

1. Application details and outcomes

1.1. Permit application details

Permit number:	10225/1
Permit type:	Purpose Permit
Applicant name:	Matsa Gold Pty Ltd
Application received:	5 June 2023
Application area:	120 hectares
Purpose of clearing:	Mineral Production and Associated Activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Leases 39/387, 39/500, 39/1077, 39/1078 Miscellaneous Licences 39/222, 39/235
Location (LGA area/s):	Shire of Leonora
Colloquial name:	Devon Gold Project

1.2. Description of clearing activities

Matsa Gold Pty Ltd proposes to clear up to 120 hectares of native vegetation within a boundary of approximately 248 hectares, for the purpose of mineral production and associated activities. The project is located approximately 70 kilometres south of Laverton, within the Shire of Leonora.

The application is to allow for the recommencement of gold mining operations from existing historical mining infrastructure (Botanica, 2024b). This will entail the cutback of the two existing pits to form a single mine void, two waste rock landforms (WRLs), a run-of-mine pad, fuel storage, workshop, administration office, topsoil storage areas, abandonment bund/water diversion bund, and access and haul roads (Botanica, 2024b).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	25 October 2024
Decision area:	120 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed, and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) advertised the application for a public comment for a period of 21 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix B), relevant datasets (Appendix F), supporting information provided by the applicant (Appendix A) including the results of biological surveys, the clearing principles set out in Schedule 5 of the EP Act (Appendix C), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3).

The assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- impacts to conservation significant flora;
- impacts to vegetation growing in association with watercourses and a wetland; and
- potential land degradation in the form of water and wind erosion.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity;
- commence construction no later than three months after undertaking clearing to reduce the risk of erosion;
- where practicable, to avoid clearing riparian vegetation, and where a watercourse, drainage line, or wetland is to be impacted by clearing, the permit holder must maintain existing surface flow or reinstate it downstream into existing natural drainage lines; and
- limiting the clearing to no more than 170 individual plants of identified *Eremophila* sp. Lake Carey.

2. Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Mining Act 1978* (WA)

Relevant agreements (treaties) considered during the assessment include:

- Japan-Australia Migratory Bird Agreement
- China-Australia Migratory Bird Agreement
- Republic of Korea-Australia Migratory Bird Agreement

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2021)
- Guidance for the Assessment of Environmental Factors – *Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia* (EPA, 2004a)
- Guidance for the Assessment of Environmental Factors – *Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia* (EPA, 2004b)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

Matsa Gold (2023) provided the following details regarding their avoidance and mitigation measures:

- Site infrastructure was primarily located in areas which are already cleared/ disturbed due to previous mining and exploration activities within the project area.
- The process used in determining the Clearing Permit Area which is equivalent to the Disturbance Envelope (prepared for the Mining Proposal under the *Mining Act 1978*) excluded areas of known populations of Priority flora where possible, including:
 - 1) Changes were made to the clearing permit area on the northern side to avoid population (#6) of *Eremophila* sp. Lake Carey.
 - 2) Changes were made to the clearing permit area on the eastern side (east of the pit and south of the waste dump) to avoid a large population of *Eremophila* sp. Lake Carey.
 - 3) Changes were made to the clearing permit area by inserting an Exclusion Zone to avoid part of the population of *Eremophila* sp. Lake Carey located west of the pit.
 - 4) Complete avoidance was made to several populations of *Eremophila* sp. Lake Carey.
 - 5) The location of internal access roads and dewatering infrastructure was relocated from the south (avoiding the large population of *Eremophila* sp. Lake Carey just west of the pit) to the east side of the pit. And from here located inside the abandonment bund to avoid the population of *Eremophila* sp. Lake Carey on the eastern side of the pit.

Matsa Gold's current mining proposal outlines the following measures to manage impacts (Botanica, 2023b):

1. Vehicle/machinery movement interactions with native fauna.
 - a. Reducing injury/death of conservation significant fauna.
 - i. Use of defined roads with speed restrictions.
 - ii. Education of employees/contractors at site inductions including reporting of any interactions.
2. Driving off authorised roads through native vegetation.

- a. Prevention of unauthorised disturbance/clearing of native vegetation and/or Priority flora.
 - i. Driving restricted to defined roads with speed limits imposed as required.
 - ii. Mark out and implement buffer zones around known populations of Priority flora which occur outside the Disturbance Envelope or are contained with the Disturbance Envelope Exclusion Zone.
 - iii. Education of employees/contractors at site inductions including identification of Priority flora, and reporting of any interactions.
3. Introduction and/or spread of environmental weeds, Declared Pests or WoNS.
 - a. Decline in health/ condition of native revegetation and/or reduction in rehabilitation success
 - i. Undertake an inspection for weeds prior to new ground disturbance activities.
 - ii. Ensure all vehicles and mobile machinery are restricted to designated access tracks.
 - iii. Significant weed populations will be controlled as required.
4. Clearing outside of the approved disturbance envelope or clearing more than the approved disturbance area
 - a. Unauthorised disturbance/clearing of native vegetation and/or Priority Flora.
 - i. Areas will be adequately surveyed and marked to ensure only the required clearing is undertaken.
 - ii. Clearing undertaken in accordance with Clearing Permit.
 - iii. Copy of approved clearing boundary (GIS/DXF) provided to Project Manager/ Engineer/ Surveyor.
 - iv. Inspection of clearing boundary prior to clearing by Mine Manager (or delegate).
 - v. Following disturbance, cleared areas and stockpiles will be surveyed, documented on the site plan and reported in the AER and MRF.
 - vi. Training and Awareness regarding clearing procedures.
 - vii. Mark out and implement buffer zones around known populations of Priority flora which occur outside the Disturbance Envelope or are contained with the Disturbance Envelope Exclusion Zone.
 - viii. Education of employees/contractors at site inductions including identification of Priority Flora, and reporting of any interactions.
5. Fauna entrapment in dams
 - a. Prevention of fauna injury/death
 - i. Turkey nest dam will have fauna egress matting installed.
 - ii. Daily visual inspections of water storage dams.
 - iii. Dams removed and rehabilitated at closure.
6. Dust emissions generated during earthworks, haulage and material handling
 - a. Decline in vegetation health/condition or vegetation death
 - i. Regular visual monitoring and implement appropriate dust controls as required.
 - ii. Regular watering across stockpiles and roads and during dumping activities.
 - iii. Ample supply of water for dust suppression.
 - iv. Use of defined roads with speed restrictions.
 - v. Avoid dust generating activities during high winds.
 - vi. Complaints from stakeholders regarding dust emissions will be acted on as required and management measures reviewed accordingly.
7. Inadequate handling and storage of topsoil and/or Unsuitable topsoil available or stockpiled
 - a. Reduction in viability of topsoil, resulting in reduction in rehabilitation success
 - i. Soil removal depth and location is informed by soil characterisation results.
 - ii. Soil stockpile will be for short duration as mining period <24 months.
 - iii. Stockpiles constructed to a maximum height of 2m.
 - iv. Following disturbance, cleared areas and stockpiles will be surveyed, documented on the site plan and reported in the AER and MRF.
 - v. Education provided to contractors and staff regarding the topsoil stripping procedures.

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

3.2. Assessment of impacts on environmental values

The assessment against the clearing principles identified that the impacts of the proposed clearing present a risk to priority 1 flora species *Eremophila* sp. Lake Carey (E. Mattiske LM 197). The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological values (flora) - Clearing Principles (a)

Assessment

Western Botanical (2022) undertook a detailed flora and vegetation survey over part of the application area (approximately 191.1 hectares) and surrounds (henceforth 'Devon'; Figure 1) between 22 to 26 September 2021. An area approximately 11 kilometres southeast of the application area was also surveyed on 27 September 2021 (henceforth 'Fortitude'; Figure 1).

Two priority flora species were recorded during the field assessment at Devon:

- *Eremophila* sp. Lake Carey (E. Mattiske LM 197) (P1)
- *Calandrinia quartzitica* (P1)

Eremophila sp. Lake Carey is a relatively new species, described as an erect shrub growing to 2.5 metres, occurring on rocky surfaces (Western Botanical, 2022). It is currently only known from five records, all of which are situated on the western flanks of Lake Carey (WAH, 1998-).

The survey recorded approximately 2,317 individual plants and was observed to form its own vegetation type dominating as an open shrubland over *Tecticornia* species and chenopods (Western Botanical, 2022). The species regularly occurred on stony scree slopes and flats adjacent to salt lakes.

Further survey work was conducted by Botanica (2024a) between 13-14 April 2024, to verify counts of *Eremophila* sp. Lake Carey due to the inopportune timing of the field assessment by Western Botanical (2022), resulting in less than optimal flowering material to be certain of the species' identification.

Based on spatial data from the Western Botanical (2022) and Botanica (2024a) surveys, approximately 280 individual plants coincide with the application area (GIS Database). The proposed infrastructure footprint within the application area will directly impact approximately 148 plants (Botanica, 2023), however based on the proximity to the clearing, it is likely that adjacent plants will be indirectly impacted through edge effects.

The original plant specimens collected that identified *Eremophila* sp. Lake Carey as a new species were collected from the nearby Butchers Well Gold Mine operation, located approximately 8 to 10 kilometres northwest of the application area which is estimated to contain over 5,000 plants (Western Botanical, 2022).

Western Botanical (2022) utilised satellite imagery to delineate prospective habitats like the known locations of *Eremophila* sp. Lake Carey based on similar landscape characteristics and visual textures. It was very conservatively estimated population numbers of up to 20,000 individuals, however further field assessments would be required to authenticate these numbers.

Five individual plants of *Calandrinia quartzitica* were recorded at Devon, however these individuals are located outside the application area (Western Botanical, 2022). An additional 19 individual plants were recorded at Fortitude.

Five weed species were recorded during the flora and vegetation surveys (Botanica, 2024a; Western Botanical, 2022). Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

Conclusion

Eremophila sp. Lake Carey is a poorly known species from very few locations, none of which coincide on lands managed for conservation and is therefore under threat of habitat destruction or degradation (GIS Database).

The current available information on *Eremophila* sp. Lake Carey indicates that the species is highly restricted in a regional and local context (Botanica, 2024a; WAH, 1998-; Western Botanical, 2022). The calculated extent of occurrence for the species is approximately 15,760 hectares based on known locations and is entirely restricted to the western side of Lake Carey (GIS Database).

The surveys conducted by Botanica (2024a) and Western Botanical (2022) provide the best available data regarding verified field counts of individuals, however as consequence it is not known what the proposed minimum direct impact to 148 individual *Eremophila* sp. Lake Carey plants will have on a species level.

For the reasons set out above, it is considered that the impacts of the proposed clearing can be managed to be environmentally acceptable following the application of the precautionary principle, therefore a flora management condition limiting the total allowable number of *Eremophila* sp. Lake Carey individuals to be cleared will be required.

Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds; and
- a flora management condition, limiting the clearing to 170 individual *Eremophila* sp. Lake Carey plants.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 13 June 2023 by the Department of Energy, Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim (Nyalpa Pirniku - WCD2023/002) over the area under application (DPLH, 2024). This claim has been registered with the National Native Title Tribunal and determined by the Federal Court on behalf of the claimant group. The mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*. There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2024). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

Other relevant authorisations required for the proposed land use include:

- A Mining Proposal / Mine Closure Plan approved under the *Mining Act 1978*.

It is the proponent's responsibility to liaise with the Department of Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

End

Appendix A. Additional information provided by applicant

Information requested	Applicant response
Requested a follow up, suitably timed flora and vegetation survey to capture the flowering period of novel species <i>Eremophila</i> sp. Lake Carey (P1).	The survey was undertaken and provided. The results of the survey were considered in section

Appendix B. Site characteristics

B.1. Site characteristics

Characteristic	Details																										
Local context	<p>The area proposed to be cleared located within the extensive land use zone of Western Australia, at the eastern boundary of the Eastern Murchison subregion (within the Murchison bioregion), approaching the interzone of the Shield subregion (within the Great Victoria Desert bioregion) (GIS Database). It is surrounded by large areas of uncleared land, mining operations, and salt lake systems, and is wholly located within the Yundamindra pastoral station (GIS Database).</p> <p>The unoccupied Linden townsite partially intersects the application area.</p> <p>Approximately 99% of the local area (50 kilometre radius from the area proposed to be cleared) remains uncleared (GIS Database).</p>																										
Ecological linkage	The application area is not considered an ecological linkage, as the majority of the surrounding vegetation remains uncleared (GIS Database).																										
Conservation areas	The application area is not located within any conservation areas (GIS Database). The nearest legislated conservation area is Goongarrie National Park, located approximately 94.5 kilometres southwest of the application area (GIS Database).																										
Vegetation description	<p>The vegetation of the application area is broadly mapped as the following Beard vegetation associations:</p> <p>389: Succulent steppe with open low woodland; mulga over saltbush; and 400: Succulent steppe with open low woodland; mulga over bluebush (GIS Database).</p> <p>A flora and vegetation survey was conducted over part of the application area and areas immediately adjacent by Western Botanical during 22-26 September 2021. The following vegetation types were recorded within the application area (Western Botanical, 2022):</p> <table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>GHAS</td> <td>Summits of greenstone / basalt hills dominated by <i>Acacia</i> sp. Eastern Murchison Basalt (G. Cockerton & J. Warden WB 39701)</td> </tr> <tr> <td>CCAS</td> <td>Exposed calcrete on eroding basalt hill slopes supporting <i>Casuarina pauper</i> and <i>Acacia</i> species</td> </tr> <tr> <td>CPBS</td> <td>Stoney plains and lower slopes of greenstone hills supporting <i>Maireana sedifolia</i> shrublands</td> </tr> <tr> <td>EsW</td> <td>Stony calcareous plains supporting <i>Eucalyptus salubris</i> woodlands of Chenopods</td> </tr> <tr> <td>EcW</td> <td>Stony calcareous plains supporting <i>Eucalyptus celastroides</i> woodlands over Chenopods</td> </tr> <tr> <td>EoW</td> <td>Incised drainage channels supporting <i>Eucalyptus oleosa</i>-<i>Acacia</i> woodlands</td> </tr> <tr> <td>DRMS</td> <td>Narrow incised linear drainage zones receiving concentrated run-on, supporting <i>Acacia burkittii</i> shrublands.</td> </tr> <tr> <td>SBLS</td> <td>Deep siliceous red sand dunes supporting <i>Acacia caesaneura</i> dominated woodlands</td> </tr> <tr> <td>ELSC</td> <td>Stony scree slopes on salt lake margins supporting <i>Eremophila</i> sp. Lake Carey (E. Mattiske LM 197) over <i>Tecticornia</i> species.</td> </tr> <tr> <td>FRAN</td> <td>Alluvial basins with saline duplex soils supporting low halophytic shrublands dominated by <i>Frankenia</i> spp.</td> </tr> <tr> <td>SAMP</td> <td>Salt lake margins supporting halophytic low shrublands dominated by <i>Tecticornia</i> species.</td> </tr> <tr> <td>SL</td> <td>Bare salt lakes with little to no vegetation</td> </tr> </tbody> </table>	CODE	DESCRIPTION	GHAS	Summits of greenstone / basalt hills dominated by <i>Acacia</i> sp. Eastern Murchison Basalt (G. Cockerton & J. Warden WB 39701)	CCAS	Exposed calcrete on eroding basalt hill slopes supporting <i>Casuarina pauper</i> and <i>Acacia</i> species	CPBS	Stoney plains and lower slopes of greenstone hills supporting <i>Maireana sedifolia</i> shrublands	EsW	Stony calcareous plains supporting <i>Eucalyptus salubris</i> woodlands of Chenopods	EcW	Stony calcareous plains supporting <i>Eucalyptus celastroides</i> woodlands over Chenopods	EoW	Incised drainage channels supporting <i>Eucalyptus oleosa</i> - <i>Acacia</i> woodlands	DRMS	Narrow incised linear drainage zones receiving concentrated run-on, supporting <i>Acacia burkittii</i> shrublands.	SBLS	Deep siliceous red sand dunes supporting <i>Acacia caesaneura</i> dominated woodlands	ELSC	Stony scree slopes on salt lake margins supporting <i>Eremophila</i> sp. Lake Carey (E. Mattiske LM 197) over <i>Tecticornia</i> species.	FRAN	Alluvial basins with saline duplex soils supporting low halophytic shrublands dominated by <i>Frankenia</i> spp.	SAMP	Salt lake margins supporting halophytic low shrublands dominated by <i>Tecticornia</i> species.	SL	Bare salt lakes with little to no vegetation
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Vegetation condition	<p>Vegetation surveys of the application area found the vegetation to be in excellent, very good, good, degraded, and completely degraded condition (Botanica, 2024; Trudgen, 1991; Western Botanical, 2021).</p> <p>The full Trudgen (1991) condition rating scale is provided in Appendix D.</p>																		
Climate and landform	<p>The climate of the Eastern Murchison subregion is described as arid, with the nearest weather station recording an average rainfall of approximately 236.7 millimetres per year (BoM, 2024; CALM, 2002).</p> <p>The application area is mapped at elevations of 400-440 metres Australian height datum (GIS Database). Pringle et al. (1994) landform descriptions of the application are salt lakes and fringing level to very gently inclined saline plains, low rounded hills, with narrow unincised tributary drainage tracts (DPIRD, 2024).</p>																		
Soil description	<p>The application area is broadly mapped as the following soil-landscape systems, attributed with the follow soil groups (DPIRD, 2024; Pringle et al., 1994; GIS Database):</p> <table border="1"> <thead> <tr> <th>SYSTEM</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>Leonora (235.3 ha)</td> <td>calcareous loamy earth, red shallow loam, red shallow sandy duplex, red/brown non-cracking clay, stony soil</td> </tr> <tr> <td>Carnegie Lake Bed (subsystem) (9.0 ha)</td> <td>salt lake soil</td> </tr> <tr> <td>Carnegie (3.6 ha)</td> <td>salt lake soil, red deep sandy duplex, red deep sand, red/brown non-cracking clay</td> </tr> </tbody> </table>	SYSTEM	DESCRIPTION	Leonora (235.3 ha)	calcareous loamy earth, red shallow loam, red shallow sandy duplex, red/brown non-cracking clay, stony soil	Carnegie Lake Bed (subsystem) (9.0 ha)	salt lake soil	Carnegie (3.6 ha)	salt lake soil, red deep sandy duplex, red deep sand, red/brown non-cracking clay										
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Carnegie Lake Bed (subsystem) (9.0 ha)	salt lake soil																		
Carnegie (3.6 ha)	salt lake soil, red deep sandy duplex, red deep sand, red/brown non-cracking clay																		
Land degradation risk	<p>Drainage lines within the Leonora land system are highly susceptible to water erosion, particularly in areas where vegetation cover has been reduced or the soil surface disturbed (DPIRD, 2023).</p> <p>Wind erosion is exacerbated at lake margins of the Carnegie land system by loss of stabilising vegetation; however, this land system is generally not susceptible to soil erosion (DPIRD, 2023).</p>																		
Waterbodies	<p>The application area is located on the bank, and partially on Lake Carey (GIS Database). Lake Carey is a non-perennial salt lake (GIS Database).</p>																		

Characteristic	Details
Hydrogeography	<p>The application area is not within any legislated surface water area (GIS Database). The nearest Public Drinking Water Source Area is the Laverton Water Reserve and Catchment Area, located approximately 76.3 kilometres north of the application area (GIS Database).</p> <p>The application area is located within the Goldfields Groundwater Area proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (GIS Database). The mapped groundwater salinity is 3,000-7,000 total dissolved solids milligrams per litre, which is described brackish to saline water quality (GIS Database).</p>
Flora	There are records of 14 priority flora species within 50 kilometres of the application area (GIS Database).
Ecological communities	There are no known ecological communities within the application area (GIS Database). The nearest priority ecological community is the 'Mount Linden Range vegetation complex (banded ironstone formation)' (P3), located approximately 1.5 kilometres south of the application area (GIS Database).
Fauna	<p>There are records of 17 conservation significant fauna species within a 50 kilometre radius of the application area (GIS Database). There are 11 bird, four invertebrate, and two mammal species.</p> <p>Six of these species are listed as migratory, eight priority, one threatened, and one other specially protected species (GIS Database).</p>
Fauna habitat	<p>The following fauna habitats were recorded within the application area (Terrestrial Ecosystems, 2022):</p> <ul style="list-style-type: none"> • <i>Eucalyptus</i> woodland • chenopod shrubland • open mulga woodland over mixed shrubs and chenopods • salt lake largely devoid of vegetation • samphire, and • cleared areas

B.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current extent in all DBCA Managed Land (proportion of pre-European extent) (%)
IBRA Bioregion - Murchison	28,120,586	28,044,823	~99	2,185,987.96	7.77
Beard vegetation associations - State					
389	642,356	640,468	~99	22,954.79	3.57
400	190,823	189,665	~99	NA	NA
Beard vegetation associations - Bioregion					
389	493,977	492,089	~99	22,954.79	4.65
400	190,823	189,665	~99	NA	NA

Government of Western Australia (2019)

B.3. Flora analysis table

The following conservation significant flora species have records within a 50 kilometre radius of the application area (GIS Database). Habitat suitability and likelihood of occurrence was determined utilising biological survey information (Botanica, 2024a; Western Botanical, 2022; WAH, 1998-; GIS Database).

Taxon	Conservation status	Distance of closest record (km)	Likelihood	Habitat suitability	Surveys adequate to identify? [Y, N, N/A]
<i>Acacia eremophila</i> var. Numerous-nerved variant (A.S. George 11924)	P3	43.3	possible	some suitable habitat present	Y

<i>Calandrinia quartzitica</i>	P1	0.1	recorded - outside application area	suitable habitat present	Y
<i>Calandrinia</i> sp. Menzies (F. Hort et al. FH 4100)	P3	6.3	likely	suitable habitat present	Y
<i>Eragrostis</i> sp. Lake Carey (J. Paterson & J. Warden WB 40825)	P1	10.0	recorded - outside application area	suitable habitat present	Y
<i>Eremophila mirabilis</i>	P2	47.0	unlikely	limited suitable habitat present	Y
<i>Eremophila</i> sp. Lake Carey (E. Mattiske LM 197)	P1	10.3	recorded - within application area	suitable habitat present	Y
<i>Goodenia lyrata</i>	P3	46.2	possible	suitable habitat present	Y
<i>Hemigenia exilis</i>	P4	31.5	unlikely	limited suitable habitat	Y
<i>Lysiandra baeckeoides</i>	P3	49.7	unlikely	limited suitable habitat	Y
<i>Melaleuca apostiba</i>	P3	7.9	recorded - outside application area	suitable habitat present	Y
<i>Pigea</i> sp. Chloroxantha (E. Bennett & D. Bright EUC 1810)	P3	22.6	possible	suitable habitat present	Y
<i>Placynthium nigrum</i>	P3	30.6	possible	some suitable habitat present	Y
<i>Tecticornia mellarium</i>	P1	3.4	recorded - outside application area	suitable habitat present	Y
<i>Tecticornia</i> sp. Lake Way (P. Armstrong 05/961)	P1	32.8	possible	suitable habitat present	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

Appendix C. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p><u>Principle (a):</u> "Native vegetation should not be cleared if it comprises a high level of biodiversity."</p> <p><u>Assessment:</u> The area proposed to be cleared contains locally and regionally significant priority flora.</p>	At variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p><u>Principle (b):</u> "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."</p> <p><u>Assessment:</u></p> <p>Terrestrial Ecosystems (2022) conducted a fauna habitat assessment and opportunistic fauna survey on 9 September 2021. No conservation significant fauna were recorded during the field assessment. It was noted that there are small and isolated low rocky outcrops present that may provide some habitat value to long-tailed dunnart (<i>Sminthopsis longicaudata</i>) (P4), however these areas are not considered significant habitat for the species (Terrestrial Ecosystems, 2022).</p> <p>The fauna habitats present within the application area are similar to habitats in adjacent areas and the surrounds of Lake Carey (Terrestrial Ecosystems, 2022). In addition, there is a significant portion of the application area devoid of fauna habitat due to historical mining disturbance (Terrestrial Ecosystems, 2022).</p> <p>Despite the proposed clearing unlikely having a significant impact on conservation significant fauna, a slow, progressive one-directional clearing condition is recommended to allow terrestrial fauna the time to move into adjacent habitat ahead of clearing activities.</p>	Not likely to be at variance	No
<p><u>Principle (c):</u> "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."</p> <p><u>Assessment:</u> There are no known records of threatened flora within a hundred kilometre radius of the application area (GIS Database). Flora and vegetation surveys of the application area did not record any species of threatened flora, or vegetation</p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
that would provide habitat for any species or threatened flora (Botanica, 2024a; Western Botanical, 2022).		
<p><u>Principle (d):</u> <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.”</i></p> <p><u>Assessment:</u> There are no known state or federally listed threatened ecological communities (TECs) located within or in close proximity to the application area (GIS Database). The nearest known threatened ecological community is the ‘Depot Springs stygofauna community’ state listed threatened ecological community (VU), located approximately 261 kilometres northwest of the application area (GIS Database).</p> <p>Flora and vegetation surveys of the application area and surrounds did not record vegetation that would be representative of a TEC (Botanica, 2024a; Western Botanical, 2022).</p>	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u> The application area falls within the Murchison bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Murchison bioregion (Government of Western Australia, 2018). The application area is broadly mapped as Beard vegetation associations 389: Succulent steppe with open low woodland; mulga over saltbush; and 400: Succulent steppe with open low woodland; mulga over bluebush (GIS Database). Approximately 99% of the pre-European extent of this vegetation association remains uncleared at both the state and bioregional level (Government of Western Australia, 2018).</p> <p>The application area is not representative of a significant remnant of native vegetation in an area that has been extensively cleared.</p>	Not at variance	No
<p><u>Principle (h):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.”</i></p> <p><u>Assessment:</u> The application area is not located within any conservation areas (GIS Database). The nearest legislated conservation area is Goongarrie National Park, located approximately 94.5 kilometres southwest of the application area (GIS Database). Given the distance to Goongarrie National Park, the proposed clearing is unlikely to have an impact on the environmental values of any conservation areas.</p>	Not likely to be at variance	No
Environmental value: land and water resources		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u> Botanica (2024a) and Western Botanical (2022) recorded a number of vegetation types that either grow in or in association with watercourses and Lake Carey. Vegetation types that were not considered to be dominated by riparian vegetation were frequently observed to have incised drainage channels throughout.</p> <p>The proposed clearing will have an impact on vegetation growing in, or in association with, an environment associated with a watercourse or wetland. Impacts to vegetation growing in association with the drainage channels and Lake Carey may be minimised by the implementation of a watercourse management condition.</p>	At variance	No
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u> The mapped soils are highly susceptible to wind and water erosion where vegetation cover has been reduced or the soil surface has been disturbed (DPIRD, 2023). Given the application area is located along the margin of Lake Carey, multiple drainage depressions flow into the salt lake and will be prone to land degradation (DPIRD, 2023).</p>	At variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
The proposed clearing is likely to cause appreciable land degradation, however the potential impacts may be minimised by the implementation of a staged clearing condition and a watercourse management condition.		
<p>Principle (i): “Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.”</p> <p>Assessment: Given the application area is located along the margin of Lake Carey, with a number of drainage channels flowing into the salt lake, the proposed clearing has the potential to cause deterioration in the quality of surface water (GIS Database). The reduction of vegetation cover may result in water erosion and sediment transport into Lake Carey (DPIRD, 2023). Potential impacts to surface water quality may be minimised by the implementation of a staged clearing condition and a watercourse management condition. This will reduce the overall time surface areas remain bare and lacking infrastructure, and to potentially redirect water surface flows.</p>	May be at variance	No
<p>Principle (j): “Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</p> <p>Assessment: The broad landform descriptions of the application area (gentle slopes) and topographic contours indicate that water flow is unlikely to stagnate and cause or exacerbate the incidence of flooding. Water is likely to continue down to footslopes and then deposit into Lake Carey (Botanica, 2024a; Western Botanical, 2022; GIS Database).</p>	Not likely to be at variance	No

Appendix D. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation’s ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.

Measuring vegetation condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1991)

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

Appendix E. Biological survey information excerpts

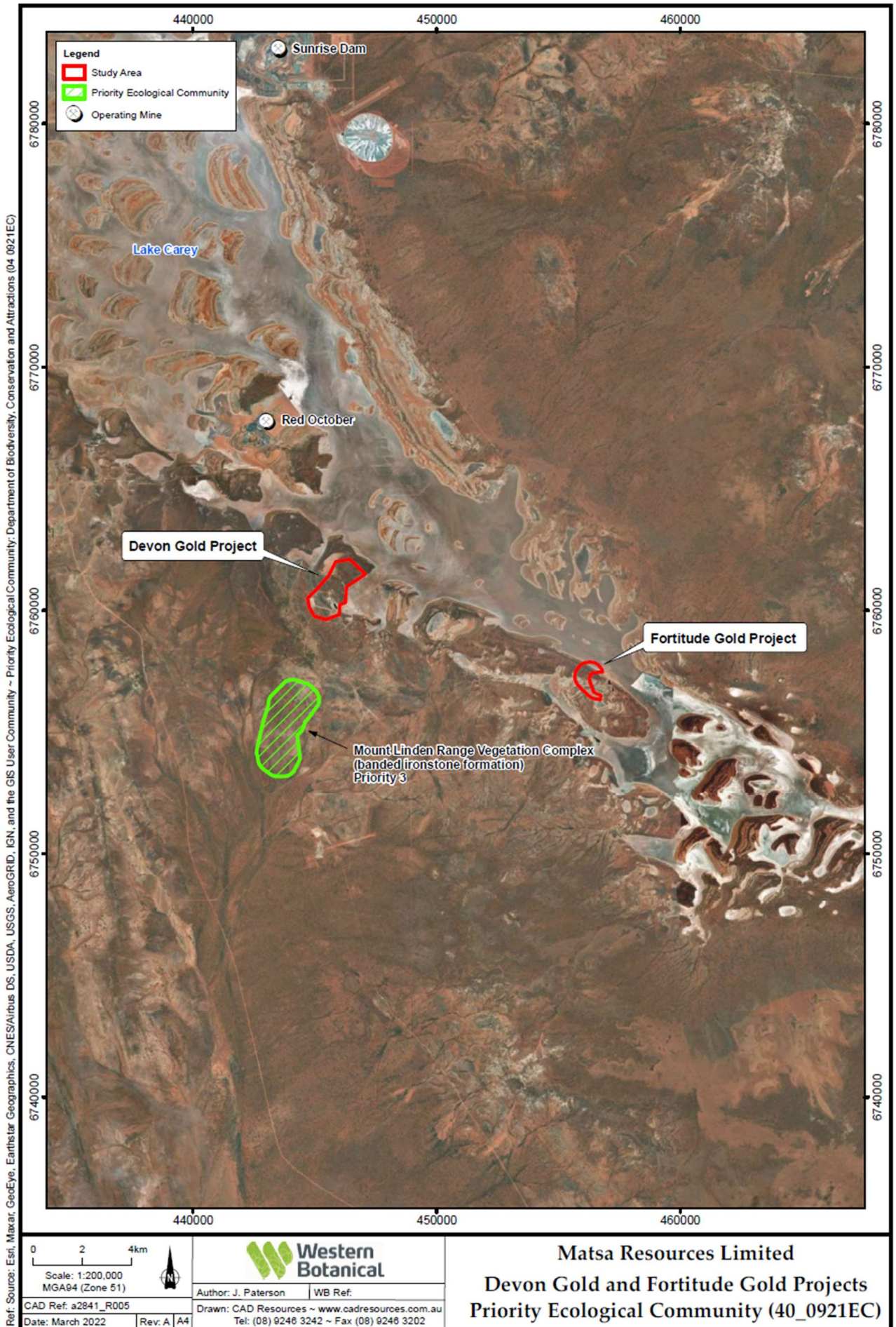


Figure 1: A representation of the Devon and Fortitude survey areas as discussed in Section 3.2.1 (Western Botanical, 2022).

Appendix F. Sources of information

F.1. GIS data

Publicly available geospatial data used (sourced from www.data.wa.gov.au):

- Cadastre (LGATE-218)
- Clearing Regulations – Schedule One Areas (DWER-057)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- GEODATA TOPO 250K Series 3 Topographic Data – Contours (Geoscience Australia, 2006)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation Statistics
- Interim Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery

Restricted geospatial data used:

- Threatened and Priority Flora (TPFL)
- Threatened and Priority Flora (WAHerb)
- Threatened and Priority Fauna
- Threatened and Priority Ecological Communities and Priority Ecological Communities
- Threatened and Priority Ecological Communities and Priority Ecological Communities (Buffers)

F.2. References

- Botanica (2023) Devon Gold Project – Clearing Permit Application Priority Flora Impact Assessment. Prepared by Botanica Consulting Pty Ltd, for Matsa Gold Pty Ltd, June 2023.
- Botanica (2024a) Devon Project Detailed Flora and Vegetation Survey. Prepared by Botanica Consulting Pty Ltd, for Matsa Resources Ltd, May 2024.
- Botanica (2024b) Devon Gold Project - Mining Proposal Open Pit Cutback Revision 1C. Prepared by Botanica Consulting Pty Ltd, for Matsa Resources Ltd, June 2024.
- Bureau of Meteorology (BoM) (2024) Bureau of Meteorology Website – Climate Data Online, Laverton. Bureau of Meteorology. <https://reg.bom.gov.au/climate/data/> (Accessed 19 September 2024).
- Conservation and Land Management (CALM) (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- Department of Environment Regulation (DER) (2014) A guide to the assessment of applications to clear native vegetation. Perth. https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf
- Department of Planning, Lands and Heritage (DPLH) (2024) Aboriginal Cultural Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/ACHIS/index.html?viewer=ACHIS> (Accessed 19 September 2024).
- Department of Primary Industries and Regional Development (DPIRD) (2023) Advice received in relation to Clearing Permit Application CPS 10225/1. Office of the Commissioner of Soil and Land Conservation, Department of Primary Industries and Regional Development, Western Australia, June 2023.
- Department of Primary Industries and Regional Development (DPIRD) (2024) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. <https://dpiird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f> (Accessed 19 September 2024).
- Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. <https://www.wa.gov.au/system/files/2023-06/procedure-native-vegetation-clearing-permits.pdf>
- Environmental Protection Authority (EPA) (2004a) Guidance for the Assessment of Environmental Factors - Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia, No. 56, June 2004.
- CPS 10225/1

- Environmental Protection Authority (EPA) (2004b) Guidance for the Assessment of Environmental Factors - Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia, No. 51, June 2004.
- Environmental Protection Authority (EPA) (2016) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf
- Environmental Protection Authority (EPA) (2020) Technical Guidance – Terrestrial Fauna Surveys. https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/2020.09.17%20-%20EPA%20Technical%20Guidance%20-%20Vertebrate%20Fauna%20Surveys%20-%20Final.pdf
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Matsa Gold (2023) Clearing permit application CPS 10225/1, received 5 June 2023.
- Pringle, H.J., Gilligan, S.A., and van Vreeswyk, A.M. (1994) An inventory and condition survey of rangelands in the north-eastern Goldfields, Western Australia. Department of Primary Industries and Regional Development, Western Australia, Perth. Technical Bulletin 87.
- Terrestrial Ecosystems (2022) Basic Vertebrate Fauna Survey and Risk Assessment - Devon Gold Project. Prepared by Terrestrial Ecosystems, for Matsa Gold Pty Ltd, June 2022.
- Western Australian Herbarium (WAH) (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dpaw.wa.gov.au/> (Accessed 14 October 2024).
- Western Botanical (2022) Detailed Flora and Vegetation Assessment of the Devon Gold Project; and Targeted Priority Flora Survey of the Fortitude Gold Project. Prepared by Western Botanical, for Matsa Resources, March 2022.

4. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016</i> , Western Australia
BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DCCEEW	Department of Climate Change, Energy, the Environment and Water, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia (now DEMIRS)
DMP	Department of Mines and Petroleum, Western Australia (now DEMIRS)
DoEE	Department of the Environment and Energy (now DCCEEW)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

{**DBCA (2023) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia**):-

T **Threatened species:**

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species

under section 26(2) of the Biodiversity Conservation Act 2016 (BC Act).

Threatened fauna is the species of fauna that are listed as critically endangered, endangered or vulnerable threatened species.

Threatened flora is the species of flora that are listed as critically endangered, endangered or vulnerable threatened species.

The assessment of the conservation status of threatened species is in accordance with the BC Act listing criteria and the requirements of [Ministerial Guideline Number 1](#) and [Ministerial Guideline Number 2](#) that adopts the use of the International Union for Conservation of Nature (IUCN) [Red List of Threatened Species Categories and Criteria](#), and is based on the national distribution of the species.

CR Critically endangered species

Threatened species considered to be “*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines.

EN Endangered species

Threatened species considered to be “*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines.

VU Vulnerable species

Threatened species considered to be “*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines.

Extinct Species:

EX Extinct species

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

EW Extinct in the wild species

Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild.

Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Migratory species include birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) or The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

CD Species of special conservation interest (conservation dependent fauna)

Species of special conservation need that are dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Currently only fauna are listed as species of special conservation interest.

OS Other specially protected species

Species otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Currently only fauna are listed as species otherwise in need of special protection.

P Priority species:

Priority is not a listing category under the BC Act. The Priority Flora and Fauna lists are maintained by the department and are published on the department's website.

All fauna and flora are protected in WA following the provisions in Part 10 of the BC Act. The protection applies even when a species is not listed as threatened or specially protected, and regardless of land tenure (State managed land (Crown land), private land, or Commonwealth land).

Species that may possibly be threatened species that do not meet the criteria for listing under the BC Act because of insufficient survey or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of prioritisation for survey and evaluation of conservation status so that consideration can be given to potential listing as threatened.

Species that are adequately known, meet criteria for near threatened, or are rare but not threatened, or that have been recently removed from the threatened species list or conservation dependent or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of priority status is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

P1 Priority One - Poorly-known species – known from few locations, none on conservation lands

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, for example, agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation.

Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements for threatened listing and appear to be under immediate threat from known threatening processes. These species are in urgent need of further survey.

P2 Priority Two - Poorly-known species – known from few locations, some on conservation lands

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, for example, national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation.

Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements for threatened listing and appear to be under threat from known threatening processes. These species are in urgent need of further survey.

P3 Priority Three - Poorly-known species – known from several locations

Species that are known from several locations and the species does not appear to be under imminent threat or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat.

Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. These species need further survey.

P4 Priority Four - Rare, Near Threatened and other species in need of monitoring

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as a conservation dependent specially protected species.

(c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.

(d) Other species in need of monitoring.

Principles for clearing native vegetation:

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.
- (j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.