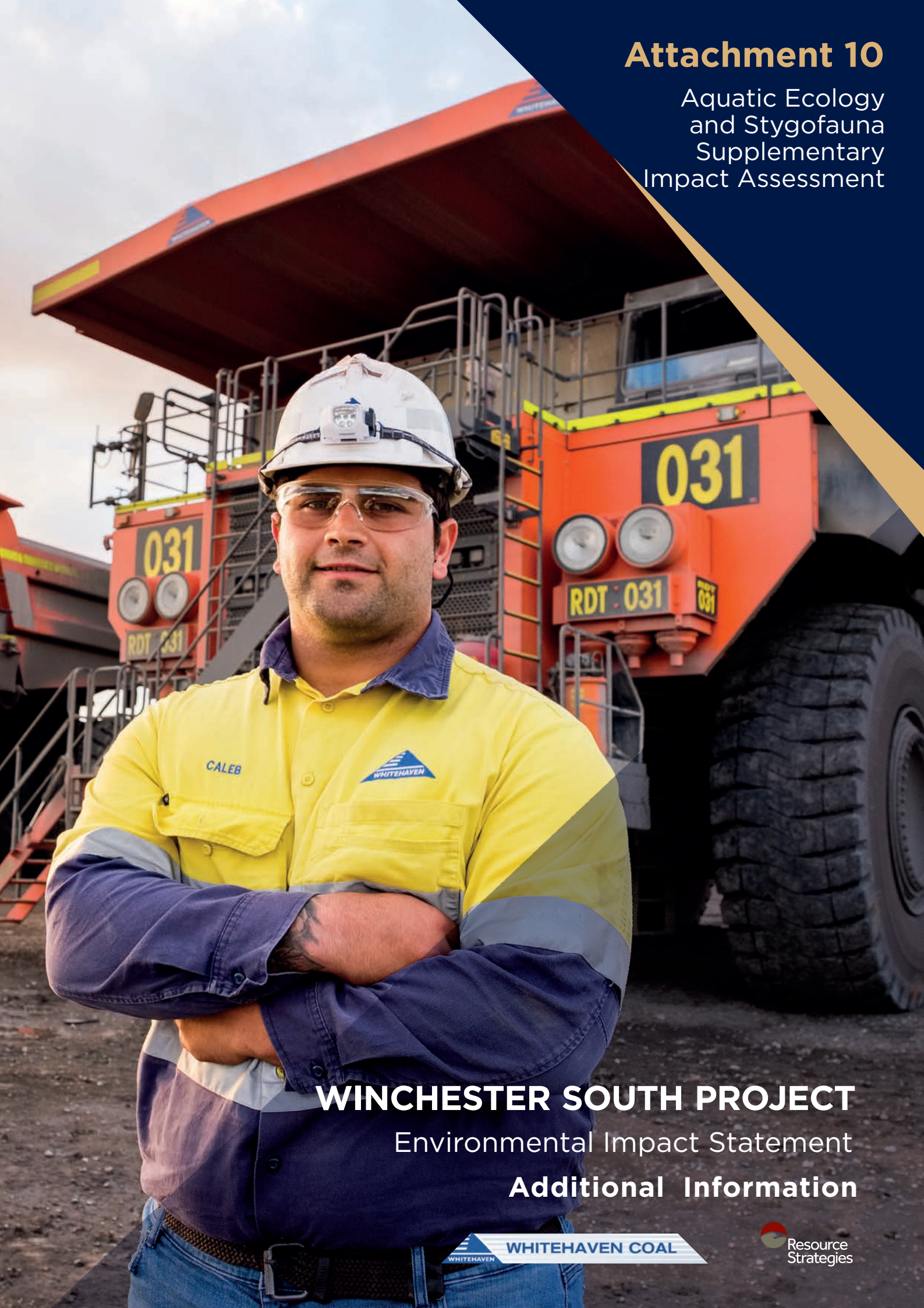

Attachment 10

Aquatic Ecology and Stygofauna Supplementary Impact Assessment

WINCHESTER SOUTH PROJECT

Environmental Impact Statement

Additional Information

WHITEHAVEN COAL

Resource Strategies

Winchester South Project

Aquatic Ecology and Stygofauna Supplementary Assessment

Prepared for: Whitehaven WS Pty Ltd

Prepared by Ecological Service Professionals Pty Ltd

July 2022

Document Control

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Project Reference: 2111

Client: Whitehaven WS Pty Ltd

Client Contact: Brendan Dillon

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Executive Summary

Introduction

This report has been prepared by Ecological Service Professionals (ESP) for Whitehaven WS Pty Ltd (Whitehaven WS), a wholly owned subsidiary of Whitehaven Coal Limited. ESP completed the aquatic ecology and stygofauna assessments for the Draft Environmental Impact Statement (Draft EIS) for the Winchester South Project (the Project).

In 2021, Whitehaven WS submitted the Draft EIS for assessment under the *State Development and Public Works Organisation Act 1971* (SDPWO Act), which was placed on public notification by the Office of the Coordinator-General from 4 August 2021 until 15 September 2021. Subsequent to the public notification of the Draft EIS, Whitehaven WS reviewed the mine plan and mine schedule with the aim of reducing environmental impacts of the Project and changing the Project final landform in response to comments raised in submissions.

On 3 December 2021, the Coordinator-General formally requested (in accordance with section 34A of the SDPWO Act) additional information on the environmental effects of the Project and other matters relating to the Project. This report provides a supplementary assessment of potential impacts from the Project on aquatic ecology and stygofauna in consideration of the optimised mine plan and submissions received on the Draft EIS.

Potential Aquatic Ecology Impacts from the Optimised Mine Plan

The optimised Project mine plan reduces the overall surface disturbance extent by approximately 179 hectares (ha) adjacent to the proposed South Pit and West Pit locations. The optimised Project final landform also includes backfilling the previous proposed South Pit mine void and providing a use for all remaining proposed residual voids (i.e. no non-use management areas). The optimised Project mine plan also includes re-establishing a post-mining surface water drainage that is sympathetic with the natural drainage lines.

The optimised Project mine plan would not increase impact on aquatic ecology, but rather have a positive impact on aquatic ecology (compared to the original design), by reducing the overall clearance footprint, and increasing the catchment area reporting to the natural ecosystems (due to backfilling the previous proposed South Pit mine void).

Matters of State Environmental Significance – Waterway Providing for Fish Passage

The *Environmental Offsets Regulation 2014* (EO Regulation) states that any part of a waterway providing for passage of fish is a Matters of State Environmental Significance (MSES) only if the construction, installation or modification of waterway barrier works carried out under an authority will limit the passage of fish along the waterway.

Additional field assessments of waterways providing for fish passage were completed by ESP in February 2022. This included supplementary waterway surveys at 85 assessment points on mapped and un-mapped waterways within the Project area.

The supplementary field surveys found that part of the unnamed northern waterway is a waterway providing for fish passage MSES as defined by the EO Regulation.

There is 3.28 kilometres (km) (constituting 5.28 ha) of the northern unnamed waterway within the mining lease. The majority of the northern unnamed waterway within the mining lease would be avoided. However, the Project would require the removal of up to 46% (1.52 km constituting 2.45 ha) of northern unnamed waterway that equates to the waterway providing for fish passage MSES.

Measures to minimise and mitigate the impacts on the waterway providing for fish passage MSES include:

- management of the northern unnamed waterway outside of the development footprint
- construction of an up-catchment diversion system, and
- reinstating excised portions of the northern unnamed waterway in the final landform.

With the impact avoidance and mitigation measures outlined in Section 2.2.5, the Project is not expected to have a significant residual impact on waterways providing for fish passage. Therefore, no offsets are required for a waterway providing for fish passage.

Waterway Barrier Works – Crossings

No impacts to waterways providing for fish passage are proposed as a result of crossings by linear infrastructure.

Supplementary Stygofauna Surveys and Assessment

During the supplementary survey, stygofauna taxa were recorded from one bore targeting the Isaac River alluvium:

- Ostracods from family Candonidae (2 specimens), and
- Syncarida from family Bathynellidae (10 specimens).

Both of these families are obligate inhabitants of groundwater ecosystems (i.e. stygobites), and are widespread.

The wetlands and farm dams in the locality are not likely to be aquatic groundwater dependant ecosystems (GDEs). Modelling has shown that the Project would result in negligible increased leakage from surface flows of the Isaac River to the underlying alluvium (SLR 2022). Therefore, impacts to surface flows and subsequently aquatic ecosystems downstream of the Project area are not expected.

As such, the Project is not expected to impact subterranean or aquatic GDEs.

1 Introduction

1.1 Background

This report has been prepared by Ecological Service Professionals (ESP) for Whitehaven WS Pty Ltd (Whitehaven WS), a wholly owned subsidiary of Whitehaven Coal Limited. ESP completed the aquatic ecology and stygofauna assessments for the Draft Environmental Impact Statement (Draft EIS) for the Winchester South Project (the Project).

The Project involves the development of an open cut metallurgical coal mine in an existing mining precinct. Products would include metallurgical coal for the steel industry and thermal coal for energy production.

The Project is located approximately 30 kilometres (km) south-east of Moranbah, in the Isaac Regional Council Local Government Area, within the Bowen Basin Coalfield, in Queensland (Figure 1).

In 2021, Whitehaven WS submitted the Draft EIS for assessment under the *State Development and Public Works Organisation Act 1971* (SDPWO Act). The EIS was placed on public notification by the Office of the Coordinator-General (OCG) from 4 August 2021 until 15 September 2021. During and following this period, government advisory agencies, organisations and members of the public provided submissions on the Draft EIS to the OCG.

Subsequent to the public notification of the Draft EIS, Whitehaven WS reviewed the mine plan and mine schedule with the aim of reducing environmental impacts of the Project and changing the Project final landform in response to comments raised in submissions. This review also considered new geological data and the outcomes of processing trials to further refine the mine plan (Figure 2).

On 3 December 2021, the Coordinator-General formally requested (in accordance with section 34A of the SDPWO Act) additional information on the environmental effects of the Project and other matters relating to the Project. This report provides a supplementary assessment of potential impacts from the Project on aquatic ecology and stygofauna in consideration of the optimised mine plan and submissions received on the Draft EIS.

1.2 Optimised Mine Plan

In response to feedback from regulatory and community stakeholders, Whitehaven WS has reviewed the Project mine plan and sequence with the aim of reducing the number of residual voids in the final landform; reducing the impacts of the Project on threatened species habitat and investigating uses for the residual void water bodies (Figure 2 to Figure 6). The optimised Project final landform achieves these by:

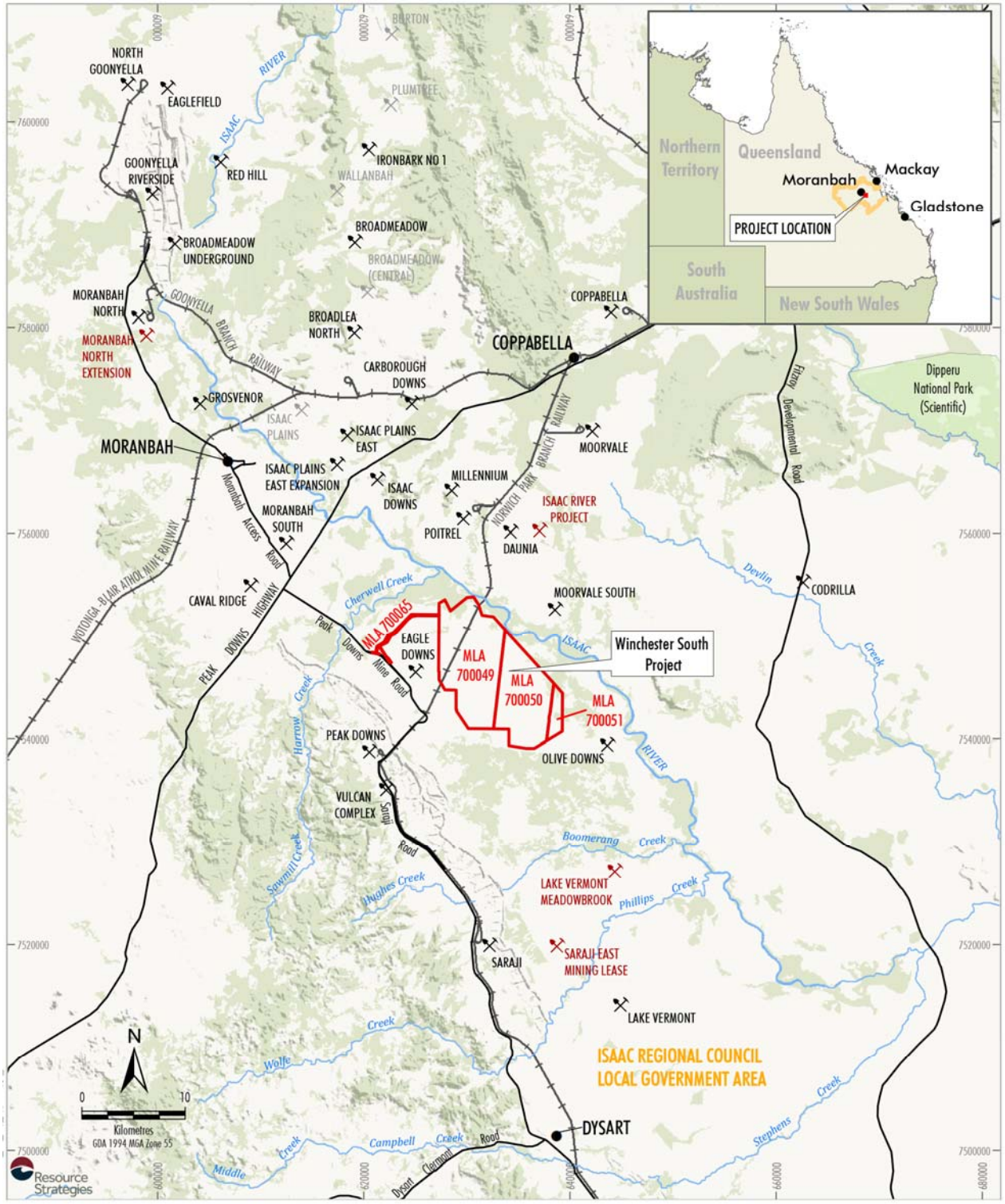
1. Backfilling South Pit mine void (Figure 6).
2. Providing a use for all remaining proposed residual voids, i.e. no non-use management areas.
3. Reducing the overall surface disturbance extent by approximately 179 hectares (ha), with further minimised out-of-pit waste rock emplacements (Figure 4).
4. Smoothing low-walls to minimise slopes greater than 10 degrees (Figure 6).

5. Providing water supply to stock.
6. Re-establishing a post-mining surface water drainage that is sympathetic with the natural drainage lines (Figure 6).

1.3 Submissions

This report provides a supplementary assessment of potential impacts from the Project on aquatic ecology and stygofauna in consideration of the submissions received on the Draft EIS regarding:

- supplementary fish surveys and review (Section 2.2.1)
- supplementary hydrological modelling related to fish passage (Section 2.2.2)
- identification of waterways providing for fish passage (Section 2.2.3)
- measures to avoid impacts on waterways providing for fish passage (Section 2.2.4)
- measures to minimise and mitigate impacts on waterways providing for fish passage (Section 2.2.5)
- assessment of significant residual impacts on waterways providing for fish passage (Section 2.3)
- offset requirements for waterways providing for fish passage (Section 2.3.1)
- waterway barrier works associated with crossings (Section 2.4), and
- supplementary stygofauna surveys and assessment (Section 2.5).



LEGEND
- Mining Lease Application Boundary
- Approved/Operating
- Proposed
- Care and Maintenance
- Local Government Area Boundary
- Railway
- Road

Source: The State of Queensland (2018 - 2020); Geoscience Australia (2018)

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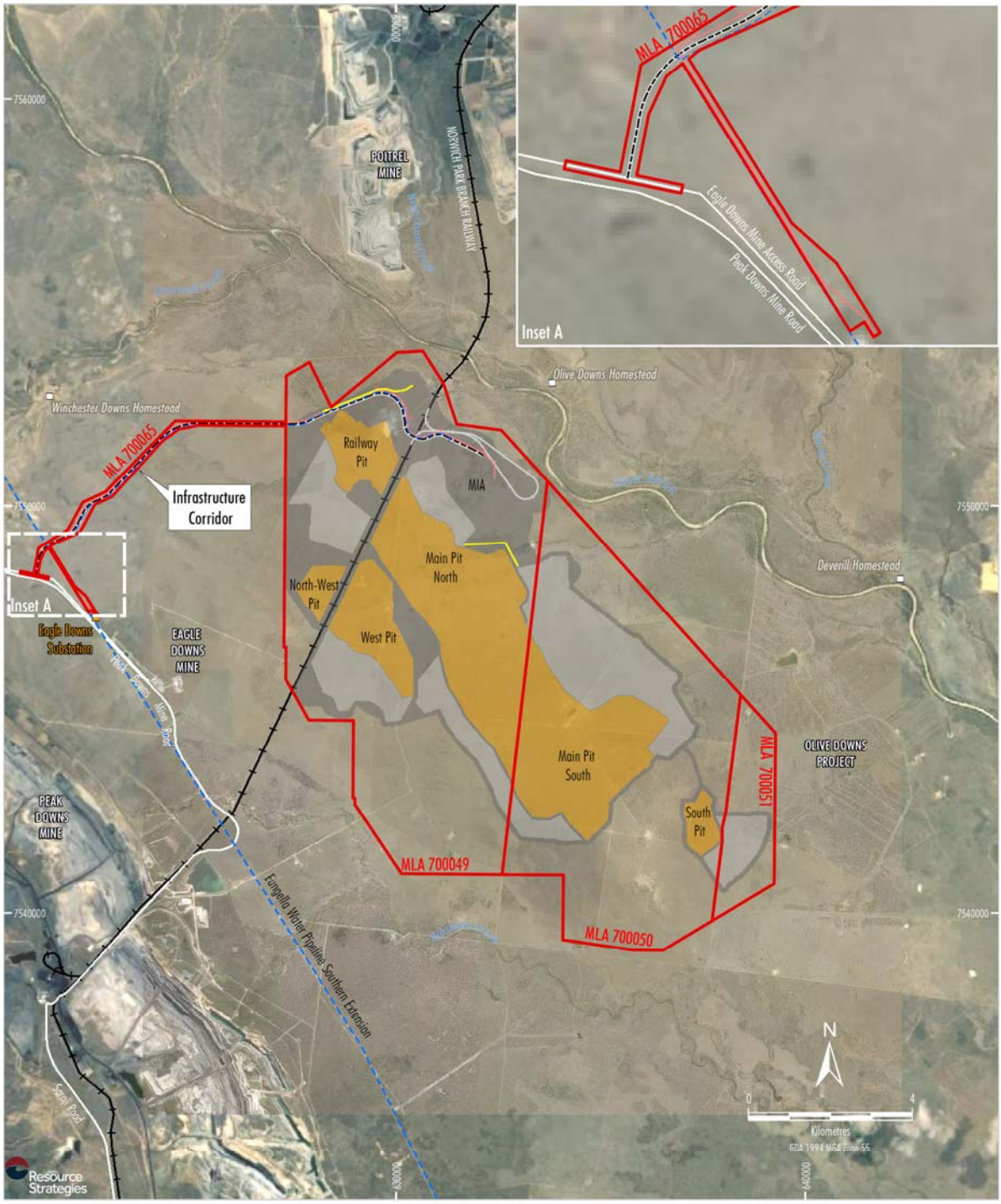
WINCHESTER SOUTH PROJECT

Project Location

Figure 1



LEGEND

- Mining Lease Application Boundary
- Eungella Water Pipeline Southern Extension
- Railway
- Substation

Project Component*

- Indicative Infrastructure Area
- Indicative Out-of-pit Waste Rock Emplacement
- Indicative Open Cut Pit Including In-pit Waste Rock Emplacement
- Indicative Mine Access Road
- Indicative Rail Spur and Loop
- Indicative Electricity Transmission Line
- Indicative Raw Water Supply Pipeline
- Indicative Flood Levee

*Note: * Excludes some project components such as water management infrastructure, access tracks, topsoil stockpiles, explosives magazines, power reticulation, temporary offices, other ancillary works and construction disturbance.*

Source: The State of Queensland (2018 - 2020); Whitehaven (2020)
Orthophoto: Google Image (2019); Whitehaven (2017)

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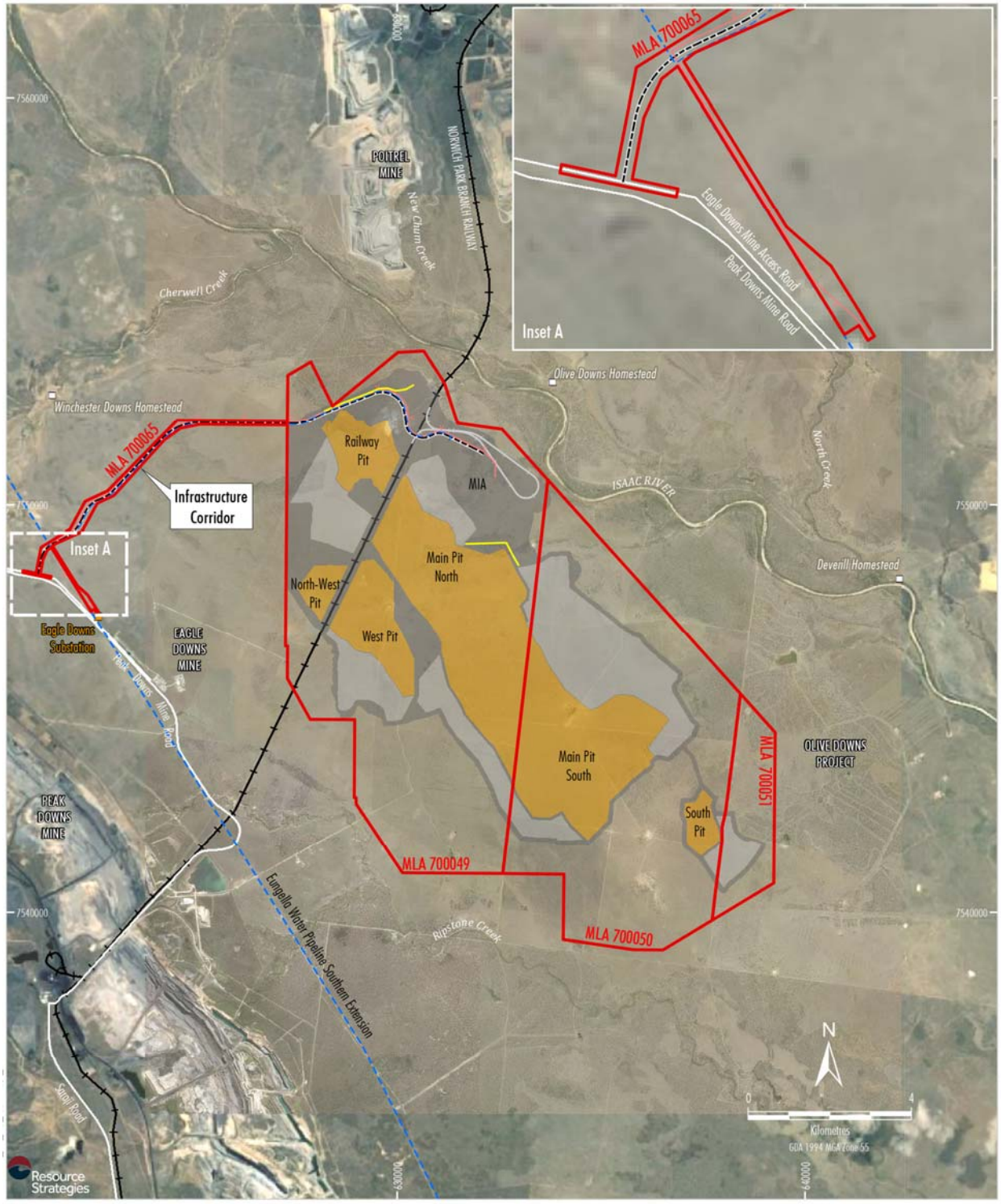
WINCHESTER SOUTH PROJECT

2021 Draft EIS
Project General Arrangement

Figure 2



LEGEND
- Mining Lease Application Boundary
- Eungella Water Pipeline Southern Extension
- Railway
- Substation

Project Component*
- Indicative Infrastructure Area
- Indicative Out-of-pit Waste Rock Emplacement
- Indicative Open Cut Pit Including In-pit Waste Rock Emplacement
- Indicative Mine Access Road
- Indicative Rail Spur and Loop
- Indicative Electricity Transmission Line
- Indicative Raw Water Supply Pipeline
- Indicative Flood Levee

*Note: * Excludes some project components such as water management infrastructure, access tracks, topsoil stockpiles, explosives magazines, power reticulation, temporary offices, other ancillary works and construction disturbance.*

Source: The State of Queensland (2018 - 2020); Whitehaven (2022)
Orthophoto: Google Image (2019); Whitehaven (2017)

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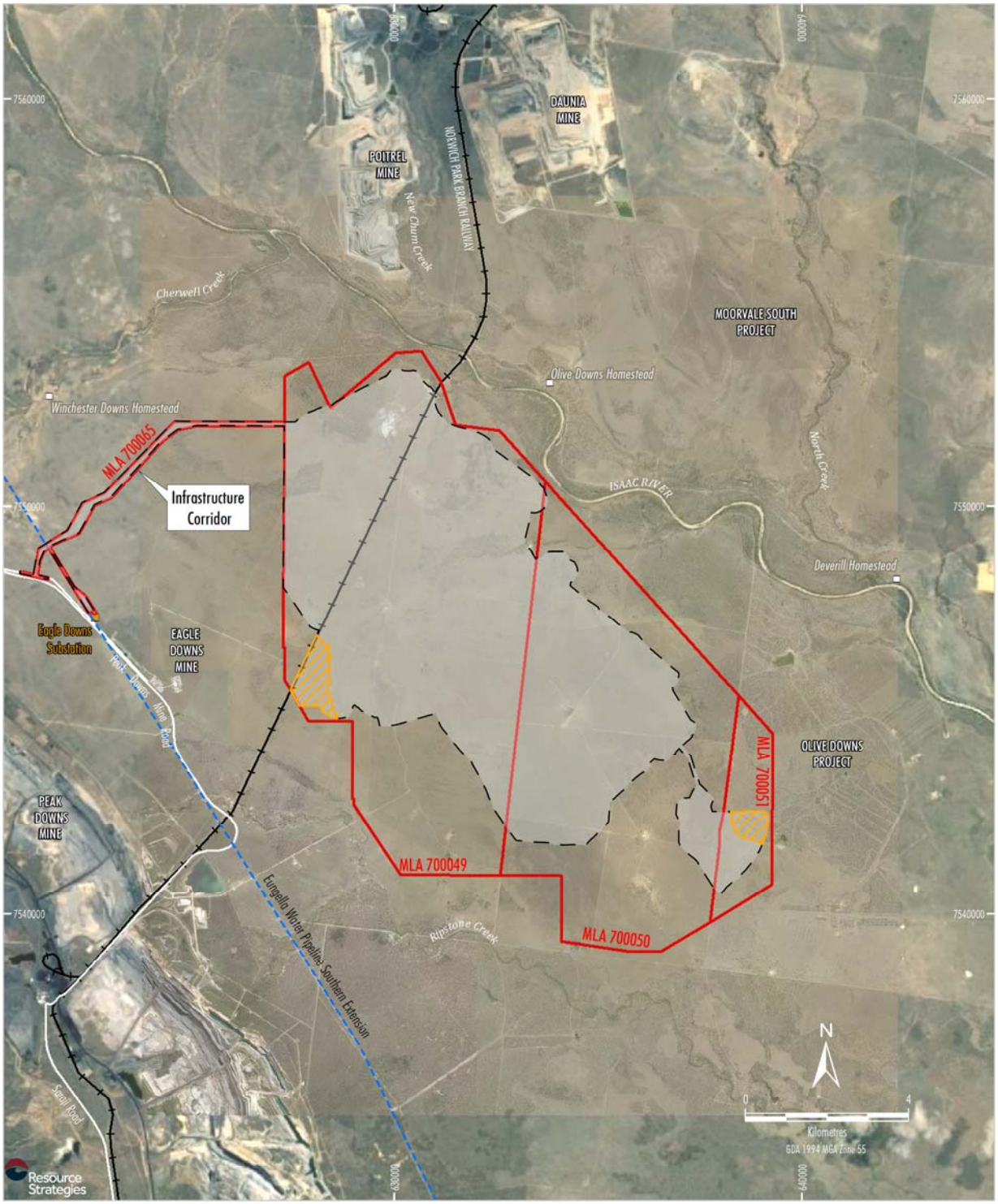
WINCHESTER SOUTH PROJECT

Optimised Project General Arrangement (May 2022)

Figure 3



LEGEND
- Mining Lease Application Boundary
- Eungella Water Pipeline Southern Extension
- Railway
- Substation
- Optimised Project Surface Disturbance Extent
- 2021 Draft EIS Surface Disturbance Extent
- Differences in the Surface Development Extent

Source: The State of Queensland (2018 - 2020); Whitehaven (2022)
Orthophoto: Google Image (2019); Whitehaven (2017)

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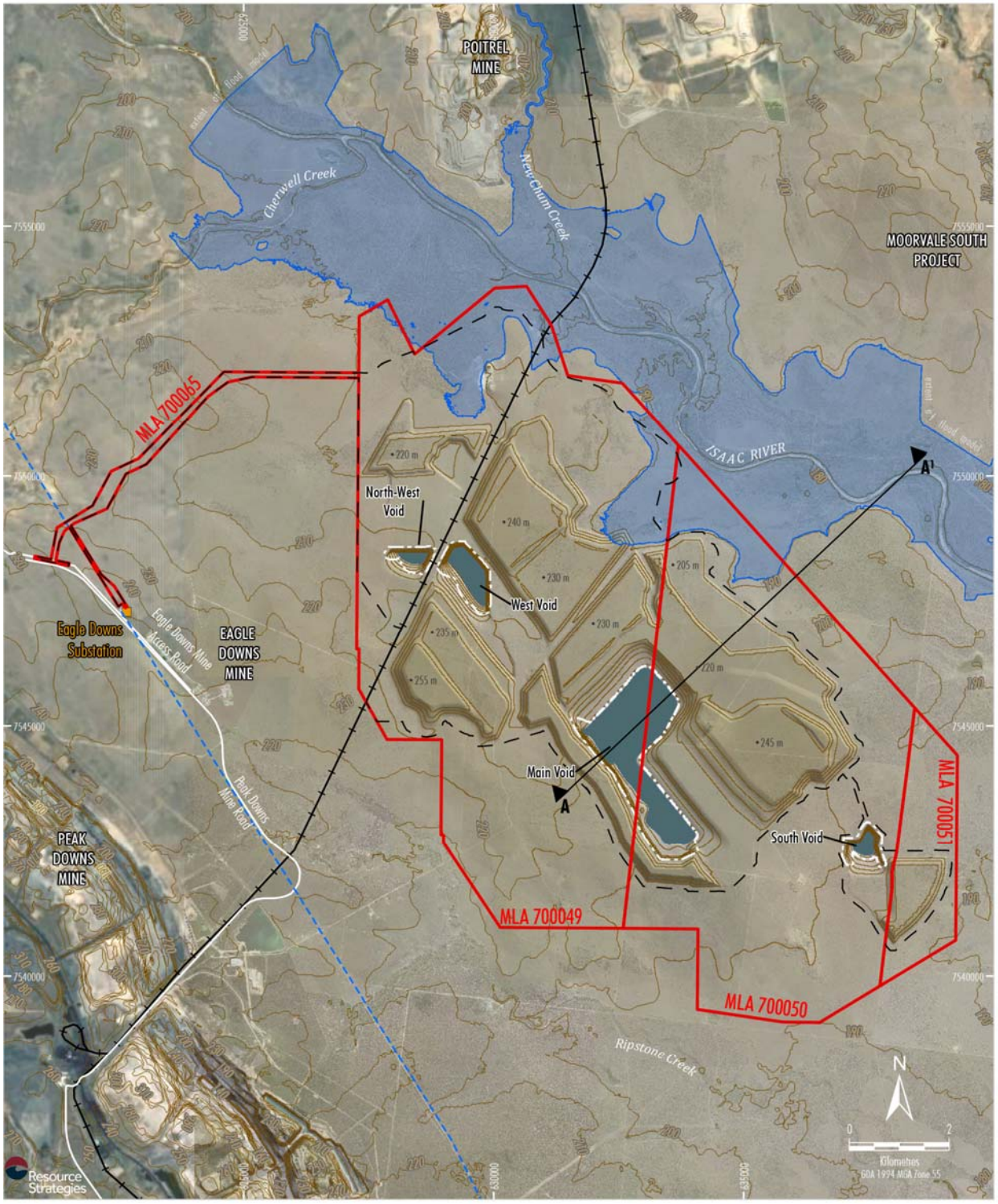
WINCHESTER SOUTH PROJECT

Differences in the Surface Development Extent

Figure 4



LEGEND
- Mining Lease Application Boundary
- Railway
- Eungella Water Pipeline Southern Extension
- Substation
- Indicative Surface Disturbance Extent
- Isaac River 0.1% AEP Flood Extent (Pre-mining)
- Indicative Extent of Non-Use Management Area
- Indicative Residual Void Waterbody

Source: The State of Queensland (2018 - 2020); Whitehaven (2022); WRM (2021). Orthophoto: Google Image (2019); Whitehaven (2017).

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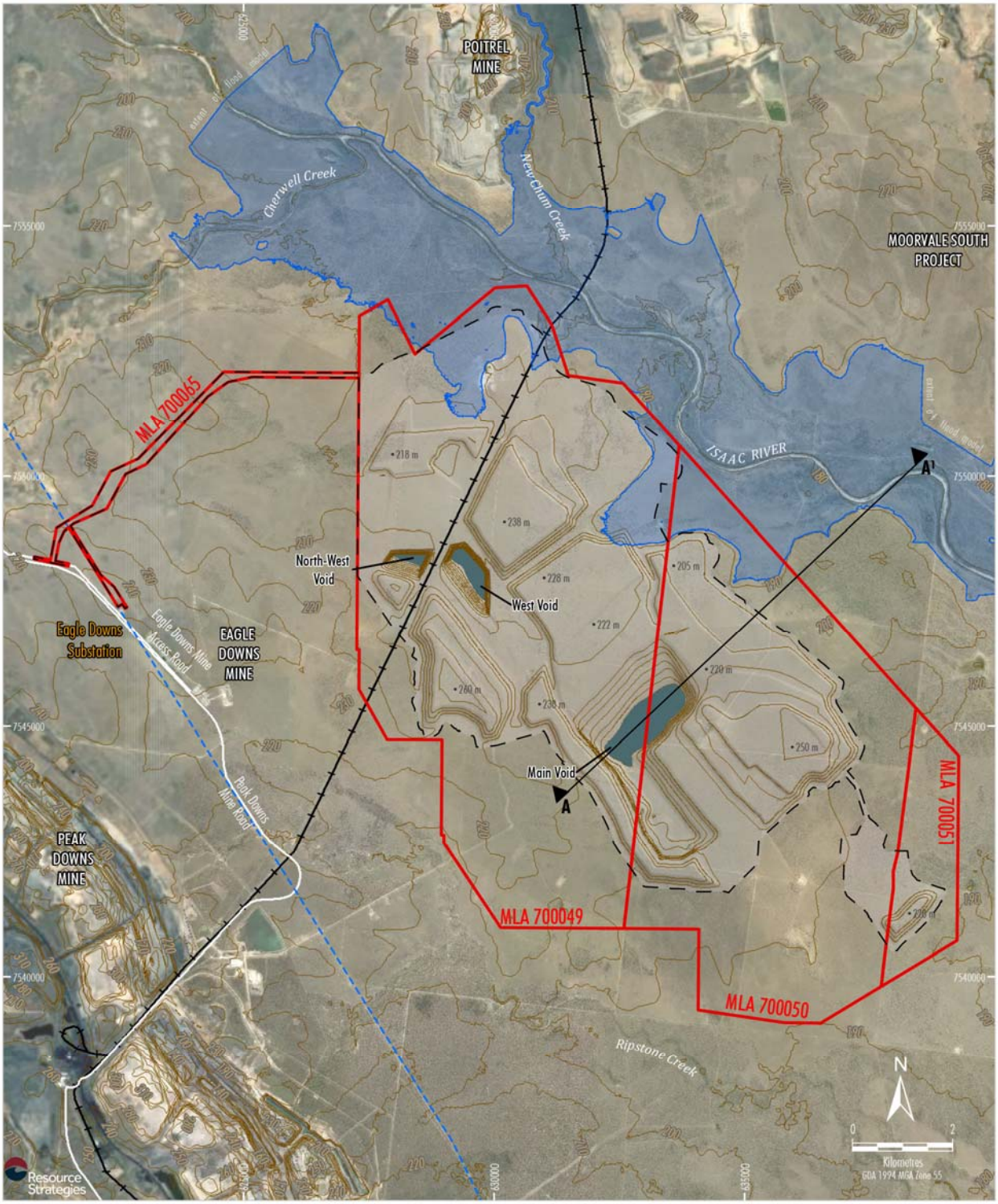
WINCHESTER SOUTH PROJECT

2021 Draft EIS Conceptual Final Landform

Figure 5



LEGEND
- Mining Lease Application Boundary
- Railway
- Eungella Water Pipeline Southern Extension
- Indicative Surface Disturbance Extent
- Isaac River 0.1% AEP Flood Extent (Pre-mining)
- Indicative Residual Void Waterbody

Source: The State of Queensland (2018 - 2020); Whitehaven (2022); Orthophoto: Google Image (2019); Whitehaven (2017)

WHITEHAVEN COAL

WINCHESTER SOUTH PROJECT

Optimised Final Landform (May 2022)

Figure 6

2 Supplementary Impact Assessment

2.1 Potential Aquatic Ecology Impacts from the Optimised Mine Plan

The optimised Project mine plan reduces the overall surface disturbance extent by approximately 179 ha adjacent to the proposed South Pit and West Pit locations (Figure 4). The optimised Project final landform also includes backfilling the previous proposed South Pit mine void and providing a use for all remaining proposed residual voids, i.e. no non-use management areas (Figure 5 and Figure 6). The optimised Project mine plan also includes re-establishing a post-mining surface water drainage that is sympathetic with the natural drainage lines (Figure 5 and Figure 6).

The optimised Project mine plan would not increase the impact on aquatic ecology, but rather have a positive impact on aquatic ecology (compared to the original design), by reducing the overall clearance footprint, and increasing the catchment area reporting to the natural ecosystems (due to backfilling the previous proposed South Pit mine void).

The optimised Project mine plan would still result in the removal of the following aquatic habitat as described by ESP (2021):

- portions of three State-mapped unnamed waterways (tributaries to the Isaac River that are drainage features under the *Water Act 2000*) that traverse the open cut extent and waste rock emplacement:
    - the upper reaches of a minor stream order 1 waterway in the waste rock emplacement area that is north of Main Pit South
    - the middle reaches of a stream order 2 waterway (the 'central unnamed waterway') and the majority of the headwaters of this waterway (two stream order 1 tributaries) in the Main Pit, North and West Pit, and associated waste rock emplacement areas; the Eagle Downs Mine is located in the upper catchment of these waterways
    - the middle reaches of a stream order 2 waterway (the 'northern unnamed waterway') in the Railway Pit and associated waste rock emplacement areas; tributaries to this waterway are within the Eagle Downs Mine, and
- seven farm dams (three of which are mapped by the State as lacustrine wetlands) in various locations within the Project area[1], and
- one palustrine wetland regional ecosystem (RE), as mapped by E2M Pty Ltd (E2M) (2021).

There would be a reduction in habitat available to aquatic flora and fauna as a result of the removal of the portions of three unnamed waterways and farm dams within the Project area. However, the integrity of these aquatic habitats has been impacted by agricultural land uses (vegetation clearing, creation of dams and direct impacts from cattle). The waterways to be impacted provide low aquatic ecosystem value to aquatic flora and fauna, and are smaller in extent than is mapped by the State. Specifically, results from the EIS field surveys

[1] All of the mapped lacustrine wetlands and unmapped dams within the Project area were characterised as man-made dams (ESP 2021).

(ESP 2021) and supplementary detailed waterway determination assessment completed by ESP (2022) concluded that:

- The waterways to be removed within the indicative surface area extent for the Project include 1.52 km (constituting 2.45 ha) of the northern unnamed waterway (ESP 2022). All other State-mapped waterways within the Project area were extensively ground-truthed during the supplementary field survey in February 2022 and did not meet the definition of a waterway under the *Fisheries Act 1994* (Fisheries Act). They are depressions within the landscape that may hold water for short periods after rainfall and provide habitat for wetland indicator flora species or macroinvertebrates, but would not provide habitat for other aquatic fauna such as fish or turtles.
- The farm dams to be removed provide low to moderate aquatic ecosystem value to aquatic flora and fauna, although some of these farm dams provided dry season refuges for aquatic flora and fauna. Extensive ground-truthing confirmed that the farm dams are not connected to functional waterways (ESP 2022). The seven farm dams cover an estimated total area of approximately 10 ha (Figure 7).
- The palustrine wetland RE contained wetland indicator flora species (such as sedges) in the understorey, but is unlikely to provide important habitat for aquatic fauna due to a lack of connectivity with surrounding waterways.

All aquatic flora and fauna species detected in the vicinity of the Project during the EIS and supplementary field surveys were common to the region, and none were listed as threatened species under the *Nature Conservation Act 1992* or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (ESP 2021, 2022). There are no important breeding, feeding or refuge areas to consider (e.g. for threatened or priority aquatic species). There were no new species recorded in the updated database search results (Appendix A). Therefore, the removal of aquatic habitat from the indicative disturbance area would not have a significant impact on a regional scale.

The Project area represents less than 0.05% and 0.3% of the overall catchment areas for the Fitzroy River basin and the Isaac-Connors sub-basin, respectively. The changed topography as a result of the Project optimised final landform would reduce the catchment area draining to the Isaac River compared to pre-mining conditions; however, the decrease in catchment area is expected to be less than 1.5% (WRM 2022). Regardless of this change to the captured catchment area, no measurable impacts to surface water quantity are likely to occur as a result of the Project (WRM 2022). Therefore, the loss of catchment area is minor in a regional context.

Furthermore, modelling predicts that the Project would result in negligible increased leakage from surface flows of the Isaac River to the underlying alluvium, with the change in flows as a result of the increased hydraulic gradient between the alluvium and the Isaac River expected to be an average of 3.65 megalitres per year (ML/year) (the Isaac River has an average flow rate of 161,863 ML/year) (SLR 2022). Therefore, impacts to surface flows, and subsequently aquatic ecosystems downstream of the Project area, are not expected.

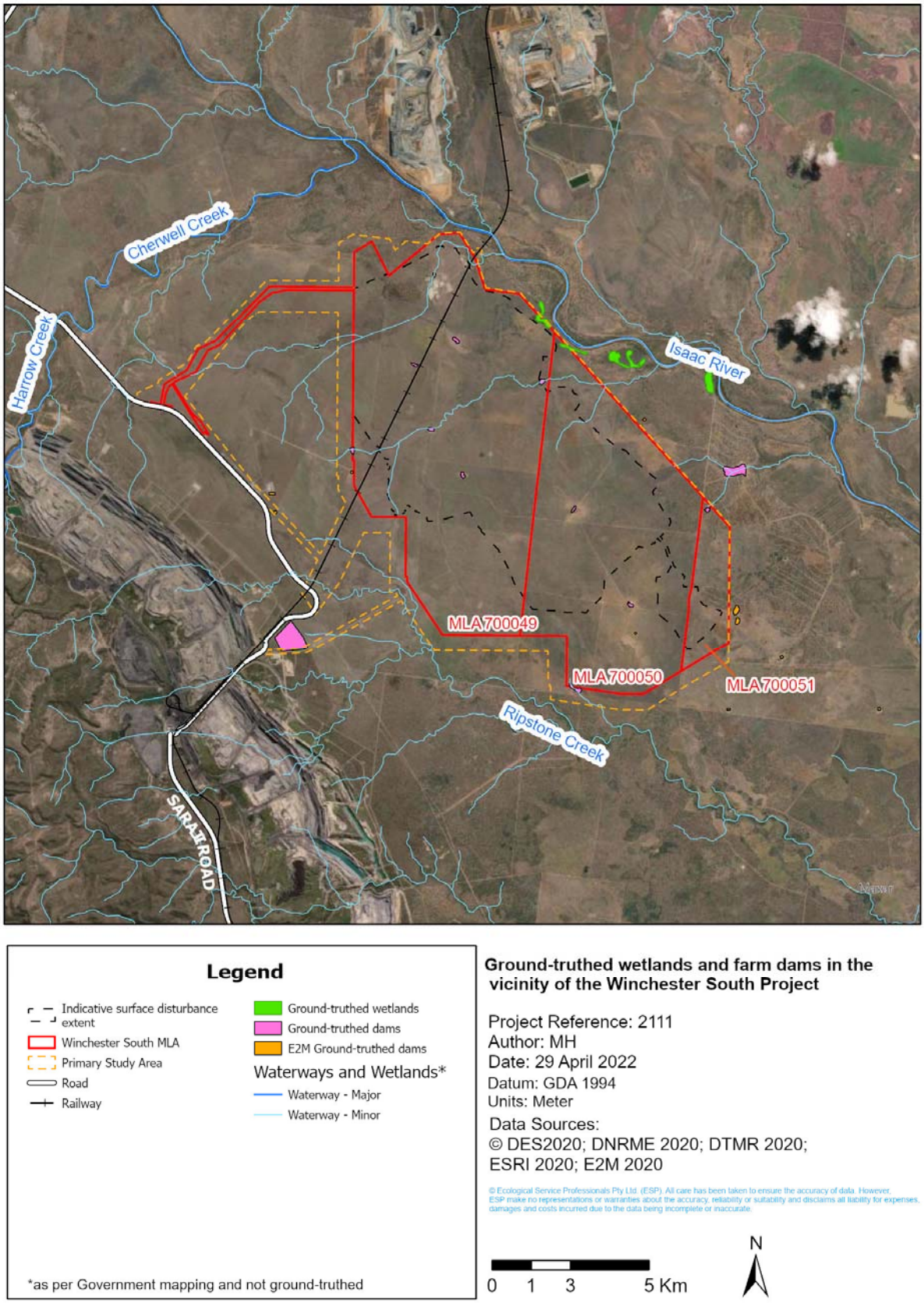


Figure 7 Mapped waterways and ground-truthed wetlands and farm dams in the vicinity of the Project

The Surface Water and Flooding Assessment (WRM 2022) and Groundwater Assessment (SLR 2022) concluded that the Project would have a negligible impact on surface water and groundwater quality and quantity, including the Isaac River (WRM 2022, SLR 2022). The modelling undertaken included consideration of cumulative impacts from surrounding developments, and are described in the Surface Water and Flooding and Groundwater Assessments. Given the above, the Project is unlikely to adversely impact the aquatic ecological values of these waterways. The Project is therefore unlikely to result in cumulative impacts to the aquatic ecosystem resilience or aquatic flora and fauna of the Isaac River system, including floodplain wetlands, given the limited potential impacts associated with the Project and the mitigation and management measures.

2.2 Matters of State Environmental Significance – Waterways Providing for Fish Passage

A 'waterway providing for fish passage' is defined under the Fisheries Act as a waterway such as a river, creek, stream, watercourse, drainage feature or inlet of the sea. A waterway as defined by Queensland Department of Agriculture and Fisheries (DAF) (2022) must have at least one of the following:

- defined bed and banks:
    - bed and banks need to be continuous upstream and downstream of the site rather than isolated and broken sections of a depression.
- an extended (if not permanent) period of flow:
    - flow must continue beyond the duration of a rain event and have some reliability attached to rainfall. There is a need to distinguish between channels that funnel immediate localised rainfall and waterways where flow has arisen from an upstream catchment.
- adequate flow:
    - flow needs to be sufficient to sustain basic ecological processes and habitats, and to maintain biodiversity within or across the feature. The adequacy of the flow depends on the ecological function of the channel (e.g. waterways that connect to fish habitat like a wetland or waterhole may only need infrequent and short-duration flows to provide connectivity for fish).
- fish habitat at, or upstream of, the site:
    - most instream features (submerged logs, overhanging vegetation) provide habitat for fish under adequate flow conditions or, in the case of pools, during dry periods. Periodic connectivity to upstream and off stream fish habitat are also considered fish habitat.

The *Environmental Offsets Regulation 2014* (EO Regulation) states that any part of a waterway providing for passage of fish is a Matters of State Environmental Significance (MSES) only if the construction, installation or modification of waterway barrier works carried out under an authority will limit the passage of fish along the waterway. Clause 10 of Schedule 2 of the EO Regulation further defines 'passage' for fish as the natural movement patterns of fish species required to maintain the biological integrity of the species, and

'waterway' as a river, creek, stream, watercourse or inlet of the sea; and therefore, does not include drainage features.

2.2.1 Supplementary Fish Surveys and Review

Several fish surveys have been completed in the vicinity of the Project to date, including for the:

- *Winchester South Project, Environmental Impact Statement. Appendix E, Aquatic Ecology and Stygofauna Assessment* (ESP 2021)
- *Winchester South Project, Aquatic Ecology Baseline Study* (frc environmental 2012), and
- *Olive Downs Coking Coal Project, Aquatic Ecology Assessment* (DPM Envirosciences 2018).

Additional field assessments of waterways providing for fish passage were also completed for the Project by ESP in February 2022, and have been reported on separately (ESP 2022).

Within the Project area and adjacent waterways (including the Isaac River), a total of 15 species were recorded across all surveys, with seven species (including one exotic species, Mozambique tilapia, *Oreochromus mossambicus*) recorded from sites on waterways, and 15 species (including one exotic species, Mozambique tilapia) recorded from sites on farm dams. Fish communities were dominated by small-bodied species, with the lack of large-bodied fish likely due to the paucity of deep pool habitats within the study area. Agassiz's glassfish (*Ambassis agassizii*) was the most widespread species, followed by Eastern rainbowfish (*Melanotaenia splendida splendida*) and carp gudgeons (*Hypseleotris* spp.).

Fish were recorded at most (but not all) sites surveyed for fish. Native species richness at each site varied substantially, from zero to ten species. The lack, or low diversity, of native species across some survey sites may be indicative of the ephemeral nature of the waterways across the study area, where complete wetting and drying within tributaries may limit the persistence of native fish.

All native fish species identified during the fish surveys require some physical instream habitat for shelter and/or reproduction. A variety of physical aquatic habitat (e.g. woody debris and substrate diversity) also supports diverse macroinvertebrate communities, which are prey to many of the fish in the survey area. Most of the surveyed species can tolerate a broad range of water quality conditions.

The fish survey results confirm our waterway assessment as described in Section 2.2.3 below. Fish were captured in a number of the farm dams surveyed, but there was no evidence of connectivity to waterways upstream of downstream of these dams. Fish were found within the waterway channel sites surveyed on the unnamed mapped waterways within the field-verified waterways providing for fish passage.

Surveys were completed over a range of seasons and rainfall conditions (see ESP 2022 for a detailed summary of rainfall conditions prior to and during each survey). During the most recent survey by ESP in February 2022, there was 8.6 millimetres (mm) of rain recorded over two days during the survey (24-25 February; assessed from nearby Bureau of Meteorology [BoM] Station No. 34035). February rainfall prior to the survey was 3.6 mm. Rainfall was above average in the month prior to the survey, and as such conditions were considered to

be representative of the wet season. Regardless of this, most waterway features were dry during the survey, with no standing water. The assessed dams contained water.

The mapped waterways within the Project area are drainage features that convey water during and immediately after significant rainfall events only. It is not possible to survey fish within the mapped waterways within the Project area when they are flowing due to logistical constraints (i.e. the very short periods of flow during and immediately following a rainfall event), access constraints (there is no vehicle access allowed on wet unsealed tracks), and safety considerations (Whitehaven WS does not permit anyone to enter fast flowing water or any creek during a storm).

2.2.2 Supplementary Hydrological Modelling

Annual Exceedance Probability (AEP) is defined as the probability that a given rainfall total accumulated over a given duration will be exceeded in any one year (BoM, 2021). WRM (2021) modelled 5%, 1%, 0.1% AEP and Probable Maximum Flood events for the Isaac River, including the catchments from tributaries of the Isaac River. The 0.1% AEP flood event for Ripstone Creek was also modelled.

Flood modelling during a 5% AEP flood event (1 in 20-year event) for the Isaac River (most frequent flood event) shows that the flood extent of the Isaac River would not interact with the DAF-mapped waterways. As such, the flood extent of the Isaac River would not interact with the DAF-mapped waterways during more minor and frequent flood events.

Flood modelling has not been completed for the mapped waterways to be impacted by the Project. These mapped waterways are drainage features that convey water during and immediately after significant rainfall events only. It is not appropriate to use a flood model to describe the depth of water within these mapped waterways during different rainfall events and would also require gauging stations along each of the drainage features to collect data from flooding events for calibration (historical flooding event data not currently available for these drainage features). Rather than using hydrological modelling to determine the extent of waterways providing for fish passage, detailed ground-truthing was completed to identify the extent of waterways within the Project area, as described in 2.2.3 below.

2.2.3 Identification of Waterways Providing for Fish Passage Matters of State Environmental Significance

Supplementary waterway surveys were completed at 110 assessment points on mapped and un-mapped waterways within the Project area. The waterway surveys described the habitat present at each assessment point with reference to the DAF (2022) definition of a waterway, as detailed in ESP 2022. The outcomes of these supplementary waterway surveys were that:

- the northern unnamed waterway is the only waterway providing for fish passage MSES that intersects the proposed surface disturbance extent for the Project (as described in further detail below)
- the central unnamed waterway and its tributary are not waterways providing for fish passage MSES within the proposed surface disturbance extent for the Project, and
- there are no other waterways providing for fish passage MSES within the Project area.

Where the waterway at an assessment point was considered to have the characteristics of a waterway providing for fish passage as defined by DAF (2022), habitat descriptions were recorded, and the main channel width was measured.

The supplementary field surveys found the unnamed northern waterway from Site 97 through to Site 98 (and therefore, downstream to the Isaac River) has defined bed and banks, is a watercourse under the Water Act and provides for the natural movement of freshwater fish species required to maintain the biological integrity of the species. It is therefore a waterway providing for fish passage MSES as defined by the EO Regulation.

Upstream of Site 97, the mapped northern waterway lacks the features required to be considered a waterway as defined by DAF (2022). In parts of the mapped amber feature, no discernible drainage feature could be found, indicating a substantial break in connectivity that would prevent fish passage further upstream. Significant barriers, including quarry walls, dam walls, and road crossings, also act as significant barriers to fish passage.

Upstream of Site 97, the drainage feature likely conveys overland flows during periods of localised rainfall. Due to the lack of waterway features including a lack of standing water/evidence of past standing water, no riparian or aquatic vegetation, and no defined, continuous channel with bed and banks, the mapped reaches upstream of Site 97 are not considered a waterway as defined by DAF (2022), nor a waterway providing for fish passage MSES as defined under the EO Regulation.

The northern unnamed waterway contained 4.5 km of waterway providing for fish passage. Of this, 1.52 km (constituting 2.45 ha[2]) is within the proposed surface disturbance extent of the Project (Figure 8).

a) b)

Figure 8 Photographs of the northern unnamed waterway at Site 88 showing a) upstream, and b) downstream

[2] Based on the length of waterway x the main channel width

The total area of waterways providing for fish passage impacted by the Project was calculated based on the length of the waterways within the Project area (as determined during a waterway determination assessment in February 2022[3]), multiplied by the average width of the main channel (DAF 2018). The average main channel widths were determined by calculating the average width of each assessment site that was within the ground-truthed waterways (Table 1). An additional 50% buffer was added to the calculation to account for any variability in channel widths between assessment sites.

The following definitions are provided in DAF (2018) (as illustrated in Figure 9):

- ***Bankfull width*** *is the width of the waterway at the bankfull level.*
- ***Main channel*** *is the active component of the flow channel characterised by a distinct change in appearance or structure at the upper limit of the channel such as undercutting, changes in vegetation density, sudden changes in bank slope, boundary levels for water marks, mosses or lichens, changes in sediment particle size. Approximate Q values of Q1 – Q2 or AEP equivalent.*

Table 1 Channel widths (including main channel and bankfull widths) for each assessment site within the ground-truthed waterways providing for fish passage within the Project area in February 2022

Waterway	Assessment Site [a]	Main Channel Width (m)	Bankfull Width (m)
Northern unnamed waterway	94	2	12
	91	3	5
	89	6	15
	88	4.5	10
	87	10	25
	85	6	25
	98	6	20
Average: Northern unnamed waterway		**5.36**	**16.00**

[a] for site locations refer to ESP (2022)

[3] Methodologies and results of the waterway determination assessment are outlined in ESP 2022

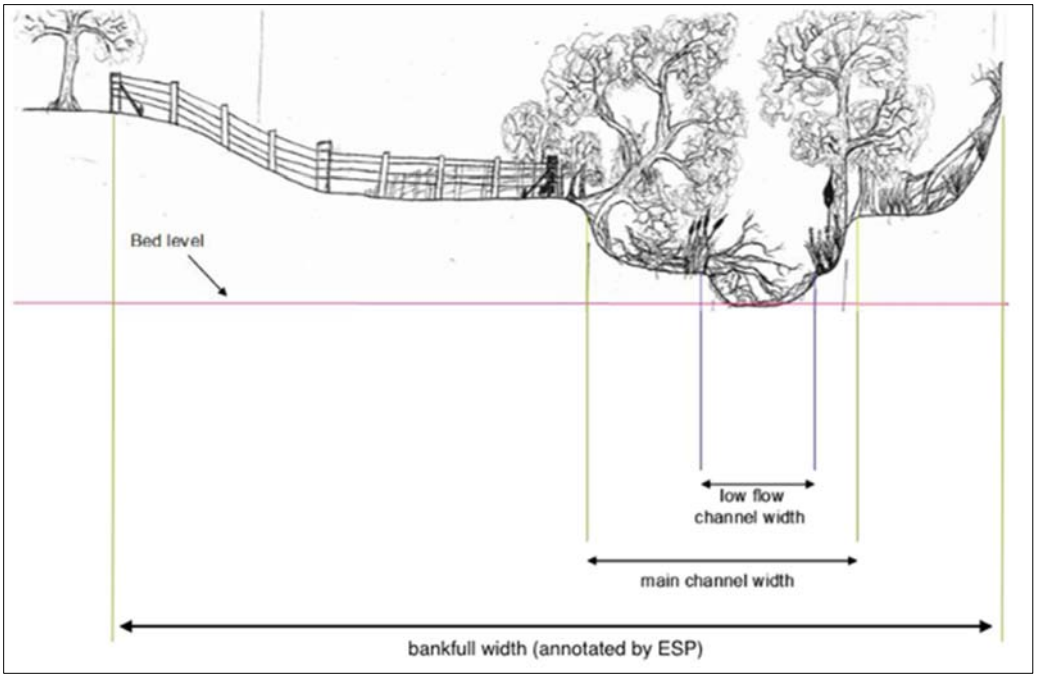


Figure 9 Example of waterway cross section showing main channel, low channel and bankfull width (adapted from DAF 2018)

Figure 10 shows current Waterways for Waterway Barrier Works (WWBW) mapping for waterways in the vicinity of the Project area. Figure 11 and Figure 12 provide the new proposed WWBW mapping for the northern unnamed waterway (ESP 2022).

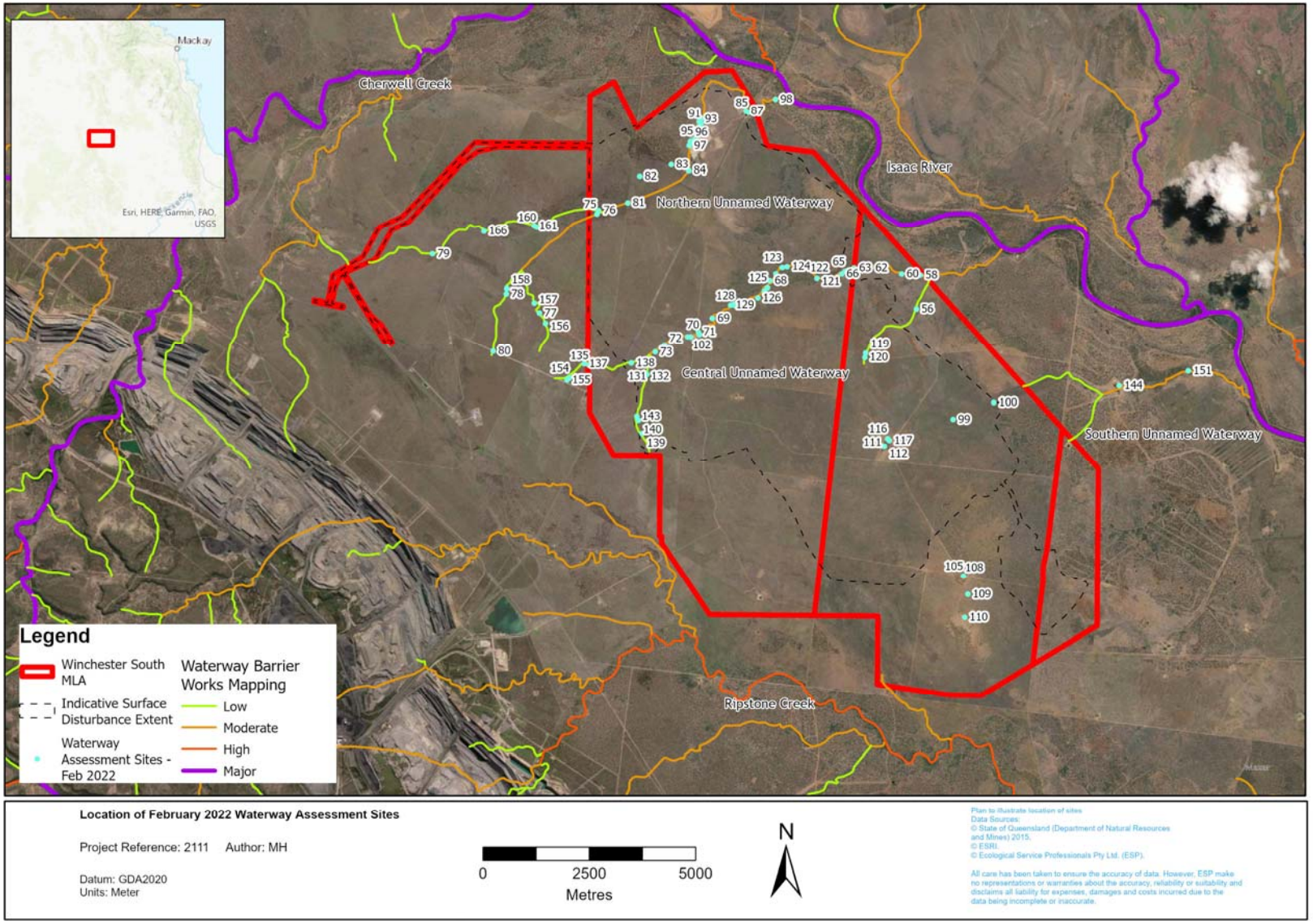


Figure 10 WWBW mapping in the vicinity of the Project area, and waterway assessment sites assessed by ESP in February 2022

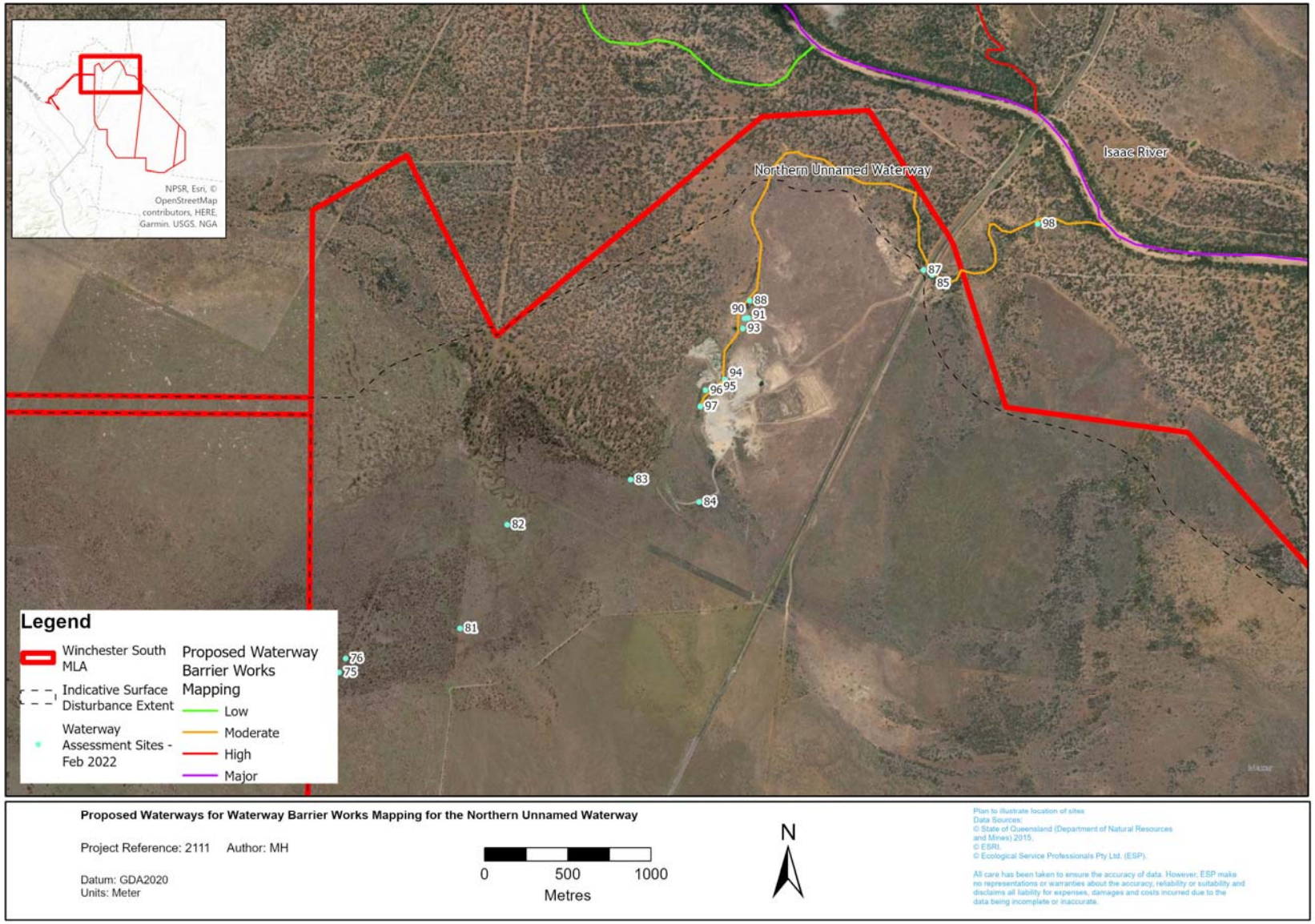


Figure 11 Ground-truthed extent of the northern unnamed waterway.

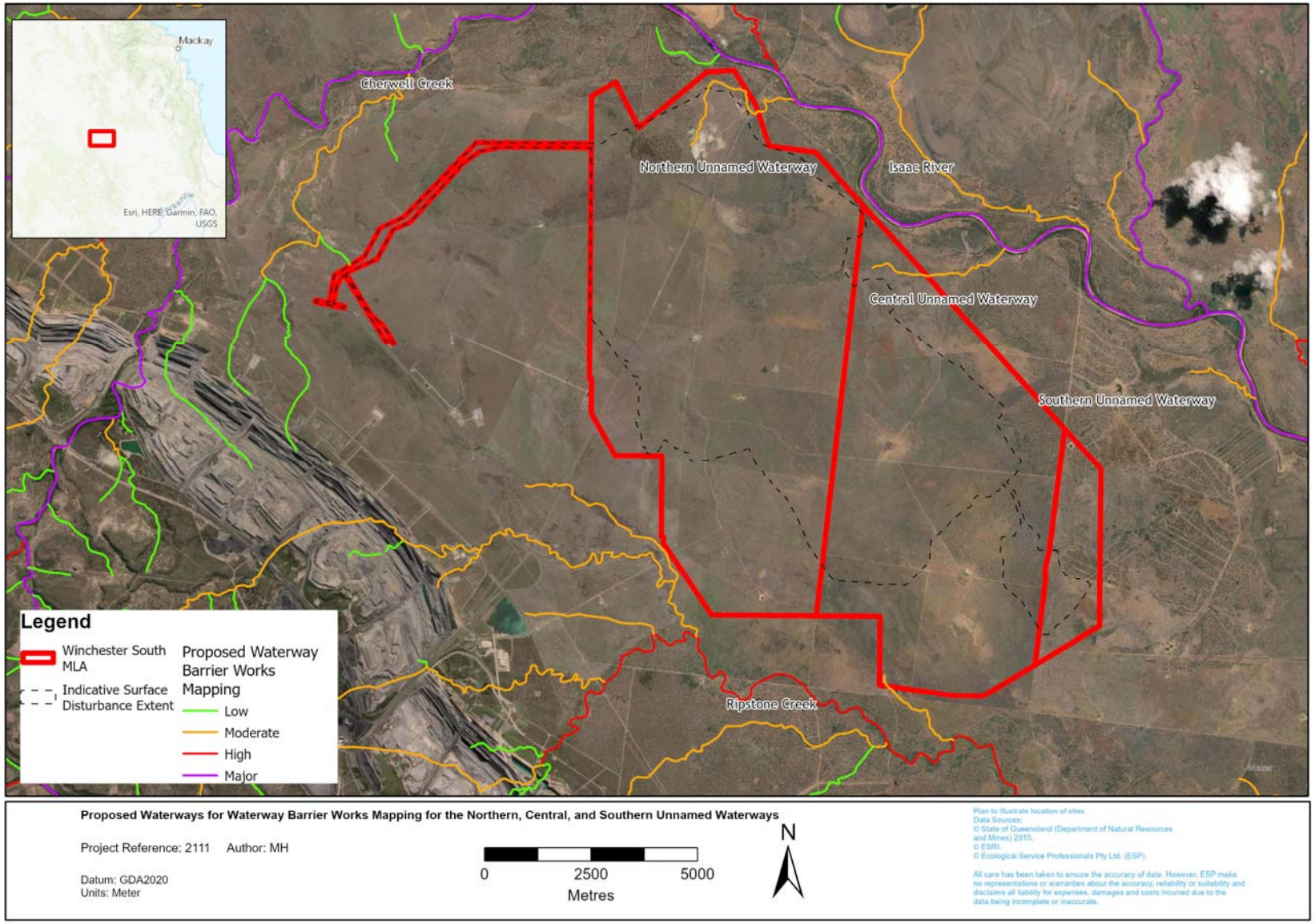


Figure 12 Ground-truthed extent of unnamed waterways across the Project area

2.2.4 Measures to Avoid Impacts

There is 3.28 km (constituting 5.28 ha) of the northern unnamed waterway within the mining lease. The majority of the northern unnamed waterway within the mining lease would be avoided. However, the Project would require the removal of up to 46% (1.52 km constituting 2.45 ha) of the northern unnamed waterway that equates to the waterway providing for fish passage MSES. Noting, however that approximately 0.63 km of this (constituting approximately 1.0 ha) runs through the existing quarry site. No remnant Regulated Vegetation occurs along the northern unnamed waterway in the disturbance footprint.

Measures to minimise and mitigate impacts to waterways providing for fish passage are proposed in Sections 2.2.5.1 to 2.2.5.6 below.

2.2.5 Measures to Minimise and Mitigate Impacts

Measures to minimise and mitigate the impacts on the waterway providing for fish passage MSES include:

- management of the northern unnamed waterway outside of the development footprint (Section 2.2.5.1)
- construction of an up-catchment diversion system (Section 2.2.5.2), and
- reinstating excised portions of the northern unnamed waterway in the final landform (Section 2.2.5.3).

Potential impacts to waterways providing for fish passage downstream of the Project would be minimised and mitigated through:

- implementation of an Erosion and Sediment Control Plan (Section 2.2.5.4)
- appropriate management of hazardous chemicals and materials (Section 2.2.5.5), and
- development and implementation of appropriate management plans and monitoring programs (Section 2.2.5.6).

Each of these measures are outlined in the subsections below.

2.2.5.1 Management of the Northern Unnamed Waterway Outside of the Development Footprint

During the life of the Project, fencing would be used to exclude livestock from the portion of the northern unnamed waterway which is outside of the development footprint and inside the mining lease. This would have the benefit of reducing grazing pressure on the waterway and riparian vegetation.

During the life of the Project, weed management (prevention, monitoring and control) would be undertaken to mitigate the abundance and species of weeds in the mining lease application areas (MLAs) and minimise the potential for weeds to spread into adjacent habitat areas.

2.2.5.2 Up-catchment Diversion System

An up-catchment diversion system would be constructed as part of the Project to divert up-catchment run-off around the advancing open cut during operation (Figure 13). The up-catchment diversion system would temporarily allow runoff from the upstream catchment to the northern unnamed waterway prior to reinstating of the excised portions of the northern unnamed waterway in the final landform.

2.2.5.3 Reinstating Excised Portions of the Northern Unnamed Waterway in the Final Landform

Rehabilitation activities would be conducted as soon as possible for disused areas. The post-mine landforms would contain a mixture of woodland and pasture and would be rehabilitated in a manner that results in patches of woodland in pasture areas.

To mitigate the impacts on the waterway providing for fish passage Matter of State Environmental Significance, the rehabilitation strategy includes reinstating excised portions of the northern unnamed waterway in the final landform (Figure 14).

The reinstated excised portion of the northern unnamed waterway would be designed to mitigate impacts associated with removal of the 1.52 km section (constituting 2.45 ha) of the northern unnamed waterway that provides for fish passage, in terms of area, quality and functionality. This would allow for the upstream and downstream passage of fish in a naturalised manner.

The reinstated excised portion of the northern unnamed waterway would incorporate features that ensure the upstream and downstream passage of fish. This will include:

- ensuring functionality and longevity of the riparian corridor, including revegetation and management of the riparian vegetation
- ensuring that the diversion is constructed at a gradient of no more than 5%
- ensuring that conditions within the diversion (depth and velocities) would be suitable to provide adequate fish passage during 1, 2 and 5 year Average Recurrence Intervals
- reinstating habitat and geomorphic features by salvaging and using material such as woody debris to create habitat diversity within the diverted waterway, and
- including natural features such as pools and meanders, bed and bank profiles, and providing a mix of suitable substrate types.

A Progressive Rehabilitation and Closure Plan would be implemented which outlines suitable rehabilitation schedules, methods and monitoring requirements for areas that can be rehabilitated over the life of the mine as well as final conformance requirements.

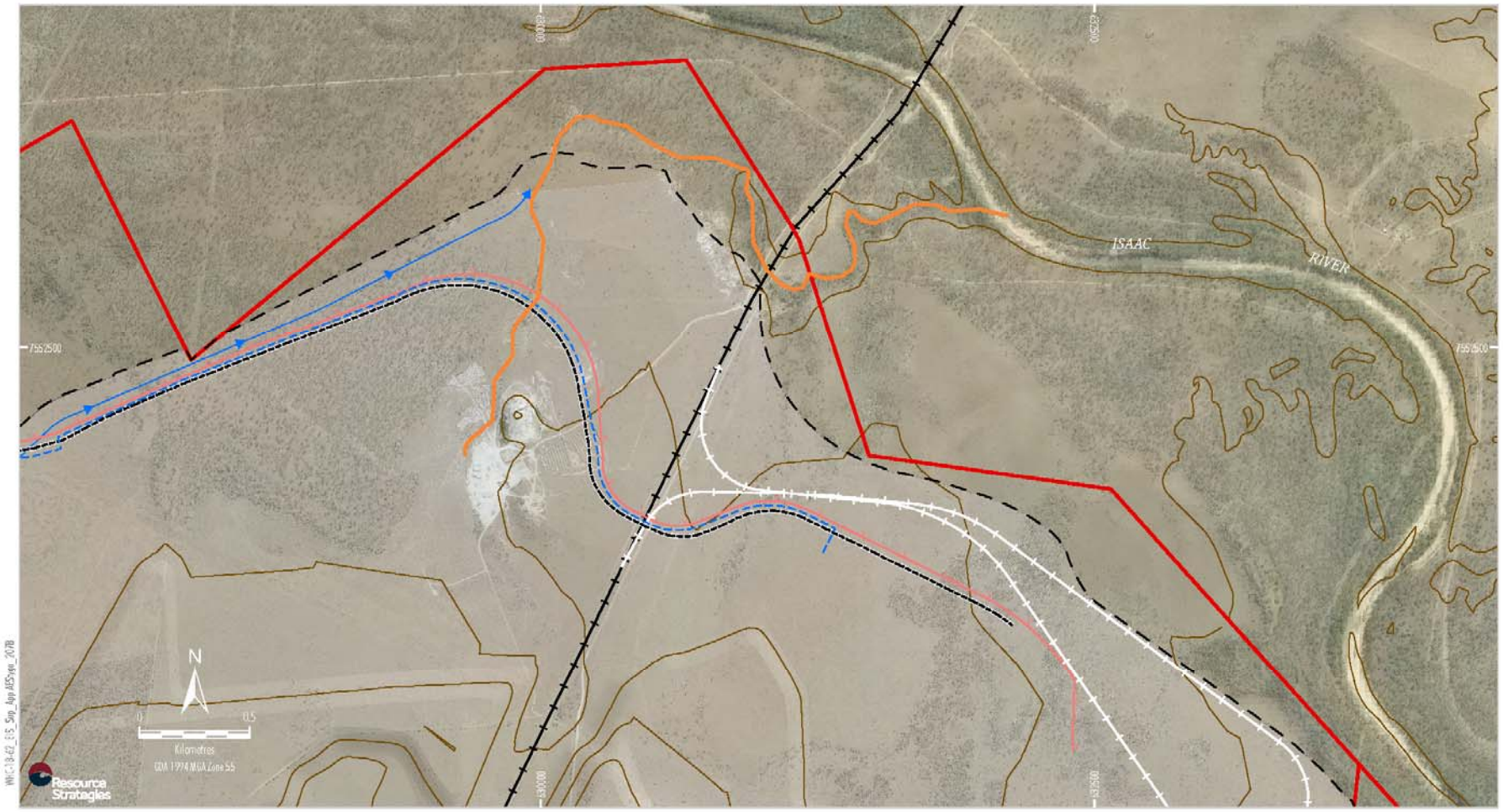
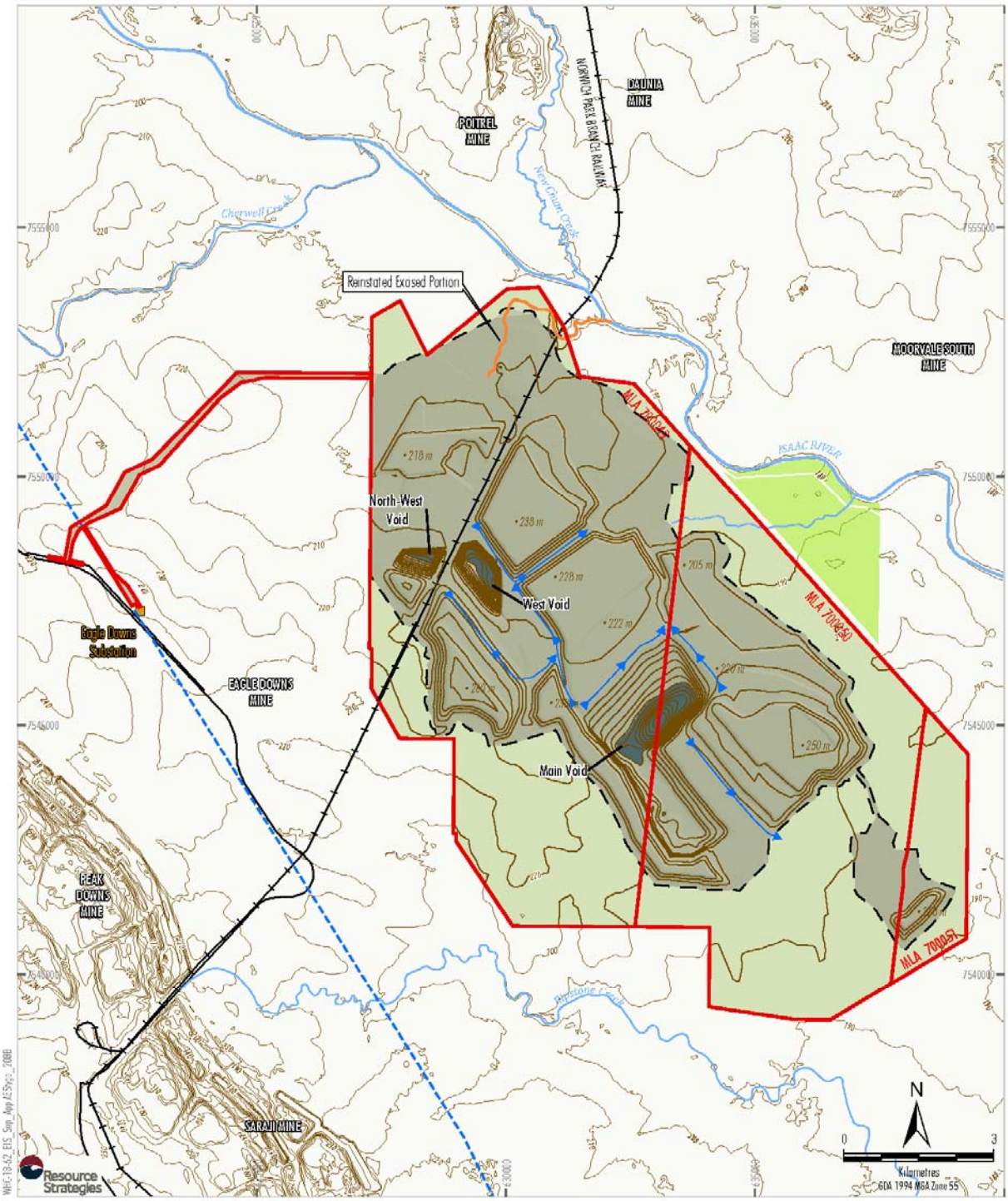

ISAAC
RIVER
N
0
0.5
Kilometres
GDA 1994 MGA Zone 55
Resource Strategies
LEGEND
Mining Lease Application Boundary
Railway
Indicative Surface Disturbance Extent
Indicative Up-catchment Diversion
Indicative Mine Access Road
Indicative Rail Spur and Loop
Indicative Electricity Transmission Line
Indicative Raw Water Supply Pipeline
Matters of State Environmental Significance
Ground-truthed Waterways Providing for Fish Passage ^
Source: The State of Queensland (2018 - 2020); Whitehaven (2022);
Orthophoto: Google Image (2019); Whitehaven (2017)
Note: ^ As stated in the Environmental Offsets Regulation 2014, any part of a waterway providing for passage of fish is a Matter of State Environmental Significance (MSES) only if the construction, installation or modification of waterway barrier works carried out under an authority will limit the passage of fish along the waterway.
WHITEHAVEN COAL
WINCHESTER SOUTH PROJECT
Optimised Final Landform –
Waterway Providing for Fish Passage

Figure 13



LEGEND

- Mining Lease Application Boundary
- Indicative Surface Disturbance Extent
- Indicative Residual Void Waterbody
- Indicative Extent of Rehabilitation to Low-Intensity Grazing Post-Mining Land Use*
- Land Outside Indicative Surface Disturbance Extent with a Low-Intensity Grazing Post-Mining Land Use
- Contours (10 m)
- Watercourse (Water Act 2000)
- Indicative Surface Water Drain

Matters of State Environmental Significance

- Ground-truthed Waterways Providing for Fish Passage ^
- Wymette Offset Area

Source: The State of Queensland (2018 - 2020); Whitehaven (2020); ESP (2022)

*Note: * Should the Winchester Quarry remain at the end of the Project life, the PMLU for its extent would be quarrying and not low-intensity grazing.*

^ As stated in the Environmental Offsets Regulation 2014, any part of a waterway providing for passage of fish is a Matter of State Environmental Significance (MSES) only if the construction, installation or modification of waterway barrier works carried out under an authority will limit the passage of fish along the waterway.

WHITEHAVEN COAL

WINCHESTER SOUTH PROJECT

Conceptual Final Landform and Land Use - Waterways Providing for Fish Passage

Figure 14

2.2.5.4 Erosion and Sediment Control

An Erosion and Sediment Control Plan would be developed and implemented throughout the construction and operation phases of the Project in order to reduce the amount of sediment-laden run-off entering downstream waterways. A 'best practice' approach would be adopted that is consistent with the International Erosion Control Association recommendations. The following general principles would apply:

- minimise the surface disturbance areas (which has been incorporated into the design of the Project)
- where possible, apply local temporary erosion control measures
- intercept run-off from undisturbed areas and divert around surface disturbance areas, through the use of up-catchment diversions, and
- where temporary measures are likely to be ineffective, direct surface water run-off from surface disturbance areas to sediment dams prior to release from the Project area.

Active haul roads would be regularly watered (or applied with dust suppressants) to minimise dust generation potential.

2.2.5.5 Management to Prevent and Manage Leaks and Spills

Hazardous chemicals and materials used or stored at the Project would be managed in accordance with Qld and Commonwealth legislation and policy requirements, including their removal from site by authorized contractors as required.

Potential impacts associated with leaks and spills can be managed where appropriate procedures, containment and spill control measures are implemented at suitable locations (e.g. where the transportation and loading, and storage of materials occurs onsite). The design and management of all required fuels and hydrocarbons would ensure that there are effective means of secondary containment to prevent or minimize releases to the environment from any fuel or oil storage onsite. Appropriate storage of chemicals and hydrocarbons would be required during the construction phase of the Project, and as part of ongoing operations.

Provided the appropriate management of chemicals is maintained, the Project is unlikely to result in leaks/spills that would eventuate in serious environmental harm to aquatic species or their habitat.

2.2.5.6 Management Plans and Monitoring Programs

The development and implementation of the following environmental management plans are recommended for the Project:

- Environmental Management Plan – including land clearing measures, management of palustrine wetlands, weed management and animal pest management, and
- Water Management Plan, including erosion and sediment control.

Implementation of appropriate water quality monitoring programs as appropriate during the construction phase of the Project, as well as designing and implementing a Receiving Environment Monitoring Program (REMP) during the operational phase, would confirm that

water quality, and therefore environmental values of downstream waterways are maintained, and can inform adaptive management of mine-affected water discharges if required.

The REMP would be designed in accordance with the *Receiving Environment Monitoring Program Guideline – For use with Environmentally Relevant Activities under the Environment Protection Act 1994* (Department of Environment and Science [DES] 2014) and include a number of indicators of aquatic ecosystem conditions including water quality, sediment quality and macroinvertebrates as biological indicators, as outlined in the *Model Water Conditions for Coal Mines in the Fitzroy Basin* (DES 2013). The macroinvertebrate data collected to date provides a baseline (pre-construction) dataset to be used for the basis of future impact monitoring. Annual REMP reports would be prepared in accordance with the *Model Water Conditions for Coal Mines in the Fitzroy Basin* (DES 2013).

Implementation of appropriate water quality monitoring programs, including periodic testing of waste rock and other reject material, as well as implementation of a REMP, would ensure that any issues with water quality associated with seepage are detected and managed appropriately.

An inspection and monitoring program would also be designed and implemented to confirm the performance of the reinstated excised portion of the northern unnamed waterway. The program should:

- be prepared by a person suitably qualified and experienced in fish biology and passage
- detail requirements for inspections and surveys during construction and operation of the reinstated excised portion of the northern unnamed waterway, as appropriate, and
- include an alert and action component, which would enable changes to be made to any deficiencies in design prior to commencement of the following wet season.

2.3 Assessment of Significant Residual Impacts

The EO Regulation defines waterways providing for fish passage MSES as:

> *Any part of a waterway providing for passage of fish is a matter of State environmental significance only if the construction, installation or modification of waterway barrier works carried out under an authority will limit the passage of fish along the waterway.*
>
> ***Fish** means fish regulated under the Fisheries Act 1994.*
> ***Passage, for fish**, means the natural movement patterns of fish species required to maintain the biological integrity of the species.*
> ***Waterway** includes a river, creek, stream, watercourse or inlet of the sea.*
> ***Waterway barrier works** means a dam, weir or other barrier across a waterway.*

The Project would remove the upper reach of the northern unmapped waterway providing fish habitat (Figure 11), but would not fragment fish habitat as the reach of the waterway to be removed does not connect to fish habitat further upstream. Part of the northern unmapped waterway providing for passage of fish (Figure 11) is a MSES because carrying out the Project would limit the passage of fish into that part of the waterway (not by removing the ability for fish to access previously connected fish habitats upstream and downstream from the reach to be cleared).

The section of the northern unnamed waterway providing for fish passage is ephemeral, and would only convey flows during periods of localised rainfall that do not continue beyond the duration of a rain event. Aquatic habitat features are present along the waterway (including large woody debris, some emergent aquatic plants, and depressions that would form pools after periods of flow). However, riparian vegetation is largely disturbed from cattle grazing activities, and the waterway is minor (stream order 2), providing low value habitat to aquatic flora and fauna.

The significance of the residual impacts to waterways providing for fish passage have been assessed in accordance with the *Queensland Environmental Offsets Policy – Significant Residual Impact Guideline* (DEHP 2014). Under the guideline, an action is likely to have a significant residual impact on a waterway providing for fish passage if there is a real possibility that it will (DEHP 2014):

- *result in the mortality or injury of fish; or*
- *result in conditions that substantially increase risks to the health, wellbeing and productivity of fish seeking passage such as through the depletion of fishes energy reserves, stranding, increased predation risks, entrapment or confined schooling behaviour in fish; or*
- *reduce the extent, frequency or duration of fish passage previously found at a site; or*
- *substantially modify, destroy or fragment areas of fish habitat (including, but not limited to in-stream vegetation, snags and woody debris, substrate, bank or riffle formations) necessary for the breeding and/or survival of fish; or*
- *result in a substantial and measurable change in the hydrological regime of the waterway, for example, a substantial change to the volume, depth, timing, duration and frequency of flows; or*
- *lead to significant changes in water quality parameters such as temperature, dissolved oxygen, pH and conductivity that provide cues for movement in local fish species.*

Will the residual impacts on waterways providing for fish passage result in the mortality or injury of fish?

The residual impacts associated with the Project are unlikely to result in the mortality or injury of native fish, where a fish salvage program is implemented before waterbodies are dewatered and disturbed. Although the upper reach of the northern unnamed waterway would be removed, there would be improved management of the remaining reach inside the mining lease (grazing and weed management) and the excised portion of the northern unnamed waterway would be reinstated as part of the final landform.

Will the residual impacts on waterways providing for fish passage result in conditions that substantially increase risks to the health, wellbeing and productivity of fish seeking passage such as through the depletion of fishes energy reserves, stranding, increased predation risks, entrapment or confined schooling behaviour in fish?

The residual impacts associated with the Project would not result in conditions that substantially increase risks to the health, wellbeing and productivity of fish seeking passage. The area of waterway providing for fish passage being removed would be mitigated through improved management of the remaining reach inside the mining lease (grazing and weed management) and the excised portion of the northern unnamed waterway would be reinstated as part of the final landform.

Will the residual impacts on waterways providing for fish passage reduce the extent, frequency or duration of fish passage previously found at a site?

The reinstated excised portion of the northern unnamed waterway would be designed and constructed to mitigate impacts associated with removal of the 1.52 km section (constituting 2.45 ha) of the northern unnamed waterway that provides for fish passage, in terms of area, quality and functionality (as described in Sections 2.2.5.2 and 2.2.5.6). The reinstated excised portion of the northern unnamed waterway would be 1.52 km long and provide up to 2.45 ha of waterway providing for fish passage, and would allow for the upstream and downstream passage of fish in a naturalised manner. As such, the residual impacts on waterways providing for fish passage would not reduce the extent, frequency or duration of fish passage previously found at the site.

Will the residual impacts on waterways providing for fish passage substantially modify, destroy or fragment areas of fish habitat (including, but not limited to in-stream vegetation, snags and woody debris, substrate, bank or riffle formations) necessary for the breeding and/or survival of fish?

The Project would remove the upper reach of the northern unmapped waterway providing fish habitat, but would not fragment fish habitat as the reach of the waterway to be removed does not connect to fish habitat further upstream. The Project would limit the passage of fish into that part of the waterway (not by removing the ability for fish to access previously connected fish habitats upstream and downstream from the reach to be cleared). The excised portion of the northern unnamed waterway would be reinstated as part of the final landform. This would allow for the upstream and downstream passage of fish in a naturalised manner. As such, the residual impacts on waterways providing for fish passage would not substantially modify, destroy or fragment areas of fish habitat necessary for the breeding and/or survival of fish.

Will the residual impacts on waterways providing for fish passage result in a substantial and measurable change in the hydrological regime of the waterway, (e.g. a substantial change to the volume, depth, timing, duration and frequency of flows)?

Modelling has demonstrated that the Project would not result in substantial changes to the hydrological regime of the Isaac River (see Section 2.2.2; WRM 2022).

An up-catchment diversion system would be constructed as part of the Project to divert up-catchment run-off around the advancing open cut during operation (Figure 13). The up-catchment diversion system would temporarily allow runoff from the upstream catchment to the northern unnamed waterway prior to reinstating of the excised portions of the northern unnamed waterway in the final landform. As such, the hydrological regime of the remaining reaches of the northern waterway is not predicted to be affected.

Will the residual impacts on waterways providing for fish passage lead to significant changes in water quality parameters (e.g. temperature, dissolved oxygen, pH and conductivity) that provide cues for movement in local fish species?

Modelling has shown that the Project would not result in changes to surface water quality parameters (see Section 2.1; WRM 2022). Any potential impacts to water quality associated with the Project would be managed through design and implementation of appropriate management plans and monitoring programs (as outlined in Sections 2.2.5.1 to 2.2.5.6). As

such, no residual impacts that lead to significant changes in water quality parameters that provide cues for movement in local fish species are expected.

Conclusion

Potential impacts to fish passage have been assessed in accordance with the *Queensland Environmental Offsets Policy – Significant Residual Impact Guideline* (DEHP, 2014) and no significant residual impacts to waterways providing for fish passage area considered likely to occur.

2.3.1 Offset Requirements

With the impact avoidance and mitigation measures outlined in Section 2.2.5, the Project is not expected to have a significant residual impact on waterways providing for fish passage. Therefore, no offsets are required for a waterway providing for fish passage.

Although an offset is not necessary for waterways providing fish passage, offset areas will be provided for impacts on other matters (e.g. regulated vegetation and threatened terrestrial species). One of the proposed offset areas, the Wynette Offset Area, is located next to the Isaac River and contains a section of the central unnamed waterway (Figure 15). The section of the waterway in the Wynette Offset Area has defined bed and banks, and may provide fish passage opportunities during periods of flow from upstream catchments (Figure 15). However, the channel is narrow with high banks, suggesting flow velocity may be high and may not provide adequate flow beyond an immediate rainfall event. The mapped feature exhibits some qualities of a waterway as defined by DAF, and is considered a waterway providing for fish passage (ESP 2022).

Figure 15 Photographs of the central unnamed waterway in the Wynette Offset Area (Photos from Geomorphology Assessment; Fluvial Systems 2020)

2.4 Waterway Barrier Works – Crossings

No impacts to waterways providing for fish passage are proposed as a result of crossings by linear infrastructure. The mine access road crosses a mapped unnamed tributary of the Isaac River (i.e. site U3a in the *Aquatic Ecology and Stygofauna Assessment*, ESP 2021). However, the upper section of the northern unnamed tributary crossed by the mine access road has been ground-truthed and does not meet the definition of a waterway providing for fish passage (ESP 2022), and is therefore not considered further.

2.5 Supplementary Stygofauna Surveys and Assessment

The stygofauna pilot study for the EIS (ESP 2021) was designed to detect stygofauna if present in the Project area or surrounds in accordance with the *Guideline for the Environmental Assessment of Subterranean Aquatic Fauna* (DES 2015). No stygofauna were recorded during the pilot study for the EIS (ESP 2021). The highly saline and largely unsaturated regolith throughout the broader region suggested that the groundwater environment within the Project area was not ideal for stygofauna (ESP 2021). However, stygofauna were considered likely to occur in the alluvium associated with the Isaac River (DPM Enviroscienses 2018, ESP 2021).

Supplementary stygofauna sampling was completed by ESP in February 2022, targeting bores in the regolith and Isaac River alluvium (ESP 2022). During the supplementary survey, stygofauna taxa were recorded from one bore targeting the Isaac River alluvium (i.e. bore IF3839P):

- Ostracods from family Candonidae (2 specimens), and
- Syncarida from family Bathynellidae (10 specimens).

Both of these families are obligate inhabitants of groundwater ecosystems (i.e. stygobites).

Bathynellidae are widespread and occur in most alluvial aquifers across Australia. The taxonomy of the family Bathynellidae is relatively unresolved, with only a few genera described (Peter Hancock 2022, pers. comm.). All are obligate groundwater dwellers that rely on groundwater habitats for their entire lifecycle.

Candonidae includes both surface water and groundwater dwelling ostracod species. Although it was not possible to identify the specimens recorded during the current survey to species level, examination of key features determined that they were likely obligate stygofauna species (Peter Hancock 2022, pers. comm.).

The wetlands and farm dams in the locality are not likely to be aquatic groundwater dependant ecosystems (GDEs). Modelling has shown that the Project would result in negligible increased leakage from surface flows of the Isaac River to the underlying alluvium (SLR 2022). Therefore, impacts to surface flows and subsequently aquatic ecosystems downstream of the Project area are not expected.

As such, the Project is not expected to impact on subterranean or aquatic GDEs.

3 Conclusion

Potential Aquatic Ecology Impacts from the Optimised Mine Plan

The optimised Project mine plan reduces the overall surface disturbance extent by approximately 179 ha adjacent to the proposed South Pit and West Pit locations. The optimised Project final landform also includes backfilling the previous proposed South Pit mine void and providing a use for all remaining proposed residual voids (i.e. no non-use management areas). The optimised Project mine plan also includes re-establishing a post-mining surface water drainage that is sympathetic with the natural drainage lines.

The optimised Project mine plan would not increase impact on aquatic ecology, but rather have a positive impact on aquatic ecology, by reducing the overall clearance footprint, and increasing the catchment area reporting to the natural ecosystems (due to backfilling the previous proposed South Pit mine void).

Matters of State Environmental Significance – Waterway Providing for Fish Passage

The supplementary field surveys found the unnamed northern waterway is a waterway providing for fish passage Matter of State Environmental Significance as defined by the EO Regulation.

There is 3.28 km (constituting 5.28 ha) of the northern unnamed waterway within the mining lease. The majority of the northern unnamed waterway within the mining lease would be avoided. However, the Project would require the removal of up to 46% (1.52 km constituting 2.45 ha) of northern unnamed waterway that equates to the waterway providing for fish passage Matter of State Environmental Significance.

Measures to minimise and mitigate the impacts on the waterway providing for fish passage Matter of State Environmental Significance include:

- management of the northern unnamed waterway outside of the development footprint,
- construction of an up-catchment diversion system, and
- reinstating excised portions of the northern unnamed waterway in the final landform.

With the impact avoidance and mitigation measures outlined in Section 2.2.5, the Project is not expected to have a significant residual impact on waterways providing for fish passage. Therefore, no offsets are required for a waterway providing for fish passage.

Waterway Barrier Works – Crossings

No impacts to waterways providing for fish passage are proposed as a result of crossings by linear infrastructure.

Supplementary Stygofauna Surveys and Assessment

During the supplementary survey, stygofauna taxa were recorded from one bore targeting the Isaac River alluvium:

- Ostracods from family Candonidae (2 specimens), and
- Syncarida from family Bathynellidae (10 specimens).

Both of these families are obligate inhabitants of groundwater ecosystems (i.e. stygobites), and are widespread.

The wetlands and farm dams in the locality are not likely to be aquatic GDEs. Modelling has shown that the Project would result in negligible increased leakage from surface flows of the Isaac River to the underlying alluvium (SLR 2022). Therefore, impacts to surface flows and subsequently aquatic ecosystems downstream of the Project area are not expected.

As such, the Project is not expected to impact on subterranean or aquatic GDEs.

4 References

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Appendix A Updated Database Searches

Australian Government
Department of Agriculture, Water and the Environment

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 19-Apr-2022

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	5
Listed Threatened Species:	25
Listed Migratory Species:	11

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at http://www.environment.gov.au/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	16
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	None
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	60
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Brigalow (Acacia harpophylla dominant and co-dominant)	Endangered	Community known to occur within area	In feature area
Natural Grasslands of the Queensland Central Highlands and northern Fitzroy Basin	Endangered	Community likely to occur within area	In feature area
Poplar Box Grassy Woodland on Alluvial Plains	Endangered	Community likely to occur within area	In feature area
Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	Endangered	Community likely to occur within area	In buffer area only
Weeping Myall Woodlands	Endangered	Community likely to occur within area	In buffer area only

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Geophaps scripta scripta			
Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat known to occur within area	In feature area
Grantiella picta			
Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Neochmia ruficauda ruficauda			
Star Finch (eastern), Star Finch (southern) [26027]	Endangered	Species or species habitat likely to occur within area	In feature area
Poephila cincta cincta			
Southern Black-throated Finch [64447]	Endangered	Species or species habitat may occur within area	In feature area
Rostratula australis			
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
Dasyurus hallucatus			
Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat likely to occur within area	In feature area
Macroderma gigas			
Ghost Bat [174]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Nyctophilus corbeni			
Corben's Long-eared Bat, South-eastern Long-eared Bat [83395]	Vulnerable	Species or species habitat may occur within area	In feature area
Petauroides volans			
Greater Glider [254]	Vulnerable	Species or species habitat known to occur within area	In feature area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)			
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
PLANT			
Aristida annua [17906]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Dichanthium queenslandicum King Blue-grass [5481]	Endangered	Species or species habitat likely to occur within area	In feature area
Dichanthium setosum bluegrass [14159]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Eucalyptus raveretiana Black Ironbox [16344]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			
Denisonia maculata Ornamental Snake [1193]	Vulnerable	Species or species habitat known to occur within area	In feature area
Egernia rugosa Yakka Skink [1420]	Vulnerable	Species or species habitat may occur within area	In feature area
Elseya albagula Southern Snapping Turtle, White-throated Snapping Turtle [81648]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Furina dunmalli Dunmall's Snake [59254]	Vulnerable	Species or species habitat may occur within area	In feature area
Lerista allanae Allan's Lerista, Retro Slider [1378]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rheodytes leukops Fitzroy River Turtle, Fitzroy Tortoise, Fitzroy Turtle, White-eyed River Diver [1761]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Listed Migratory Species [Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat may occur within area	In buffer area only
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pandion haliaetus			
Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
Tringa nebularia			
Common Greenshank, Greenshank [832]		Species or species habitat may occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Anseranas semipalmata			
Magpie Goose [978]		Species or species habitat may occur within area overfly marine area	In feature area
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis			
Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area	In feature area
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
[Chalcites osculans as Chrysococcyx osculans](#) Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
[Gallinago hardwickii](#) Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area overfly marine area	In feature area
[Haliaeetus leucogaster](#) White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
[Merops ornatus](#) Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
[Motacilla flava](#) Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
[Myiagra cyanoleuca](#) Satin Flycatcher [612]		Species or species habitat may occur within area overfly marine area	In buffer area only
[Pandion haliaetus](#) Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
[Rostratula australis as Rostratula benghalensis (sensu lato)](#) Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area	In feature area
[Tringa nebularia](#) Common Greenshank, Greenshank [832]		Species or species habitat may occur within area overfly marine area	In feature area

Extra Information

EPBC Act Referrals				[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
7 North Dam Extension Project - Peak Downs Mine	2012/6260	Controlled Action	Completed	In buffer area only
Alpha Coal Project - Mine and Rail Development	2008/4648	Controlled Action	Post-Approval	In buffer area only
Arrow Bowen Pipeline (CSG), QLD	2012/6459	Controlled Action	Post-Approval	In buffer area only
Bowen Gas Project	2012/6377	Controlled Action	Post-Approval	In feature area
Carmichael Coal Mine and Rail Project	2010/5736	Controlled Action	Post-Approval	In buffer area only
Caval Ridge Mine Horse Pit Extension, Bowen Basin	2021/9031	Controlled Action	Further Information Request	In buffer area only
Caval Ridge Open Cut Coal Mine Project	2008/4417	Controlled Action	Post-Approval	In buffer area only
Codrilla Open Cut Coal Mining and Processing Operation with Associated Infrastructure	2009/4892	Controlled Action	Post-Approval	In buffer area only
Construct and Operate the Connors River Dam and Pipelines	2008/4429	Controlled Action	Post-Approval	In buffer area only
Construction and operation of an extension to the existing underground coal mine, Grosvenor Mine, near Moranbah, Qld	2016/7796	Controlled Action	Post-Approval	In buffer area only
Develop an Open Cut Coal Mine at Daunia	2008/4418	Controlled Action	Post-Approval	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Eagle Downs Coal Mine Central Queensland	2008/3945	Controlled Action	Post-Approval	In feature area
Ellensfield Underground Coal Mine	2007/3643	Controlled Action	Post-Approval	In buffer area only
Establishment of Galilee Coal Mine and Associated Infrastructure	2009/4737	Controlled Action	Post-Approval	In buffer area only
Extension to the exisiting Isaac Plains Mine, near Moranbah, Qld	2016/7827	Controlled Action	Post-Approval	In buffer area only
Gas pipeline	2002/728	Controlled Action	Post-Approval	In buffer area only
Goonyella Riverside Mine to South Walker Creek Mine Dragline Move	2016/7788	Controlled Action	Completed	In buffer area only
Harrybrandt Open Cut Coal Mine and Associated Infrastructure, Bowen Basin, Qld	2012/6483	Controlled Action	Completed	In buffer area only
install & operate gas pipeline	2005/2059	Controlled Action	Post-Approval	In feature area
Isaac Downs coal mine project, near Moranbah, Qld	2019/8413	Controlled Action	Post-Approval	In buffer area only
Isaac River Coal Mine Project	2021/8980	Controlled Action	Assessment Approach	In buffer area only
Lake Vermont Meadowbrook Coal Mine Project, Qld	2019/8485	Controlled Action	Assessment Approach	In buffer area only
Lake Vermont open cut coal northern extension project, central Qld	2016/7701	Controlled Action	Post-Approval	In buffer area only
Millenium Open Cut Coal Mine Expansion Project, QLD	2009/4821	Controlled Action	Post-Approval	In buffer area only
Moranbah North Extension Project, Moranbah, Qld	2018/8338	Controlled Action	Post-Approval	In buffer area only
Moranbah South Project Coal Mine, QLD	2012/6337	Controlled Action	Post-Approval	In feature area
New Saraji Coal Mine Project	2007/3845	Controlled Action	Completed	In buffer area only
Norwich Park & Blackwater CSG Fields & supporting infrastructure Bowen Basin	2011/6032	Controlled Action	Completed	In buffer area only
Norwich Park to Blackwater Gas Pipeline	2011/6031	Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Olive Downs Project Electricity Transmission Line	2017/7869	Controlled Action	Post-Approval	In buffer area only
Olive Downs Project Mine Site and Access Road	2017/7867	Controlled Action	Post-Approval	In buffer area only
Olive Downs Project Rail Spur	2017/7870	Controlled Action	Post-Approval	In feature area
Olive Downs Project Water Pipeline	2017/7868	Controlled Action	Post-Approval	In feature area
Open Cut Coal Mining	2004/1770	Controlled Action	Post-Approval	In feature area
Relocation of approximately 16km of Dysart Road and associated service infrastructure	2013/6868	Controlled Action	Post-Approval	In feature area
Saraji East Mining Lease Project, Qld	2016/7791	Controlled Action	Assessment Approach	In buffer area only
Spring Creek to Phillips Creek Diversion	2019/8576	Controlled Action	Post-Approval	In buffer area only
The Grosvenor Coal Mine Project	2007/3785	Controlled Action	Post-Approval	In buffer area only
Urannah Dam and Pipelines Project	2020/8708	Controlled Action	Assessment Approach	In buffer area only
Vulcan Complex Project	2020/8676	Controlled Action	Post-Approval	In buffer area only
Winchester South Project Electricity Transmission Line, near Moranbah, Qld	2019/8458	Controlled Action	Assessment Approach	In feature area
Winchester South Project Mine Site and Access Road, near Moranbah, Qld	2019/8460	Controlled Action	Assessment Approach	In feature area
Winchester South Project Water Pipeline, near Moranbah, Qld	2019/8459	Controlled Action	Assessment Approach	In feature area
Not controlled action				
Broadlea North Coal Project open cut mine and associated infrastructure	2005/2179	Not Controlled Action	Completed	In buffer area only
Broadlea to Mallawa and Mallawa to Wotonga Rail Duplication	2006/3046	Not Controlled Action	Completed	In buffer area only
Carborough Downs mine extension	2006/3085	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
construction and operation of Carborough Downs Mine	2005/2064	Not Controlled Action	Completed	In buffer area only
Coppabella-Ingsdon Railway Duplication	2008/4103	Not Controlled Action	Completed	In buffer area only
Eagle-1 Exploration Drilling, North West Shelf, WA	2019/8578	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Integrated Isaac Plains Project	2006/3043	Not Controlled Action	Completed	In buffer area only
Moranbah to Alpha Pipeline Project	2012/6257	Not Controlled Action	Completed	In buffer area only
Olive Downs Project	2005/2377	Not Controlled Action	Completed	In feature area
Open cut coal mine 7km NE of Moranbah (Isaac Plains)	2005/2070	Not Controlled Action	Completed	In buffer area only
Upgrade of a section of the Goonyella Rail System	2011/5857	Not Controlled Action	Completed	In buffer area only
Vulcan Bulk Sample Project	2019/8504	Not Controlled Action	Completed	In buffer area only
Water pipeline	2006/2595	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
Moranbah South Feasibility Seismic Survey	2010/5497	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Moranbah South Project 2013 Seismic Exploration Program, Qld	2013/6814	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Referral decision				
Expansion of open cut coal mine and diversion of creeks in existing mine operati	2006/2845	Referral Decision	Completed	In buffer area only

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

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Queensland Government

WildNet species list

Search Criteria: Species List for a Specified Point
Species: All
Type: All
Queensland status: All
Records: All
Date: All
Latitude: -22.1846
Longitude: 148.2693
Distance: 5
Email: kkeating@ecosp.com.au
Date submitted: Tuesday 19 Apr 2022 09:46:02
Date extracted: Tuesday 19 Apr 2022 09:50:06

The number of records retrieved = 102

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Accipitridae	*Circus assimilis*	spotted harrier		C		1
animals	birds	Columbidae	*Geophaps scripta scripta*	squatter pigeon (southern subspecies)		V	V	3
animals	birds	Falconidae	*Falco berigora*	brown falcon		C		1
animals	mammals	Pseudocheiridae	*Petauroides armillatus*	central greater glider		E	V	1
animals	ray-finned fishes	Ambassidae	*Ambassis agassizii*	Agassiz's glassfish				3
animals	ray-finned fishes	Atherinidae	*Craterocephalus stercusmuscarum*	flyspecked hardyhead				3
animals	ray-finned fishes	Cichlidae	*Oreochromis mossambica*	Mozambique mouthbrooder	Y			2
animals	ray-finned fishes	Clupeidae	*Nematalosa erebi*	bony bream				3
animals	ray-finned fishes	Eleotridae	*Hypseleotris sp.*					5
animals	ray-finned fishes	Eleotridae	*Oxyeleotris lineolata*	sleepy cod				2
animals	ray-finned fishes	Melanotaeniidae	*Melanotaenia splendida splendida*	eastern rainbowfish				3
animals	ray-finned fishes	Plotosidae	*Neosilurus hyrtlii*	Hyrtl's catfish				1
animals	ray-finned fishes	Plotosidae	*Porochilus rendahli*	Rendahl's catfish				1
animals	ray-finned fishes	Terapontidae	*Leiopotherapon unicolor*	spangled perch				2
animals	reptiles	Chelidae	*Chelodina longicollis*	eastern snake-necked turtle		C		1
animals	reptiles	Elapidae	*Denisonia maculata*	ornamental snake		V	V	8
plants	land plants	Acanthaceae	*Brunoniella australis*	blue trumpet		C		3
plants	land plants	Acanthaceae	*Rostellularia adscendens*			C		1
plants	land plants	Aizoaceae	*Trianthema triquetra*	red spinach		C		1
plants	land plants	Apocynaceae	*Carissa ovata*	currantbush		C		1
plants	land plants	Asteraceae	*Parthenium hysterophorus*	parthenium weed	Y			7
plants	land plants	Capparaceae	*Capparis*					1
plants	land plants	Capparaceae	*Capparis anomala*			C		1
plants	land plants	Capparaceae	*Capparis lasiantha*	nipan		C		1
plants	land plants	Convolvulaceae	*Ipomoea lonchophylla*			C		7
plants	land plants	Convolvulaceae	*Polymeria longifolia*	polymeria		C		1
plants	land plants	Cyperaceae	*Cyperus concinnus*			C		1
plants	land plants	Cyperaceae	*Cyperus gilesii*			C		5
plants	land plants	Euphorbiaceae	*Euphorbia drummondii*			C		1
plants	land plants	Goodeniaceae	*Goodenia glabra*			C		2
plants	land plants	Haloragaceae	*Haloragis stricta*			C		2
plants	land plants	Hemerocallidaceae	*Dianella longifolia*			C		1
plants	land plants	Laxmanniaceae	*Lomandra multiflora*			C		2
plants	land plants	Leguminosae	*Acacia excelsa*			C		2
plants	land plants	Leguminosae	*Cassia brewsteri*			C		1
plants	land plants	Leguminosae	*Crotalaria*					1
plants	land plants	Leguminosae	*Crotalaria juncea*	sunhemp	Y			3
plants	land plants	Leguminosae	*Cullen tenax*	emu-foot		C		2
plants	land plants	Leguminosae	*Desmodium campylocaulon*			C		1
plants	land plants	Leguminosae	*Galactia muelleri*			C		2
plants	land plants	Leguminosae	*Galactia tenuiflora*			C		1
plants	land plants	Leguminosae	*Glycine falcata*			C		5
plants	land plants	Leguminosae	*Indigofera linifolia*			C		2
plants	land plants	Leguminosae	*Lysiphyllum*					1
plants	land plants	Leguminosae	*Lysiphyllum carronii*	ebony tree		C		1
plants	land plants	Leguminosae	*Neptunia gracilis forma gracilis*			C		5

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Leguminosae	*Rhynchosia minima*			C		1
plants	land plants	Leguminosae	*Rhynchosia minima var. minima*			C		5
plants	land plants	Leguminosae	*Senna*					1
plants	land plants	Leguminosae	*Sesbania cannabina*			C		2
plants	land plants	Leguminosae	*Stylosanthes hamata*		Y			1
plants	land plants	Leguminosae	*Tephrosia filipes*			C		1
plants	land plants	Leguminosae	*Vachellia farnesiana*		Y			2
plants	land plants	Leguminosae	*Vigna lanceolata*			C		5
plants	land plants	Leguminosae	*Vigna radiata var. sublobata*			C		2
plants	land plants	Malvaceae	*Abelmoschus ficulneus*	native rosella		C		3
plants	land plants	Malvaceae	*Abutilon hannii*			C		1
plants	land plants	Malvaceae	*Hibiscus meraukensis*	Merauke hibiscus		C		1
plants	land plants	Malvaceae	*Malvastrum americanum*		Y			4
plants	land plants	Malvaceae	*Sida corrugata*			C		5
plants	land plants	Malvaceae	*Sida spinosa*	spiny sida	Y			4
plants	land plants	Meliaceae	*Owenia acidula*	emu apple		C		1
plants	land plants	Nyctaginaceae	*Boerhavia burbidgeana*			C		1
plants	land plants	Phyllanthaceae	*Phyllanthus maderaspatensis*			C		1
plants	land plants	Phyllanthaceae	*Phyllanthus virgatus*			C		1
plants	land plants	Poaceae	*Aristida latifolia*	feathertop wiregrass		C		4
plants	land plants	Poaceae	*Aristida leptopoda*	white speargrass		C		1
plants	land plants	Poaceae	*Astrebla lappacea*	curly mitchell grass		C		3
plants	land plants	Poaceae	*Astrebla squarrosa*	bull mitchell grass		C		4
plants	land plants	Poaceae	*Bothriochloa erianthoides*	satintop grass		C		1
plants	land plants	Poaceae	*Bothriochloa ewartiana*	desert bluegrass		C		5
plants	land plants	Poaceae	*Bothriochloa pertusa*		Y			2/1
plants	land plants	Poaceae	*Brachyachne convergens*	common native couch		C		6
plants	land plants	Poaceae	*Cenchrus ciliaris*		Y			6
plants	land plants	Poaceae	*Chloris truncata*			C		1
plants	land plants	Poaceae	*Chloris virgata*	feathertop rhodes grass	Y			3
plants	land plants	Poaceae	*Dichanthium aristatum*	angleton grass	Y			1/1
plants	land plants	Poaceae	*Dichanthium queenslandicum*			V	E	1/1
plants	land plants	Poaceae	*Dichanthium sericeum*			C		5
plants	land plants	Poaceae	*Digitaria ammophila*	silky umbrella grass		C		1
plants	land plants	Poaceae	*Enneapogon truncatus*			C		3
plants	land plants	Poaceae	*Eragrostis tenellula*	delicate lovegrass		C		1
plants	land plants	Poaceae	*Eriochloa crebra*	spring grass		C		7/1
plants	land plants	Poaceae	*Eriochloa pseudoacrotricha*			C		4
plants	land plants	Poaceae	*Heteropogon contortus*	black speargrass		C		4
plants	land plants	Poaceae	*Iseilema vaginiflorum*	red flinders grass		C		6
plants	land plants	Poaceae	*Melinis repens*	red natal grass	Y			2
plants	land plants	Poaceae	*Ophiuros exaltatus*			C		2
plants	land plants	Poaceae	*Panicum decompositum var. decompositum*			C		4
plants	land plants	Poaceae	*Panicum queenslandicum*			C		2
plants	land plants	Poaceae	*Panicum queenslandicum var. acuminatum*			C		1/1
plants	land plants	Poaceae	*Paspalidium globoideum*	sago grass		C		4

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Poaceae	*Poaceae*					1
plants	land plants	Poaceae	*Sehima nervosum*			C		1/1
plants	land plants	Poaceae	*Sporobolus creber*			C		1
plants	land plants	Poaceae	*Themeda triandra*	kangaroo grass		C		4
plants	land plants	Polygalaceae	*Polygala crassitesta*			C		1
plants	land plants	Sapindaceae	*Atalaya*					1
plants	land plants	Sapindaceae	*Atalaya hemiglauca*			C		1
plants	land plants	Solanaceae	*Solanum esuriale*	quena		C		3
plants	land plants	Sparrmanniaceae	*Corchorus trilocularis*			C		1
plants	land plants	Thymelaeaceae	*Pimelea haematostachya*			C		4

CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992.*
The codes are Extinct (EX), Extinct in the Wild (PE), Critically Endangered (CR), Endangered (E), Vulnerable (V), Near Threatened (NT), Special Least Concern (SL) and Least Concern (C).

A - Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999.*
The values of EPBC are Extinct (EX), Extinct in the Wild (XW), Critically Endangered (CE), Endangered (E), Vulnerable (V) and Conservation Dependent (CD).

Records - The first number indicates the total number of records of the taxon (wildlife records and species listings for selected areas).
This number is output as 99999 if it equals or exceeds this value. A second number located after a / indicates the number of specimen records for the taxon.
This number is output as 999 if it equals or exceeds this value.

Queensland Government

WildNet species list

Search Criteria: Species List for a Specified Point
Species: All
Type: All
Queensland status: All
Records: All
Date: All
Latitude: -22.1846
Longitude: 148.2693
Distance: 30
Email: kkeating@ecosp.com.au
Date submitted: Tuesday 19 Apr 2022 09:43:30
Date extracted: Tuesday 19 Apr 2022 09:50:03

The number of records retrieved = 925

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	amphibians	Bufonidae	*Rhinella marina*	cane toad	Y			20
animals	amphibians	Hylidae	*Cyclorana alboguttata*	greenstripe frog		C		6
animals	amphibians	Hylidae	*Cyclorana brevipes*	superb collared frog		C		5
animals	amphibians	Hylidae	*Cyclorana novaehollandiae*	eastern snapping frog		C		6
animals	amphibians	Hylidae	*Cyclorana verrucosa*	rough collared frog		C		2/1
animals	amphibians	Hylidae	*Litoria caerulea*	common green treefrog		C		9
animals	amphibians	Hylidae	*Litoria fallax*	eastern sedgefrog		C		1
animals	amphibians	Hylidae	*Litoria inermis*	bumpy rocketfrog		C		6
animals	amphibians	Hylidae	*Litoria latopalmata*	broad palmed rocketfrog		C		12
animals	amphibians	Hylidae	*Litoria nasuta*	striped rocketfrog		C		1
animals	amphibians	Hylidae	*Litoria rothii*	northern laughing treefrog		C		3
animals	amphibians	Hylidae	*Litoria rubella*	ruddy treefrog		C		9
animals	amphibians	Limnodynastidae	*Limnodynastes peronii*	striped marshfrog		C		1
animals	amphibians	Limnodynastidae	*Limnodynastes salmini*	salmon striped frog		C		8
animals	amphibians	Limnodynastidae	*Limnodynastes tasmaniensis*	spotted grassfrog		C		13
animals	amphibians	Limnodynastidae	*Limnodynastes terraereginae*	scarlet sided pobblebonk		C		5
animals	amphibians	Limnodynastidae	*Platyplectrum ornatum*	ornate burrowing frog		C		29
animals	amphibians	Myobatrachidae	*Pseudophryne major*	great brown broodfrog		C		1
animals	amphibians	Myobatrachidae	*Uperoleia rugosa*	chubby gungan		C		1
animals	birds	Acanthizidae	*Acanthiza apicalis*	inland thornbill		C		3
animals	birds	Acanthizidae	*Acanthiza chrysorrhoa*	yellow-rumped thornbill		C		4
animals	birds	Acanthizidae	*Acanthiza nana*	yellow thornbill		C		11
animals	birds	Acanthizidae	*Acanthiza reguloides*	buff-rumped thornbill		C		6
animals	birds	Acanthizidae	*Gerygone fusca*	western gerygone		C		1
animals	birds	Acanthizidae	*Gerygone olivacea*	white-throated gerygone		C		32
animals	birds	Acanthizidae	*Pyrrholaemus sagittatus*	speckled warbler		C		4
animals	birds	Acanthizidae	*Sericornis frontalis*	white-browed scrubwren		C		1
animals	birds	Acanthizidae	*Smicrornis brevirostris*	weebill		C		45
animals	birds	Accipitridae	*Accipiter cirrocephalus*	collared sparrowhawk		C		4
animals	birds	Accipitridae	*Accipiter fasciatus*	brown goshawk		C		6
animals	birds	Accipitridae	*Aquila audax*	wedge-tailed eagle		C		21
animals	birds	Accipitridae	*Aviceda subcristata*	Pacific baza		C		3
animals	birds	Accipitridae	*Circus approximans*	swamp harrier		C		1
animals	birds	Accipitridae	*Circus assimilis*	spotted harrier		C		2
animals	birds	Accipitridae	*Elanus axillaris*	black-shouldered kite		C		7
animals	birds	Accipitridae	*Haliaeetus leucogaster*	white-bellied sea-eagle		C		5
animals	birds	Accipitridae	*Haliastur sphenurus*	whistling kite		C		38
animals	birds	Accipitridae	*Hieraaetus morphnoides*	little eagle		C		1
animals	birds	Accipitridae	*Milvus migrans*	black kite		C		14
animals	birds	Acrocephalidae	*Acrocephalus australis*	Australian reed-warbler		C		10
animals	birds	Aegothelidae	*Aegotheles cristatus*	Australian owlet-nightjar		C		4
animals	birds	Alaudidae	*Mirafra javanica*	Horsfield's bushlark		C		6
animals	birds	Anatidae	*Anas castanea*	chestnut teal		C		2
animals	birds	Anatidae	*Anas gracilis*	grey teal		C		28
animals	birds	Anatidae	*Anas superciliosa*	Pacific black duck		C		33
animals	birds	Anatidae	*Aythya australis*	hardhead		C		20

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Anatidae	*Chenonetta jubata*	Australian wood duck		C		31
animals	birds	Anatidae	*Cygnus atratus*	black swan		C		13
animals	birds	Anatidae	*Dendrocygna arcuata*	wandering whistling-duck		C		3
animals	birds	Anatidae	*Dendrocygna eytoni*	plumed whistling-duck		C		13
animals	birds	Anatidae	*Malacorhynchus membranaceus*	pink-eared duck		C		1
animals	birds	Anatidae	*Nettapus coromandelianus*	cotton pygmy-goose		C		9
animals	birds	Anhingidae	*Anhinga novaehollandiae*	Australasian darter		C		21
animals	birds	Anseranatidae	*Anseranas semipalmata*	magpie goose		C		1
animals	birds	Ardeidae	*Ardea alba modesta*	eastern great egret		C		19
animals	birds	Ardeidae	*Ardea intermedia*	intermediate egret		C		15
animals	birds	Ardeidae	*Ardea pacifica*	white-necked heron		C		13
animals	birds	Ardeidae	*Bubulcus ibis*	cattle egret		C		3
animals	birds	Ardeidae	*Egretta garzetta*	little egret		C		4
animals	birds	Ardeidae	*Egretta novaehollandiae*	white-faced heron		C		21
animals	birds	Ardeidae	*Nycticorax caledonicus*	nankeen night-heron		C		5
animals	birds	Artamidae	*Artamus cinereus*	black-faced woodswallow		C		11
animals	birds	Artamidae	*Artamus leucorynchus*	white-breasted woodswallow		C		20
animals	birds	Artamidae	*Artamus minor*	little woodswallow		C		1
animals	birds	Artamidae	*Artamus personatus*	masked woodswallow		C		2
animals	birds	Artamidae	*Artamus superciliosus*	white-browed woodswallow		C		1
animals	birds	Artamidae	*Cracticus nigrogularis*	pied butcherbird		C		62
animals	birds	Artamidae	*Cracticus torquatus*	grey butcherbird		C		40
animals	birds	Artamidae	*Gymnorhina tibicen*	Australian magpie		C		84
animals	birds	Artamidae	*Strepera graculina*	pied currawong		C		20
animals	birds	Burhinidae	*Burhinus grallarius*	bush stone-curlew		C		4
animals	birds	Cacatuidae	*Cacatua galerita*	sulphur-crested cockatoo		C		36
animals	birds	Cacatuidae	*Eolophus roseicapilla*	galah		C		38
animals	birds	Cacatuidae	*Nymphicus hollandicus*	cockatiel		C		10
animals	birds	Campephagidae	*Coracina maxima*	ground cuckoo-shrike		C		1
animals	birds	Campephagidae	*Coracina novaehollandiae*	black-faced cuckoo-shrike		C		45
animals	birds	Campephagidae	*Coracina papuensis*	white-bellied cuckoo-shrike		C		4
animals	birds	Campephagidae	*Edolisoma tenuirostre*	common cicadabird		C		9
animals	birds	Campephagidae	*Lalage tricolor*	white-winged triller		C		12
animals	birds	Casuariidae	*Dromaius novaehollandiae*	emu		C		18
animals	birds	Charadriidae	*Elseyornis melanops*	black-fronted dotterel		C		14
animals	birds	Charadriidae	*Vanellus miles*	masked lapwing		C		16
animals	birds	Charadriidae	*Vanellus miles novaehollandiae*	masked lapwing (southern subspecies)		C		8
animals	birds	Ciconiidae	*Ephippiorhynchus asiaticus*	black-necked stork		C		4
animals	birds	Cisticolidae	*Cisticola exilis*	golden-headed cisticola		C		16
animals	birds	Climacteridae	*Climacteris picumnus*	brown treecreeper		C		1
animals	birds	Columbidae	*Geopelia cuneata*	diamond dove		C		2
animals	birds	Columbidae	*Geopelia humeralis*	bar-shouldered dove		C		15
animals	birds	Columbidae	*Geopelia placida*	peaceful dove		C		26
animals	birds	Columbidae	*Geophaps scripta scripta*	squatter pigeon (southern subspecies)		V	V	35
animals	birds	Columbidae	*Ocyphaps lophotes*	crested pigeon		C		28
animals	birds	Columbidae	*Phaps chalcoptera*	common bronzewing		C		7

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Coraciidae	*Eurystomus orientalis*	dollarbird		C		30
animals	birds	Corcoracidae	*Corcorax melanorhamphos*	white-winged chough		C		12
animals	birds	Corcoracidae	*Struthidea cinerea*	apostlebird		C		54
animals	birds	Corvidae	*Corvus bennetti*	little crow		C		1
animals	birds	Corvidae	*Corvus coronoides*	Australian raven		C		2
animals	birds	Corvidae	*Corvus orru*	Torresian crow		C		105
animals	birds	Cuculidae	*Cacomantis flabelliformis*	fan-tailed cuckoo		C		3
animals	birds	Cuculidae	*Cacomantis pallidus*	pallid cuckoo		C		10
animals	birds	Cuculidae	*Cacomantis variolosus*	brush cuckoo		C		1
animals	birds	Cuculidae	*Centropus phasianinus*	pheasant coucal		C		19
animals	birds	Cuculidae	*Chalcites basalis*	Horsfield's bronze-cuckoo		C		8
animals	birds	Cuculidae	*Chalcites lucidus*	shining bronze-cuckoo		C		4
animals	birds	Cuculidae	*Chalcites minutillus*	little bronze-cuckoo		C		3
animals	birds	Cuculidae	*Eudynamys orientalis*	eastern koel		C		6
animals	birds	Cuculidae	*Scythrops novaehollandiae*	channel-billed cuckoo		C		15
animals	birds	Dicruridae	*Dicrurus bracteatus*	spangled drongo		C		6
animals	birds	Estrildidae	*Lonchura castaneothorax*	chestnut-breasted mannikin		C		4
animals	birds	Estrildidae	*Neochmia modesta*	plum-headed finch		C		3
animals	birds	Estrildidae	*Neochmia temporalis*	red-browed finch		C		1
animals	birds	Estrildidae	*Taeniopygia bichenovii*	double-barred finch		C		29
animals	birds	Estrildidae	*Taeniopygia guttata*	zebra finch		C		3
animals	birds	Eurostopodidae	*Eurostopodus mystacalis*	white-throated nightjar		C		5
animals	birds	Falconidae	*Falco berigora*	brown falcon		C		17
animals	birds	Falconidae	*Falco cenchroides*	nankeen kestrel		C		26
animals	birds	Falconidae	*Falco longipennis*	Australian hobby		C		5
animals	birds	Falconidae	*Falco peregrinus*	peregrine falcon		C		1
animals	birds	Gruidae	*Antigone rubicunda*	brolga		C		25
animals	birds	Halcyonidae	*Dacelo leachii*	blue-winged kookaburra		C		14
animals	birds	Halcyonidae	*Dacelo novaeguineae*	laughing kookaburra		C		42
animals	birds	Halcyonidae	*Todiramphus macleayii*	forest kingfisher		C		17
animals	birds	Halcyonidae	*Todiramphus pyrrhopygius*	red-backed kingfisher		C		6
animals	birds	Halcyonidae	*Todiramphus sanctus*	sacred kingfisher		C		12
animals	birds	Hirundinidae	*Hirundo neoxena*	welcome swallow		C		8
animals	birds	Hirundinidae	*Petrochelidon ariel*	fairy martin		C		11
animals	birds	Hirundinidae	*Petrochelidon nigricans*	tree martin		C		10
animals	birds	Jacanidae	*Irediparra gallinacea*	comb-crested jacana		C		2
animals	birds	Laridae	*Chlidonias hybrida*	whiskered tern		C		1
animals	birds	Laridae	*Chroicocephalus novaehollandiae*	silver gull		C		2
animals	birds	Laridae	*Gelochelidon nilotica*	gull-billed tern		SL		1
animals	birds	Laridae	*Hydroprogne caspia*	Caspian tern		SL		1
animals	birds	Maluridae	*Malurus assimilis*	purple-backed fairy-wren		C		15
animals	birds	Maluridae	*Malurus cyaneus*	superb fairy-wren		C		1
animals	birds	Maluridae	*Malurus melanocephalus*	red-backed fairy-wren		C		44
animals	birds	Megaluridae	*Cincloramphus cruralis*	brown songlark		C		1
animals	birds	Megaluridae	*Cincloramphus mathewsi*	rufous songlark		C		9
animals	birds	Megaluridae	*Cincloramphus timoriensis*	tawny grassbird		C		4

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Megaluridae	*Poodytes gramineus*	little grassbird		C		1
animals	birds	Megapodiidae	*Alectura lathami*	Australian brush-turkey		C		1
animals	birds	Meliphagidae	*Acanthagenys rufogularis*	spiny-cheeked honeyeater		C		4
animals	birds	Meliphagidae	*Caligavis chrysops*	yellow-faced honeyeater		C		2
animals	birds	Meliphagidae	*Entomyzon cyanotis*	blue-faced honeyeater		C		43
animals	birds	Meliphagidae	*Gavicalis virescens*	singing honeyeater		C		30
animals	birds	Meliphagidae	*Lichmera indistincta*	brown honeyeater		C		17
animals	birds	Meliphagidae	*Manorina flavigula*	yellow-throated miner		C		25
animals	birds	Meliphagidae	*Manorina melanocephala*	noisy miner		C		26
animals	birds	Meliphagidae	*Meliphaga lewinii*	Lewin's honeyeater		C		3
animals	birds	Meliphagidae	*Melithreptus albogularis*	white-throated honeyeater		C		41
animals	birds	Meliphagidae	*Melithreptus gularis*	black-chinned honeyeater		C		1
animals	birds	Meliphagidae	*Melithreptus lunatus*	white-naped honeyeater		C		1
animals	birds	Meliphagidae	*Myzomela obscura*	dusky honeyeater		C		1
animals	birds	Meliphagidae	*Myzomela sanguinolenta*	scarlet honeyeater		C		1
animals	birds	Meliphagidae	*Philemon citreogularis*	little friarbird		C		29
animals	birds	Meliphagidae	*Philemon corniculatus*	noisy friarbird		C		45
animals	birds	Meliphagidae	*Plectorhyncha lanceolata*	striped honeyeater		C		25
animals	birds	Meliphagidae	*Ptilotula fusca*	fuscous honeyeater		C		1
animals	birds	Meliphagidae	*Stomiopera flava*	yellow honeyeater		C		2
animals	birds	Meropidae	*Merops ornatus*	rainbow bee-eater		C		44
animals	birds	Monarchidae	*Grallina cyanoleuca*	magpie-lark		C		59
animals	birds	Monarchidae	*Monarcha melanopsis*	black-faced monarch		SL		1
animals	birds	Monarchidae	*Myiagra inquieta*	restless flycatcher		C		5
animals	birds	Monarchidae	*Myiagra rubecula*	leaden flycatcher		C		19
animals	birds	Motacillidae	*Anthus novaeseelandiae*	Australasian pipit		C		18
animals	birds	Nectariniidae	*Dicaeum hirundinaceum*	mistletoebird		C		13
animals	birds	Neosittidae	*Daphoenositta chrysoptera*	varied sittella		C		11
animals	birds	Oriolidae	*Oriolus sagittatus*	olive-backed oriole		C		12
animals	birds	Oriolidae	*Sphecotheres vieilloti*	Australasian figbird		C		6
animals	birds	Otididae	*Ardeotis australis*	Australian bustard		C		14
animals	birds	Pachycephalidae	*Colluricincla harmonica*	grey shrike-thrush		C		20
animals	birds	Pachycephalidae	*Colluricincla megarhyncha*	little shrike-thrush		C		1
animals	birds	Pachycephalidae	*Pachycephala pectoralis*	golden whistler		C		1
animals	birds	Pachycephalidae	*Pachycephala rufiventris*	rufous whistler		C		27
animals	birds	Pardalotidae	*Pardalotus striatus*	striated pardalote		C		72
animals	birds	Passeridae	*Passer domesticus*	house sparrow	Y			1
animals	birds	Pelecanidae	*Pelecanus conspicillatus*	Australian pelican		C		15
animals	birds	Petroicidae	*Eopsaltria australis*	eastern yellow robin		C		1
animals	birds	Petroicidae	*Microeca fascinans*	jacky winter		C		7
animals	birds	Petroicidae	*Petroica goodenovii*	red-capped robin		C		3
animals	birds	Phalacrocoracidae	*Microcarbo melanoleucos*	little pied cormorant		C		20
animals	birds	Phalacrocoracidae	*Phalacrocorax carbo*	great cormorant		C		1
animals	birds	Phalacrocoracidae	*Phalacrocorax sulcirostris*	little black cormorant		C		19
animals	birds	Phalacrocoracidae	*Phalacrocorax varius*	pied cormorant		C		4
animals	birds	Phasianidae	*Coturnix pectoralis*	stubble quail		C		3

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Phasianidae	*Synoicus ypsilophorus*	brown quail		C		13
animals	birds	Podargidae	*Podargus strigoides*	tawny frogmouth		C		17
animals	birds	Podicipedidae	*Podiceps cristatus*	great crested grebe		C		8
animals	birds	Podicipedidae	*Tachybaptus novaehollandiae*	Australasian grebe		C		22
animals	birds	Pomatostomidae	*Pomatostomus temporalis*	grey-crowned babbler		C		36
animals	birds	Psittacidae	*Aprosmictus erythropterus*	red-winged parrot		C		23
animals	birds	Psittacidae	*Melopsittacus undulatus*	budgerigar		C		1
animals	birds	Psittacidae	*Parvipsitta pusilla*	little lorikeet		C		1
animals	birds	Psittacidae	*Platycercus adscitus*	pale-headed rosella		C		47
animals	birds	Psittacidae	*Platycercus adscitus palliceps*	pale-headed rosella (southern form)		C		2
animals	birds	Psittacidae	*Trichoglossus chlorolepidotus*	scaly-breasted lorikeet		C		3
animals	birds	Psittacidae	*Trichoglossus moluccanus*	rainbow lorikeet		C		40
animals	birds	Ptilonorhynchidae	*Chlamydera maculata*	spotted bowerbird		C		10
animals	birds	Ptilonorhynchidae	*Chlamydera nuchalis*	great bowerbird		C		2
animals	birds	Rallidae	*Fulica atra*	Eurasian coot		C		10
animals	birds	Rallidae	*Gallinula tenebrosa*	dusky moorhen		C		12
animals	birds	Rallidae	*Gallirallus philippensis*	buff-banded rail		C		1
animals	birds	Rallidae	*Porphyrio melanotus*	purple swamphen		C		10
animals	birds	Rallidae	*Porzana fluminea*	Australian spotted crake		C		1
animals	birds	Recurvirostridae	*Himantopus himantopus*	black-winged stilt		C		10
animals	birds	Rhipiduridae	*Rhipidura albiscapa*	grey fantail		C		29
animals	birds	Rhipiduridae	*Rhipidura leucophrys*	willie wagtail		C		44
animals	birds	Rhipiduridae	*Rhipidura rufifrons*	rufous fantail		SL		2
animals	birds	Scolopacidae	*Calidris acuminata*	sharp-tailed sandpiper		SL		1
animals	birds	Scolopacidae	*Tringa nebularia*	common greenshank		SL		1
animals	birds	Scolopacidae	*Tringa stagnatilis*	marsh sandpiper		SL		3
animals	birds	Strigidae	*Ninox boobook*	southern boobook		C		11
animals	birds	Strigidae	*Ninox connivens*	barking owl		C		2
animals	birds	Sturnidae	*Acridotheres tristis*	common myna	Y			2
animals	birds	Threskiornithidae	*Platalea flavipes*	yellow-billed spoonbill		C		5
animals	birds	Threskiornithidae	*Platalea regia*	royal spoonbill		C		14
animals	birds	Threskiornithidae	*Plegadis falcinellus*	glossy ibis		SL		2
animals	birds	Threskiornithidae	*Threskiornis molucca*	Australian white ibis		C		8
animals	birds	Threskiornithidae	*Threskiornis spinicollis*	straw-necked ibis		C		12
animals	birds	Timaliidae	*Zosterops lateralis*	silvereye		C		2
animals	birds	Turnicidae	*Turnix varius*	painted button-quail		C		4
animals	birds	Tytonidae	*Tyto javanica*	eastern barn owl		C		5
animals	birds	Tytonidae	*Tyto longimembris*	eastern grass owl		C		1
animals	insects	Nymphalidae	*Acraea andromacha andromacha*	glasswing				1
animals	insects	Nymphalidae	*Danaus petilia*	lesser wanderer				1
animals	insects	Nymphalidae	*Euploea corinna*	common crow				4
animals	insects	Nymphalidae	*Hypolimnas bolina nerina*	varied eggfly				1
animals	insects	Nymphalidae	*Junonia villida villida*	meadow argus				4
animals	insects	Nymphalidae	*Tirumala hamata hamata*	blue tiger				1
animals	insects	Papilionidae	*Papilio anactus*	dainty swallowtail				2
animals	insects	Pieridae	*Belenois java teutonia*	caper white				6

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animals	insects	Pieridae	*Catopsilia pomona*	lemon migrant				6
animals	insects	Pieridae	*Cepora perimale scyllara*	caper gull (Australian subspecies)				1
animals	insects	Pieridae	*Elodina parthia*	striated pearl-white				1
animals	mammals	Bovidae	*Bos taurus*	European cattle	Y			2
animals	mammals	Canidae	*Canis familiaris*	dog	Y			4
animals	mammals	Canidae	*Canis familiaris (dingo)*	dingo				3
animals	mammals	Canidae	*Canis sp.*		Y			3
animals	mammals	Canidae	*Vulpes vulpes*	red fox	Y			3
animals	mammals	Cervidae	*Axis axis*	chital	Y			3
animals	mammals	Dasyuridae	*Planigale maculata*	common planigale		C		3
animals	mammals	Dasyuridae	*Planigale tenuirostris*	narrow-nosed planigale		C		2
animals	mammals	Dasyuridae	*Sminthopsis macroura*	stripe-faced dunnart		C		1
animals	mammals	Emballonuridae	*Saccolaimus flaviventris*	yellow-bellied sheathtail bat		C		16
animals	mammals	Emballonuridae	*Taphozous australis*	coastal sheathtail bat		NT		1
animals	mammals	Emballonuridae	*Taphozous troughtoni*	Troughton's sheathtail bat		C		5
animals	mammals	Felidae	*Felis catus*	cat	Y			4
animals	mammals	Leporidae	*Oryctolagus cuniculus*	rabbit	Y			18
animals	mammals	Macropodidae	*Lagorchestes conspicillatus*	spectacled hare-wallaby		C		1
animals	mammals	Macropodidae	*Macropus giganteus*	eastern grey kangaroo		C		21
animals	mammals	Macropodidae	*Notamacropus dorsalis*	black-striped wallaby		C		3
animals	mammals	Macropodidae	*Osphranter robustus*	common wallaroo		C		5
animals	mammals	Macropodidae	*Osphranter rufus*	red kangaroo		C		1
animals	mammals	Macropodidae	*Petrogale inornata*	unadorned rock-wallaby		C		4
animals	mammals	Macropodidae	*Petrogale sp.*			C		1
animals	mammals	Macropodidae	*Wallabia bicolor*	swamp wallaby		C		3
animals	mammals	Miniopteridae	*Miniopterus australis*	little bent-wing bat		C		6
animals	mammals	Miniopteridae	*Miniopterus schreibersii oceanensis*	eastern bent-wing bat		C		7
animals	mammals	Molossidae	*Austronomus australis*	white-striped freetail bat		C		1
animals	mammals	Molossidae	*Chaerephon jobensis*	northern freetail bat		C		15
animals	mammals	Molossidae	*Mormopterus lumsdenae*	northern free-tailed bat		C		10
animals	mammals	Molossidae	*Mormopterus ridei*	eastern free-tailed bat		C		9
animals	mammals	Muridae	*Hydromys chrysogaster*	water rat		C		6
animals	mammals	Muridae	*Leggadina lakedownensis*	Lakeland Downs mouse		C		1
animals	mammals	Muridae	*Mus musculus*	house mouse	Y			10
animals	mammals	Muridae	*Pseudomys delicatulus*	delicate mouse		C		6
animals	mammals	Muridae	*Pseudomys gracilicaudatus*	eastern chestnut mouse		C		5
animals	mammals	Muridae	*Pseudomys patrius*	eastern pebble-mound mouse		C		1
animals	mammals	Muridae	*Rattus fuscipes*	bush rat		C		1
animals	mammals	Muridae	*Rattus rattus*	black rat	Y			1
animals	mammals	Peramelidae	*Isoodon macrourus*	northern brown bandicoot		C		3
animals	mammals	Petauridae	*Petaurus norfolcensis*	squirrel glider		C		3
animals	mammals	Petauridae	*Petaurus notatus*	Krefft's glider		C		9
animals	mammals	Petauridae	*Petaurus sp.*			C		1
animals	mammals	Phalangeridae	*Trichosurus vulpecula*	common brushtail possum		C		13
animals	mammals	Phascolarctidae	*Phascolarctos cinereus*	koala		E	E	114
animals	mammals	Potoroidae	*Aepyprymnus rufescens*	rufous bettong		C		15

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animals	mammals	Pseudocheiridae	*Petauroides armillatus*	central greater glider		E	V	103
animals	mammals	Pseudocheiridae	*Pseudocheirus peregrinus*	common ringtail possum		C		1
animals	mammals	Pteropodidae	*Pteropus scapulatus*	little red flying-fox		C		7
animals	mammals	Suidae	*Sus scrofa*	pig	Y			9
animals	mammals	Tachyglossidae	*Tachyglossus aculeatus*	short-beaked echidna		SL		19
animals	mammals	Vespertilionidae	*Chalinolobus dwyeri*	large-eared pied bat		V	V	1
animals	mammals	Vespertilionidae	*Chalinolobus gouldii*	Gould's wattled bat		C		20
animals	mammals	Vespertilionidae	*Chalinolobus morio*	chocolate wattled bat		C		9
animals	mammals	Vespertilionidae	*Chalinolobus nigrogriseus*	hoary wattled bat		C		9
animals	mammals	Vespertilionidae	*Chalinolobus picatus*	little pied bat		C		16
animals	mammals	Vespertilionidae	*Chalinolobus sp.*			C		5
animals	mammals	Vespertilionidae	*Nyctophilus bifax*	northern long-eared bat		C		1
animals	mammals	Vespertilionidae	*Nyctophilus geoffroyi*	lesser long-eared bat		C		1
animals	mammals	Vespertilionidae	*Nyctophilus gouldi*	Gould's long-eared bat		C		3
animals	mammals	Vespertilionidae	*Nyctophilus sp.*			C		4
animals	mammals	Vespertilionidae	*Scotorepens balstoni*	inland broad-nosed bat		C		10
animals	mammals	Vespertilionidae	*Scotorepens greyii*	little broad-nosed bat		C		19
animals	mammals	Vespertilionidae	*Scotorepens sanborni*	northern broad-nosed bat		C		3
animals	mammals	Vespertilionidae	*Scotorepens sp.*			C		1
animals	mammals	Vespertilionidae	*Vespadelus baverstocki*	inland forest bat		C		9
animals	mammals	Vespertilionidae	*Vespadelus troughtoni*	eastern cave bat		C		12
animals	ray-finned fishes	Ambassidae	*Ambassis agassizii*	Agassiz's glassfish				32
animals	ray-finned fishes	Atherinidae	*Craterocephalus stercusmuscarum*	flyspecked hardyhead				8
animals	ray-finned fishes	Cichlidae	*Oreochromis mossambica*	Mozambique mouthbrooder	Y			14
animals	ray-finned fishes	Clupeidae	*Nematalosa erebi*	bony bream				16
animals	ray-finned fishes	Eleotridae	*Hypseleotris galii*	firetail gudgeon				1
animals	ray-finned fishes	Eleotridae	*Hypseleotris klunzingeri*	western carp gudgeon				3
animals	ray-finned fishes	Eleotridae	*Hypseleotris sp.*					29
animals	ray-finned fishes	Eleotridae	*Mogurnda adspersa*	southern purplespotted gudgeon				8
animals	ray-finned fishes	Eleotridae	*Oxyeleotris lineolata*	sleepy cod				8
animals	ray-finned fishes	Eleotridae	*Philypnodon grandiceps*	flathead gudgeon				1
animals	ray-finned fishes	Melanotaeniidae	*Melanotaenia splendida splendida*	eastern rainbowfish				29
animals	ray-finned fishes	Osteoglossidae	*Scleropages leichardti*	southern saratoga				1
animals	ray-finned fishes	Percichthyidae	*Macquaria ambigua*	golden perch				4
animals	ray-finned fishes	Plotosidae	*Neosilurus hyrtlii*	Hyrtl's catfish				11
animals	ray-finned fishes	Plotosidae	*Porochilus rendahli*	Rendahl's catfish				1
animals	ray-finned fishes	Plotosidae	*Tandanus tandanus*	freshwater catfish				1
animals	ray-finned fishes	Poeciliidae	*Gambusia holbrooki*	mosquitofish	Y			4
animals	ray-finned fishes	Poeciliidae	*Xiphophorus maculatus*	platy	Y			2
animals	ray-finned fishes	Retropinnidae	*Retropinna semoni*	Australian smelt				1
animals	ray-finned fishes	Terapontidae	*Bidyanus bidyanus*	silver perch			CE	1
animals	ray-finned fishes	Terapontidae	*Leiopotherapon unicolor*	spangled perch				19
animals	reptiles	Agamidae	*Amphibolurus burnsi*	Burns's dragon		C		2
animals	reptiles	Agamidae	*Chlamydosaurus kingii*	frilled lizard		C		2
animals	reptiles	Agamidae	*Diporiphora australis*	tommy roundhead		C		12/1
animals	reptiles	Agamidae	*Pogona barbata*	bearded dragon		C		6

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animals	reptiles	Agamidae	*Pogona vitticeps*	central bearded dragon		C		1
animals	reptiles	Boidae	*Antaresia maculosa*	spotted python		C		11
animals	reptiles	Boidae	*Aspidites melanocephalus*	black-headed python		C		4
animals	reptiles	Carphodactylidae	*Nephrurus asper*	spiny knob-tailed gecko		C		5
animals	reptiles	Chelidae	*Chelodina longicollis*	eastern snake-necked turtle		C		4
animals	reptiles	Chelidae	*Emydura macquarii krefftii*	Krefft's river turtle		C		6
animals	reptiles	Chelidae	*Emydura sp.*			C		1
animals	reptiles	Colubridae	*Boiga irregularis*	brown tree snake		C		5
animals	reptiles	Colubridae	*Dendrelaphis punctulatus*	green tree snake		C		1
animals	reptiles	Colubridae	*Tropidonophis mairii*	freshwater snake		C		2
animals	reptiles	Diplodactylidae	*Amalosia rhombifer*	zig-zag gecko		C		3
animals	reptiles	Diplodactylidae	*Diplodactylus platyurus*	eastern fat-tailed gecko		C		11
animals	reptiles	Diplodactylidae	*Diplodactylus vittatus*	wood gecko		C		2
animals	reptiles	Diplodactylidae	*Lucasium steindachneri*	Steindachner's gecko		C		14
animals	reptiles	Diplodactylidae	*Oedura monilis*	ocellated velvet gecko		C		8
animals	reptiles	Diplodactylidae	*Oedura monilis sensu lato*	ocellated velvet gecko		C		5
animals	reptiles	Diplodactylidae	*Strophurus williamsi*	soft-spined gecko		C		5
animals	reptiles	Elapidae	*Acanthophis antarcticus*	common death adder		V		1
animals	reptiles	Elapidae	*Brachyurophis australis*	coral snake		C		1
animals	reptiles	Elapidae	*Cryptophis boschmai*	Carpentaria whip snake		C		6
animals	reptiles	Elapidae	*Demansia psammophis*	yellow-faced whipsnake		C		5
animals	reptiles	Elapidae	*Denisonia maculata*	ornamental snake		V	V	43
animals	reptiles	Elapidae	*Denisonia sp.*			C		1
animals	reptiles	Elapidae	*Furina diadema*	red-naped snake		C		3
animals	reptiles	Elapidae	*Hoplocephalus bitorquatus*	pale-headed snake		C		6
animals	reptiles	Elapidae	*Pseudonaja textilis*	eastern brown snake		C		11
animals	reptiles	Elapidae	*Suta suta*	myall snake		C		7
animals	reptiles	Gekkonidae	*Gehyra catenata*	chain-backed dtella		C		11
animals	reptiles	Gekkonidae	*Gehyra dubia*	dubious dtella		C		48/1
animals	reptiles	Gekkonidae	*Gehyra versicolor*			C		1
animals	reptiles	Gekkonidae	*Heteronotia binoei*	Bynoe's gecko		C		36
animals	reptiles	Pygopodidae	*Lialis burtonis*	Burton's legless lizard		C		7
animals	reptiles	Pygopodidae	*Paradelma orientalis*	brigalow scaly-foot		C		1
animals	reptiles	Pygopodidae	*Pygopus schraderi*	eastern hooded scaly-foot		C		1
animals	reptiles	Scincidae	*Bellatorias frerei*	major skink		C		1
animals	reptiles	Scincidae	*Carlia munda*	shaded-litter rainbow-skink		C		5
animals	reptiles	Scincidae	*Carlia pectoralis sensu lato*			C		19
animals	reptiles	Scincidae	*Carlia rubigo*	orange-flanked rainbow skink		C		13
animals	reptiles	Scincidae	*Carlia schmeltzii*	robust rainbow-skink		C		7/1
animals	reptiles	Scincidae	*Carlia sp.*			C		1
animals	reptiles	Scincidae	*Carlia vivax*	tussock rainbow-skink		C		4
animals	reptiles	Scincidae	*Cryptoblepharus pannosus*	ragged snake-eyed skink		C		2
animals	reptiles	Scincidae	*Cryptoblepharus pulcher pulcher*	elegant snake-eyed skink		C		9
animals	reptiles	Scincidae	*Cryptoblepharus sp.*			C		1
animals	reptiles	Scincidae	*Cryptoblepharus virgatus sensu lato*			C		7
animals	reptiles	Scincidae	*Ctenotus ingrami*	unspotted yellow-sided ctenotus		C		1

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animals	reptiles	Scincidae	*Ctenotus spaldingi*	straight-browed ctenotus		C		19
animals	reptiles	Scincidae	*Ctenotus strauchii*	eastern barred wedgesnout ctenotus		C		1
animals	reptiles	Scincidae	*Ctenotus taeniolatus*	copper-tailed skink		C		18
animals	reptiles	Scincidae	*Eulamprus sp.*			C		2
animals	reptiles	Scincidae	*Glaphyromorphus punctulatus*	fine-spotted mulch-skink		C		2/1
animals	reptiles	Scincidae	*Lerista fragilis*	eastern mulch slider		C		17/1
animals	reptiles	Scincidae	*Lerista punctatovittata*	eastern robust slider		C		1
animals	reptiles	Scincidae	*Lygisaurus foliorum*	tree-base litter-skink		C		14
animals	reptiles	Scincidae	*Menetia greyii*	common dwarf skink		C		4
animals	reptiles	Scincidae	*Morethia boulengeri*	south-eastern morethia skink		C		8
animals	reptiles	Scincidae	*Morethia taeniopleura*	fire-tailed skink		C		6
animals	reptiles	Scincidae	*Pygmaeascincus timlowi*	dwarf litter-skink		C		3
animals	reptiles	Scincidae	*Tiliqua rugosa*	shingle-back		C		1
animals	reptiles	Scincidae	*Tiliqua scincoides*	eastern blue-tongued lizard		C		2
animals	reptiles	Typhlopidae	*Anilios affinis*	small-headed blind snake		C		2
animals	reptiles	Typhlopidae	*Anilios ligatus*	robust blind snake		C		1
animals	reptiles	Typhlopidae	*Anilios unguirostris*	claw-snouted blind snake		C		1
animals	reptiles	Varanidae	*Varanus tristis*	black-tailed monitor		C		10
fungi	lecanoromycetes	Cladoniaceae	*Cladia muelleri*			C		1/1
fungi	lecanoromycetes	Cladoniaceae	*Ramalinora glaucolivida*			C		1/1
fungi	lecanoromycetes	Lecideaceae	*Lecidea*					3/3
fungi	lecanoromycetes	Parmeliaceae	*Xanthoparmelia ballingalliana*			C		2/2
fungi	lecanoromycetes	Parmeliaceae	*Xanthoparmelia exuviata*			C		1/1
fungi	lecanoromycetes	Physciaceae	*Rinodina*					1/1
fungi	lecanoromycetes	Porinaceae	*Porina subargillacea*			C		1/1
fungi	lecanoromycetes	Teloschistaceae	*Caloplaca cinnabarina*			C		1/1
fungi	lichinomycetes	Peltulaceae	*Peltula placodizans*			C		1/1
plants	land plants	Acanthaceae	*Brunoniella australis*	blue trumpet		C		13
plants	land plants	Acanthaceae	*Harnieria sp. (Lornesleigh E.J.Thompson+ CHA75)*			C		1/1
plants	land plants	Acanthaceae	*Pseuderanthemum variabile*	pastel flower		C		2/1
plants	land plants	Acanthaceae	*Rostellularia adscendens*			C		26/1
plants	land plants	Acanthaceae	*Rostellularia adscendens var. hispida*			C		1/1
plants	land plants	Aizoaceae	*Trianthema portulacastrum*	black pigweed	Y			3
plants	land plants	Aizoaceae	*Trianthema triquetra*	red spinach		C		1
plants	land plants	Amaranthaceae	*Alternanthera denticulata*	lesser joyweed		C		1
plants	land plants	Amaranthaceae	*Alternanthera denticulata var. micrantha*			C		6
plants	land plants	Amaranthaceae	*Alternanthera nana*	hairy joyweed		C		1/1
plants	land plants	Amaranthaceae	*Alternanthera nodiflora*	joyweed		C		1
plants	land plants	Amaranthaceae	*Gomphrena celosioides*	gomphrena weed	Y			5
plants	land plants	Amaranthaceae	*Ptilotus*					1
plants	land plants	Amaryllidaceae	*Crinum*					1
plants	land plants	Apiaceae	*Eryngium plantagineum*	long eryngium		C		2/2
plants	land plants	Apocynaceae	*Alstonia constricta*	bitterbark		C		2
plants	land plants	Apocynaceae	*Alyxia ruscifolia*			C		1/1
plants	land plants	Apocynaceae	*Carissa ovata*	currantbush		C		11
plants	land plants	Apocynaceae	*Hoya australis subsp. australis*			C		1/1

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plants	land plants	Apocynaceae	*Leichhardtia australis*			C		1
plants	land plants	Apocynaceae	*Leichhardtia viridiflora*			C		1
plants	land plants	Apocynaceae	*Marsdenia*					1
plants	land plants	Apocynaceae	*Parsonsia eucalyptophylla*	gargaloo		C		1
plants	land plants	Apocynaceae	*Parsonsia lanceolata*	northern silkpod		C		3/2
plants	land plants	Apocynaceae	*Wrightia saligna*			C		1/1
plants	land plants	Apocynaceae	*Wrightia versicolor*			C		1/1
plants	land plants	Araliaceae	*Polyscias elegans*	celery wood		C		1/1
plants	land plants	Asphodelaceae	*Bulbine bulbosa*	golden lily		C		2
plants	land plants	Asteraceae	*Acanthospermum hispidum*	star burr	Y			1
plants	land plants	Asteraceae	*Apowollastonia spilanthoides*			C		10/3
plants	land plants	Asteraceae	*Bidens pilosa*		Y			2
plants	land plants	Asteraceae	*Blumea axillaris*			C		2/2
plants	land plants	Asteraceae	*Calotis cuneifolia*	burr daisy		C		1
plants	land plants	Asteraceae	*Calotis dentex*	white burr daisy		C		1/1
plants	land plants	Asteraceae	*Coronidium rupicola*			C		1/1
plants	land plants	Asteraceae	*Cyanthillium cinereum*			C		2/1
plants	land plants	Asteraceae	*Emilia sonchifolia*		Y			2
plants	land plants	Asteraceae	*Euchiton involucratus*			C		3
plants	land plants	Asteraceae	*Gamochaeta pensylvanica*		Y			1/1
plants	land plants	Asteraceae	*Parthenium hysterophorus*	parthenium weed	Y			42
plants	land plants	Asteraceae	*Peripleura hispidula*			C		2
plants	land plants	Asteraceae	*Praxelis clematidea*		Y			1/1
plants	land plants	Asteraceae	*Pterocaulon redolens*			C		6
plants	land plants	Asteraceae	*Pterocaulon sphacelatum*	applebush		C		2
plants	land plants	Asteraceae	*Rutidosis leucantha*			C		1/1
plants	land plants	Asteraceae	*Senecio pinnatifolius var. pinnatifolius*			C		2
plants	land plants	Asteraceae	*Sonchus oleraceus*	common sowthistle	Y			1
plants	land plants	Asteraceae	*Sphaeromorphaea australis*			C		1/1
plants	land plants	Asteraceae	*Sphaeromorphaea subintegra*			C		1/1
plants	land plants	Asteraceae	*Tridax procumbens*	tridax daisy	Y			1/1
plants	land plants	Asteraceae	*Vittadinia pustulata*			C		1/1
plants	land plants	Boraginaceae	*Ehretia membranifolia*	weeping koda		C		2
plants	land plants	Boraginaceae	*Trichodesma zeylanicum*			C		5
plants	land plants	Brassicaceae	*Cardamine hirsuta*	common bittercress	Y			1/1
plants	land plants	Byttneriaceae	*Hannafordia shanesii*			C		1/1
plants	land plants	Cactaceae	*Harrisia martinii*		Y			10
plants	land plants	Cactaceae	*Opuntia*					1
plants	land plants	Cactaceae	*Opuntia stricta*		Y			1
plants	land plants	Cactaceae	*Opuntia tomentosa*	velvety tree pear	Y			7
plants	land plants	Campanulaceae	*Wahlenbergia gracilis*	sprawling bluebell		SL		6
plants	land plants	Campanulaceae	*Wahlenbergia queenslandica*			SL		1/1
plants	land plants	Capparaceae	*Capparis*					2
plants	land plants	Capparaceae	*Capparis anomala*			C		5
plants	land plants	Capparaceae	*Capparis canescens*			C		1
plants	land plants	Capparaceae	*Capparis humistrata*			E		1/1

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plants	land plants	Capparaceae	*Capparis lasiantha*	nipan		C		11
plants	land plants	Capparaceae	*Capparis loranthifolia*			C		1
plants	land plants	Capparaceae	*Capparis mitchellii*			C		1
plants	land plants	Capparaceae	*Capparis shanesiana*			C		1/1
plants	land plants	Capparaceae	*Capparis umbonata*			C		1/1
plants	land plants	Caryophyllaceae	*Polycarpaea longiflora*			C		5
plants	land plants	Casuarinaceae	*Allocasuarina luehmannii*	bull oak		C		2
plants	land plants	Casuarinaceae	*Casuarina cristata*	belah		C		1
plants	land plants	Casuarinaceae	*Casuarina cunninghamiana*			C		1
plants	land plants	Casuarinaceae	*Casuarina cunninghamiana subsp. cunninghamiana*			C		3
plants	land plants	Celastraceae	*Denhamia bilocularis*			C		1
plants	land plants	Celastraceae	*Denhamia cunninghamii*			C		2/1
plants	land plants	Celastraceae	*Denhamia disperma*			C		3
plants	land plants	Celastraceae	*Elaeodendron australe*			C		1
plants	land plants	Celastraceae	*Elaeodendron australe var. australe*			C		1/1
plants	land plants	Chenopodiaceae	*Dysphania melanocarpa forma melanocarpa*			C		1/1
plants	land plants	Chenopodiaceae	*Enchylaena tomentosa*			C		10
plants	land plants	Chenopodiaceae	*Enchylaena tomentosa var. tomentosa*			C		3
plants	land plants	Chenopodiaceae	*Maireana microphylla*			C		2
plants	land plants	Chenopodiaceae	*Salsola australis*			C		2
plants	land plants	Chenopodiaceae	*Sclerolaena lanicuspis*			C		1/1
plants	land plants	Chenopodiaceae	*Sclerolaena muricata var. muricata*			C		3/1
plants	land plants	Chenopodiaceae	*Sclerolaena muricata var. villosa*			C		3
plants	land plants	Chenopodiaceae	*Sclerolaena tetracuspis*	brigalow burr		C		1/1
plants	land plants	Cleomaceae	*Arivela viscosa*			C		6
plants	land plants	Clusiaceae	*Hypericum gramineum*			C		2/2
plants	land plants	Combretaceae	*Terminalia oblongata*			C		1
plants	land plants	Combretaceae	*Terminalia oblongata subsp. oblongata*			C		1
plants	land plants	Commelinaceae	*Commelina*					1
plants	land plants	Commelinaceae	*Commelina diffusa*	wandering jew		C		5
plants	land plants	Convolvulaceae	*Evolvulus alsinoides*			C		5
plants	land plants	Convolvulaceae	*Evolvulus alsinoides var. decumbens*			C		1
plants	land plants	Convolvulaceae	*Ipomoea brownii*			C		1/1
plants	land plants	Convolvulaceae	*Ipomoea calobra*			C		1/1
plants	land plants	Convolvulaceae	*Ipomoea lonchophylla*			C		30
plants	land plants	Convolvulaceae	*Ipomoea plebeia*	bellvine		C		1
plants	land plants	Convolvulaceae	*Jacquemontia paniculata*			C		3/1
plants	land plants	Convolvulaceae	*Polymeria longifolia*	polymeria		C		17
plants	land plants	Convolvulaceae	*Polymeria pusilla*			C		7
plants	land plants	Convolvulaceae	*Xenostegia tridentata*			C		1/1
plants	land plants	Cucurbitaceae	*Cucumis melo*			C		5
plants	land plants	Cucurbitaceae	*Cucurbitaceae*					1
plants	land plants	Cyperaceae	*Cyperus alopecuroides*			C		1/1
plants	land plants	Cyperaceae	*Cyperus alterniflorus*			C		1/1
plants	land plants	Cyperaceae	*Cyperus betchei*			C		2
plants	land plants	Cyperaceae	*Cyperus compressus*		Y			1/1

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plants	land plants	Cyperaceae	*Cyperus concinnus*			C		2
plants	land plants	Cyperaceae	*Cyperus conicus var. conicus*			C		1/1
plants	land plants	Cyperaceae	*Cyperus distans*			C		3
plants	land plants	Cyperaceae	*Cyperus exaltatus*	tall flatsedge		C		7
plants	land plants	Cyperaceae	*Cyperus flaccidus*			C		1/1
plants	land plants	Cyperaceae	*Cyperus gilesii*			C		24
plants	land plants	Cyperaceae	*Cyperus gracilis*			C		1/1
plants	land plants	Cyperaceae	*Cyperus iria*			C		1/1
plants	land plants	Cyperaceae	*Cyperus isabellinus*			C		1/1
plants	land plants	Cyperaceae	*Cyperus javanicus*			C		1/1
plants	land plants	Cyperaceae	*Cyperus polystachyos var. polystachyos*			C		1/1
plants	land plants	Cyperaceae	*Cyperus pulchellus*			C		1/1
plants	land plants	Cyperaceae	*Fimbristylis depauperata*			C		1/1
plants	land plants	Cyperaceae	*Gahnia aspera*			C		1
plants	land plants	Cyperaceae	*Schoenoplectiella dissachantha*			C		3
plants	land plants	Cyperaceae	*Scleria brownii*			C		1/1
plants	land plants	Cyperaceae	*Scleria rugosa*			C		1/1
plants	land plants	Cyperaceae	*Scleria sphacelata*			C		1
plants	land plants	Droseraceae	*Drosera*					1
plants	land plants	Ebenaceae	*Diospyros humilis*	small-leaved ebony		C		4/1
plants	land plants	Erythroxylaceae	*Erythroxylum australe*	cocaine tree		C		7
plants	land plants	Euphorbiaceae	*Adriana tomentosa var. tomentosa*			C		1/1
plants	land plants	Euphorbiaceae	*Alchornea ilicifolia*	native holly		C		1
plants	land plants	Euphorbiaceae	*Bertya pedicellata*			NT		9/8
plants	land plants	Euphorbiaceae	*Croton insularis*	Queensland cascarilla		C		1/1
plants	land plants	Euphorbiaceae	*Croton phebalioides*	narrow-leaved croton		C		1
plants	land plants	Euphorbiaceae	*Euphorbia*					1/1
plants	land plants	Euphorbiaceae	*Euphorbia coghlanii*			C		6
plants	land plants	Euphorbiaceae	*Euphorbia drummondii*			C		8
plants	land plants	Euphorbiaceae	*Euphorbia hirta*		Y			1
plants	land plants	Euphorbiaceae	*Euphorbia tannensis subsp. eremophila*			C		1
plants	land plants	Euphorbiaceae	*Mallotus philippensis*	red kamala		C		1
plants	land plants	Euphorbiaceae	*Ricinus communis*	castor oil bush	Y			1
plants	land plants	Frullaniaceae	*Frullania*					1/1
plants	land plants	Goodeniaceae	*Goodenia*					1
plants	land plants	Goodeniaceae	*Goodenia glabra*			C		18
plants	land plants	Goodeniaceae	*Goodenia grandiflora*			C		2/2
plants	land plants	Goodeniaceae	*Goodenia rotundifolia*			C		1
plants	land plants	Goodeniaceae	*Goodenia sp. (Mt Castletower M.D.Crisp 2753)*			C		2/2
plants	land plants	Haloragaceae	*Haloragis stricta*			C		13
plants	land plants	Hemerocallidaceae	*Dianella*					1
plants	land plants	Hemerocallidaceae	*Dianella longifolia*			C		3
plants	land plants	Hemerocallidaceae	*Dianella nervosa*			C		1
plants	land plants	Juncaceae	*Juncus bufonius*	toad rush	Y			1/1
plants	land plants	Lamiaceae	*Basilicum polystachyon*			C		5
plants	land plants	Lamiaceae	*Clerodendrum floribundum*			C		2

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plants	land plants	Lamiaceae	*Coleus diversus*			C		1/1
plants	land plants	Lamiaceae	*Leucas lavandulifolia*		Y			1/1
plants	land plants	Lamiaceae	*Mentha*					1
plants	land plants	Lamiaceae	*Ocimum tenuiflorum*			C		3
plants	land plants	Lamiaceae	*Plectranthus*					1
plants	land plants	Lamiaceae	*Prostanthera collina*			C		1/1
plants	land plants	Lamiaceae	*Teucrium integrifolium*			C		1/1
plants	land plants	Lamiaceae	*Teucrium junceum*			C		1/1
plants	land plants	Lauraceae	*Cassytha pubescens*	downy devil's twine		C		1
plants	land plants	Laxmanniaceae	*Eustrephus latifolius*	wombat berry		C		3/1
plants	land plants	Laxmanniaceae	*Laxmannia gracilis*	slender wire lily		C		1
plants	land plants	Laxmanniaceae	*Lomandra longifolia*			C		2/2
plants	land plants	Laxmanniaceae	*Lomandra multiflora*			C		3
plants	land plants	Leguminosae	*Acacia*					3
plants	land plants	Leguminosae	*Acacia bancroftiorum*			C		2/2
plants	land plants	Leguminosae	*Acacia catenulata*	bendee		C		1
plants	land plants	Leguminosae	*Acacia conferta*			C		1/1
plants	land plants	Leguminosae	*Acacia cowleana*			C		1/1
plants	land plants	Leguminosae	*Acacia crassa*			C		1
plants	land plants	Leguminosae	*Acacia excelsa*			C		3
plants	land plants	Leguminosae	*Acacia faucium*			C		1/1
plants	land plants	Leguminosae	*Acacia flavescens*	toothed wattle		C		4
plants	land plants	Leguminosae	*Acacia fodinalis*			C		1/1
plants	land plants	Leguminosae	*Acacia harpophylla*	brigalow		C		8
plants	land plants	Leguminosae	*Acacia julifera subsp. curvinervia*			C		4/4
plants	land plants	Leguminosae	*Acacia leiocalyx*			C		1
plants	land plants	Leguminosae	*Acacia leiocalyx subsp. leiocalyx*			C		1
plants	land plants	Leguminosae	*Acacia oswaldii*	miljee		C		2/1
plants	land plants	Leguminosae	*Acacia rhodoxylon*	ringy rosewood		C		18
plants	land plants	Leguminosae	*Acacia salicina*	doolan		C		3
plants	land plants	Leguminosae	*Acacia shirleyi*	lancewood		C		44/1
plants	land plants	Leguminosae	*Aeschynomene indica*	budda pea		C		2
plants	land plants	Leguminosae	*Albizia canescens*			C		2/1
plants	land plants	Leguminosae	*Archidendropsis basaltica*	red lancewood		C		3
plants	land plants	Leguminosae	*Cassia brewsteri*			C		15
plants	land plants	Leguminosae	*Chamaecrista absus var. absus*			C		1/1
plants	land plants	Leguminosae	*Crotalaria*					1
plants	land plants	Leguminosae	*Crotalaria juncea*	sunhemp	Y			17/1
plants	land plants	Leguminosae	*Crotalaria montana*			C		4
plants	land plants	Leguminosae	*Cullen tenax*	emu-foot		C		9
plants	land plants	Leguminosae	*Desmodium*					1
plants	land plants	Leguminosae	*Desmodium brachypodum*	large ticktrefoil		C		1/1
plants	land plants	Leguminosae	*Desmodium campylocaulon*			C		8
plants	land plants	Leguminosae	*Desmodium filiforme*			C		1/1
plants	land plants	Leguminosae	*Desmodium macrocarpum*			C		5/4
plants	land plants	Leguminosae	*Desmodium tortuosum*	Florida beggar-weed	Y			1/1

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plants	land plants	Leguminosae	*Galactia muelleri*			C		7
plants	land plants	Leguminosae	*Galactia tenuiflora*			C		2
plants	land plants	Leguminosae	*Galactia tenuiflora var. lucida*			C		1/1
plants	land plants	Leguminosae	*Glycine falcata*			C		14
plants	land plants	Leguminosae	*Glycine latifolia*			C		2
plants	land plants	Leguminosae	*Glycine tabacina*	glycine pea		C		2
plants	land plants	Leguminosae	*Glycine tomentella*	woolly glycine		C		1/1
plants	land plants	Leguminosae	*Indigofera*					1
plants	land plants	Leguminosae	*Indigofera hirsuta*	hairy indigo		C		1/1
plants	land plants	Leguminosae	*Indigofera linifolia*			C		11
plants	land plants	Leguminosae	*Lablab purpureus*	lablab	Y			1/1
plants	land plants	Leguminosae	*Lysiphyllum*					2
plants	land plants	Leguminosae	*Lysiphyllum carronii*	ebony tree		C		4
plants	land plants	Leguminosae	*Macroptilium atropurpureum*	siratro	Y			5
plants	land plants	Leguminosae	*Macroptilium lathyroides var. semierectum*		Y			1
plants	land plants	Leguminosae	*Neptunia gracilis forma gracilis*			C		25/1
plants	land plants	Leguminosae	*Pycnospora lutescens*	pycnospora		C		1/1
plants	land plants	Leguminosae	*Rhynchosia minima*			C		11
plants	land plants	Leguminosae	*Rhynchosia minima var. minima*			C		18
plants	land plants	Leguminosae	*Senna*					2
plants	land plants	Leguminosae	*Senna artemisioides subsp. zygophylla*			C		1
plants	land plants	Leguminosae	*Senna barclayana*			C		1
plants	land plants	Leguminosae	*Senna coronilloides*			C		1/1
plants	land plants	Leguminosae	*Sesbania cannabina*			C		8
plants	land plants	Leguminosae	*Sesbania cannabina var. cannabina*			C		2
plants	land plants	Leguminosae	*Stylosanthes hamata*		Y			13/1
plants	land plants	Leguminosae	*Stylosanthes scabra*		Y			4
plants	land plants	Leguminosae	*Tephrosia*					2/2
plants	land plants	Leguminosae	*Tephrosia filipes*			C		3
plants	land plants	Leguminosae	*Tephrosia filipes subsp. filipes*			C		1/1
plants	land plants	Leguminosae	*Tephrosia filipes var. (Mt Blackjack A.R.Bean+ 7332)*			C		1/1
plants	land plants	Leguminosae	*Vachellia farnesiana*		Y			23
plants	land plants	Leguminosae	*Vigna lanceolata*			C		29
plants	land plants	Leguminosae	*Vigna radiata var. sublobata*			C		5
plants	land plants	Leguminosae	*Zornia*					1
plants	land plants	Leguminosae	*Zornia areolata*			C		1/1
plants	land plants	Leguminosae	*Zornia muelleriana*			C		1
plants	land plants	Leguminosae	*Zornia muelleriana subsp. muelleriana*			C		1/1
plants	land plants	Leguminosae	*Zornia muriculata subsp. angustata*			C		1/1
plants	land plants	Linderniaceae	*Torenia crustacea*			C		1/1
plants	land plants	Loganiaceae	*Mitrasacme*					1/1
plants	land plants	Loganiaceae	*Mitrasacme micrantha*			C		1/1
plants	land plants	Malvaceae	*Abelmoschus ficulneus*	native rosella		C		12/1
plants	land plants	Malvaceae	*Abutilon fraseri*	dwarf lantern flower		C		1
plants	land plants	Malvaceae	*Abutilon hannii*			C		2

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plants	land plants	Malvaceae	*Abutilon leucopetalum*			C		6
plants	land plants	Malvaceae	*Abutilon micropetalum*			C		1/1
plants	land plants	Malvaceae	*Gossypium australe*			C		1/1
plants	land plants	Malvaceae	*Hibiscus divaricatus*			C		2/2
plants	land plants	Malvaceae	*Hibiscus heterophyllus*			C		1/1
plants	land plants	Malvaceae	*Hibiscus krichauffianus*			C		1/1
plants	land plants	Malvaceae	*Hibiscus meraukensis*	Merauke hibiscus		C		1
plants	land plants	Malvaceae	*Hibiscus sp. (Emerald S.L.Everist 2124)*			C		1/1
plants	land plants	Malvaceae	*Hibiscus splendens*	pink hibiscus		C		2/2
plants	land plants	Malvaceae	*Hibiscus sturtii*			C		3/2
plants	land plants	Malvaceae	*Hibiscus sturtii var. sturtii*			C		1/1
plants	land plants	Malvaceae	*Hibiscus verdcourtii*			C		1/1
plants	land plants	Malvaceae	*Malvastrum americanum*		Y			28
plants	land plants	Malvaceae	*Malvastrum americanum var. stellatum*			C		1/1
plants	land plants	Malvaceae	*Sida*					12
plants	land plants	Malvaceae	*Sida atherophora*			C		1/1
plants	land plants	Malvaceae	*Sida cordifolia*		Y			4
plants	land plants	Malvaceae	*Sida corrugata*			C		22
plants	land plants	Malvaceae	*Sida cunninghamii*			C		2
plants	land plants	Malvaceae	*Sida everistiana*			C		1
plants	land plants	Malvaceae	*Sida fibulifera*			C		1/1
plants	land plants	Malvaceae	*Sida hackettiana*			C		4
plants	land plants	Malvaceae	*Sida rohlenae subsp. rohlenae*			C		1
plants	land plants	Malvaceae	*Sida sp. (Aramac E.J.Thompson+ JER192)*			C		2/2
plants	land plants	Malvaceae	*Sida sp. (Charters Towers E.J.THompson+ CHA456)*			C		2/2
plants	land plants	Malvaceae	*Sida sp. (Musselbrook M.B.Thomas+ MRS437)*			C		2
plants	land plants	Malvaceae	*Sida spinosa*	spiny sida	Y			26/2
plants	land plants	Malvaceae	*Sida trichopoda*			C		16/2
plants	land plants	Marsileaceae	*Marsilea drummondii*	common nardoo		C		1
plants	land plants	Marsileaceae	*Marsilea mutica*	shiny nardoo		C		3
plants	land plants	Meliaceae	*Owenia acidula*	emu apple		C		6
plants	land plants	Meliaceae	*Owenia x reliqua*			C		1/1
plants	land plants	Menispermaceae	*Tinospora smilacina*	snakevine		C		1
plants	land plants	Molluginaceae	*Glinus lotoides*	hairy carpet weed		C		1/1
plants	land plants	Moraceae	*Ficus opposita*			C		3
plants	land plants	Myrsinaceae	*Myrsine variabilis*			C		1/1
plants	land plants	Myrtaceae	*Corymbia*					3
plants	land plants	Myrtaceae	*Corymbia aureola*			C		12/12
plants	land plants	Myrtaceae	*Corymbia citriodora subsp. citriodora*			C		34
plants	land plants	Myrtaceae	*Corymbia clarksoniana*			C		4/2
plants	land plants	Myrtaceae	*Corymbia dallachiana*			C		4
plants	land plants	Myrtaceae	*Corymbia erythrophloia*	variable-barked bloodwood		C		4
plants	land plants	Myrtaceae	*Corymbia tessellaris*	Moreton Bay ash		C		5
plants	land plants	Myrtaceae	*Corymbia trachyphloia subsp. trachyphloia*			C		1/1
plants	land plants	Myrtaceae	*Corymbia watsoniana*			C		1
plants	land plants	Myrtaceae	*Eucalyptus*					3

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plants	land plants	Myrtaceae	*Eucalyptus apothalassica*			C		4
plants	land plants	Myrtaceae	*Eucalyptus camaldulensis subsp. acuta*			C		2
plants	land plants	Myrtaceae	*Eucalyptus cambageana*	Dawson gum		C		2
plants	land plants	Myrtaceae	*Eucalyptus coolabah*	coolabah		C		1
plants	land plants	Myrtaceae	*Eucalyptus crebra*	narrow-leaved red ironbark		C		8/1
plants	land plants	Myrtaceae	*Eucalyptus drepanophylla*			C		1/1
plants	land plants	Myrtaceae	*Eucalyptus exserta*	Queensland peppermint		C		1/1
plants	land plants	Myrtaceae	*Eucalyptus orgadophila*	mountain coolibah		C		1
plants	land plants	Myrtaceae	*Eucalyptus persistens*			C		1/1
plants	land plants	Myrtaceae	*Eucalyptus populnea*	poplar box		C		10
plants	land plants	Myrtaceae	*Eucalyptus tholiformis*			C		2/2
plants	land plants	Myrtaceae	*Eucalyptus thozetiana*			C		2/2
plants	land plants	Myrtaceae	*Gossia bidwillii*			C		1/1
plants	land plants	Myrtaceae	*Lysicarpus angustifolius*	budgeroo		C		2/2
plants	land plants	Myrtaceae	*Melaleuca*					1
plants	land plants	Myrtaceae	*Melaleuca fluviatilis*			C		1/1
plants	land plants	Myrtaceae	*Melaleuca leucadendra*	broad-leaved tea-tree		C		2
plants	land plants	Myrtaceae	*Melaleuca nervosa*			C		3/2
plants	land plants	Myrtaceae	*Melaleuca viridiflora*			C		2
plants	land plants	Myrtaceae	*Micromyrtus capricornia*			C		1/1
plants	land plants	Myrtaceae	*Myrtaceae*					2
plants	land plants	Nyctaginaceae	*Boerhavia burbidgeana*			C		1
plants	land plants	Nyctaginaceae	*Boerhavia dominii*			C		2
plants	land plants	Oleaceae	*Jasminum didymum subsp. lineare*			C		1
plants	land plants	Oleaceae	*Jasminum simplicifolium subsp. australiense*			C		1/1
plants	land plants	Onagraceae	*Ludwigia octovalvis*	willow primrose		C		3
plants	land plants	Orchidaceae	*Cymbidium canaliculatum*			SL		2
plants	land plants	Orthotrichaceae	*Macromitrium aurescens*			C		2/2
plants	land plants	Oxalidaceae	*Oxalis*					2
plants	land plants	Oxalidaceae	*Oxalis radicosa*			C		4/1
plants	land plants	Passifloraceae	*Passiflora foetida*		Y			1/1
plants	land plants	Phyllanthaceae	*Bridelia leichhardtii*			C		1/1
plants	land plants	Phyllanthaceae	*Flueggea leucopyrus*			C		1/1
plants	land plants	Phyllanthaceae	*Phyllanthus maderaspatensis*			C		3
plants	land plants	Phyllanthaceae	*Phyllanthus maderaspatensis var. maderaspatensis*			C		2
plants	land plants	Phyllanthaceae	*Phyllanthus sp. (Pentland R.J.Cumming 9742)*			C		2
plants	land plants	Phyllanthaceae	*Phyllanthus virgatus*			C		12
plants	land plants	Picrodendraceae	*Petalostigma pubescens*	quinine tree		C		10
plants	land plants	Pittosporaceae	*Bursaria spinosa subsp. spinosa*			C		1
plants	land plants	Pittosporaceae	*Pittosporum angustifolium*			C		1
plants	land plants	Plantaginaceae	*Scoparia dulcis*	scoparia	Y			2/1
plants	land plants	Poaceae	*Alloteropsis cimicina*			C		1/1
plants	land plants	Poaceae	*Alloteropsis semialata*	cockatoo grass		C		2
plants	land plants	Poaceae	*Ancistrachne uncinulata*	hooky grass		C		2/2
plants	land plants	Poaceae	*Aristida*					6
plants	land plants	Poaceae	*Aristida benthamii*			C		3

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Poaceae	*Aristida benthamii var. benthamii*			C		1/1
plants	land plants	Poaceae	*Aristida calycina var. praealta*			C		1/1
plants	land plants	Poaceae	*Aristida gracilipes*			C		1/1
plants	land plants	Poaceae	*Aristida holathera var. holathera*			C		4/3
plants	land plants	Poaceae	*Aristida ingrata*			C		1/1
plants	land plants	Poaceae	*Aristida jerichoensis var. jerichoensis*			C		1/1
plants	land plants	Poaceae	*Aristida jerichoensis var. subspinulifera*			C		3/3
plants	land plants	Poaceae	*Aristida latifolia*	feathertop wiregrass		C		32/4
plants	land plants	Poaceae	*Aristida leptopoda*	white speargrass		C		13/1
plants	land plants	Poaceae	*Aristida muricata*			C		1/1
plants	land plants	Poaceae	*Aristida personata*			C		4
plants	land plants	Poaceae	*Aristida queenslandica*			C		1
plants	land plants	Poaceae	*Aristida queenslandica var. dissimilis*			C		1
plants	land plants	Poaceae	*Aristida queenslandica var. queenslandica*			C		1/1
plants	land plants	Poaceae	*Aristida ramosa*	purple wiregrass		C		2
plants	land plants	Poaceae	*Astrebla elymoides*	hoop mitchell grass		C		4/1
plants	land plants	Poaceae	*Astrebla lappacea*	curly mitchell grass		C		7
plants	land plants	Poaceae	*Astrebla squarrosa*	bull mitchell grass		C		26
plants	land plants	Poaceae	*Bothriochloa bladhii subsp. bladhii*			C		1/1
plants	land plants	Poaceae	*Bothriochloa decipiens var. decipiens*			C		1/1
plants	land plants	Poaceae	*Bothriochloa erianthoides*	satintop grass		C		2
plants	land plants	Poaceae	*Bothriochloa ewartiana*	desert bluegrass		C		31/2
plants	land plants	Poaceae	*Bothriochloa pertusa*		Y			11/3
plants	land plants	Poaceae	*Brachyachne convergens*	common native couch		C		35
plants	land plants	Poaceae	*Calyptochloa gracillima subsp. gracillima*			C		2/2
plants	land plants	Poaceae	*Cenchrus ciliaris*		Y			54/1
plants	land plants	Poaceae	*Cenchrus pennisetiformis*		Y			1/1
plants	land plants	Poaceae	*Chloris divaricata var. divaricata*	slender chloris		C		3/1
plants	land plants	Poaceae	*Chloris gayana*	rhodes grass	Y			4
plants	land plants	Poaceae	*Chloris inflata*	purpletop chloris	Y			12
plants	land plants	Poaceae	*Chloris pectinata*	comb chloris		C		1/1
plants	land plants	Poaceae	*Chloris truncata*			C		5
plants	land plants	Poaceae	*Chloris virgata*	feathertop rhodes grass	Y			9
plants	land plants	Poaceae	*Chrysopogon fallax*			C		6/3
plants	land plants	Poaceae	*Cymbopogon ambiguus*	lemon grass		C		3/1
plants	land plants	Poaceae	*Cymbopogon bombycinus*	silky oilgrass		C		2
plants	land plants	Poaceae	*Cymbopogon queenslandicus*			C		1
plants	land plants	Poaceae	*Cymbopogon refractus*	barbed-wire grass		C		1
plants	land plants	Poaceae	*Cynodon dactylon var. dactylon*		Y			1
plants	land plants	Poaceae	*Dactyloctenium radulans*	button grass		C		3
plants	land plants	Poaceae	*Dichanthium aristatum*	angleton grass	Y			2/2
plants	land plants	Poaceae	*Dichanthium fecundum*	curly bluegrass		C		1
plants	land plants	Poaceae	*Dichanthium queenslandicum*			V	E	3/3
plants	land plants	Poaceae	*Dichanthium sericeum*			C		31
plants	land plants	Poaceae	*Dichanthium sericeum subsp. sericeum*			C		6/3
plants	land plants	Poaceae	*Digitaria*					1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Poaceae	*Digitaria ammophila*	silky umbrella grass		C		10/2
plants	land plants	Poaceae	*Digitaria bicornis*			C		1
plants	land plants	Poaceae	*Digitaria breviglumis*			C		1
plants	land plants	Poaceae	*Digitaria brownii*			C		1/1
plants	land plants	Poaceae	*Digitaria divaricatissima*	spreading umbrella grass		C		1/1
plants	land plants	Poaceae	*Digitaria hystrichoides*	umbrella grass		C		1/1
plants	land plants	Poaceae	*Digitaria orbata*			C		1
plants	land plants	Poaceae	*Digitaria papposa*			C		1/1
plants	land plants	Poaceae	*Dinebra decipiens var. peacockii*			C		1/1
plants	land plants	Poaceae	*Diplachne fusca var. fusca*			C		1/1
plants	land plants	Poaceae	*Echinochloa colona*	awnless barnyard grass	Y			1
plants	land plants	Poaceae	*Elytrophorus spicatus*			C		3
plants	land plants	Poaceae	*Enneapogon truncatus*			C		22
plants	land plants	Poaceae	*Enneapogon virens*			C		2/1
plants	land plants	Poaceae	*Enteropogon acicularis*	curly windmill grass		C		2
plants	land plants	Poaceae	*Enteropogon ramosus*			C		4/1
plants	land plants	Poaceae	*Enteropogon unispiceus*			C		1/1
plants	land plants	Poaceae	*Entolasia stricta*	wiry panic		C		2
plants	land plants	Poaceae	*Eragrostis*					6
plants	land plants	Poaceae	*Eragrostis brownii*	Brown's lovegrass		C		3/1
plants	land plants	Poaceae	*Eragrostis elongata*			C		1
plants	land plants	Poaceae	*Eragrostis lacunaria*	purple lovegrass		C		2/1
plants	land plants	Poaceae	*Eragrostis leptostachya*			C		1
plants	land plants	Poaceae	*Eragrostis longipedicellata*			C		2/2
plants	land plants	Poaceae	*Eragrostis megalosperma*			C		2/2
plants	land plants	Poaceae	*Eragrostis parviflora*	weeping lovegrass		C		6
plants	land plants	Poaceae	*Eragrostis pilosa*	soft lovegrass	Y			1/1
plants	land plants	Poaceae	*Eragrostis schultzii*			C		1/1
plants	land plants	Poaceae	*Eragrostis sororia*			C		8/4
plants	land plants	Poaceae	*Eragrostis speciosa*			C		1/1
plants	land plants	Poaceae	*Eragrostis tenellula*	delicate lovegrass		C		11
plants	land plants	Poaceae	*Eremochloa bimaculata*	poverty grass		C		1/1
plants	land plants	Poaceae	*Eriachne mucronata*			C		1
plants	land plants	Poaceae	*Eriachne mucronata forma (Alpha C.E.Hubbard 7882)*			C		2/2
plants	land plants	Poaceae	*Eriachne obtusa*			C		4/1
plants	land plants	Poaceae	*Eriachne rara*			C		1/1
plants	land plants	Poaceae	*Eriachne sp. (Dugald River B.K.Simon+ 3007)*			C		1/1
plants	land plants	Poaceae	*Eriochloa crebra*	spring grass		C		33/2
plants	land plants	Poaceae	*Eriochloa procera*	slender cupgrass		C		3
plants	land plants	Poaceae	*Eriochloa pseudoacrotricha*			C		25
plants	land plants	Poaceae	*Eulalia aurea*	silky browntop		C		1/1
plants	land plants	Poaceae	*Heteropogon contortus*	black speargrass		C		23
plants	land plants	Poaceae	*Hyparrhenia rufa subsp. rufa*		Y			2/2
plants	land plants	Poaceae	*Iseilema membranaceum*	small flinders grass		C		1/1
plants	land plants	Poaceae	*Iseilema vaginiflorum*	red flinders grass		C		34/1
plants	land plants	Poaceae	*Leptochloa digitata*			C		2

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Poaceae	*Megathyrsus maximus*		Y			3
plants	land plants	Poaceae	*Melinis repens*	red natal grass	Y			17
plants	land plants	Poaceae	*Mnesithea formosa*			C		1/1
plants	land plants	Poaceae	*Moorochloa eruciformis*		Y			9/1
plants	land plants	Poaceae	*Ophiuros exaltatus*			C		3
plants	land plants	Poaceae	*Panicum decompositum*			C		3
plants	land plants	Poaceae	*Panicum decompositum var. decompositum*			C		24/1
plants	land plants	Poaceae	*Panicum decompositum var. tenuius*			C		1/1
plants	land plants	Poaceae	*Panicum effusum*			C		5/2
plants	land plants	Poaceae	*Panicum queenslandicum*			C		8
plants	land plants	Poaceae	*Panicum queenslandicum var. acuminatum*			C		2/2
plants	land plants	Poaceae	*Panicum queenslandicum var. queenslandicum*			C		1/1
plants	land plants	Poaceae	*Paspalidium*					1
plants	land plants	Poaceae	*Paspalidium albovillosum*			C		2/2
plants	land plants	Poaceae	*Paspalidium criniforme*			C		2/1
plants	land plants	Poaceae	*Paspalidium globoideum*	sago grass		C		22/1
plants	land plants	Poaceae	*Paspalidium gracile*	slender panic		C		1
plants	land plants	Poaceae	*Paspalum mandiocanum*		Y			1/1
plants	land plants	Poaceae	*Perotis rara*	comet grass		C		1/1
plants	land plants	Poaceae	*Poaceae*					3
plants	land plants	Poaceae	*Sehima nervosum*			C		1/1
plants	land plants	Poaceae	*Setaria paspalidioides*			C		2/2
plants	land plants	Poaceae	*Setaria surgens*			C		1/1
plants	land plants	Poaceae	*Sporobolus actinocladus*	katoora grass		C		1/1
plants	land plants	Poaceae	*Sporobolus caroli*	fairy grass		C		5
plants	land plants	Poaceae	*Sporobolus creber*			C		15
plants	land plants	Poaceae	*Sporobolus sessilis*			C		1
plants	land plants	Poaceae	*Thellungia advena*	coolibah grass		C		5/2
plants	land plants	Poaceae	*Themeda avenacea*			C		1
plants	land plants	Poaceae	*Themeda triandra*	kangaroo grass		C		20/1
plants	land plants	Poaceae	*Thyridolepis mitchelliana*	mulga mitchell grass		C		1
plants	land plants	Poaceae	*Triraphis mollis*	purple plumegrass		C		1/1
plants	land plants	Poaceae	*Urochloa holosericea subsp. velutina*			C		1/1
plants	land plants	Poaceae	*Urochloa mosambicensis*	sabi grass	Y			4/1
plants	land plants	Poaceae	*Urochloa piligera*			C		2
plants	land plants	Polygalaceae	*Polygala crassitesta*			C		13
plants	land plants	Polygonaceae	*Persicaria attenuata*			C		2/1
plants	land plants	Pontederiaceae	*Monochoria cyanea*			C		5
plants	land plants	Portulacaceae	*Portulaca oleracea*	pigweed	Y			3
plants	land plants	Portulacaceae	*Portulaca pilosa*		Y			1
plants	land plants	Proteaceae	*Grevillea*					2
plants	land plants	Proteaceae	*Grevillea juncifolia*	honeysuckle spider flower		C		1
plants	land plants	Proteaceae	*Grevillea parallela*			C		1
plants	land plants	Proteaceae	*Grevillea pteridifolia*	golden parrot tree		C		2/1
plants	land plants	Proteaceae	*Grevillea striata*	beefwood		C		1
plants	land plants	Proteaceae	*Hakea chordophylla*			C		1

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plants	land plants	Proteaceae	*Hakea lorea subsp. lorea*			C		2/1
plants	land plants	Proteaceae	*Persoonia amaliae*			C		2/1
plants	land plants	Proteaceae	*Persoonia falcata*			C		5
plants	land plants	Pteridaceae	*Adiantum atroviride*			SL		1/1
plants	land plants	Pteridaceae	*Cheilanthes sieberi subsp. sieberi*			C		2
plants	land plants	Putranjivaceae	*Drypetes deplanchei*	grey boxwood		C		1
plants	land plants	Rhamnaceae	*Alphitonia excelsa*	soap tree		C		5
plants	land plants	Rhamnaceae	*Ventilago viminalis*	supplejack		C		9/1
plants	land plants	Rubiaceae	*Dolichocarpa coerulescens*			C		1/1
plants	land plants	Rubiaceae	*Larsenaikia ochreata*			C		4/2
plants	land plants	Rubiaceae	*Paranotis mitrasacmoides subsp. trachymenoides*			C		7/1
plants	land plants	Rubiaceae	*Pavetta australiensis var. australiensis - Pavetta granitica*			C		1/1
plants	land plants	Rubiaceae	*Psydrax odorata subsp. australiana*			C		1/1
plants	land plants	Rubiaceae	*Psydrax oleifolia*			C		1
plants	land plants	Rubiaceae	*Richardia brasiliensis*	white eye	Y			1/1
plants	land plants	Rubiaceae	*Scleromitrion galioides*			C		1/1
plants	land plants	Rubiaceae	*Spermacoce brachystema*			C		2
plants	land plants	Rubiaceae	*Spermacoce multicaulis*			C		1
plants	land plants	Rutaceae	*Acronychia laevis*	glossy acronychia		C		1/1
plants	land plants	Rutaceae	*Flindersia dissosperma*			C		5
plants	land plants	Rutaceae	*Geijera salicifolia*	brush wilga		C		1
plants	land plants	Rutaceae	*Murraya ovatifoliolata*			C		1/1
plants	land plants	Santalaceae	*Santalum lanceolatum*			SL		3
plants	land plants	Sapindaceae	*Alectryon diversifolius*	scrub boonaree		C		4
plants	land plants	Sapindaceae	*Alectryon oleifolius subsp. elongatus*			C		3
plants	land plants	Sapindaceae	*Atalaya*					5
plants	land plants	Sapindaceae	*Atalaya hemiglauca*			C		5
plants	land plants	Sapindaceae	*Dodonaea lanceolata*			C		2
plants	land plants	Sapotaceae	*Planchonella pohlmaniana*			C		1/1
plants	land plants	Scrophulariaceae	*Eremophila bignoniiflora*	eurah		C		1
plants	land plants	Scrophulariaceae	*Eremophila debilis*	winter apple		C		4
plants	land plants	Scrophulariaceae	*Eremophila deserti*			C		3
plants	land plants	Scrophulariaceae	*Eremophila maculata*			C		7
plants	land plants	Scrophulariaceae	*Eremophila mitchellii*			C		4
plants	land plants	Scrophulariaceae	*Myoporum acuminatum*	coastal boobialla		C		3/2
plants	land plants	Solanaceae	*Datura stramonium*	common thornapple	Y			3
plants	land plants	Solanaceae	*Solanum adenophorum*			E		1/1
plants	land plants	Solanaceae	*Solanum elachophyllum*			E		1/1
plants	land plants	Solanaceae	*Solanum esuriale*	quena		C		8
plants	land plants	Solanaceae	*Solanum parvifolium subsp. parvifolium*			C		2/2
plants	land plants	Sparrmanniaceae	*Corchorus trilocularis*			C		16/1
plants	land plants	Sparrmanniaceae	*Grewia latifolia*	dysentery plant		C		4
plants	land plants	Sparrmanniaceae	*Grewia savannicola*			C		9
plants	land plants	Stylidiaceae	*Stylidium eglandulosum*			SL		1/1
plants	land plants	Thymelaeaceae	*Pimelea haematostachya*			C		20/1

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plants	land plants	Thymelaeaceae	*Pimelea microcephala*			C		1
plants	land plants	Verbenaceae	*Glandularia aristigera*		Y			1
plants	land plants	Verbenaceae	*Lantana camara*	lantana	Y			1
plants	land plants	Verbenaceae	*Verbena macrostachya*			C		1
plants	land plants	Violaceae	*Pigea enneasperma*			C		1
plants	land plants	Zygophyllaceae	*Tribulus eichlerianus*	bull head		C		1
plants	land plants	Zygophyllaceae	*Tribulus terrestris*	caltrop		C		1

CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992*.
The codes are Extinct (EX), Extinct in the Wild (PE), Critically Endangered (CR), Endangered (E), Vulnerable (V), Near Threatened (NT), Special Least Concern (SL) and Least Concern (C).

A - Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999.*
The values of EPBC are Extinct (EX), Extinct in the Wild (XW), Critically Endangered (CE), Endangered (E), Vulnerable (V) and Conservation Dependent (CD).

Records - The first number indicates the total number of records of the taxon (wildlife records and species listings for selected areas).
This number is output as 99999 if it equals or exceeds this value. A second number located after a / indicates the number of specimen records for the taxon.
This number is output as 999 if it equals or exceeds this value.