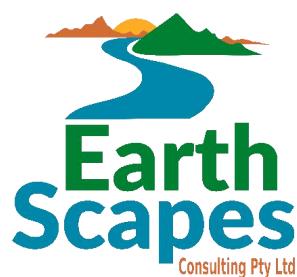


Western Coalfields Strategic Release Mapping and Analysis

Prepared by



May 2021

Version	Written by	Date	Reviewed by	Date
V1	Jane Wickers	April 2021		
V2	Jane Wickers	May 5 2021	Carmel Flint	
V3	Jane Wickers	May 14 2021		
V4	Jane Wickers	May 26 2021		
Final				

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Note: The information in this plan is subject to clarification or amendment due to changes in legislation, agencies and organisations over time. It is the responsibility of the user to ensure compliance with relevant legislation.

This plan has been prepared by EarthScapes Consulting Pty Ltd

11 Tristran Parade, Mullumbimby NSW 2482

info@earthscapes.com.au

www.earthscapes.com.au

Acknowledgement

The People of the Wiradjuri nation developed and maintained a deep and rich connection with the lands the subject of this report. The land nourished all of the person, supplying physical, spiritual, cultural and identity necessities. We wish to acknowledge these First Peoples, and pay our respects to Elders - past, present and future.

Executive Summary

The Hawkins, Rumker and Ganguddy-Kelgoola strategic release areas are located in the Central Tablelands region of New South Wales. The areas total 60,369 Ha in area.

The area is in the Sydney Basin bioregion and is in the Wollemi subregion.

The release areas are located in an intact landscape with very significant remnant vegetation, with analysis showing that native vegetation covers 84% of the total area.

103 Km of the coal release areas border the Greater Blue Mountains World Heritage Area.

The tenure of the areas includes State Forest, Crown Land and other tenure – almost 50% of the areas are comprised of State Forest and Crown Land with the remaining areas private tenures. There is no National Park Estate in the study area.

The dominant landuses are grazing and native forestry production.

There are 45 recorded aboriginal heritage sites and an additional 13 sites that are Restricted and location data not supplied in the proposed coal release areas.

There are 36 water bores are located in the study area. There are 121 Km of stream channel in good condition and 118 Km of stream channel classed as a high level of fragility.

There are 1,854 Ha of Groundwater Dependant Ecosystems (GDEs) mapped in the proposed coal release areas.

There are 6,634 Ha of potential Threatened Ecological Communities (TECs), 22 threatened fauna species and 6 threatened flora species occur in the Hawkins, Rumker and Ganguddy-Kelgoola strategic release areas.

Some of the key species recorded include the Koala, the critically endangered Regent Honeyeater and the endangered Spotted-tailed Quoll, along with four plant species endemic to the Rylstone/western Wollemi area.

Areas of Biophysical Strategic Agricultural Land (BSAL) are located in the Rumker strategic release area.

There are 215.2 hectares of the coalfield release areas mapped as alluvial areas by the groundwater productivity layer. The proposed coal release areas contain a number of surface and groundwater sharing plan areas.

Contents

Acknowledgement.....	3
Executive Summary.....	4
1 Terms of Reference.....	7
2 Location Information.....	7
3 Values and Constraints.....	10
3.1 Land Tenures and Land Use.....	10
3.1.1 Tenure.....	10
3.1.2 Landuse.....	12
3.2 Aboriginal Cultural Heritage.....	14
3.3 Water - Bores, streams, GDEs.....	19
3.3.1 Bores.....	19
3.3.2 Groundwater Dependant Ecosystems.....	21
3.4 Biodiversity – threatened flora, fauna and EECs.....	24
3.4.1 Vegetation.....	24
3.4.2 Threatened Species.....	28
3.5 Other – WMP areas, BSAL, alluvial.....	32
3.5.1 Strategic Agricultural Land.....	32
3.5.2 Groundwater Productivity.....	34
4 References.....	39
Appendix 1 Secondary and Tertiary Landuses.....	40
Appendix 2 Bore Water Data.....	43
Appendix 3 PCTs.....	45
Appendix 4 Threatened Species.....	52

Figures

Figure 1 Local Government Areas (LGAs) in Proposed Coal Release Areas.....	7
Figure 2 Proposed Coal Release Areas.....	9
Figure 3 Tenure Types.....	11
Figure 4 Landuse Classes.....	13

Figure 5 Aboriginal Heritage Sites.....	15
Figure 6 Bores and Stream Condition.....	20
Figure 7 Groundwater Dependant Ecosystems (GDEs).....	22
Figure 8 Vegetation Communities.....	25
Figure 9 Threatend Ecological Communities (TECs).....	26
Figure 10 Threatened Flora Species.....	30
Figure 11 Threatened Flora Species.....	31
Figure 12 Biophysical Strategic Agricultural Land (BSAL).....	33
Figure 13 Groundwater productivity Categories.....	36
Figure 14 Surface Water Sharing Plan Areas.....	37
Figure 15 Groundwater Water Sharing Plan Areas.....	38

Tables

Table 1 Proposed Coal Release Areas by Area (Ha).....	8
Table 2 Proposed Coal Release Areas by World Heritage Boundary (m).....	8
Table 3 Tenure categories.....	12
Table 4 Aboriginal Heritage Sites.....	18
Table 5 Stream Condition for Proposed Coal Release Area.....	21
Table 6 Stream Fragility for Proposed Coal Release Area.....	21
Table 7 PCTS for Groundwater Dependant Ecosystems.....	23
Table 8 Threatened Ecological Communities (TECs).....	27
Table 9 Summary of Threatened Species by NSW Status (V Vulnerable,E1 Endangered E4A Critically Endangered E4 Presumed Extinct E2 Endangered Population).....	28
Table 10 Groundwater Water Sharing Plan Area.....	35

1 Terms of Reference

To produce a short report with mapping and analysis of the values of the area covered by Hawkins, Rumker and Ganguddy-Kelgoola strategic release areas for coal.

2 Location Information

The Hawkins, Rumker and Ganguddy-Kelgoola strategic release areas are located in the Central Tablelands region of New South Wales.

The area is in the Sydney Basin bioregion and is in the Wollemi subregion.

The strategic release areas fall mainly within the Mid Western Council LGA, with small areas of Lithgow City Council, Muswellbrook Shire Council and Singleton Council LGA on the margins (see Figure 1).

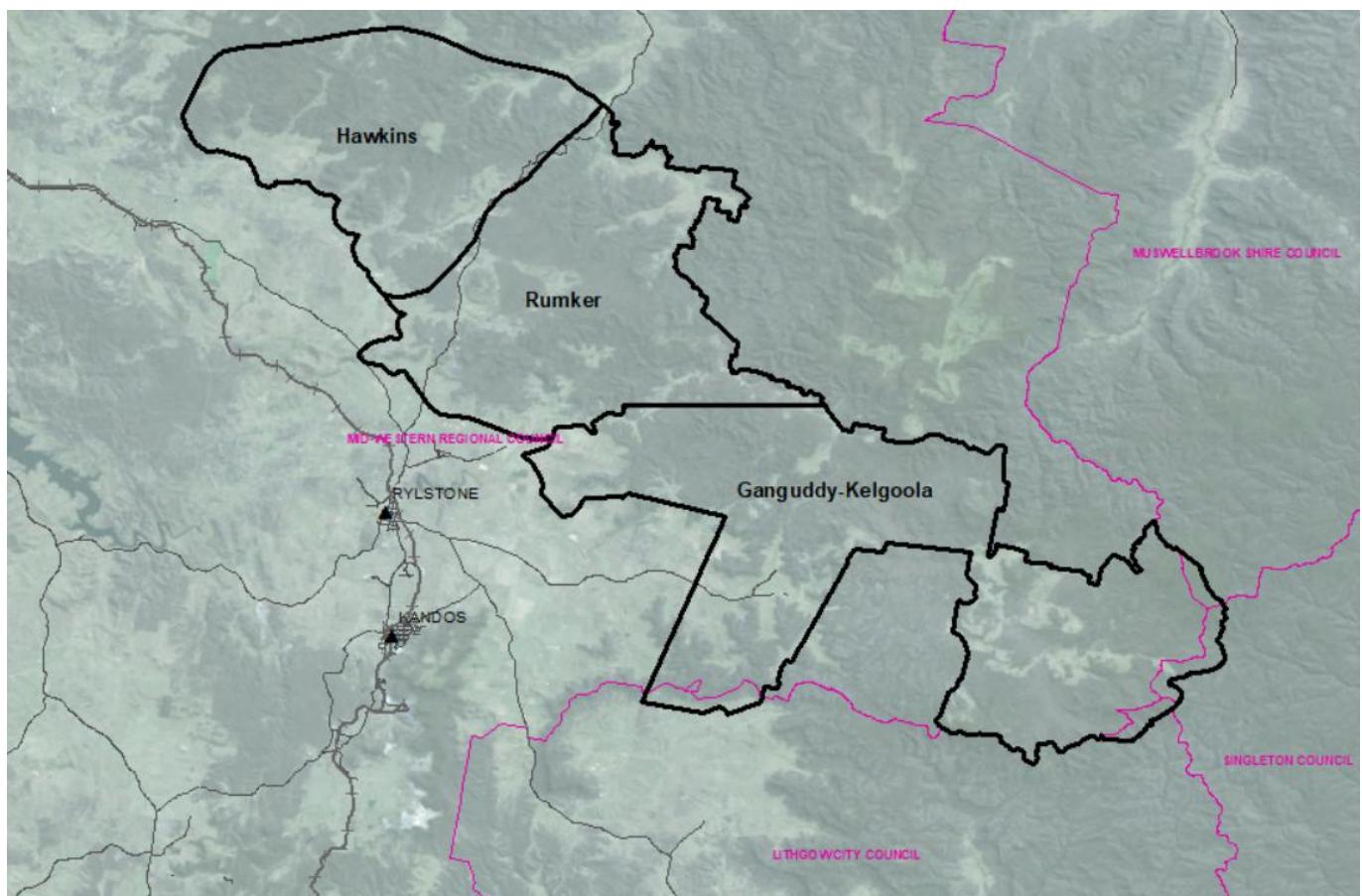


Figure 1 Local Government Areas (LGAs) in Proposed Coal Release Areas.

The areas of each proposed release area are listed in Table 1.

Proposed Coal Release Area	Area (Ha)
Hawkins	14,910
Rumker	17,845
Ganguddy-Kelgoola	27,614
	60,369

Table 1 Proposed Coal Release Areas by Area (Ha)

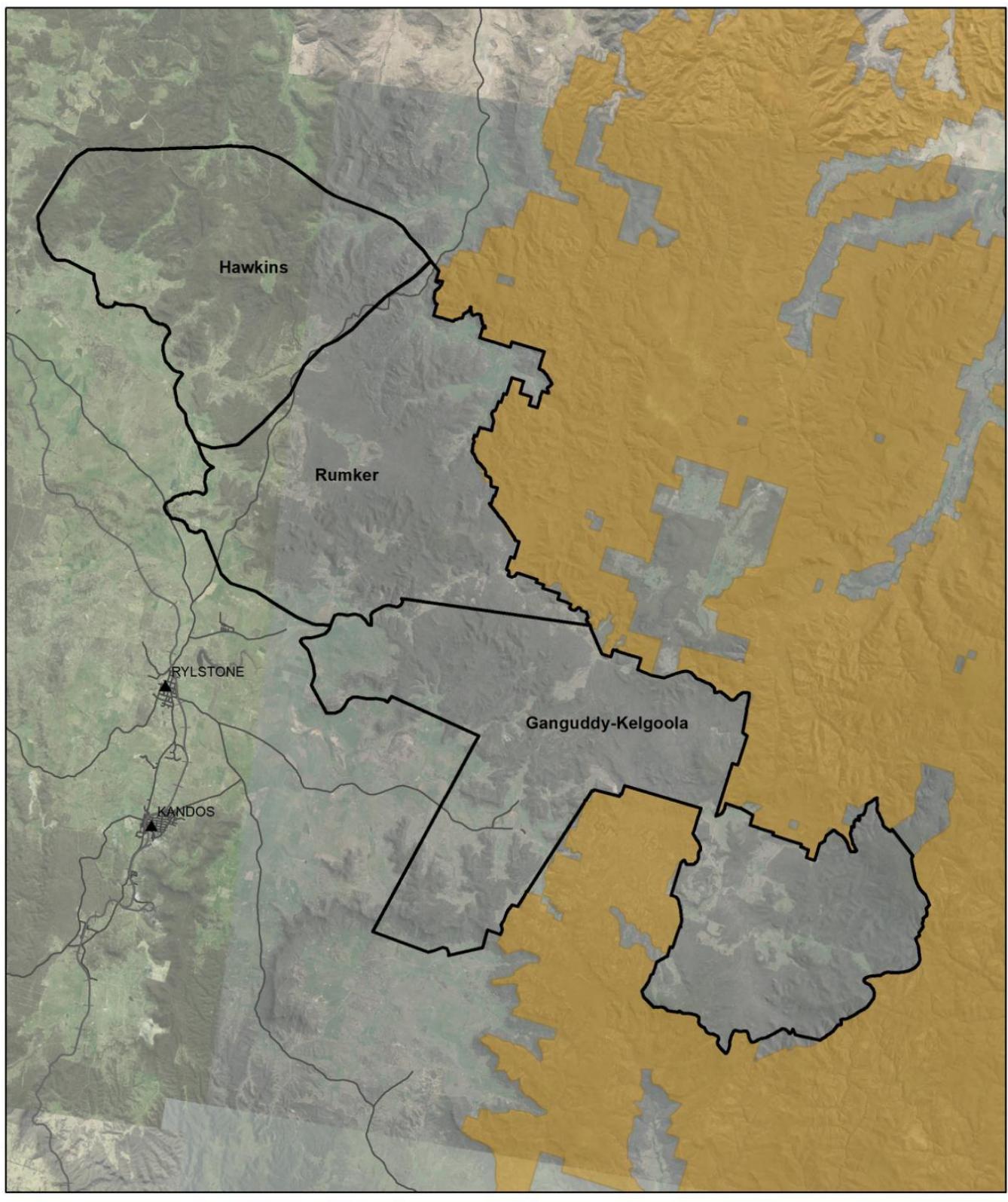
The Proposed Coal Release Areas are located to the west of the Greater Blue Mountains World Heritage Area (see Figure 2).

Table 2 outlines the length each proposed coal release area bounds the World Heritage Area.

Proposed Coal Release Area	WHA boundary (m)
Hawkins	0
Rumker	33,254
Ganguddy-Kelgoola	70,421
	103,675

Table 2 Proposed Coal Release Areas by World Heritage Boundary (m).

Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas



World Heritage Area

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Information current as at April 2021.
Aerial Photography SIX Maps (Spatial Services,
the State of New South Wales)

0.75 1.5 3 4.5 6 Km



Figure 2 Proposed Coal Release Areas.

3 Values and Constraints

3.1 Land Tenures and Land Use

3.1.1 Tenure

State Forest data was sourced from the NSW Department of Finance, Spatial Services.

Refer to metadata at:

<https://datasets.seed.nsw.gov.au/dataset/state-forest>

National Park data was sourced from the NSW Department of Planning, Industry and Environment.

Refer to metadata at:

<https://datasets.seed.nsw.gov.au/dataset/nsw-national-parks-and-wildlife-service-npws-estate3f9e7>

World Heritage data was sourced from Australian Government Department of Agriculture, Water and the Environment

Refer to metadata at:

<https://data.gov.au/dataset/ds-nsw-4000651a-96da-4f07-85a7-54cd54704aca/distribution/distribution-nsw-8aab4734-3af2-47b3-9f3f-81529dcd2244/details?q=>

Crown Land data was sourced from the NSW Department of Planning, Industry and Environment. No metadata was provided.

Figure 3 displays Tenure in the Proposed Coal Release Areas.

Table 3 lists the Tenure Types for each of the Proposed Coal Release Areas.

Tenure: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

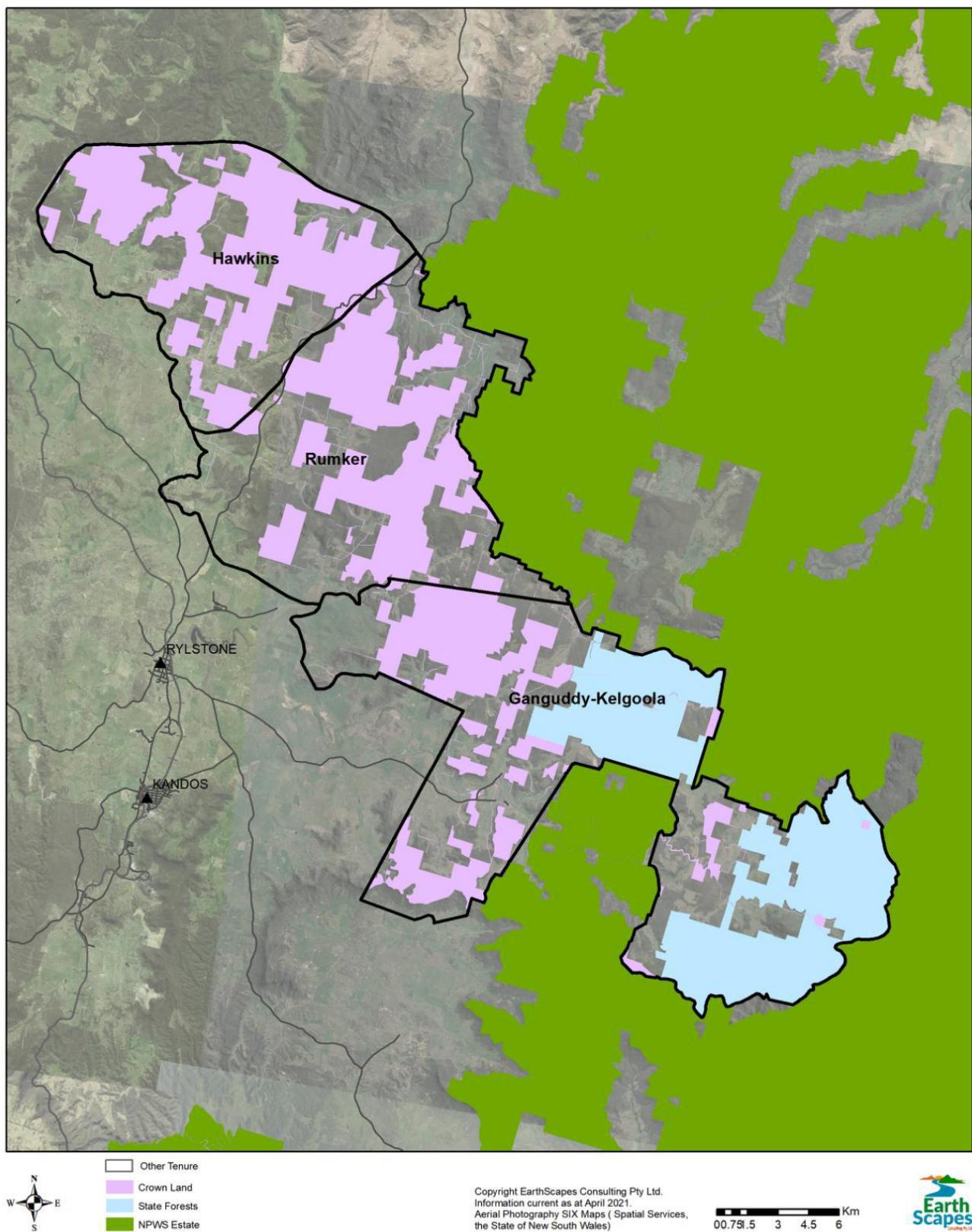


Figure 3 Tenure Types

Proposed Coal Release Area	Tenure	Area (Ha)
Ganguddy-Kelgoola	SF	10,442
Hawkins	SF	0
Rumker	SF	0
Ganguddy-Kelgoola	Crown	5,808
Hawkins	Crown	8,214
Rumker	Crown	7,079

Table 3 Tenure categories

3.1.2 Landuse

Landuse data was sourced from the NSW Department of Planning, Industry and Environment.

Refer to metadata at:

<https://datasets.seed.nsw.gov.au/dataset/nsw-landuse-2017-v1p2-f0ed>

Figure 4 displays the Landuse classes in the proposed coal release areas.

Appendix 1 lists the Secondary and Tertiary Landuses for each of the proposed coal release areas.

Landuse: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

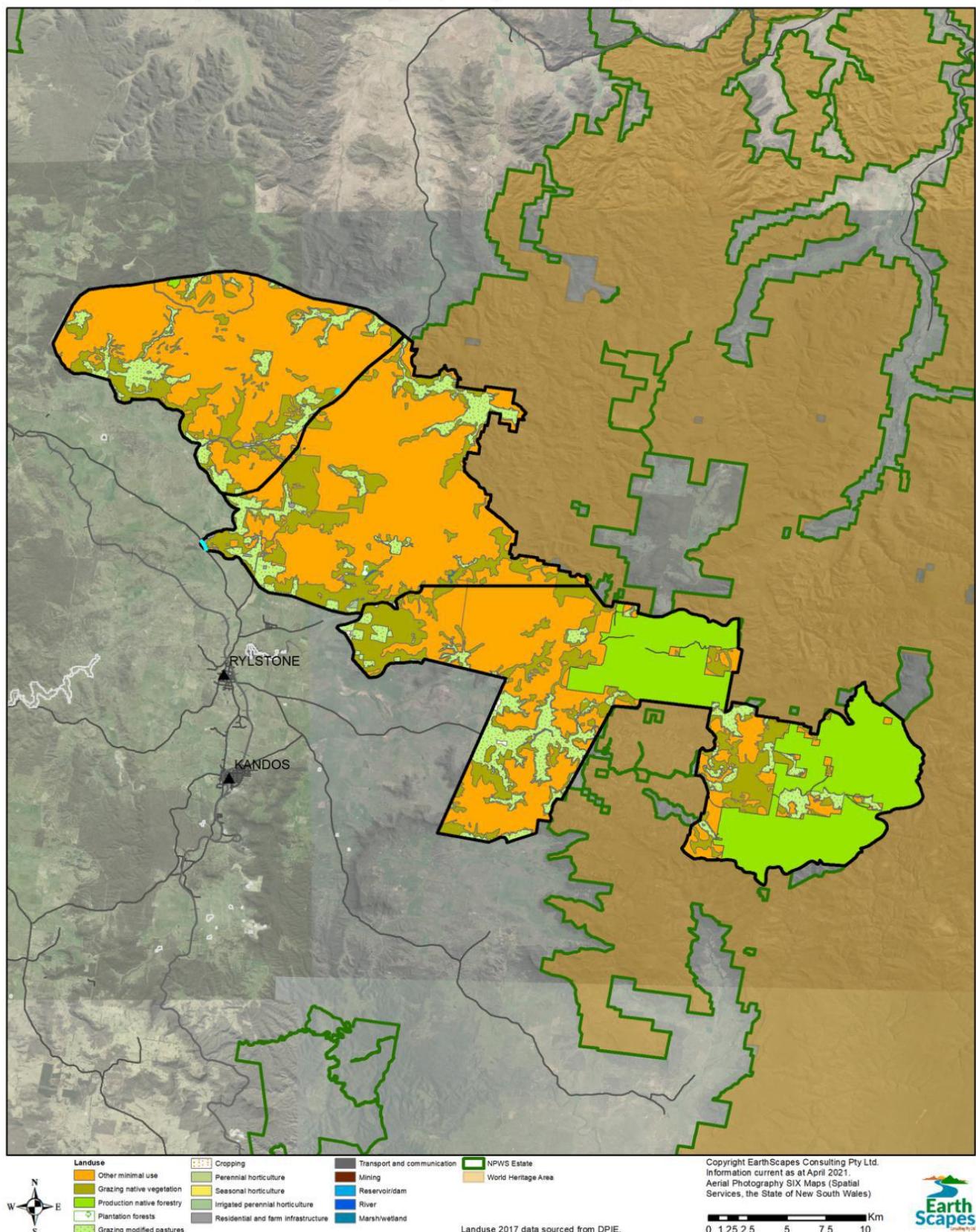


Figure 4 Landuse Classes.

3.2 Aboriginal Cultural Heritage

The Aboriginal Heritage data was sourced from AHIMS by Craig Shaw.

Figure 5 displays Aboriginal Heritage sites in the proposed coal release areas.

Table 4 lists the Aboriginal Heritage sites in the proposed coal release areas. Note, there are an additional 13 sites in the study area that are Restricted and location data not supplied.

Aboriginal Heritage: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

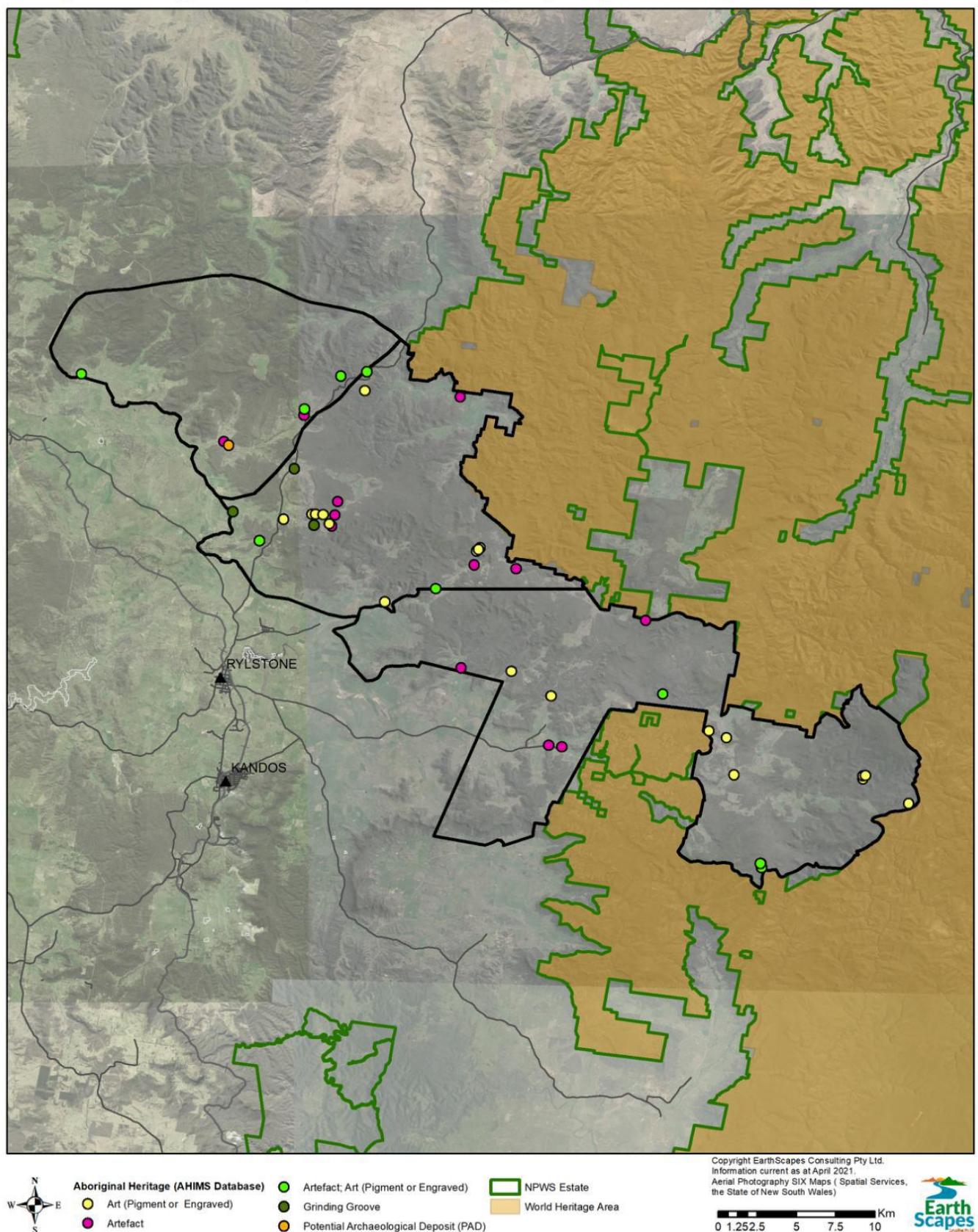


Figure 5 Aboriginal Heritage Sites.

Proposed Coal Release Area	Site Name	Site Types	Site Feature
Ganguddy-Kelgoola	Mount Coorongooba Shelter one		Artefact; Art (Pigment or Engraved)
Ganguddy-Kelgoola	Mt Coorongooba Shelter Three		Art (Pigment or Engraved)
Ganguddy-Kelgoola	Mt Coorongooba Shelter Two		Artefact; Art (Pigment or Engraved)
Ganguddy-Kelgoola	DW 7		Art (Pigment or Engraved)
Ganguddy-Kelgoola	Coricudgy 1		Art (Pigment or Engraved)
Ganguddy-Kelgoola	Coricudgy 2		Art (Pigment or Engraved)
Ganguddy-Kelgoola	Coricudgy 3		Art (Pigment or Engraved)
Ganguddy-Kelgoola	Ingelwood;	Shelter with Art	Art (Pigment or Engraved)
Ganguddy-Kelgoola	Kelgoola Artefact Scatter 2 (KE AS 2)		Artefact
Ganguddy-Kelgoola	Kelgoola Artefact Scatter 1 (KE AS 1)		Artefact
Ganguddy-Kelgoola	Grey Gap;	Shelter with Art	Art (Pigment or Engraved)
Ganguddy-Kelgoola	Mycumbene #1;	Shelter with Art	Art (Pigment or Engraved)
Ganguddy-Kelgoola	Nullo Mountain Road	Shelter with Art	Art (Pigment or Engraved)
Ganguddy-Kelgoola	Cugegong River;Olinda;Kandos Weir 9;KW 9;	"Shelter with Art;Shelter with Deposit"	Artefact; Art (Pigment or Engraved)
Ganguddy-Kelgoola	Swampy Creek;	Shelter with Art	Art (Pigment or Engraved)
Ganguddy-Kelgoola	Olinda Isolated Find (OL IF)		Artefact

Ganguddy-Kelgoola	Jack Foodey;	"Shelter with Deposit"	Artifact
Rumker	Cox's Creek;	Shelter with Art	Art (Pigment or Engraved)
Rumker	Cox Creek - DP1132646		Artifact; Art (Pigment or Engraved)
Rumker	Coxs Creek IF1		Artifact
Rumker	BR1	Open Camp Site	Artifact
Rumker	Cox's Creek;Cox's Creek 1;	Shelter with Art	Art (Pigment or Engraved)
Rumker	Cox's Creek 3;Cox's Creek;	Shelter with Art	Art (Pigment or Engraved)
Rumker	Cox's Creek;	Shelter with Art	Art (Pigment or Engraved)
Rumker	IB 3		Artifact; Art (Pigment or Engraved)
Rumker	Reedy Creek;	"Shelter with Deposit"	Artifact
Rumker	Bylong;The Straight Arm;	"Axe Grinding Groove"	Grinding Groove
Rumker	Reedy Creek;	Shelter with Art	Art (Pigment or Engraved)
Rumker	Brookside;	Shelter with Art	Art (Pigment or Engraved)
Rumker	Reedy Creek;	"Shelter with Deposit"	Artifact
Rumker	Reedy Creek;	Shelter with Art	Art (Pigment or Engraved)
Rumker	Reedy Creek;	Shelter with Art	Art (Pigment or Engraved)
Rumker	Reedy Creek;	Shelter with Art	Art (Pigment or Engraved)
Rumker	Reedy Creek;Camboon;	"Axe Grinding Groove"	Grinding Groove

Rumker	Braebeen;	"Shelter with Deposit"	Artefact
Rumker	IB 4		Grinding Groove
Hawkins	BC2		Potential Archaeological Deposit (PAD)
Hawkins	BC1		Artefact
Hawkins	Green Hills Swamp; Kay Jay Property;	Open Camp Site	Artefact
Hawkins	IB 5		Artefact; Art (Pigment or Engraved)
Rumker	Growee Coxs Creek Artefact Site 1		Artefact
Rumker	The Wombat Hole; Gulf Creek;	Shelter with Art	Art (Pigment or Engraved)
Hawkins	Growee Gulf; Gulf Creek;	"Shelter with Art; Shelter with Deposit"	Artefact; Art (Pigment or Engraved)
Hawkins	Lue;	"Shelter with Art; Shelter with Deposit"	Artefact; Art (Pigment or Engraved)
Rumker	Gulf Creek; Gulf Creek 1;	"Shelter with Art; Shelter with Deposit"	Artefact; Art (Pigment or Engraved)

Table 4 Aboriginal Heritage Sites.

3.3 Water - Bores, streams, GDEs

3.3.1 Bores

Bores data was sourced from NSW Water. There are 36 water bores and wells mapped in the release areas.

Rivers Styles data was sourced from the Bioregional Assessment Program.

Refer to the metadata for more information:

<https://data.gov.au/data/dataset/06fb694b-d2f1-4338-ab65-a707c02f11d7>

Figure 6 displays Bore data and Stream Condition.

Appendix 2 lists Bore information for each Proposed Coal Release Area.

Tables 5 and 6 provide a summary of Stream Condition and Fragility for each of the Proposed Coal Release Areas.

Hydrology: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

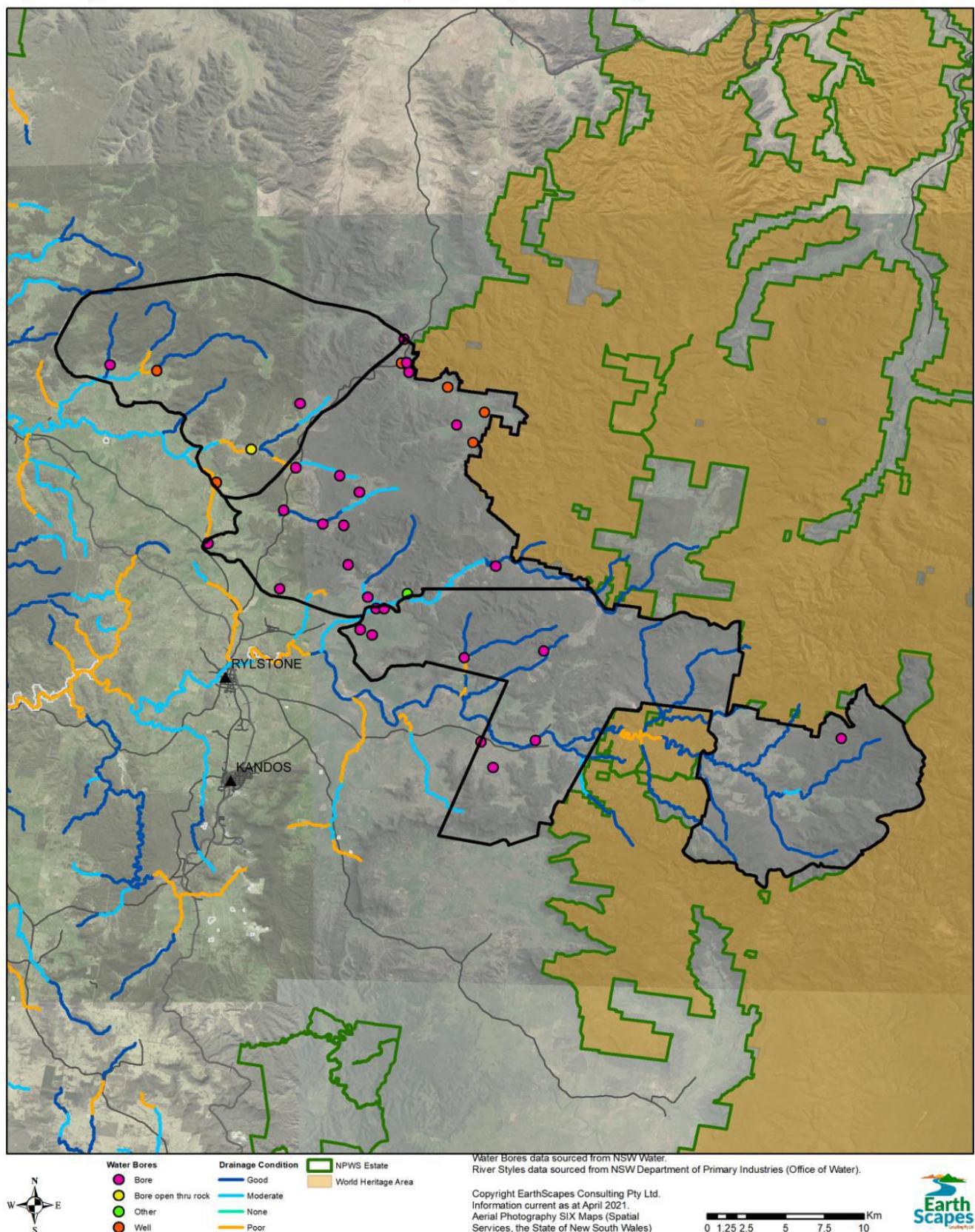


Figure 6 Bores and Stream Condition

Stream Condition	Stream Length (m)
Good	121, 802
Moderate	28, 721
Poor	10, 423
	160, 946

Table 5 Stream Condition for Proposed Coal Release Area.

Stream Fragility	Stream Length(m)
High	118, 844
Moderate	31, 687
Low	10, 233
	160, 946

Table 6 Stream Fragility for Proposed Coal Release Area.

3.3.2 Groundwater Dependant Ecosystems

Hunter Central and Macquarie Castlereagh catchments GDE data was sourced from NSW Department of Industry Water.

Refer to metadata at:

<https://datasets.seed.nsw.gov.au/dataset/hevae-vegetation-groundwater-dependent-ecosystems-murrumbidgee>

Figure 7 displays GDEs in the proposed coal release area.

Table 7 summarises the PCTs for GDEs for each proposed coal release area.

Groundwater Dependant Ecosystems: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

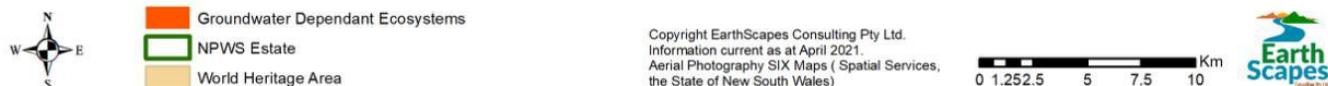
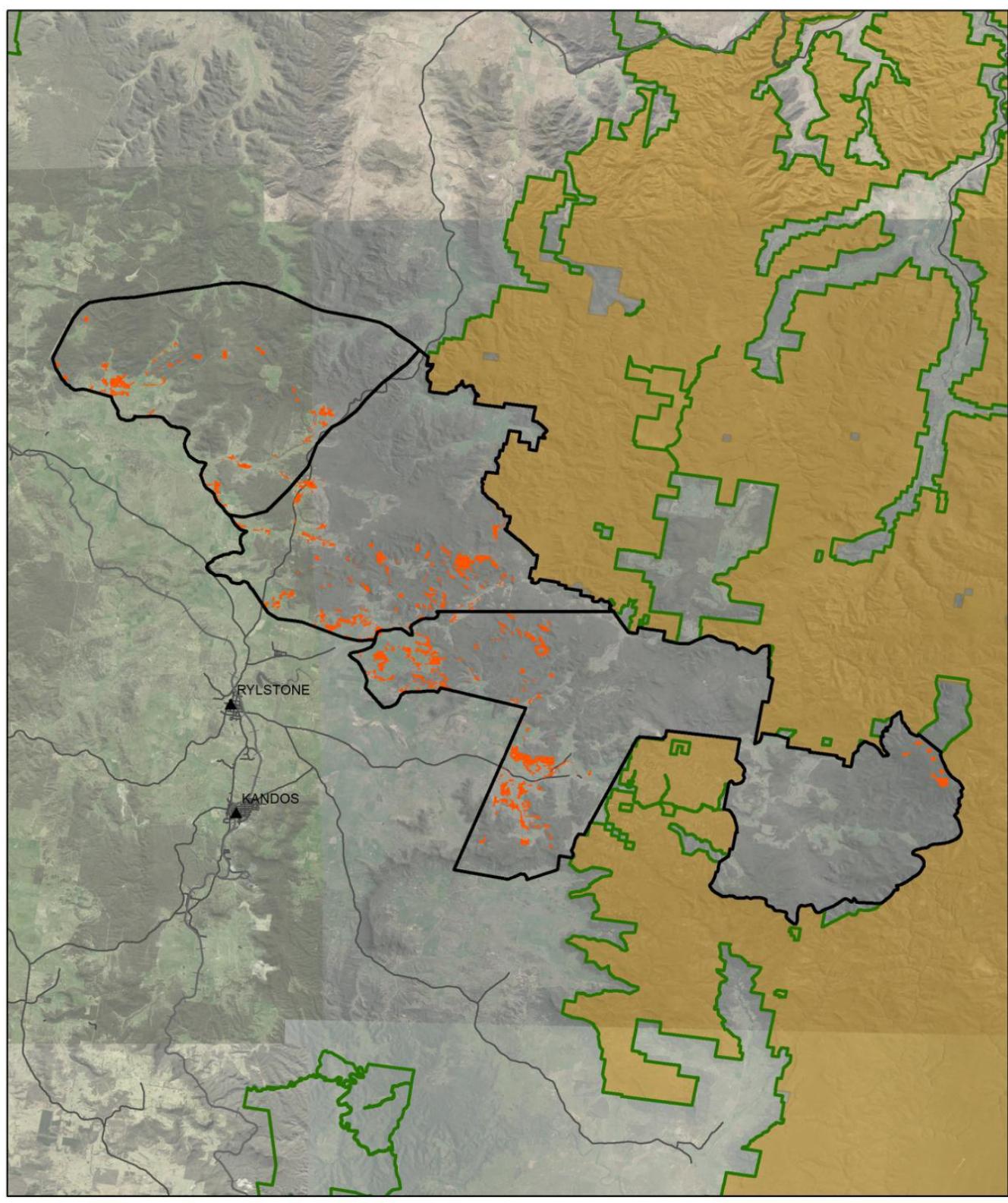


Figure 7 Groundwater Dependant Ecosystems (GDEs).

Proposed Coal Release Area	PCT Name	Area (Ha)
Ganguddy-Kelgoola	Not listed	339.2
Ganguddy-Kelgoola	<i>Angophora floribunda</i> , <i>Eucalyptus blakelyi</i> , <i>Eucalyptus melliodora</i> / <i>Acacia implexa</i> , <i>Dodonaea viscosa</i> subsp. <i>angustifolia</i> , <i>Bursaria spinosa</i> subsp. <i>spinosa</i> , <i>Hibbertia obtusifolia</i> / <i>Austrostipa verticillata</i> , <i>Aristida ramosa</i> , <i>Calotis lappulacea</i> , <i>Arund</i>	440.7
Ganguddy-Kelgoola	<i>Casuarina cunninghamiana</i> subsp. <i>cunninghamiana</i> / <i>Callistemon sieberi</i> , <i>Pteridium esculentum</i> , <i>Urtica incisa</i> / <i>Microlaena stipoides</i> var. <i>stipoides</i> , <i>Carex appressa</i> , <i>Bothriochloa macra</i> , <i>Lomandra longifolia</i>	28.1
Ganguddy-Kelgoola	<i>Eucalyptus blakelyi</i> , <i>Eucalyptus melliodora</i> , <i>Eucalyptus bridgesiana</i> / <i>Acacia dealbata</i> / <i>Themeda australis</i> , <i>Poa sieberiana</i> , <i>Bothriochloa macra</i> , <i>Aristida ramosa</i>	1.0
Ganguddy-Kelgoola	Montane Basalt Ribbon Gum Moist Forest	59.1
Ganguddy-Kelgoola	Montane Basalt Warm Temperate Rainforest	2.8
Hawkins	Not listed	69.9
Hawkins	<i>Angophora floribunda</i> , <i>Eucalyptus blakelyi</i> , <i>Eucalyptus melliodora</i> / <i>Acacia implexa</i> , <i>Dodonaea viscosa</i> subsp. <i>angustifolia</i> , <i>Bursaria spinosa</i> subsp. <i>spinosa</i> , <i>Hibbertia obtusifolia</i> / <i>Austrostipa verticillata</i> , <i>Aristida ramosa</i> , <i>Calotis lappulacea</i> , <i>Arund</i>	256.1
Hawkins	Central Tableland Ribbon Gum-Apple Gully Forest	0.2
Rumker	Not listed	329.4
Rumker	<i>Angophora floribunda</i> , <i>Eucalyptus blakelyi</i> , <i>Eucalyptus melliodora</i> / <i>Acacia implexa</i> , <i>Dodonaea viscosa</i> subsp. <i>angustifolia</i> , <i>Bursaria spinosa</i> subsp. <i>spinosa</i> , <i>Hibbertia obtusifolia</i> / <i>Austrostipa verticillata</i> , <i>Aristida ramosa</i> , <i>Calotis lappulacea</i> , <i>Arund</i>	286.2
Rumker	<i>Casuarina cunninghamiana</i> subsp. <i>cunninghamiana</i> / <i>Callistemon sieberi</i> , <i>Pteridium esculentum</i> , <i>Urtica incisa</i> / <i>Microlaena stipoides</i> var. <i>stipoides</i> , <i>Carex appressa</i> , <i>Bothriochloa macra</i> , <i>Lomandra longifolia</i>	13.5
Rumker	Central Tableland Ribbon Gum-Apple Gully Forest	0.3
Rumker	Central Tableland Sedge Swamp	27.4
		1,854

Table 7 PCTS for Groundwater Dependant Ecosystems.

3.4 Biodiversity – threatened flora, fauna and EECs

3.4.1 Vegetation

Vegetation was sourced from The NSW Office of Environment and Heritage (OEH):

State Vegetation Type Map: Central Tablelands Region Version 1.0. VIS_ID 4778

Refer to the metadata for more information.

https://datasets.seed.nsw.gov.au/dataset/state-vegetation-type-map-central-tablelands-region-version-0-1-vis_id-4778

The NSW Vegetation Extent 5m raster

(<https://data.gov.au/dataset/ds-nsw-98028b88-e917-4502-91fa-9e571f58385a/details?q=>) was used to calculate vegetation cover in the proposed Coal Release Area. It was calculated that there is 50, 984 Ha of tree cover, which is 84% of the Coal Release Area.

Vegetation Communities are displayed in Figure 8.

Threatened Ecological Communities are displayed in Figure 9. The TECs are based on expert advice from an ecologist with experience in the region. The following vegetation map categories were used to identify likely distribution of Threatened Ecological Communities (under NSW legislation) or Endangered Ecological Communities (under Federal legislation):

1. The category 'Western Slopes Grassy Woodland' from the state vegetation mapping is used because it is likely to encompass predominantly White Box Yellow Box Blakely's Red Gum NSW TEC and Fuzzy Box Woodland TEC, and the Box Gum Woodland Federal Endangered Ecological Community.
2. The category 'Eastern Riverine Forests' from the state vegetation mapping is used because it is probable that it encompasses some Hunter Floodplain Red Gum Woodland NSW TEC.
3. The category 'North-west Slopes Dry Sclerophyll Woodlands' from the state vegetation mapping is used because it possibly includes some examples of Hunter Valley Footslopes Slaty Gum Woodland NSW TEC.
4. The Montana Basalt Cap Forest category from the Wollemi vegetation mapping is used because it is likely to encompass predominantly the Upland Basalt Eucalypt Forests of the Sydney Basin Bioregion EEC.

Appendix 3 lists the PCT classes for each Proposed Coal Release Area.

Table 8 lists TECs for each Proposed Coal Release Area.

Vegetation Communities: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

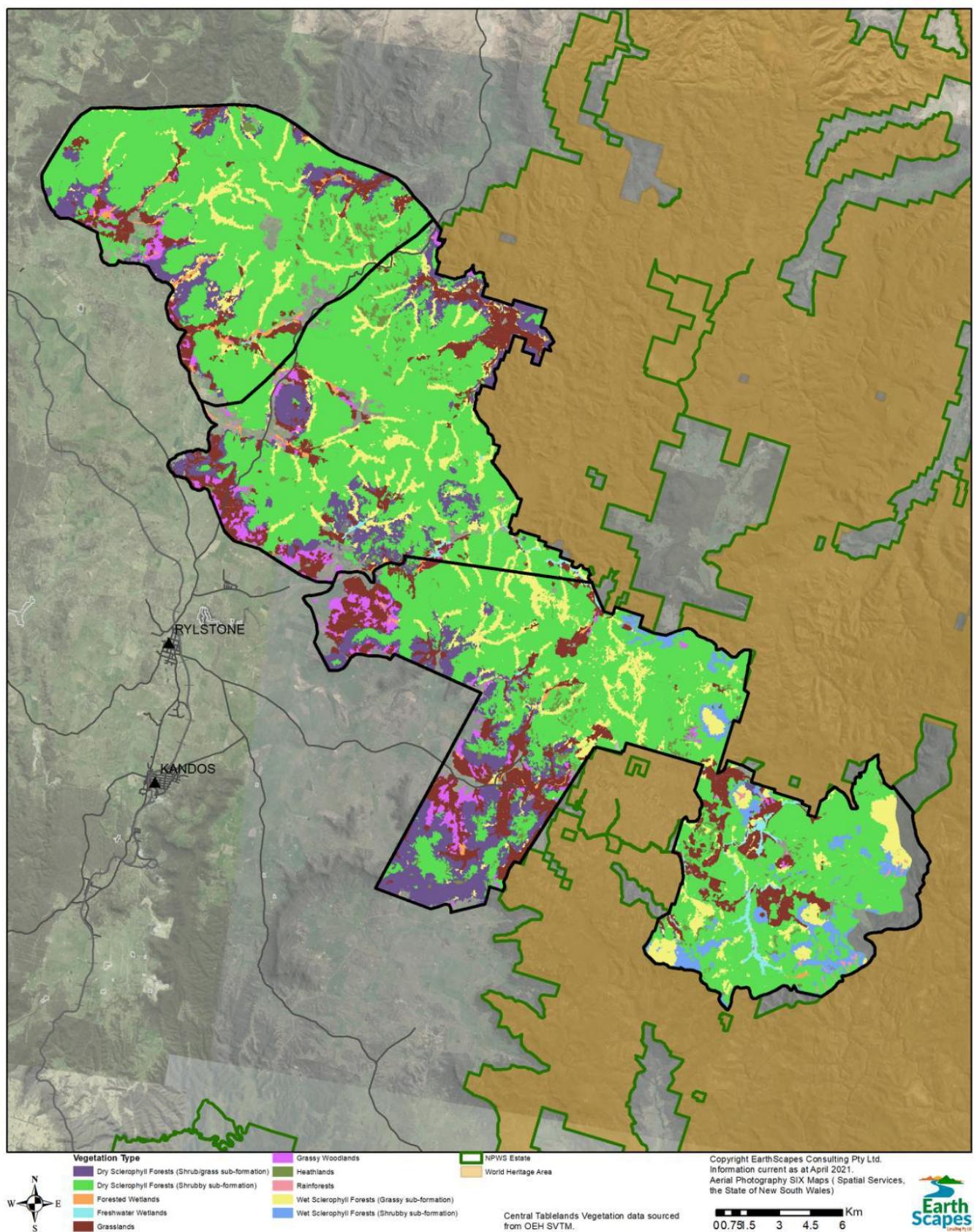


Figure 8 Vegetation Communities.

Threatened Ecological Communities: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

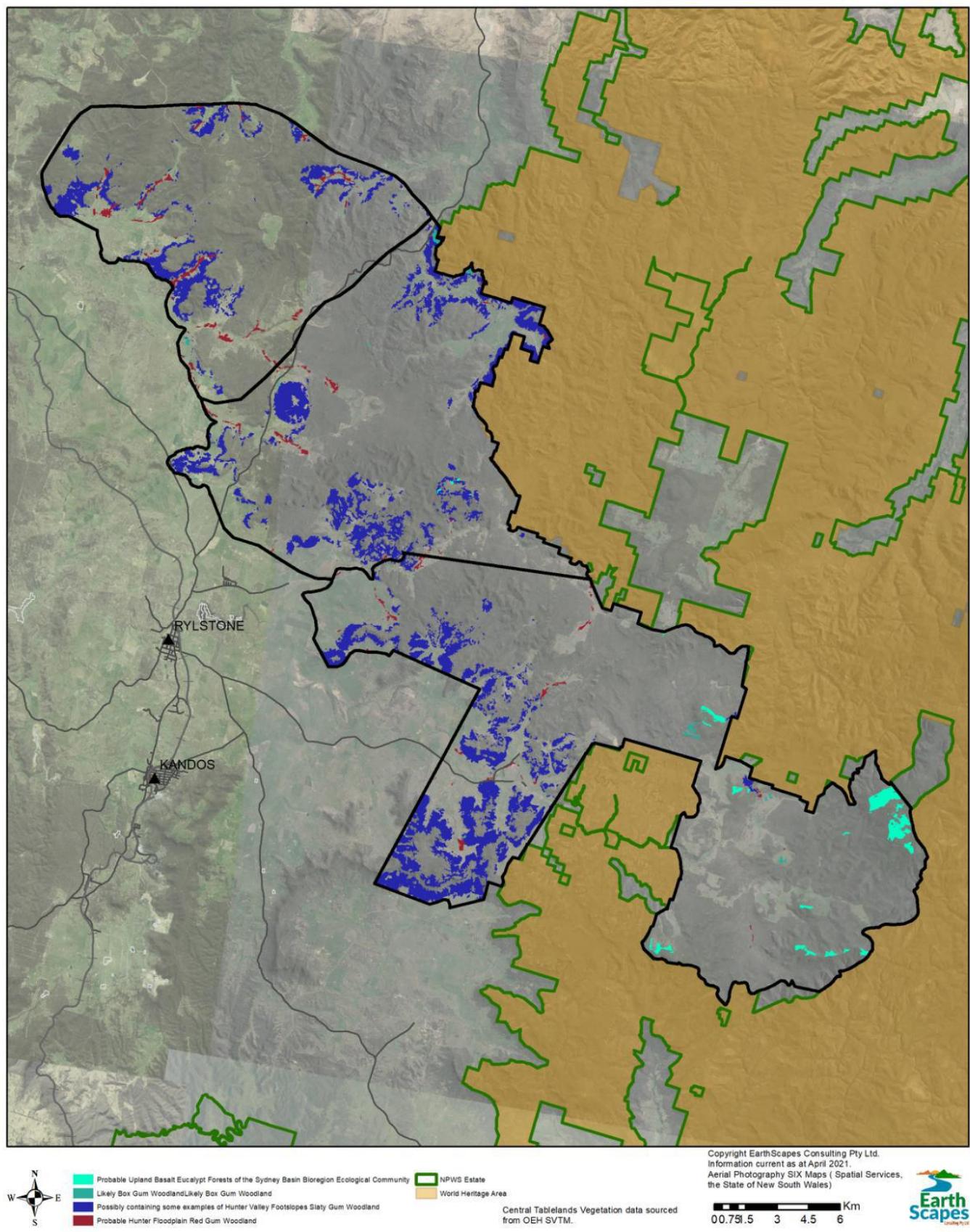


Figure 9 Threatened Ecological Communities (TECs).

Proposed Coal Release Area	TEC	Area (Ha)
Ganguddy-Kelgoola	Likely Box Gum Woodland	37
Ganguddy-Kelgoola	Possibly containing some examples of Hunter Valley Foothslopes Slaty Gum Woodland	2, 556
Ganguddy-Kelgoola	Probable Hunter Floodplain Red Gum Woodland	89
Ganguddy-Kelgoola	Probable Upland Basalt Eucalypt Forests	318
Hawkins	Likely Box Gum Woodland	12
Hawkins	Possibly containing some examples of Hunter Valley Foothslopes Slaty Gum Woodland	1, 250
Hawkins	Probable Hunter Floodplain Red Gum Woodland	224
Rumker	Likely Box Gum Woodland	38
Rumker	Possibly containing some examples of Hunter Valley Foothslopes Slaty Gum Woodland	2, 007
Rumker	Probable Hunter Floodplain Red Gum Woodland	97
Rumker	Probable Upland Basalt Eucalypt Forests	6
		6,634

Table 8 Threatened Ecological Communities (TECs).

3.4.2 Threatened Species

Threatened Species data was sourced from the NSW Department of Planning, Industry and Environment Bionet Species database. It should be noted that Bionet data is heavily dependent on surveys to identify species, so absence of information doesn't mean that threatened species are not present but may instead reflect a lack of survey effort.

For more information about the database refer to:

<https://www.environment.nsw.gov.au/wildlifeatlas/about.htm>

Figure 10 displays threatened Flora Species and Figure 11 threatened Fauna records in the proposed coal release area.

Appendix 4 contains a complete listing of threatened species in the proposed coal release area.

Table 9 is a summary of the number of records by NSW Status.

Kingdom	NSW Status	Number of threatened species recorded
Fauna	E1	2
Fauna	E4A	1
Fauna	V	19
Flora	E1	2
Flora	V	4
		28

Table 9 Summary of Threatened Species by NSW Status (V Vulnerable,E1 Endangered E4A Critically Endangered E4 Presumed Extinct E2 Endangered Population)

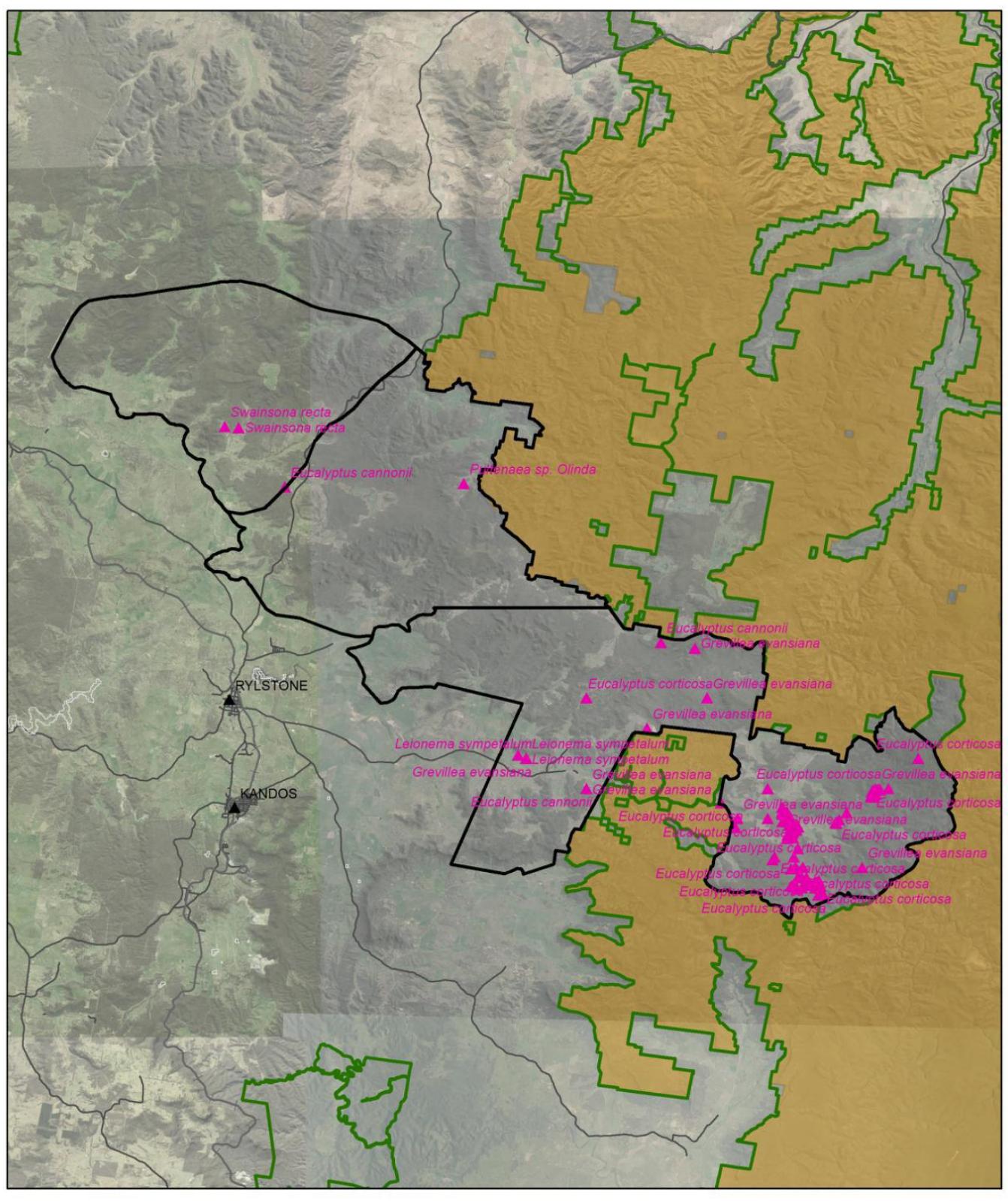
There are several records of the Koala, a species listed as vulnerable nationally, in the Hawkins area. A scientific study undertaken by BioLink found that 71% of Koala populations had been lost in six fire-affected areas in northern NSW after the catastrophic 2019/2020 bushfires. The impact of the fires on Koalas in NSW are so severe that the Federal Threatened Species Scientific Committee is currently considering whether to upgrade it's status to endangered under the Federal Environmental Protection and Biodiversity Conservation Act 1999. In light of the severe declines in Koala populations following the bushfires, further information on the significance of the Hawkins area to Koalas is warranted.

The area also appears to represent an important habitat for the critically endangered Regent Honeyeater and endangered Spotted-tailed Quoll. There are several Regent Honeyeater sightings, predominantly in Ganguddy-Kelgoola but also one sighting on the border between Hawkins and Rumker, and given it's critically endangered status under state and Federal statutes, this is very significant. A thorough assessment of the habitat value for the species in each of the areas is warranted. The Hawkins-Rumker release areas in particular contain a large number of records for the nationally endangered Spotted-tailed Quoll which is a large home-range species that is reliant on large, intact habitats with oldgrowth elements.

Other old-forest dependent species such as the vulnerable Powerful Owl and Yellow-bellied Gliders also occur in the release areas, and there a suite of declining woodland birds including the Scarlet Robin, Diamond Firetail and Speckled Warbler.

There are also a number of threatened flora species in the release areas, including 1 endangered and 3 vulnerable species endemic to the Rylstone/western Wollomi area – the endangered *Pultenaea* sp. Olinda, and vulnerable *Grevillea* (Grevillea evansiana), Rylstone Bell (*Leionema sympetalum*) and Crewsick Apple Box (*Eucalyptus corticosa*).

Threatened Flora Species: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas



▲ Threatened Species (Source Bionet April 2021)

NPWS Estate
World Heritage Area

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Information current as at April 2021.
Aerial Photography SIX Maps (Spatial Services,
the State of New South Wales)



Figure 10 Threatened Flora Species

Threatened Fauna Species: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

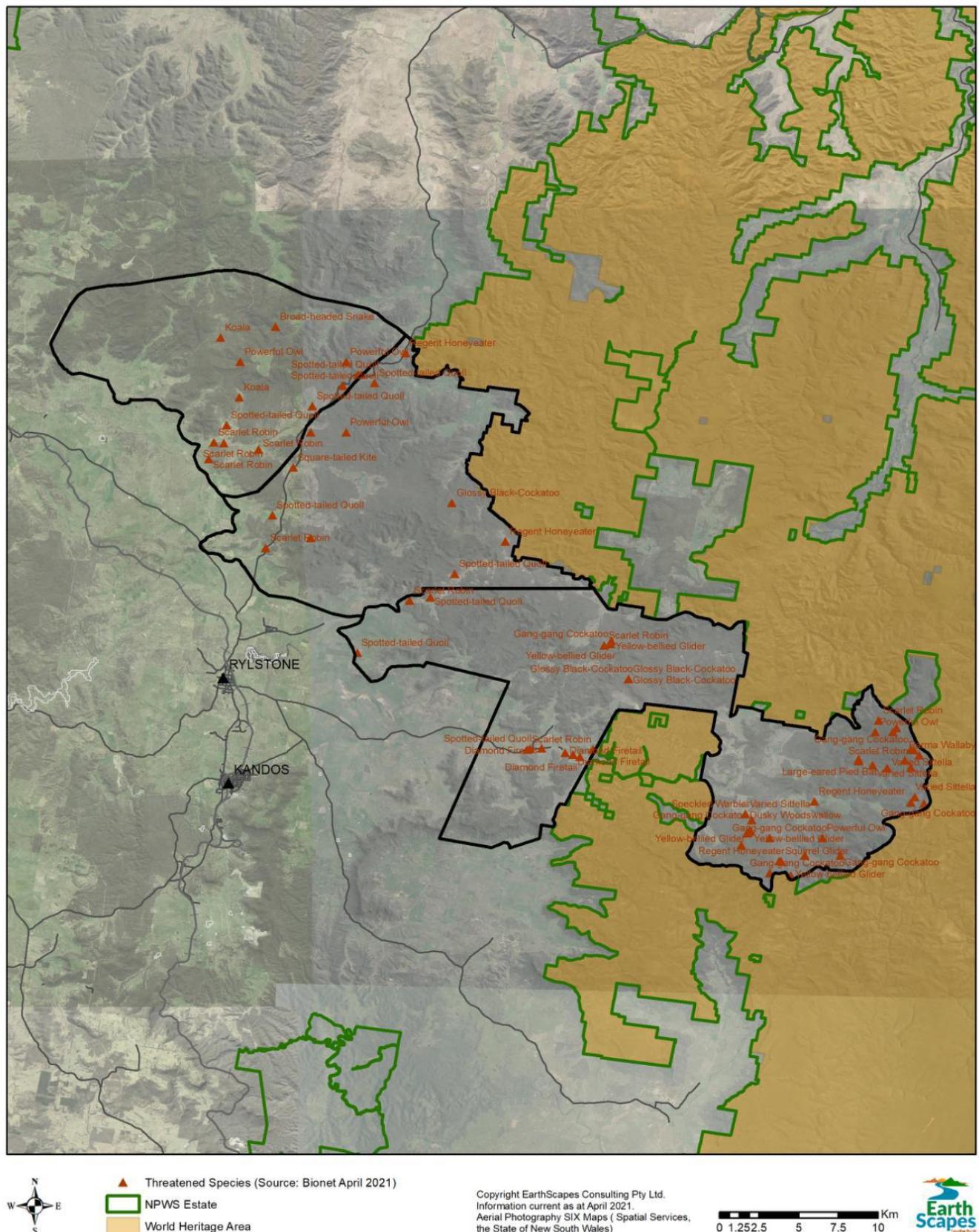


Figure 11 Threatened Flora Species.

3.5 Other – WMP areas, BSAL, alluvial

3.5.1 Strategic Agricultural Land

Biophysical Strategic Agricultural Land (BSAL)

Biophysical Strategic Agricultural Land (BSAL) was sourced from the NSW Department of Planning, Industry and Environment.

Refer to metadata at:

<https://data.gov.au/dataset/ds-nsw-8f2dedaa-ee8f-44d8-b5c9-04deb33fbdb4/distribution/district-nsw-bb3a2553-7297-446a-9fb3-102d38f9812b/details?q=>

Figure 12 displays BSAL data in the proposed coal release areas.

Because the data was only available as a Web Map Service (WMS) it was not possible to analyse this data and provide statistics.

Strategic Regional Landuse Planning - Biophysical: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

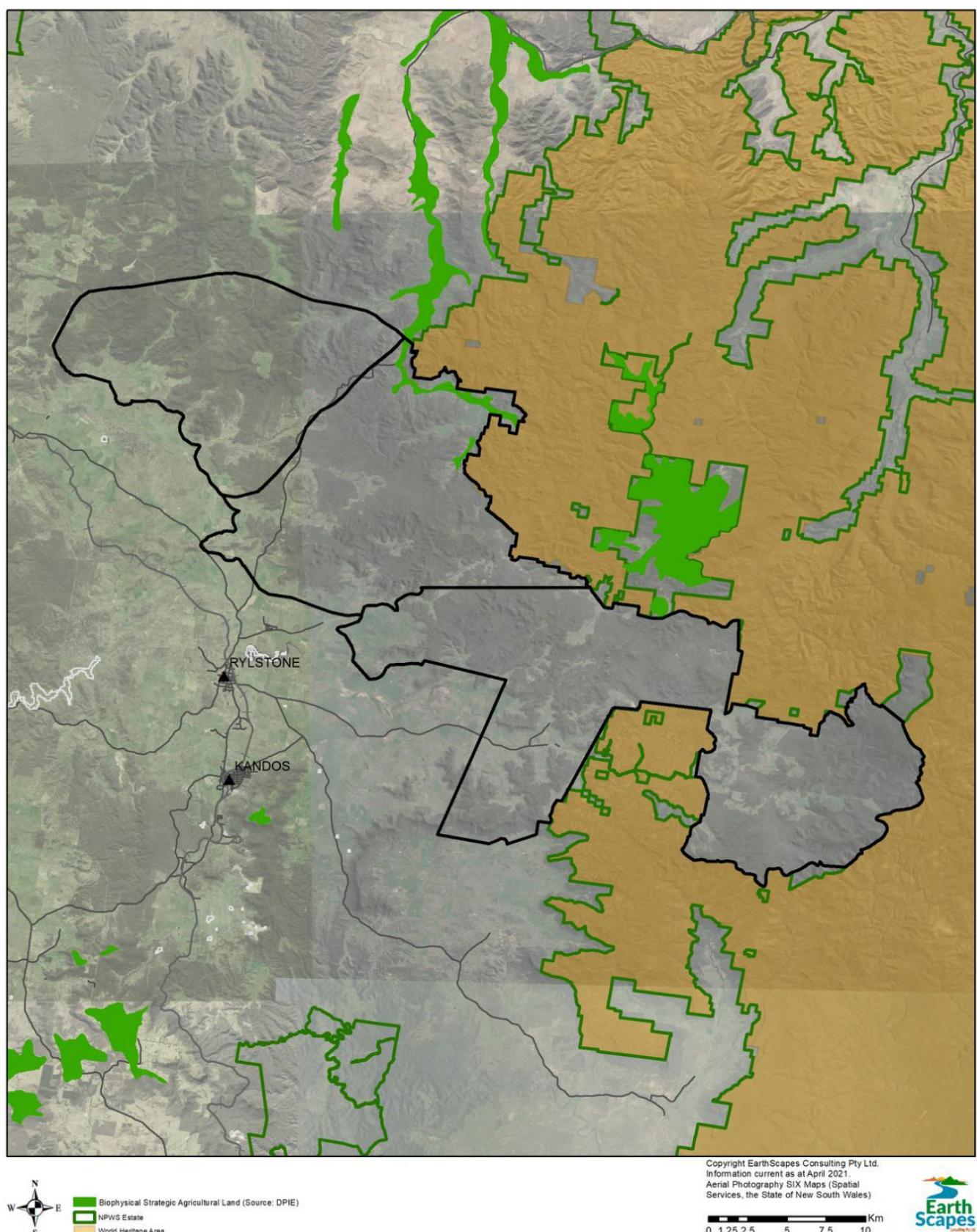


Figure 12 Biophysical Strategic Agricultural Land (BSAL)

3.5.2 Groundwater Productivity

Groundwater Productivity in NSW - 2013 was sourced from the Department of Primary Industries (Office of Water).

Refer to metadata at:

<https://datasets.seed.nsw.gov.au/dataset/highly-productive-groundwater-in-nsw>

Figure 13 displays groundwater by category (alluvial, porous rock, fractured rock) in the proposed coal release area. There are 215.2 hectares of the coalfield release areas mapped as alluvial areas by the groundwater productivity layer.

Figure 14 displays groundwater by surface water sharing plan area in the proposed coal release area.

Figure 15 displays groundwater by groundwater water sharing plan area in the proposed coal release area.

Table 10 summarises groundwater water sharing plan area each proposed coal release area.

Statistics could not be calculated for surface water sharing plan area as the data was only available in WMS format.

Proposed Coal Release Area	Groundwater Water Sharing Plan Area	Area (Ha)
Ganguddy-Kelgoola	Draft North Coast Fractured and Porous Rock Groundwater Sources	565.0
Ganguddy-Kelgoola	Greater Metropolitan Region Groundwater Sources 2011	1592.0
Ganguddy-Kelgoola	NSW Murray Darling Basin Porous Rock Groundwater Sources 2011	25457.3
Hawkins	Draft North Coast Fractured and Porous Rock Groundwater Sources	4743.5
Hawkins	Hunter Unregulated and Alluvial Water Sources 2009	70.1
Hawkins	NSW Murray Darling Basin Porous Rock Groundwater Sources 2011	10096.3
Rumker	Draft North Coast Fractured and Porous Rock	6097.4

	Groundwater Sources	
Rumker	Hunter Unregulated and Alluvial Water Sources 2009	145.2
Rumker	NSW Murray Darling Basin Porous Rock Groundwater Sources 2011	11602.5
		60, 369

Table 10 Groundwater Water Sharing Plan Area

Groundwater Productivity (Category): Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

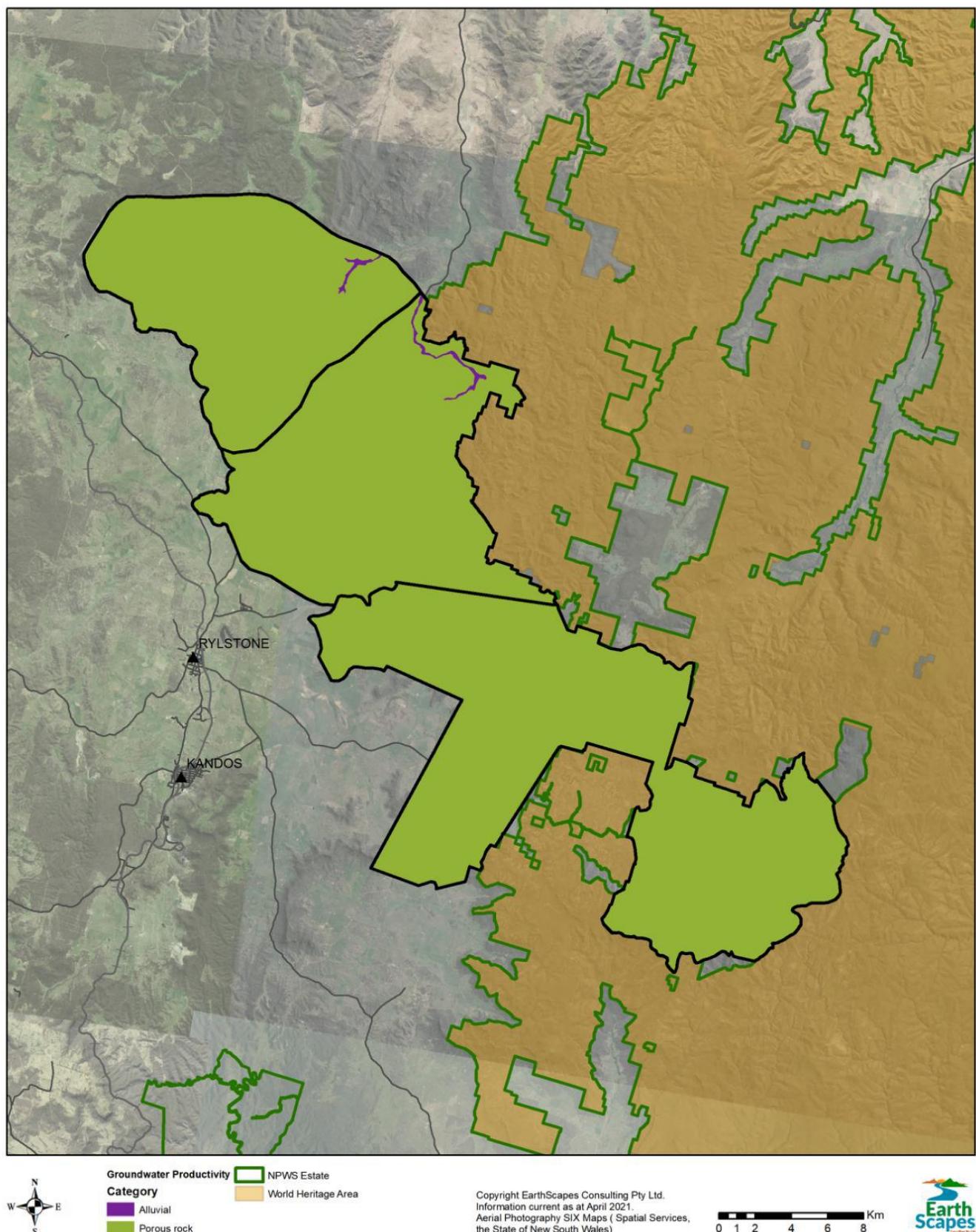


Figure 13 Groundwater productivity Categories

Surface Water Sharing Plan: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

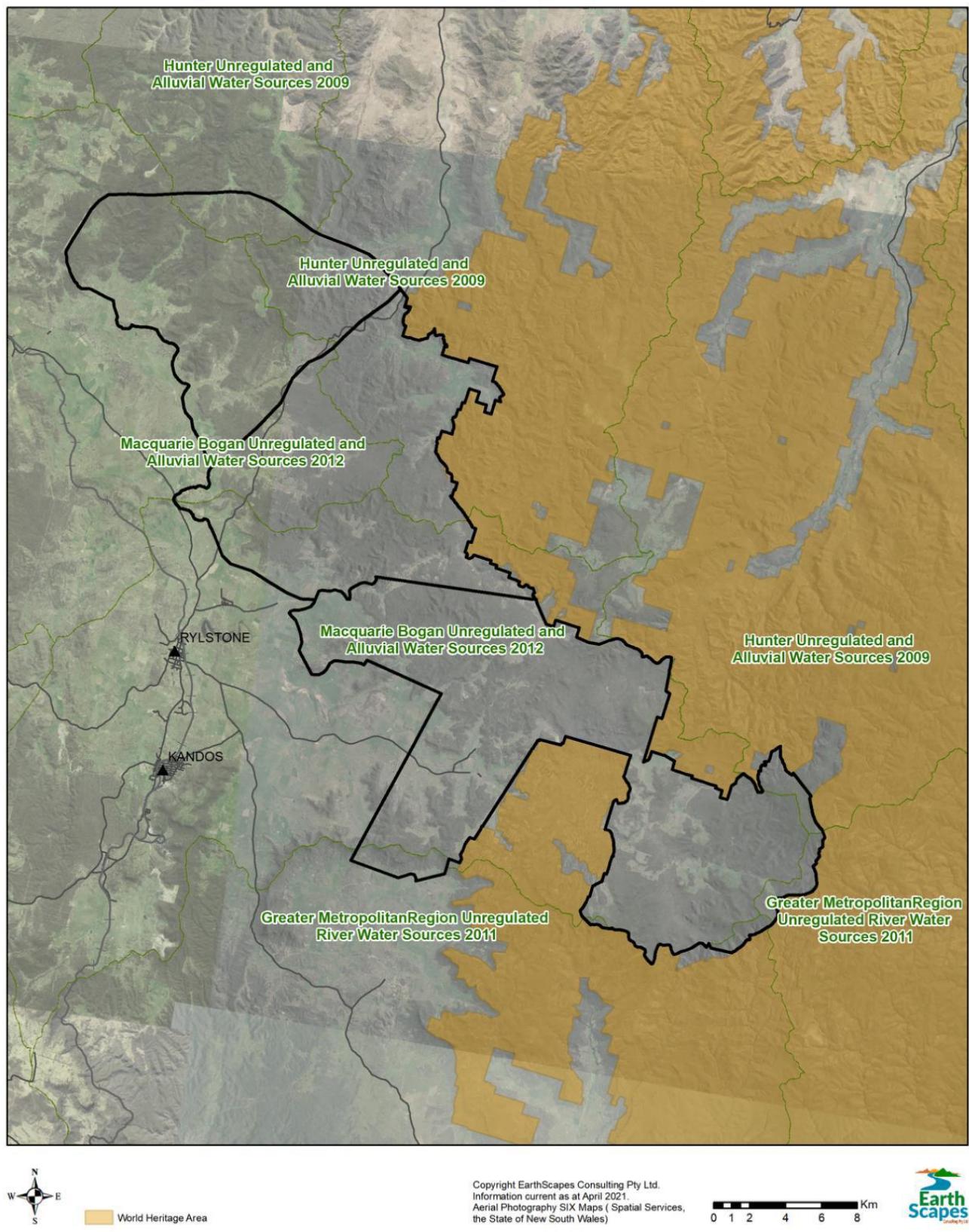


Figure 14 Surface Water Sharing Plan Areas

Groundwater Sharing Plan: Hawkins, Rumker and Ganguddy-Kelgoola Strategic Release Areas

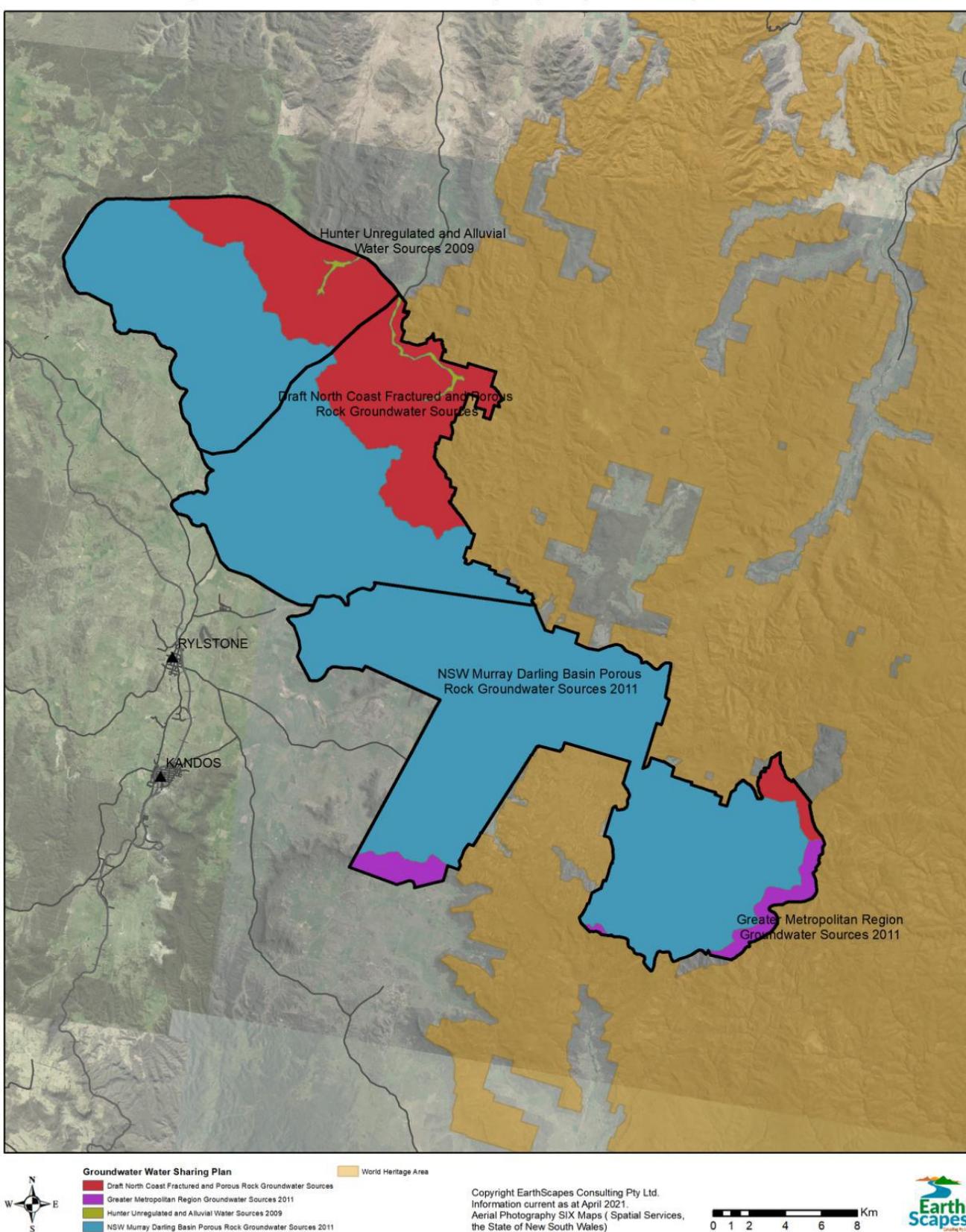


Figure 15 Groundwater Water Sharing Plan Areas

4 References

BioLink 2020: Quantifying the impacts of bushfire on populations of wild koalas: Insights from the 2019/20 fire season. Produced for WWF Australia.

Appendix 1 Secondary and Tertiary Landuses

Proposed Coal Release Area	Secondary Landuse	Tertiary Landuse	Area (Ha)
Ganguddy-Kelgoola	1.1.0 Nature conservation	1.1.0 Nature conservation	0.4
Ganguddy-Kelgoola	1.1.0 Nature conservation	1.1.3 Nature park	0.0
Ganguddy-Kelgoola	1.3.0 Other minimal use	1.3.0 Other minimal use	3826.0
Ganguddy-Kelgoola	1.3.0 Other minimal use	1.3.3 Residual native cover	5289.7
Ganguddy-Kelgoola	2.1.0 Grazing native vegetation	2.1.0 Grazing native vegetation	5017.4
Ganguddy-Kelgoola	2.2.0 Production native forestry	2.2.0 Production native forests	10444.7
Ganguddy-Kelgoola	3.1.0 Plantation forests	3.1.2 Softwood plantation forestry	2.9
Ganguddy-Kelgoola	3.2.0 Grazing modified pastures	3.2.0 Grazing modified pastures	2736.8
Ganguddy-Kelgoola	3.2.0 Grazing modified pastures	3.2.1 Native/exotic pasture mosaic	214.5
Ganguddy-Kelgoola	3.3.0 Cropping	3.3.0 Cropping	53.3
Ganguddy-Kelgoola	5.4.0 Residential and farm infrastructure	5.4.0 Residential and farm infrastructure	2.9
Ganguddy-Kelgoola	5.4.0 Residential and farm infrastructure	5.4.5 Farm buildings/infrastructure	10.8
Ganguddy-Kelgoola	6.2.0 Reservoir/dam	6.2.0 Reservoir/dam	0.9
Ganguddy-Kelgoola	6.3.0 River	6.3.0 River	14.4
Hawkins	1.3.0 Other minimal use	1.3.3 Residual native cover	10531.5
Hawkins	2.1.0 Grazing native vegetation	2.1.0 Grazing native vegetation	2708.2
Hawkins	2.2.0 Production native forestry	2.2.0 Production native forests	33.0
Hawkins	3.2.0 Grazing modified pastures	3.2.0 Grazing modified pastures	1584.3

Hawkins	3.3.0 Cropping	3.3.0 Cropping	3.2
Hawkins	3.4.0 Perennial horticulture	3.4.0 Perennial horticulture	4.0
Hawkins	5.4.0 Residential and farm infrastructure	5.4.0 Residential and farm infrastructure	13.6
Hawkins	5.4.0 Residential and farm infrastructure	5.4.3 Rural residential without agriculture	1.5
Hawkins	5.4.0 Residential and farm infrastructure	5.4.5 Farm buildings/infrastructure	3.2
Hawkins	5.7.0 Transport and communication	5.7.2 Roads	0.5
Hawkins	5.8.0 Mining	5.8.2 Quarries	0.8
Hawkins	6.3.0 River	6.3.0 River	26.1
Rumker	1.1.0 Nature conservation	1.1.0 Nature conservation	0.1
Rumker	1.3.0 Other minimal use	1.3.0 Other minimal use	446.6
Rumker	1.3.0 Other minimal use	1.3.3 Residual native cover	11492.1
Rumker	2.1.0 Grazing native vegetation	2.1.0 Grazing native vegetation	4045.9
Rumker	3.1.0 Plantation forests	3.1.2 Softwood plantation forestry	17.7
Rumker	3.2.0 Grazing modified pastures	3.2.0 Grazing modified pastures	1651.4
Rumker	3.2.0 Grazing modified pastures	3.2.1 Native/exotic pasture mosaic	75.9
Rumker	3.2.0 Grazing modified pastures	3.2.5 Sown grasses	5.7
Rumker	3.3.0 Cropping	3.3.0 Cropping	0.9
Rumker	3.4.0 Perennial horticulture	3.4.0 Perennial horticulture	0.5
Rumker	3.4.0 Perennial horticulture	3.4.3 Tree nuts	8.5

Rumker	3.5.0 Seasonal horticulture	3.5.0 Seasonal horticulture	3.1
Rumker	4.4.0 Irrigated perennial horticulture	4.4.9 Irrigated grapes	16.7
Rumker	5.4.0 Residential and farm infrastructure	5.4.0 Residential and farm infrastructure	9.8
Rumker	5.4.0 Residential and farm infrastructure	5.4.2 Rural residential with agriculture	24.2
Rumker	5.4.0 Residential and farm infrastructure	5.4.3 Rural residential without agriculture	5.1
Rumker	5.4.0 Residential and farm infrastructure	5.4.5 Farm buildings/infrastructure	14.9
Rumker	5.7.0 Transport and communication	5.7.2 Roads	1.6
Rumker	5.8.0 Mining	5.8.2 Quarries	1.8
Rumker	6.2.0 Reservoir/dam	6.2.0 Reservoir/dam	3.6
Rumker	6.3.0 River	6.3.0 River	0.5
Rumker	6.5.0 Marsh/wetland	6.5.0 Marsh/wetland	18.1

Appendix 2 Bore Water Data

Proposed Coal Release Area	Bore_ID	Type	Status
Ganguddy-Kelgoola	GW011317	Bore	Unknown
Ganguddy-Kelgoola	GW052388	Bore	Unknown
Ganguddy-Kelgoola	GW801550	Bore	Supply Obtained
Ganguddy-Kelgoola	GW060302	Bore	Unknown
Ganguddy-Kelgoola	GW805016	Bore	Supply Obtained
Ganguddy-Kelgoola	GW031530	Bore	Unknown
Ganguddy-Kelgoola	GW028876	Bore	Unknown
Ganguddy-Kelgoola	GW803598	Bore	Supply Obtained
Ganguddy-Kelgoola	GW804515	Bore	Supply Obtained
Ganguddy-Kelgoola	GW802374	Bore	Abandoned
Hawkins	GW801432	Well	Unknown
Hawkins	GW057059	Bore open thru rock	Unknown
Hawkins	GW803707	Bore	Supply Obtained
Hawkins	GW051992	Well	Unknown
Hawkins	GW011493	Bore	Unknown
Hawkins	GW200369	Bore	Unknown
Rumker	GW802370	Bore	Supply Obtained
Rumker	GW800581	Other	Unknown
Rumker	GW058394	Bore	Unknown
Rumker	GW801428	Bore	Supply Obtained

Rumker	GW805155	Bore	Supply Obtained
Rumker	GW801884	Bore	Supply Obtained
Rumker	GW805120	Bore	Supply Obtained
Rumker	GW801723	Bore	Supply Obtained
Rumker	GW064010	Bore	Unknown
Rumker	GW802734	Bore	Supply Obtained
Rumker	GW802864	Bore	Supply Obtained
Rumker	GW058417	Bore	Unknown
Rumker	GW031624	Well	Supply Obtained
Rumker	GW018929	Bore	Supply Obtained
Rumker	GW026583	Well	Unknown
Rumker	GW062357	Well	Supply Obtained
Rumker	GW037281	Bore	Needs Reconditioning
Rumker	GW026411	Well	Needs Reconditioning
Rumker	GW062492	Well	Unknown
Rumker	GW080274	Bore	Unknown

Appendix 3 PCTs

Proposed Coal Release Area	PCT	Area (Ha)
Ganguddy-Kelgoola	Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion	2.3
Ganguddy-Kelgoola	Blue Mountains Ash Moist Forest	54.8
Ganguddy-Kelgoola	Blue Mountains Gorges Grey Gum Sheltered Forest	226.1
Ganguddy-Kelgoola	Blue Mountains Sedge Swamp	1.3
Ganguddy-Kelgoola	Capertee Escarpment Ironbark Forest	79.3
Ganguddy-Kelgoola	Capertee Footslopes Box-Stringybark Forest	2528.3
Ganguddy-Kelgoola	Central Tableland Clay White Box Woodland	21.3
Ganguddy-Kelgoola	Central Tableland Flats Snow Gum-Ribbon Gum Forest	82.9
Ganguddy-Kelgoola	Central Tableland Flats Swamp Gum Low Forest	106.0
Ganguddy-Kelgoola	Central Tableland Ribbon Gum-Apple Gully Forest	1735.0
Ganguddy-Kelgoola	Central Tableland Sand-slope Scribbly Gum Woodland	4444.3
Ganguddy-Kelgoola	Central Tableland Sedge Swamp	17.4
Ganguddy-Kelgoola	Coast Grey Box - Mountain Grey Gum - stringybark moist shrubby open forest in coastal gullies; southern South East Corner Bioregion	5.3
Ganguddy-Kelgoola	Cudgegong Footslopes Forest	132.1
Ganguddy-Kelgoola	Cudgegong Footslopes Yellow Box Forest	293.0
Ganguddy-Kelgoola	Derived grassland of the NSW South Western Slopes	1204.2
Ganguddy-Kelgoola	Derived grassland of the South Eastern Highlands Bioregion and South East Corner Bioregion	2154.0
Ganguddy-Kelgoola	Growee Ranges Grey Gum-Scribbly Gum Forest	5710.5

Ganguddy-Kelgoola	Hunter Range Peppermint Sheltered Forest	5.7
Ganguddy-Kelgoola	Hunter Range Stringybark-Apple-Peppermint Forest	14.7
Ganguddy-Kelgoola	Montane Basalt Ribbon Gum-Box Forest	89.9
Ganguddy-Kelgoola	Montane Basalt Ribbon Gum Moist Forest	730.9
Ganguddy-Kelgoola	Montane Basalt Stringybark-Brittle Gum Forest	9.5
Ganguddy-Kelgoola	Montane Basalt Warm Temperate Rainforest	20.5
Ganguddy-Kelgoola	Ribbon Gum - Yellow Box grassy woodland on undulating terrain of the eastern tablelands; South Eastern Highlands Bioregion	7.0
Ganguddy-Kelgoola	River Oak Forest	6.1
Ganguddy-Kelgoola	River Oak forest and woodland wetland of the NSW South Western Slopes and South Eastern Highlands Bioregion	12.7
Ganguddy-Kelgoola	River Red Gum riparian tall woodland / open forest wetland in the Nandewar Bioregion and Brigalow Belt South Bioregion	6.9
Ganguddy-Kelgoola	River Red Gum shrub/grass riparian tall woodland or open forest wetland mainly in the upper slopes sub-region of the NSW South Western Slopes Bioregion and western South Eastern Highlands Bioregion	5.2
Ganguddy-Kelgoola	Rough-Barked Apple - red gum - Yellow Box woodland on alluvial clay to loam soils on valley flats in the northern NSW South Western Slopes Bioregion and Brigalow Belt South Bioregion	1.3
Ganguddy-Kelgoola	Snow Gum - Candle Bark woodland on broad valley flats of the tablelands and slopes; South Eastern Highlands Bioregion	0.5
Ganguddy-Kelgoola	Snow Gum - Mountain Gum tussock grass-herb forest of the South Eastern Highlands Bioregion	3.8
Ganguddy-Kelgoola	Sydney Hinterland Grey Myrtle Dry Rainforest	1.6
Ganguddy-Kelgoola	Sydney Hinterland Riverflat Paperbark Swamp Forest	12.7
Ganguddy-Kelgoola	Sydney Hinterland Warm Temperate Rainforest	39.7

Ganguddy-Kelgoola	Sydney Montane Basalt Monkey Gum Forest	1034.9
Ganguddy-Kelgoola	Typha rushland	141.8
Ganguddy-Kelgoola	Upper Blue Mountains Peppermint Sheltered Forest	1874.9
Ganguddy-Kelgoola	Western Blue Mountains Pagoda Shrubland	456.8
Ganguddy-Kelgoola	Western Blue Mountains Pagoda Woodland	776.8
Ganguddy-Kelgoola	Western Blue Mountains Peppermint Forest	876.6
Ganguddy-Kelgoola	Western Hunter Flats Rough-barked Apple Forest	70.1
Ganguddy-Kelgoola	Western Hunter Footslopes Box Woodland	0.2
Ganguddy-Kelgoola	Western Hunter Residual Basalt Low Forest	28.2
Ganguddy-Kelgoola	White Box - Black Cypress Pine shrubby woodland of the Western Slopes	0.2
Ganguddy-Kelgoola	White Box - Narrow-leaved Ironbark grassy woodland of the Capertee Valley; Sydney Basin Bioregion	11.9
Ganguddy-Kelgoola	Wollemi Monkey Gum-Peppermint Gully Forest	41.8
Ganguddy-Kelgoola	Wollemi Yertchuk-Stringybark Exposed Woodland	336.7
Ganguddy-Kelgoola	Yellow Box - Blakelys Red Gum grassy woodland on the tablelands; South Eastern Highlands Bioregion	343.7
Hawkins	Apple Box - Yellow Box dry grassy woodland of the South Eastern Highlands Bioregion	20.4
Hawkins	Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion	3.9
Hawkins	Blue Mountains Gorges Grey Gum Sheltered Forest	28.1
Hawkins	Burgan - tea-tree - Fringe Myrtle dry heathland on rocky outcrops; South Eastern Highlands Bioregion	1.2
Hawkins	Capertee Escarpment Slaty Gum Forest	16.3

Hawkins	Capertee Footslopes Box-Stringybark Forest	1049.6
Hawkins	Central Tableland Ribbon Gum-Apple Gully Forest	1096.8
Hawkins	Central Tableland Sand-slope Scribbly Gum Woodland	371.3
Hawkins	Cudgegong Footslopes Forest	0.9
Hawkins	Derived grassland of the NSW South Western Slopes	981.1
Hawkins	Derived grassland of the South Eastern Highlands Bioregion and South East Corner Bioregion	109.2
Hawkins	Growee Ranges Grey Gum-Scribbly Gum Forest	9238.1
Hawkins	Growee Ranges Grey Gum Sheltered Forest	22.4
Hawkins	Hunter Escarpment Slaty Gum-Box Forest	183.6
Hawkins	Long-leaved Box - Red Box grass-shrub open forest on hillslopes in the Mudgee Region; NSW central western slopes	0.1
Hawkins	Montane Basalt Ribbon Gum Moist Forest	0.9
Hawkins	Narrow-leaved Ironbark - Black Pine - Sifton Bush heathy open forest on sandstone ranges of the upper Hunter and Sydney Basin	1.7
Hawkins	Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands; South Eastern Highlands Bioregion	0.7
Hawkins	Ribbon Gum - Yellow Box grassy woodland on undulating terrain of the eastern tablelands; South Eastern Highlands Bioregion	12.2
Hawkins	River Oak Forest	0.5
Hawkins	River Oak forest and woodland wetland of the NSW South Western Slopes and South Eastern Highlands Bioregion	2.0
Hawkins	River Red Gum riparian tall woodland / open forest wetland in the Nandewar Bioregion and Brigalow Belt South Bioregion	24.1
Hawkins	River Red Gum shrub/grass riparian tall woodland or open forest wetland mainly in the upper slopes sub-region of the NSW South Western Slopes	0.3

	Bioregion and western South Eastern Highlands Bioregion	
Hawkins	Rough-Barked Apple - red gum - Yellow Box woodland on alluvial clay to loam soils on valley flats in the northern NSW South Western Slopes Bioregion and Brigalow Belt South Bioregion	0.3
Hawkins	Tumbledown Gum woodland on hills in the northern NSW South Western Slopes Bioregion and southern Brigalow Belt South Bioregion	6.1
Hawkins	Tumbledown Red Gum - Spinifex grass heathy low open woodland on sandstone slopes of the Sydney Basin	216.4
Hawkins	Typha rushland	13.1
Hawkins	Upper Blue Mountains Peppermint Sheltered Forest	3.5
Hawkins	Western Blue Mountains Pagoda Shrubland	236.7
Hawkins	Western Blue Mountains Peppermint Forest	1.8
Hawkins	Western Hunter Dwyers Red Gum-Cypress Woodland	12.3
Hawkins	Western Hunter Flats Rough-barked Apple Forest	222.0
Hawkins	Western Hunter Footslopes Box Woodland	1.0
Hawkins	Western Hunter Grey Gum-Stringybark Forest	6.2
Hawkins	White Box - Black Cypress Pine shrubby woodland of the Western Slopes	6.3
Hawkins	White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion	0.2
Hawkins	White Box shrubby open forest on fine grained sediments on steep slopes in the Mudgee region of the central western slopes of NSW	132.5
Hawkins	Yellow Box - Blakelys Red Gum grassy woodland on the tablelands; South Eastern Highlands Bioregion	159.4
Rumker	Apple Box - Yellow Box dry grassy woodland of the South Eastern Highlands Bioregion	0.2
Rumker	Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South	7.6

	Western Slopes Bioregion	
Rumker	Blue Mountains Gorges Grey Gum Sheltered Forest	61.3
Rumker	Burgan - tea-tree - Fringe Myrtle dry heathland on rocky outcrops; South Eastern Highlands Bioregion	1.0
Rumker	Capertee Footslopes Box-Stringybark Forest	1356.0
Rumker	Central Tableland Clay White Box Woodland	27.7
Rumker	Central Tableland Ribbon Gum-Apple Gully Forest	1637.0
Rumker	Central Tableland Sand-slope Scribbly Gum Woodland	2986.9
Rumker	Derived grassland of the NSW South Western Slopes	1402.0
Rumker	Derived grassland of the South Eastern Highlands Bioregion and South East Corner Bioregion	396.8
Rumker	Growee Ranges Grey Gum-Scribbly Gum Forest	7004.7
Rumker	Growee Ranges Grey Gum Sheltered Forest	126.6
Rumker	Growee Ranges Rocky Stringybark Woodland	2.4
Rumker	Hunter Escarpment Slaty Gum-Box Forest	651.3
Rumker	Long-leaved Box - Red Box grass-shrub open forest on hillslopes in the Mudgee Region; NSW central western slopes	0.6
Rumker	Montane Basalt Ribbon Gum-Box Forest	19.9
Rumker	Montane Basalt Stringybark-Brittle Gum Forest	0.7
Rumker	Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands; South Eastern Highlands Bioregion	0.4
Rumker	Ribbon Gum - Yellow Box grassy woodland on undulating terrain of the eastern tablelands; South Eastern Highlands Bioregion	13.8
Rumker	River Oak Forest	4.8

Rumker	River Oak forest and woodland wetland of the NSW South Western Slopes and South Eastern Highlands Bioregion	3.0
Rumker	River Red Gum riparian tall woodland / open forest wetland in the Nandewar Bioregion and Brigalow Belt South Bioregion	6.0
Rumker	River Red Gum shrub/grass riparian tall woodland or open forest wetland mainly in the upper slopes sub-region of the NSW South Western Slopes Bioregion and western South Eastern Highlands Bioregion	1.2
Rumker	Sydney Montane Basalt Monkey Gum Forest	1.9
Rumker	Tumbledown Gum woodland on hills in the northern NSW South Western Slopes Bioregion and southern Brigalow Belt South Bioregion	0.2
Rumker	Typha rushland	89.1
Rumker	Upper Blue Mountains Peppermint Sheltered Forest	16.7
Rumker	Western Blue Mountains Pagoda Shrubland	220.5
Rumker	Western Blue Mountains Pagoda Woodland	156.6
Rumker	Western Blue Mountains Peppermint Forest	29.1
Rumker	Western Hunter Dwyers Red Gum-Cypress Woodland	15.7
Rumker	Western Hunter Escarpment Ironbark Forest	26.7
Rumker	Western Hunter Flats Rough-barked Apple Forest	89.4
Rumker	Western Hunter Footslopes Box Woodland	1.6
Rumker	Western Hunter Grey Gum-Stringybark Forest	82.0
Rumker	Yellow Box - Blakelys Red Gum grassy woodland on the tablelands; South Eastern Highlands Bioregion	381.1

Appendix 4 Threatened Species

Proposed Coal Release Area	Dataset Name	Sighting Key	Species Code	Kingdom Name	Class Name	Family Name	Scientific Name	Common Name	NSW Status	Comm Status
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 403CQ	1136	Fauna	Mammalia	Petauridae	Petaurus australis	Yellow-bellied Glider	V,P	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 3294Y	268	Fauna	Aves	Cacatuidae	Callocephalon fimbriatum	Gang-gang Cockatoo	V,P,3	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722987	1137	Fauna	Mammalia	Petauridae	Petaurus norfolkensis	Squirrel Glider	V,P	
Ganguddy-Kelgo ola	DPIE Data from Scientific Licences dataset	SDMPI000 0419	603	Fauna	Aves	Meliphagidae	Anthochaera phrygia	Regent Honeyeater	E4A,P	CE
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJT04020 303	2676	Fauna	Reptilia	Elapidae	Hoplocephalus bungaroides	Broad-headed Snake	E1,P,2	V
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 30246	265	Fauna	Aves	Cacatuidae	Calyptorhynchus lathami	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 3024A	265	Fauna	Aves	Cacatuidae	Calyptorhynchus lathami	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo	Data Priorities Fauna Survey	SRMA060	265	Fauna	Aves	Cacatuidae	Calyptorhynchus	Glossy	V,P,2	

ola		3024Z					Iathami	Black-Cockatoo		
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 329BB	265	Fauna	Aves	Cacatuidae	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 403C4	265	Fauna	Aves	Cacatuidae	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 403C5	265	Fauna	Aves	Cacatuidae	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 5041C	265	Fauna	Aves	Cacatuidae	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 50847	265	Fauna	Aves	Cacatuidae	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	DPIE Default Sightings	36177-HO	265	Fauna	Aves	Cacatuidae	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	State Forests Biodata	SF-723038	265	Fauna	Aves	Cacatuidae	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	State Forests Biodata	SF-723040	265	Fauna	Aves	Cacatuidae	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	DPIE Default Sightings	SSNW000 22905	268	Fauna	Aves	Cacatuidae	<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V,P,3	

Ganguddy-Kelgo ola	State Forests Biodata	SF-723047	1136	Fauna	Mammalia	Petauridae	Petaurus australis	Yellow-bellied Glider	V,P	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722940	268	Fauna	Aves	Cacatuidae	Callocephalon fimbriatum	Gang-gang Cockatoo	V,P,3	
Ganguddy-Kelgo ola	DPIE Default Sightings	97973-035	248	Fauna	Aves	Strigidae	Ninox strenua	Powerful Owl	V,P,3	
Ganguddy-Kelgo ola	State Forests Biodata	SF-723108	1136	Fauna	Mammalia	Petauridae	Petaurus australis	Yellow-bellied Glider	V,P	
Ganguddy-Kelgo ola	State Forests Biodata	SF-723109	1136	Fauna	Mammalia	Petauridae	Petaurus australis	Yellow-bellied Glider	V,P	
Ganguddy-Kelgo ola	State Forests Biodata	SF-723110	1136	Fauna	Mammalia	Petauridae	Petaurus australis	Yellow-bellied Glider	V,P	
Ganguddy-Kelgo ola	State Forests Biodata	SF-723123	1136	Fauna	Mammalia	Petauridae	Petaurus australis	Yellow-bellied Glider	V,P	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 30251	268	Fauna	Aves	Cacatuidae	Callocephalon fimbriatum	Gang-gang Cockatoo	V,P,3	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 3025C	504	Fauna	Aves	Acanthizidae	Chthonicola sagittata	Speckled Warbler	V,P	
Ganguddy-Kelgo	Data Priorities Fauna Survey	SRMA060	549	Fauna	Aves	Neosittidae	Daphoenositta	Varied Sittella	V,P	

ola		30258					chrysopera			
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 3025D	8519	Fauna	Aves	Artamidae	<i>Artamus cyanopterus</i> <i>cyanopterus</i>	Dusky Woodswallow	V,P	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 3139S	3116	Fauna	Amphi bia	Myobatrachi dae	<i>Pseudophryne australis</i>	Red-crowned Toadlet	V,P	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SERM060 5023T	1150	Fauna	Mamm alia	Burramyidae	<i>Cercartetus nanus</i>	Eastern Pygmy-possum	V,P	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 3145P	268	Fauna	Aves	Cacatuidae	<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V,P,3	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SJMP9711 115N	603	Fauna	Aves	Meliphagidae	<i>Anthochaera phrygia</i>	Regent Honeyeater	E4A,P	CE
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 3145Y	549	Fauna	Aves	Neosittidae	<i>Daphoenositta chrysopera</i>	Varied Sittella	V,P	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SKEM9708 141E	549	Fauna	Aves	Neosittidae	<i>Daphoenositta chrysopera</i>	Varied Sittella	V,P	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SRWM980 7033R	1353	Fauna	Mamm alia	Vespertilioni dae	<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	V,P	V
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SRWM980 7033T	1372	Fauna	Mamm alia	Vespertilioni dae	<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V,P	

Ganguddy-Kelgo ola	DPIE Default Sightings	WD22180	268	Fauna	Aves	Cacatuidae	Callocephalon fimbriatum	Gang-gang Cockatoo	V,P,3	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SJKL97093 02U	549	Fauna	Aves	Neosittidae	Daphoenositta chrysoptera	Varied Sittella	V,P	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SKEM9708 1421	380	Fauna	Aves	Petroicidae	Petroica boodang	Scarlet Robin	V,P	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SKEM9708 2720	1353	Fauna	Mammalia	Vespertilionidae	Chalinolobus dwyeri	Large-eared Pied Bat	V,P	V
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SRWM980 7033N	1372	Fauna	Mammalia	Vespertilionidae	Falsistrellus tasmaniensis	Eastern False Pipistrelle	V,P	
Ganguddy-Kelgo ola	DPIE Default Sightings	WD36281	8519	Fauna	Aves	Artamidae	Artamus cyanopterus	Dusky Woodswallow	V,P	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SJMP9711 1151	1136	Fauna	Mammalia	Petauridae	Petaurus australis	Yellow-bellied Glider	V,P	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 3025G	652	Fauna	Aves	Estrildidae	Stagonopleura guttata	Diamond Firetail	V,P	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SJMP9801 3012	1245	Fauna	Mammalia	Macropodidae	Macropus parma	Parma Wallaby	V,P	
Ganguddy-Kelgo	Data Priorities Fauna Survey	SRMA060	8519	Fauna	Aves	Artamidae	Artamus cyanopterus	Dusky	V,P	

ola		5042L					cyanopterus	Woodswallow		
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 5042K	652	Fauna	Aves	Estrildidae	Stagonopleura guttata	Diamond Firetail	V,P	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 5084A	652	Fauna	Aves	Estrildidae	Stagonopleura guttata	Diamond Firetail	V,P	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SRWM980 7082T	1372	Fauna	Mammalia	Vespertilionidae	Falsistrellus tasmaniensis	Eastern False Pipistrelle	V,P	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 2079U	268	Fauna	Aves	Cacatuidae	Callocephalon fimbriatum	Gang-gang Cockatoo	V,P,3	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SKEM9708 1453	268	Fauna	Aves	Cacatuidae	Callocephalon fimbriatum	Gang-gang Cockatoo	V,P,3	
Ganguddy-Kelgo ola	Capertee subregion fauna	SMZS1108 122N	380	Fauna	Aves	Petroicidae	Petroica boodang	Scarlet Robin	V,P	
Ganguddy-Kelgo ola	DPIE Default Sightings	SAWH111 10200	1008	Fauna	Mammalia	Dasyuridae	Dasyurus maculatus	Spotted-tailed Quoll	V,P	E
Ganguddy-Kelgo ola	Capertee subregion fauna	SMZS1109 2022	652	Fauna	Aves	Estrildidae	Stagonopleura guttata	Diamond Firetail	V,P	
Ganguddy-Kelgo ola	Data Priorities Fauna Survey	SRMA060 5081V	248	Fauna	Aves	Strigidae	Ninox strenua	Powerful Owl	V,P,3	

Ganguddy-Kelgo ola	Central CRA Fauna Survey	SJMP9711 110E	268	Fauna	Aves	Cacatuidae	Callocephalon fimbriatum	Gang-gang Cockatoo	V,P,3	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SKEM9708 143N	268	Fauna	Aves	Cacatuidae	Callocephalon fimbriatum	Gang-gang Cockatoo	V,P,3	
Ganguddy-Kelgo ola	Central CRA Fauna Survey	SRWM980 7033E	1372	Fauna	Mammalia	Vespertilionidae	Falsistrellus tasmaniensis	Eastern False Pipistrelle	V,P	
Ganguddy-Kelgo ola	State Forests Biodata	SF-130275 5	380	Fauna	Aves	Petroicidae	Petroica boodang	Scarlet Robin	V,P	
Ganguddy-Kelgo ola	Capertee subregion fauna	SMZS1108 124I	265	Fauna	Aves	Cacatuidae	Calyptorhynchus lathamii	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	Capertee subregion fauna	SMZS1109 2024	265	Fauna	Aves	Cacatuidae	Calyptorhynchus lathamii	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	DPIE Default Sightings	SDMP020 8260J	265	Fauna	Aves	Cacatuidae	Calyptorhynchus lathamii	Glossy Black-Cockatoo	V,P,2	
Ganguddy-Kelgo ola	DPIE Data from Scientific Licences dataset	SDMPI009 7018	1008	Fauna	Mammalia	Dasyuridae	Dasyurus maculatus	Spotted-tailed Quoll	V,P	E
Ganguddy-Kelgo ola	Capertee subregion fauna	SMZS1108 124K	380	Fauna	Aves	Petroicidae	Petroica boodang	Scarlet Robin	V,P	
Ganguddy-Kelgo	Capertee subregion fauna	SMZS1108	1136	Fauna	Mammal	Petauridae	Petaurus australis	Yellow-bellied Petauridae	V,P	

ola		124U			alia			Glider		
Ganguddy-Kelgo ola	Capertee subregion fauna	SMZS1108 124E	268	Fauna	Aves	Cacatuidae	Callocephalon fimbriatum	Gang-gang Cockatoo	V,P,3	
Ganguddy-Kelgo ola	Capertee subregion fauna	SMZS1109 2023	1136	Fauna	Mammalia	Petauridae	Petaurus australis	Yellow-bellied Glider	V,P	
Ganguddy-Kelgo ola	Capertee subregion fauna	SMZS1108 126L	380	Fauna	Aves	Petroicidae	Petroica boodang	Scarlet Robin	V,P	
Ganguddy-Kelgo ola	Dan Lunney's Community Wildlife Survey	WS-19221	1008	Fauna	Mammalia	Dasyuridae	Dasyurus maculatus	Spotted-tailed Quoll	V,P	E
Rumker	DPIE Data from Scientific Licences dataset	SDMPI009 7016	1008	Fauna	Mammalia	Dasyuridae	Dasyurus maculatus	Spotted-tailed Quoll	V,P	E
Rumker	Capertee subregion fauna	SMZS1109 095I	380	Fauna	Aves	Petroicidae	Petroica boodang	Scarlet Robin	V,P	
Rumker	DPIE Data from Scientific Licences dataset	SDMPI008 1590	603	Fauna	Aves	Meliphagidae	Anthochaera phrygia	Regent Honeyeater	E4A,P	CE
Rumker	DPIE Default Sightings	36374-HO	268	Fauna	Aves	Cacatuidae	Callocephalon fimbriatum	Gang-gang Cockatoo	V,P,3	
Rumker	DPIE Data from Scientific Licences dataset	SIXRI0609 651	1008	Fauna	Mammalia	Dasyuridae	Dasyurus maculatus	Spotted-tailed Quoll	V,P	E

Rumker	Central CRA Fauna Survey	SKEM9710 231V	265	Fauna	Aves	Cacatuidae	<i>Calyptorhynchus lathamii</i>	Glossy Black-Cockatoo	V,P,2	
Rumker	DPIE Default Sightings	93525-035	230	Fauna	Aves	Accipitridae	<i>Lophoictinia isura</i>	Square-tailed Kite	V,P,3	
Hawkins	Capertee subregion fauna	SMZS1108 128G	380	Fauna	Aves	Petroicidae	<i>Petroica boodang</i>	Scarlet Robin	V,P	
Hawkins	Capertee subregion fauna	SMZS1109 2029	380	Fauna	Aves	Petroicidae	<i>Petroica boodang</i>	Scarlet Robin	V,P	
Hawkins	Capertee subregion fauna	SMZS1108 1298	380	Fauna	Aves	Petroicidae	<i>Petroica boodang</i>	Scarlet Robin	V,P	
Hawkins	Capertee subregion fauna	SMZS1109 202B	380	Fauna	Aves	Petroicidae	<i>Petroica boodang</i>	Scarlet Robin	V,P	
Rumker	DPIE Default Sightings	100633-03 5	231	Fauna	Aves	Accipitridae	<i>Hamirostra melanosternon</i>	Black-breasted Buzzard	V,P,3	
Rumker	DPIE Default Sightings	SMCE9704 2417	248	Fauna	Aves	Strigidae	<i>Ninox strenua</i>	Powerful Owl	V,P,3	
Hawkins	Dan Lunney's Community Wildlife Survey	WS-19228	1008	Fauna	Mammalia	Dasyuridae	<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V,P	E
Hawkins	DPIE Data from Scientific	SDMPI009	1008	Fauna	Mamm	Dasyuridae	<i>Dasyurus maculatus</i>	Spotted-tailed	V,P	E

	Licences dataset	7006			alia			Quoll		
Hawkins	DPIE Default Sightings	SJJS15012 70P	1162	Fauna	Mammalia	Phascolarctid ae	Phascolarctos cinereus	Koala	V,P	V
Hawkins	DPIE Data from Scientific Licences dataset	SDMPI009 7007	1008	Fauna	Mammalia	Dasyuridae	Dasyurus maculatus	Spotted-tailed Quoll	V,P	E
Hawkins	DPIE Data from Scientific Licences dataset	SDMPI009 6988	1008	Fauna	Mammalia	Dasyuridae	Dasyurus maculatus	Spotted-tailed Quoll	V,P	E
Rumker	DPIE Default Sightings	SJAL02022 202	1008	Fauna	Mammalia	Dasyuridae	Dasyurus maculatus	Spotted-tailed Quoll	V,P	E
Hawkins	DPIE Data from Scientific Licences dataset	SDMPI009 6989	1008	Fauna	Mammalia	Dasyuridae	Dasyurus maculatus	Spotted-tailed Quoll	V,P	E
Hawkins	DPIE Default Sightings	59969-HO	1215	Fauna	Mammalia	Macropodidae	Petrogale penicillata	Brush-tailed Rock-wallaby	E1,P	V
Hawkins	DPIE Default Sightings	92806-035	248	Fauna	Aves	Strigidae	Ninox strenua	Powerful Owl	V,P,3	
Hawkins	DPIE Default Sightings	SJJT03081 801	248	Fauna	Aves	Strigidae	Ninox strenua	Powerful Owl	V,P,3	
Rumker	DPIE Data from Scientific Licences dataset	SDMPI000 0416	603	Fauna	Aves	Meliphagidae	Anthochaera phrygia	Regent Honeyeater	E4A,P	CE

Hawkins	DPIE Default Sightings	SSYK0203 2800	1162	Fauna	Mammalia	Phascolarctid ae	Phascolarctos cinereus	Koala	V,P	V
Hawkins	DPIE Default Sightings	59970-HO	2676	Fauna	Reptilia	Elapidae	Hoplocephalus bungaroides	Broad-headed Snake	E1,P,2	V
Ganguddy-Kelgo ola	State Forests Biodata	SF-722957	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI06636 52	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI06636 55	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722944	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722952	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 64	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 77	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo	State Forests Biodata	SF-722956	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	

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Ganguddy-Kelgo ola	State Forests Biodata	SF-722953	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 65	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 68	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 76	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722951	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 66	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 67	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 69	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 70	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	

Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 71	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 72	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI06636 54	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722945	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722955	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722954	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 73	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 75	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 74	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo	DPIE Default Sightings	SJJSI06636	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple	V	

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Ganguddy-Kelgo ola	DPIE Data from Scientific Licences dataset	SJJSI0672484	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722947	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI0663656	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI0663657	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722946	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722950	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139163	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-722949	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	1037R	5369	Flora	Flora	Proteaceae	Grevillea evansiana	Evans Grevillea	V	V

Ganguddy-Kelgo ola	State Forests Biodata	SF-722948	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI0663643	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI0663651	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-723042	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	State Forests Biodata	SF-723041	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI0663650	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW319367	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139139	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139137	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo	DPIE Default Sightings	SJJSI11391	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple	V	

ola		38						Box		
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139136	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139135	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139134	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139133	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139132	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139131	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI0663638	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI0663637	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139144	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	

Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI06636 36	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 43	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 42	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SDZC0809 220L	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 40	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 41	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 46	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	WOLLEMI_09 Vegetation Survey	SPJGI3725 073	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	WOLLEMI_09 Vegetation Survey	SPJGI3880 182	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo	DPIE Default Sightings	SJJSI06636	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple	V	

ola		39						Box		
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 47	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW2647 42	9979	Flora	Flora	Fabaceae (Faboideae)	Pultenaea sp. Olinda		E1,3	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW4679 38	9979	Flora	Flora	Fabaceae (Faboideae)	Pultenaea sp. Olinda		E1,3	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI06636 47	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 45	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 48	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI06636 44	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI06636 40	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 99	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	

Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	SJJSI1126370	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139198	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	1033R	5369	Flora	Flora	Proteaceae	Grevillea evansiana	Evans Grevillea	V	V
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139160	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139197	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW119454	5369	Flora	Flora	Proteaceae	Grevillea evansiana	Evans Grevillea	V	V
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW459688	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW459780	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI1139161	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo	DPIE Default Sightings	SJJSI11391	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple	V	

ola		59						Box		
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 58	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 57	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 56	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 55	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	WOLLEMI_09 Vegetation Survey	SPJGI3724 871	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	WOLLEMI_09 Vegetation Survey	SPJGI3937 109	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 96	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 50	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 49	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	

Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 51	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 54	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 52	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 53	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 62	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI06636 49	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 84	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 85	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 86	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo	DPIE Default Sightings	SJJSI11391	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple	V	

ola		83						Box		
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 87	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 82	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 88	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 81	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI06636 53	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	WOLLEMI_10 Vegetation Survey	SPJGI4342 567	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	WOLLEMI_10 Vegetation Survey	SPJGI4377 669	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 80	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 89	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	

Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 90	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 79	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 91	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 93	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 94	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 95	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 92	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	DPIE Default Sightings	SJJSI11391 78	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW3354 24	8326	Flora	Flora	Myrtaceae	Eucalyptus cannonii	Capertee Stringybark	V	
Ganguddy-Kelgo	Royal Botanic Gardens	NSW2117	5369	Flora	Flora	Proteaceae	Grevillea evansiana	Evans Grevillea	V	V

ola	Herbarium Specimen Register	07								
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW4159 582	5369	Flora	Flora	Proteaceae	<i>Grevillea evansiana</i>	Evans Grevillea	V	V
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW3158 38	10020	Flora	Flora	Myrtaceae	<i>Eucalyptus corticosa</i>	Creswick Apple Box	V	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW5407 6	10020	Flora	Flora	Myrtaceae	<i>Eucalyptus corticosa</i>	Creswick Apple Box	V	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW5407 7	10020	Flora	Flora	Myrtaceae	<i>Eucalyptus corticosa</i>	Creswick Apple Box	V	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW6641 60	5369	Flora	Flora	Proteaceae	<i>Grevillea evansiana</i>	Evans Grevillea	V	V
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW2264 8	5369	Flora	Flora	Proteaceae	<i>Grevillea evansiana</i>	Evans Grevillea	V	V
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW6543 42	10737	Flora	Flora	Rutaceae	<i>Leionema sympetalum</i>	Rylstone Bell	V	V
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW6969 4	10737	Flora	Flora	Rutaceae	<i>Leionema sympetalum</i>	Rylstone Bell	V	V
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW6969 5	10737	Flora	Flora	Rutaceae	<i>Leionema sympetalum</i>	Rylstone Bell	V	V

Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW54080	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW108535	9979	Flora	Flora	Fabaceae (Faboideae)	Pultenaea sp. Olinda		E1,3	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW38970	9979	Flora	Flora	Fabaceae (Faboideae)	Pultenaea sp. Olinda		E1,3	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW664161	5369	Flora	Flora	Proteaceae	Grevillea evansiana	Evans Grevillea	V	V
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW54078	10020	Flora	Flora	Myrtaceae	Eucalyptus corticosa	Creswick Apple Box	V	
Ganguddy-Kelgo ola	Royal Botanic Gardens Herbarium Specimen Register	NSW85265	5369	Flora	Flora	Proteaceae	Grevillea evansiana	Evans Grevillea	V	V
Ganguddy-Kelgo ola	DPIE Default Sightings	1036R	5369	Flora	Flora	Proteaceae	Grevillea evansiana	Evans Grevillea	V	V
Ganguddy-Kelgo ola	WOLLEMI_10 Vegetation Survey	SPJGI4338959	8326	Flora	Flora	Myrtaceae	Eucalyptus cannonii	Capertee Stringybark	V	
Hawkins	Royal Botanic Gardens Herbarium Specimen Register	NSW335420	8326	Flora	Flora	Myrtaceae	Eucalyptus cannonii	Capertee Stringybark	V	
Rumker	Royal Botanic Gardens	NSW2472	9979	Flora	Flora	Fabaceae	Pultenaea sp. Olinda		E1,3	

	Herbarium Specimen Register	72				(Faboideae)				
Hawkins	DPIE Default Sightings	355	3056	Flora	Flora	Fabaceae (Faboideae)	Swainsona recta	Small Purple-pea	E1	E
Hawkins	Royal Botanic Gardens Herbarium Specimen Register	NSW2134 08	3056	Flora	Flora	Fabaceae (Faboideae)	Swainsona recta	Small Purple-pea	E1	E