipularis (Sand Pea)		RA			
Myoporum brevipes (Warty Boobialla)			RA		
Myoporum montanum (Native Myrtle)	RA				RA
Myoporum platycarpum ssp. platycarpum (False Sandalwood)			RA		
Myosurus australis (Mousetail)			NT	RA	
Myriocephalus pluriflorus (Inland Woolly-heads)		NT	NT	NT	
Myriocephalus rudallii (Small Poached-egg Daisy)				NT	
Neptunia dimorphantha	NT				
Neurachne lanigera (Woolly Mulga-grass)		VU			
Neurachne munroi (Window Mulga-grass)		RA			RA
Newcastelia cephalantha var. cephalantha	RA				
Newcastelia cephalantha var. oblonga		RA			
Nicotiana occidentalis ssp. obliqua (Western Tobacco)			RA		
Nicotiana simulans (Native Tobacco)				RA	NT
Nitraria billardiarei (Nitre-bush)		RA			
Nymphoides crenata (Wavy Marshwort)					EN
Olearia decurrens (Winged Daisy-bush)			NT		
Ophioglossum polyphyllum (Large Adder's-tongue)				RA	
Orobanche cernua var. australiana (Australian Broomrape)				NT	
Osteocarpum acropterum var. deminutum (Wingless Bonefruit)	RA				
Osteocarpum pentapterum (Five-wing Bonefruit)					RA
Owenia acidula (Sour Plum)				RA	
Oxychloris scariosa	NT				NT
Panicum effusum var. effusum (Hairy Panic)			NT		
Panicum laevinode			NT		
Paraneurachne muelleri (Northern Mulga-grass)		NT		NT	NT
Parietaria cardiostegia (Mallee Smooth-nettle)	RA				
Peplidium aithocheilum					NT
Peplidium foecundum (Dwarf Peplidium)	RA			NT	
Persicaria attenuata ssp. attenuata	RA				RA

Flora Taxa	IBRA subregion	Coon gie	Lake Pure	Murn peowie	Strze lecki Desert	Sturt Stony Desert
Persicaria lapathifolia (Pale Knotweed)		NT				
Persicaria prostrata (Creeping Knotweed)						RA
Petalostylis labicheoides (Butterfly Bush)				NT		
Phlegmatospermum cochlearinum (Downy Cress)		NT				NT
Phragmites australis (Common Reed)				RA		
Phyllanthus fuernrohrii (Sand Spurge)			RA			
Phyllanthus lacunarius (Lagoon Spurge)					NT	
Phyllanthus lacunellus (Lagoon Spurge)			RA			
Phyllanthus maderaspatensis var. angustifolius			RA			
Picris angustifolia ssp. angustifolia (NC) (Coast Picris)				RA		
Pimelea elongata				NT		
Pimelea microcephala ssp. microcephala (Shrubby Riceflower)		RA				
Pimelea penicillaris (Sandhill Riceflower)		VU				VU
Pimelea simplex ssp. continua (Desert Riceflower)		NT				
Pittosporum angustifolium (Native Apricot)			NT			
Plagiobothrys plurisepaleus (White Rochelia)			RA	RA		RA
Plantago cunninghamii (Clay Plantain)				NT		
Plantago turrifera (Crowned Plantain)		RA				RA
Pleurosorus rutifolius (Blanket Fern)				RA		
Pluchea dentex (Bowl Daisy)		RA		NT		RA
Pluchea rubelliflora					NT	
Poa fordeana (Forde's Poa)		NT				
Podolepis canescens (Grey Copper-wire Daisy)		RA			RA	RA
Podolepis davisiana (Button Podolepis)				VU		
Polycarpaea arida		NT			NT	NT
Polycarpaea breviflora		RA				NT
Polygala isingii (NC) (Central Australian Milkwort)			RA			
Pomax umbellata (Pomax)			RA			
Portulaca filifolia (Slender Purslane)					RA	
Potamogeton crispus (Curly Pondweed)				VU		
Potamogeton pectinatus (Fennel Pondweed)				RA	RA	
Pseudoraphis spinescens (Spiny Mud-grass)		NT				RA
Psyrax latifolia (Broad-leaf Native Currant)						RA
Ptilotus disparilis (Small-leaf Mulla Mulla)				VU		
Ptilotus helipteroides (Hairy Mulla Mulla)						RA
Ptilotus latifolius (Tangled Mulla Mulla)		NT				
Ptilotus macrocephalus (Feather-heads)		RA			RA	
Ptilotus murrayi		NT	NT			NT
Ptilotus parvifolius (Small-leaf Mulla Mulla)				RA		
Ptilotus remotiflorus						RA
Ptilotus sessilifolius (Crimson-tails)				RA		
Ptilotus whitei (Small-leaf Mulla Mulla)				RA		
Pycnosorus melleus (Long-head Buttons)		RA				RA
Ranunculus hamatosetosus (Hill Buttercup)				RA		
Ranunculus pentandrus var. platycarpus (Smooth Buttercup)			NT		NT	NT
Ranunculus pumilio var. pumilio (Ferny Buttercup)		RA		RA	RA	
Ranunculus sessiliflorus var. sessiliflorus (Annual Buttercup)						VU
Rhagodia parabolica (Mealy Saltbush)				NT		
Rhagodia ulicina (Intricate Saltbush)				NT		
Rhodanthe corymbiflora (Paper Everlasting)		RA		RA		RA
Rhodanthe gossypina		VU				
Rhodanthe polygalifolia (Milkwort Everlasting)				NT		
Rhodanthe pygmaea (Pigmy Daisy)				NT		
Rhodanthe stuartiana (Clay Everlasting)				RA	RA	
Rhodanthe troedelii (Small Paper-everlasting)		RA		NT		RA
Rhyncharhena linearis (Bush Bean)				RA		
Rorippa eustylis (River Bitter-cress)		RA			RA	
Rostellularia adscendens var. pogonantha (Pink Tongues)		RA	RA		RA	
Rulingia loxophylla (Pur#ar-pur#arpa)		RA	RA			

Flora Taxa	IBRA subregion			Coon gie	Lake Pure	Murn peowie	Strze lecki Desert	Sturt Stony Desert
Ruppia maritima (Sea Tassel)						RA	RA	
Rutidosia helichrysoides ssp. helichrysoides (Grey Wrinklewort)							NT	
Samolus repens (Creeping Brookweed)						RA		
Santalum acuminatum (Quandong)						RA		
Santalum spicatum (Sandalwood)						RA		
Sarcocornia blackiana (Thick-head Samphire)							NT	
Sarcostemma viminalis ssp. australe (Caustic Bush)						NT	NT	NT
Sarcozona praecox (Sarcozona)						RA		
Sauropus ramosissimus								VU
Scaevola collaris								NT
Scaevola depauperata (Skeleton Fanflower)				RA				NT
Scaevola parvifolia ssp. parvifolia (Camel Weed)					RA			
Schoenoplectus dissachanthus (Inland Club-rush)				RA	RA	RA	RA	RA
Schoenoplectus pungens (Spiky Club-rush)						VU		
Schoenoplectus subulatus (Shore Club-rush)						RA		
Schoenoplectus validus (River Club-rush)						VU		
Scleroblitum atriplicinum (Starry Goosefoot)							RA	
Sclerolaena anisacanthoides				RA				
Sclerolaena articulata (Jointed Bindyi)				RA				RA
Sclerolaena bicuspidata (Two-spine Bindyi)							RA	
Sclerolaena blackiana (Black's Bindyi)						RA		RA
Sclerolaena constricta				NT				
Sclerolaena convexula (Tall Bindyi)				NT				
Sclerolaena costata (Ribbed Bindyi)				NT			NT	
Sclerolaena glabra (Smooth Bindyi)							NT	
Sclerolaena johnsonii (Johnson's Bindyi)					NT			NT
Sclerolaena longicuspis (Long-spine Bindyi)				NT	NT			
Sclerolaena muricata var. muricata (Five-spine Bindyi)						NT	NT	
Sclerolaena obliquicuspis (Oblique-spined Bindyi)				RA				
Sclerolaena tatei (Tate's Bindyi)				RA			NT	
Sclerolaena tricuspidata (Three-spine Bindyi)						NT		
Senecio depressicola							NT	
Senecio lacustrinus				RA				
Senecio runcinifolius (Thistle-leaf Groundsel)						RA		RA
Senna artemisioides ssp. alicia (Desert Senna)				NT			NT	
Senna artemisioides ssp. quadrifolia (Four-leaf Desert Senna)					RA		NT	
Senna artemisioides ssp. X coriacea (Broad-leaf Desert Senna)					NT			NT
Senna artemisioides ssp. X sturtii (Grey Senna)				RA			RA	
Senna artemisioides ssp. zygomorpha (Twin-leaf Desert Senna)				NT	NT	NT	NT	NT
Senna notabilis (Showy Senna)				RA				RA
Sesbania cannabina var. cannabina (Sesbania Pea)							RA	RA
Setaria basicalata						NT		RA
Setaria clementii (Clement's Paspalidium)				RA		NT		
Setaria constricta (Knotty-butt Paspalidium)					RA	RA		RA
Setaria jubiflora (Warrego Summer-grass)							RA	
Setaria reflexa							RA	
Sida argillacea					NT			NT
Sida filiformis (Fine Sida)				NT	NT			NT
Sida goniocarpa (Angled Sida)				NT	NT		NT	
Sida petrophila (Rock Sida)							RA	NT
Sida phaeotricha (Hill Sida)								RA
Sida rohlenae ssp. rohlenae (Shrub Sida)				NT				
Sigesbeckia australiensis (Australian Sigesbeckia)						NT		
Solanum chenopodium (Goosefoot Potato-bush)					RA		RA	NT
Solanum ferocissimum (Spiny Potato-bush)								RA
Sonchus hydrophilus (Native Sow-thistle)				RA				RA
Spartothamnella teucriflora (Bead Bush)						VU		
Spergularia marina (Salt Sand-spurrey)							NT	
Sporobolus australasicus					NT			

Flora Taxa	IBRA subregion			Strzelecki Desert	Sturt Stony Desert
	Coongie	Lake Pure	Murn peowie		
Sporobolus caroli (Yakka Grass)	RA	RA			
Sporobolus mitchellii (Rat-tail Couch)			RA		
Sporobolus virginicus (Salt Couch)	RA		NT		
Stackhousia clementii (Limestone Candles)			RA	RA	
Stemodia glabella (Smooth Bluerod)	RA			RA	
Stenopetalum lineare (Narrow Thread-petal)	NT				
Stenopetalum velutinum (Velvet Thread-petal)		NT		NT	NT
Streptoglossa decurrens					RA
Streptoglossa liatroides (Wertaloona Daisy)		RA			
Stylidium desertorum		VU			
Suaeda australis (Austral Seablite)				RA	
Swainsona adenophylla (Violet Swainson-pea)				RA	
Swainsona burkittii (Woolly Darling Pea)			RA		
Swainsona colutooides (Bladder Swainson-pea)			VU		
Swainsona eremaea			RA		
Swainsona extrajacens	RA	RA	RA	RA	
Swainsona fissimontana (Broken Hill Pea)			VU		RA
Swainsona flavicarinata (Yellow-keel Swainson-pea)			NT	RA	
Swainsona formosa (Sturt Pea)			NT		
Swainsona minutiflora (Small-flower Swainson-pea)			VU		
Swainsona oligophylla			NT		
Swainsona oroboides (Variable Swainson-pea)	RA			NT	
Swainsona purpurea (Purple Swainson-pea)	RA		RA	RA	
Swainsona stipularis (Orange Swainson-pea)				NT	NT
Swainsona villosa (Villous Swainson-pea)		RA			
Swainsona viridis (Creeping Darling Pea)			VU		
Synaptantha tillaeacea var. hispidula	NT		NT		NT
Tecticornia arbuscula (Shrubby Samphire)			RA		
Tecticornia fontinalis (Mound Spring Samphire)			VU		
Tecticornia halocnemoides ssp. halocnemoides (Grey Samphire)	RA		RA		
Tecticornia halocnemoides ssp. longispicata (Grey Samphire)	NT				
Tecticornia halocnemoides ssp. tenuis	RA				
Tecticornia indica ssp. bidens (Brown-head Samphire)			RA	RA	
Tecticornia medullosa					NT
Tecticornia nitida (Shining Glasswort)				RA	
Tecticornia pergranulata ssp. divaricata (Black-seed Samphire)	RA			RA	
Tecticornia pergranulata ssp. elongata (Black-seed Samphire)			RA		
Tecticornia pergranulata ssp. pergranulata (Black-seed Samphire)			NT		
Templetonia egena (NC) (Broombush Templetonia)			RA	RA	
Tephrosia supina					RA
Teucrium albicaule (Scurfy Germander)			RA	NT	
Themeda avenacea (Tall Oat-grass)					RA
Themeda triandra (Kangaroo Grass)	RA	NT	RA	RA	
Thysanotus exiliflorus (Inland Fringe-lily)			RA		
Trianthema pilosa				NT	
Tribulus minutus			NT		
Triglochin hexagona (Six-point Arrowgrass)			RA		
Triglochin sp. A Flora of Australia (G.J.Keighery 2477) (Spurred Arrowgrass)		NT			
Triglochin striata (Streaked Arrowgrass)				RA	
Triodia basedowii (Hard Spinifex)			RA		
Triodia irritans (Spinifex)			RA		
Typha domingensis (Narrow-leaf Bulrush)	RA		RA	RA	RA
Uranthoecium truncatum (Flat-stem Grass)			NT		
Utricularia dichotoma (Purple Bladderwort)			EN		
Vigna lanceolata var. latifolia (Maloga Bean)	RA	RA			RA
Vittadinia arida			RA	RA	
Vittadinia pterochaeta (Rough New Holland Daisy)			NT	NT	
Vittadinia sulcata (Furrowed New Holland Daisy)				NT	NT

Flora Taxa	IBRA subregion			Strzelecki Desert	Sturt Stony Desert
	Coon gie	Lake Pure	Murn peowie		
Wahlenbergia aridicola (Dryland Bluebell)	RA	RA	RA		RA
Wahlenbergia gracilenta (Annual Bluebell)	RA		RA		
Wahlenbergia queenslandica					NT
Wahlenbergia stricta ssp. stricta (Tall Bluebell)			RA		
Wurmbea citrina (Green-flower Nancy)	NT	NT	NT		
Yakirra australiensis var. australiensis (Bunch Panic)				RA	NT
Zygophyllum apiculatum (Pointed Twinleaf)		RA	NT		RA
Zygophyllum aurantiacum ssp. cuneatum				NT	
Zygophyllum aurantiacum ssp. simplicifolium			RA		
Zygophyllum aurantiacum ssp. verticillatum (Shrubby Twinleaf)					RA
Zygophyllum compressum (Rabbit-ears Twinleaf)				NT	
Zygophyllum confluens (Forked Twinleaf)			RA		
Zygophyllum crenatum (Notched Twinleaf)			RA		
Zygophyllum emarginatum (Notched Twinleaf)	RA		RA	NT	RA
Zygophyllum humillimum (Small-fruit Twinleaf)	NT	NT	RA	NT	
Zygophyllum hybridum			RA		
Zygophyllum iodocarpum (Violet Twinleaf)	RA				RA
Zygophyllum marliesiae (Square-fruit Twinleaf)			RA		
Zygophyllum ovatum (Dwarf Twinleaf)			RA		
Zygophyllum simile (White Twinleaf)		NT			

D. Fauna species subregional conservation status

IUCN (2003, V3.0 Regional Level) status: CR - Critically Endangered; EN - Endangered; NT - Near Threatened; RA - Rare; RE - Regionally Extinct; VU - Vulnerable.

Fauna class / Taxa	IBRA subregion			Strzelecki Desert	Sturt Stony Desert
	Coongie	Lake Pure	Murnpeowie		
1_Birds					
Acanthiza uropygialis (Chestnut-rumped Thornbill)	NT	NT		NT	
Acrocephalus australis (Australian Reed Warbler)	RA	RA	RA	RA	RA
Actitis hypoleucos (Common Sandpiper)	RA		RA		RA
Amytornis barbatus (Grey Grasswren)	CR				RA
Amytornis goidyi (Eyrean Grasswren)	NT	NT	NT	NT	NT
Amytornis textilis modestus (Thick-billed Grasswren)			VU	RA	RA
Anas castanea (Chestnut Teal)	RA		RA	RA	RA
Anas rhynchotis (Australasian Shoveler)	RA		RA	RA	RA
Anhinga novaehollandiae (Australasian Darter)	RA	RA	RA	RA	RA
Anseranas semipalmata (Magpie Goose)	EN			EN	
Aphelocephala nigricincta (Banded Whiteface)	NT	NT	NT	NT	NT
Aphelocephala pectoralis (Chestnut-breasted Whiteface)			RA		
Aprosmictus erythropterus (Red-winged Parrot)	VU	VU		VU	VU
Apus pacificus (Fork-tailed Swift)	NT		NT		NT
Ardea alba (Great Egret)	RA	RA	RA	RA	RA
Ardea intermedia (Intermediate Egret)	RA		RA	RA	RA
Ardea pacifica (White-necked Heron)	RA	RA	RA	RA	RA
Ardeotis australis (Australian Bustard)	VU	VU	VU	VU	VU
Artamus cyanopterus (Dusky Woodswallow)	RA		NT		
Artamus minor (Little Woodswallow)			RA		
Artamus superciliosus (White-browed Woodswallow)	NT	NT	NT	NT	NT
Ashbyia lovensis (Gibberbird)	NT	NT	NT	NT	NT
Barnardius zonarius (Australian Ringneck)	NT				NT
Biziura lobata (Musk Duck)	RA		RA	RA	RA
Burhinus grallarius (Bush Stonecurlew)	CR		CR		CR
Cacatua leadbeateri (Major Mitchell's Cockatoo)				EN	
Cacomantis pallidus (Pallid Cuckoo)	NT	NT	NT	NT	NT
Calamanthus (Calamanthus) campestris (Rufous Fieldwren)	RA				RA
Calidris acuminata (Sharp-tailed Sandpiper)	RA		RA	RA	RA
Calidris ferruginea (Curlew Sandpiper)				RA	RA
Calidris ruficollis (Red-necked Stint)	RA		RA	RA	RA
Calidris subminuta (Long-toed Stint)	RA				
Calyptorhynchus banksii (Red-tailed Black Cockatoo)	EN				EN
Chalcites osculans (Black-eared Cuckoo)	RA		RA	RA	RA
Charadrius ruficapillus (Red-capped Plover)	RA	RA	RA	RA	RA
Charadrius veredus (Oriental Plover)	RA				RA
Chlidonias hybrida (Whiskered Tern)	NT		RA	RA	RA
Circus approximans (Swamp Harrier)	RA	RA	RA	RA	RA
Cladorhynchus leucocephalus (Banded Stilt)	RA		RA	VU	
Climacteris picumnus (Brown Treecreeper)	NT	NT	RA		NT
Colluricincla harmonica (Grey Shrike-thrush)	NT			NT	NT
Conopophila whitei (Grey Honeyeater)					EN
Coracina maxima (Ground Cuckooshrike)	NT	NT	NT	NT	NT
Corvus orru (Torresian Crow)					RA
Coturnix ypsilophora (Brown Quail)	RA		RA	RA	
Cracticus torquatus (Grey Butcherbird)	RA	RA		RA	RA
Cygnus atratus (Black Swan)	RA		RA	RA	RA
Dendrocygna eytoni (Plumed Whistling Duck)	RA	RA	RA		RA
Egretta garzetta (Little Egret)	RA		RA		RA
Elanus scriptus (Letter-winged Kite)	VU		VU	VU	VU
Emblema pictum (Painted Finch)			RA		
Epthianura albifrons (White-fronted Chat)			RA	RA	
Epthianura crocea (Yellow Chat)					EN

Fauna class / Taxa	IBRA subregion	Coon gie	Lake Pure	Murnpeo wie	Strze lecki Desert	Sturt Stony Desert
Erythrogonys cinctus (Red-kneed Dotterel)		NT	NT	NT	NT	NT
Falco hypoleucos (Grey Falcon)		EN	EN	EN	EN	EN
Falco peregrinus (Peregrine Falcon)		VU		VU	VU	VU
Falco subniger (Black Falcon)		RA	RA	RA	RA	RA
Fulica atra (Eurasian Coot)		NT		NT	NT	NT
Gallinago hardwickii (Latham's Snipe)		RA				
Gallinula tenebrosa (Dusky Moorhen)		RA		RA	RA	RA
Gallirallus philippensis (Buff-banded Rail)		RA		RA		RA
Gelochelidon nilotica (Gull-billed Tern)		RA	RA	RA	RA	RA
Geophaps plumifera (Spinifex Pigeon)						VU
Grantiella picta (Painted Honeyeater)					EN	
Grus rubicunda (Brolga)		VU	VU	VU	VU	VU
Hamirostra melanosternon (Black-breasted Buzzard)		RA		RA	RA	RA
Hieraaetus morphnoides (Little Eagle)		NT	NT	NT	NT	NT
Himantopus himantopus (Black-winged Stilt)		RA	RA	RA	RA	RA
Hydroprogne caspia (Caspian Tern)		RA		RA	RA	RA
Limosa limosa (Black-tailed Godwit)		RA				
Lophoictinia isura (Square-tailed Kite)		EN			EN	EN
Malurus splendens (Splendid Fairywren)				EN		
Megalurus gramineus (Little Grassbird)		NT		NT	NT	NT
Melanodryas cucullata (Hooded Robin)		RA	RA	RA	RA	RA
Melithreptus gularis laetior (Golden-backed Honeyeater)		EN				
Microcarbo melanoleucos (Little Pied Cormorant)		RA		RA	RA	RA
Microeca fascinans (Jacky Winter)		RA	RA	RA	RA	RA
Mirafra javanica (Horsfield's Bush Lark)		RA	RA	RA	RA	RA
Myiagra inquieta (Restless Flycatcher)		RA		RA	RA	RA
Neochmia modesta (Plum-headed Finches)		RA				
Neophema chrysostoma (Blue-winged Parrot)		VU		VU	VU	VU
Neophema elegans (Elegant Parrot)				RA		
Neophema splendida (Scarlet-chested Parrot)				CR		
Neopsephotus bourkii (Bourke's Parrot)				RA		
Ninox connivens (Barking Owl)		VU				VU
Nycticorax caledonicus (Nankeen Night Heron)		RA	RA	RA	RA	RA
Oreoica gutturalis (Crested Bellbird)		RA		RA	RA	RA
Oxyura australis (Blue-billed Duck)		RA		RA	RA	RA
Pardalotus rubricatus (Red-browed Pardalote)					NT	
Pedionomus torquatus (Plains-wanderer)				EN		EN
Pelecanus conspicillatus (Australian Pelican)		NT	RA	RA	RA	RA
Pezoporus occidentalis (Night Parrot)		CR				
Phalacrocorax carbo (Great Cormorant)		RA		RA	RA	RA
Phalacrocorax sulcirostris (Little Black Cormorant)		RA		RA	RA	RA
Phalacrocorax varius (Pied Cormorant)		RA		RA	RA	RA
Phaps histrionica (Flock Bronzewing)		RA	RA	RA	RA	RA
Platalea flavipes (Yellow-billed Spoonbill)		RA	RA	RA	RA	RA
Platalea regia (Royal Spoonbill)		RA	RA	RA	RA	RA
Plegadis falcinellus (Glossy Ibis)		RA	RA	RA	RA	RA
Podiceps cristatus (Great Crested Grebe)		RA		RA	RA	
Pomatostomus ruficeps (Chestnut-crowned Babbler)				RA		
Pomatostomus superciliosus (White-browed Babbler)		RA			RA	
Porphyrio porphyrio (Purple Swamphen)		RA		RA		RA
Porzana fluminea (Australian Spotted Crake)		RA		RA	RA	RA
Porzana pusilla (Baillon's Crake)				RA	RA	RA
Porzana tabuensis (Spotless Crake)		RA		RA	RA	RA
Psephotus haematonotus (Red-rumped Parrot)				RA		
Psephotus varius (Mulga Parrot)		RA			RA	RA
Ptilotula plumula (Grey-fronted Honeyeater)				RA	RA	
Pumella albigularis (White-fronted Honeyeater)					RA	RA
Pyrrholaemus brunneus (Redthroat)				RA	EN	
Recurvirostra novaehollandiae (Red-necked Avocet)		RA	RA	RA	RA	RA

Fauna class / Taxa	IBRA subregion			Strzelecki Desert	Sturt Stony Desert
	Coongie	Lake Pure	Murnpeowie		
Rhipidura albiscapa (Grey Fantail)	RA		RA	RA	RA
Smicronis brevirostris (Weebill)	RA				
Stictonetta naevosa (Freckled Duck)	RA		RA	RA	RA
Struthidea cinerea (Apostlebird)				RA	
Sugomel niger (Black Honeyeater)		NT	NT	NT	NT
Tadorna tadornoides (Australian Shelduck)	RA		RA	RA	RA
Threskiornis moluccus (Australian White Ibis)	NT		RA	RA	RA
Threskiornis spinicollis (Straw-necked Ibis)	NT	RA	RA	RA	RA
Todiramphus sanctus (Sacred Kingfisher)			RA	RA	RA
Tringa glareola (Wood Sandpiper)	RA		RA		RA
Tringa nebularia (Common Greenshank)	RA	RA	RA	RA	RA
Tringa stagnatilis (Marsh Sandpiper)	RA		RA	RA	RA
Tyto longimembris (Eastern Grass Owl)			CR		CR
Tyto novaehollandiae (Australian Masked Owl)	CR				
Vanellus tricolor (Banded Lapwing)	NT	NT		NT	NT
2. Mammals					
Antechinomys laniger (Kultarr)			RE		
Caloprymnus campestris (Desert Rat-kangaroo)					RE
Canis lupus dingo (Dingo)	RA	RA	RA	RA	RA
Dasyuroides byrnei (Kowari)					VU
Hydromys chrysogaster (Water Rat)					RA
Isoodon auratus (Golden Bandicoot)	RE		RE		
Leporillus conditor (Greater Stick-nest Rat)			RE		
Macropus giganteus (Eastern Grey Kangaroo)				RA	
Macroctis lagotis (Greater Bilby (Bilby))	RE			RE	RE
Macroctis leucura (Lesser Bilby)					RE
Notomys cervinus (Fawn Hopping-mouse)					VU
Notomys fuscus (Dusky Hopping-mouse)			RA		
Notomys longicaudatus (Long-tailed Hopping-mouse)			RE		
Pseudomys australis (Plains mouse)			RA	RA	RE
Pseudomys desertor (Desert Mouse)	RA				RA
Pseudomys gouldii (Gould's Mouse)			RE		
Rattus villosissimus (Long-haired Rat (Plague Rat))	RA	RA	RA	RA	RA
3. Reptiles					
Ctenophorus fionni (Peninsula Dragon)			RA		
Ctenophorus maculosus (Lake Eyre Dragon)			RA	RA	
Ctenotus astarte (Ashy Downs Ctenotus)					RA
Ctenotus joanae (Blacksoil Ctenotus)					RA
Demansia rimicola (Channel Country Whipsnake)					RA
Emydura macquarii (Macquarie Tortoise)	VU				VU
Furina diadema (Red-naped Snake)	RA				
Gehyra lazelli (Southern Rock Dteila)			RA		
Morelia spilota (Carpet Python)	RA			RA	RA
Proablepharus kinghorni (Blacksoil Skink)	RA				RA
Ramphotyphlops bicolor (Southern Blind Snake)				RA	
4. Frogs					
Cyclorana cultripes (Knife-footed Frog)	RA				RA
Uperoleia capitulata (Small-headed Toadlet)	RA				
5. Fish					
Amniataba percoides (Barred Grunter)					RA
Bidyanus welchi (Welch's Grunter)	NT				RA
Chlamydogobius eremius (Desert Goby)			NT		RA
Craterocephalus eyresii (Lake Eyre Hardyhead)	RA		NT	RA	RA
Craterocephalus stercusmuscarum ?stercusmuscarum (Fly-specked Hardyhead)			VU		
Hypseleotris klunzingeri (Western Carp Gudgeon)	RA		RA		RA
Leiopotherapon unicolor (Spangled Perch)	NT		NT	RA	RA
Macquaria sp. (undescribed) (Lake Eyre Golden Perch)	RA	NT		RA	RA
Melanotaenia splendida tatei (Desert Rainbow Fish)	RA		RA	RA	RA

Fauna class / Taxa	IBRA subregion					Strzelecki Desert	Sturt Stony Desert
	Coon gie	Lake Pure	Murnpeo wie				
Nematalosa erebi (Bony Bream)	NT		RA			RA	RA
Neosiluroides cooperensis (Cooper Creek Tandan)	RA						RA
Neosilurus hyrtlii (Hyrtl's Tandan)	NT						RA
Porochilus argenteus (Silver Tandan)	NT						RA
Retropinna semoni (Australian Smelt)	NT		RA				RA
Scortum barcoo (Barcoo Grunter)	RA						RA

E. Fauna species records associated with ecotypes

Vertebrate class / Taxa, #conservation status, *introduced	Ecotype																												Total records
	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518	C481519	C481622	
All native fauna	2540	238	1006	724	3719	1217	2682	2680	1258	13394	1377	1659	1568	4064	1951	4014	2833	76	3461	3453	1459	550	278	2352	3241	1529	1552	3188	68063
1_Birds	1374	163	529	452	2536	1028	1299	1735	919	5422	386	619	1296	2339	1429	2353	258	20	947	1659	912	410	190	1292	1661	1098	1117	2324	35767
Acanthagenys rufogularis (Spiny-cheeked Honeyeater)	4	2	4	2	76	32	8	8	24	38	1	6	17	12	9	6	1		8	11	8	3		9	7	5	10	15	326
Acanthiza apicalis (Inland Thornbill)			1		4	1				1											1	1							9
Acanthiza chrysorrhoa (Yellow-rumped Thornbill)			1		1	2														1									5
Acanthiza lineata (Striated Thornbill)					3																								3
Acanthiza robustirostris (Slaty-backed Thornbill)				1																	1								2
Acanthiza uropygialis (Chestnut-rumped Thornbill)			1	1	8	6	14	2	5	15	1		1	2	7	10				2	1	4	1	1	5	5	2	3	97
Accipiter cirrocephalus (Collared Sparrowhawk)			1	2	8			2	1	4				4	3	2			1		1	2		1		2		3	37
Accipiter fasciatus (Brown Goshawk)	1			2	7		2	5	1	7	1		2	6	2		1		4		4	2		2		1		6	56
Acrocephalus australis (Australian Reed Warbler)	12	1	1		9	1	1	2		26		3	4	10					6	7	1				2			2	88
Actitis hypoleucos (Common Sandpiper), #AUS: -, SA: R										2									3										5
Aegotheles cristatus (Australian Owlet-nightjar)	1				4	1	5	2	6	26	1	4	2	2	6	8			1	4	3	2		1	4	8	3	3	97
Amytornis barbatus (Grey Grasswren), #AUS: -, SA: R											1	2	4	4					7	2				1					21
Amytornis goyderi (Eyrean Grasswren)	2						8	9		4			1	5	5	2			5	1				37	4	8	1	9	101
Amytornis modestus (Thick-billed Grasswren), #AUS: VU, SA: -														1															1
Amytornis textilis (Western Grasswren)	1													3						1								5	10
Anas castanea (Chestnut Teal)	1						1			2		1				4				1		1							11
Anas gracilis (Grey Teal)	17		1	4	6	1	16	10	1	69	4	8	13	39	10	47	6	1	20	24	13	23	13	5	12	5	5	30	403
Anas rhynchotis (Australasian Shoveler), #AUS: -, SA: R	2				1	1	5			2		1		3		1			3			6	2	1	1				29
Anas superciliosa (Pacific Black Duck)	9	1		1	4	1	14	6		59	1	5	2	25	3	10	1	1	11	12	8	8	7	4	8	3	2	13	219
Anhinga novaehollandiae (Australasian Darter), #AUS: -, SA: R	3			2	7			3	3	64		4	1	12	1				10	3	3			2	4		2	6	130
Anseranas semipalmata (Magpie Goose), #AUS: -, SA: E										1																			1
Anthus australis (Australian Pipit)	23	9	33	17	29	9	14	13	7	16	6	3	14	29	25	27	4		7	32	13	5	4	13	32	11	15	36	446
Aphelocephala leucopsis (Southern Whiteface)			2		17	33	38	6	5	23	4	6		3	20	25	1		1	11	2	5	4	3	15	15	4	6	249
Aphelocephala nigricincta (Banded Whiteface)	5						8	11		1		1	3		3	5			1	1	2		1	17	7	7	4	16	93
Aprosmictus erythropterus (Red-winged Parrot), #AUS: -, SA: R										2				4	1							1					1		9
Apus pacificus (Pacific Swift (Fork-tailed Swift))												2		1		1				1	1				1		1	8	
Aquila audax (Wedge-tailed Eagle)	17	5	19		45	16	22	15	4	38	3	7	9	29	18	37	2		7	23	11	4	5	12	17	18	11	30	424
Ardea alba (Great Egret)	7			5	1	1		2	2	72	2	7		13		1			13	3	6			3	4		6	8	156
Ardea intermedia (Intermediate Egret), #AUS: -, SA: R	1									16		1							1		2				1		1	1	24
Ardea pacifica (White-necked Heron)	8			5	1	1	3	3		74	3	5	13	34	3	5	2		13	5	7	1	1	7	4	1	8	17	224
Ardeotis australis (Australian Bustard), #AUS: -, SA: V	4			2	2			12		2			3	6		1	1			1	5						2	2	43
Artamus cinereus (Black-faced Woodswallow)	30	5	14	10	49	33	59	53	20	67	6	8	27	47	48	41	5		11	37	24	10	9	42	58	40	39	56	848
Artamus cyanopterus (Dusky Woodswallow)					7	1																							8

Vertebrate class / Taxa, #conservation status, *introduced	Ecotype																												
	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518	C481519	C481622	Total records
Artamus leucorynchus (White-breasted Woodswallow)	14	2		2	14	1	8	4	4	80	3	11	6	10	6	9	1		7	6	4			6	9	7	5	13	232
Artamus minor (Little Woodswallow)										1						1													2
Artamus personatus (Masked Woodswallow)	2	1	3	2	20	15	7	23	14	23	6	4	14	15	5	11	1		2	6	7	2		7	5	3	8	13	219
Artamus sp. (Woodswallow)															1	3								1			1		6
Artamus superciliosus (White-browed Woodswallow)	1		1		13	2	7	7		11	1		6	6	7	7	1			6	3	1		1	5	3	1	2	92
Ashbyia lovensis (Gibberbird)	15		3	12	1	4		2	3		1		3	13						16	17				1			9	100
Aythya australis (Hardhead)	3			2	3	1	9	3	1	58	1	3	4	17	4	12			10	4	5	10	3	1	4	1	1	10	170
Barnardius zonarius (Australian Ringneck)		1	4	1	30	8	4	1	2	38		2		1	4	4				2	3	3			4	1	1	1	115
Biziura lobata (Musk Duck), #AUS: -, SA: R	1									5		2		6	3	3	1		9		1	1	1	1				4	38
Cacatua galerita (Sulphur-crested Cockatoo)					1		1																						2
Cacatua sanguinea (Little Corella)	26	2	19	9	82	30	22	49	25	147	7	6	24	48	29	75	6	1	13	24	23	4	2	26	29	24	25	58	835
Cacomantis pallidus (Pallid Cuckoo)	3			2	1		4	7	3	8	1	1	4	6	4	8	2			3	2				5	3		9	76
Calamanthus (Calamanthus) campestris (Rufous Fieldwren)	10	20	5		2	2							2			7				5	6	1			1			4	65
Calidris acuminata (Sharp-tailed Sandpiper)	2							1		1	1	1	2			3			6	10			1				1	29	
Calidris ferruginea (Curlew Sandpiper), #AUS: CR, SA: -													1																1
Calidris ruficollis (Red-necked Stint)													2																2
Calyptorhynchus banksii samueli (Red-tailed Black Cockatoo (far north SA ssp))										1																			1
Certhionyx variegatus (Pied Honeyeater)	1	2	1		4	3	15	26	3	10	2		17	5	8	5			1	10		1	1	8	7	15	6	7	158
Chalcites basalis (Horsfield's Bronze Cuckoo)	6			2	9	3	10	17	2	41	2	4	10	19	10	20	2		6	6	3			12	13	11	9	17	234
Chalcites osculans (Black-eared Cuckoo)	1			2	2			1	1	2						1			1	1		1		3			2	2	20
Charadrius ruficapillus (Red-capped Plover)	3	1						3		5	1	2	4	2	1	5	1		3	15			1	2	2		2	9	62
Charadrius veredus (Oriental Plover)																									1				1
Chenonetta jubata (Maned Duck (Australian Wood Duck))	5			5	4	2	3	5	2	39	1	5	10	23	8	24	3		7	5	4	6	6	3	9	6	3	19	207
Cheramoeca leucosterna (White-backed Swallow)	10	1		4	8	3	20	22	4	35	2	4	8	23	29	63	1		8	16	5	2	1	38	35	32	18	37	429
Chlamydera maculata (Spotted Bowerbird), #AUS: -, SA: E										1				1															2
Chlidonias hybrida (Whiskered Tern)	4				3		1			8	1	1	2	7	2	4			6	3	2	3	1	1	1	1	1	5	57
Chroicocephalus novaehollandiae (Silver Gull)	3	1					2	1	1	10	2	5		8	2	17	1		11	1				2	6		1	9	83
Cincloramphus cruralis (Brown Songlark)	26		17	5	17	7	3	18	4	12	4	2	11	10	8	22			4	19	5			12	13	5	12	24	260
Cincloramphus mathewsi (Rufous Songlark)	8		5	4	19	2	11	9	1	36	3	1	25	11	7	7	2		5	13	5				5	8	9	17	213
Cinclosoma castaneothorax (Chestnut-breasted Quail-thrush)																											1		1
Cinclosoma cinnamomeum (Cinnamon Quailthrush)	31	9	10	4	28	9	16	28	11	10		1	16	22	7	15				37	14		2	40	8	12	6	37	373
Circus approximans (Swamp Harrier)	2				5		1	1		7		4	2	3		2			4	4				1				4	40
Circus assimilis (Spotted Harrier)	2		2	1	12	1		8	6	9			5	6	2	4			3	3	2			4	4	1	6	6	87
Cladorhynchus leucocephalus (Banded Stilt), #AUS: -, SA: V										1				1		4	1			3								1	11
Climacteris affinis (White-browed Treecreeper), #AUS: -, SA: R										1	1																		2
Climacteris picumnus (Brown Treecreeper)				2	2		3	3	1	64	1	3		1	3	1		1	3	1	4	2			3	2		4	104
Colluricincla harmonica (Grey Shrikethrush)	1			2	6	4		2	3	52	1	10	2	5					5	1	4	2		1	7	3	6	3	120

	Ecotype																												
Vertebrate class / Taxa, #conservation status, *introduced	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518	C481519	C481622	Total records
Coracina maxima (Ground Cuckooshrike)				1	3	1	4	4	3	8		1	1	1	1	2	2			4				2	5	2	1	4	50
Coracina novaehollandiae (Black-faced Cuckooshrike)	9	1		5	17	4	10	10	7	55	3	6	6	18	8	14	5		5	15	4	1		2	5	4	9	15	238
Coracina papuensis (White-bellied Cuckooshrike), #AUS: -, SA: R																											1	1	
Corvus bennetti (Little Crow)	32	1	2	5	9	3	27	41	11	56	3	8	20	43	52	60	4		4	30	12	3	1	29	59	28	26	46	615
Corvus coronoides (Australian Raven)	26	4	17	9	63	40	25	38	24	131	9	15	20	55	32	64	5	1	21	40	31	11	5	34	37	35	30	55	877
Corvus mellori (Little Raven)			8		14	1					1			1															25
Corvus orru (Torresian Crow)	1			1							1													1			1		5
Corvus sp. (Crow or Raven)	10	1	4		4	4	4	16		11	2		4	10	8	7			1	6	2		1	2	15	4	1	10	127
Coturnix pectoralis (Stubble Quail)	3		2	1	12	1		1	1	4	2		1	1		1	1			2				1	1			2	37
Coturnix ypsilophora (Brown Quail), #AUS: -, SA: V	1			1						1			1	1							1						2		8
Cracticus nigrogularis (Pied Butcherbird)				1			1								4	2											2		10
Cracticus torquatus (Grey Butcherbird)			1	1	5	2		2	5	9			8			1				1	5	4	1				1	1	47
Cygnus atratus (Black Swan)	4	2					7			7	1	4	1	6	3	7	32		11	5		14	4	2	3			4	117
Dendrocygna eytoni (Plumed Whistling Duck)	1			1						2	2			2	1		1		1	5	1				1		1	1	20
Dicaeum hirundinaceum (Mistletoebird)	5		2	5	22	13	12	13	7	41	1	1	7	14	12	21	1		6	7	8	4	1	7	5	15	13	21	264
Dromaius novaehollandiae (Emu)	14	2	12	1	57	17	16	9	7	16	2	2	8	22	9	28	6		5	16	2	12	5	19	5	3	9	16	320
Egretta garzetta (Little Egret), #AUS: -, SA: R	2			1						12				2					1		1						1		20
Egretta novaehollandiae (White-faced Heron)	13			3	5	1	2	11	3	75	3	5	5	18	4	6	1		10	8	5	2	2	3	2		3	13	203
Egretta picata (Pied Heron)				1																									1
Elanus axillaris (Black-shouldered Kite)	3		5	3	21	2	1		2	6	1		2	5		1			1	2		1		1	2		4	4	67
Elanus scriptus (Letter-winged Kite), #AUS: -, SA: R	2									1	1		1		4					1					1	1	1	1	14
Elseyornis melanops (Black-fronted Dotterel)	17	1		6	5		3	10	6	70	2	10	12	23	5	40	3		14	13	8		1	6	7	1	6	20	289
Emblema pictum (Painted Finch), #AUS: -, SA: R				1	2				1																		4		8
Eolophus roseicapilla (Galah)	37	3	25	9	106	50	30	50	33	160	16	10	48	70	31	69	9	2	17	49	27	9	2	30	43	23	36	50	1044
Ephippiorhynchus asiaticus (Black-necked Stork)																		1											1
Epthianura albifrons (White-fronted Chat)					1	1	1																						3
Epthianura aurifrons (Orange Chat)	50	3	10	2	6	5	16	11	2	17	5	6	27	40	11	66	9		14	34	5		1	12	10	5	3	31	401
Epthianura crocea (Yellow Chat), #AUS: -, SA: E													3							5									8
Epthianura tricolor (Crimson Chat)	15	2	3	2	27	18	33	57	14	29	2	4	21	25	17	30	1		7	12	4	2	1	19	16	11	14	34	420
Erythrogonyx cinctus (Red-kneed Dotterel)	7						2	3		7		5	3	11	1	8	2		7	3	1		1	3	4		1	5	74
Eurostopodus argus (Spotted Nightjar)	3	1	2	1	6	2	2		4	3			1	3	1		1		2		1				1	1	1	5	41
Falco berigora (Brown Falcon)	19	3	8	9	38	12	25	29	9	43	5	5	20	36	22	61	5		8	20	10	4	2	31	21	19	20	41	525
Falco cenchroides (Nankeen Kestrel)	34	6	33	16	65	26	19	16	15	28	3	3	15	31	12	43	3		6	24	17	3	2	26	11	10	23	37	527
Falco hypoleucos (Grey Falcon), #AUS: -, SA: R	1					1	1	2		2				2		2				1					4	1		4	21
Falco longipennis (Australian Hobby)	2		2		9	2	1	4	3	14	1	1	1	3	1	4			2	5	1		2	3	1	3	2		67
Falco peregrinus (Peregrine Falcon), #AUS: -, SA: R	1				2		2		3											1									9
Falco subniger (Black Falcon)	1				4	2		1		8	1	3	4	1	2	1			3	1	2				1	6	4	3	48

Vertebrate class / Taxa, #conservation status, *introduced	Ecotype																												
	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518	C481519	C481622	Total records
Fulica atra (Eurasian Coot)	9	1		1	6		8		1	44		6		21	3	7	1		10	2	2	12	4	2	5		2	9	156
Gallinula tenebrosa (Dusky Moorhen)	2			1						7		1		5					3						1			3	23
Gallirallus philippensis (Buff-banded Rail)										1		1												1	1		1		5
Gavicalis virescens (Singing Honeyeater)	27	2	25	4	123	61	47	58	35	37	4		27	40	84	76	3		6	33	18	6	4	41	113	48	64	60	1046
Gelochelidon nilotica (Gull-billed Tern)	4	1	1				3	7		12	3	2	3	10	1	9			10	6					5	1	2	6	86
Geopelia cuneata (Diamond Dove)	14		3	4	39	7	11	42	19	57	7	9	30	29	16	20	4		6	16	7	2		14	16	13	13	27	425
Geopelia placida (Peaceful Dove)	7	1		1	8	2	3	9	9	88	4	13	2	14	10	7			9	12	8	1	1	4	8	10	6	13	250
Geophaps plumifera (Spinifex Pigeon), #AUS: -, SA: R				2						1			2	2							1						3		11
Grallina cyanoleuca (Magpielark)	16	1		12	26	10	19	21	19	148	10	15	28	50	18	47	5		18	29	23	9	2	13	19	21	17	36	632
Grus rubicunda (Brolga), #AUS: -, SA: V	14			1	1		1	9	3	26	4		11	16	1				3	12	6	1		3	2		4	17	135
Gymnorhina tibicen (Australian Magpie)	26	4	10	11	44	26	30	37	23	87	4	9	24	37	46	54	6		10	26	21	6	3	16	40	22	21	60	703
Haliastur spheurnus (Whistling Kite)	10	1		4	5	2	3	12	7	124	8	15	8	20	7	19	2		20	8	7			7	14	6	12	24	345
Hamirostra melanosternon (Black-breasted Buzzard), #AUS: -, SA: R	1						1	2		14		1		3		6				5	1			1	2	4		2	43
Hieraaetus morphnoides (Little Eagle)	3	1	1	1	5	1	2	4	4	22		2		3		1			1	5		1		4	4	7	1	3	76
Himantopus leucocephalus (White-headed Stilt)	10			1	1		10	1		22	2	4	3	17	3	21	2		7	9		13	4	1	5			15	151
Hirundo neoxena (Welcome Swallow)	11		2	2	4	5	10	4	1	35		1		13	5	5			5	11	4	5	2		2	2	3	10	142
Hydroprogne caspia (Caspian Tern)	2						1			15		6	1	6		3			13					3	2			6	58
Lalage tricolor (White-winged Triller)	13		1	3	16	10	15	28	11	30	4	1	20	10	4	8			3	11	3	3	2	5	9	11	8	11	240
Lichenostomus melanops (Yellow-tufted Honeyeater)						1																							1
Lichmera indistincta (Brown Honeyeater), #AUS: -, SA: R										1																			1
Limosa limosa (Black-tailed Godwit), #AUS: -, SA: R																				1									1
Malacorhynchus membranaceus (Pink-eared Duck)	8			3	2		10	6	1	28	2	5	7	24	8	15	3	1	14	5	4	20	6	5	8		2	18	205
Malurus lamberti (Variegated Fairywren)	12	2	9	3	75	13	16	33	7	58	3	12	10	28	19	24	1	1	17	19	9	3	1	31	28	32	16	48	530
Malurus leucopterus (White-winged Fairywren)	56	18	35	7	86	21	33	73	12	56	10	15	36	73	60	90	8		14	53	17	6	8	103	97	50	46	94	1177
Malurus sp. (Fairywren)	4					1		1					1	1		3				18				1			1	31	
Malurus splendens (Splendid Fairywren)							1									1													2
Manorina flavigula (Yellow-throated Miner)	24	1	1	10	44	9	27	48	27	118	6	13	25	57	54	33	6	1	16	21	21	5	4	31	50	26	19	60	757
Manorina sp. (Miner)														2											5				7
Megalurus gramineus (Little Grassbird)	7				3	1	1	3		26		5	3	13		14	1		8	7	2			2	2	1	1	9	109
Melanodryas cucullata (Hooded Robin)					4			1		2						2				2						1			12
Melopsittacus undulatus (Budgerigar)	32	5	16	13	62	27	24	91	67	94	12	5	56	48	67	28	8		7	54	22	9	5	47	67	30	38	53	987
Merops ornatus (Rainbow Bee-eater)	8	1	3	1	44	17	4	11	14	44	3	10	16	15	3	17	1		7	11	8	1		4	11	8	12	12	286
Microcarbo melanoleucos (Little Pied Cormorant)	6			1	3	1	2			24		2		11	2	5			6	1	1	1			2		2	2	72
Microeca fascians (Jacky Winter), #AUS: -, SA: ssp			1	1	2			1		13	2			2							3				1	1			27
Milvus migrans (Black Kite)	44	1	10	16	30	8	35	56	20	130	17	12	31	64	32	75	6	1	17	35	32	6	1	42	42	28	45	57	893
Mirafra javanica (Horsfield's Bush Lark)	2									4	6		4	3					1	3	2						2		27
Myiagra inquieta (Restless Flycatcher), #AUS: -, SA: R							1	1	3	14	1	2	2	1	6	3			3							1		2	40

	Ecotype																												
Vertebrate class / Taxa, #conservation status, *introduced	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518	C481519	C481622	Total records
Neochmia modesta (Plum-headed Finch)									1	1	1																2		5
Neophema chrysostoma (Blue-winged Parrot), #AUS: -, SA: V	3				2									3	1	4								3	1	1		6	24
Neophema elegans (Elegant Parrot), #AUS: -, SA: R					1	2																						3	
Neopsephotus bourkii (Bourke's Parrot)	2			1			12	3	14	12	1		4	4	10	7	4			1	6				1		6	3	91
Ninox boobook (Southern Boobook)			1	1	2			1		2			2	1	1	4								3	1	2	1	5	27
Ninox connivens (Barking Owl), #AUS: -, SA: R										8		1							2	1	1							1	14
Northiella haematogaster (Bluebonnet)	10			1	4	4	26	20	3	43	4	7	14	21	32	32	5		7	19	4	10	4	24	20	19	10	28	371
Nycticorax caledonicus (Nankeen Night Heron)	4			3				2	1	44		1	2	12	1	1			7	2	4				1	1	2	1	89
Nymphicus hollandicus (Cockatiel)	5	1	7	4	13	5	8	27	7	29	4	1	16	15	9	10	2		3	9	9	1	1	10	6	3	6	8	219
Ocyphaps lophotes (Crested Pigeon)	40	5	15	9	85	40	27	56	27	140	8	17	29	65	56	67	4		19	38	28	5	4	41	69	32	29	85	1040
Oreoica gutturalis (Crested Bellbird)					10	6	14	1	2	1		3	1		9	9	2				1	3	2		3	1	3		71
Oxyura australis (Blue-billed Duck), #AUS: -, SA: R	1			1						4		2							3	1		1			1			2	16
Pachycephala rufiventris (Rufous Whistler)	1			4	29	8	2	1	6	13		1	5	2	1	3	2		2	7	4			1		3	2	1	98
Pardalotus punctatus (Spotted Pardalote)										1																			1
Pardalotus rubricatus (Red-browed Pardalote)	4	1		4	3	2	6	14	13	59	2	7	9	11	5	9			4	10	4	1		4	14	10	6	13	215
Pardalotus striatus (Striated Pardalote)	2				16	11	1		1	17	2		1	1	4	5	1		1	5	2	3		1	2			3	79
Pedionomus torquatus (Plains-wanderer), #AUS: CR, SA: E	1				1																								2
Pelecanus conspicillatus (Australian Pelican)	2			2	1	1		1	3	83	5	8	1	12	2	2			19	2	7			5	7	2	4	9	178
Peltohyas australis (Inland Dotterel)	9		2	4	1	2	2		3				6	5	1	3	2			11	4	1	2		2		1	6	67
Petrochelidon ariel (Fairy Martin)	13	1	2	4	15	2	7	8	8	85	8	9	22	28	9	30	1		9	10	14			9	16	13	15	19	357
Petrochelidon nigricans (Tree Martin)	12	1	5	2	62	17	12	16	6	113	6	14	20	15	16	22	6	1	17	17	8	2	1	11	11	14	6	19	452
Petroica goodenovii (Red-capped Robin)	8	1	1	4	22	15	17	12	6	18	3	1	13	10	10	11	2		4	10	9	3		15	5	10	7	17	234
Phalacrocorax carbo (Great Cormorant)	2			3	5			1	1	44	1	3		11		1			10	2	5			2	4		2	6	103
Phalacrocorax sulcirostris (Little Black Cormorant)	8			2	7		1	1	1	49		3	1	15		5			11	4	3	1		2	3		4	8	129
Phalacrocorax varius ((Australian) Pied Cormorant)	4			1	1		1			35	1	2		5					9	2	5		1	3	3		1	4	78
Phaps chalcoptera (Common Bronzewing)	1		2		11		1	3	2	3			1	4	4					2	4			2		3	3	3	49
Phaps histrionica (Flock Bronzewing), #AUS: -, SA: R	9			2			5	4	1	1	2		11	13	1		4			3	4			6		1	2	2	71
Platalea flavipes (Yellow-billed Spoonbill)	3			2	1		3	4	1	38	1	5		16	2	6			12	5	2	1	2	4	4	2	3	13	130
Platalea regia (Royal Spoonbill)	3			1	3			1		31	1	3	2	11					11	1	2			3	3		2	6	84
Plegadis falcinellus (Glossy Ibis), #AUS: -, SA: R	1			1				2		9	3	1	1	4		2			6	5								2	37
Podargus strigoides (Tawny Frogmouth)			2		2	1	1		2	2			1	2	2	3			1		2				2	1	1	2	27
Podiceps cristatus (Great Crested Grebe), #AUS: -, SA: R										5						2			3									1	11
Poliiocephalus poliocephalus (Hoary-headed Grebe)	7			1	3		2	1		10		4		12	3	10	1		9	1	2			3	3	1		12	85
Pomatostomus ruficeps (Chestnut-crowned Babbler)	1				9	13	28	9	2	22	4	7	6	13	35	15	2	1	1	5	5	6	2	8	29	26	8	9	266
Pomatostomus superciliosus (White-browed Babbler)			1		21	7	4			4				2	2	1				5		3		1			2	3	56
Porphyrio porphyrio (Purple Swamphen)	8			1	2	1				23		1	1	13					3	1	1				2		2	2	61
Porzana fluminea (Australian Crake (Australian Spotted Crake))	3				1					1		1		2		14			1	1				1	1			2	28

Vertebrate class / Taxa, #conservation status, *introduced	Ecotype																										Total records		
	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518		C481519	C481622
Porzana pusilla (Baillon's Crake)	2									3										1				1		1		1	9
Porzana tabuensis (Spotless Crake), #AUS: -, SA: R								1		3					3				1	1								1	10
Psephotus haematonotus (Red-rumped Parrot)				5	3			3	20	115	6	13	8	12	1	17		1	13	8	14			3	13	15	2	8	280
Psephotus varius (Mulga Parrot)		1	3		29	23	5	2		7	1		1		2					2		3			1	4	1		85
Psophodes cristatus (Chirruping Wedgebill)	4		23		76	45	27	11	1	29	3	16	8	20	20	21			6	8	4	7		14	35	23	3	10	414
Ptilotula penicillata (White-plumed Honeyeater)	22	2	1	12	49	10	16	17	40	192	14	18	43	44	17	22	5	1	16	24	23	1	3	17	20	23	22	35	709
Ptilotula plumula (Grey-fronted Honeyeater)				1			1		1											1							1		5
Purnella albifrons (White-fronted Honeyeater)					8	3		1	2				1	1	6				1			1				1			25
Pyrrholaemus brunneus (Redthroat)			1		3		2									3													9
Recurvirostra novaehollandiae (Red-necked Avocet)	4			1	1		14	6		10	2	3	2	22	6	16	2		6	11	2	13	3	1	10		2	14	151
Rhipidura albiscapa (Grey Fantail)										6		1	2	1	1	5			4	1	3						1	4	29
Rhipidura leucophrys (Willie Wagtail)	34	1	10	18	86	49	38	52	44	160	13	18	41	55	33	75	4	2	20	41	30	9	4	47	40	43	44	78	1089
Smicromis brevirostris (Weebill)			1		8	3	1			2										1		1							17
Stictonetta naevosa (Freckled Duck), #AUS: -, SA: V	1						3			5				5	1	1			2	1		8	3	1	1				32
Stiltia isabella (Australian Pratincole)	14			14	2	6	2	2		4	3	2	13	15	2	2	3		2	23	4			4			1	8	126
Struthidea cinerea (Apostlebird)					2		3								1	4					1	3	1						15
Sugomel niger (Black Honeyeater)	4				3		2	7	1				7		9				2	1	1				3	1	7	1	49
Tachybaptus novaehollandiae (Australasian Grebe)	9		1	1	5		1		2	23	2	3	3	15	4	11	1		6	3	6	1		3	1	2	2	9	114
Tadorna tadornoides (Australian Shelduck)				1			2			3				1		28			3	1	1			1	1			5	47
Taeniopygia guttata (Zebra Finch)	61	12	30	21	151	58	46	108	54	122	11	12	63	81	73	63	3		14	150	38	9	13	78	83	61	68	94	1577
Thinornis rubricollis (Hooded Plover/Dotterel)), #AUS: VU, SA: V														1															1
Threskiornis moluccus (Australian White Ibis)	1			1		1				12	2	4	1	6					6	2		1		1	2		1	2	43
Threskiornis spinicollis (Straw-necked Ibis)	2		1	2	3		1	2	5	48	3		3	10	3	2	1		8	4	6		1	2	3		6	4	120
Todiramphus pyrrhopygius (Red-backed Kingfisher)	7	1	8	2	32	14	9	11	11	55	2	4	15	12	6	13		1	2	8	10	1		4	12	9	6	15	270
Todiramphus sanctus (Sacred Kingfisher)	1	1		2	2	2	2	1	1	33			1	1	2						1				2	1		1	54
Tribonyx ventralis (Black-tailed Nativehen)	9			4	5	1	2	9	3	37	5	11	7	26	4	28	3	1	14	6	7	5		3	9		6	13	218
Tringa glareola (Wood Sandpiper), #AUS: -, SA: R	1											1							1	1									4
Tringa nebularia (Common Greenshank)								1			1	1	2	1		1			3	8					2			3	23
Tringa stagnatilis (Marsh Sandpiper)										2				1					1	4					1			2	11
Turnix velox (Little Buttonquail)	3		9	3	12	2	1	8	2	7	1		5	6	3	1	1			10	5	1		3		2	4	3	92
Tyto delicatula (Eastern Barn Owl)	1	1	1	1	11	2	2	1	4	13		1	1	2	1	4			2	2	8					3	4	4	69
Tyto longimembris (Eastern Grass Owl), #AUS: -, SA: R																1													1
Vanellus miles (Masked Lapwing)	7			1	1		8	5		34	3	6	5	24	4	43			13	15	1	8	1	1	6			24	210
Vanellus tricolor (Banded Lapwing)	7	1				4	4	7	4	4			10	6	12	6	2			13	1			1	16	4	6	7	115

	Ecotype																												
Vertebrate class / Taxa, #conservation status, *introduced	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518	C481519	C481622	Total records
2_Mammals	963	25	142	194	409	49	377	221	195	104	54	25	152	437	100	360	10	5	9	1102	240	98	61	301	388	99	131	263	6514
Antechinomys laniger (Kultarr)	191			1				3			1		16	56					1	23	37		1					1	331
Austronomus australis (White-striped Free-tailed Bat)					1		3	6	1							2				1			1					4	19
Chalinolobus gouldii (Gould's Wattled Bat)					17		3		12	2	1			2	6													6	49
Chalinolobus morio (Chocolate Wattled Bat)					2																								2
Dasyercus cristicauda (Crest-tailed Mulgara (Ampurta)), #AUS: VU, SA: -	2						4	3						1		19								37		3		7	76
Dasyuroides byrnei (Kowari), #AUS: VU, SA: V	402												15	72						12	47								548
Hydromys chrysogaster (Water Rat)										2																			2
Leggadina forresti (Central Short-tailed Mouse (Forrest's Mouse))	16	4	28	13	17	2	1	1	26	4			16	7	3			2		243	6		3	4	13	3	2	6	420
Leporillus conditor (Greater Stick-nest Rat), #AUS: VU, SA: V		1		1																									2
Macropus fuliginosus (Western Grey Kangaroo)					3		4								3							2	2				1		15
Macropus giganteus (Eastern Grey Kangaroo), #AUS: -, SA: R																1						2					1		4
Macropus robustus (Euro)		1	4		8	1																							14
Macropus rufus (Red Kangaroo)	6	3	19	6	58	12	19	12	4	3			2	5	6	16	2			8	5	9	7	3	4	1	5	5	220
Macropus sp. (Kangaroo/Wallaby)		1				2	4		5	3			1	2						1	2	1		2	1				25
Mormopterus petersi (Inland Free-tailed Bat)					8		1								3													7	19
Mormopterus planiceps (Southern Free-tailed Bat)					5																								5
Mormopterus sp. (Free-tailed Bat)					3		3			1				1															8
Ningai ridei (Wongai Ningai)								16																1	1		1		19
Notomys alexis (Spinifex Hopping-mouse)	1						1	4			5									12	2				11		2	2	40
Notomys cervinus (Fawn Hopping-mouse), #AUS: -, SA: V	66													22							9								97
Notomys fuscus (Dusky Hopping-mouse), #AUS: VU, SA: V	4				89	1	160	1		3				3	2	247				315		82	23	31	58	31	3	55	1108
Notomys sp. (Hopping-mouse)	15							2						2		1			1	2	4			29	1	3	1	4	65
Nyctophilus geoffroyi (Lesser Long-eared Bat)					25		14	8	26	12	6		3		7					1		1					1	6	110
Petrogale xanthopus xanthopus (Yellow-footed Rock-wallaby), #AUS: VU, SA: -				1																									1
Planigale gilesi (Giles' Planigale (Paucident Planigale))							6	1		2			2	6		1		1		26					1		1		47
Planigale ingrami (Long-tailed Planigale)									1		3		4	6						1					2				18
Planigale sp. (Planigale)	1								1	2					1										2			1	8
Planigale tenuirostris (Narrow-nosed Planigale)		1	7		4															1	1		1					1	16
Pseudomys australis (Plains mouse), #AUS: VU, SA: V			7	1	5		4							1	1					2		3			2				26
Pseudomys bolami (Bolam's Mouse)			3		2	2	1																						8
Pseudomys desertor (Desert Mouse)	2		2	1	30	4	5	5		1	4		2	5	1					41	25		6	8	4			4	150
Pseudomys hermannsburgensis (Sandy Inland Mouse)	30		2	1	6	2	51	131	5	6	2	2	12	53	19	21			2	33	1	3		122	52	20	34	48	658
Pseudomys sp. (Native Mouse)									1					6						2	2			1	3				15
Rattus villosissimus (Long-haired Rat (Plague Rat))	186		2	84	23	6	11	12	26	44	17	1	29	69		2		1	1	113	56		5	12	78	11	47	47	883

	Ecotype																												
Vertebrate class / Taxa, #conservation status, *introduced	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518	C481519	C481622	Total records
Saccolaimus flaviventris (Yellow-bellied Sheath-tailed Bat), #AUS: -, SA: R																1	1												2
Scotorepens balstoni (Inland Broad-nosed Bat)					8		2			1			4		1														16
Scotorepens greyii (Little Broad-nosed Bat)							9		8	3			3	3	7											1		11	45
Sminthopsis crassicaudata (Fat-tailed Dunnart)	23	4	32	58	29	8	53	3	34	8	3	20	13	58	24	30	6	1	2	122	5		4	34	103	19	12	27	735
Sminthopsis macroura (Stripe-faced Dunnart)	18	10	36	26	36	5	18	13	34	7	12	2	30	57	15	16	1		2	137	38			16	50	7	19	20	625
Sminthopsis sp. (Dunnart)									6											4					2			1	13
Tachyglossus aculeatus (Short-beaked Echidna)					9	4			5						1	3						1	2	1			1		27
Vespadelus baverstocki (Inland Forest Bat)					21															2									23
3_Reptiles	172	50	334	65	751	139	849	702	123	214	115	19	67	450	401	870		51	33	624	192	40	26	695	1184	327	301	595	9389
Amphibolurus burnsii (Channel Dragon)									1	7																			8
Anilius bituberculatus (Rough-nosed Blind Snake)	1				1	2																			1		2	7	
Anilius endoterus (Centralian Blind Snake)							2	5						7	1									3	4	3	2	1	28
Anilius sp. (Blind Snake)																								2	1		2		5
Antaresia stimsoni (Stimson's Python)					1																								1
Aspidites ramsayi (Woma), #AUS: -, SA: R	2				2					2	1									7	1	1		1	8	4	1	2	32
Brachyuropsis australis (Coral Snake)								1																					1
Brachyuropsis fasciolatus (Narrow-banded Snake)			1		1		1								2							1			1				7
Cryptoblepharus australis (Desert Wall Skink)					19	1	2		1	1				1	2						1							1	29
Cryptoblepharus ochrus (Eyrean Wall Skink)							1																						1
Cryptoblepharus pannosus (Speckled Wall Skink)										1																			1
Ctenophorus cristatus (Crested Dragon)														1															1
Ctenophorus fordi (Mallee Dragon)					11	9	55							25	44	31									76	10	24	5	290
Ctenophorus isolepis (Military Dragon)								92																			8		100
Ctenophorus maculosus (Lake Eyre Dragon)			2												12					4									18
Ctenophorus nuchalis (Central Netted Dragon)	5		1	1	8	2	50	40	9	4	8		2	36	16	26				13	1	1		11	60	24	12	33	363
Ctenophorus pictus (Painted Dragon)	1		1		12	5	83	20		1	6			24	14	138		1		18	1			84	72	55	8	92	636
Ctenophorus vadrappa (Red-barred Dragon)					1																								1
Ctenotus ariadnae (Pin-striped Ctenotus)								24																					24
Ctenotus astarte (Ashy Downs Ctenotus), #AUS: -, SA: R														9															9
Ctenotus brooksi (Sandhill Ctenotus)	3						235							1	34	160											7		440
Ctenotus inornatus (Brown Ctenotus)								24			1			3	4									6	19		10		67
Ctenotus joanae (Blacksoil Ctenotus), #AUS: -, SA: R				2						2			1	5							1								11
Ctenotus leae (Centralian Coppertail)							2	21					1	1										11	1	1	1	1	40
Ctenotus leonhardii (Common Desert Ctenotus)		1	13		96	8		17	5		1			2	6										3		3		155
Ctenotus olympicus (Saltbush Ctenotus)		6	17	3	42	18															1			1	5	1		3	97
Ctenotus orientalis (Spotted Ctenotus)			1			1																							2
Ctenotus pantherinus (Leopard Skink)					8			47													1						1		57

Vertebrate class / Taxa, #conservation status, *introduced	Ecotype																												
	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518	C481519	C481622	Total records
Ctenotus regius (Eastern Desert Ctenotus)	7	1	2		68	10	17	85	11	10	5	2	10	28	11	11		4	4	8	1	1	1	60	29	17	16	34	453
Ctenotus schomburgkii (Sandplain Ctenotus)	1		7		37	14	115	32			1			11	37	75				1		8	4		25	8	17	1	394
Ctenotus sp. (Ctenotus)		1			5	1		2	1	2				3		2				2			1	3	1		1	1	26
Ctenotus spaldingi (Eastern Striped Skink)					5	1															2					1			9
Ctenotus strauchii (Short-legged Ctenotus)	18		48	4	22	3	11		1				1	10	1	2				9	14	2	4	2	12	2	2	8	176
Ctenotus taeniatus (Eyrean Ctenotus)	6	1	2			3	3	30		2			2	5	11	34		2	1	3	2		2	128	62	19	14	34	366
Cyclodomorphus venustus (Saltbush Slender Bluetongue)													5								1								6
Delma butleri (Spinifex Snake-lizard)					2			5						2	1										5				15
Delma tincta (Black-necked Snake-lizard)			1						1	9	1			4															16
Demansia psammophis (Yellow-faced Whipsnake)					1																								1
Demansia rimicola (Channel Country Whipsnake), #AUS: -, SA: R														1						1				1					3
Diplodactylus conspicillatus (Variable Fat-tailed Gecko)											1																1		2
Diplodactylus tessellatus (Tessellated Gecko)	5	3	26	3	5	4	5	3		7	12	2	1	18	1	5		3	1	7	3		3		22	5		10	154
Diporiphora winneckei (revised) (Canegrass Dragon)											1													4		1			6
Egernia stokesii (Gidgee Skink)	1	2		1	1				5												1						1	3	15
Emydura macquarii (Macquarie Tortoise), #AUS: -, SA: V										2	1																		3
Eremiascincus pallidus (Western Sand-swimming Skink)							1																						1
Eremiascincus phantasmus (Ghost Skink)	4						38	46		1	3		1	29	61	131		3	2	12	1	5		52	116	27	52	33	617
Eremiascincus richardsonii (Broad-banded Sandswimmer)	1	2	2		13				2	3	2			2				10	3	1	1			5	1	2			50
Eremiascincus sp. (Sandswimmer)							2	1												3						4			10
Furina diadema (Red-naped Snake)			1								1																		2
Gehyra purpurascens (Purple Dtella)																								16	1				17
Gehyra sp. (Dtella)	19							3		2			1			1				1					4			2	33
Gehyra variegata (revised) (Western Tree Dtella)							11								19	14									2			9	55
Gehyra variegata complex (Western Tree Dtella)					2				4	3	3		1	1				1		3	2			1	4	2		5	32
Gehyra versicolor (Eastern Tree Dtella)				4																									4
Heteronotia binoei (Bynoe's Gecko)	3	4	3	4	29	3	6	4	38	29	4	3	3	25	7	45		7	2	8	6	2		27	12	9	4	37	324
Lerista aericeps (Yellow-tailed Slider)					1		3								1	1								3	4	1		1	15
Lerista bipes (Western Two-toed Slider)										1																			1
Lerista labialis (Eastern Two-toed Slider)	2		1		19		32	77	2	9				12	20	18		1	3	4		3		28	38	10	7	12	298
Lerista punctatovittata (Spotted Slider)					5																								5
Lerista timida (Dwarf Three-toed Slider)			1		17															1									19
Lialis burtonis (Burton's Legless Lizard)		1			2	1		3		2	2									1				7	11	7	2	5	44
Liopholis inornata (Desert Skink)								5					1	10	12	18									7		5	1	59
Lucasium byrnei (Pink-blotched Gecko)	13		19	1	5	3	8						1	3	15	3				6		1	7		13	12	9	2	121
Lucasium damaeum (Beaded Gecko)					3	1	43	19		1		1	3	18	26	37		9	2	2		4		82	40	15	11	11	328
Lucasium stenodactylum (revised) (Sandplain Gecko)						2	24	11	2	1				1	4	11			1					8	2		2	1	70

Vertebrate class / Taxa, #conservation status, *introduced	Ecotype																												
	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518	C481519	C481622	Total records
Menetia greyii (Dwarf Skink)	3	7	69	1	68	9	6	18	4	3	2		4	8	6	7		2	2	5	4			13	5	2	5	13	266
Morelia spilota (Carpet Python), #AUS: -, SA: R										1																			1
Morethia adelaidensis (Adelaide Snake-eye)		2	5		3		2	1		3				2		9		3	4	2				29	5	2		8	80
Morethia boulengeri (Common Snake-eye)		2	10	3	85	13		2	20	52	3	6	5	3	1				2	1	4	1		2	1	1	1	3	221
Nephurus levis (Smooth Knob-tailed Gecko)	1				2		24	16	1	4	5	1	2	9	18	23		4	1	71	6			21	56	11	20	15	311
Nephurus sp. (Knob-tailed Gecko)										1										24					1		1		27
Oxyuranus microlepidotus (Inland Taipan)				1							1									3					1				6
Pogona vitticeps (Central Bearded Dragon)	9	4	16	6	25	5	14	7	2	16	13	1	3	40	8	8			1	209	34	2		34	193	22	10	65	747
Proablepharus kinghorni (Blacksoil Skink), #AUS: -, SA: R	1			2																1									4
Pseudechis australis (Mulga Snake)	3		2				3		1	1	7		1	8	1	2				7	4			2	15	4	11	14	86
Pseudonaja aspidorhyncha (Patch-nosed Brown Snake)										1			1	1						75	1			9	58	17		45	208
Pseudonaja guttata (Spotted Brown Snake), #AUS: -, SA: R				1									1												1			1	4
Pseudonaja mengdeni (Gwardar)			1		2	1		1			2			1					1	6	3				20		1		39
Pseudonaja modesta (Five-ringed Snake)					1			4							1										1				7
Pseudonaja sp. (Brown Snake)					2															2					20		1	1	26
Pseudonaja textilis (Eastern Brown Snake)											1			1						2	3				2		1		10
Pygopus nigriceps (Black-headed Scaly-foot)							3	1													1	1			2	6	1		15
Pygopus schraderi (Hooded Scaly-foot)	1			1	1									1															4
Rhynchoedura eyrensis (Eyre Basin Beaked Gecko)																										1			1
Rhynchoedura ormsbyi (Eastern Beaked Gecko)							16								1	10													27
Rhynchoedura ornata (revised) (Western Beaked Gecko)					6	1	1																		2				10
Strophurus ciliaris (Northern Spiny-tailed Gecko)				1	6		5				1				1	2			1			1		2	10	1	3	6	40
Strophurus elderi (Jewelled Gecko)								1																	3				4
Strophurus intermedius (Southern Spiny-tailed Gecko)										1								1							1				3
Suta suta (Curl Snake)	1	2	4	5	3	3	2			15	13	1	1	23	1	3			1	20	27			1	26	8	6	34	200
Tiliqua multifasciata (Centralian Bluetongue)														1										3	1	1		1	7
Tiliqua rugosa (Sleepy Lizard)	12	1	6		36	4	5			6			1	1		3				4		2	2	7				2	92
Tiliqua scincoides (Eastern Bluetongue)																									1				1
Tympanocryptis intima (Smooth-snouted Earless Dragon)	34		8	6	11	1			4		1		6	16						29	28		1	3			7	155	
Tympanocryptis lineata (Five-lined Earless Dragon)							3					1	1	4	4	1				3		1	1	5	5	1			29
Tympanocryptis sp. (Earless Dragon)	2								1		2										1								6
Tympanocryptis tetraporophora (Eyrean Earless Dragon)	6	10	59	14	40	9		4	7	1		7	20							16	32			10					235
Underwoodisaurus milii (Barking Gecko)	2			1																1								1	5
Varanus eremius (Desert Pygmy Goanna)								15																					15
Varanus gouldii (Sand Goanna)	5		5		16	1	14	20	1	2	7	1		13	13	23			1	28	3	4		19	81	10	17	29	313
Varanus panoptes (Yellow-spotted Monitor)										1																			1
Varanus tristis (Black-headed Goanna)									2																				2

Vertebrate class / Taxa, #conservation status, *introduced	Ecotype																												
	C110101	C110120	C110505	C110525	C140404	C140421	C191417	C191424	C191723	C220202	C220209	C220808	C260912	C26111400	C26111441	C33030303	C33030335	C330707	C330710	C350606	C350611	C35131622	C35131627	C471013	C481215	C481518	C481519	C481622	Total records
4_Frogs	31		1	13	13	1	157	22	21	32	12	7	53	31	21	53	6		7	28	20	2	1	64	6	5	3	6	616
Crinia deserticola (Desert Froglet)				8				1		3	1	1							2					1					17
Cyclorana cultripes (Knife-footed Frog), #AUS: -, SA: R											2		3	1							2						2		10
Cyclorana platycephala (Water-holding Frog)				5				1	4	4	1	3	1	2	3	1	1				2			3					31
Limnodynastes tasmaniensis (Spotted Marsh Frog)									2	13	1	2		2					3	2	7			5	2				39
Litoria caerulea (Green Tree Frog)										4	3										1								8
Litoria latopalmata (Broad-palmed Frog)								1		2		1							1										5
Litoria rubella (Desert Tree Frog)			1		10			1	2	1	4		3		1		1				7					1	1		33
Neobatrachus sp. (Burrowing Frog)																				4		2	1						7
Neobatrachus sudelli (Sudell's Frog)	31				3	1	157	18	13	5			46	26	17	52	4		1	22	1			55	4	4		6	466
5_Fish				10						7622	810	989		807		378	2559		2465	40	95				2				15777
Ambassis agassizii (Agassiz's Glassfish)										1																			1
Ambassis sp. (Northwest Glassfish)										1413	244	111		194			7		171										2140
Bidyanus welchi (Welch's Grunter)										529	80	48		19		3	13		56		3								751
Craterocephalus eyresii (Lake Eyre Hardyhead)										9		108		4			528		190										839
Craterocephalus stercusmuscarum (Fly-specked Hardyhead)				4																									4
Hypseleotris spp. (complex) (Carp Gudgeon)				1						866	104	102		127			263		426										1889
Leiopotherapon unicolor (Spangled Perch)				2						1140	31	40		26		14	333		107	1									1694
Macquaria ambigua ambigua (Murray-Darling Golden Perch)										820	107	81		79		87	132		238										1544
Melanotaenia splendida (Desert Rainbow Fish)				1						1																			2
Melanotaenia splendida tatei (Desert Rainbow Fish)				1						565	22	107		137		1	447		164										1444
Nematalosa erebi (Bony Bream)				1						831	161	194		218		268	825		1057	39	92								3686
Neosiluroides cooperensis (Cooper Creek Tandan)										7									2						2				11
Neosilurus hyrtlil (Hyrtl's Tandan)										1022	57	179					1		8										1267
Porochilus argenteus (Silver Catfish)										295	2	19							2										318
Retropinna semoni (Australian Smelt)										85	2			3			3		30										123
Scortum barcoo (Barcoo Grunter)										38						5	7		14										64

Conservation status. **AUS**: EW - Extinct in the Wild; EX - Extinct; CE - Critically Endangered; EN - Endangered; VU - Vulnerable; CD - Conservation Dependent. **SA**: E - Endangered; V - Vulnerable; R - Rare.

9 References

- Auscover (2016). *Australian woody vegetation cover: Landsat 2000-2010 woody vegetation cover*. Terrestrial Ecosystem Research Network. <http://auscover.org.au/purl/landsat-persistent-green-2000-2010>.
- Australian Government (2016). *National Vegetation Information System (NVIS)*. <http://www.environment.gov.au/land/native-vegetation/national-vegetation-information-system>
- Bonifacio RS, Hobbs TJ, Rogers D, Jellinek S, Willoughby N & Thompson D (2016). *An assessment of ecosystems within the Coorong, Lower Lakes and Murray Mouth (CLLMM) region*. DEWNR Technical note 2016/32, Government of South Australia, Department of Environment, Water and Natural Resources, Adelaide.
- Brandle R (2001). *A Biological Survey of the Flinders Ranges, South Australia 1997-1999*. Biodiversity Survey and Monitoring, National Parks and Wildlife, South Australia, Department for Environment and Heritage, Adelaide
- Brandle R (ed) (1998). *A Biological Survey of the Stony Deserts, South Australia, 1994-1997*. Biological Survey and Research Section, Heritage and Biodiversity Division, Department of Environment, Heritage and Aboriginal Affairs & National Parks Foundation of South Australia Inc., Adelaide.
- Canty P & Brandle P (2008). *Kowari *Dasyercus byrnei* distribution monitoring in Sturts Stony Desert, South Australia, Spring 2007*. Science & Conservation, SA Dept Environment & Heritage, SA Arid Lands Natural Resources Management Board, Adelaide.
- CSIRO (2015). *Soil and Landscape Grid of Australia*. CSIRO & Terrestrial Ecosystem Research Network, Canberra. <http://www.clw.csiro.au/aclep/soilandlandscapegrid/index.html>
- DENR (2011). *Pastoral Lease Assessment Technical Training Manual*. Pastoral Program, Department of Environment and Natural Resources, Adelaide.
- DEWNR (2017). *Biological Surveys of South Australia*. Government of South Australia, Department of Environment, Water and Natural Resources (DEWNR), Adelaide. http://www.environment.sa.gov.au/Science/Information_data/Biological_Survey_of_South_Australia
- DotE (2012). *Australia's bioregions (IBRA)*. Commonwealth of Australia, Department of the Environment (DotE), Canberra. <http://www.environment.gov.au/land/nrs/science/ibra>
- DSD (2016). *Field guide for the environmental assessment of abandoned petroleum wellsites in the Cooper Basin, South Australia*. Energy Resources Division, Department of State Development, Adelaide.
- Eyre TJ, Fisher A, Hunt L & Kutt AS (2011). Measure it to better manage it: a biodiversity monitoring framework for the Australian rangelands. *The Rangeland Journal* **33**, 239-253.
- Geoscience Australia 2015. *Water Observations from Space*. <http://www.ga.gov.au/scientific-topics/hazards/flood/wofs>
- Gill T, Johansen K, Phinn S, Trevithick R, Scarth P & Armston J (2017). A method for mapping Australian woody vegetation cover by linking continental-scale field data and long-term Landsat time series. *International Journal of Remote Sensing*, **38**, 679-705. doi: 10.1080/01431161.2016.1266112
- Gillen JS & Drewien GN (1993). *A Vegetation Survey of the Kanowana Wetlands, Cooper Creek South Australia*. Department of Environment and Land Management, Adelaide.
- Heard L & Channon B (1997). *Guide to a native vegetation survey (agricultural region) using the biological survey of South Australia methodology*. South Australian Department of Housing & Urban Development, Adelaide.

- Hijmans RJ, Cameron SE, Parra JL, Jones PG & Jarvis A (2005). Very high resolution interpolated climate surfaces for global land areas. *International Journal of Climatology*, **25**, 1965–1978. <http://worldclim.org/bioclim>
- Hobbs TJ, Armstrong DM, Willoughby N, Johnson R & West A (2017). *Distribution of priority woodland birds in the north-eastern Mount Lofty Ranges*. DEWNR Technical report 2017/02, Government of South Australia, Department of Environment, Water and Natural Resources, Adelaide.
- Hobbs TJ, Naby N & Schutz A (2015). *Mingiri – Developing a rapid assessment technique for Native Vegetation Council clearance and offset applications in the arid zone*. DEWNR Technical note 2015, Government of South Australia, Department of Environment, Water and Natural Resources, Adelaide.
- Hobbs TJ, Neumann CR, Meyer WS, Moon T & Bryan BA (2016). Models of reforestation productivity and carbon sequestration for land use and climate change adaptation planning in South Australia. *Journal of Environmental Management*, **181**, 279–88. (doi: 10.1016/j.jenvman.2016.06.049).
- Hobbs TJ, Neumann CR, Tucker M & Ryan KT (2013). *Carbon sequestration from revegetation: South Australian Agricultural Regions*. DEWNR Technical Report 2013/14. Government of South Australia, through Department of Environment, Water and Natural Resources, Adelaide & Future Farm Industries Cooperative Research.
- Hutchinson M, Kesteven J & Xu T (2014). *Monthly 1976–2005 mean class A pan evaporation: ANU Climate 1.0, 0.01 degree, Australian Coverage*. Australian National University, Canberra, Australia. Obtained from <http://dap.nci.org.au>, made available by the Ecosystem Modelling and Scaling Infrastructure (eMAST, <http://www.emast.org.au>) of the Terrestrial Ecosystem Research Network (TERN, <http://www.tern.org.au>)
- Jacobs (2015). *An ecological monitoring framework for the Cooper-Eromanga Basin of South Australia*. Jacobs, Adelaide.
- James CD, Landsberg J & Morton SR (1999). Provision of watering points in the Australian arid zone: a review of effects on biota. *Journal of Arid Environments*, **41**, 87–121.
- Kingsford R, Curtin A & Porter J (1999). Water flows on Cooper Creek in arid Australia determine ‘boom’ and ‘bust’ periods for waterbirds. *Biological Conservation*, **88(2)**, 231–248.
- Landsberg JJ, James CD, Morton SR, Hobbs TJ, Stol J, Drew A & Tongway H (1999). *The effects of artificial sources of water on rangeland biodiversity: final report to the Biodiversity Convention and Strategy Section of the Biodiversity Group, Environment Australia*. Environment Australia Biodiversity Group and CSIRO, Division of Wildlife and Ecology. 203 pp.
- Laut P, Keig G, Lazarides M, Löffler E, Margules C, Scott RM & Sullivan ME (1977). *Environments of South Australia, Province 8, Northern Arids*. CSIRO Division of Land Use Research, Canberra.
- Maschmedt DJ (2002). *Assessing Agricultural Land*. Soil and Land Program, Department of Water, Land and Biodiversity Conservation, South Australia.
- Mollenmans FH, Reid JRW, Thompson MB, Alexander L & Pedler LP (1984). *Biological Survey of the Cooper Creek Environmental Association 8.4.4) North-Eastern South Australia*. Department of Environment and Planning, Adelaide.
- Morton SR, Stafford Smith DM, Dickman CR, Dunkerley DL, Friedel MH, McAllister RRJ, Reid JRW, Roshier DA, Smith MA, Walsh FJ, Wardle GM, Watson IW & Westoby M (2011). A fresh framework for the ecology of arid Australia. *Journal of Arid Environments*, **75**, 313–329.
- NASA (2014). *Shuttle Radar Topography Mission – The Mission to Map the World*. NASA Jet Propulsion Laboratory, Californian Institute of Technology, Pasadena, California, USA. <http://www2.jpl.nasa.gov/srtm/>
- Neagle N & Armstrong D (2010). *A Biological Survey of the Marqualpie Land System, South Australia, 2008*. Department of Environment and Natural Resources, South Australia, Adelaide.

- Nicholls N, Newsome A & Hobbs TJ (1996). The uncertain climate and its effects on biota. *Exploring Central Australia: Society, the Environment and the 1894 Horn Exhibition*. pp. 287-304. Eds. S.R. Morton and D.J. Mulvaney. Surrey Beatty, Chipping Norton.
- Oksanen J, Guillaume Blanchet F, Kindt R, Legendre P, Minchin PR, O'Hara RB, Simpson GL, Solymos P, Henry M, Stevens H & Wagner H (2017). Vegan: Community Ecology Package. R package version 2.4-3. <http://CRAN.R-project.org/package=vegan>
- Phillips SJ (2015). *A brief tutorial on Maxent*. http://biodiversityinformatics.amnh.org/open_source/maxent/
- Phillips SJ, Anderson RP & Schapire RE (2006). Maximum entropy modeling of species geographic distributions. *Ecological Modelling*, **190**, 231-259
- Pisanu P (2010). *Discussion Paper – Priority Setting for the SRC Vegetation Information Improvement Project*. Science Resource Centre, Department of Environment and Natural Resources. Adelaide, SA.
- Playfair RM & Robinson AC (eds) (1997). *A Biological Survey of the North Olary Plains, South Australia, 1995-1997*. Biological Survey and Research, Natural Resources Group, Department of Environment and Natural Resources, South Australia, Adelaide.
- R Core Team 2017. *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. <http://www.R-project.org/>
- Reid J & Gillen J (1988). *The Coongie Lakes Study*. Department of Environment and Planning, Adelaide.
- Smyth A, Brandle R, Chewings VH, Read J, Brook A & Fleming M (2009). A framework for assessing regional biodiversity condition under changing environments of the arid Australian rangelands. *The Rangeland Journal*, **31(1)**, 87-101. doi: 10.1071/RJ08047.
- Speight JG (2009). Landform. In: *Australian Soil and Land Survey Field Handbook*, 3rd Edition (ed National Committee on Soil and Terrain, CSIRO Publishing, Melbourne.
- Wiltshire D & Schmidt M (2003). *Field guide to the common plants of the Cooper Basin, South Australia and Queensland*. 4th edition. Santos Ltd. Adelaide. <https://www.scribd.com/document/35403138/Desert-Trees-Shrubs-of-Australia>
- Xu T & Hutchinson MF (2013). New developments and applications in the ANUCLIM spatial climatic and bioclimatic modelling package. *Environmental Modelling and Software*, **40**, 267–279

