

GRANNY SMITH RENEWABLE PROJECT NVCP



Granny Smith Gold Mine

7th August 2026

Supporting Document: Granny Smith Renewable Project & Wallaby
Support Infrastructure Native Vegetation Clearing Permit Application



GOLD FIELDS

Our Purpose Creating enduring value beyond mining



safety



integrity



respect



responsibility



innovation



collaborative
delivery



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EXECUTIVE SUMMARY

Project Title: Granny Smith Gold Mine: Granny Smith Renewable Project (GSRP)

Area Proposed to be Cleared: Up to 182 ha of native vegetation within a 1,692 ha boundary

Purpose of Clearing: Construction of a wind and solar farm, including ancillary infrastructure and expansion to the Wallaby Office area complex (including offices, laydown areas and stores) for ongoing operations and project support. Additionally, some clearing is required for exploration and installation of TSF seepage infrastructure and access tracks, adjacent to TSF Cell 4, an obligation under the Part V licence for Granny Smith.

GSM Mining Company Pty Ltd (GSM), a wholly owned subsidiary of Gold Fields Australia Ltd (GFA), own and operate the Granny Smith Gold Mine located approximately 720 km north-east of Perth and 24 km south of Laverton in Western Australia. As energy demands increase with the underground operation continuing at depth and transitioning to electrification across parts of the operation, GSM is expanding its existing power generation capacity to provide additional energy. The objective of the Granny Smith Renewable Project (the Project) is to supplement site power generation, shift towards an increased renewable energy fraction, while managing impacts on the environment, heritage, and social amenity.

Site power is currently supplied via an Aggreko owned and operated hybrid power station. This consists of a 75 MW gas-fuelled power station (consisting of 50 generators, each with a capacity of 1.5 MW), a 20 MW solar power station (consisting of Solar Farm 1, 7.7 MW, and Solar Farm 2, 11.5 MW), and two battery energy storage systems (BESS) (consisting of a 2 MW/1 MWh BESS and a 6 MW/3 MW BESS).

As part of GFA's commitment to reduce carbon emissions, the existing hybrid power station at GSM is being expanded with the addition of an 80 MW wind farm, 11.5 MW solar farm. The Project will require up to 182 ha of native vegetation clearing. Additional infrastructure for the power expansion includes the construction of a 10 turbines wind farm and additional solar farm (Solar Farm 3).

The Project will require additional infrastructure, workforce capacity and operations support to facilitate both construction and ongoing GSM operations. Key requirements include an extension of the Wallaby Complex Office area. Proposed developments within the Wallaby Complex will be needed for expanded stores facilities, dedicated laydown areas, and long-term office accommodation for employees and business partners. Although existing facilities are being reorganised and utilised to their maximum practical extent, the projected increase in workforce numbers, equipment, and operational activities necessitates the development of additional area for proposed ongoing operations.

To ensure seepage risks are managed and mitigated, including risk to native vegetation, GSM Mining Company Pty Ltd are implementing a phased TSF Seepage Groundwater Management Plan. The Plan has been developed alongside DWER and looks to install several new seepage recovery bores.

Up to 182 ha of native vegetation will be cleared within the Proposed Clearing Permit Area (1,693 ha) to construct and operate the Project, including access and infrastructure corridors to connect the facilities to the existing infrastructure and access roads. Fifteen mining tenements and seven miscellaneous tenements intersect the Proposed Clearing Permit Area. All tenements are currently held by GSM Mining Company Pty Ltd.

The clearing of native vegetation within the Proposed Clearing Permit Area requires submission of a Native Vegetation Clearing Permit (NVCP) application, and subsequent approval by the Department of Water and Environmental Regulation (DWER) and/or the Department of Mines, Petroleum and Exploration (DMPE), in accordance with section 51E of the *Environmental Protection Act 1986* (EP Act). The purpose of this report is to support the NVCP application for the clearing of up to 182 ha of native vegetation within the Proposed Clearing



Permit Area. An assessment against the Ten Clearing Principles for clearing native vegetation of Schedule 5 of the EP Act was undertaken and a precautionary approach was applied, which assumed that all habitats within the Proposed Clearing Permit Area have an equal likelihood of being cleared. Based on this assumption, the Project is not at variance to clearing principles (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j).

GSM will also be submitting a Mining Development and Closure Proposal to DMPE for the expansion of the Project. This is underway with its submission planned for Q3 2026.

Information	Document Section
Aerial photographs and site photographs of the area proposed to be cleared.	Figure 2
A flora and vegetation survey. Detail should include: • Mapping of vegetation types / associations / communities, their condition and their representation in a regional context. Photographs of each vegetation type to be cleared are also recommended. • Declared rare and priority flora species present or likely to be present. Details should include the location/s and size of the population/s; the impact of the proposed clearing on the population/s and the likely impact of the proposed clearing on the continued existence of the species.	Section 4
A fauna assessment. Detail should include: • The fauna present or likely to be present, and their conservation significance. • An assessment of the significance of the vegetation and landform to be cleared, as a habitat for fauna; including mapping of any significant fauna habitats.	Section 5
A site overview, with a brief description of topography, landforms, soils and hydrology.	Section 3
A summary and/or map of the proposed developments on the site.	Figure 2
A hydrological summary, which includes discussion of the likelihood of impact from the clearing on riparian vegetation, wetlands, watercourses, surface water or groundwater.	Section 3.8, Section 7, Table 12
A vegetation degradation summary, which includes discussion of the likelihood of the spread of dieback disease and/or weeds.	Section 4.2, Section 7, Table 12
A land degradation summary, which includes discussion of the likelihood of land degradation, including waterlogging, acidification, salinization, deep subsoil compaction and erosion.	Section 3.7, Section 7, Table 12



Information	Document Section
An outline of environmental management measures and rehabilitation practices that will be undertaken during and subsequent to the completion of the project. Existing Management Plans and Mining Proposals should be submitted, if they are relevant to the clearing proposal.	Section 6.3
Copies of any correspondence with the Department of Biodiversity Conservation and Attractions (DBCA) or other government agencies regarding the proposal.	Not Applicable
A statement against each of the 10 clearing principles.	Section 7, Table 12

**Abbreviations**

Abbreviations	Definition
BC Act	<i>Biodiversity Conservation Act 2016</i>
BESS	Battery Energy Storage System
DBCA	Department of Biodiversity, Conservation and Attractions
DMPE	Department of Mines, Petroleum and Exploration
DPIRD	Department of Primary Industries and Regional Development
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986</i>
EPA	Environmental Protection Authority
EPBC act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
GFA	Gold Fields Australia Ltd
GSM	GSM Mining Company Pty Ltd
GSRP	Granny Smith Renewable Project
IBRA	Interim Biogeographic Regionalisation for Australia
LAA	<i>Land Administering Act 1997 (WA)</i>
MDCP	Mining Development and Closure Proposal
NVCP	Native Vegetation Clearing Permit
PEC	Priority Ecological Community
TEC	Threatened Ecological Community
UCL	Unallocated Crown Land
WoNS	Weeds of National Significance



1 INTRODUCTION

GSM Mining Company Pty Limited (GSM), a wholly owned subsidiary of Gold Fields Australia Limited (GFA), owns and operates the Granny Smith Gold Mine, located approximately 720 km northeast of Perth and 24 km south of Laverton in Western Australia (Figure 1). Current electrical power supply for GSM is via an Aggreko owned and operated hybrid power station, consisting of a 75 megawatt (MW) gas-fuelled power station (consisting of 50 generators, each with a capacity of 1.5 MW), a 20 MW solar power station (consisting of Solar Farm 1 - 7.7 MW, and Solar Farm 2 - 11.5 MW), and two battery energy storage systems (BESS) (consisting of a 2 MW/1 MWh BESS and a 6 MW/3 MW BESS).

GSM propose to further expand the renewable infrastructure operations for the site, constructing 11.5 MW Solar Farm 3 alongside a 10-turbine wind farm for 80 MW. The Project is anticipated to increase GSM's renewable energy contribution and assist in offsetting carbon emissions.

To practicably and safely support the renewables project, and other major projects at site, additional infrastructure, people and support services are required. This will require an extension of the Wallaby Complex Office area. Proposed developments within the Wallaby Complex will be needed for expanded stores facilities, dedicated laydown areas, and long-term office accommodation for employees and business partners. Although existing facilities are being reorganised and utilised to their maximum practical extent, the projected increase in workforce numbers, equipment, and operational activities necessitates the development of additional area for proposed ongoing operations.

A Disturbance Footprint of 185 ha, consisting of 182 ha of native to construct and operate the Project, including access and infrastructure corridors to connect the facilities to the existing infrastructure and access roads.

1.1 Report Purpose, Objective and Structure

The clearing of native vegetation within the Proposed Clearing Permit Area requires submission of a Native Vegetation Clearing Permit (NVCP) application, and subsequent approval, by the Department of Water and Environmental Regulation (DWER) and/or the Department of Mines, Petroleum and Exploration (DMPE) in accordance with section 51E of the *Environmental Protection Act 1986* (WA) (EP Act).

The purpose of this report is to support the NVCP application for the clearing of up to 182 ha of native vegetation within the Proposed Clearing Permit Area (Figure 2). It describes the environmental values of the Proposed Clearing Permit Area, outlines native vegetation clearing requirements, and identifies potential impacts and proposed mitigation for reducing and managing environmental impacts of the Project.

This report follows the broad structure summarised below:

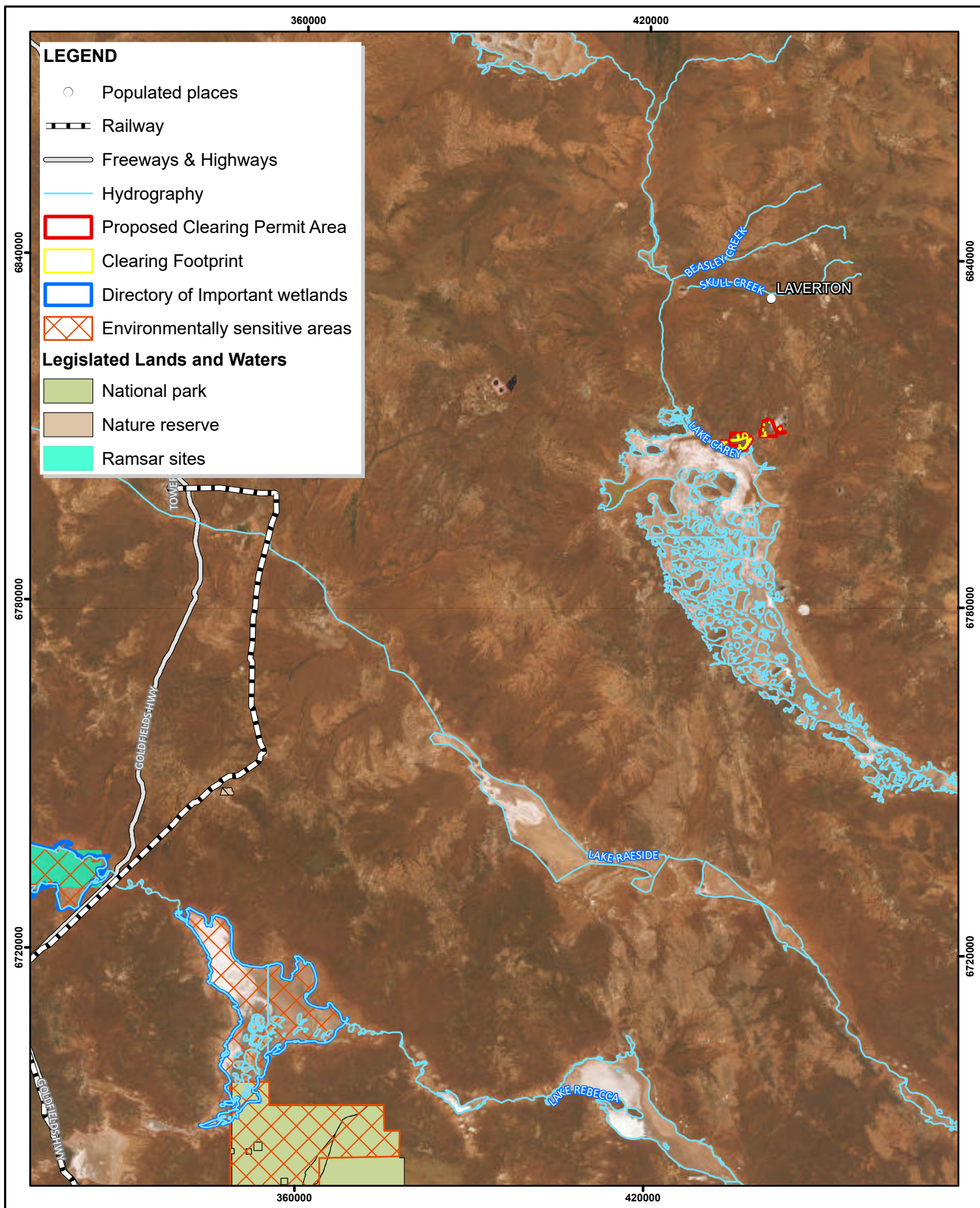
- Description and maps of the Proposed Clearing Permit Area, delineating location, size, extent and purpose
- Site overview with a brief description of local climate, biogeographic region, geology, land use and land systems, soils, hydrology, and hydrogeology
- Description of the Proposed Clearing Permit Area relative to vegetation type, condition, and representation in a regional context
- Description of flora and fauna taxa present within the Proposed Clearing Permit Area and identification of any significant flora or fauna taxa
- Discussion of the proposed vegetation clearing in relation to the EP Act, Schedule 5 — Principles for clearing native vegetation (Ten Clearing Principles).



A Mining Development and Closure Proposal is currently under development to support these Project and will be submitted to the DMPE in Q3 2026.

Studies undertaken for the Project to inform this NVCP include:

- Flora and Vegetation Survey - (NVS 2019a; 2022a; 2024a; 2025a; 2026a; 2026c) (Appendix A)
- Vertebrate Fauna Habitat Survey (Terrestrial Ecosystems 2018; 2022; 2024a; 2024b; 2026) (Appendix B)
- Surface Water Study (AECOM 2018) (Appendix C)
- Management Plans (Gold Fields Australia 2024) (Appendix D).



 GOLD FIELDS Coordinate System: GDA2020 MGA Zone 51	Granny Smith Gold Mine Regional location of the Proposed Clearing Permit Area and adjacent land use  0 10 20 30 40 50 Kilometres	Date: 7/31/2026 Author: QUEZADAMEZAKL Figure: 1 Copyright © 2025 - Granny Smith Gold Mine Pty Ltd. All data contained in this map is reserved for exclusive use by Granny Smith Gold Mine only and no part may be reproduced for any commercial purposes without prior written permission of the General Manager of Granny Smith Gold Mine.	
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2 Project Background

2.1 Location, Tenure and Site Layout

Fifteen mining tenements and seven miscellaneous tenements intersect the Proposed Clearing Permit Area (Table 1). All tenements are currently held by GSM and are shown in Figure 2.

Table 1 Granny Smith Tenements relevant to the Proposed Clearing Permit Area

Tenement	Area in Proposed Clearing Permit Area (ha)	Area in clearing footprint (ha)	Granted	Expires	Lessee
L 38/144	62.90	0.13	12/08/2009	11/08/2030	GSM Mining Company Pty Ltd
L 38/326	14.41	7.08	24/01/2019	23/01/2040	GSM Mining Company Pty Ltd
L 38/329	5.10	0	20/09/2021	19/09/2042	GSM Mining Company Pty Ltd
L 38/48	0.73	0	14/10/1992	13/10/2027	GSM Mining Company Pty Ltd
L 38/77	11.66	4.24	23/06/2000	22/06/2042	GSM Mining Company Pty Ltd
L 38/88	20.99	4.42	21/11/2000	20/11/2042	GSM Mining Company Pty Ltd
L 39/31	3.41	0	12/04/1989	11/04/2029	GSM Mining Company Pty Ltd
M 38/1280	13.01	2.89	29/11/2018	28/11/2039	GSM Mining Company Pty Ltd
M 38/1298	16.90	9.40	4/02/2026	3/02/2047	GSM Mining Company Pty Ltd
M 38/161	46.44	1.84	22/05/1988	23/05/2030	GSM Mining Company Pty Ltd
M 38/205	231.18	0.15	20/02/1989	2/03/2031	GSM Mining Company Pty Ltd
M 38/287	11.59	0	6/09/1990	10/09/2032	GSM Mining Company Pty Ltd
M 38/389	83.37	0.46	24/10/1994	24/10/2036	GSM Mining Company Pty Ltd
M 38/397	168.28	64.29	20/10/1998	19/10/2040	GSM Mining Company Pty Ltd



M 38/440	22.55	6.59	20/10/1998	19/10/2040	GSM Mining Company Pty Ltd
M 38/525	9.66	0.93	20/10/1998	19/10/2040	GSM Mining Company Pty Ltd
M 38/532	311.37	0.61	7/01/2008	9/01/2029	GSM Mining Company Pty Ltd
M 38/533	28.40	0	7/01/2008	9/01/2029	GSM Mining Company Pty Ltd
M 38/91	221.19	28.01	2/03/2000	1/03/2042	GSM Mining Company Pty Ltd
M 38/692	190.47	10.18	2/03/2000	1/03/2042	GSM Mining Company Pty Ltd
M 38/725	108.23	11.84	13/01/2003	12/01/2045	GSM Mining Company Pty Ltd
M 38/849	230.82	47.65	10/02/2009	9/02/2030	GSM Mining Company Pty Ltd

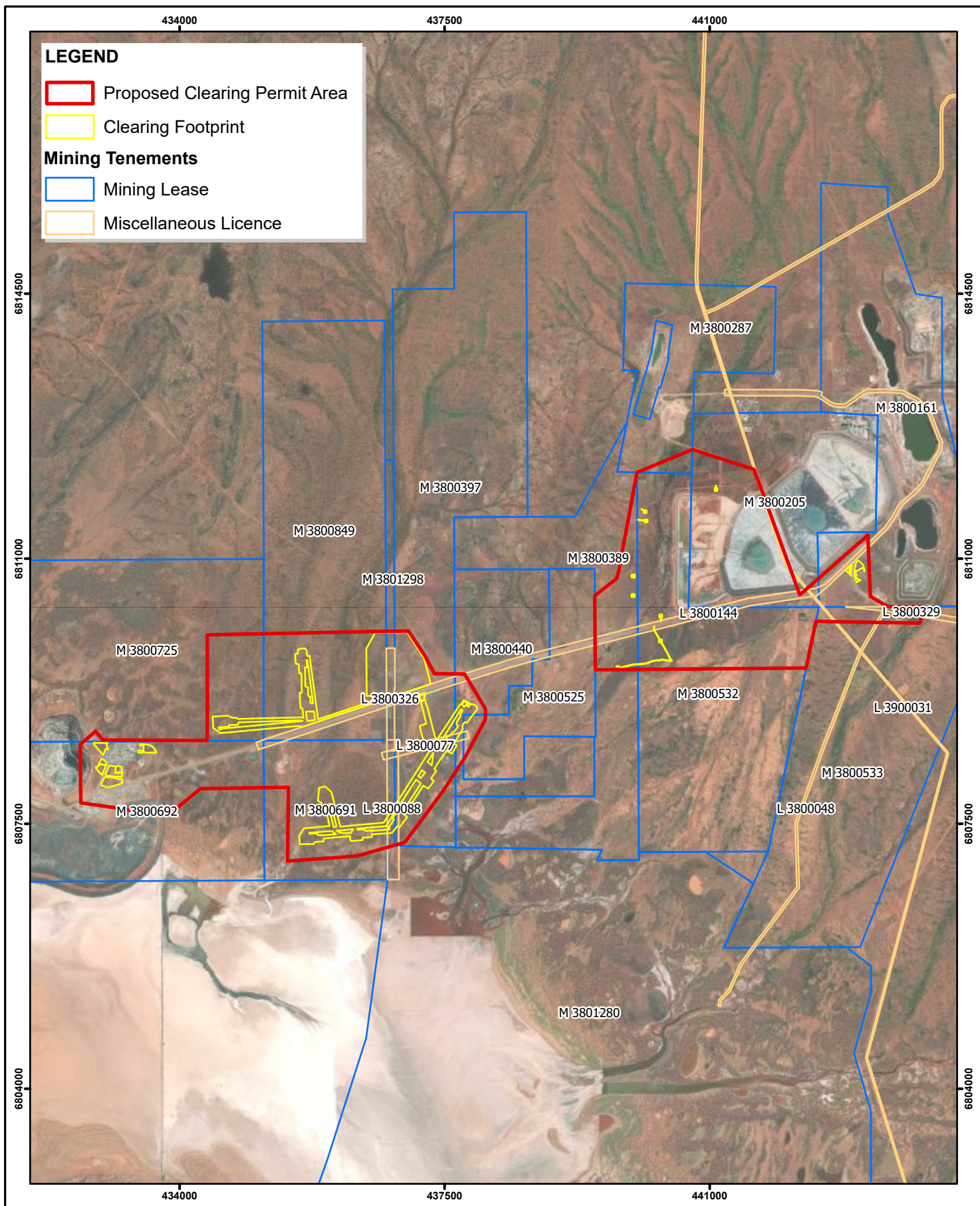
2.2 Applicant Details

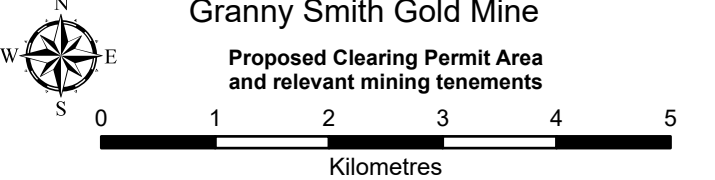
2.2.1 Application Contact Details

Company Details	GSM Mining Company Pty Limited
Name	Ashleigh Shelton Manager Environment
Phone	08 9088 2164
ABN/ACN	ABN 42 165 235 030 ACN 165 235 030
Postal Address	GPO Box 2731 Cloisters Square, WA, 6850

2.2.2 Contact Details for Enquiries

Company Details	GSM Mining Company Pty Limited
Name	Laura Marchese Superintendent Environment
Phone	08 9088 2108
ABN/ACN	ABN 42 165 235 030 ACN 165 235 030
Postal Address	GPO Box 2731 Cloisters Square, WA, 6850



 GOLD FIELDS Coordinate System: GDA2020 MGA Zone 51	Granny Smith Gold Mine Proposed Clearing Permit Area and relevant mining tenements 	Date: 7/31/2026 Author: QUEZADAMEZAKL Figure: 2 Copyright © 2025 - Granny Smith Gold Mine Pty Ltd. All data contained in this map is reserved for exclusive use by Granny Smith Gold Mine only and no part may be reproduced for any commercial purposes without prior written permission of the General Manager of Granny Smith Gold Mine.	
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2.3 Proposed Clearing

2.3.1 Description of Proposed Clearing

Details of the Granny Smith Renewable Project are in Table 2.

Table 2 Proposed Activity

Aspect	Details
Total Clearing Area (ha)	Up to 182 ha within a 1,692 ha boundary
Proposed Clearing Method	Clearing completed using mechanised earthmoving equipment, including (but not limited to) bulldozers, dump trucks, graders, rollers, bobcats and excavators.
Period of Clearing	Q3 2027 – Q3 2028
Purpose of Clearing	Construction of a wind farm, solar farm and all associated infrastructure
Land Use	Wind and solar power generation, ancillary infrastructure
Final Land Use	Renewable power generation

2.3.2 Rehabilitation

Comprehensive mitigation approaches will be in place to meet environmental obligation as prescribed by current regulatory frameworks, approvals documents, and GSM internal practices. Refer to Section 6.3 for rehabilitation and closure activities specific to power generation.



3 EXISTING ENVIRONMENT

3.1 Biogeographic Location

The Interim Biogeographic Regionalisation for Australia (IBRA) is a bioregional framework that divides Australia into 89 biogeographic regions and 419 subregions on the basis of climate, geography, landforms, vegetation and fauna (Thackway and Cresswell 1995). The Proposed Clearing Permit Area lies within the East Murchison (MUR01) IBRA subregion of the Murchison bioregion (Figure 3).

The East Murchison subregion encompasses 7.8 million ha in the northern Southern Cross and Eastern Goldfields area of the Yilgarn Craton. The landscape is described as having extensive area of elevated red desert sandplains with minimal due development and internal drainage. Other features of the landscape include broad plains of red-brown soils, breakaway complexes, and red sandplains. Salt lakes are associated with the occluded Carey Palaeoriver. The vegetation is dominated by Mulga woodlands, often rich in ephemerals, as well as hummock grasslands, saltbush shrublands and *Tecticornia* shrublands (Cowan 2001).

3.2 Land Use

The dominant land use (85%) within the East Murchison subregion is grazing of sheep and cattle on native pastures (Cowan 2001). Other land uses include Unallocated Crown Land (UCL), Crown Reserves, freehold land held by the state of WA, and mining. Mining in the East Murchison subregion is largely comprised of gold and nickel; most mining lease areas, including the Proposed Clearing Permit Area, are required to be stocked in accordance with the *Land Administering Act 1997* (WA). The area set aside for conservation purposes increased from about 0.5% of the bioregion in 1998 to 6.7% in 2004, due to the purchase of pastoral leases by the WA Government (DCCEEW, undated).

The Murchison bioregion includes the Goongarrie National Park and the Wanjarri Nature Reserve. There are no Aboriginal communities currently located in the Proposed Clearing Permit Area, with Mount Margaret being the closest community, located less than 20 km to the northwest. Laverton is the closest townsite, located 24 km to the north. There are no known recreational land uses in the immediate area.

3.3 Pre-European Vegetation

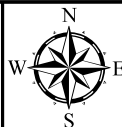
The Proposed Clearing Permit Area occurs in the Eremaean Botanical Province (Beard 1976). Vegetation mapping of WA was completed on a broad scale (1:1,000,000 and 1:250,000) by Beard (1976), classifying vegetation into broad vegetation associations. These vegetation associations were re-assessed by Shepherd *et al.* (2002) to account for clearing in the intensive land use zone, and to divide some of the larger vegetation units. Shepherd *et al.* (2002) also developed a series of systems to assist in the removal of some mosaics. Vegetation system associations described by Shepherd *et al.* (2002) correspond with that of Beard (1976). Two vegetation systems intersect the Proposed Clearing Permit Area (Figure 4); the Laverton vegetation association 18 and Laverton vegetation association 389.

The current extent of the Laverton vegetation associations, 18 and 389, remaining is presented in Table 3. The significance of clearing a particular vegetation association can be determined by comparing current and pre-European vegetation extents. The required retention threshold of the pre-European extent of a vegetation association is 30% (EPA 2000). Below this threshold, clearing is considered to compromise species diversity at an ecosystem level. The current remaining extent of the Laverton vegetation association exceeds 99% (Table 3) (EPA 2000; GoW 2019).



GOLD FIELDS

Coordinate System: GDA2020



Granny Smith Gold Mine

**Location of the Proposed Clearing Permit Area
in relation to the East Murchison subregion**

0 50 100 150 200



Kilometres

Date: 7/31/2026

Author: QUEZADAMEZAKL

Figure: 3

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**Table 3 Vegetation system associations and extent within the proposed Disturbance Footprint**

Vegetation Association (Description)	Pre-European Extent (ha)	Current Extent (ha)	Remaining in Class I–IV Reserves %	Area within clearing footprint (ha)	Current Remaining %
Laverton 18 (Low woodland; Mulga (<i>Acacia aneura</i>))	2,353,508.44	2,342,961.36	-	138.30	98.76
Laverton 389 (Succulent steppe with open low woodland; mulga over saltbush)	105,136.11	103,855.58	-	46.52	98.76

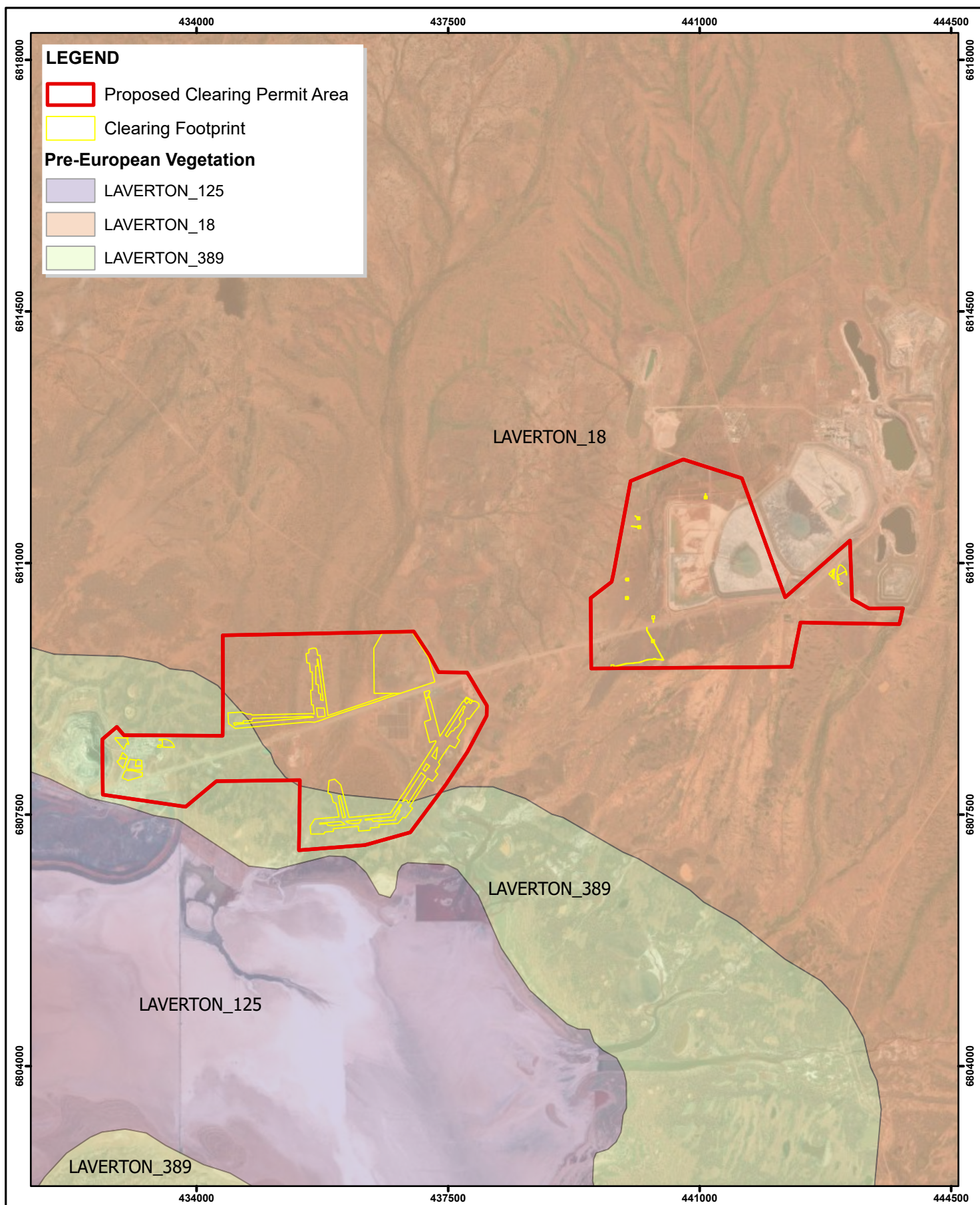
3.4 Conservation Values

The Proposed Clearing Permit Area does not intersect with:

- An Environmentally Sensitive Area (ESA), listed within the Environmental Protection (Environmentally Sensitive Areas) Notice 2005 in accordance with s 51B of the EP Act
- Conservation reserves (Australian Government 2023).

3.5 Land Systems and Topography

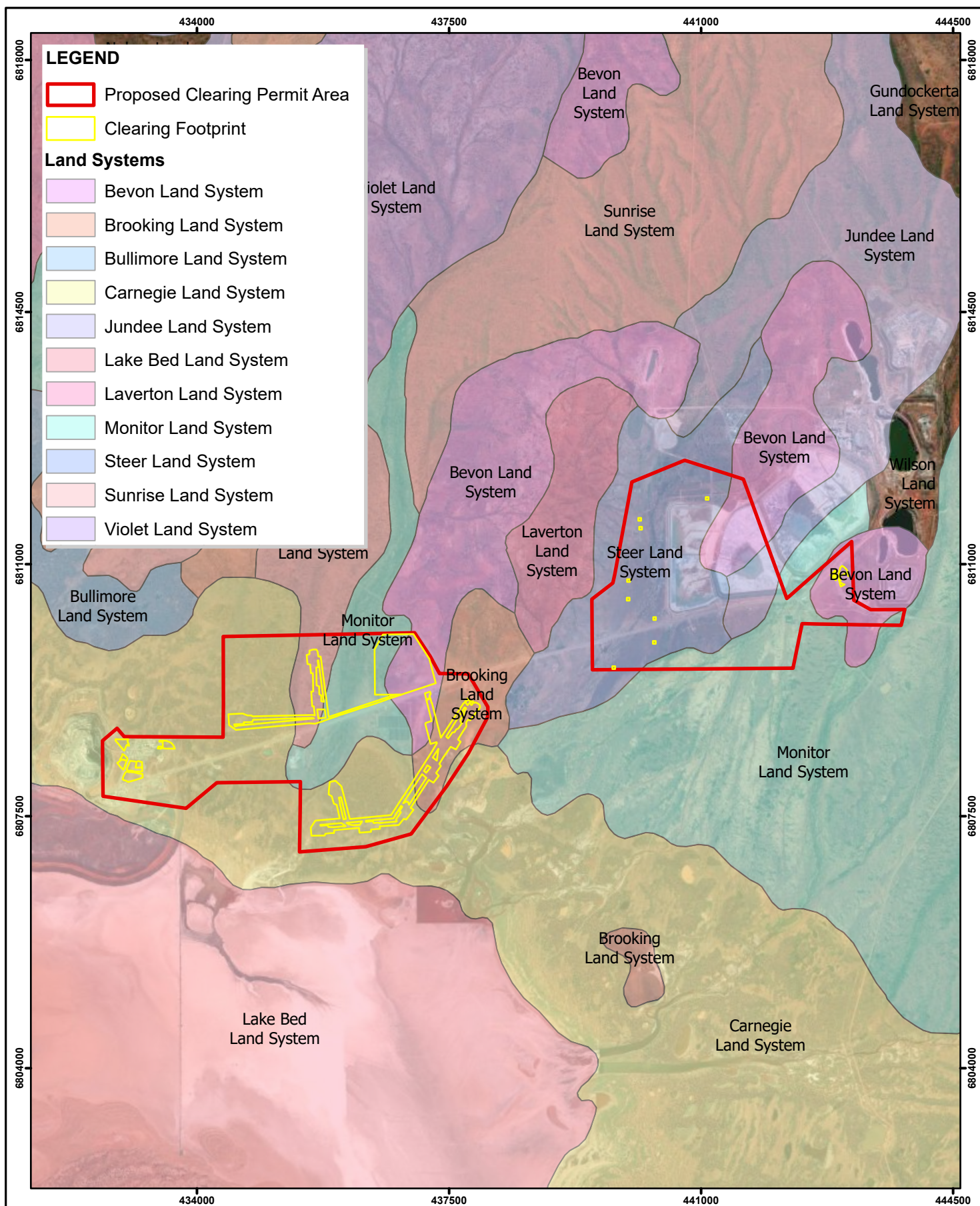
Land systems are defined as an area or group of areas throughout which there is a recurring pattern of topography, soils and vegetation (Tille 2006). An assessment of land systems provides an indication of the occurrence and distribution of fauna habitats and vegetation within and surrounding the Proposed Clearing Permit Area (Pringle et al. 1994). Land systems across the Murchison bioregion have been mapped by the Natural Resources Assessment Group of the Department of Primary Industries and Regional Development (DPIRD) (formerly the Department of Agriculture). This mapping provides a comprehensive description of biophysical resources within the area (Pringle et al. 1994). The Proposed Clearing Permit Area occurs within the Carnegie System (31%), the Steer Land System (24%), the Monitor System (18%), the Bevon System (12%), the Sunrise system (7%), the Brooking System (6%), the Sunrise System (4%), the Jundee Land System (4%) and the Bullimore system (0.4%) (Table 4, Figure 5). The natural topography of the region, and in the vicinity of the Proposed Clearing Permit Area, is flat to gently undulating and is closely related to underlying geology. The greatest topographical relief in the area is provided by waste landforms associated with mining operations adjacent to Lake Carey



 GOLD FIELDS Coordinate System: GDA2020 MGA Zone 51	Granny Smith Gold Mine Pre-European vegetation of the Proposed Clearing Permit Area	Date: 7/31/2026 Author: QUEZADAMEZAKL Figure: 4 Copyright © 2025 - Granny Smith Gold Mine Pty Ltd. All data contained in this map is reserved for exclusive use by Granny Smith Gold Mine only and no part may be reproduced for any commercial purposes whatsoever without prior written permission of the General Manager of Granny Smith Gold Mine.	
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**Table 4 Extent of land systems underlying and surrounding the Proposed Clearing Permit Area**

Land Systems	Description	Extent within the Proposed Clearing Permit Area (ha) (%)	Extent within the Clearing Footprint (ha)	Portion disturbed within Proposed Clearing Permit Area (%)
Carnegie System	Salt lakes with fringing saline alluvial plains, kopi dunes and sandy banks, supporting halophytic shrublands and acacia tall shrublands.	537.55 (31%)	62.80	3.71
Sunrise System	Stony plains supporting Mulga shrublands.	70.09 (4%)	18.31	1.08
Monitor System	Distributary alluvial fans and wash plains supporting mulga - chenopod shrublands.	313.33 (18%)	24.26	1.43
Bevon System	Irregular low ironstone hills with stony lower slopes supporting Mulga shrublands.	211.03 (12%)	44.63	2.64
Brooking System	Prominent ridges of banded iron formation supporting Mulga shrublands and occasional minor halophytic communities.	100.80 (6%)	33.47	1.98
Steer Land System	Gravelly alluvial plains supporting chenopod shrublands.	397.43 (24%)	1.22	0.07
Jundee Land System	Hardpan plains with variable gravelly mantles and minor sandy banks supporting weakly groved mulga shrublands.	62.03 (4%)	-	-
Total		1,692.27	184.69	10.91%



 GOLD FIELDS Coordinate System: GDA2020 MGA Zone 51	 0 1 2 3 4 5 Kilometres	Granny Smith Gold Mine Land systems underlying and surrounding the Proposed Clearing Permit Area		Date: 7/31/2026	
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3.6 Geology

The Proposed Clearing Permit Area lies within the Laverton Achaean granite-greenstone belt in the central north-south portion of the Eastern Goldfields Province of the Yilgarn Block within the Western Shield. The Archaean geology of the region is subdivided by two volcanics dominated by basalts, high magnesian basalts, interflow sediments, and basal ultramafics. Feldspathic conglomerates and siliciclastic overlay the Upper Association lithologies (Dames and Moore 2000).

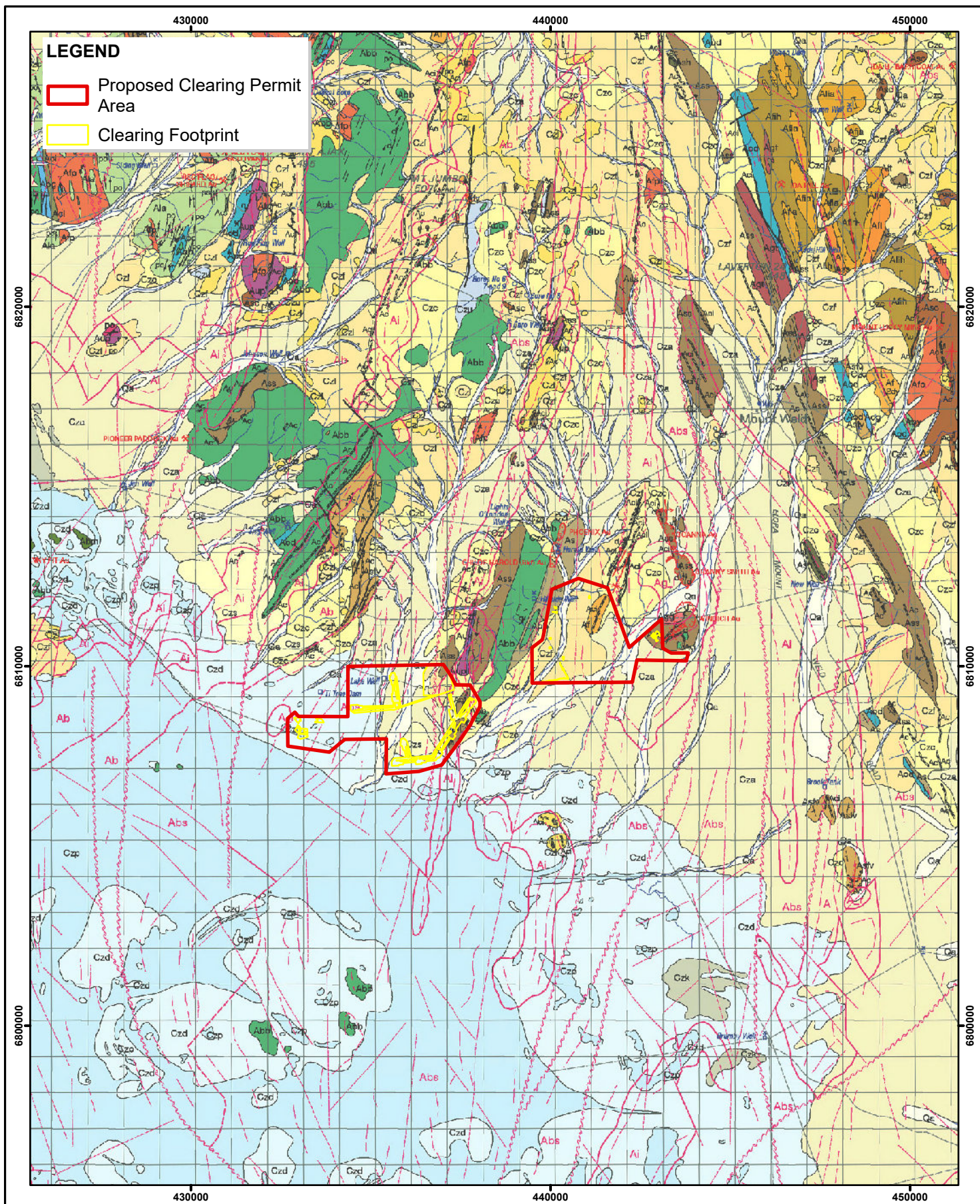
Three north-south litho-structural terranes control the distribution of these rock associations; the Western terrane (dominated by mafic volcanics of the Base Association), the central terrane (comprised of calc-alkaline volcanics and siliciclastic of the Upper Association), and the eastern terrane (characterised by mafic volcanics of the Base Association). The Mt Weld carbonatite intrudes the central eastern terrane boundary and is approximately 13 km from the GSM. Elongate basins of conglomerate are localised along the flanks of the terranes, while intrusions of the late syntectonic granites and granodiorite porphyry have occurred at the Granny Smith deposit (Dames and Moore 2000).

The local surface geology in the Proposed Clearing Permit Area can be broadly described as colluvial clay, silt, sand, and gravel with pockets of metamorphosed sandstone and or siltstone (Figure 6). Alluvial clay, silt, sand, and gravel can be found in and near the creek channels (Figure 7). The local geology beneath the Proposed Clearing Permit Area comprises both granite and granodiorite. The layers and zones of silcrete and ferricrete cementation within the palaeovalley show considerable lateral and vertical variation (Gold Fields Australia 2024). The superficial and palaeochannel deposits are thought to vary laterally and vertically with distance away from the Proposed Clearing Permit Area, with the thickness of valley-fill deposits progressively increasing further downstream beneath Windich Creek (Gold Fields Australia 2024). The Proposed Clearing Permit Area intersects six regional geological units: unit 38491 (colluvium and residual deposits) comprising colluvium and/or residual deposits, sheetwash, talus and scree, with boulder, gravel and sand deposits and minor alluvial, sand plain, calcrete and reworked laterite deposits; unit 74322 (sedimentary rocks) comprising phyllitic schist, siltstone, sandstone, greywacke, pelite, conglomerate, quartzite, phyllite, shale, slate, claystone and chert, with minor felsic volcanic and volcanoclastic rocks, arkose and amphibolites; unit 72955 (lunette dunes) comprising quartz and gypsum dunes and mounds (kopi), with minor adjacent playa-related sediments; unit 74248 (mafic extrusive rocks) comprising basalt, high-magnesium basalt, minor mafic intrusive rocks, amphibolite, dolerite and related mafic lithologies; unit 74256 (banded iron formation and chert) comprising banded quartz-magnetite rock, banded iron formation, ferruginous chert and associated siliceous sedimentary rocks; and unit 74288 (felsic volcanic and volcanoclastic rocks) comprising quartz-feldspar porphyry, rhyolite, dacite, rhyodacite, felsic schist, tuff, breccia and agglomerate. (Table 5, Figure 6) (Australian Government 2023).



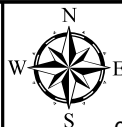
Table 5 Geological Features within the Proposed Clearing Permit Area

Geological Unit	Description	Proposed Clearing Permit Area (ha)	Clearing Footprint (ha)
38491	Colluvium and/or residual deposits, sheetwash, talus, scree; boulder, gravel, sand; may include minor alluvial or sand plain deposits, local calcrete and reworked laterite	964.25	87.13
74322	Phyllitic schist, siltstone, sandstone, greywacke, pelite, conglomerate, quartzite, phyllite, shale, slate, claystone, chert, minor felsic volcanic and volcanoclastic rocks; arkose, para- and orthoamphibolites; rare banded iron formation	280.50	71.94
72955	Quartz and gypsum dunes and mounds (kopi); may include minor silt, sand, gravel, and clay flats adjacent to playas; locally includes some playa sediments	337.80	25.75
74248	Basalt, high-Mg basalt, minor mafic intrusive rocks; some andesite; agglomerate; mafic schist; amphibolite; dolerite; komatiitic basalt; carbonated basalt; basaltic andesite; mafic rock interleaved with minor granitic rock	5.90	0
74288	Quartz-feldspar (meta-) porphyry, porphyritic microgranite; rhyolite, dacite, rhyodacite, andesite; agglomerate, breccia tuff; felsic schist; felsic volcanic and volcanoclastic rocks; dacite and rhyodacite tuff; dacite porphyry;	95.71	0
38491	Colluvium and/or residual deposits, sheetwash, talus, scree; boulder, gravel, sand; may include minor alluvial or sand plain deposits, local calcrete and reworked laterite	964.25	87.13
Total		1693.46	184.82



GOLD FIELDS

Coordinate System:
GDA2020 MGA Zone 51



Granny Smith Gold Mine

Surface geology of the Proposed
Clearing Permit Area

0 2.5 5 7.5 10

Kilometers

Date: 8/3/2026

Author: QUEZADAMEZAKL

Figure: 7

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3.7 Soils

The Murchison bioregion is defined by gently undulating soils with occasional ranges of low hills, and extensive sand plains in the eastern half. The area is characterised by shallow earthy loams overlying a red-brown hardpan, shallow stony loams on hills and red earthy sands on sand plains (Cowan 2001). The Proposed Clearing Permit Area is located within the Salinaland Plains soil-landscape zone of the Murchison Province. This zone consists of sandplains (with hardpan wash plains and some mesas, stony plains, and salt lakes) on granitic rocks (and some greenstone) of the Yilgarn Craton. Soils include red sandy earths, red deep sands, red shallow loams and red loamy earths with some red-brown hardpan shallow loams, salt lake soils and red shallow sandy duplexes (Stantec 2023).

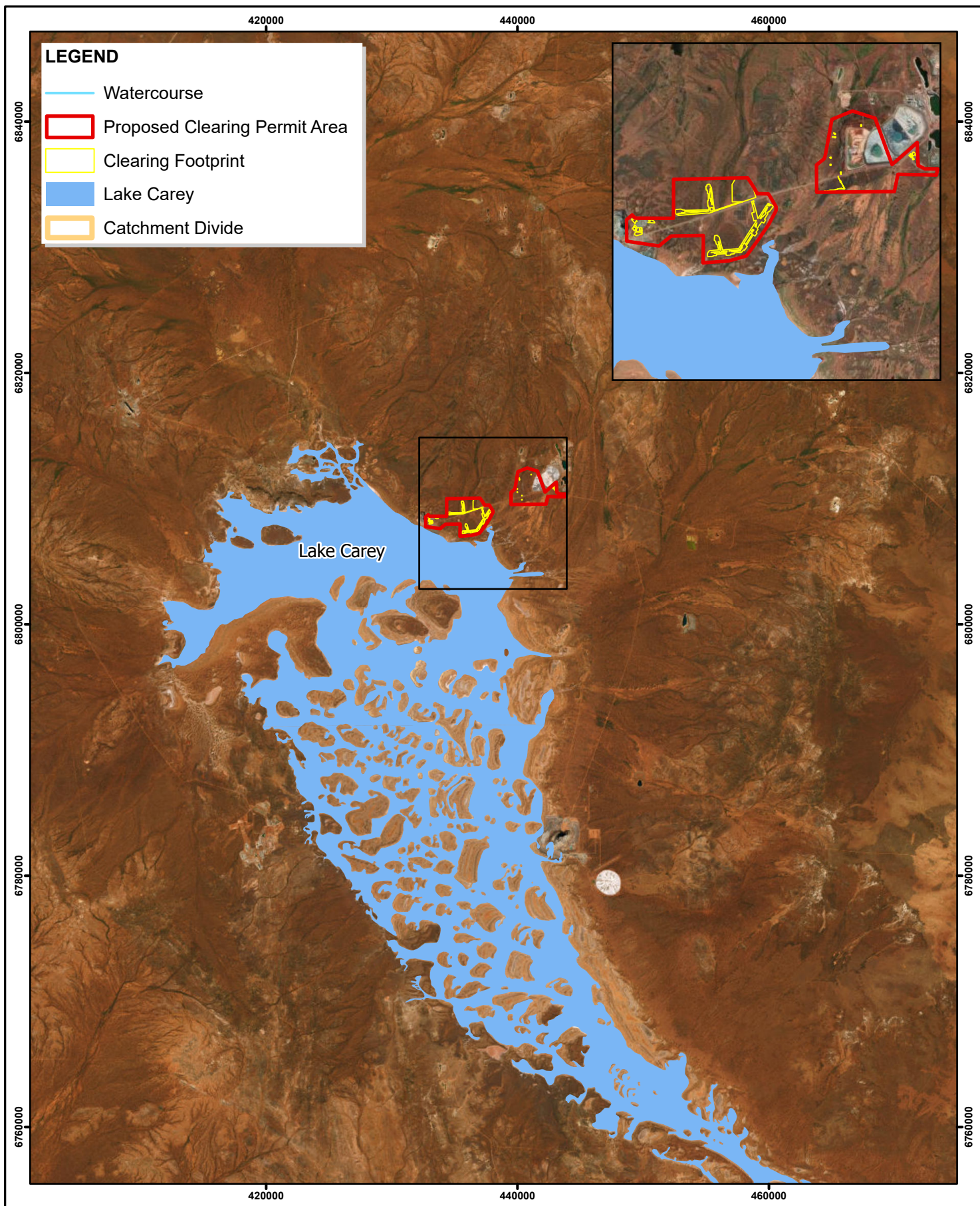
Land degradation includes any alteration to land capability, soil erosion, salinity, nutrient export, acidification, waterlogging and flooding that affects the present or future use of land. A review of the grade of soil erosion for the Yilgarn Plateau Province of Australia (Australian Government 2023) indicated the Proposed Clearing Permit Area lies within an area classified as 'Poor', attributed to the province being vulnerable to wind erosion due to low ground cover and erodible soils. Poor soil erosion grading of the province is likely attributed to agriculture and grazing activities that dominate the region. Further, the Proposed Clearing Permit Area is already subject to modification from construction of the existing solar farms and hybrid power station and proximity to mining infrastructure, including access/haul roads. The Proposed Clearing Permit Area does not occur within a known acid sulphate soils risk area (Stantec 2023).

3.8 Surface Hydrology and Hydrogeology

The Proposed Clearing Permit Area is located within the Lake Carey Catchment, which drains into Lake Carey (Figure 8) (AECOM 2018). Lake Carey, situated approximately 1.5 km to the south of the Proposed Clearing Permit Area, is part of a chain of salt lakes located in the eastern portion of the Yilgarn Craton, and these lakes are the surface expression of the Carey Palaeoriver, an ancient drainage channel (Timms 1992). Drainage is internal and occurs in a south-easterly direction during surface sheet flow. Major flood events are rare, and the lake only fills after intense winter rains or cyclonic events (Timms et al. 2006), with surface water draining from the surrounding catchments via several key tributaries. The areas around Lake Carey are dominated by calcrete and gypsiferous dunes, salt pans, and sheet wash deposits (Gray and Britt 2005). Several minor ephemeral waterways are located within, or adjacent to, the Proposed Clearing Permit Area and may present a potential flood risk (AECOM 2018). However, surface water flow is ephemeral in the local area, occurring only after substantial rainfall events, with sub-catchments discharging to the north-eastern shore of Lake Carey, predominately via shallow, low velocity sheet flow (AECOM 2018).

The closest Mt Weld carbonatite aquifer bore is located more than 15 km from the Proposed Clearing Permit Area. The closest Public Drinking Water Source Area (PDWSA) is the Priority 1 Laverton PDWSA, located approximately 30 km from the Proposed Clearing Permit Area.

Groundwater salinity in the region ranges from fresh (<3,000 mg/L total dissolved solids; TDS) to mesosaline (20,000 mg/L TDS – 50,000 mg/L TDS) closer to the margins of Lake Carey (Allen 1996), however, local groundwater salinity ranges from saline to hypersaline (Gold Fields Australia 2024). Groundwater salinity in the vicinity of the Goanna and Granny pits ranges from 14,000 mg/L TDS to 116,000 mg/L TDS, and between 1,890 mg/L TDS and 17,000 mg/L TDS adjacent to the Jubilee Pit (Gold Fields Australia 2024). Seepage of hypersaline groundwater from disused pits adjacent to the Granny Pit has resulted in a groundwater salinity of 104,000 mg/L TDS, however no significant impact has been observed from this increasing groundwater salinity.



 GOLD FIELDS Coordinate System: GDA2020 MGA Zone 51	Granny Smith Gold Mine Regional hydrology of the Proposed Clearing Permit Area 0 5 10 15 20 Kilometres	Date: 7/31/2026 Author: QUEZADAMEZAKL Figure: 8 Copyright © 2025 - Granny Smith Gold Mine Pty Ltd. All data contained in this map is reserved for exclusive use by Granny Smith Gold Mine only and no part may be reproduced for any commercial purposes without prior written permission of the General Manager of Granny Smith Gold Mine.	
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3.9 Climate

The climate of the Murchison bioregion is characterised as arid with a bimodal rainfall distribution and an annual rainfall approximately 200 mm (Gilligan 1994) however, rainfall in the area is unreliable. During summer, weather in the region is influenced by anticyclonic systems in the southeast, which result in clear skies and easterly winds. The region borders the southern end of the Intertropic Convergence Zone and, consequently, thunderstorm activity and summer rainfall are generated (Gilligan 1994). Although summer rainfall is a feature of the bioregion, a dry period lasting four to six months is not uncommon most years, typically beginning in October. During winter, weather is directly influenced by anticyclonic systems, which generate westerly winds and rain-bearing frontal systems. Winter rains are typically heaviest in late May through to August and subside during September and October as the anticyclonic conditions stabilise (Gilligan 1994).

The closest Bureau of Meteorology station to the GSM is Laverton Aero (station number 012305). Monthly mean maximum temperatures range from 18.6°C in winter (June, July) to 35.6°C in summer (January) (Figure 9). (Bureau of Meteorology 2026). Mean monthly rainfall ranges from 6.8 mm in September to 53.4 mm in February Figure 9 (Bureau of Meteorology 2026). Average annual rainfall recorded at Laverton Aero is 275.9 mm (Bureau of Meteorology 2026).

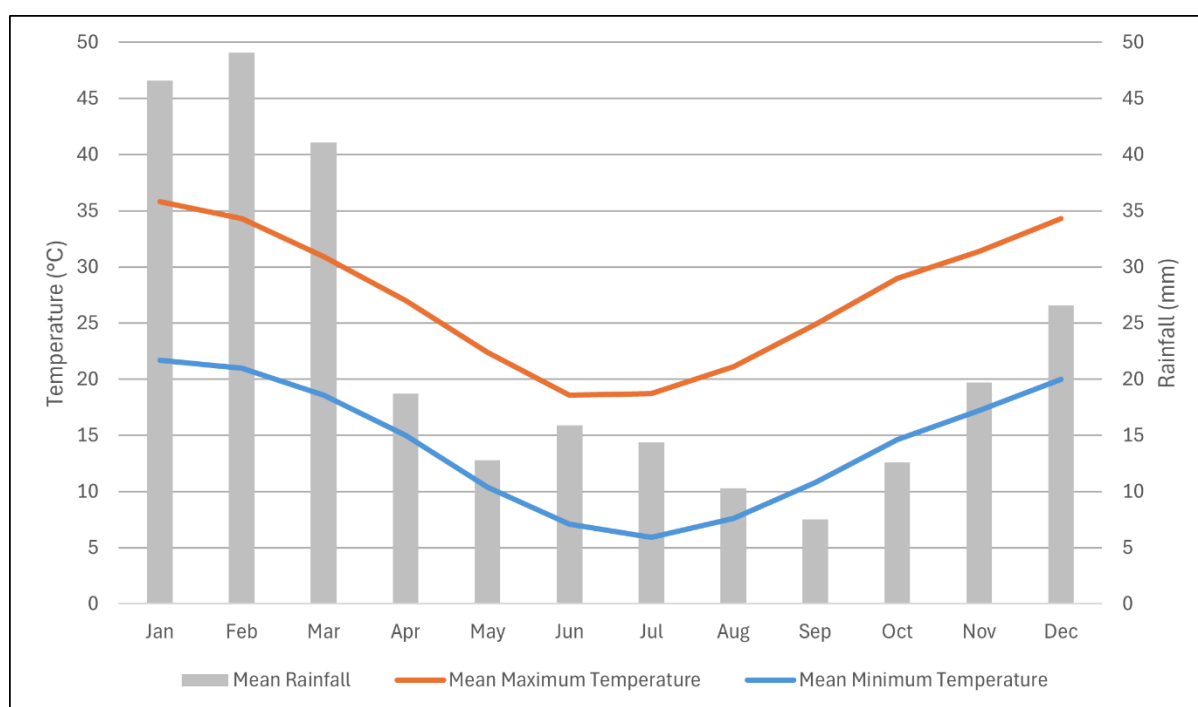


Figure 9 Mean monthly rainfall (mm) and temperature (°C) data recorded at the Laverton Aero weather station (012305)



4 FLORA AND VEGETATION

Four flora and vegetation reconnaissance surveys have been conducted in the vicinity of the Proposed Clearing Permit Area. These are shown in Table 6 and Figure 10.

Table 6 Flora and vegetation surveys for the GSM

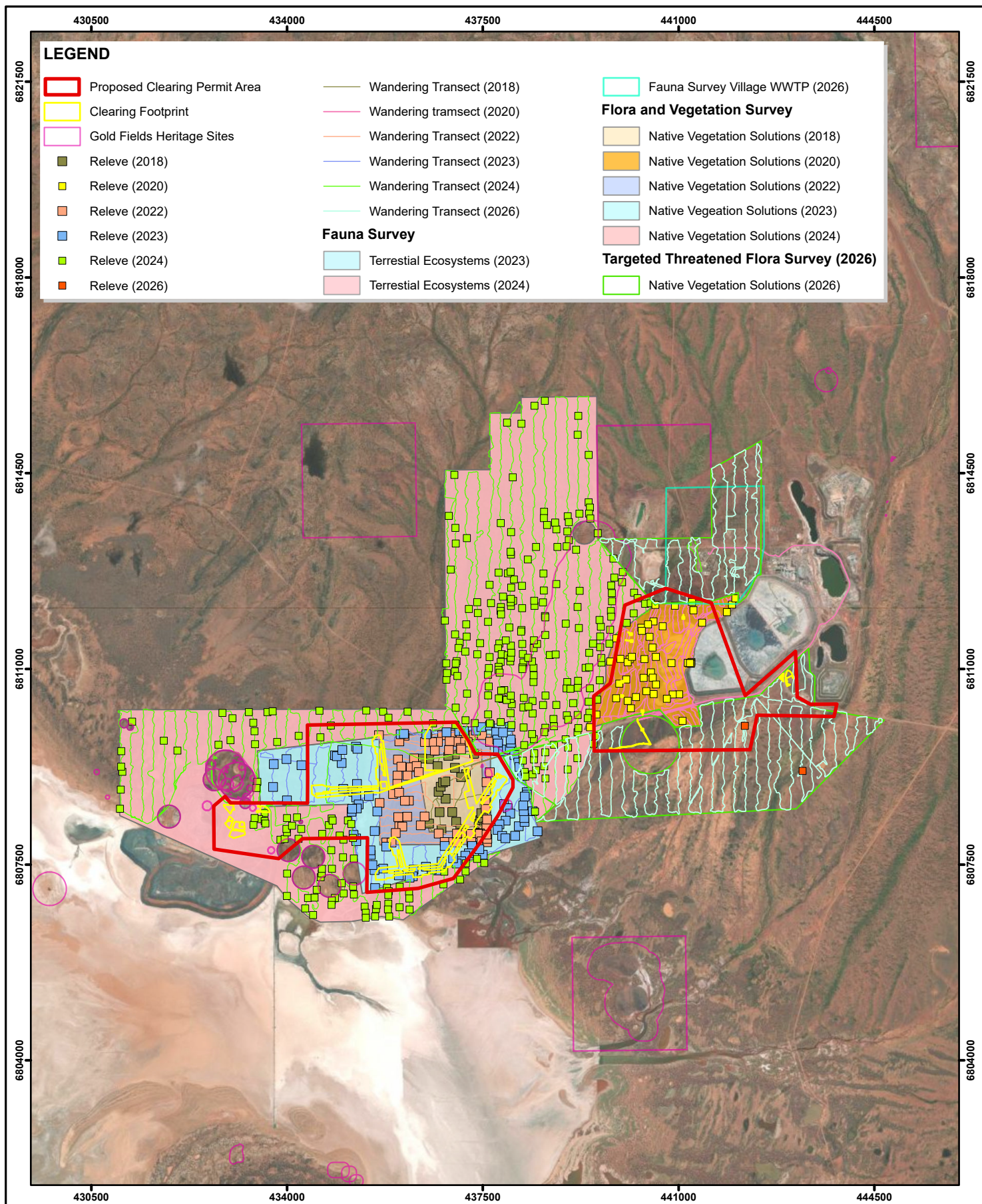
Year of Survey	Who	Purpose
2018	Native Vegetation Solutions	GSM Solar Farm project (survey completed October 2018, report finalised in January 2019)
2022	Native Vegetation Solutions	GSM Solar Farm Expansion Area (survey completed May 2022, report finalised in October 2022)
2023	Native Vegetation Solutions	Wind Farm survey (survey completed November 2023, report finalised March 2024)
2024	Native Vegetation Solutions	Wind Farm survey (survey completed Spring 2024, report finalised January 2025)
2026	Native Vegetation Solutions	Targeted Threatened Flora Search of the GSM Camp Surrounds and South of the TSF (survey completed May 2026, report finalised June 2026)
2026	Native Vegetation Solutions	Targeted Threatened Flora Search of the Wallaby Project Area (survey completed May 2026, report finalised May 2026)

4.1 Flora Assemblage

A total of 89 flora taxa from 19 families were recorded within the Native Vegetation Solutions (NVS) (2019a) study area in the central portion of the Proposed Clearing Permit Area. A total of 66 flora taxa from 20 families were recorded within the NVS (2022) study area in the central portion of the Proposed Clearing Permit Area. A total of 126 flora taxa from 24 families were recorded within the NVS (2024a) study area in the central portion of the Proposed Clearing Permit Area.

The NVS (2025a) study area covered approximately 2,828 ha, and identified a total of 189 flora taxa from 36 families were recorded.

The surveys undertaken by NVS (2024a; 2019b; 2022b; 2024b; 2025b; 2026b; 2026d) reported that the most species-rich family was *Amaranthaceae* (formerly *Chenopodiaceae*), reflecting the extensive chenopod shrublands and salt lake margin habitats present across the survey area. Fabaceae was also well represented throughout the survey area. This is followed by *Fabaceae* and *Asteraceae*. The findings from these surveys are consistent with what would be expected to occur within the Murchison bioregion, considering the landforms present, the field survey season, and the sampling intensity.



 GOLD FIELDS Coordinate System: GDA2020 MGA Zone 51		Granny Smith Gold Mine Flora, vegetation and fauna survey effort within the Proposed Clearing Permit Area 0 1 2 3 4 5 Kilometres	Date: 7/31/2026 Author: QUEZADAMEZAKL Figure: 10 Copyright © 2025 - Granny Smith Gold Mine Pty Ltd. All data contained in this map is reserved for exclusive use by Granny Smith Gold Mine only and no part may be reproduced for any commercial purposes without prior written permission of the General Manager of Granny Smith Gold Mine.	
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4.1.1 Threatened, Priority and Introduced Flora

Interrogation of the DBCA database indicated that there were no records of any Threatened or Priority taxa located within the survey area (refer to Appendix A - (NVS, 2025 - Map 3). The desktop search also indicated that there were no Threatened Flora within the 20 km radius of the survey area (NVS, 2025a), however eight Priority Flora could potentially occur. The Priority species included:

- *Calytrix praecipua* -P3
- *Goodenia lyrata* – P3
- *Lysiandra baeckeoides* - P3
- *Olearia mucronata* - P3
- *Tetracornia cymbiformis* – P3
- *Tecticornia mellarium* – P1
- *Tecticornia sp. Lake Way (P. Armstrong 05/961)* - P1
- *Vittadinia oldfieldii cervicularis var. oldfieldii* – P1

During the NVS (2025a) survey, the buffer zone for the Priority 3 Priority Ecological Community (PEC) - Mount Jumbo Range vegetation complex- Banded Ironstone Formation (BIF) was recorded in the survey area and this is synonymous with this PEC. The Mount Jumbo Range vegetation complex PEC occupies approximately 5,044 ha across its mapped extent including its 500 m buffer, however, the PEC does not occur within the proposed clearing footprint or disturbance envelope. As such, the proposed clearing will not result in the direct loss, fragmentation, or degradation of this PEC.

There were no other unique or restricted vegetation communities identified during the 2025 survey and remaining vegetation types/communities are common, widespread and well represented in the Eastern Murchison subregion.

During the NVS (2025a) survey, six weed species were recorded within the survey area, *Carrichtera annua* (Wards Weed), *Citrullus amarus* (Pie Melon), *Cuscuta planiflora* (Dodder), *Lysimachia arvensis* (Pimpernel), *Rumex vesicarius* (Ruby Dock) and *Sonchus oleraceus* (Common Sowthistle). These species are not considered a Declared Pest under the BAM Act or a WoNS (DPIRD, 2026).

During the 2026 surveys undertaken by NVS one Priority Flora species, *Hemigenia exillis* (P4), was recorded in the survey area, south of the tailings storage facility, (NVS, 2026a). A total of 20 plants were recorded within however, none of these individuals lie within the Proposed Clearing Permit Area.

4.2 Vegetation

Twenty-eight broad vegetation types were identified within the Proposed Clearing Permit Area over the last two survey efforts. (Table 7, Figure 11) (NVS 2025a; 2024a). Some of these are analogous to the previous survey, but have been classified slightly differently in the report. The buffer zone of a PEC-3 intersects survey area; Mount Jumbo Range vegetation complex- Banded Ironstone Formation. BIF was recorded in the survey area and is synonymous with this PEC (NVS 2025a). No Threatened ecological community (TEC) listed under the BC Act or *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) were noted to be in the survey area. No unique or restricted vegetation communities were identified. All vegetation types were considered to be common or widespread within the East Murchison subregion.



Table 7 Vegetation types recorded within the Proposed Clearing Permit Area

Vegetation Descriptions	Survey Area ha	Proposed Clearing Permit Area ha	Clearing Footprint ha (% with Proposed Clearing Permit Area)
Mulga and <i>Acacia burkittii</i> over undulating rocky hills	18.08	0	0 (0%)
Mulga shrubland	990.03	156.12	26.28 (1.6)
Acacia and Hakea open shrubland	14.01	12.94	0.008 <(0.1%)
Mulga and <i>Acacia resinimarginea</i> over undulating rocky Ironstone hills	296.54	<0.01	0
Mulga over Senna shrubland on rocky hills	87.11	0	0
Mulga creekline	321.22	100.64	2.78 (0.16%)
Mulga shrubland over BIF rocky outcrops	64.67	14.09	0.36 (0.4%)
Mulga woodland over chenopod shrubland	315.95	163.54	30.34 (1.79%)
Mulga over Ironstone outcrops	2.38	2.38	0.54 (0.03%)
Mulga over <i>Maireana sedifolia</i> and sclerophyll shrubland	9.14	8.58	8.28 (0.49%)
Chenopod shrubland	584.02	188.25	43.66 (2.58%)
Mulga woodland over Ironstone rocky flats	67.50	35.84	11.12 (0.66%)
Bare Salt Lake	21.88	0	0
<i>Tecticornia</i> shrubland	74.31	8.38	0.31 (0.01%)
Mulga over <i>Eremophila forrestii</i> and tussock grasslands	537.05	211.78	42.46 (2.5%)



Vegetation Descriptions	Survey Area ha	Proposed Clearing Permit Area ha	Clearing Footprint ha (% with Proposed Clearing Permit Area)
Open Mulga Woodland	20.69	20.69	7.40 (0.43%)
Melaleuca interioris shrubland	2.71	2.00	0
Bare Clay Pan	3.76	0	0
Low Chenopod shrubland	72.17	0	0
<i>Acacia oswaldii</i> and Mulga over <i>Eremophila</i> shrubland	10.15	0	0
Mulga and <i>Acacia quadrimarginea</i> on laterite rises	2.46	0	0
Mulga over hummock grassland	7.05	0	0
Existing Disturbance	574.65	373.23	3.20 (0.19%)
Unmapped	0	393.78	2.12 (0.13%)
Total	4,491.80	1,692.27	184.69 (10.91%)

4.2.1 Vegetation Conditions

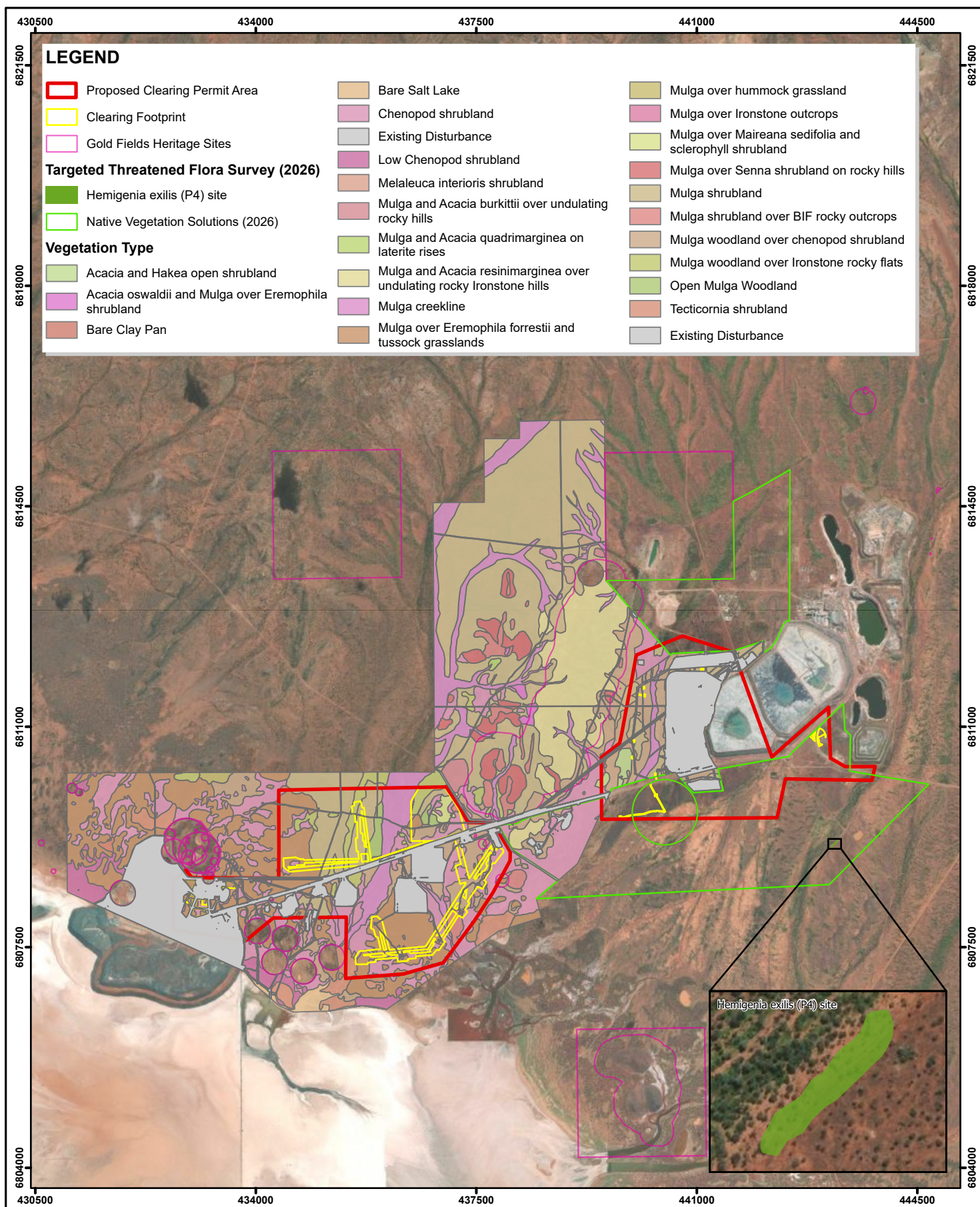
The vegetation condition of the Proposed Clearing Permit Area was assessed using the Keighery scale for vegetation condition (Keighery 1994). The condition of the vegetation for the survey area ranged from 'Completely Degraded' to 'Very Good' (Table 8, Figure 12) with the majority of the area classifies as 'Good' (NVS 2025a). There were no areas identified as being in 'Pristine' condition.

As *Phytophthora cinnamomi* has not been documented from the Murchison bioregion (DBCA, 2026), there is no risk of the introduction or spread of dieback.

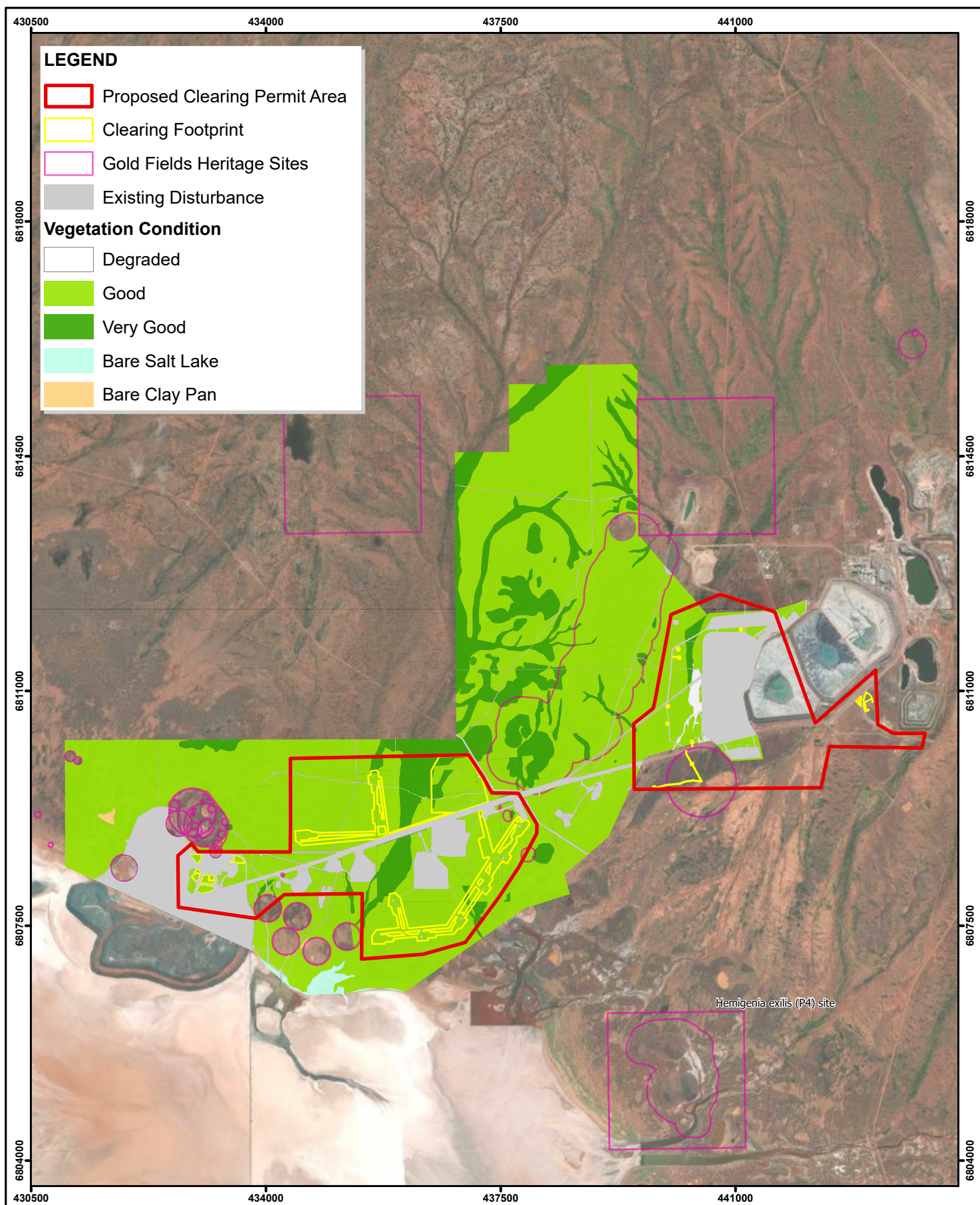
However, as indicated within the dieback guidelines (DBCA, 2020), other species of *Phytophthora* may persist east of the 400 mm isohyet in unusually wet conditions. It is therefore recommended to conduct a risk assessment, prior to undertaking clearing activities, as per the DBCA guidelines.

**Table 8 Vegetation Condition in the Proposed Clearing Permit Area**

Condition Rating	Known Extent within Survey Area ha	Proposed Clearing Permit Area Proportion ha	Clearing Footprint ha (% of survey area)
Very good	533.97	114.93	12.78 (2.4%)
Good	2951.71	799.08	167.94 (5.7%)
Degraded	14.99	14.99	0.87 (5.8%)
Existing Disturbance	574.65	373.23	3.20 (0.6%)
Bare Clay	3.76	0.00	0.00
Bare Salt Lake	21.90	0.00	0.00
Total	4100.98	1302.23	369.58



GOLD FIELDS Coordinate System: GDA2020 MGA Zone 51	Granny Smith Gold Mine Vegetation descriptions recorded from within the Proposed Clearing Permit Area 0 1 2 3 4 5 Kilometres	Date: 7/31/2026	
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 GOLD FIELDS Coordinate System: GDA2020 MGA Zone 51	 Granny Smith Gold Mine Vegetation condition within the Proposed Clearing Permit Area  Kilometres	Date: 7/31/2026 Author: QUEZADAMEZAKL Figure: 12 Copyright © 2025 - Granny Smith Gold Mine Pty Ltd. All data contained in this map is reserved for exclusive use by Granny Smith Gold Mine only and no part may be reproduced for any commercial purposes without prior written permission of the General Manager of Granny Smith Gold Mine.	
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5 TERRESTRIAL FAUNA

5.1 Fauna Assemblage

Five fauna studies have been conducted over the GSM operations for the purposes of the Project. There are shown in Table 9.

Table 9 Terrestrial Fauna for the Granny Smith Mine

Year of Survey	Who	Purpose
2018	Terrestrial Ecosystems	Vertebrate Fauna Risk Assessment for the Granny Smith Solar Power Farm Project (survey completed in October 2018, report finalised November 2018)
2022	Terrestrial Ecosystems	Desktop Vertebrate Fauna Assessment Expansion of the Solar Power Farm Project Area (report finalised in October 2022)
2018 and 2023	Terrestrial Ecosystems	Basic Vertebrate Fauna Assessment Expansion of the Renewable Energy Zone (report finalised April 2024)
2024	Donato Environmental Services	Bat activity at Granny Smith Gold Mine: 2024 Annual Report (report finalised in February 2025)
2026	Terrestrial Ecosystems	Desktop Vertebrate Fauna Assessment - Granny Smith Mine Expansion 2026

A Detailed Vertebrate Fauna Survey was undertaken by Terrestrial Ecosystems in 2011, which was undertaken to the north of the Proposed Clearing Permit Area and included a trapping program and an avifauna survey. The survey area was reported to support similar fauna habitat to that in the Proposed Clearing Permit Area (Terrestrial Ecosystems 2024b). The 2011 survey was also used to inform on the likelihood of occurrence of significant fauna, due to the close proximity to the Proposed Clearing Permit Area and the similarity of fauna habitat present (Terrestrial Ecosystems 2024b). Terrestrial fauna survey effort within the Proposed Clearing Permit Area is shown in Figure 13.

The 2011 trapping program recorded a reptile, mammal, and amphibian assemblage comparable to that recorded in other areas of open Mulga woodland in the East Murchison subregion. The exception was the capture of three Long-tailed Dunnart (Priority 4) individuals, which was unexpected given the previous nearest known record at the time was 200 km southeast of the Proposed Clearing Permit Area. Subsequently, the Long-tailed Dunnart has been recorded at several BIF in the East Murchison subregion (Terrestrial Ecosystems 2022; 2024b).

Terrestrial Ecosystems (2022) recorded in their avifauna survey 820 individuals from 60 species across 70 survey sites and an additional 495 opportunistic observations. A proportion of these species, primarily the waterbird species, are rarely observed in the north-eastern Goldfields; however, substantial rainfall resulted in increased observations of these birds during the survey period. No Malleefowl nests or tracks were observed (Terrestrial Ecosystems 2022; 2024b).



Four species of bat were recorded during the 2011 survey, comprising Gould's Wattled Bat (*Chalinolobus gouldii*), the Inland Free-tailed Bat (*Ozimops petersi* / *Mormopterus* sp. 3), the Inland Broad-nosed Bat (*Scotorepens balstoni*), and Finlayson's Cave Bat (*Vespadelus finlaysoni*) (Terrestrial Ecosystems 2022; 2024b). These species are commonly recorded throughout the Murchison bioregion.

5.1.1 Fauna of Significance

Terrestrial Ecosystems (2024b) identified 15 significant species with the potential to occur within, or adjacent to, the Proposed Clearing Permit Area. Of these species, two were considered Likely to occur in the survey area; Long-tailed Dunnart (*Sminthopsis longicaudata*) (P4) and the Southern Whiteface (*Aphelocephala leucopsiss*) (V).

The Long-tailed Dunnart (P4) is widely distributed throughout the arid zone of Australia, specifically the Gibson Desert, West MacDonnell National Park, Murchison, Carnarvon Basin and the Pilbara. Its preferred habitat is rugged rocky landscapes that support a low open woodland or shrubland of *Acacia* spp., particularly Mulga, with an understory of spinifex hummocks, perennial grasses and *Senna* spp. The species has been caught in the Murchison bioregion at Mt Ida and Bottle Creek located approximately 200 km to the west of the GSM. Three adult Long-tailed Dunnarts were caught in small rocky outcrops within approximately 3 km of the Project (Terrestrial Ecosystems 2022) and a single individual was caught during a subsequent targeted survey. Suitable habitat for this species within Proposed Clearing Permit Area consists of at least 11.2 ha of small rocky outcrops of banded iron formation vegetated with open Mulga woodland. This species is considered Likely to occur in the Proposed Clearing Permit Area. Clearing of the 11.2 ha of small rocky outcrops of banded iron formation is unlikely to have a significant impact on this species, given its presence elsewhere in the Goldfields (Terrestrial Ecosystems 2022).

The Southern Whiteface was listed as a significant species under the EPBC Act in March 2023. It is a small bush bird found in the arid and semi-arid interior from the WA coast near Hamelin Bay through the Great Victoria Desert into the arid areas of South Australia, Victoria, NSW and Queensland. Southern Whitefaces prefer open woodlands and shrublands with an understorey of grasses, shrubs, or both. These areas are usually in habitats dominated by acacias or eucalypts on ranges, foothills and lowlands, and plains. This species is almost an exclusive ground forager, favouring habitat with low tree densities and herbaceous understoreys with litter cover. Its diet mainly consists of insects, spiders, and seeds (DCCEEW 2023).

The Southern Whiteface has been recorded in multiple fauna surveys in the region, and is considered likely to be present in the Proposed Clearing Permit Area (Terrestrial Ecosystems 2024b). Evidence has shown that the species will readily move if disturbed. Given its widespread distribution, abundance in surveys and ability to move if disturbed, it is unlikely to be significantly impacted by vegetation clearing and low impact activities in the Proposed Clearing Permit Area.

5.2 Fauna Habitat

The fauna habitat types recorded during the 2018 and 2022/24 surveys differed slightly in their descriptions; therefore, they were amalgamated to allow continuity in habitat mapping across the Proposed Clearing Permit Area (Table 10) (Terrestrial Ecosystems 2018; 2022). A total of seven broad fauna habitats were identified by Terrestrial Ecosystems (2022) (Table 11, Figure 13). The Mulga and Chenopod shrubland was the most widespread habitat type, occupying 34.6% (1,693.7 ha) of the Terrestrial Ecosystems (2022) survey area, followed by open Mulga woodland over scattered low shrubs and grasses with 30.3% (1,481.9 ha), chenopod shrubland with 20.4% (999.8 ha), disturbed areas with 9.8% (478.5 ha), samphire (*Tecticornia*) shrubland with 2% (96.6 ha), open Mulga woodland over ironstone gravel with 1.6% (76.6 ha), Claypan with 0.8% (38.7 ha), and banded ironstone formation making up 0.7% (33.09) of the survey area.

The fauna habitat in the Proposed Clearing Permit Area is predominantly characterised by Mulga, varying in density across the area and typically sparse (Terrestrial Ecosystems 2022), with ephemeral waterways



supporting denser vegetation. The fauna habitat condition within the Proposed Clearing Permit Area varied from Degraded to Good with the more degraded areas resulting from existing infrastructure development, historical exploration activity, and cattle grazing. Extensive evidence of rabbits and other feral fauna were recorded (Terrestrial Ecosystems 2022).

Terrestrial Ecosystems increased the survey footprint to consolidate fauna habits (Terrestrial Ecosystems 2024a; 2024b). The habitats were consistent with previous surveys (Terrestrial Ecosystems 2018; 2022). The density of trees and shrubs in the relatively undisturbed areas varied across the survey area but the vegetation was mostly sparse. The fauna habitat varied from highly degraded to good, with the more degraded areas due to a haul road that runs east-west through the survey area and the solar farm.

Table 10 Amalgamated fauna habitat descriptions within the Proposed Clearing Permit Area

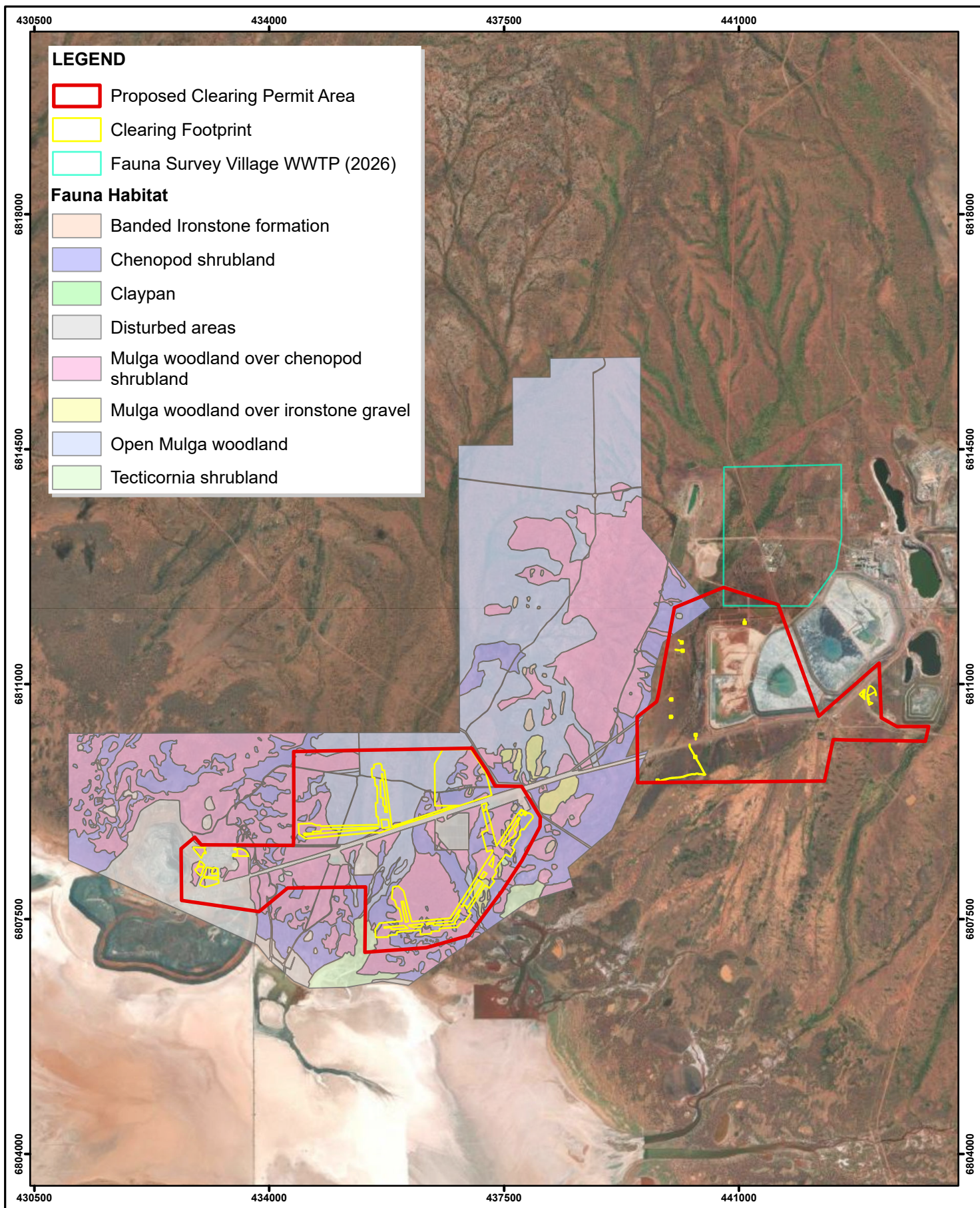
Amalgamated Fauna Habitat Types	
Original Terrestrial Ecosystems (2018) Fauna Habitat Type Description	Amalgamated with Terrestrial Ecosystems (2022) Fauna Habitat Type Description
Samphire shrubland	Samphire shrubland
Chenopod and mulga shrubland over scattered grasses of varying densities on a stony sandy-clay or sandy-clay substrate	Mulga and chenopod shrubland
Open mulga woodland over scattered low shrubs and grasses of varying densities on a stony sandy-clay or sandy-clay substrate	Open mulga woodland over scattered low shrubs and grasses
Open chenopod shrubland over grasses of varying densities on a stony sandy-clay or sandy-clay substrate	Chenopod shrubland
Banded ironstone rocky ridgeline with scattered mulga and shrubs	Open mulga woodland over scattered low shrubs and grasses on banded ironstone formations

Table 11 Fauna habitats recorded within the Proposed Clearing Permit Area

Habitat type		Survey Area ha	Proposed Permit Clearing Area ha	Clearing Footprint ha %		Value to fauna
Tecticornia shrubland		96.63	14.54	0.36	0.37	Widespread and well represented across the East Murchison bioregion, and abundant in adjacent areas. Has been heavily grazed and is of limited significance to fauna.
Mulga	woodland over chenopod shrubland	1693.66	605.05	140.81	8.31	



Habitat type		Survey Area ha	Proposed Permit Clearing Area ha	Clearing Footprint ha %		Value to fauna
Open woodland over scattered low shrubs and grasses	mulga	1481.91	431.12	89.84	6.06	
Chenopod shrubland		999.80	385.57	95.50	9.55	
Banded ironstone formation	ironstone	33.09	11.27	3.73	11.26	Not well represented across the East Murchison bioregion, but abundant in adjacent areas. Likely habitat for the fauna species of conservation significance Long-tailed Dunnart (<i>Sminthopsis longicaudata</i>) and Southern Whiteface (<i>Aphelocephala leucopsiss</i>).
Mulga over gravel	woodland ironstone	76.61	20.58	9.84	12.84	
Claypan		38.68	0.57	0	0	
Disturbed areas		478.46	235.34	6.06	1.27	Cleared areas largely comprised bare open ground (e.g., tracks, roads) with minimal vegetation and debris. This habitat lacks shelter and complexity and would provide minimal value to fauna. The central portion of the Project Area contains the existing solar farm infrastructure.
Total		4,898.8	1692.27	184.69	49.66	



GOLD FIELDS

Coordinate System:
GDA2020 MGA Zone 51



Granny Smith Gold Mine

**Fauna habitats
within the Proposed Clearing Permit Area**



Date: 7/31/2026

Author: QUEZADAMEZAKL

Figure: 13

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6 ENVIRONMENTAL MANAGEMENT AND REHABILITATION

GSM has considered the EPA's mitigation hierarchy of Avoid, Minimise, Rehabilitate and Offset (EPA 2023) which is founded on a series of controls focussed on reducing adverse impacts to the surrounding environment and to the EPA's key environmental factors. The key environmental factors for the Project include Flora and Vegetation, Terrestrial Fauna, and Social Surroundings. Mitigation approaches are detailed in the sections below and it is not anticipated that environmental offsets will be required as part of the Project.

6.1 Avoid

The following mitigation approaches to avoid impact on native vegetation as a result of clearing are:

- Implementation of the Granny Smith Surface Disturbance Procedure to ensure all clearing works are compliant with regulatory requirements and are within the approved boundary.
- The area to be cleared shall be clearly demarcated and machinery operators made aware of the operational boundary, following confirmation with the relevant manager.
- Where possible, clearing of well-established vegetation will be avoided.

6.2 Minimise

GSM has a robust environmental framework to manage and monitor activities on site to achieve positive environmental outcomes. The following mitigation approaches to minimise impact on native vegetation as a result of clearing area currently practice by GSM personnel.

6.2.1 Land Clearing and Flora Management

- Adherence to both the construction and operational environmental management plans with respect to clearing native vegetation.
- Clearing awareness training is undertaken by all personnel involved in clearing activities.
- Vegetation clearing is kept to a minimum to facility the work required.
- Surface Disturbance Permit process is followed, including issuing Surface Disturbance Permits for all clearing.
- Clearing extents and approved ground disturbance areas are to be pegged by surveyors prior to ground disturbance commencing.
- In unpegged areas, the use of GPS-guided machinery may be used.

6.2.2 Weed Management

- Site Disturbance Permit Procedure is implemented to ensure all clearing works are compliant with regulatory requirements and within approved boundaries.
- The GSM Weed Management Procedure is to be implemented to prevent the introduction and spread of weeds into the Proposed Clearing Permit Area, weed-free areas, and between work areas.
- Vehicles with ground engaging equipment are cleaned and inspected prior to entry to site or moving between areas on-site.
- Vehicles and equipment are restricted to designated roads and tracks, unless authorised under a Surface Disturbance Permit.
- Regular inspection and maintenance of vehicles and equipment is undertaken.
- Movement of topsoil at known weed locations is restricted.
- Declared weed occurrences or other weed infestations are reported to the Environmental Department.
- Where deemed necessary, weed control programs are conducted, including herbicide spraying or physical removal.



6.2.3 Fauna

- Clearing awareness training is undertaken by all personnel involved in clearing activities, including specific information on significant fauna within the Proposed Clearing Permit Area, the requirements for clearing, and the Site Disturbance Permit Procedure processes.
- Vegetation clearing is kept to the minimum amount required for site activities.
- Vehicles and equipment are restricted to designated roads and tracks.
- Machinery and vehicle movements are managed during construction to minimise the potential for vehicle strikes and allowing sufficient time for fauna to move on.
- Machinery and vehicle movements that must be undertaken between dusk and dawn are limited to low speeds on access tracks.

6.2.4 Dust Deposition on Vegetation

- Dust is to be minimised and managed during land clearing activities, aiming to reduce impacts to surrounding fauna and vegetation from dust, in line with the GSM Environmental Management Plan.
- Vehicles and equipment are to stay on designated roads and tracks, unless authorised otherwise.
- Dust suppression will be used for cleared areas.
- Speed limits apply on site.
- Clearing activities (including topsoil stripping) will temporarily cease during periods of high wind.

6.2.5 Water Management

- Where possible, progressive land clearing will be undertaken to limit land exposure and reduce erosion.
- To manage sediment run off, containment bunds on the downstream side of topsoil stockpiles will be constructed for the duration of operations, ensuring that topsoil eroded during rainfall events is not lost in runoff.
- Suitable drainage features are incorporated into the design to manage surface water runoff.

6.2.6 Hydrocarbon Management

- Hydrocarbons are managed in accordance with legislation, regulations, guidance materials, and licenses and in line with existing site procedures.
- Disposal of hydrocarbons is undertaken in accordance with existing systems, including waste oil separation and storage facilities in maintenance workshops.
- Storage and handling of hydrocarbons and wastes comply with all relevant local and state regulations, including the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007, the Environmental Protection (Controlled Waste) Regulations 2004, and AS 1940:2017: The storage and handling of flammable and combustible liquids.
- Spills or leaks of hydrocarbons, including secondary containment, are managed through the Hydrocarbon and Chemical Management Procedure.
- Chemicals, including containment in bunding, storage in double skinned tanks, and maintenance of spill protection equipment, are managed through the Hazardous Substances Management Plan.
- Hydrocarbon spills, including immediate bunding to prevent spread, and removal of hydrocarbon contaminated material for processing at the bioremediation facility are managed through the Procedure for Hydrocarbon and Chemical Management.

6.3 Rehabilitation

The following mitigation approaches will be implemented:

- All closure and rehabilitation activities will be completed in line with the GSM Mine Closure Plan.
- Undertake progressive rehabilitation where temporary clearing has occurred.



- Salvage and stockpile soil and/or habitat features (e.g. vegetation, stumps, logs, boulders) during clearing for use in rehabilitation programs.
- At the end of operations:
 - De-energise, dismantle, and remove all infrastructure including all solar array panels.
 - Selling, or transport off-site, switchgear and battery storage.
 - Remove all powerlines and cut power poles to ground level, roll wiring, and transport all components off site.
 - Disturbed ground shall be contour ripped, spread with topsoil (minimum of 100 mm deep), and revegetated with flora species of local provenance to reflect the floristics of the local vegetation type.
- Appropriate rehabilitation implementation plans will be developed throughout the course of the project and address factors including surface treatments; seed selection, collection, storage and management.



7 ENVIRONMENTAL ASSESSMENT

7.1 Assessment Against the Ten Clearing Principles

An assessment against Schedule 5 of the EP Act – Principles for clearing native vegetation (10 clearing principles) was undertaken and a precautionary approach was applied, which assumed that all habitats within the Proposed Clearing Permit Area have an equal likelihood of being cleared. Based on this assumption, the Project is not at variance to clearing principles (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j) (Table 12).

The assessment was made using information obtained from existing surveys and reports completed by NVS (2019a; 2022a; 2024a; 2025a) and Terrestrial Ecosystems (2018; 2022; 2024a; 2024b).



Table 12 Assessment of the Project against the ten clearing principles of clearing native vegetation

Clearing Principle	Assessment	Management	Outcome
Principle (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.	Flora and Vegetation: - A total of 66 flora taxa from 20 families were recorded within the NVS (2019a) study area, 89 flora taxa from 19 families were recorded within the NVS (2022a) study area and 189 species from 36 families within the 2024 Study area. The findings from these surveys are consistent with what would be expected to occur within the Murchison bioregion, considering the landforms present, the field survey season, and the sampling intensity. - No Declared Pests or WoNS were recorded from the Proposed Clearing Permit Area. - Twenty-eight vegetation types have been identified across the two surveys within the Proposed Clearing Permit Area, including the vegetation types of Bare Salt Lake. The Mount Jumbo Range vegetation complex - Banded Ironstone Formation (P3) was found in the survey area, with 0.12 ha recoded within the Clearing Footprint. No TEC listed vegetation types listed under the BC Act or EPBC Act were recorded any of the surveys. All vegetation types surveyed are considered common or widespread within the East Murchison subregion.	Avoid: - The Granny Smith Surface Disturbance procedure will be implemented to ensure all clearing works are compliant with regulatory requirements and are within the approved boundary. - The area to be cleared will be pegged, clearly demarcated and machinery operators made aware of the approved clearing boundary, following confirmation with the relevant manager. - Where possible, clearing of well-established vegetation will be avoided Minimise: - Adhere to both construction and operational environmental management plans with respect to clearing native vegetation. - Clearing awareness training undertaken by all personnel involved in clearing activities. - Vegetation clearing minimised as far as practicable. - Site Disturbance Permit Procedure is implemented to ensure all clearing works are compliant with regulatory requirements and within approved boundaries. - The GSM Weed Management Procedure is to be implemented to prevent the introduction and spread	The proposed clearing is not at variance with this principle



Clearing Principle	Assessment	Management	Outcome
	- The database searches undertaken by NVS (2022a) indicated that six taxa of significance occur to within 20 km of the Project, comprising one P1 taxa and five P3 taxa; however, none of the NVS (2019a; 2022a; 2024a; 2025a) surveys recorded Threatened or Priority flora taxa within the Proposed Clearing Permit Area. - While the flora of the local area is relatively diverse, the Proposed Clearing Permit Area is not considered to have a high level of biological diversity. Terrestrial Fauna: - The 2011 survey summarised in Terrestrial Ecosystems (2022) documented a terrestrial fauna assemblage comparable to that recorded in other areas of open Mulga woodland in the East Murchison subregion. Terrestrial Ecosystems (2024b) also identified 15 conservation significant species with the potential to occur within, or adjacent to, the Project; however, with the exception of the Southern Whiteface and the Long-tailed Dunnart, the majority were considered Unlikely to occur. - The 2011 avifauna survey recorded 820 individuals from 60 species across 70 survey sites and an additional 495 opportunistic observations. No Malleefowl nests or tracks were observed.	of weeds into the Proposed Clearing Permit Area, weed-free areas, and between work areas - Vehicles with ground engaging equipment are to be cleaned and inspected prior to entry to site or moving between areas on-site. - Vehicles and equipment will be restricted to designated roads and tracks, unless authorised under a Surface Disturbance Permit. - Ensure timely response for the management of any declared weed occurrences or other weed infestations. - Where deemed necessary, weed control programs will be implemented, including herbicide spraying or physical removal. - Clearing extents and approved ground disturbance areas will be pegged by surveyors in the field prior to ground disturbance commencing. - In unpegged areas, the use of GPS guided machinery may be used, provided the appropriate Site Disturbance Permit has been followed. - Dust is to be minimised and managed during land clearing activities, aiming to reduce impacts to surrounding fauna and vegetation from dust, in line with the GSM Environmental Management Plan - Dust suppression will be used for cleared areas. - Clearing (including topsoil stripping) will temporarily cease during periods of high wind. Rehabilitate: - All closure and rehabilitation activities will be completed in line with the GSM Mine Closure Plan	



Clearing Principle	Assessment	Management	Outcome
	- Four species of bat were recorded during the 2011 survey; Gould's Wattled Bat, Inland Free-tailed Bat, Inland Broad-nosed Bat, and Finlayson's Cave Bat, all commonly recorded throughout the Murchison bioregion (Terrestrial Ecosystems 2022). - The capture of three Long-tailed Dunnart (P4) individuals was unexpected given the previous nearest known record at the time was approximately 200 km southeast of the Project. Subsequently, the Long-tailed Dunnart (P4) has been recorded at several banded iron formations in the East Murchison subregion, as well as adjacent to the Project during a subsequent targeted survey (Terrestrial Ecosystems 2022). As a result, it was considered Likely that the Long-tailed Dunnart (P4) could occur within the Proposed Clearing Permit Area (Terrestrial Ecosystems 2024b). - It is unlikely that clearing of vegetation will have significant impact on the Long-tailed Dunnart (P4) when considered in a bioregional context, due to the availability of similar open Mulga woodland and banded iron formation habitat throughout the Murchison bioregion (Terrestrial Ecosystems 2022). Further, the Long-tailed Dunnart (P4) has been caught in the Murchison bioregion at Mt Ida and Bottle Creek, although these specimens were approximately 200 km to the west of the GSM.	- Salvage and stockpile soil and/or habitat features (e.g. vegetation, stumps, logs, boulders) during clearing for use in rehabilitation programs. - Disturbed ground shall be contour ripped, spread with topsoil (minimum of 100 mm deep), and revegetated with indigenous flora species to reflect the floristics of the local vegetation type. - Appropriate rehabilitation implementation plans will be developed throughout the course of the project and address factors including surface treatments; seed selection, collection, storage and management. - Undertake progressive rehabilitation where applicable. - Commence rehabilitation activities soon as practicable following closure.	



Clearing Principle	Assessment	Management	Outcome
	While the fauna of the local area is moderately diversity, the clearing of native vegetation for the Project is not considered to have a high level of biological diversity.		
Principle (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 indigenous to Western Australia.	- Fifteen vegetation groups were reported in the 2025 study NVS. These are considered to be reflective of the eight broad vegetation groups identified in the NVS survey (2022a) with the addition of Bare Salt Plake and Bare Clay Pan. The Mount Jumbo Range vegetation complex - Banded Ironstone Formation (P3) was found in the survey area, with 0.12 ha recoded within the Clearing Footprint. No TEC listed vegetation types listed under the BC Act or EPBC Act were recorded any of the surveys. All vegetation types were considered common or widespread within the East Murchison subregion. - The 2011 survey summarised in Terrestrial Ecosystems (2022) documented a terrestrial fauna assemblage comparable to that recorded in other areas of open Mulga woodland in the East Murchison subregion. Terrestrial Ecosystems (2024b) also identified 15 conservation significant species with the potential to occur within, or adjacent to, the Project; however, with the exception of the Southern Whiteface and the Long-tailed Dunnart, the majority were considered Unlikely to occur. The habitat for these species is considered well represented in the broader	Avoid - Procedure for Granny Smith Surface Disturbance will be implemented to ensure all clearing works are compliant with regulatory requirements and are within the approved boundary. - The area to be cleared will be clearly demarcated and machinery operators made aware of the operational boundary, following confirmation with the relevant manager. - Where possible, clearing of well-established vegetation will be avoided Minimise - Adhere to relevant construction and/or operational environmental management plans with respect to clearing native vegetation. - Clearing awareness training undertaken by all personnel involved in clearing activities. - Vegetation clearing will be kept to the minimum amount required, as far as practicable. - Site Disturbance Permit is followed to ensure all clearing works are compliant with regulatory requirements and are within approved boundary.	The proposed clearing is not likely to be at variance with this principle



Clearing Principle	Assessment	Management	Outcome
	area and therefore the clearing activities are not considered to have a significant impact on their habitat • The capture of three Long-tailed Dunnart (P4) individuals was unexpected given the previous nearest known record at the time was 200 km southeast of the Proposed Clearing Permit Area. Subsequently, the Long-tailed Dunnart (P4) has been recorded at several banded iron formations in the East Murchison subregion, as well as adjacent to the Project during a subsequent targeted survey (Terrestrial Ecosystems 2022). As a result, it was considered Likely that the Long-tailed Dunnart (P4) could occur within the Proposed Clearing Permit Area. • It is unlikely that clearing of vegetation will have significant impact on the Long-tailed Dunnart (P4) due to the availability of similar open Mulga woodland and banded iron formation habitat throughout the Murchison bioregion (Terrestrial Ecosystems 2022). Furthermore, it is unlikely that clearing of vegetation will fragment, restrict or isolate potential populations of the Long-tailed Dunnart (P4) within the Proposed Clearing Permit Area. • The Southern Whiteface has been recorded frequently in the region and is likely to be present in the Project area and has been noted to readily move if disturbed. Given the widespread distribution of this species and its habitat is well represented within the broader	• Clearing extents and approved ground disturbance areas will be pegged by surveyors in the field prior to ground disturbance commencing. • In unpegged areas, the use of GPS guided machinery may be used, provided the appropriate Site Disturbance Permit is followed. • Vehicles and equipment will be restricted to designated roads and tracks, unless authorised under a Surface Disturbance Permit. Rehabilitate: • All closure and rehabilitation activities will be completed in line with the GSM Mine Closure Plan • Salvage and stockpile soil and/or habitat features (e.g. vegetation, stumps, logs, boulders) during clearing for use in rehabilitation programs. • Disturbed ground will be contour ripped, spread with topsoil (minimum of 100 mm deep), and revegetated with indigenous flora species to reflect the floristics of the local vegetation type. • Appropriate rehabilitation implementation plans will be developed throughout the course of the project and address factors including surface treatments; seed selection, collection, storage and management. • Undertake progressive rehabilitation as far as practicable. • Commence rehabilitation activities soon as practicable following closure.	



Clearing Principle	Assessment	Management	Outcome
	area, it is unlikely to be significantly impacted by the clearing of native vegetation and low impact activities required for the Project.		
Principle (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.	The database searches undertaken by Native Vegetation Solutions (2022a; 2024a; 2025a) indicated that six taxa of conservation significance occur to within 20 km of the Proposed Clearing Permit Area, comprising one P1 taxa and five P3 taxa; however, neither of the NVS (2019a; 2022a; 2025a; 2024a) surveys recorded Threatened or Priority flora taxa within the Proposed Clearing Permit Area.	Based on the assessment no mitigation approaches are proposed.	The proposed clearing is not likely to be at variance with this principle
Principle (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.	Twenty-eight vegetation groups were reported across the two survey conducted by NVS (2024a; 2024a; 2022a; 2019a). The surveys from NVS (2025a) did identify the vegetation unit of Bare Salt Lake within the Proposed Clearing Permit Area and Bare Clay Pan within the wider survey area. No TEC listed vegetation types listed under the BC Act or EPBC Act were recorded any of the surveys. All vegetation types were considered common or widespread within the East Murchison subregion.	Based on the assessment no mitigation approaches are proposed.	The proposed clearing is not at variance with this principle
Principle (e)	Two vegetation associations intersect the Proposed Clearing Permit Area; Laverton 18 and Laverton 389 vegetation association. T and the	Avoid:	The proposed clearing is not at variance



Clearing Principle	Assessment	Management	Outcome
Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.	current remaining extent of the Laverton 18 vegetation association exceeds 99%, and Laverton 389 vegetation associate is above 98%. Both vegetation associations are substantially above the 30% threshold for protection of species diversity at an ecosystem level.	• Procedure for Granny Smith Surface Disturbance will be implemented to ensure all clearing works are compliant with regulatory requirements and are within the approved boundary. • The area to be cleared will be clearly demarcated and machinery operators made aware of the operational boundary, following confirmation with the relevant manager. • Where possible, clearing of well-established vegetation will be avoided Minimise: • Adhere to relevant construction and/or operational environmental management plans with respect to clearing native vegetation. • Clearing awareness training undertaken by all personnel involved in clearing activities. • Vegetation clearing will be kept to the minimum amount required, as far as practicable. • Rehabilitate. • All closure and rehabilitation activities will be completed in line with the GSM Mine Closure Plan . • Salvage and stockpile soil and/or habitat features (e.g. vegetation, stumps, logs, boulders) during clearing for use in rehabilitation programs. • Disturbed ground will be contour ripped, spread with topsoil (minimum of 100 mm deep), and revegetated with indigenous flora species to reflect the floristics of the local vegetation type. • Appropriate rehabilitation implementation plans will be developed throughout the course of the project	with this principle



Clearing Principle	Assessment	Management	Outcome
		and address factors including surface treatments; seed selection, collection, storage and management. Commence rehabilitation activities soon as practicable following closure.	
Principle (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.	- There are no major or minor waterways that intersect the Proposed Clearing Permit Area. - Several minor drainage channels are located within, or adjacent to, the Clearing Footprint; however, surface water flow is ephemeral in the local area, occurring only after substantial rainfall events, and associated vegetation is not considered to be riparian. - The closest waterbody to the Project is Lake Carey, an ephemeral salt lake, located approximately 1 km to the southwest of the Proposed Clearing Permit Area. - No semi-permanent or permanent surface water (waterway or wetland) or associated riparian vegetation occurs within the Clearing Proposed Clearing Permit Area.	Minimise: - Where possible, progressive land clearing will be undertaken to limit land exposure and reduce erosion. - To manage sediment runoff, containment bunds on the downstream side of topsoil stockpiles will be constructed for the duration of operations, ensuring that topsoil eroded during rainfall events is not lost in runoff. - Suitable drainage features will be incorporated into the design to manage surface water runoff. Rehabilitate: - All closure and rehabilitation activities will be completed in line with the GSM Mine Closure Plan - Undertake progressive rehabilitation as far as practicable. - Commence rehabilitation activities soon as practicable following closure.	The proposed clearing is not at variance with this principle
Principle (g) Native vegetation should not be cleared if the	The Proposed Clearing Permit Area lies within an area classified as 'Poor', attributed to the Yilgarn Plateau Province being vulnerable to wind erosion due to low ground cover and erodible soils (Australian Government 2023).	Avoid: Procedure for Granny Smith Surface Disturbance will be implemented to ensure all clearing works are compliant with regulatory requirements and are within the approved boundary.	The proposed clearing is not at variance



Clearing Principle	Assessment	Management	Outcome
clearing of the vegetation is likely to cause appreciable land degradation.	Poor soil erosion grading of the province is likely attributed to agriculture and grazing activities that dominate the region. • The Proposed Clearing Permit Area is already subject to degradation as a result of construction of the existing hybrid power station and proximity to existing infrastructure and access/haul roads. • The Proposed Clearing Permit Area does not occur within a known acid sulphate soils risk area.	• The area to be cleared will be clearly demarcated and machinery operators made aware of the operational boundary, following confirmation with the relevant manager. • Where possible, clearing of well-established vegetation will be avoided Minimise: • Adhere to relevant construction and/or operational environmental management plans with respect to clearing native vegetation. • Clearing awareness training undertaken by all personnel involved in clearing activities. • Vegetation clearing will be kept to the minimum amount required, as far as practicable. • Where possible, progressive land clearing will be undertaken to limit land exposure and reduce erosion. • •To manage sediment run off, containment bunds on the downstream side of topsoil stockpiles will be constructed for the duration of operations, ensuring that topsoil eroded during rainfall events is not lost in runoff • Suitable drainage features will be incorporated into the design to manage surface water runoff. Rehabilitate: • All closure and rehabilitation activities will be completed in line with the GSM Mine Closure Plan	with this principle



Clearing Principle	Assessment	Management	Outcome
		- Disturbed ground will be contour ripped, spread with topsoil (minimum of 100 mm deep), and revegetated with indigenous flora species to reflect the floristics of the local vegetation type. - Undertake progressive rehabilitation as far as practicable. - Commence rehabilitation activities soon as practicable following closure.	
Principle (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.	The Proposed Clearing Permit Area does not intersect with an ESA or any conservation reserve and there is no connectivity between the Proposed Clearing Permit Area and any areas of high conservation value.	Based on the assessment no mitigation approaches are proposed.	The proposed clearing is not at variance with this principle
Principle (i) Native vegetation should not be cleared if the clearing of the	- There are no major or minor waterways that intersect the Proposed Clearing Permit Area. - Several minor drainage channels are located within, or adjacent to, the Proposed Clearing Permit Area; however, surface water flow is ephemeral in the local area, occurring only after	Avoid: Procedure for Granny Smith Surface Disturbance will be implemented to ensure all clearing works are compliant with regulatory requirements and are within the approved boundary.	The proposed clearing is not at variance with this principle



Clearing Principle	Assessment	Management	Outcome
vegetation is likely to cause deterioration in the quality of surface or underground water.	substantial rainfall events, predominately via shallow, low velocity sheet flow (AECOM 2018). Therefore, it is unlikely that surface water quality will be affected from clearing of native vegetation. • The closest waterbody to the Project is Lake Carey, an ephemeral salt lake, located approximately 1 km to the southwest of the Proposed Clearing Permit Area. • The closest PDWSA is the Priority 1 Laverton PDWSA, located approximately 30 km from the Proposed Clearing Permit Area. • The closest groundwater resource to the Proposed Clearing Permit Area is the Mt Weld Carbonatite aquifer. • Clearing of vegetation is unlikely to interact with local aquifers.	• The area to be cleared will be clearly demarcated and machinery operators made aware of the operational boundary, following confirmation with the relevant manager. • Where possible, clearing of well-established vegetation will be avoided Minimise: • Adhere to relevant construction and/or operational environmental management plans with respect to clearing native vegetation. • Clearing awareness training is undertaken by all personnel involved in clearing activities. • Vegetation clearing will be kept to the minimum amount required, as far as practicable. • Where possible, clearing will be undertaken in the dry season to prevent contamination of surface water. • Where possible, progressive land clearing will be undertaken to limit land exposure and reduce erosion. • •To manage sediment run off, containment bunds on the downstream side of topsoil stockpiles will be constructed for the duration of operations, ensuring that topsoil eroded during rainfall events is not lost in runoff. • Suitable drainage features will be incorporated into the design to manage surface water runoff.	



Clearing Principle	Assessment	Management	Outcome
		Rehabilitate: - All closure and rehabilitation activities will be completed in line with the GSM Mine Closure Plan - Undertake progressive rehabilitation as far as practicable. - Commence rehabilitation activities soon as practicable following closure.	
Principle (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.	- Several minor waterways are located within, or adjacent to, the Proposed Clearing Permit Area; however, surface water flow is ephemeral in the local area, occurring only after substantial rainfall events, predominately via shallow, low velocity sheet flow (AECOM 2018). - The closest waterbody to the Project is Lake Carey, an ephemeral salt lake, located approximately 1 km to the southwest of the Proposed Clearing Permit Area. - The natural topography of the region, and in the vicinity of the Proposed Clearing Permit Area, is flat to gently undulating. - Clearing of vegetation has the potential to cause/exacerbate the incidence/intensity of flooding by removing resistance of the landscape to sheet flow; however, the ephemeral nature of surface water flow in the local area means that changes in the hydrological regime are likely to be infrequent.	Avoid: - Procedure for Granny Smith Surface Disturbance will be implemented to ensure all clearing works are compliant with regulatory requirements and are within the approved boundary. - The area to be cleared will be clearly demarcated and machinery operators made aware of the operational boundary, following confirmation with the relevant manager. - Where possible, clearing of well-established vegetation will be avoided Minimise: - Adhere to relevant construction and/or operational environmental management plans with respect to clearing native vegetation. - Vegetation clearing will be kept to the minimum amount required, as far as practicable. - Where possible, clearing will be undertaken in the dry season to prevent contamination of surface water.	The proposed clearing is not at variance with this principle



Clearing Principle	Assessment	Management	Outcome
		• Where possible, progressive land clearing will be undertaken to limit land exposure and reduce erosion. • Suitable drainage features will be incorporated into the design to manage surface water runoff. Rehabilitate: • All closure and rehabilitation activities will be completed in line with the GSM Mine Closure Plan • Undertake progressive rehabilitation as far as practicable. • Commence rehabilitation activities soon as practicable following closure.	



8 STAKEHOLDER CONSULTATION

GSM is committed to ongoing stakeholder communication, engagement and consultation throughout the planning, approvals, construction and operational phases of the Project. To support these commitments and meet regulatory approval requirements, GSM has developed the Granny Smith Renewable Project Stakeholder Management Plan, which identifies and categorises stakeholders across six key groups: Government, Native Title, Community, Landholders, Special Interest Groups and Internal Stakeholders. Engagement activities will be undertaken throughout each stage of the Project lifecycle, with key stakeholders identified in Table 13.

GSM is committed to meaningful engagement with Indigenous stakeholders and local communities. The Granny Smith Mine Native Title Agreement (NTA) provides the framework for ongoing consultation and collaboration between GSM and the Wangkatja Tjungula Aboriginal Corporation (WTAC), the Registered Native Title Body Corporate representing the Nyalpa Pirniku People, the Native Title Holders for the land on which the Granny Smith Mine and the Project are located.

Extensive ethnographic and anthropological heritage surveys, together with ongoing consultation, have been undertaken across the Project area and will continue as the Project footprint is refined. In accordance with its commitments under the NTA, GSM works cooperatively with WTAC to identify, protect and manage Aboriginal Cultural Heritage. The Agreement establishes avoidance of known Aboriginal Sites as a primary heritage management principle, supported by consultation, heritage surveys, management measures and monitoring to ensure cultural heritage values are appropriately protected before activities proceed.

WTAC has lodged an application for the Lake Carey area to be recognised as an Aboriginal ethnographic heritage site. While the application remains under assessment, GSM is managing activities within and adjacent to the area in consultation with WTAC. Consistent with its commitments under the Native Title Agreement, GSM is working collaboratively with WTAC to develop an application for Ministerial Consent under Section 18 of the Aboriginal Heritage Act 1972 (WA) to authorise any activities, including those in this NVCP, that may intersect with the proposed Wati Kutjarra Tjina Lake Carey heritage site boundary or associated buffer zones.

Table 13 Project Stakeholders

Group	Stakeholder
Local Government Agencies	Shire of Laverton Shire of Menzies City of Greater Geraldton Shire of Mount Magnet Shire of Yalgoo Shire of Sandstone Shire of Leonora
State Government Agencies	EPA Services, Department of Water and Environmental Regulation (DWER) Department of Mines Petroleum and Exploration (DMPE) Department of Biodiversity, Conservation and Attractions (DBCA) Department of Planning Lands and Heritage (DPLH) Department of Fire and Emergency Services (DFES) Main Roads Western Australia (MRWA) Bureau of Meteorology (BOM)
Federal Government	Department of Defence [regarding aviation impact] Civil Aviation Safety Authority (CASA) [regarding aviation impact] Air Services Australia (ASA) [regarding aviation impact]



Group	Stakeholder
	Australian Communications and Media Authority (ACMA) [regarding communication and radio considerations] Clean Energy Regulator (CER)
Native Title Groups	Wangkatja Tjungula Aboriginal Corporation (WTAC) - Nyalpa Pirniku People
Pastoral Station	Mt Weld Station Laverton Downs Ejudina Station
Neighbouring Operations	Anglo Gold (Sunrise Dam) Lynas Rare Earth (Mount Weld)



9 SUMMARY AND CONCLUSION

The Project will require clearing of 182 ha for the construction and operation of a solar farm, wind turbines, BESS, access tracks, TSF seepage infrastructure and all associated infrastructure. This clearing will occur within the 1,692 ha Proposed Clearing Permit Area.

Table 14 Summary and Assessment of Clearing Principles

Principle	Objective of Principle	Variance
a	Native vegetation should not be cleared if it comprises a high level of biological diversity.	Not at variance
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 indigenous to Western Australia.	Not likely to be at variance
c	Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.	Not at likely to be variance
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.	Not at variance
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.	Not at variance
f	Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.	Not at variance
g	Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	Not at variance
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.	Not at variance
i	Native vegetation should not be cleared if the clearing of native vegetation is likely to cause deterioration in the quality of surface or underground water.	Not at variance
j	Native vegetation should not be cleared if the clearing of native vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.	Not at variance



10 REFERENCES

- AECOM. 2024. "Granny Smith Mine - Energy Expansion - Wind Turbine Flood Study.. Prepared for Granny Smith Mining Company Pty Ltd."
- Allen, A.D. 1996. "Hydrogeology of the Northeastern Goldfields Western Australia. Geological Survey of Western Australia. Department of Minerals and Energy, Record 1996/4, Western Australia."
- Australian Government. 2023. "LAN25 Grade of Soil Erosion for the Physiographic Provinces of Australia." API. 2016 SoE Land Grade of soil erosion for the physiographic provinces of Australia - LAN25 Grade of s....
- Beard, J.S. 1976. *The Vegetation of the Murchison Region: 1:1,000,000 Vegetation Series, Map and Explanatory Notes to Sheet 6*. University of Western Australia Press, Nedlands, Western Australia.
- Bureau of Meteorology. 2026. "Climate Data Online: Laverton. Available Online at https://www.bom.gov.au/jsp/Ncc/Cdio/weatherData/Av?p_nccObsCode=139&p_display_type=dataFile&p_startYear=&p_c=&p_stn_num=012305."
- Cowan, M. 2001. "Murchison 1 (MUR1 - East Murchison Subregion." Department of Conservation and Land Management, Kensington.
- Dames, and Moore. 2000. "Notice of Intent for the Wallaby Project."
- Department Climate Change Energy the Environment and Water (DCCEEW). 2023. "Conservation Advice for *Aphelocephala leucopsis* (Southern Whiteface)." Australian Government. <https://www.environment.gov.au/biodiversity/threatened/species/pubs/529-conservation-advice-31032023.pdf>.
- Department of Biodiversity, Conservation and Attractions (DBCA). 2020. "Phytophthora Dieback Management Manual."
- Department of Biodiversity, Conservation and Attractions (DBCA). 2026. "Phytophthora Dieback - One of the Most Significant Threats to the Unique Biodiversity of South-West Western Australia. Available Online at <https://www.dbca.wa.gov.au/Management/Threat-Management/Plant-Diseases/Phytophthora-Dieback>."
- Department of Climate Change, Energy, Environment and Water (DCCEEW). undated. "Murchison Bioregion." www.dcceew.gov.au/sites/default/files/env/resources/a8015c25-4aa2-4833-ad9c-e98d09e2ab52/files/bioregion-murchison.pdf.
- Department of Primary Industries and Regional Development (DPIRD). 2026. "Western Australian Organism List. Government of Western Australia. Available Online at <https://www.dpird.wa.gov.au/Online-Tools/Western-Australian-Organism-List/>."
- Environmental Protection Authority (EPA). 2000. "Environmental Protection of Native Vegetation in Western Australia: Clearing of Native Vegetation, with Particular Reference to Agricultural Areas. Position Statement No. 2." Government of Western Australia, Perth, Western Australia.
- Environmental Protection Authority (EPA). 2023. "Statement of Environmental Principles, Factors, Objectives and Aims of EIA." EPA, Western Australia.
- Gilligan, S.A. 1994. "Climate. In: H. J. R. Pringle, A. M. E. van Vreeswyk and S. A. Gilligan (Eds) An Inventory and Condition Survey of the North-Eastern Goldfield, Western Australia., Vol 87. Department of Agriculture Western Australia Technical Bulletin, Western Australia, Pp 15-35."
- Gold Fields Australia. 2024. "Mine Closure Plan, Granny Smith Gold Mine S0002288."
- Government of Western Australia (goW). 2019. "2018 Statewide Vegetation Statistics Incorporating the CAR Reserve Analysis (Full Report)." WA Department of Biodiversity, Conservation and Attractions, Perth, Western Australia.
- Gray, D.J., and A.F. Britt. 2005. "Sunrise Dam Gold Deposit, Eastern Goldfields, WA. In: C. R. M. Butt, M. Cornelius, K. M. Scott and I. D. M. Robertson (Eds) *Regolith Expression of Australian Ore Systems: A Compilation of Geochemical Case Histories and Conceptual Models*. Cooperative Research Centre for Landscape Environments and Mineral Exploration, Canberra."
- Keighery, B.J. 1994. "Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc)."
- Native Vegetation Solutions (NVS). 2019a. "Reconnaissance Flora and Vegetation Survey of the Proposed GSM Solar Farm - October 2018. Unpublished Report Prepared for Gold Fields Australia."



- Native Vegetation Solutions (NVS). 2019b. "Reconnaissance Flora and Vegetation Survey of the Proposed GSM Solar Farm - October 2018. Unpublished Report Prepared for Gold Fields Australia."
- Native Vegetation Solutions (NVS). 2022a. "Reconnaissance Flora and Vegetation Survey of the GSM Solar Farm Expansion Area - May 2022. Unpublished Report Prepared for Gold Fields Australia."
- Native Vegetation Solutions (NVS). 2022b. "Reconnaissance Flora and Vegetation Survey of the GSM Solar Farm Expansion Area - May 2022. Unpublished Report Prepared for Gold Fields Australia."
- Native Vegetation Solutions (NVS). 2024a. "Reconnaissance Flora and Vegetation Survey of the Proposed GSM Wind Farm- November 2023. Unpublished Report Prepared for Gold Fields Australia."
- Native Vegetation Solutions (NVS). 2024b. "Reconnaissance Flora and Vegetation Survey of the Proposed GSM Wind Farm- November 2023. Unpublished Report Prepared for Gold Fields Australia."
- Native Vegetation Solutions (NVS). 2025a. "Reconnaissance Flora and Vegetation Survey of the Proposed Wind Turbine Sites - Spring 2024. Unpublished Report Prepared for Gold Fields Australia."
- Native Vegetation Solutions (NVS). 2025b. "Reconnaissance Flora and Vegetation Survey of the Proposed Wind Turbine Sites - Spring 2024. Unpublished Report Prepared for Gold Fields Australia."
- Native Vegetation Solutions (NVS). 2026a. "Targeted Threatened Flora Search of the GSM Camp Surrounds and South of the TSF." Memo Prepared for Granny Smith Mine.
- Native Vegetation Solutions (NVS). 2026b. "Targeted Threatened Flora Search of the GSM Camp Surrounds and South of the TSF." Memo Prepared for Granny Smith Mine.
- Native Vegetation Solutions (NVS). 2026c. "Targeted Threatened Flora Search of the Wallaby Project Area." Memo Prepared for Granny Smith Mine.
- Native Vegetation Solutions (NVS). 2026d. "Targeted Threatened Flora Search of the Wallaby Project Area." Memo Prepared for Granny Smith Mine.
- Pringle, H.J.R., A.M.E. Van Vreeswyk, and S.A. Gilligan. 1994. "An Inventory and Condition Survey of the North-Eastern Goldfields, Western Australia." Department of Agriculture, Western Australia, Perth, W.A.
- Shepherd, D.P., G.R. Beeston, and A.J.M. Hopkins. 2002. *Native Vegetation in Western Australia. Extent, Type and Status*. Department of Agriculture, Perth, Western Australia.
- Stantec. 2023. "Granny Smith Gold Mine: Granny Smith Solar Farm Expansion Project - Native Vegetation Clearing Permit Report, Prepared for GSM Mining Company Pty Ltd."
- Terrestrial Ecosystems. 2018. "Vertebrate Fauna Risk Assessment for the Granny Smith Solar Power Farm Project." Unpublished report prepared for Gold Fields Australia.
- Terrestrial Ecosystems. 2022. "Desktop Vertebrate Fauna Assessment Expansion of the Solar Power Farm Project Area." Unpublished report prepared for Gold Fields Australia.
- Terrestrial Ecosystems. 2024a. "Basic Vertebrate Fauna Assessment Expansion of the Renewable Energy Zone." Unpublished report prepared for Gold Fields Australia. April 2024.
- Terrestrial Ecosystems. 2024b. "Basic Vertebrate Fauna Assessment Expansion of the Renewable Energy Zone." Unpublished report prepared for Gold Fields Australia. November 2024.
- Terrestrial Ecosystems. 2026. "Desktop Vertebrate Fauna Assessment - Granny Smith Mine Expansion 2026." Version 1. Unpublished report prepared for Gold Fields Australia.
- Thackway, R., and I.D. Cresswell. 1995. "An Interim Biogeographical Regionalisation for Australia." Australian Nature Conservation Agency, Canberra, Australian Capital Territory.
- Tille, P. 2006. "Soil-Landscapes of Western Australia's Rangelands and Arid Interior." Department of Agriculture and Food Resource Management Technical Report 313.
- Timms, B.V. 1992. "Lake Geomorphology. Gleneagles Publishing, Adelaide."
- Timms, B.V., B. Datson, and M. Coleman. 2006. "The Wetlands of the Lake Carey Catchment, Northeast Goldfields of Western Australia, with Special Reference to Large Branchiopods." *Journal of the Royal Society of Western Australia* 89: 175-183.



APPENDIX A - FLORA AND VEGETATION SURVEY

Native Vegetation Solutions (2019, 2022, 2024 and 2025, 2026a, 2026b)



APPENDIX B - VERTEBRATE FAUNA HABITAT SURVEY

Terrestrial Ecosystems (2018; 2022; 2024a; 2024b, 2026)



APPENDIX C - SURFACE WATER STUDY

AECOM 2024

